

# Explaining the Ban on Ergative Anaphors

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## Abstract

Some ergative languages exhibit the *Ergative Extraction Constraint* (EEC; Aissen 2017): processes of  $\bar{A}$ -extraction can only target absolutive but not ergative DPs. At the same time, reflexive anaphors in EEC languages are generally disallowed as ergative arguments (Anderson 1976). This fact, which we dub the *Ban on Ergative Anaphors*, has been taken as an argument against the High Absolutive solution to the EEC: that absolutive DPs undergo consistent raising to an A-position above ergative DPs (Campana 1992, Ordóñez 1995, Bittner and Hale 1996a, a.m.o.). The argument goes as follows: if an absolutive argument raised above an ergative argument into a higher clause-internal A-position, then such an absolutive argument should be able to bind a reflexive anaphor in the position of the lower ergative argument (Bobaljik and Branigan 2006; Legate 2006; Massam 2006; Otsuka 2006, a.m.o.). Drawing on data from Chuj (Mayan) and Mandar (Western Austronesian), this paper addresses and rejects this claim on two counts. First, the Ban holds even in languages where Conditions B and C of the Binding Theory (Reinhart 1983; Chomsky 1986) provide evidence for High Absolutive configurations. Second, virtually all mainstream approaches to the distribution of reflexive anaphors already *predict* the Ban, even for High-Absolutive languages (e.g., Chomsky 1986, Hornstein 2001, Reuland 2001, 2011, Rooryck and vanden Wyngaerd 2011, Charnavel and Sportiche 2016, a.m.o.). We end the paper by analyzing and comparing the distribution of reflexive anaphors in Chuj and Mandar. This comparison will lead us to the conclusion that the distribution of non-exempt reflexive anaphors is perhaps not regulated by a single constraint across all languages, but by a range of distinct derivational pathways that conspire to derive Condition A effects (Déchaine and Wiltschko 2017). These pathways also share the property that they consistently deliver the Ban on Ergative Anaphors.

## 1 Introduction

Morphological ergativity often correlates with a syntactic constraint: that WH-movement can target absolutive arguments but not ergative arguments. This restriction (alongside parallel constraints on focus-fronting and relativization) is one of the patterns that is grouped together by Dixon (1994) under the label of Syntactic Ergativity. We will refer to it as the Ergative Extraction Constraint (EEC; Aissen 2017).

The standard analysis of the EEC understands the asymmetry in extraction in terms of syntactic locality (Campana 1992; Ordóñez 1995; Bittner and Hale 1996a, a.m.o.). This approach takes the EEC to arise within configurations that show *High Absolutive Syntax*: namely, configurations in which the absolutive argument moves above the ergative argument to the highest clause-internal A-position (1). Within this configuration, the EEC has been argued to emerge from several types of restriction: for instance, relative locality constraints on probing (Coon et al. 2021), or absolute locality constraints grounded in phase impenetrability (Aldridge 2004, Coon et al. 2014). We collectively refer to this family of approaches, which ground the analysis of the EEC in High Absolutive configurations, as the *Locality Analysis of the EEC*.<sup>1</sup>

- (1) *High Absolutive Syntax and the EEC*
- [<sub>CP</sub> \_\_\_ ... [<sub>TP</sub> ABSOLUTIVE [<sub>VP</sub> ERGATIVE [<sub>VP</sub> V ABSOLUTIVE ] ] ] ]
- 

<sup>1</sup>We use the following abbreviations in glosses and examples: ABS: absolutive; ACC: accusative; AF: Agent Focus morpheme; ANTIP: antipassive; APPL: applicative; AV: agent voice; CLF: noun classifier; DEM: demonstrative; DTV: derived transitive status suffix; ERG: ergative; FOC: focus marking; GEN: genitive; IMP: imperative; INTRANS: intransitive morpheme; IRR: irrealis; NAME: proper name; PFV: perfective; PRON: pronoun; PV: patient voice; REFL: reflexive; s(G): singular; TV: transitive status suffix.

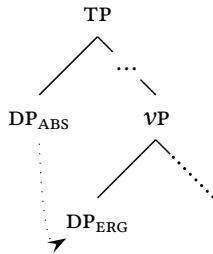
The goal of this paper is to address and reject an argument that has been drawn up in many languages as evidence against the existence of High Absolute configurations—and thus as potential evidence against the Locality Analysis of the EEC. This is one which concerns the distribution of reflexive anaphors, first noted by [Anderson 1976](#). We state it in (2).

(2) *The Ban on Ergative Anaphors*

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

The Ban on Ergative Anaphors has been taken to suggest that absolutive arguments do not raise above the ergative argument to the highest clause-internal A-position in many languages that show the EEC ([Bobaljik and Branigan 2006](#); [Legate 2006](#); [Massam 2006](#); [Otsuka 2006](#), a.m.o). This argument runs as follows: if an absolutive argument raised above an ergative argument into a higher clause-internal A-position, then with no further assumptions, such an absolutive argument should be able to bind a reflexive anaphor in the position of the lower ergative argument. We schematize this unattested pattern of binding in tree (3).

(3) *Hypothetical Binding of Ergative Anaphors*



We argue against this logic in three steps. First, we show that there is no correlation between the distribution of reflexive anaphors and High Absolute Syntax: the Ban on Ergative Anaphors holds even in languages where Conditions B and C of the Binding Theory ([Reinhart 1983](#); [Chomsky 1986](#)) actually provide *evidence* for High Absolute configurations; we discuss this for two unrelated languages, Chuj (Mayan) and Mandar (Austronesian). Second, we show that the Ban on Ergative Anaphors can be made to follow from most, if not all, mainstream approaches to the distribution of reflexive anaphors, which all impose constraints on the binding of non-exempt reflexive anaphors that go beyond the simple need for a c-commanding antecedent in an A-position within a clause (e.g., [Chomsky 1986](#), [Hornstein 2001](#), [Reuland 2001, 2011](#), [Zwart 2002](#), [Drummond et al. 2011](#), [Rooryck and vanden Wyngaerd 2011](#), [Levin 2014](#), [Charnavel and Sportiche 2016](#), [Ershova 2022](#)). Third, we argue that the Ban on Ergative Anaphors may ultimately emerge from different sources in different languages, in recognition of the fact that reflexive anaphors do not form a syntactically homogeneous class ([Déchaine and Wiltschko 2017](#)); focusing again on differences between Chuj and Mandar, we specifically argue that the distribution of non-exempt reflexive anaphors may not be regulated by a single constraint across all languages, as traditionally assumed, but by a range of distinct mechanisms that nonetheless share the property of delivering the Ban on Ergative Anaphors.

The remainder of this paper is structured as follows. In section 2, we provide background on Chuj and Mandar, show that these languages display the EEC, and present evidence that both languages show High Absolute Syntax (building on much previous work: [Coon et al. 2014](#), [Coon et al. 2021](#), [Royer 2022, 2024](#) for Chuj; [Brodikin 2022a, 2022b](#) for Mandar). In section 3, we introduce the non-exempt reflexive anaphors in these languages and show that both Chuj and Mandar display the Ban on Ergative Anaphors. In section 4, we show that the Ban on Ergative Anaphors in High Absolute languages is naturally derived by two common lines of approaches to the distribution of non-exempt reflexive anaphors: those which posit syntactic domains for binding (“*domain-based approaches*”; [Ahn 2015](#); [Charnavel and Sportiche 2016](#); [Ershova 2022](#)) and those which derive the distribution of non-exempt reflexive anaphors from constraints on movement (“*reductionist approaches*”; [Hornstein 2001](#); [Zwart 2002](#)). In section 5, we advance specific

analyses of the distribution of non-exempt reflexive anaphors in Chuj and Mandar, adopting a movement-based approach for Chuj (following Royer 2022) and a domain-based approach for Mandar. We conclude in section 6.

## 2 High Absolute Syntax and the EEC in Chuj and Mandar

Chuj is a Mayan language of the Q’anjob’alan subgroup (Kaufman 1974), spoken primarily in Guatemala and Southern Mexico by an estimated 80,000 people (Piedrasanta 2009, Buenrostro 2013). Mandar is an Austronesian language of the South Sulawesi subgroup (Mills 1975), spoken by roughly 400,000 people in the Indonesian province of West Sulawesi (Grimes and Grimes 1987). Despite the distance between them, these languages show a number of morphosyntactic similarities, and as a result, we will discuss them in parallel below. Unless otherwise noted, all data on these languages are drawn from original fieldwork.

### 2.1 Clausal syntax and the EEC

The following diagram illustrates the basic shape of the clause in both Chuj and Mandar. Both languages are head-initial and exclusively head-marking, showing no case morphology on nominals and allowing *pro*-drop. Both languages have a set of TAM markers that precede the verb; these are consistently followed by a marker of absolute agreement. The verb immediately follows the TAM markers and absolute morpheme, and when it is transitive, it bears an ergative agreement prefix. In both languages, arguments and VP-level adjuncts follow the verb under pragmatically neutral contexts. Following orthographic convention, we present the full verbal complex as a single word in Chuj but not in Mandar.<sup>2</sup>

#### (4) Clause Structure in Chuj and Mandar

TAM ABS.AGR ERG.AGR-VERB ARGUMENTS ADJUNCTS

The following examples illustrate in the format that we will use throughout this paper. Example (5a) presents a clause in Chuj; there the verbal complex contains a TAM marker, an absolute morpheme, an ergative agreement prefix, and then the verb. Example (5b) shows a similar clause in Mandar, where the order of elements is the same. In Mandar but not Chuj, preverbal TAM markers are optional; in Mandar examples where they are absent, the absolute agreement will surface in second position, following the verb in a verb-initial clause (5c).<sup>3</sup>

- |     |    |  |                              |                      |        |
|-----|----|--|------------------------------|----------------------|--------|
| (5) | a. | Ix-ach-y-il<br>PFV-2SG.ABS-3ERG-see                                | ix unin chi’<br>the girl DEM | ‘That girl saw you.’ | Chuj   |
|     | b. | Rua o na-ita do na’iwaine o.<br>once 2ABS 3ERG-see that girl there | ‘That girl once saw you.’    |                      | Mandar |
|     | c. | Na-ita o do na’iwaine o.<br>3ERG-see 2ABS that girl there          | ‘That girl saw you.’         |                      | Mandar |

<sup>2</sup>For grammar sketches or information about Chuj, see Hopkins 1967, 2021; Maxwell 1981; García Pablo 2007; Buenrostro 2013. For similar resources in Mandar, see Pelenkahu et al. 1983. For background on the Mayan family, see England 2001, Coon 2016, Aissen et al. 2017; for background on the South Sulawesi subgroup of Austronesian, Matthes 1858; Campbell 1989; Strømme 1994; Matti 1994; Valkama 1995a,b; Friberg 1996; Finer 1997, 1998; Jukes 2006; Laskowske 2016. See also Martens et al. 1988 for an initial note on certain morphosyntactic parallels between Mayan languages and an Austronesian language of this area.

<sup>3</sup>In the distant past, TAM marking is often absent. Carolan (2015) attributes this to the existence of a null tense/aspect marker in Chuj, in complementary distribution with other TAM markers.

Chuj and Mandar both have a process of WH-movement that fronts WH-words into the left periphery. This process is always able to target the argument that triggers absolutive agreement, which we will refer to as the absolutive argument (despite the fact that both languages lack morphological case). The following examples illustrate this with transitive clauses, where the absolutive argument is the internal argument: in this context, WH-movement can target the internal argument in both Chuj and Mandar. Note that absolutive agreement is not visible in WH-questions in either case: Chuj has no overt third person absolutive agreement (for both singular and plural), so WH-phrases cannot trigger overt absolutive agreement (6a), and Mandar does have overt third-person absolutive agreement but shows an Anti-Agreement Effect (Brandi and Cordin 1989; Ouhalla 1993; Baier 2018), where absolutive agreement disappears when the absolutive argument undergoes  $\bar{A}$ -extraction (Brodkin 2021a, and see also Finer 1997 on the related Selayarese).

(6) *Wh-movement in Chuj and Mandar*

- |    |                                |        |
|----|--------------------------------|--------|
| a. | Mach [ ix-h-il-a' $t_{ABS}$ ]? |        |
|    | who PFV-2SG.ERG-see-TV         |        |
|    | ‘Who did you see?’             | Chuj   |
| b. | Nai [ mu-ita $t_{ABS}$ ]?      |        |
|    | who 2ERG-see                   |        |
|    | ‘Who did you see?’             | Mandar |

In their systems of WH-movement, Chuj and Mandar both show the *Ergative Extraction Constraint*. This is shown in (7): in transitive clauses, WH-movement cannot target the argument that triggers ergative agreement. This restriction is matched in many other languages that show morphological ergativity, both in systems of agreement and in systems of nominal case marking (Aldridge 2008; Deal 2016; Polinsky 2017). On the corresponding restrictions in Mayan, see Larsen and Norman 1979, Coon et al. 2014, Aissen 2017; on the larger restrictions in Western Austronesian languages, which are not always discussed in ergative terms, see Keenan 1976; Guilfoyle et al. 1992; Aldridge 2004.

(7) *Wh-movement shows the EEC in Chuj and Mandar*

- |    |                                    |        |
|----|------------------------------------|--------|
| a. | *Mach [ ix-ach-y-ila' $t_{ERG}$ ]? |        |
|    | who PFV-2SG.ABS-3ERG-see           |        |
|    | Intended: ‘Who saw you?’           | Chuj   |
| b. | *Nai o [ na-ita $t_{ERG}$ ]?       |        |
|    | who 2ABS 3ERG-see                  |        |
|    | Intended: ‘Who saw you?’           | Mandar |

In both Chuj and Mandar, the same restriction extends to two further types of  $\bar{A}$ -extraction. The first of these is focus-fronting, which positions nominals in the left periphery. The syntax of this process likely differs across the two languages, as Chuj requires it to occur alongside an initial particle where Mandar does not (Brodkin 2020 argues that WH-movement and focus-fronting involve direct movement to the same position in Mandar). However, both languages prohibit focus-fronting of the ergative argument.

(8) *Focus fronting shows the EEC in Chuj and Mandar*

- |    |  |        |
|----|--|--------|
| a. | *Ha ix unin [ ix-ach-y-ila' $t_{ERG}$ ]. |        |
|    | FOC CLF child PFV-2SG.ABS-3ERG-see       |        |
|    | Intended: ‘THE CHILD saw you.’           | Chuj   |
| b. | *Iting sanaeke o [ na-ita $t_{ERG}$ ].   |        |
|    | that child 2ABS 3ERG-see                 |        |
|    | Intended: ‘THAT CHILD saw you.’          | Mandar |



result, should be able to undergo WH-movement, focus-fronting, and relativization. As shown below, this prediction is indeed correct.

(12) Agent Focus: Intransitive Morphology, External Argument Extracts

- a. Mach<sub>j</sub> [ ix-ach-il-**an-i** t<sub>ABS</sub> ]?  
 who PFV-2SG.ACC-see-AF-INTRANS  
 ‘Who saw you?’ Chuj
- b. Nai<sub>j</sub> [ **m-an**-dundu i t<sub>ABS</sub> ]?  
 who INTRANS-AF-drink 3ACC  
 ‘Who drank it?’ Mandar

We thus arrive at the network of correlations below: Chuj and Mandar have constructions that assign different types of abstract Case to the external argument, and it is only when the external argument receives abstract absolutive Case that it can be targeted by WH-movement, focus-fronting, and relativization.

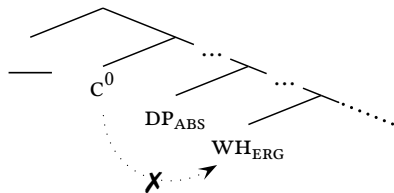
Table 1: The EEC in Chuj and Mandar

Construction	Case of External Argument	Extraction of External Argument
Antipassive	Absolutive	✓
Agent Focus	Absolutive	✓
Transitive	Ergative	✗

## 2.2 The locality approach and its correlates

The literature has advanced a range of proposals to account for the EEC and similar constraints in Mayan and Austronesian, including many analyses that are specifically formulated for the languages or language families under investigation (in Mayan: Aissen 1999, 2017, Stiebels 2006, Erlewine 2016; in Austronesian, Chung 1998; Pearson 2005; Chen 2017). But there is one account that has been independently developed and applied in both of these literatures, and this is one that is grounded in Locality (in Mayan: Campana 1992; Ordóñez 1995; see Aissen 2017 for discussion; and in Austronesian, Schachter 1976; Keenan 1976). On this final type of account, the EEC emerges from two components: (i) movement of the absolutive argument above the ergative argument to the highest A-position in the clause and (ii) a locality restriction that forces WH-movement to target the highest DP in that domain (Aldridge 2004; Coon et al. 2014, 2021). This account is sketched in the following tree.

(13) *The Locality Analysis*



The task of this section is to summarize the evidence in favour of the Locality Analysis in Chuj and Mandar. To do so, we will present two lines of evidence for component (i): in both of these languages, the absolutive argument raises above the ergative argument to an A-position in the clause. One piece of evidence comes from Condition C effects (§2.2.1), which show that the internal argument asymmetrically c-commands the external argument in both languages. Another piece of evidence will come from the mor-



phosyntactic distribution of absolutive markers (§2.2.2), which shows that they are licensed higher than external arguments in the clause.

These results will ultimately establish a parallel between Chuj and Mandar and the other morphologically ergative languages that have been argued to show High Absolutive Syntax, including at least many varieties of Inuit (Bittner 1994; Bittner and Hale 1996a; Yuan 2018), Salishan (Davis et al. 1993; Davis and Brown 2011; Brown 2016) and West Circassian (Ershova 2017, 2019). In the same vein, they will allow us to develop a classical “High Licensing” analysis of this configuration, based on Guilfoyle et al. 1992, Bittner and Hale 1996c,b, and Coon et al. 2014. More specifically, we will argue that absolutive arguments undergo a step of A-movement above the external argument in both Chuj and Mandar. For purposes of illustration, we will assume that this movement is triggered as a result of a relationship between the internal argument and the highest Case-Licensing head in the clause ( $T^0$ ), though see Coon et al. 2021 and Royer 2022,2024 for a different perspective on the relevant movement that is compatible with the main results of this paper.<sup>5</sup>

### 2.2.1 Binding Asymmetries

Royer (2021a, 2022, 2024) and Brodtkin (2022a; 2022b) observe that specific predictions emerge around the distribution of pronouns and coreferential nominal expressions on the hypothesis that the absolutive argument must raise above the ergative argument to the highest A-position in the clause (see also Kroeger 1993 for relevant discussion in Tagalog). On the assumption that A-movement does not reconstruct for Condition C (Chomsky 1995, Lasnik 1999), to begin, raising of an absolutive internal argument over an ergative external argument should feed Condition C effects from the internal argument into the external argument. In other words, it should be impossible for an absolutive internal argument to be a pronoun that is coreferential with an R-expression in an ergative external argument. This illegal pattern of coreference is shown in example (14) below.

(14) John’s<sub>i</sub> mom<sub>ERG</sub> saw him<sub>i</sub> ABS.

This prediction is correct for both Chuj and Mandar. It is impossible in each language for an absolutive internal argument to be a pronoun coreferential with an R-expression in an ergative external argument.

(15) Condition C effects from ABS to ERG

- a. \*Ix-s-tum-ej [ABS *pro*] [ERG ix ix ix-il-an-i *waj Xun*].  
 PFV-3ERG-scold-DTV *pro* the woman PFV-see-AF-INTRANS the Xun  
 Intended: ‘The woman that saw Xun<sub>1</sub> scolded him<sub>1</sub>. Chuj; (Royer 2024: (84))
- b. \*Na-ita i [ABS *pro*] [ERG kindo’-na *iNina*].  
 3ERG-see 3ABS mom-3GEN Nina  
 Intended: ‘Nina’s<sub>i</sub> mom saw her<sub>j</sub>. Mandar

Royer and Brodtkin note a second prediction in the other direction: A-movement of an absolutive internal argument above an ergative argument should bleed (otherwise expected) violations of Condition C from the external argument into the internal argument. In other words, it should be possible for an absolutive internal argument to contain an R-expression that is coreferential with a pronominal ergative external argument. This licit pattern of coreference is shown in example (16) below.

(16) She<sub>i</sub> ERG will read the book<sub>ABS</sub> that Ana<sub>i</sub> bought.

This prediction is correct for both Chuj and Mandar as well: an ergative external argument can be a

<sup>5</sup>Specifically, in Coon et al. 2021 and Royer 2022, 2024, the internal argument raises by virtue of Agreeing with an [EPP]-specified probe on *v*. However, the crucial point remains: the internal argument undergoes inversion with the external argument.

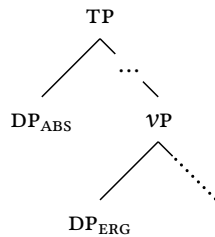
pronoun that is coindexed with an R-expression inside of an absolutive internal argument (and see [Brodkin 2022a,b](#); [Royer 2024](#) for discussion).

(17) *No Condition C effects from ERG to ABS*

- a. Ol-y-awtej [ABS ch'anh libro [RC s-man ix Ana ewi ]] [ERG pro ].  
 will-3ERG-read the book 3ERG-buy the NAME yesterday PRON  
 Literally: 'She<sub>1</sub> will read the book that Ana<sub>1</sub> bought yesterday.' Chuj; ([Royer 2024: \(34\)](#))
- b. Na-na-baca i [ABS buku [RC na-alli iNina digena' ]] [ERG pro ].  
 will-3ERG-read 3ABS book 3ERG-buy NAME earlier  
 Literally: 'She<sub>1</sub> will read the book Nina<sub>1</sub> bought earlier.' Mandar

We take these facts to suggest that transitive clauses in both Chuj and Mandar show the rough syntax in (18): the absolutive internal argument raises above the ergative external argument to the highest clause-internal A-position, with this process feeding the evaluation of Condition C.

(18) *High Absolutive Syntax*



## 2.2.2 High Source of Absolutive Case

The facts of binding are then matched by a parallel argument from the position of absolutive agreement. [Tada \(1993\)](#) and [Coon et al. \(2014\)](#) note that there is a correlation between the linear position of absolutive agreement in the verbal complex and the distribution of the EEC across the Mayan family: the languages that show the EEC require absolutive agreement to surface above the ergative prefix and the verbal stem, and the languages that do not exhibit the EEC require absolutive agreement to surface after the verbal stem (19). [Royer \(2021a, 2022, 2024\)](#) shows that the position of absolutive agreement in the verbal complex correlates with the distribution of Condition C effects in the same way.

- (19) a. Verb stem in High Absolutive Mayan languages  
 TAM - ABS - ERG - verb - suffixes
- b. Verb stem in Low Absolutive Mayan languages  
 TAM - ERG - verb - suffixes - ABS

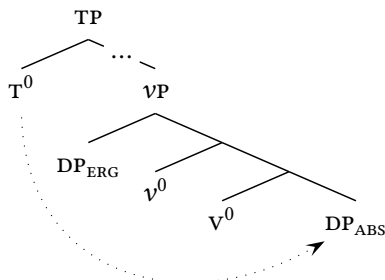
The following examples show the relevant contrast with the EEC. Chuj requires absolutive morphemes to surface above the ergative prefix and the verbal stem and it shows the EEC (20a). The Mayan language Ch'ol, however, requires absolutive morphemes after the verbal stem and it does not show the EEC (20b).

- (20) a. Ix-ach-y-il ix ix.  
 PFV-ABS.SG.2-ERG.3-see CLF woman  
 'The woman saw you.' (Chuj → EEC)
- b. Tyi y-il-ä-yety x-ixik.  
 PFV ERG.3-see-DTV-ABS.2 CLF-woman  
 'The woman saw you.' (Ch'ol → no EEC; see [Coon et al. 2021](#))

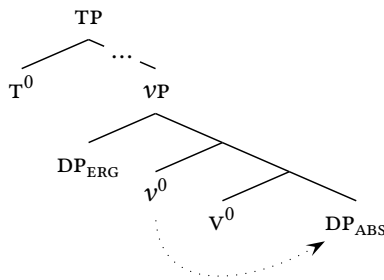


Coon et al. (2014), Assmann et al. (2015) and Coon et al. (2021) propose that this split follows from the syntactic position of the head that hosts absolutive agreement in the Mayan family. In the languages that show the EEC and require absolutive agreement to surface above the ergative prefix and the verbal stem (the “High Absolutive” languages), absolutive agreement sits in  $T^0$ . In the languages that do not exhibit the EEC and require absolutive agreement to surface after the verbal stem (the “Low Absolutive” languages), absolutive agreement has a lower source. The following diagrams illustrate this split.

(21) *High Absolutive Syntax*



(22) *Low Absolutive Syntax*



In support of this claim, Coon et al. (2014) observe that the linear position of absolutive agreement correlates equally with its availability in non-finite clauses in Mayan.<sup>6</sup> In the High Absolutive languages of the family, like Chuj, absolutive agreement must disappear in the non-finite complements to verbs like *yamoch* “begin.” But in the Low Absolutive languages of the family, like Ch’ol, absolutive agreement can appear in these contexts.

- (23) a. \*Ix-in-yamoch [NFC **hach**-in-chel-a’ ].  
 PFV-ERG1SG-begin ABS2S-ERG1SG-hug-TV  
 Intended: ‘I began to hug you.’ Chuj
- b. K-om [NFC j-käñ-**ety** ].  
 ERG1-want ERG1-know-ABS2  
 ‘I want to know you.’ (Ch’ol, Vázquez Álvarez 2011: 99)

Focusing specifically on Mandarin, Brodtkin (2021a, 2022b) makes a parallel case that absolutive agreement must originate in a head that sits relatively high in the clause, above the head that hosts ergative agreement. Two arguments establish the initial asymmetry. First, absolutive agreement surfaces in second-position in Mandarin, while ergative agreement is verb-adjacent. In clauses that contain fronted adverbs or adjunct WH-words, absolutive agreement must move to the left to follow those (on Mandarin, see Brodtkin 2021b; on the related Konjo, Friberg 1996, and on Selayarese, Finer 1999.).

- (24) a. Marondong **a’** na-lamba.  
 tomorrow 1ABS will-go  
 ‘Tomorrow I’ll go.’
- b. Pirang **o** biasa lamba?  
 when 2ABS usually go  
 ‘When do you usually go?’

Second, ergative agreement appears freely in the complements of control, raising, and restructuring verbs in Mandarin, but absolutive agreement does not. The following examples illustrate this in the complement clauses of the control verb *cowa* ‘try’, the raising verb *myosa* ‘stop’, and the restructuring verb *luppei* ‘forget’.

<sup>6</sup>While some Mayan languages must use an antipassive, others, including Chuj, require AF nonfinite clauses—also dubbed the ‘crazy antipassive’ by Kaufman (1990).

- (25) a. U-cowa [TP **na-saka** \_\_\_/\*a' polisi ].  
 1ERG-try 3ERG-catch 1ABS police  
 'I'm trying to be caught by the police.'
- b. Myosa a' [TP **na-pelambi'i** \_\_\_/\*a' sanaeke-u ].  
 stop 1ABS 3ERG-visit 1ABS kids-1GEN  
 'I stopped being visited by my kids.'
- c. U-luppei i [voiceP **u-wawa** \_\_\_/\*i la'lang-u].  
 1ERG-forget 3ABS 1ERG-bring 3ABS umbrella-1GEN  
 'I forgot to bring my umbrella.'

These effects suggest that the head which hosts absolutive agreement in Mandar must sit above the head that hosts ergative agreement. This result converges with two further patterns to allow us to pin down its exact position. First, absolutive agreement forms portmanteaux with the second-position clitics that mark aspect. The following examples illustrate this: the 1ABS agreement enclitic *a'* and the perfective *mo* surface together as *ma'*, while the 3ABS enclitic *i* and the perfective *mo* surface together as *mi* (and see also [Campbell 1989](#); [Friberg 1996](#); [Jukes 2006](#); [Laskowske 2016](#) elsewhere in the South Sulawesi subfamily).

- (26) a. Diang **mo**.  
 there is PFV  
 'There already is some.'
- b. Pole **ma'** na-pelambi'i.  
 just PFV.1ABS 3ERG-visit  
 'He just now visited me.'
- c. Pole **mi** u-pelambi'i.  
 just PFV.3ABS 1ERG-visit  
 'I just now visited him.'

Second, absolutive agreement appears in a distinct paradigm beneath the irrealis *c*<sup>0</sup> *anna'* 'so that'. As a result, the 1ABS agreement enclitic *a'* is replaced with the irrealis 1ABS suffix *-u* in the clauses below (again in a pattern familiar from other languages of South Sulawesi; see especially [Valkama 1995a](#) on Duri).

- (27) a. Na-gumora a' [ **anna'-u** mala na-irangi ].  
 will-shout 1ABS so.that-1ABS.IRR can 3ERG-hear  
 'I'll shout so that they can hear me'
- b. Bulang, indoi=a' mai [ **anna'-u** mala m-a'-issang=i alawe-u ].  
 moon, shine on me that-1ABS.IRR can INTRANS-AF-know=3ACC self-1SG.GEN  
 'Moon, shine on me that I might know myself.' Song lyric: Bulang, by Sulkep Liaco (2006)

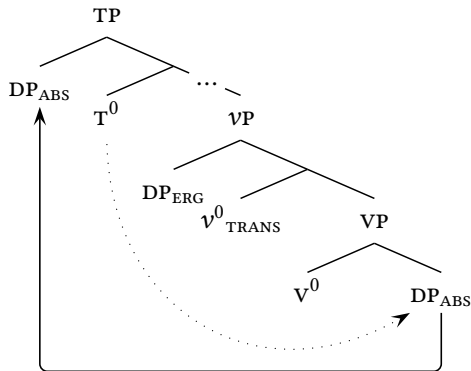
Portmanteau formation and contextual allomorphy of this type are widely understood to obey constraints on morphosyntactic locality ([Noyer 1992](#); [Trommer 2010](#); [Bye and Svenonius 2010](#); [Embick 2010](#); [Merchant 2015](#); [Woolford 2016](#)). These effects thus suggest that the head which hosts absolutive agreement must sit near *ASP*<sup>0</sup> and *c*<sup>0</sup>. The natural candidate for a head in this position is *T*<sup>0</sup>.

### 2.3 Summary

The empirical results of sections 2.1, 2.2.1 and 2.2.2 allow us to understand the clausal syntax of Chuj and Mandar in roughly the same way. In both languages, the absolutive argument must move to the highest A-position in the clause. In both languages, this step occurs in tandem with the formation of an agreement relationship between the absolutive argument and *T*<sup>0</sup>. As a result, we propose that the two languages share

a common pattern of Case Licensing which forces the absolutive argument to raise. Following [Bittner and Hale 1996a,b](#), we argue that transitive clauses in Chuj and Mandar do not generally provide the internal argument with a source of abstract Accusative Case within the *vp*. The internal argument is thus typically licensed in this context by receiving abstract Absolutive Case from  $T^0$ . Endowing  $T^0$  with the feature [+EPP], we thus arrive at the account in tree (28): in both languages, the absolutive argument will always raise above the external argument.<sup>7</sup>

(28) *The High Licensing Account of High Absolutive Syntax*



### 3 The Ban on Ergative Anaphors

With this background in place, we can now turn to the distribution of non-exempt reflexive anaphors. Although Chuj and Mandar both show High Absolutive Syntax, they both form reflexive predicates with a strategy that is familiar from nominative-accusative languages: they place non-exempt reflexive anaphors in the position of the internal argument of a transitive verb, along the lines of (29).

(29)  $Mary_{ERG,i}$  saw<sub>TRANS</sub> herself<sub>i</sub>.

Chuj has only one way to form reflexive predicates, and this is by using the reflexive anaphor *b'a* (30a). The anaphor *b'a*, like its analogues across the family, patterns with possessed nominals in appearing with a genitive prefix ([Ayres 1980](#)). *B'a* is roughly subject to Condition A of the classical binding theory ([Chomsky 1986](#)) and has no exempt or logophoric use (*cf.* [Ayres 1980](#)). This constraint is shown in (30b): *b'a* must be coindexed with a DP which c-commands it and occupies the same clause.

(30) *The Chuj Anaphor b'a*

- a. Ix-y-il            s-**b'a**        waj Xun.  
 PFV-3ERG-see 3GEN-self CLF Xun  
 'Xun saw himself.'
- b. Ix-y-al            ix Xuwan to ix-y-il            s-**b'a**        s-k'ayb'um ix Telex  
 PFV-3ERG-say CLF Xuwan that PFV-3ERG-see 3GEN-self 3GEN-teacher CLF Telex  
 'Xuwan<sub>i</sub> said that [ Telex<sub>j</sub>'s teacher ]<sub>k</sub> saw herself<sub>\*i,j,k</sub>'

<sup>7</sup>As mentioned above, the [+EPP] feature causing the internal argument to raise above the external argument could alternatively sit on  $v_{TRANS}$ , allowing it to be the closest accessible goal for absolutive licensing by  $T^0$ . This option is specifically proposed for Mayan languages in [Coon et al. 2021](#) and [Royer 2022, 2024](#) and [Deal and Royer 2023](#). For purposes of illustration and comparison between Mandar and Chuj, however, we assume the configuration in (28), as originally proposed by [Coon et al. 2014](#) for Mayan.

In Mandarin, reflexive constructions are typically formed in a similar way. Mandarin has a non-exempt reflexive anaphor *alawe* which always hosts a genitive agreement suffix. It is homophonous with a lexical noun that means “body” (31a), but beneath predicates that require their internal arguments to be animate, it must receive a reflexive interpretation (31b).

(31) *The Mandarin Anaphor Alawe*

- a. Sayang i **alawe**-mu!  
 love.2ERG.IMP 3ABS body/self-2SG.GEN  
 ‘Love your body/ yourself!’
- b. U-soso’ i **alawe**-u.  
 1ERG-pity 3ABS self-1SG.GEN  
 ‘I pity myself.’

In its reflexive use, *alawe* obeys Condition A of the binding theory. It has no non-exempt reflexive uses. This pattern is shown in (32): *alawe* must be bound by c-commanding antecedent within its clause.

(32) *The Reflexive Alawe: Condition A*

- Ma’-uang i iKaco’ mua’ na-pokannyang i **alawe-na** guru-nna iSulle.  
 ANTIP-say 3ABS NAME that 3ERG-trust 3ABS self-3GEN teacher-3GEN NAME  
 ‘Kaco’<sub>i</sub> said that [ Sulle’s<sub>j</sub> teacher ]<sub>k</sub> trusts herself<sub>\*i,\*j,k</sub> Mandar

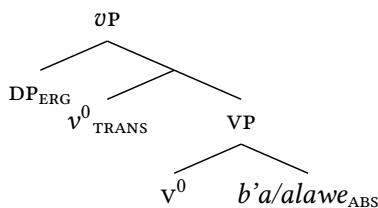
In the constructions above, Chuj and Mandarin both require the non-exempt reflexive anaphors to surface in the position of the internal arguments. This fact can be seen in the patterns of agreement. In these reflexive constructions, both Chuj and Mandarin require the ergative prefixes on the verb to reflect the person features of the semantic agent, rather than the reflexive anaphor itself (which triggers third-person agreement when absolutive in Mandarin). The following examples illustrate this fact: when the semantic agent is a null second-person pronoun, both Chuj and Mandarin require the verb to show second-person ergative agreement.

(33) *Reflexive Anaphors are Internal Arguments*

- a. Ix-**a**-b’ik ha-b’a.  
 PFV-2SG.ERG-wash 2SG.GEN-self  
 ‘You washed yourself.’
- b. **Mu**-soso’ i alawe-mu a?  
 2ERG-pity 3ABS self-2SG.GEN eh?  
 ‘You pity yourself, eh?’

We can thus be certain that these constructions show the vP-level syntax in (34): the reflexive anaphor originates in the position of the internal argument, and its antecedent surfaces in the base position of the external argument. We will return to the TP-level syntax of these constructions in Section 5.

(34) *vP-Level Reflexive Syntax*



Against this backdrop, we now introduce the Ban on Ergative Anaphors. Despite the fact that Chuj and Mandar both show High Absolutive Syntax, they both prohibit the absolutive internal argument of a transitive clause from binding a reflexive anaphor in the position of the external argument. As a result, both languages ban clauses with the shape in (35).

(35) Herself<sub>ERG,i</sub> saw<sub>TRANS</sub> Mary<sub>ABS,i</sub>.

This fact can be seen in Chuj and Mandar in the distribution of agreement. It is ungrammatical in both languages for the ergative prefixes on transitive verbs to track the person features of reflexive anaphors. In other words, both languages disallow reflexive clauses in which the ergative agreement is third-person and the absolutive agreement is second- or first-person.

(36) *No Ergative Anaphors*

- a. \*Ix-**ach-s**-b'ik                      ha-b'a.  
     PFV-2SG.ABS-3ERG-wash    2SG.GEN-self  
     Intended: 'Yourself washed you.'
- b. \*Na-soso' o                      alawe-mu              a?  
     3ERG-pity 2ABS                  self-2SG.GEN        eh  
     Intended: 'Yourself pities you, eh?'

We thus arrive at the following result: Chuj and Mandar pattern with many ergative languages (Anderson 1976), including ergative languages that have been argued to show High Absolutive Syntax, like West Circassian (Ershova 2019, 2022) and many Inuit varieties (Manning 1996), in prohibiting reflexive anaphors from appearing in the position of the transitive external argument. We restate this result in generalization (37) below.

(37) *High Absolutive languages show the Ban on Ergative Anaphors*

In many ergative languages, reflexive anaphors cannot surface as ergative external arguments, even when absolutive arguments raise above ergative arguments to an A-position in the clause.

## 4 Two ways to derive the Ban

The goal of this section is to show that the Ban on Ergative Anaphors follows straightforwardly from prominent contemporary approaches to the distribution of non-exempt reflexive anaphors. We divide these approaches into two groups: Domain-Based Approaches, which demand that Condition A be enforced within narrow syntactic domains (following Chomsky 1981, 1986), and Reductionist Approaches, which derive Condition A from constraints on Internal Merge (Move) (Hornstein 2001, 2007). We aim to show that both approaches (a) can explain the Ban on Ergative Anaphors and (b) can do so in a way that is compatible with the existence of High Absolutive Syntax and thus the Locality Analysis of the EEC.

### 4.1 Domain-based approaches

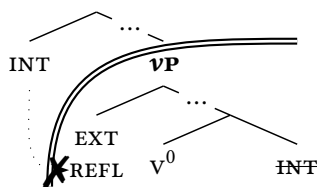
Chomsky (1981, 1986) argues that reflexive anaphors must be bound by an antecedent in a narrow syntactic domain: the smallest syntactic constituent that also contains an external argument. The contemporary literature has often reformulated the Binding Conditions in terms of Phase Theory (e.g., Canac-Marquis 2005; Heinat 2006; Lee-Schoenfeld 2008; Hicks 2009; Bruening 2014; Safir 2014; Despić 2015; Charnavel and Sportiche 2016). On this approach, the constraint behind Condition A can be understood as follows:

(38) *The Phase-Based Binding Constraint*

Non-exempt reflexive anaphors must be bound within the first phase in which they are merged.

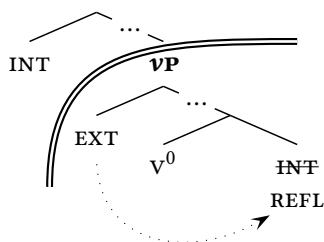
On this approach, it is possible to derive the Ban on Ergative Anaphors through two assumptions: (i) there is a clause-internal phase that corresponds to the *vp/voiceP* (Chomsky 2000) and (ii) there is no step of A-movement that positions the absolutive argument above the ergative argument within this phase (as Brodtkin 2022b argues is the case for Mandarin). Under these circumstances, the phase-based binding constraint will ban a raised absolutive argument from binding a reflexive anaphor in the position of the external argument, as shown below.

(39) *Phase-Based Accounts Predict the Ban on Ergative Anaphors*



This analysis guarantees that the binding of non-exempt reflexive anaphors will be sensitive to the patterns of c-command that hold between arguments within the *vp/voiceP* alone. The result is that the distribution of non-exempt reflexive anaphors should not be affected by the existence of a High Absolutive Syntax configuration like the one in (28) above. Whether or not the absolutive argument moves to an A-position outside of the *vp/voiceP* or stays *in situ*, an absolutive argument should never be able to bind a reflexive anaphor in the position of the ergative external argument (39).<sup>8</sup> In the same vein, an ergative external argument should always be able to bind a reflexive anaphor in the position of the internal argument, regardless of whether or not that argument raises to a higher A-position later in the derivation (40).

(40) *Phase-Based Accounts Allow Absolutive Anaphors*



We thus conclude that domain-based approaches can deliver the Ban on Ergative Anaphors in a way that is compatible with High Absolutive syntax and the Locality Analysis of the EEC.

## 4.2 Reductionist approaches

The Ban on Ergative Anaphors can also be derived from many alternative approaches to the distribution of non-exempt reflexive anaphors, including those grounded in *Agree* (Reuland 2001, 2011, Rooryck and

<sup>8</sup>Under a domain-based approach like the one put forth here, accounts that assume that the internal argument moves to an outer specifier of *vp/voiceP* (such as Coon et al. 2021, Royer 2022, 2024, Deal and Royer 2023; see also footnote 6 above) might, all else being equal, predict that the internal argument should be able to bind an anaphor in the position of the ergative argument. However, as we will show in section 5, while a domain-based approach is desirable for Mandarin-type reflexive anaphors, it is not desirable for Mayan-type anaphors. Mayan anaphors are best analyzed under reductionist approaches instead (Royer 2022, 2024), which, as we show in the next section, can deliver the Ban on Ergative Anaphors even if internal arguments generally raise to the specifier of *vp/voiceP*.

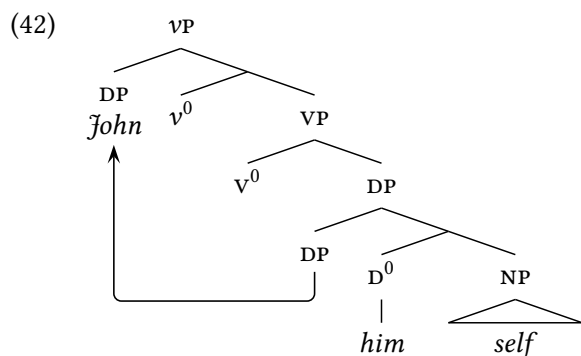


vanden Wyngaerd 2011) and *Move* (Hornstein 2001, 2007, Kayne 2002, Zwart 2002) (see Drummond et al. 2011 for an instructive overview). For instance, Levin (2014) already shows that the Agree-based approach in Rooryck and vanden Wyngaerd 2011 can account for the Ban on Ergative Anaphors in Balinese. We thus turn to approaches based on *Move*, showing that they too can naturally explain the Ban on Ergative Anaphors.

Like Domain-Based approaches, Movement-based approaches can also ensure that the distribution of non-exempt reflexive anaphors will only be sensitive to the patterns of c-command that hold between arguments in the *VP/voiceP*. The core of the account runs as follows: (i) reflexive anaphors are nominals whose possessors have raised to a higher A-position, (ii) movement must always go upwards and target the root, and cannot go downwards or apply countercyclically (Chomsky 2001), and (iii) the arguments which bear the thematic roles associated with internal arguments are strictly base-merged in the VP (the UTAH; Baker 1988).

We illustrate with the following derivation of a transitive clause with a reflexive anaphor in the position of the internal argument. In this clause, the Movement-based approach takes the ergative argument to be base-merged as the possessor of the internal argument and to raise to the position of the external argument:

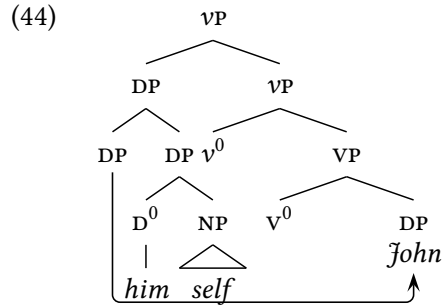
(41) John<sub>ERG,i</sub> loves<sub>TRANS</sub> himself<sub>i</sub>.



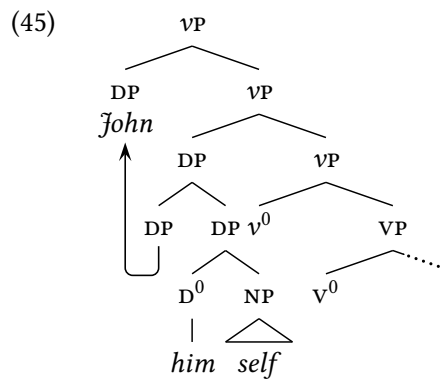
This approach extends in the same fashion to other constructions in which a reflexive anaphor is bound by an argument that c-commands it in its base position. For instance, clauses in which an internal argument is bound by an applied argument would be taken to involve raising of the possessor of the internal argument to the position of the applied argument, and clauses in which an applied argument is bound by an external argument would be taken to involve raising of the possessor of the applied argument to the position of the external argument. In each case, the step of movement in question obeys the constraints that are now standardly taken to hold over phrasal movement: it targets the root and c-commands its trace. What is considerably more difficult on this approach are constructions in which a reflexive anaphor would be bound by an argument that does *not* c-command it in its base position. Setting aside the question of high-absolutive syntax entirely, consider the problem that is raised by a construction like (43), in which there is a reflexive anaphor in the position of the external argument that is bound by an internal argument.

(43) Himself<sub>i</sub> loves John<sub>i</sub>.

There are two ways in which a Movement-based analysis might derive a construction of this type. The first is to resort to movement that is downward or countercyclic, in violation of the Extension Condition: here, from a position inside of the external argument to the thematic position of the internal argument.



The second is to posit movement that is upward but assume that the internal argument is integrated into the clause in a position distinct from that in which it is canonically base-merged: for instance, above the external argument in the *vP* (or perhaps even higher), in violation of the UTAH (Baker 1985).



We argue that each of these possibilities should be ruled out by independent principles of the grammar. And with this, the Movement analysis is unable to derive the ergative anaphor pattern in (43). As a result, this approach, too, delivers Ban on Ergative Anaphors in a manner that is straightforwardly compatible with the existence of High Absolutive Syntax.<sup>9</sup>

<sup>9</sup>There are many other approaches to the distribution of non-exempt reflexive anaphors which are also able to deliver the Ban on Ergative Anaphors. For instance, Burukina (2019) provides an analysis of reflexive anaphors in Kachikil (Mayan), based on the detransitivization approaches to reflexive *SE*-anaphors developed by Labelle (2008), which is compatible with the existence of High Absolutive Syntax. In the same vein, Ahn (2015) develops a domain-based approach to the distribution of reflexive anaphors that turns on the function of a particular *voice*<sup>0</sup>, and Ershova (2022) demonstrates that such an account can be extended to languages that show High Absolutive Syntax. We assume that these types of analyses are not on the right track for Chuj and Mandar, in which the verbs in reflexive constructions must be transitive and must bear the morphology that canonically sits in the transitive *v*<sup>0</sup> and *voice*<sup>0</sup> (on Mandar, see Brodtkin 2022b). We make no claims about the validity of these approaches in other languages and we expect that they could also be made to deliver the Ban on Ergative Anaphors in Chuj and Mandar if our own analyses of these languages turn out to be misguided. We take the same stance on accounts of Condition A effects that are based on Agree.

## 5 Language-Specific Analyses

Just as the literature has proposed multiple derivational paths to understand the effects of Condition A, Déchaine and Wiltschko (2017) argue that non-exempt reflexive anaphors do not form a syntactically homogeneous class. The final task of our paper is thus to build from this position toward specific analyses of Condition A effects in Chuj and Mandar. In section 5.1, we argue that a domain-based approach is sufficient to account for the distribution of non-exempt reflexive anaphors in Mandar. In section 5.2, we show that the distribution of non-exempt reflexive anaphors in Chuj is very distinct, and as a result, we develop a reductionist account based on Move. In section 5.3, finally, we show that the Chuj facts are amenable to a second analysis that connects the distribution of its reflexive anaphor to nominal size.

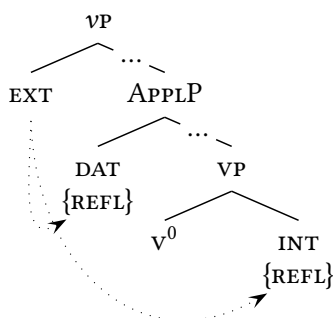
### 5.1 Mandar: A Domain-based approach

On a domain-based approach, we have proposed that the distribution of non-exempt reflexive anaphors can be understood through the following constellation of claims:

- (46) *The Domain-Based Account*
- Non-exempt reflexive anaphors must be bound by a c-commanding antecedent in an A-position within the first phase in which they are merged.
  - There is a clause-internal phase that contains the first-merge positions of the external argument and internal argument (alongside applied arguments), and there is no smaller clause-internal phase that only contains the first-merge position of the internal argument.
  - The absolutive argument does not raise to an A-position above all other arguments within this first clause-internal phase.

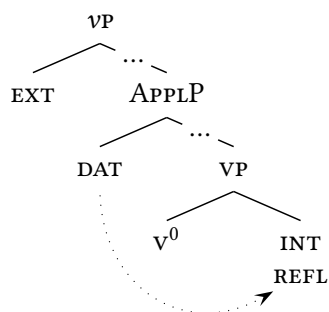
This analysis predicts that the external argument should be able to bind reflexive anaphors in the position of the internal argument, as well as reflexive anaphors in the positions of any applied arguments that are first merged in positions beneath the external argument (e.g., in a specifier of an APPLP; Pylkkänen 2008):

- (47) *Domain-Based Account: Prediction One*



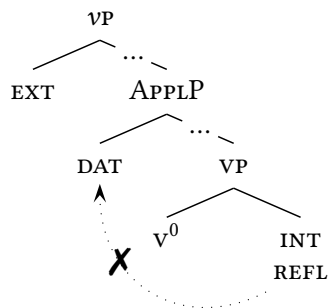
It similarly predicts that an applied argument that originates above the internal argument should be able to bind reflexive anaphors in the position of the internal argument:

(48) *Domain-Based Account: Prediction Two*



This analysis also predicts that the internal argument should be unable to bind reflexive anaphors in applied arguments and external arguments that are first merged above the internal argument. In the same vein, it predicts that an applied argument should be unable to bind a reflexive anaphor in the position of an external argument that originates above it (not shown).

(49) *Domain-Based Account: Prediction Three*



These predictions are all correct in Mandarin: (50a) shows that external arguments can bind into applied arguments, (50b) shows that applied arguments can also bind into internal arguments, and (50c) shows that applied arguments cannot bind into external arguments.

- (50) a. U-anna-ngang i kandekande **alawe-u**.  
 1ERG-save-APPL 3ABS snack self-1GEN  
 'I<sub>1</sub> saved myself<sub>1</sub> a snack.'
- b. U-jolo-ang i iKaco' **alawe-na**.  
 1ERG-point-APPL 3ABS NAME self-3GEN  
 'I showed Kaco'<sub>1</sub> himself<sub>1</sub>.'
- c. \*Na-ellong-ang a' **alawe-u** ellongang.  
 3ERG-sing-APPL 1ABS self-1SG.GEN song  
 Intended: 'Myself<sub>1</sub> sang a song to me<sub>1</sub>.'

The domain-based account can also capture several further restrictions when embedded within a larger theory of the distribution of phases. On the hypothesis that the DP forms a phase, this account predicts that the usual patterns of binding can be disrupted by embedding a non-exempt reflexive anaphor within a DP: for instance, by placing it in the position of the possessor of the internal argument. In this context, the first phase that defines the domain for reflexive binding will correspond to the complex DP, rather than the VP, ruling out the pattern of binding in (51).

- (51) Mary<sub>i</sub> [<sub>PHASE</sub> saw [<sub>PHASE</sub> a picture of herself<sub>i</sub> ] ].

In Mandarin, this prediction is borne out: when *alawe* appears as a possessor inside a complex DP, it cannot be bound by any constituent outside of that DP.

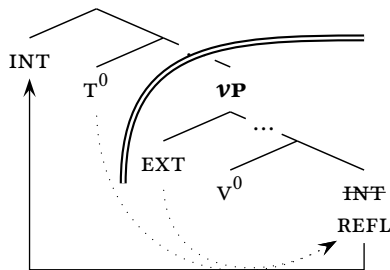
- (52) \*Na-ita i iMina [<sub>DP</sub> photo-nna **alawe-na** ].  
 3ERG-see 3ABS NAME photo-3GEN self-3GEN  
 Intended: ‘Mina<sub>1</sub> saw a photo of herself<sub>1</sub>.’

The same prediction extends to contexts where non-exempt reflexive anaphors surface inside of PPs (on the status of PP as a phase, see Abels 2003). In this context, the domain-based account should predict that non-exempt reflexive anaphors cannot be bound by constituents that sit outside of the PP, and in Mandarin this prediction is again correct. The following examples illustrate this: the verb *makannyang* ‘have faith in’ typically selects a PP complement (53a), and the reflexive anaphor *alawe* cannot appear inside of this PP (53b). The way to express the relevant meaning is through the use of a pronominal form that is not subject to Condition A: in this case, the inflected preposition *mai* ‘to me’ (53c).

- (53) a. Makannyang a’ [<sub>PP</sub> lo iMina ].  
 have faith 1ABS in NAME  
 ‘I have faith in Mina.’  
 b. \*Makannyang a’ [<sub>PP</sub> lo **alawe-u** ].  
 have faith 1ABS in self-1SG.GEN  
 Intended: ‘I have faith in myself.’  
 c. Makannyang a’ [<sub>PP</sub> mai ].  
 have faith 1ABS in me  
 ‘I have faith in me.’

Turning now to the broader syntax of the language, we observe that the domain-based account can be integrated with the larger system of High Absolute Syntax schematized in (28) above with no further complications. In transitive clauses where the non-exempt reflexive anaphor is the internal argument, we have seen that it triggers the expected pattern of third-person absolutive agreement (see for instance *-i* absolutive agreement above). As a result, we propose that reflexive anaphors in this position raise to the highest clause-internal A-position, moving at a derivational stage that follows the evaluation of Condition A. This proposal yields the syntax in (54).

- (54) *Domain-Based Account: Regular High Absolute Syntax*



The result is an account that captures the distribution of non-exempt reflexive anaphors in Mandarin and the Ban on Ergative Anaphors, all while fitting into the broader system of High Absolute Syntax laid out in section 2.

## 5.2 Chuj: A Movement-Based Approach

Turning now to Chuj, we note that the reflexive anaphor *b'a* obeys a range of further constraints that set it apart from its Mandarin counterpart (see also Ayres 1980 and Burukina 2019 on Kaqchikel). This will ultimately lead us to the proposal that a different approach to anaphors from the one just provided for Mandarin must be sought in Chuj, adopting a movement-based approach below.

Setting the status of ditransitives aside (Chuj lacks clear applicative morphology), we can begin with the fact that *b'a*, like *alawe*, cannot appear inside of complex DPs and PPs.

(55) *Chuj: No Reflexive Anaphors in Complex DPs and PPs*

- a. \*Ix-s-nib'-ej [DP juntzanh poto **s-b'a** chi' ] waj Xun.  
 PFV-3ERG-like-DTV some picture A3-self DEM CLF Xun  
 Intended: 'Xun liked these pictures of himself.'
- b. \*Ix-lolon waj Xun [PP t'a **s-b'a** ].  
 PFV-speak the Xun PREP 3GEN-self  
 Intended: 'Xun spoke to himself.'

Despite this initial parallel, there are a number of ways in which *b'a* and *alawe* diverge. The first of these asymmetries lies with syntactic mobility. Both Chuj and Mandarin allow the internal arguments of transitive verbs to surface in preverbal positions as topics and foci (see e.g., Bielig 2015; Royer 2021b). In Chuj, however, the reflexive anaphor *b'a* cannot be moved in this way. The following examples illustrate this fact: *b'a* cannot surface in the preverbal focus position (56a), though its Mandarin counterpart can (56b).

(56) *Movement Restrictions on Reflexive Anaphors in Chuj but not in Mandarin*

- a. \*Ha **s-b'a** [ ix-y-il ix t<sub>ABS</sub> ].  
 FOC 3GEN-self PFV-3ERG-see she  
 Intended: 'She<sub>i</sub> saw HERSELF<sub>i</sub>' Chuj
- b. **Alawe-na** [ na-ita iMina t<sub>ABS</sub> ].  
 self-3GEN 3ERG-see NAME  
 'Mina<sub>i</sub> saw HERSELF<sub>i</sub>' Mandar

The second asymmetry involves coordination. In Chuj, it is impossible to coordinate the reflexive anaphor with any other DPs (57a). No such restriction holds over the reflexive anaphor in Mandarin (57b).<sup>10</sup>

<sup>10</sup>This Chuj fact allows us to circumvent one of the strongest criticisms levied against movement-based approaches to binding, put forth by Bruening (2021). Bruening argues against a movement theory of anaphors in English on the basis of the fact that English anaphors can be coordinated with non-anaphors:

- (i) a. She washed herself<sub>1</sub> and him<sub>1</sub>.  
 b. The Queen<sub>1</sub> invited the baron and herself<sub>1</sub> to tea. (Bruening 2021: 12)

Bruening's argument is the following: coordinate structures are islands for movement, and so a movement theory of English anaphors cannot be pursued.

As seen in (57a), this argument cannot be extended to Chuj, since anaphors in this language cannot be coordinated with regular nominals. The movement-based approach to Condition A is thus entirely compatible with the distribution of Chuj anaphors. Actually, a movement-based account (as opposed to a domain based approach) would *predict* that (57a) should be ungrammatical. Bruening (2021: §3.1) discusses other related island-sensitive environments in which English anaphors can be licensed, to the alleged detriment of movement-based accounts, but the fact of the matter remains the same: Chuj anaphors exhibit the expected pattern insofar as they do not appear in any of these environments.



(57) *Coordination Restrictions on Reflexive Anaphors in Chuj but not in Mandar*

- a. \*Ix-y-il [ &P s-b'a yet' ix Malin ] winh k'ayb'um.  
 PFV-A3-see A3-self and A3 Malin CLF teacher  
 Intended: 'The teacher<sub>i</sub> saw himself<sub>i</sub> and Malin.' Chuj
- b. U-pakaraya i [ &P alawe-u na iMina ].  
 1ERG-respect 3ABS self-1GEN and NAME  
 'I<sub>i</sub> respect myself<sub>i</sub> and Mina.' Mandar

There is a third asymmetry that can be seen in other Mayan languages in the system of agreement. While third person absolutive is always null in Chuj, it is overt for plural DPs in languages of the K'ichean sub-branch, like K'iche' and Kaqchikel (Can Pixabaj 2015; Burukina 2019; Royer 2022). In these languages, plural reflexive anaphors in the position of the internal argument exceptionally fail to trigger overt plural absolutive agreement on the verb. In this respect, the reflexive anaphors in these languages contrast clearly with the Mandar *alawe*, which triggers the regular pattern of absolutive agreement (see e.g., (53) and (57b)).

(58) *Kaqchikel* → *no Set B agreement with reflexives* (data cited from Royer 2022)

- a. Rije x-(\*e)-ki-tz'ët k-i'.  
 PRON.3P PFV-B3P-A3P-see A3P-REFL  
 'They<sub>i</sub> saw themselves<sub>i</sub>.' (Burukina 2019: (2))
- b. Yin x-e-in-tz'ët rje'.  
 I PFV-B3P-A1S-see they  
 'I saw them.' (Imanishi 2019: (6))

In tandem with these facts, there is a final asymmetry which suggests that reflexive anaphors in Chuj do not participate in the usual system of High Absolutive Syntax. In transitive clauses, we have seen that Chuj does not allow ergative third-person external arguments to undergo any kind of extraction. But this restriction is lifted in transitive clauses when the internal argument is the reflexive anaphor *b'a*. The following examples illustrate this: in the presence of a reflexive internal argument, Chuj allows the ergative external argument to undergo WH-movement (59a). Mandar does not (59b).

- (59) a. Mach [ ix-y-il-a s-b'a t<sub>ERG</sub> ]?  
 who PFV-3ERG-see-TV 3GEN-self  
 'Who<sub>i</sub> saw himself<sub>i</sub>?' Chuj
- b. \*Nai i [ na-pakaraya t<sub>ERG</sub> alawe-na ].  
 who 3ABS 3ERG-respect self-1SG.GEN  
 Intended: 'Who<sub>i</sub> respects himself<sub>i</sub>?' Mandar

We can thus summarize the divide between Chuj and Mandar as follows:

Table 2: Distribution of Reflexive Anaphors: Mandar vs. Chuj

Syntactic distribution	Mandar	Chuj
① Can the anaphor appear within a PP or complex DP?	No	No
② Can the anaphor be $\bar{A}$ -extracted?	Yes	No
③ Can the anaphor be coordinated with DPs?	Yes	No
④ Can the anaphor trigger absolutive agreement?	Yes	No
		(Kaqchikel)
⑤ Does the EEC still hold when the INT is an anaphor?	Yes	No

We take these facts to suggest that there is a meaningful syntactic distinction between the non-exempt

reflexive anaphors in these two languages: the syntax of Mandarin *alawe* is distinct from that of Chuj *b'a*. Pressing further, we propose that this syntactic distinction emerges from the distinct derivational pathways that give rise to the non-exempt reflexive anaphors in these two languages. In Mandarin, we propose that the distribution of the reflexive anaphor *alawe* is governed by the domain-based constraint in (38), and already discussed in section 5.1. In Chuj, in contrast, we following Royer 2022, 2024 in proposing that the distribution of the reflexive anaphor *b'a* is best analyzed in terms of movement. We restate this proposal as follows.

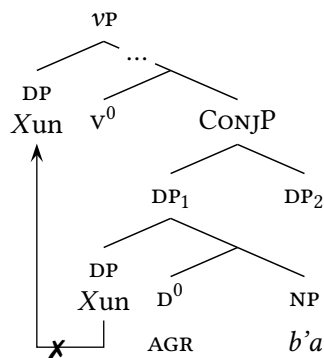
(60) *Two Derivational Paths to Non-Exempt Reflexive Anaphors*

- a. The Mandarin *alawe* is bound in accordance with the Phase-Based Binding Constraint (38).
- b. The Chuj *b'a* is stranded by movement of its possessor to a higher argument position.

At the outset, we note that both of these accounts can explain the bans on reflexive anaphors within PPs and complex DPs (line ① of Table 2). If DPs and PPs form phases in Mandarin, then the domain-based binding constraint in (38) should block binding into these domains. PPs with the preposition *t'a* indeed form islands for extraction in Chuj, and as a result, the movement-based approach can also capture the restriction that reflexive anaphors cannot appear within PPs in Chuj. To account for the ban on reflexive anaphors within complex DPs in Chuj, finally, we assume that A-movement out of DPs in Chuj cannot target any constituent except the specifier of the entire DP (in other words, we assume a ban on A-movement of the specifiers of specifiers of the DP).

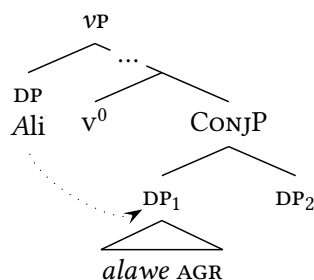
Turning now to the asymmetries between the two languages, we can begin with the restriction on coordination in Chuj (line ③ of Table 2). Coordinate structures form islands for subextraction in Chuj (the Coordinate Structure Constraint; Ross 1967; Bruening 2021). As a result, the movement-based account correctly predicts that it should be impossible for the possessor of the anaphor *b'a* to move out from a coordinate structure and into the position of the external argument in a clause where *b'a* appears inside of a coordinate structure. We schematize this ban below.

(61) *Movement-Based Account: No Reflexive Anaphors in Coordinate Structures*



In tandem with this conclusion, we note that the domain-based account predicts that the Mandarin reflexive anaphor *alawe* should be able to appear freely in coordinate structures, on the hypothesis that the islandhood of coordinate structures is not due to their status as phases. We illustrate this pattern below.

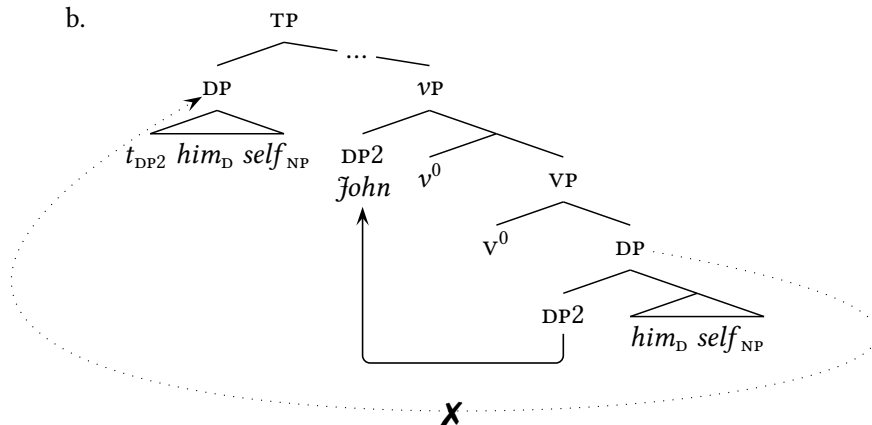
(62) *Domain-Based Account: Reflexive Anaphors OK in Coordinate Structures*



Second, the movement-based account allows us to derive the contextual disappearance of the EEC in Chuj (line ⑤ of Table 2) from constraints on remnant movement. In a clause of Chuj where a reflexive internal argument raised to the regular high absolutive position, we would end up with the (illicit) remnant movement configuration in (63):

(63) *Movement-Derived Anaphors: Remnant Movement to Spec,TP is Illicit*

- a. John loves himself.
- b.

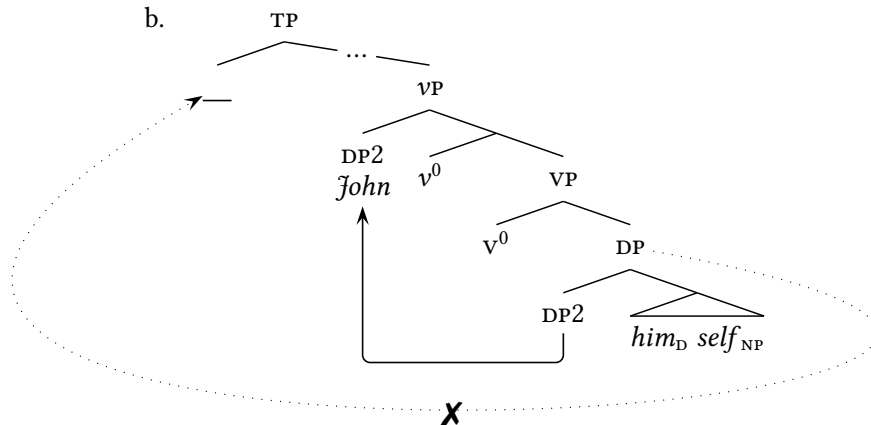


Here, the possessor of the internal argument would first move to the external argument position, and the remnant internal argument would then move above the external argument position. The result is a configuration that is ruled out by virtually all theories of remnant movement (see e.g. Saito 1992, 2002, Müller 1996, 1998, and Grewendorf 2003; see Grewendorf 2015 for an overview of constraints on remnant movement). Consider, for instance, Müller’s (1996, 1998) *Condition of Unambiguous Domination* (CUD). In short, this condition bars remnant movement of a constituent XP with a trace *t*, if XP undergoes the same kind of movement as the movement that left *t*. Müller distinguishes between four kinds of movements: (i) scrambling, (ii) topicalization, (iii) *wh*-movement, and (iv) A-movement. We assume that the movement of the possessor in (63) involves the same kind of movement as the movement that leads to high-absolutive syntax: both are A-movements. As a result, Müller’s CUD should rule out structures like (63), in which the reflexive anaphor *b’a* raises to the canonical High Absolutive A-position. We thus propose that clauses that contain reflexive anaphors in the position of the internal argument in Chuj show the A-syntax in (64): the possessor of the internal argument first moves to the external argument position, and then nothing raises to the canonical High Absolutive A-position.

(64) *Movement-Derived Reflexive Anaphors: No Movement to Spec,TP*

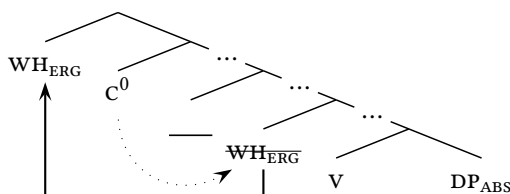
a. John loves himself.

b.



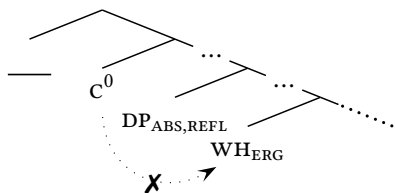
The result is that the ergative external arguments in these clauses can be targeted by the strictly local  $\bar{A}$ -probes that drive WH-movement, focus-fronting, and relativization in Chuj:

(65) *Chuj: Exceptional Extraction of Ergative Arguments*



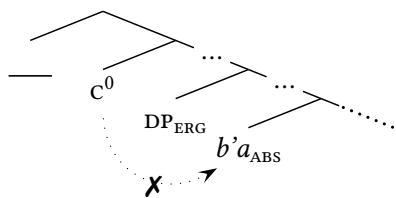
On the other hand, the domain-based account of Mandarin predicts that reflexive anaphors should freely raise to the canonical High Absolutive A-position. Our account thus predicts that the EEC should persist in the Mandarin clauses where reflexive anaphors are merged in the position of the internal argument—a correct result:

(66) *Mandarin: No Exceptional Extraction of Ergative Arguments*



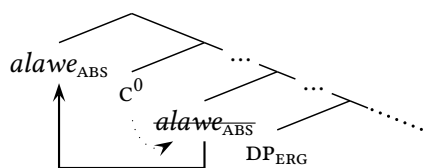
Third, the movement-based account can provide us with an explanation for the ban on  $\bar{A}$ -extraction of reflexive anaphors in Chuj (line ② of Table 2). The locality analysis of the EEC holds that  $\bar{A}$ -extraction of internal arguments can only occur when internal arguments move to the highest clause-internal A-position (e.g., Coon et al. 2014). On the movement-based account of *b'a* adopted here, however, constraints on remnant movement should rule out the derivations in which the reflexive anaphor *b'a* moves to this high position. We thus arrive at the following account of this restriction: *b'a* cannot undergo  $\bar{A}$ -extraction because it cannot first raise to the highest clause-internal A-position:

(67) No  $\bar{A}$ -Extraction of  $B'a$



Once again, the domain-based account of Mandar yields a different result. If reflexive anaphors raise to the High Absolutive A-position, then they should form licit targets for the local  $\bar{A}$ -probes that drive WH-movement, focus-fronting, and relativization in Mandar. As we have seen, this prediction is correct.

(68)  $\bar{A}$ -Extraction of *Alawe*: OK

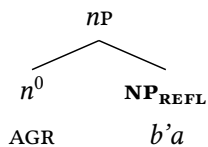


Stepping back from the particulars, then, we submit that the syntactic differences between the non-exempt reflexive anaphors of Chuj and Mandar can be derived by appeal to distinct derivational pathways that deliver the surface effect of Condition A, and which at the same time also provide an explanation for the Ban on Ergative Anaphors. To the extent that our proposal succeeds, it opens up a novel path to connect and reinterpret these two lines of the literature—domain-based and reductionist—on Condition A Effects.

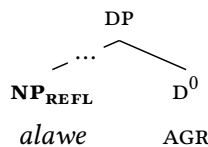
### 5.3 Chuj: A Size-Based Alternative

The final task of our paper is to weigh our account of non-exempt reflexive anaphors in Chuj against an alternative analysis that is familiar from the wider literature on Mayan. [Ordóñez \(1995\)](#), [Coon et al. \(2014, 2021\)](#), and [Royer \(2022, 2024\)](#) propose that the restrictions that govern non-exempt reflexive anaphors in Chuj and other Mayan languages could be derived from a restriction on nominal size: focusing on Chuj, non-exempt reflexive anaphors may be smaller than full DPs. We will refer to this second analysis of Chuj as the “NP-analysis”, and we present it in tree (69) (compared to our analysis of Mandar reflexives in (70)).<sup>11</sup>

(69) *Chuj*: NP



(70) *Mandar*: DP

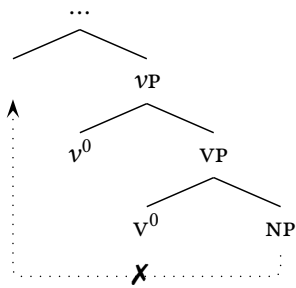


[Royer \(2022, 2024\)](#) notes that this second approach can explain many of the restrictions on non-exempt reflexive anaphors in Chuj (which, as far as we can tell, hold in many Mayan languages; [Ayres 1980](#)). We summarize these arguments here. First, non-exempt reflexive anaphors could be blocked from raising to

<sup>11</sup>This analysis would require the structurally-reduced reflexives in Chuj to host a low possessor position. We identify this with the position that is proposed to host inalienable possessors by [Alexiadou \(2003\)](#), [Myler \(2014\)](#), and [Tyler \(2021\)](#).

the High Absolutive position in Chuj (lines ④/⑤ of Table 2) by positing that  $\tau^0$  in Chuj can only attract DPs to its specifier. As a result, the clauses that contain non-exempt reflexive anaphors in the position of the internal argument will not allow these elements to raise to the canonical High Absolutive position:

(71)

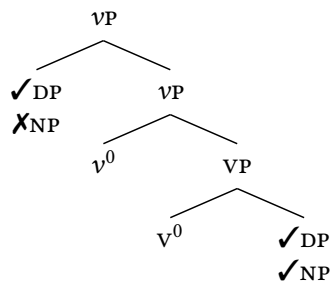


Second, the NP-analysis could explain the ban on  $\bar{A}$ -extraction of reflexive anaphors (line ② of Table 2) in two ways. To begin, it could posit a strict locality restriction on the probes that drive WH-movement, focus-fronting, and relativization in Chuj, ruling out extraction of the reflexive anaphor in the same way as the Movement-Based Account. As an alternative, it could posit another ‘DPS-only’ restriction on the probes that drive WH-movement, focus-fronting, and relativization in Chuj (as argued by Coon et al. (2021)), thus ruling out the extraction of NPs.

Third, the NP-analysis could explain the ban on coordinating reflexive anaphors with regular DPS (line ③ of Table 2) by another selectional restriction: the two elements in a coordinate structure must have the same syntactic category, and as a result, NP-sized reflexives should not be able to be coordinated with DPS.

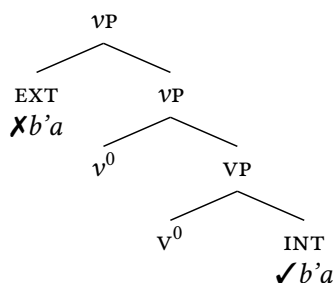
Fourth, the NP-analysis would allow us to capture the Ban on Ergative Anaphors in a similar way. More specifically, we might imagine that Chuj allows structurally reduced nominals to appear in the position of the internal argument but not the position of the external argument. Once again, we can understand this restriction in terms of selection: the head that introduces the internal argument imposes no restrictions on the structural size of its complement, but the head that introduces the external argument does.

(72)



This restriction provides the means to derive the Ban on Ergative Anaphors from the structural properties of an NP-anaphor like *b'a*: such an element can appear in the position of the internal argument, where NPs can occur, but not in the position of the external argument, where they cannot.

(73)





Stepping back once again, we arrive at an alternative analysis that leverages independent restrictions to derive the syntactic differences between non-exempt reflexive anaphors in Mandarin and Chuj. On this perspective, we can understand the differences between *b'a* and *alawe* without postulating multiple pathways to Condition A Effects. The result is that we can derive the binding profiles of *b'a* and *alawe* from a singular constraint, like the Phase-Based Binding Condition (38). This type of reanalysis would pave the way for a different line of advance on the theory of Condition A Effects: one that grounded them in a singular syntactic source and hung all other syntactic differences between non-exempt reflexive anaphors in separate systems. We leave it to future investigation to determine which approach is correct.<sup>12</sup>

## 6 Conclusions

The first contribution of this paper has been to demonstrate two interlocking points: (i) non-exempt reflexive anaphors cannot appear in the position of the external argument even in configurations that show High Absolutive Syntax, and (ii) this restriction can be neatly derived on two mainstream accounts of Condition A. We have shown that both domain-based and movement-based accounts of Condition A Effects can deliver the Ban on Ergative Anaphors in Mandarin and Chuj, even in configurations where the internal argument raises above the external argument to the highest A-position in the clause.

This result leads to two methodological conclusions. First, the Ban on Ergative Anaphors cannot be taken as evidence against the existence of High Absolutive Configurations, in which absolutive arguments

<sup>12</sup>Beyond Mayan, we note that NP-sized anaphors are likely well-attested in Western Austronesian languages as well (see especially Paul 2004). Indonesian and Malagasy have reflexive anaphors that pattern with *b'a* in three respects. First, when they are internal argument, they surface in a construction where internal arguments remain low (the “Agent Voice”):

- (i) *Low Anaphors in Indonesian and Malagasy*
- a. Dia **meng**-hargai **diri**.  
3SG AV-respect self  
'He respects himself.' Indonesian
- b. **Ma-naja** **tena** iSahondra.  
AV-respect self NAME  
'Sahondra respects herself.' Malagasy; Paul 2004

Second, they cannot be internal arguments in constructions that require internal arguments to raise over the external argument to the highest clause-internal A-position. The following examples illustrate this: these reduced reflexives cannot be internal arguments in the Patient Voice in Malagasy or the Pasif Semu (“Pseudo-passive”) in Indonesian.

- (ii) a. \***Diri** tidak saya hargai.  
self not 1SG respect.PV  
Intended: 'I don't respect myself' Indonesian
- b. \*Haja-**in** iSoa **tena** .  
respect-PV NAME self  
Intended: 'Herself is respected by Soa.' Malagasy; Paul 2004

Third, these anaphors cannot surface in the position of the external argument, even in clauses in which an internal argument raises over the external argument to the highest clause-internal A-position:

- (iii) a. \*Saya tidak **diri** hargai.  
1SG not self respect.PV  
Intended: 'Myself does not respect me.' Indonesian
- b. \*Haja-**in** **tena** iSoa .  
respect-PV self NAME  
Intended: 'Herself respects Soa.' Malagasy; Connie Ting (p.c.)

Paul (2004) takes some of these patterns to suggest that the Malagasy *tena* projects only up to the level of NP.

raise to the highest clause-internal A-position. Second, the Ban on Ergative Anaphors cannot be taken as evidence that the high position to which absolutive arguments move in these languages is an  $\bar{A}$ -position (cf. Campana 1992): an important result for the literature on many Western Austronesian languages, in which there is consensus that absolutive arguments raise but disagreement over the nature of the position into which they move (setting the terminology of ergativity aside, these arguments are argued to raise into  $\bar{A}$ -positions in Tagalog by Richards 2000 and in Malagasy by Pearson 2005). These results allow us to refine the analytical toolkit that can be deployed to study High Absolutive Syntax, and this result, in turn, clears the path for deeper investigation into the EEC and, ultimately, into constraints on locality in syntax.

The second goal of this paper has been to argue that certain syntactic distinctions between non-exempt reflexive anaphors may emerge from distinct derivational pathways to Condition A Effects. We have proposed that several differences between the reflexive anaphors *b'a* (Chuj) and *alawe* (Mandar) can be derived from the hypothesis that *b'a* is a reflexive anaphor that is always stranded by movement of a possessor where *alawe* is a reflexive anaphor that must be bound by a c-commanding antecedent in the first phrase in which it is merged. This hypothesis opens up the ambitious possibility that the syntactic typology of non-exempt reflexive anaphors might be derived entirely from the derivational consequences of various independent strategies that the language faculty provides to create these elements (Déchaine and Wiltschko 2017). We leave it to future work to determine whether this possibility might be borne out.

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