

Ergative Anaphors and High Absolutive Syntax

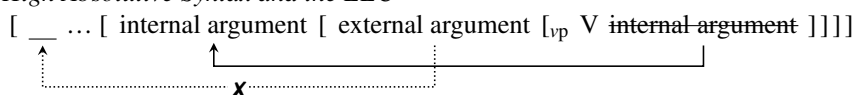
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1. Introduction

Many ergative languages show an asymmetry in the \bar{A} -domain: while the absolutive argument can undergo \bar{A} -extraction, the ergative argument cannot. We refer to this as the Ergative Extraction Constraint (EEC; Aissen 2017). It is one of the patterns grouped under ‘Syntactic Ergativity’ (Dixon 1994).

The standard analysis of the EEC links it to locality (Rizzi 1990, Campana 1992). This analysis treats the constraint as a byproduct of a ‘High Absolutive’ configuration: one where the absolutive argument systematically moves to a position above the ergative argument (1). In this context, the extraction of the ergative argument could be ruled out in several ways: for instance, from locality constraints on \bar{A} -extraction (Shlonsky 1992, Coon et al. to appear) or from phase theory (Aldridge 2004, Coon et al. 2014). We refer to this family of approaches collectively as the *Locality Analysis*.

(1) *High Absolutive Syntax and the EEC*



The Locality Analysis makes a prediction about constructions which show the EEC: they must show evidence for High Absolutive syntax. In many ergative languages, this evidence is robust, readily visible, and well-established (Guilfoyle, Hung & Travis 1992, Bittner 1994). In others, however, the evidence is less clear, and arguments for and against the High Absolutive analysis must be made with care.

This paper addresses and rejects a putative argument against High Absolutive syntax in languages of the second type. The argument concerns the distribution of reflexive anaphors, which, cross-linguistically, cannot appear in the position of the external argument (Anderson 1976). We restate this more specifically for morphologically-ergative languages as a general ban on ergative anaphors:

(2) *The Ban on Ergative Anaphors*

In many ergative languages, reflexive anaphors cannot surface as external arguments.

The literature has taken (2) as evidence against the High Absolutive configuration in several unrelated languages (e.g., Bobaljik & Branigan 2006, Legate 2006, Massam 2006, Otsuka 2006). The underlying assumption has been the following: if the distribution of reflexive anaphors were governed by nothing beyond the requirement for a c-commanding antecedent, then in a High Absolutive configuration, a moved internal argument should be able to bind an anaphor in the position of the external argument.

We object to this assumption on two counts. First, reflexive anaphors are subject to constraints beyond the requirement for a c-commanding antecedent (Chomsky 1986). Second, patterns of anaphor binding run against other diagnostics for c-command in High Absolutive languages. These patterns suggest that the distribution of anaphors does not provide an argument against the existence of High Absolutive syntax.

The remainder of this paper is structured as follows. In section 2, we highlight the absence of ergative anaphors in two unrelated languages: Chuj (Mayan) and Mandar (Austronesian). In section 3, we show that both languages nevertheless exhibit High Absolutive syntax. In section 4, we note that the same pattern holds cross-linguistically: many High-Absolutive languages ban ergative anaphors. Section 5 concludes by re-affirming the ban in (2) and lays out several reasons why it might hold.

* Many thanks to Jupri Talib for judgments on Mandar and Matal Torres and Mateo Pablo for judgments on Chuj. Thanks as well to Judith Aissen, Sandy Chung, and Jessica Coon. This material is based upon work supported by the National Science Foundation under Grant No. 2018267201.

2. No Ergative Anaphors in Chuj and Mandar

2.1. Chuj

Chuj is a language of the Q'anjob'alan sub-branch of the Mayan family. It is spoken by approximately 70,000 people in Guatemala and Mexico (Buenrostro 2013). Like other Mayan languages (Aissen et al. 2017), it shows a head-marking system of ergativity, features no case morphology on nominals, and exhibits basic verb-initial word order. The arguments of verbs are generally cross-referenced with ergative and absolutive morphemes on the verb stem (3rd person absolutive is null and left unglossed):¹

(3) Transitive Sentences in Chuj

- a. Ix-s-b'o' [abs tek] [erg waj Xun].
pfv-3erg-make meal clf Xun
'Xun made food.'
- b. Ix-onh-y-il ix k'ayb'um.
pfv-1pl.abs-3erg-see-tv clf teacher
'The teacher saw us.'

In Chuj, there is only one way to form a reflexive predicate: by placing the reflexive anaphor *b'a* in the position of the internal argument of a transitive verb (4). The anaphor *b'a*, like its analogues across the family, patterns with possessed nominals in appearing with a genitive prefix (Ayres 1980).

(4) The Chuj Anaphor *b'a*

- Ix-y-il s-b'a waj Xun.
pfv-3erg-see 3gen-self clf Xun
'Xun saw himself.'

The anaphor *b'a* is roughly subject to Condition A of the classical binding theory (Chomsky 1986). This constraint is shown in (5): *b'a* must be coindexed with a DP which c-commands it and occupies the same clause. It has no exempt uses (cf. Ayres 1980).

(5) The Anaphor *b'a*: Condition A

- Ix-y-al ix Xuwan to ix-y-il s-b'a s-k'ayb'um ix Telex
pfv-3erg-say clf Xuwan c pfv-3erg-see 3gen-self 3gen-teacher clf Telex
'Xuwan_i said that [Telex_j's teacher]_k saw herself_{*i,*j,k}.'

What is of interest is the following: Chuj shows the Ban on Ergative Anaphors. In this language, the anaphor *b'a* cannot appear as the external argument of a transitive verb. This fact can be seen in the agreement system. In reflexive contexts, the ergative prefix must track the argument which antecedes the anaphor (6a). When it tracks the anaphor *b'a*, the result is ungrammatical (6b). This pattern suggests that the reflexive *b'a* cannot be the external argument of a transitive clause.

(6) No Ergative Anaphors in Chuj

- a. Ix-a-b'ik ha-b'a.
pfv-2sg.erg-wash 2sg.gen-self
'You washed yourself.'
- b. *Ix-ach-y-b'ik ha-b'a.
pfv-2sg.abs-3erg-wash 2sg.gen-self
Intended: 'Yourself washed you.'

¹ glossing: 1/2/3: first/second/third person, abs: absolutive, ant: antipassive, clf: classifier, erg: ergative, gen: genitive, iv/tv: intransitive/transitive, pfv: perfective, sg/pl: singular/plural,

3. Evidence for High Abslutive Syntax

The literature has taken the Ban on Ergative Anaphors to provide evidence against High Abslutive analyses of several ergative languages (Bobaljik & Branigan 2006, Legate 2006, Massam 2006, Otsuka 2006). In this section, however, we show that both Chuj and Mandar show High Abslutive syntax: they require the absolutive argument to undergo A-movement to a position above all other arguments in the clause. As such, we argue that the Ban on Ergative Anaphors cannot be taken as evidence against this configuration.

3.1. High Abslutive Agreement

The first piece of evidence for High Abslutive syntax in these languages lies in the relative height of ergative and absolutive agreement. In both languages, the absolutive argument controls the highest source of phi-agreement in the clause. This pattern has historically been taken as evidence for High Abslutive syntax in other ergative languages of this type (Bok-Bennema 1991, Bittner & Hale 1996b,a).

Two facts suggest that absolutive agreement originates above ergative agreement in both languages. First, there is a positional contrast between the absolutive enclitic and the ergative prefix. In both languages, the absolutive enclitic follows TAM morphemes while the ergative prefix stays verb-adjacent (11a-11b).

(11) *Abslutive Agreement: High Position*

- a. Ix-ach-w-il-a'
pfv-2abs-1erg-see-tv
'I saw you.' Chuj
- b. Pura=i tu' u-paressu'!
Already=3abs really 1erg-cook
'I really already cooked it!' Mandar

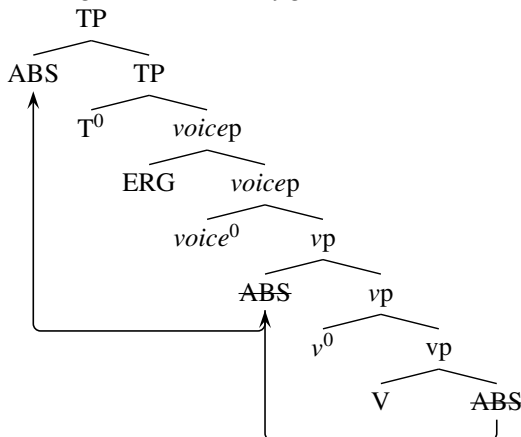
Second, both languages show non-finite constructions where absolutive agreement vanishes but ergative agreement remains. We show this below aspectual verbs in Chuj (12a) and modals in Mandar (12b).

(12) *Abslutive Agreement: Disappears in Non-Finite Clauses*

- a. Ixayamoch [_{nfc} ha/*hach-munlaj-i].
you.began 2sg/2sg.abs-work-iv
'You began to work.' Chuj: Coon & Carolan 2017, 25
- b. Andiang=to=i na-ulle [_{nfc} na-alli=(*)].
not=even=3abs 3erg-can 3erg-buy=3abs
'He can't even buy it.' Mandar

These patterns suggest that the absolutive argument controls the highest source of phi-agreement in the clause across both languages. We take this agreement relationship to give rise to the High Abslutive configuration in (1): when the finite T⁰ is merged, it probes for the highest unlicensed argument in the *voiceP* and attracts it to its specifier. In transitive clauses, this places the internal argument in Spec,TP.

(13) *The High Abslutive Configuration*



3.2. Condition C effects

The second piece of evidence for High Absolutive syntax comes from patterns of pronominal coreference. In configurations like (13), we predict that the internal argument should c-command the external argument for the purposes of Condition C (*cf.* Royer to appear). In both Chuj and Mandar, this is the case.

The distribution of coindexed pronouns and R-expressions is typically assumed to be sensitive to c-command (Chomsky 1993). In English, for instance, a pronominal subject cannot be coindexed with an R-expression in an object which it c-commands (14a). This violation disappears, however, if the object undergoes A-movement to a position outside the c-command domain of the subject (Lasnik 1999).

- (14) a. It seems to him_i *_j that the books that John_j bought are rubbish.
 b. [The books that John_j bought] seem to him_j *t* to be crucial to Kim's well-being.

In both Chuj and Mandar, the profile of Condition C violations suggests that the internal argument undergoes A-movement above the external argument in a typical transitive clause (see also Coon et al. to appear on Mayan). In both languages, it is possible for a pronoun in the position of the external argument to be coindexed with an R-expression inside of an absolutive internal argument. We illustrate this pattern with R-expressions inside of relative clauses adjoined to the internal argument below.

- (15) *External Arguments don't trigger Condition C Violations over Internal Arguments*
- a. Ol-y-awtej [abs ch'anh libro [rc s-man ix Ana ewi]] [erg pro].
 will-3erg-read clf book 3erg-buy clf Ana yesterday
 Lit: 'She_i will read the book that Ana_i bought yesterday.' Chuj
- b. Na na-baca=i manini [abs buku [Ø na-alli iNina dionging]] [erg pro].
 will 3erg-read=3abs later book rel 3erg-buy name yesterday
 Lit: 'She_i will read the book that Nina_i bought yesterday later.' Mandar

If the absolutive internal argument did not undergo A-movement above the external argument, we would predict these patterns of coreference to be ruled out by Condition C. Nevertheless, these examples are grammatical in both languages. This fact suggests that the absolutive internal argument does move above the external argument, providing a second piece of evidence for High Absolutive syntax.

Before moving on, we note that there is also evidence that the absolutive internal argument *c-commands* the ergative argument in both languages, just as the High Absolutive analysis in (13) would predict. This pattern can be seen from the pattern of coreference between internal arguments and elements inside of the external argument. The examples in (16) illustrate the relevant context in English.

- (16) a. The woman that met with Nina_i loves her_i.
 b. The woman that met with her_i loves Nina_i.

In these examples, the internal argument corefers with an argument in a relative clause which modifies the external argument. In English, there is flexibility in the position of the R-expression in this context: it can appear either inside the relative clause or as the internal argument. This lack of Condition C effects has been taken to suggest the lack of a c-command relation between the two elements (Reinhart 1983).

In Chuj and Mandar, however, the facts are different again. In these languages, an absolutive pronoun cannot corefer with an R-expression inside the external argument. In other words, both languages rule out the equivalent of the sentence in (16a). We illustrate with R-expressions in relative clauses modifying the external argument (Chuj: (17a)) and in possessors of the external argument (Mandar: (17b)).

- (17) *Internal Arguments trigger Condition C Violations over External Arguments*
- a. *Tz-s-nib'-ej [abs pro] [erg ix ix ix-il-an waj Xun].
 ipfv-3erg-like-dtv pro the woman pfv-see-af clf Xun
 Intended: 'The woman that saw Xun_i likes *him_i.' Chuj
- b. *Na-ita=i [erg kindoq-na iNina] [abs pro].
 3erg-see=3abs mom-3gen name 3sg
 Intended: Nina's_i mother saw *her_i. Mandar

These patterns of pronominal coreference provide a second argument for High Absolute syntax in both languages above. In this respect, they could be supplemented with evidence from a range of other domains. Scoping out, however, the force of the argument is the following. Both Chuj and Mandar show the Ban on Ergative Anaphors. Nevertheless, both languages appear to show High Absolute syntax, and other diagnostics for c-command stand at odds with the pattern of anaphor binding above. This apparent contradiction suggests that the Ban on Ergative Anaphors cannot be taken as evidence against the High Absolute configuration in any language. Rather, it must be linked to independent constraints.

4. The Cross-Linguistic Landscape

The preceding sections have shown that the Ban on Ergative Anaphors holds in two High Absolute languages. Anderson (1976), however, noted that this ban holds generally across ergative languages, including many which are now standardly taken to show High Absolute syntax as well: for instance, West Circassian (Ershova 2019) and in many Inuit varieties (Manning 1995).

The following section notes the presence of this constraint in two other languages of the Austronesian family: Tagalog (Greater Central Philippines) and Malagasy (Barito). In these languages, the verb shows morphological alternations which correlate with patterns of case-marking, binding, and \bar{A} -extraction. In both, moreover, the absolutive argument systematically undergoes A-movement to a position above all other elements in the clause (Guilfoyle et al. 1992, Kroeger 1993, Rackowski 2002). While there is variation in the terminology used to describe this system, it is equivalent to what we refer to as High Absolute syntax. In spite of this fact, both languages show the Ban on Ergative Anaphors (Keenan 1993).

We illustrate this pattern first in Tagalog. This language shows an ergative-absolutive case system: the transitive external argument bears the ergative case-marker *ng* and the internal argument bears the absolutive case-marker *ang* (Aldridge 2004). Like Chuj and Mandar, Tagalog shows High Absolute syntax: in transitive clauses like (18), the internal argument moves above all other arguments in the clause.

(18) *The Basic Transitive Clause in Tagalog*

B-in-ili [_{erg} ng babae] [_{abs} ang isda].
tr-buy erg woman abs fish

‘The woman bought the fish.’

Tagalog; Aldridge 2012: 1a

Like Chuj and Mandar, Tagalog shows the Ban on Ergative Anaphors. In transitive clauses, it requires the anaphor *sarili* ‘self’ to bear the absolutive case-marker *ang* (19a). It does not allow the anaphor to bear the ergative case-marker *ng* (19b). This fact suggests that it cannot be an external argument.

(19) *Tagalog: No Ergative Anaphors*

a. S-in-ampal ng babae ang sarili niya.
tr-hit erg woman abs self her

‘The woman hit herself.’

Keenan 1993: 13a

b. *S-in-ampal ng sarili niya ang babae
tr-hit erg self her abs woman

(‘Herself hit the woman.’)

Keenan 1993: 13b

The same facts hold in Malagasy. While this language retains morphological ergativity only in its pronominal system, it shows similar evidence for High Absolute syntax (Paul 2000). Moreover, there is a correlation with word order: the absolutive argument must follow all other arguments (20).

(20) *The Basic Transitive Clause in Malagasy.*

Vono-in [_{erg=i} Soa] [_{abs} ny akoho].
kill-tr d name d chicken

‘Soa is killing the chickens.’

Pearson 2005: 12b

Much like Chuj, Mandar, and Tagalog, however, Malagasy shows the Ban on Ergative Anaphors. The literature on reflexivity in this language has focused on the element ‘*ny tenany*’ (Keenan 1993, Paul 2004,

Pearson 2005), which typically appears as the absolutive internal argument of a transitive clause (21a). This element cannot appear in the immediately postverbal external argument position (21b). This pattern holds, moreover, in spite of the fact that it supports exempt uses elsewhere (Paul 2004).

(21) *Malagasy: No Ergative Anaphors*

- a. Ha_ja-in [_{erg}=i Soa] [_{abs} ny tena=ny].
 respect-tr d name d self=3gen
 ‘Soa respects herself.’
- b. *No-tsongo-in [_{erg}=ny tena=ny] [_a Rabe].
 pst-pinch-tr d self=3g name
 (‘Himself pinched Rabe.’)

Paul 2004: 33

Paul 2004: 38b

5. Conclusion

In this paper, we have argued that the Ban on Ergative Anaphors in (2) cannot be taken as reliable evidence against a High Absolutive analysis of \bar{A} -extraction asymmetries, contra previous work (e.g., Bobaljik & Branigan 2006, Legate 2006, Massam 2006, Otsuka 2006). Despite lacking ergative anaphors, many languages that exhibit the EEC show independent evidence for High-Absolutive syntax. The source of the ban is thus necessarily more general: reflexive anaphors simply cannot be external arguments (Anderson 1976), regardless of whether a language exhibits High Absolutive syntax or not.

Though we have not attempted to explain *why* the ban should hold in the first place, we believe that there are several conceivable explanations to explore. In fact, most post-GB approaches to the binding conditions seem to predict, or are easily compatible with, a general ban on anaphors in the external argument position. For instance, Charnavel & Sportiche (2016) recently propose that Condition A should be restated in terms of phase theory: anaphors must be bound in a particular phasal domain. We could restate this condition as in (22).

(22) *The Phasal Binding Constraint*

Condition A anaphors must be bound within the first phase in which they are merged.

Suppose (i) that there is a clause-internal phase which corresponds to the vP, and (ii) that the internal argument remains beneath the external argument within this domain in High Absolutive languages (13). The theory of Condition A in (22) would predict the absence of ergative anaphors in such a language: to be bound in vP, an anaphor would have to be realized as the internal argument.

The Ban on Ergative Anaphors could similarly be derived on any derivational approach to Condition A. There are two main approaches of this type (Drummond et al. 2011): Agree-based approaches (e.g. Reuland 2001), and movement-based approaches (e.g. Hornstein 2001). While Levin (2014) shows that an Agree-based approach can account for the Ban on Ergative Anaphors in Balinese, we note that movement-based approaches can do so as well. On such an analysis, reflexive anaphors would be derived by movement of a constituent inside the internal argument into the position of the external argument:

(23) Lou saw [*t* herself].

On this analysis, the Ban on Ergative Anaphors can be derived from two similarly uncontroversial assumptions: movement is always upward and the external argument is invariably base-merged above the internal argument. On these assumptions, it would be impossible for the constituent inside the external argument to move into the position of the internal argument. As a result, it would be impossible to derive an anaphor in the position of the external argument.

In sum, modern approaches to Condition A generally seem to predict the Ban on Ergative Anaphors. This supports our proposal that the ban does not constitute evidence against High Absolutive syntax.

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