MAYAN AGENT FOCUS AND THE ERGATIVE EXTRACTION CONSTRAINT: FACTS AND FICTIONS REVISITED

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Many languages of the Mayan family restrict the extraction of transitive (ergative) subjects for focus, wh-questions, and relativization (A-bar-extraction). We follow Aissen (2017b) in labeling this restriction the ergative extraction constraint (EEC). In this article, we offer a unified account of the EEC within Mayan languages, as well as an analysis of the special construction known as agent focus (AF) used to circumvent it. Specifically, we propose that the EEC has a similar source across the subset of Mayan languages that exhibit it: intervention. The intervention problem is created when an object DP structurally intervenes between the A-bar-probe on C0 and the ergative subject. Evidence that intervention by the object is the source of the problem comes from a handful of exceptional contexts that permit transitive subjects to extract in languages which normally ban this extraction, and conversely, a context that exceptionally bans ergative extraction in a language which otherwise allows it. We argue that the problem with A-bar-extracting the ergative subject across the intervening object connects to the requirements of the A-bar-probe on C0: the probe on C0 is bundled to search simultaneously for [A] and [D] features. This relates the Mayan patterns to recent proposals for extraction patterns in Austronesian languages (e.g. Legate 2014, Aldridge 2017b) and elsewhere (van Urk 2015). Specifically, adapting the proposal of Coon & Keine 2020, we argue that in configurations in which a DP object intervenes between the probe on C0 and an A-subject, conflicting requirements on movement lead to a derivational crash. While we propose that the EEC has a uniform source across the family, we argue that AF constructions vary Mayan-internally in how they circumvent the EEC, accounting for the variation in behavior of AF across the family. This article contributes both to our understanding of parametric variation internal to the Mayan family and to the discussion of variation in A-bar-extraction asymmetries and syntactic ergativity crosslinguistically.*

Keywords: A-bar-extraction, extraction restrictions, syntactic ergativity, agent focus, Mayan, feature gluttony

1. Introduction. In many Mayan languages, the extraction of transitive (ergative) subjects is restricted; we follow Aissen (2017b) in labeling this restriction the ergative extraction constraint, or EEC. This article offers a unified account of the EEC within the Mayan language family, as well as an analysis of the special construction known as agent focus (AF) used to circumvent it. Agent focus has been a long-standing topic in the Mayanist literature (Smith-Stark 1978, Craig 1979, Larsen & Norman 1979, Dayley 1981, Ayres 1983) and more recently has received a good deal of attention in wider morphosyntactic circles (Stiebels 2006, Aissen 2011, Coon et al. 2014, Preminger 2014, Assmann et al. 2015, Erlewine 2016, Aissen 2017b, Watanabe 2017, Henderson & Coon 2018, Newman 2020, Tollan & Clemens 2021). The continued interest in the EEC and AF is perhaps unsurprising given the connection to topics across a range of morphological and syntactic domains, including morphological and syntactic

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ergativity, Ā-extraction, hierarchy effects and feature structure, case and agreement (and Case and Agree), binding, incorporation, obviation, transitivity, and voice morphology—all topics we discuss below. The similarities and differences found in this area across the roughly thirty languages of the Mayan family also make this a fruitful area in which to investigate syntactic microvariation.

Examples that illustrate the restriction on Ā-extracting the ergative subject from a regular transitive clause are previewed for Q’anjob’al and K’iche’ in 1; we indicate foci in small caps in the English translations throughout.¹

(1) Ergative extraction constraint
   a. *Maktxel max y-il ix ix?
      who PFV A3-see CLF woman
      intended: ‘Who saw the woman?’  (Q’anjob’al; Coon et al. 2014:193)
   b. *Are ri ixoq x-u-b’aq  ri ch’ajo’n.
      FOC DET woman PFV-A3SG-scrub DET clothes
      intended: ‘THE WOMAN scrubbed the clothes.’  (K’iche’; Can Pixabaj 2004:58)

In contrast, object Ā-extraction from transitive verb forms is well formed.

(2) Object extraction
   a. Maktxel max y-il naq winaq?
      who PFV A3-see CLF man
      ‘Who did the man see?’  (Q’anjob’al; Coon et al. 2014:192)
   b. Jas x-u-k’ut ri ixoq?
      what PFV-A3SG-teach DET woman
      ‘What did the woman teach?’  (K’iche’; Can Pixabaj 2004:29)

The AF construction, used specifically to Ā-extract transitive subjects for wh-questions, focus, and relativization, is illustrated for the same two languages in 3 and described further below.

(3) Agent focus
   a. Maktxel max-ach il-on-i?
      who PFV-B2SG see-AF-ITV
      ‘Who saw you?’  (Q’anjob’al; Coon et al. 2014:213)
   b. Are ri sis x-티’-ow ri kumatz.
      FOC DET coati PFV-bite-AF DET snake
      ‘THE COATI bit the snake.’  (K’iche’; Can Pixabaj 2004:56)

This article has three main goals. First, we aim to clarify the range of variation concerning the EEC and the AF construction in the Mayan family in order to provide a more complete picture of the empirical landscape to be accounted for. While some recent work has tackled differences in AF across a number of Mayan languages (e.g. Stiebels 2006, Watanabe 2017), we show below that the variation is more limited than previously described. The ‘facts and fictions’ in our title pays homage to Smith-Stark’s

¹ We follow Leipzig glossing conventions (https://www.eva.mpg.de/lingua/resources/glossing-rules.php), with the addition of the following abbreviations: A: ‘set A’ (ergative/possessive), AF: agent focus, ASF: aspect, B: ‘set B’ (absolutive), DIM: diminutive, DIR: directional, DTV: derived transitive status suffix, ENC: enclitic, EP: epenthesis, EXT: existential, ITV: intransitive status suffix, OBV: obviative, PREP: preposition, PRON: pronoun, RN: relational noun, SS: status suffix, TV: transitive status suffix, WH: WH-word. In some cases, we have modified glosses or spelling of language names from original sources for consistency, and we have neutralized clitic/affix distinctions when present in originals. Unattributed examples are from the authors’ elicitation notes. Translations from Spanish are our own.
(1978) seminal work on this topic, but now with the benefit of more than four decades of descriptive and theoretical work to add. We connect some of the apparent points of variation to independent properties in the languages in question, delimiting the EEC- and AF-specific factors to be explained.

Second, we argue that the EEC has a similar source across the subset of Mayan languages that exhibit it: intervention. We provide evidence for the generalization in 4.

(4) **Mayan EEC Generalization:** When an interpreted DP object structurally intervenes between the subject and the A ¯-probe on C 0, the subject is restricted from undergoing A ¯-extraction. We propose, in line with other previous work on EEC-effects (and syntactic ergativity more generally), that in Mayan languages that exhibit the EEC, the transitive object raises to a position above the transitive subject, blocking the subject from extracting (e.g. Campana 1992, Ordóñez 1995, Bittner & Hale 1996a, Aldridge 2004, 2008a, Coon et al. 2014, Assmann et al. 2015; see Deal 2016 for a recent overview of these accounts and syntactic ergativity more generally). This configuration is schematized in 5.

We show that special factors which exceptionally prevent such intervention from occurring have a direct effect on the extractability of the transitive subject.

We argue, following previous work in Mayan, that the problem with extracting transitive (ergative) subjects cannot be reduced to properties of the ergative subject itself (contra Deal 2016, Polinsky 2016). Furthermore, while other previous work on extraction asymmetries has attributed the problem resulting from the inversion in 5 to a failure of abstract case (Case) assignment or nominal licensing (Coon et al. 2014, Assmann et al. 2015), we demonstrate below that this line of analysis cannot capture the patterns found across the Mayan EEC. Instead, we argue that the problem with A ¯-extracting the ergative subject across the moved object connects to the requirements of the A ¯-probe on C 0. In §3, we specifically propose that the probe on C 0 is a complex probe that probes simultaneously for [A] and [D] features. For reasons detailed below, this causes the probe to enter into an Agree relationship with both the object and the subject in structures like 5. Adapting the feature gluttony proposal of Coon and Keine (2020), we argue that in such a configuration, conflicting requirements on movement force a derivational crash. Our account thus builds on existing work that ties extraction asymmetries to variation in the requirements of the A ¯-probe on C 0, and to a blurred division between traditional A- and A ¯-operations and positions more generally, discussed further below.

Finally, we argue that while the EEC has a common source (the configuration in 5), the AF construction in 3 is not homogenous across the family. We focus on the two subfamilies that have received the most attention in recent literature: Q’anjob’alan and K’ichean Proper. In the former, we follow the basic outline of the analysis in Coon et al. 2014, in which the AF morpheme is a v 0 head that does not cause the object to raise, thus allowing the ergative subject to extract freely. In K’ichean, in contrast, we propose that the object does raise (Levin 2018), but lands in a specifier equidistant with the subject to higher probes on Infl 0 and C 0. We propose in §5 that the two different AF strategies account for independent differences in these constructions in Q’anjob’alan and K’ichean. What these strategies have in common is that the object does not intervene between the probe on C 0 and the ergative subject, avoiding the intervention problem in 5.
The remainder of this article is organized as follows. We first provide a survey of the EEC and the AF construction in a representative sample of Mayan languages and summarize the desiderata that a successful analysis of these facts must cover (§2). Section 3 provides a unified account of the extraction problem, which attributes the EEC to the nature of the A-probe on C0 and intervention of a DP. In §4 we offer further evidence for our proposal that intervention is at issue in deriving the EEC, as stated in the generalization in 4 above. We provide an analysis of AF in §5 that accounts for both the similarities and the differences found in AF constructions. We conclude with a summary and discussion of connections to extraction restrictions outside of the Mayan family (§6).

2. Agent extraction and agent focus: description and desiderata. This section lays out the EEC and AF facts for which we aim to account. As noted at the outset, there is variation across the Mayan family in the details of what have been called AF constructions, as well as in the nature of the restriction on extracting agents. Here we offer a proposal for how to delimit the scope of investigation, and we attribute some of the apparent variation to independent differences among the languages in question. The core properties of the AF construction that we aim to account for are exemplified by the Chuj (Q’anjob’alan) example in 6b, contrasted with the regular transitive in 6a (basics of clause structure are reviewed just below, in §2.1).

(6) a. Ix-in-y-il ix ix.  
   PFV-B1SG-A3-see CLF woman  
   ‘The woman saw me.’  (Chuj transitive)

   b. Ha ix ix ix-in-il-an-i.  
   FOC CLF woman PFV-B1SG-see-AF-ITV  
   ‘The woman saw me.’  (Chuj agent focus)

The AF construction in Chuj has the characteristics listed in 7, also shared by the AF constructions in Q’anjob’al and K’iche’ in 3 above. First, AF is used only when the transitive subject appears in a dedicated preverbal A-position, as in the focus construction in 6b. The example in 6b further illustrates that neither of the arguments of the AF verb is oblique. Zooming in on the AF verb stem itself we find: (i) the absence of the set A (ergative) prefix (cf. y- in 6a), (ii) a special AF suffix -an, and (iii) an intransitive ‘status suffix’ -i (§2.2). We take these to be the core characteristics to be accounted for in a successful analysis of AF.

(7) Characteristics of Mayan agent focus
   a. AF is used when the transitive subject is A-extracted.
   b. AF constructions involve dyadic predicates in which neither subject nor object DP is oblique.
   c. Set A (ergative) φ-marking is absent.
   d. A special AF suffix appears on the stem.
   e. If a status suffix appears, it is an intransitive status suffix.

This combination of properties has been noted to give AF constructions across the family an apparently ‘mixed’ status with respect to transitivity (Stiebels 2006). They appear to be transitive insofar as we find two nonoblique DP arguments. Nonetheless, the verb appears with only a single φ-indexing morpheme, and when a status suffix appears, it is an intransitive status suffix.

2 Note that the ‘agent’ in ‘agent focus’ is used to refer to the most agent-like argument in a transitive construction, setting aside variation in details of thematic roles, which to our knowledge do not have an effect on the EEC or AF constructions.
Note that there are two ways that ‘agent focus’ has been used in previous literature: to refer (i) to a particular construction used EXCLUSIVELY to A-extract transitive subjects, with a defined set of characteristics, as in 7, or (ii) to ANY construction that permits the extraction of agents. Here we focus on the former, setting aside antipassive constructions, which do not conform to 7b, as well as other constructions characterized by an oblique object sometimes described under the umbrella of ‘agent focus’, discussed in §2.3 below. The characteristic in 7d also rules out a construction that has been labeled as ‘agent focus’ in Yucatec Maya, but which patterns differently from more canonical AF in both form and distribution; we follow Norcliffe (2009), who treats this as a distinct phenomenon, and do not discuss Yucatec further here. See Norcliffe 2009 and discussion in Coon et al. 2014 for more on the Yucatec case, and §2.3 below on the decision to eliminate constructions with oblique objects from the scope of our investigation.

We begin in §2.1 with brief background on the Mayan language family and grammatical characteristics relevant to the discussion below, and then turn to our theoretical assumptions about Mayan clause structure in §2.2. In §2.3 we examine the EEC and AF in more detail, focusing on two apparent areas of variation: (i) WHICH DP (the subject or the object) governs the set B φ-marking on the AF verb stem, and (ii) apparent variation in the relevance of person features of the subject DP to whether AF is needed for ergative extraction. In both cases, we connect the variation to independent grammatical properties of the languages in question.

2.1. MAYAN BACKGROUND. The Mayan language family is made up of about thirty languages spoken in southern Mexico, Guatemala, Belize, and Honduras by over six million people (Bennett et al. 2016, Aissen et al. 2017b, England 2017). The family is typically divided into six major subgroups: Yucatecan, Greater Tzeltalan, K’ichean, Greater Q’anjob’alan, Mamean, and Huastecan (Campbell & Kaufman 1985, England & Zavala 2013, Campbell 2017). The Huastecan branch is the most divergent, having been the first to branch off, and is not discussed further here. The five remaining subfamilies are shown in 8 (further subdivisions are separated by semicolons). We have underlined four languages that will play a main role in the discussion and analysis below.

(8) a. **Yucatecan:** Yucatec Maya, Lacandon; Itzaj, Mopan
   b. **Greater Tzeltalan:** Ch’ol, Yokot’an, Ch’orti; Tzotil, Tzeltal
   c. **K’ichean:** Q’eqchi’; Uspantek; Poqom, Poqomchi’; K’iche’, Kagchikel, Tz’utujil, Sakapultek, Sipakapense
   d. **Greater Q’anjob’alan:** Q’anjob’al, Akatek, Popti’, Mocho’; Chuj, Tojol-ab’al
   e. **Mamean:** Mam, Tektitek; Awakatek, Ixil

Despite variation across the family, a number of core characteristics are found across Mayan languages. First, Mayan languages are generally verb-initial in discourse-neutral contexts, with arguments appearing in preverbal positions for topic, focus, wh-questions, and relativization (England 1991, Aissen 1992, Clemens & Coon 2018). Core arguments may generally be pro-dropped and are cross-referenced on the verb stem by two series of morphemes: ‘set A’ (ergative, possessive) and ‘set B’ (absolutive). Set A morphemes are always prefixal, while the location of set B morphemes varies. A general template for a full transitive verbal complex is shown in 9. Note that whether

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3 See also Bennett et al. 2016 and Campbell 2017 for discussion and alternate spellings of language names, and discussion of potential language versus dialect divisions.
and where word boundaries are transcribed internal to this complex varies from language to language.

(9) TAM – {set B} – set A – [Root – (Voice) – (Status suffix)] – {set B}

The stem core (in square brackets in 9) consists of a root, possibly one or more valence or argument structure-related suffixes (including the AF suffix, discussed below), and in some languages, a final ‘status suffix’, which varies according to TAM (tense-aspect-mood), transitivitiy, and clause type (-itv, -tv, and -dtv below). In some languages, status suffixes surface only phrase-finally (Henderson 2012, Royer 2021a). Set A prefixes precede the verb stem, and a TAM marker appears initially. As shown in 9 and noted above, set B morphemes appear either following the TAM marker or stem-finally, discussed further below. Third-person singular set B lacks an overt reflex across the family; we do not represent a null morpheme in glosses.

Examples of transitive stems in three different languages are shown in 10. The core stem, in brackets in 9, is underlined.

(10) a. Tyi i-k’el-e-y-ety.
    pfv A3-watch-tv-ep-b2
    ‘He watched you.’ (Ch’ol; Vázquez Álvarez 2011:177)

b. X-in-ki-ch’ab’ee-i.
    pfv-b1sg-A3pl-speak-dtv
    ‘They spoke to me.’ (K’iche’; Can Pixabaj 2004:27)

c. Max-ach hin-kol-o’.
    pfv-b2sg A1sg-help-tv
    ‘I helped you.’ (Q’anjob’al; Mateo Toledo 2017:538)

Many languages exhibit split ergativity in certain nonperfective aspects, as well as in nonfinite embedded clauses. In these splits, the intransitive subjects are marked with the same set A (ergative/possessive) series normally reserved for transitive subjects (Larsen & Norman 1979, Coon 2013), as shown by the Ch’ol progressive in 11 (compare the identically marked transitive subject in 10a above).

(11) Choñkol i-wäy-el.
    prog A3-sleep-nmlz
    ‘She is sleeping.’

Importantly for the discussion below, intransitive subjects are never restricted from extracting, even when they are marked by the same set A (‘ergative’) morphology as transitive subjects. The EEC is restricted to TRANSITIVE subjects and is not directly connected to set A morphology (contra Stiebels 2006).


2.2. THEORETICAL ASSUMPTIONS. Following Clemens & Coon 2018, we take the verb stem to be formed by head movement of the root up through functional projections related to the verb’s argument structure. Minimally, for a transitive stem this includes a bundled $v^0$/Voice$^0$ head (see Harley 2017), which introduces the transitive subject in its specifier position (and may or may not be realized by overt valence morphology). We represent this head here as $i^0$. The stem lands above the subject in a head that hosts the stem-final status suffix (‘ssP’) and sits above the transitive subject, resulting in basic verb-initial order, as in 12 (see below on VSO/VOS alternations).
Mayan agent focus and the ergative extraction constraint

(12) Mayan verb stem formation (Clemens & Coon 2018)

Following Aissen (2010) for Tsotsil and Coon (2017) for Ch’ol, we assume that set A morphology appears due to a spec-head agreement relationship between \( v^0 \) and its specifier, which takes place directly upon merge (formalized in §5). See also Wiltschko 2006 for a similar case of ‘inherent agreement’ in Halkomelem Salish. Set B morphemes are discussed just below.

As noted above, Mayan languages also feature preverbal positions for topic, focus, \( \text{wh} \)-questions, and relativization. Norman (1977) initially recognized two positions: a sentence-initial ‘topic’ position, and a preverbal ‘focus’ position: \( \text{TOPIC} \gg \text{FOCUS} \gg \text{VERB} \). Aissen (1992) further refines this picture, noting the existence of two distinct topic positions across Mayan languages, one clause-internal and one clause-external; external topics are base-generated high and are coindexed with a pronominal inside the clause (often null). For our purposes below, it is important that (i) there is a single focus position into which foci, \( \text{wh} \)-interrogatives, relativized arguments, and certain scope-bearing elements must move, and (ii) movement into this position by transitive subjects is restricted by the EEC, requiring instead the AF construction. Topics, in contrast, do not trigger AF, a point we return to in §4.1. In the Tz’utujil examples in 13, for example, the focused subject in 13a triggers the AF form of the verb, while the topicalized subject in 13b appears with the regular transitive verb form.

(13) a. \([\text{FOC} \text{ Ma ch’ooy ta }] \ x-tij-ow-i \ ja \text{ keeso}.
\quad \text{neg rat irr pfv-eat-af-itv det cheese}
\quad \text{‘It wasn’t a rat that ate the cheese.’} \quad (\text{Tz’utujil; Dayley 1985:322})

b. \([\text{TOP} \text{ Ja ch’ooy-aa’}] \ x-k-ee-tij \ ja \text{ tzyaq}.
\quad \text{det rats-pl pfv-a3pl-b3pl-eat det clothes}
\quad \text{‘The rats ate the clothes.’} \quad (\text{Tz’utujil; Dayley 1985:306})

Below, we represent the focus position as Spec,CP, with topics occupying higher positions in the left periphery.4

High-abs and low-abs languages. Recall from 9 that the location of set B (absolutive) morphology varies both across the family and in some cases even within individual languages. This variation in set B is relevant because of the generalization, noted by Tada (1993) and discussed further in Coon et al. 2014, that languages in which set B marking appears in the prestem position generally restrict the extraction of ergative ar-

4 Note that for Aissen (1992), foci occupy Spec,IP and internal topics occupy Spec,CP. For our purposes here, what is important is that the probe driving \( \hat{A} \)-movement is located above the head responsible for set B \( \varphi \)-agreement. The latter point is important for the reconstruction account in §4.3 below.
guments (i.e. generally exhibit the EEC and require AF for transitive subject extraction), while languages in which set B marking follows the stem do not (i.e. generally do not exhibit the EEC and do not possess AF forms). We follow Coon et al. (2014), who—building on Aldridge 2004 and Legate 2008 for other languages—take this variation to relate to two different possible sources of set B morphology: ‘high-abs’ languages have pre-stem set B morphemes generated by finite Infl\(^0\); ‘low-abs’ languages have post-stem set B morphemes generated by a low functional head, \(\nu^0\).

Ch’ol and Tseltal are examples of low-abs languages. Following Coon et al., we assume that in low-abs languages, set B markers in transitive clauses are generated via an Agree relationship established by the transitive \(\nu^0\) head, akin to accusative in nominative-accusative languages. Set B markers in intransitive clauses are generated by finite Infl\(^0\) (i.e. an ABS=DEF system, in the terminology of Legate (2008)). Evidence for this proposal comes from the fact that set B morphemes are available in nonfinite (TAM-less) embedded transitives, as shown in 14 for low-abs Ch’ol. This is compatible with the proposal that set B morphemes have a low source and thus remain present in nonfinite embeddings.\(^5\)

(14) K-om [j-kän-ety ].
   A1-want A1-know-b2
   ‘I want to know you.’  
   (Ch’ol; Vázquez Álvarez 2011:99)

K’iche’, by contrast, is an example of a language in which the set B absolute morphemes uniformly precede the predicate stem, as in 10b above. These high-abs languages are proposed by Coon et al. (2014) to be languages in which finite Infl\(^0\) is the source of absolute morphology in both transitive and intransitive clauses (Legate’s (2008) ABS=NOM; see also Campana 1992, Bittner & Hale 1996b, Aldridge 2004, among others). As expected, set B morphemes may not appear in nonfinite embedded clauses. The subject of a nonfinite embedded intransitive is cross-referenced via set A marking, and transitive predicates must appear with passive or antipassive morphology in order to be embedded.\(^6\)

(15) X-u-chap [nu-kuna-x-iik ].
   PFV-A3SG-begin A1SG-cure-PASS-ITV
   ‘She began to cure me.’  
   (K’iche’; Can Pixabaj 2015:116)

Some languages, like Chuj and Q’anjob’al, allow both pre- and post-stem set B morphology. In general, set B markers appear attached to the TAM marker in eventive predicates, and follow the stem in stative ‘nonverbal’ predicates that obligatorily lack TAM marking. Compare the Chuj eventive predicate in 16a with the stative TAM-less form in 16b.

   IPFV-B1SG-A3-see CLF Juan
   ‘Juan sees me.’  
   (Chuj; Buenrostro 2013:128)

b. Winak-in.
   man-B1SG
   ‘I am a man.’  
   (Chuj; Buenrostro 2013:119)

\(^5\) We set aside for now the question of whether set B morphemes are pronominal clitics or agreement markers, returning to this issue for individual languages in §5 below. What is relevant here is that an Agree relationship prefigures either, and we use the term ‘agreement’ informally below to refer to any \(\phi\)-indexing on the predicate. See, for example, Preminger 2019 and work cited therein on Agree as a precursor to both agreement and pronominal clitic formation.

\(^6\) Based on the possibility of embedded reflexives, Can Pixabaj (2015) argues that nonfinite complement clauses in K’iche’ may be formally transitive. Nonetheless, what is crucial here is the fact that—to our knowledge—set B marking does not appear on these or other TAM-less embedded clauses in high-abs languages. See also Aissen 2017b, Coon & Royer 2020, and works in Palancar & Zavala 2013 on nonfinite embedding in Mayan languages.
We propose that these Q’anjob’alan languages are nonetheless high-abs in the sense that finite Infl₀ is responsible for generating the set B morphemes, and that alternations like the one in 16 are morphophonological in nature (having to do, for example, with the need for an overt host for the set B morpheme). As with K’iche’ and other consistently high-abs languages, Q’anjob’al and Chuj do not permit nonfinite embedded transitive stems. However, while K’ichean embedded predicates must be formally intransitive, Q’anjob’alan languages permit nonfinite embedded transitives with the use of the AF morpheme (Ordóñez 1995, Quesada 1997, Pascual 2007, Coon et al. 2014; termed the ‘crazy antipassive’ by Kaufman 1990). This fact forms an important part of the motivation for the proposal in §5 that while the EEC has a consistent source across the Mayan family, the AF solution is not homogenous.

The patterns examined thus far are shown in 17.

(17) Extraction and embedding in three Mayan languages

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<thead>
<tr>
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<tbody>
<tr>
<td>a. low-abs (e.g. Ch’ol)</td>
<td>v₀</td>
<td>no</td>
<td>✓</td>
</tr>
<tr>
<td>b. high-abs (e.g. K’iche’)</td>
<td>Infl₀</td>
<td>yes</td>
<td>x</td>
</tr>
<tr>
<td>c. high-abs (e.g. Q’anjob’al)</td>
<td>Infl₀</td>
<td>yes</td>
<td>with AF</td>
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To summarize, we assume that set B morphemes are generated by an Agree relation with a functional head. While the linear position and source of set B marking typically align, we take the important distinction between high- and low-abs to be about the particular functional head responsible for generating the morpheme in question. In transitive clauses in low-abs languages, like Ch’ol in row (a), transitive v₀ is responsible for the appearance of the set B morpheme, and in general we do not find extraction restrictions in these languages. In high-abs languages, by contrast, finite Infl₀ is the head responsible for set B morphology, and ergative subjects are restricted from extracting. High-abs languages either ban set B marking in nonfinite clauses altogether (e.g. K’iche’) or require the use of the AF morpheme in nonfinite embedded clauses (e.g. Q’anjob’al), a point of variation we return to in §5 below.

Following Coon et al. (2014) and Assmann et al. (2015), we take the above facts to be connected: in high-abs languages, the transitive object must move to a position above the ergative subject. We take this object movement to be driven by an [EPP] feature on transitive v₀, present in high-abs languages. This movement makes the object the closest accessible goal for the abs-generating probe on Infl₀, as in 18. For simplicity in 18, as well as in diagrams below, we do not represent the movement of the verb to the high ss₀ position (see 12), but recall that the verb precedes the subject and object arguments. In §4.3 we provide additional evidence for the high position of the object in high-abs languages.

(18) [InflP Infl₀ ... [VP OBJECT [SUBJECT [VP V OBJECT ]]]] [SET B]

While movement of the object above the subject is necessary for set B morphology in high-abs languages, the object creates an intervention problem for extraction of the...
ergative subject, as illustrated in 19 (repeated from 5 above) and formalized in §3 below. We propose that this configuration is the source of the EEC.8

\[(19) \ [CP \ \ldots \ [vP \ \text{object} \ [\text{subject} \ [vP \ \text{object}]]]]\]

While we have discussed Infl0 and v0 as the heads responsible for the Agree operations underlying the appearance of the set B (absolutive) morphemes, we make no commitment as to whether the realization of set B morphology is also related to nominal licensing. While some previous accounts of Mayan AF attribute the extraction problem to a failure of abstract case assignment (see e.g. Coon et al. 2014, Assmann et al. 2015), we argue below that this does not adequately cover all of the facts. Our proposal leaves open the possibility that the appearance of set B morphology is tied to abstract case assignment, but this is not a necessary part of the analysis, which we take to be an advantage of our account.

**Word order and the source of set B.** Finally, a note on word order is in order. All else being equal, we might expect variation in postverbal word order in the Mayan family to correlate with the high/low-abs distinction, with high-abs languages showing VOS order (because the object has raised above the subject) and low-abs languages showing VSO (because the object remains low).9 The picture, however, is more complicated than this, and we find languages with basic VOS and basic VSO on both sides of the high/low-abs divide. As one example, the Chuj dialect of San Mateo Ixtatán has basic VOS order, while the Chuj dialect of San Sebastián Coatán is described as basically VSO; both are nevertheless high-abs and exhibit the EEC (Maxwell 1981, Buenrostro 2013).

The factors governing postverbal word order in Mayan are complex (England 1991, Clemens & Coon 2018), and we cannot do justice to the full range of patterns here. Clemens and Coon (2018) argue, for example, that low-abs Ch’ol is syntactically VSO, but that a postsyntactic prosodic constraint forces bare NP objects to appear adjacent to the verb, resulting in frequent VOS. On the flip side, Coon et al. (2014) suggest that in the high-abs VSO language Q’anjob’al, the object consistently moves to Spec,vP, but that the choice of whether to pronounce the higher (presubject) or lower (postsentence) copy is governed by phonological factors. Phonologically small set B clitics are pronounced in the higher position, and full DPs are pronounced in the lower position, as illustrated by the alternation in 20. Recall that there is no overt third-person set B morpheme, and first- and second-person pronouns do not appear postverbally (see Appendix A), meaning that we find either an overt clitic, as in 20a, or a full DP, as in 20b, but not both.

---

8 Note that while objects in low-abs languages are proposed not to raise above the transitive subject, they may still undergo object shift out of VP, for example, for semantic interpretation, as argued by Little (2020). What is important here is that object shift in low-abs languages results in a configuration in which the object is still c-commanded by the subject.

9 See Douglas et al. 2017 and Little 2020 for proposals that relate postverbal word order to the EEC.
(20) a. Max-in h-el-a’.
   PFV-B1SG A2SG-see-TV
   ‘You saw me.’

b. Max h-el naq winaq.
   PFV A2SG-see CLF man
   ‘You saw the man.’ (Q’anjob’al; Coon et al. 2014:212)

As noted above, morphophonological factors are clearly responsible for the position of
the set B morpheme in some Mayan languages, lending plausibility to this proposal.
While further work is needed on postverbal word-order alternations across the Mayan
family, we conclude here that because factors outside of the core syntactic domain are
involved in word-order alternations, we do not expect a perfect correlation between
high/low-abs and VOS/VSO order.

2.3. Agent focus and variation. Though the focus of this article is on languages
of the K’ichean and Q’anjob’alan subfamilies—on which much recent theoretical dis-
cussion focuses—AF has been claimed to be present in all five of the subfamilies in 8
above. As noted above, we focus here on constructions that share the properties in 21
(repeated from 7).

(21) Characteristics of Mayan agent focus
a. AF is used when the transitive subject is A¯-extracted.
b. AF constructions involve dyadic predicates in which neither subject nor
   object DP is oblique.
c. Set A (ergative) φ-marking is absent.
d. A special AF suffix appears on the stem.
e. If a status suffix appears, it is an intransitive status suffix.

An example from K’iche’ illustrating these characteristics is shown in 22.

(22) Aree ri at x-at-ch’ay-ow-ik.
   foc det pron.2SG PFV-B2SG-hit-AF-ITV
   ‘You hit him.’ (K’iche’; Larsen 1988:504)

Despite the consistent characteristics in 21, there is also variation in AF across the
family, and this variation plays an important role in our analysis of AF constructions in
§5. A first point of reported variation concerns whether and how the person features of
the subject and object DPs are involved in the choice between AF and transitive stems
in agent-extraction environments, summarized in 23.

(23) Person features and agent focus in agent-extraction environments
a. At least one DP must be third person in order for AF to occur (e.g. K’iche’).
b. The agent must be third person in order for AF to occur (e.g. Q’anjob’al).
c. Both agent and patient must be third person in order for AF to occur
   (Tsotsil).

This is discussed in Appendix A, where we propose that this variation is only apparent
and does not provide counterevidence to the EEC generalization in 4 above. Namely,
we claim that the EEC is not affected by the person features of the subject and object
DPs (contra Stiebels 2006, Watanabe 2017). The restriction in 23a is morphological; the
pattern in 23b connects to the special status of first- and second-person pronouns in
Q’anjob’alan; and we suggest (in line with Aissen 1997) that the Tsotsil pattern in 23c
is related to obviation, which we in turn connect to the relative position of the subject
and object.
Second, while AF constructions share in common the absence of set A (ergative) marking, there is variation as to which argument (the subject or the object) is cross-referenced by the remaining set B morphology, which we discuss in the remainder of this section. Stiebels (2006) and Watanabe (2017) describe three different patterns of set B cross-referencing in Mayan AF, summarized in 24. Here we argue against the existence of 24c for true AF; our analysis in §5 accounts for the variation between 24a and 24b.

(24) Set B patterns in agent focus
   a. consistent object agreement (e.g. Q’anjob’al)
   b. variable agreement (e.g. K’iche’)
   c. consistent subject agreement (e.g. Poqom)

The first type of pattern is exemplified by AF in languages of the Q’anjob’alan branch, as shown by Q’anjob’al in 25. Characteristic of AF, the set A agreement that would normally cross-reference the transitive subject is absent. The set B absolutive morpheme remains and always coindexes the internal argument. Recall that there is no third-person set B form, as in 25c.

(25) a. Maktxel max-in il-on-i?
   who pfv-b1sg see-AF-ITV
   ‘Who saw me?’ (Q’anjob’al; Coon et al. 2014:223)
   b. Maktxel max-ach il-on-i?
   who pfv-b2sg see-AF-ITV
   ‘Who saw you?’ (Q’anjob’al; Coon et al. 2014:180)
   c. Maktxel max il-on naq winaq?
   who pfv see-AF CLF man
   ‘Who saw the man?’ (Q’anjob’al)

Languages in the K’ichean Proper subbranch of the K’ichean group (see 8c above)—K’iche’, Kaqchikel, Tz’utujil, Sakapultek, and Sipakapense—show hierarchy-based agreement (Dayley 1978, Norman & Campbell 1978, Smith-Stark 1978, Davies & Sam-Colop 1990, Preminger 2014). Specifically, the single set B morpheme on the AF stem may cross-reference either the subject or the object DP, according to the descriptive hierarchy in 26.

(26) 1st person/2nd person >> 3rd person plural >> 3rd person singular

Examples are shown in the K’iche’ focus pairs in 27 and 28. The roles of the argument DPs are reversed in the pairs below, but note that the verb forms remain identical. In 27 the set B morpheme indexes the first-person DP regardless of whether it is the subject or the object. Similarly, in 28 the set B morpheme indexes the third-person plural DP regardless of its grammatical function.

(27) a. In x-in-il-ow le ak’al-ab’.
   pron.1sg pfv-b1sg-see-AF det child-pl
   ‘I saw the children.’
   b. E are’ le ak’al-ab’ x-in-il-ow in.
   pl foc det child-pl pfv-b1sg-see-AF pron.1sg
   ‘THE CHILDREN SAW me.’ (K’iche’; Davies & Sam-Colop 1990:531)

(28) a. Ri ak’al-ab’ x-e-tzuq-uw ri a Lu’.
   det child-pl pfv-b3pl-feed-AF det Peter
   ‘THE CHILDREN fed Peter.’
   b. Ri a Lu’ x-e-tzuq-uw ri ak’al-ab’.
   det Peter pfv-b3pl-feed-AF det child-pl
   ‘PETER fed the children.’ (K’iche’; Davies & Sam-Colop 1990:531)
We offer an analysis of the appearance of the hierarchy effect precisely in AF contexts in §5.3 below.

Finally, both Stiebels (2006) and Watanabe (2017) describe a third pattern in AF: consistent subject agreement. Watanabe lists ‘Q’eqchi’ and Mam; Stiebels also lists Poqom and Poqomchi’. However, as Stiebels (2006:528) notes: ‘In general, subject agreement seems to correlate with the oblique realization of the internal argument’. A Poqom example is given in 29. Note here that the patient is preceded by a relational noun (RN), used to introduce oblique nominals across the family; the verb takes an intransitive status suffix -a, and the subject triggers set B morphology on the stem.

(29) Re’ han x-in-tiin-sa-n-a [obl aw-eh].
    FOC PRON.1SG PFV-B1SG-bathe-CAUS-ANTIP-ITV A2-RN
    ‘I bathed you.’ (Poqom; Benito Pérez 2016:57)

We gloss the suffix on the verb in 29 as antipassive (‘ANTIP’) rather than AF because Benito Pérez (2016:55) notes that the morphology found on verbs in which the agent (i.e. underlying external argument) is focused is IDENTICAL to that found in antipassives: -n for derived transitives, -w for underived ‘root’ transitives.

Compare the forms in 30. In 30a we see a sentence with no extraction, typically described as an antipassive, while in 30b we find a sentence with extraction, described as AF.

(30) a. X-to’-w-a [obl r-eh ma’ Tojin] la k’ayaneel.
    PFV-help-ANTIP-ITV A3SG-RN CLF Tojin DET salesman
    ‘The salesman helped Tojin.’ (Poqom; Benito Pérez 2016:53)

b. Re’ la k’ayaneel x-to’-w-a [obl r-eh ma’ Tojin].
    FOC DET salesman PFV-help-ANTIP-ITV A3SG-RN CLF tojin
    ‘The SALESMAN helped Tojin.’ (Poqom; Benito Pérez 2016:56)

In both forms in 30, the patient is oblique, the verb is formally intransitive, and the subject is marked with set B. Given that the agent, la k’ayaneel, is an intransitive set B-triggering subject, it is unsurprising that it may undergo extraction, as in 30b. We contend that 30b simply is an antipassive form; because extraction of intransitive subjects is not restricted, these types of constructions—though interesting in their own right—do not pose a puzzle for the question of how the EEC is obviated.

Similar facts are described for Mam (England 1983), which does not appear to possess a distinct AF form, but instead uses antipassive forms to extract agents: ‘The antipassive is used for various functions, including unknown or unmentioned patient, AGENT PROMOTION, object (patient) incorporation into the verb, and lexical functions’ (England 1983:110, emphasis ours); see also Pérez Vail 2014 on the Mam antipassive. The use of an antipassive form to circumvent an ergative extraction restriction is a typologically common pattern in languages that restrict the extraction of transitive subjects (see e.g. Deal 2016, Polinsky 2017) and is also independently available in many languages that do have a distinct AF form.

Finally, Berinstein (1998) describes two different constructions with demoted objects in Q’eqchi’. One corresponds to what has been described as an ‘incorporation antipassive’ in other Mayan languages (e.g. Maxwell 1976, Coon 2019 on Chuj), shown in 31a. Here the internal argument must be a bare nonreferential NP, the verb stem bears the antipassive suffix and is formally intransitive, and the subject behaves like other intransitive subjects in triggering set B morphology. The second construction, in 31b, shows the same antipassive morphology, an intransitive verb stem, and an oblique object. However, unlike a regular antipassive, it is apparently RESTRICTED to contexts where the agent is Â-extracted (Berinstein labels this construction ‘2–3 retreat’ in the framework of RELATIONAL GRAMMAR).
As discussed in Aissen 2017b, while it is interesting that the antipassive form in 31b is restricted to contexts of agent extraction (Aissen labels these AF_{obl.}), this form again does not present the same type of puzzle as canonical AF constructions: because the object is demoted to oblique status (and presumably does not raise) and the clause is intransitive, it is unsurprising that the subject triggers set B morphology and can extract. Contrast the antipassive schema in 32 with the ungrammatical 33, repeated from 5 above.

(32) Antipassive subject extraction

\[
\begin{array}{c}
\text{[CP ... [vP SUBJECT [VP [obl OBJECT]]]]}
\end{array}
\]

(33) Transitive EEC

\[
\begin{array}{c}
\text{[CP ... [vP OBJECT [SUBJECT [VP V OBJECT]]]]}
\end{array}
\]

In our analysis of AF in §5, we analyze the AF morpheme as the realization of a \(v^0/\text{Voice}^0\) head that, among other special characteristics described below, imposes a selectional restriction on the agent in its specifier, requiring it to bear an [\(\bar{A}\)] feature. This correctly restricts the use of AF to agent-extraction environments. We suggest that the special antipassives which are dedicated to \(\bar{A}\)-extraction, like the Q’eqchi’ form in 31b, impose a similar selectional restriction on the external argument as in AF clauses, but differ in terms of their treatment of the patient. We return to this in §5.

We thus find the two basic agreement patterns in the AF constructions under consideration here from 24a and 24b above, summarized in 34. We return to the analysis of these in §5.

(34) Agent focus agreement patterns

- set B = object: e.g. Q’anjob’al, Chuj, Popti’
- set B = variable: e.g. K’iche’, Kaqchikel, Tz’utujil

As noted by Stiebels (2006), consistent subject agreement (from 24c above) is limited to contexts in which objects are demoted. Though these antipassive constructions are interesting, they do not present the same type of puzzle for how the EEC is circumvented and are not discussed further here.

Finally, note that variation has been described for some languages regarding which types of preverbal agents require AF. Heaton et al. (2016) report on an experimental study comparing AF in \(\text{wh}\)-questions and relativization in Kaqchikel, finding that AF is preferred for \(\text{wh}\)-questions but not relativization; see also Stiebels 2006 for a summary of similar variation in other Mayan languages. We return to this type of variation below, suggesting that it could be due to either (i) frequent use of topicalization for subjects (§4, and see Henderson & Coon 2018) or (ii) variation in probe structure (§3.2, and n. 10). The important generalization to take from this section is that despite variation, the EEC occurs in transitive configurations in which the object has raised above the subject, and AF constructions provide an alternative means for extracting the transitive subject. We formalize these patterns below.
3. The extraction problem. As stated at the outset, we propose that the source of the EEC is intervention. Recall from §2.2 above that the direct object of a transitive clause in all high-abs Mayan languages moves to a position above the ergative subject; we take this movement to be triggered by an [EPP] feature on v0. In this configuration, the direct object establishes an Agree relationship with Infl0, resulting in set B morphology. Set B morphology is correctly expected to correlate with the presence or absence of finite Infl0 in verbal clauses in high-abs languages (see 15 above); we turn to additional evidence for the high position of objects in §4.3. The relevant configuration is diagrammed in 35.

\[
\text{(35) } [\text{VP object } [\text{subject } [\text{VP V object }]]]
\]

In 35, the direct object asymmetrically c-commands the subject, and therefore stands in a more local relationship with probes on higher functional heads. We contend, following previous authors, that this configuration is the source of the ban on A¯-extraction of the ergative subject (Coon et al. 2014, Assmann et al. 2015). By virtue of moving above the subject, the object alone is a licit target for A¯-movement to Spec,CP, schematized in 36. Ergative subject A¯-movement is ill-formed, as illustrated in 37, repeated from 5.

\[
\text{(36) Object can extract}
\]

\[
\text{(37) Subject cannot extract}
\]

Insofar as an intervening DP causes problems for subject extraction, the present analysis is similar to previous analyses of extraction restrictions, for example, Campana 1992, Coon et al. 2014, and Assmann et al. 2015 on Mayan and Aldridge 2004, 2008b on Austronesian. Our formalization of exactly what goes wrong departs from these works. Specifically, we claim that the extraction problem arises from conflicting demands on movement imposed by the nature of the A¯-probe in Mayan.

A¯-movement is generally taken to obey relativized minimality (Rizzi 1990b), and therefore is able to skip over or ignore elements that structurally intervene between an A¯-probe and its accessible goal, but that crucially lack the requisite A¯-feature sought by the probe—for example, the plain object DP in the configuration in 37. Building on the analysis of K’ichean in Levin 2018, however, we claim that 38 holds in Mayan.

\[
\text{(38) Relativized probing in Mayan A¯-movement: The A¯-probe on C0 is bundled to search for [A¯] and [D] features.}
\]

On the basis of 38, A¯-probes in Mayan languages are expected to always target the first accessible DP in their c-command domain because all DPs bear [D]-features (see e.g. Nevins 2007, 2011, Béjar & Rezac 2009, Preminger 2014 for discussion of feature-relativized probing). We propose below that it is the combination of (i) movement of the transitive object above the ergative subject, as in 37, and (ii) relativization of the A¯-probe to [D], as in 38, that conspire to yield the EEC.

Before we discuss the details, we note that relativization of an A¯-probe to [D] connects to recent work on extraction asymmetries outside of the Mayan family. Legate (2014) proposes that only a single specifier exists at the left edge in Austronesian languages with extraction asymmetries, relating this to a collapsing of A¯- and A-positions and their asso-
ciated features; this connects to her previous work on syntactic ergativity in Dyirbal (Legate 2012), in which she suggests that an A*-feature driving relativization is ‘bundled’ with Case. In a related vein, Aldridge (2017a,b) argues that Austronesian movement to Spec,CP is driven by φ-features, while Erlewine (2018) (building on proposals on the relationship between T^0 and C^0 in Martinović 2015 and work in Erlewine et al. 2017) proposes that the locus of nominal case licensing in Toba Batak is a bundled C^0–T^0 head. Douglas (2018) argues that C^0 probes for [D] features in Māori, and Branan and Erlewine (2020) argue that relativization of an A*-probe to [D] is supported by the existence of languages with subject-only relativization (Keenan & Comrie 1976). This line of work blurs the division between the roles and features typically associated with T^0 and C^0 (and relatedly, between A-movement and A*-movement; van Urk 2015) with potential connections to the notion of feature inheritance more generally (Richards 2007, Chomsky 2008, Martinović 2015). Importantly, however, many of these works also relate asymmetries in extraction to a problem of nominal licensing (as in e.g. Coon et al.’s (2014) and Assmann et al.’s (2015) accounts of Mayan discussed above). For Legate, Aldridge, and Erlewine, only the DP that A*-extracts may receive abstract structural case (i.e. nominative/absolutive). We argue in §4 that in Mayan, nominal licensing cannot be the problem: finite Infl^0 may enter into Agree with the object, even when the ergative subject extracts.

In the remainder of this section, we present a formal account of the Mayan EEC that relies on 38, but that crucially does not require reference to nominal licensing; nominal licensing may or may not be independently necessary, and we take no stand on this issue here. In §3.1, we introduce Coon and Keine’s (2020) derivation of φ-feature-driven hierarchy effects in terms of feature gluttony, a configuration in which a probe agrees with multiple goals. While their account focuses on configurations of multiple agreement involving φ-features, we show in §3.2 how, by extending their analysis to larger feature sets including A*-features (building on Baier 2018), we can straightforwardly derive the EEC. Specifically, an articulated probe on C^0 causes the probe to enter into Agree with both the subject and the object in EEC-inducing configurations, resulting in an irresolvable conflict for movement. The nature of the articulated probe—which searches simultaneously for both [uA] and [uD] features—is directly relatable to the discussion of feature inheritance (or a possible lack thereof) and the blurring of C^0/T^0 divisions in the works referenced above. Our focus is on the formalization of the probe and resulting Agree relations, though connections to feature inheritance and C^0–T^0 relations, as well as the relation to extraction patterns in Austronesian and other languages with extraction restrictions, are all interesting topics for future work; we return to this briefly in §4.1. Finally, in §3.3 we consider adjunct extraction.

3.1. Relativized probing and feature gluttony. Coon and Keine (2020) develop an account of φ-feature driven hierarchy effects, or configurations containing two DPs whose grammaticality or surface realization depends on the ranking of the two DPs with respect to some grammatical hierarchy, such as 1 > 2 > 3 for person, or pl > sg for number. The core intuition of their proposal is that such hierarchy effects are the result of having too much Agree. Specifically, they argue that ungrammatical structures with respect to a particular hierarchy may arise when a probe participates in more than one valuation relation, entering into Agree with multiple goals. They refer to this configuration as ‘feature gluttony’, illustrated in 39.

(39) Feature gluttony (Coon & Keine 2020)
       [ Probe^φ [... DP_1 ... [... DP_2 ... ]]]
       \---------------------------\
Feature gluttony is not itself ungrammatical. Instead, Coon and Keine propose that it is the way the grammar processes such a structure that may lead to ungrammaticality. On the one hand, when it comes to morphological agreement, if the probe in 39 copies back different φ-values, this may pose a problem for spell-out during the morphological component. If, on the other hand, the φ-probe induces cliticization, Agree with more than one DP may cause an irresolvable conflict for movement. Below, we extend this to A*-movement: when the A*-probe on C0 enters into Agree with more than one DP, a movement conflict arises—detailed further below—resulting in the EEC. First we examine the system that results in a single probe entering into Agree with multiple goals.

The first necessary ingredient to Coon and Keine’s account is the arrangement of features into geometries (Harley & Ritter 2002, Béjar 2003). An abstract feature geometry is given in 40.

(40) 
\[
\begin{array}{c}
x \\
y \\
z
\end{array}
\]

Such geometries encode entailment relations among features: features on lower nodes entail the features on higher nodes. A syntactic object specified for a given feature on a hierarchy is also specified for any features the first entails. Thus, given the hierarchy in 40, an element with feature [y] has the feature specification [x[y]], and an element with feature [z] has the specification [x[y[z]]].

Second, Coon and Keine assume that probes may be articulated to varying degrees. In Deal’s (2015) terms, probes may vary as to what kinds of features they are satisfied by, that is, what kinds of features have to be matched in order for the probe to stop searching for a goal (Béjar 2003, Béjar & Rezac 2009, Preminger 2014). Specifically, following previous work, Coon and Keine assume that complex probes consist of hierarchically organized segments, and that these segments are arranged according to the same geometry as the relevant set of features on goals (Béjar & Rezac 2009). Examples of probes that would interact with the hierarchy in 40 are given in 41.

(41) Articulated probes
a. [ux] — fully satisfied by any goal bearing [x]
b. [ux] — fully satisfied by any goal bearing [x[y]]
c. uy — fully satisfied by any goal bearing [x[y[z]]]

Finally, Coon and Keine’s formalization of Agree is given in 42.

(42) Agree (Coon & Keine 2020, ex. 14): A probe segment [uF] agrees with the closest accessible DP in its domain that bears [F]. If Agree is established, the hierarchy of segments containing [F] is copied over to the probe, valuing and thus removing [uF].

The definition of Agree in 42 states that a segment of a complex probe will enter into Agree with the closest accessible DP that matches it. Importantly, the definition of Agree in 42 allows for different segments on a complex probe to enter into Agree with distinct goals. Consider the diagram in 43.
In 43, an articulated probe $P$ with the unvalued segments $[ux][uy]$ probes a structure that contains two DPs. The higher DP bears only the feature $[x]$; the lower DP bears the feature hierarchy $[x[y[z]]]$. By 42, both $[ux]$ and $[uy]$ probe the structure and enter into Agree with the closest goal that contains a matching segment. The segment $[ux]$ thus agrees with the higher DP, while the segment $[uy]$—finding no match on the higher DP—agrees with the lower DP. As a result of these Agree relations between the probe and the two DPs, the feature hierarchies containing $[x]$ and $[y]$ are copied over to the probe, valuing $[ux]$ and $[uy]$. Here, we follow Coon and Keine in depicting feature copying by means of the identifiers 1 and 2. So, ‘$ux \rightarrow 1$’ encodes that Agree for segment $[x]$ results in the copying of the feature hierarchy 1 and the valuation of $[ux]$, and ‘$uy \rightarrow 2$’ encodes that Agree for segment $[uy]$ results in the copying of the feature hierarchy 2.

The Agree relations in the derivation in 44 result in the feature geometries of both DPs being copied back to the probe $P$. The content of $P$ after these relations is represented as in 44. $P$ in 44 is gluttonous because it has agreed with, and hence acquired values from, two DPs.

\[
(44) \quad P = \{ [x]1, \begin{bmatrix} x & \{2\} & y & z \end{bmatrix} \} \]

Crucially, feature gluttony arises only when the lower potential goal is more highly specified featurally than the higher potential goal with respect to the probe, as was the case in 43 above. If the lower DP has fewer features than the higher DP, or an identical set of features, gluttony does not arise.

First consider 45, an example in which the lower DP has fewer of the features sought by the probe. The higher DP matches both segments on the probe, $[ux]$ and $[uy]$, leading to Agree. Because there is no closer DP that matches either segment, $P$ agrees only with a single goal in this structure. The entire feature geometry from the higher DP, $[x[y[z]]]$, is copied over onto the probe. $[ux]$ and $[uy]$ are valued, causing probing to stop.

\[
(45) \quad P = \{ [x]1, \begin{bmatrix} x & \{2\} & y & z \end{bmatrix} \} \]

Similarly, only a single Agree relationship is established in 46, where both DPs bear identical feature sets, $[x]$. The probe agrees with the closest DP, leading to copying of $[x]$ and valuation of $[ux]$ on the probe. Even though $[uy]$ remains on the probe, neither DP contains a matching feature $[y]$. Search for that segment fails, and no other Agree is established. Following Preminger (2014), a probe with unvalued features must initiate a search operation, but failure to enter into Agree does not cause the derivation to crash. Consequently, the fact that $[uy]$ is left over in 46 is not fatal.
With this system in place, we show in the next section how the system of Agree just sketched can be used to derive the Mayan EEC.

3.2. Extension to the EEC. As shown above, feature gluttony arises only in configurations in which the lower of two DPs in a probe’s search domain contains more features that match the probe’s unvalued segments than the higher DP, creating the opportunity for an articulated probe to enter into Agree with more than one DP. We contend that exactly such an environment exists in configurations of would-be ergative extraction in Mayan, albeit with an expanded set of features. We propose that feature gluttony on C0 leads to the EEC. Recall that we take the following constraint on A-probes to hold in Mayan (repeated from 38).

(47) Relativized probing in Mayan A-movement: The A-probe on C0 is bundled to search for [Å] and [D] features.

More precisely, we take 47 to mean that the A-probe on C0 in Mayan searches for both the feature [D] and one of the features involved in A-movement, such as [Wh], [Foc], or [Rel]. Here, we notate this set of features together as [Å]). In a high-abs configuration, the higher DP object will have the feature [D], while the lower A-subject will have both [D] and [Å] features, giving rise to gluttony, as shown in 48.

(48) Feature gluttony configuration in A-probing

The question now is how it is possible for C0 to probe for both [D] and [Å] at the same time. We suggest that the key to understanding this property is the ability for features to be arranged into geometries. Specifically, following Baier (2018) on anti-agreement effects crosslinguistically, we propose that the feature [D] and the [Å] in Mayan are part of the same feature geometry, which we label \( \mathcal{F} \), shown in 49.

(49) Feature geometry \( \mathcal{F} \)

According to the geometry in 49, the feature [D] entails [\( \mathcal{F} \)], as does the feature [Å]. This means that a constituent bearing the feature [D] does not bear just [D], but is specified as [\( \mathcal{F}[D] \)]. Likewise, a constituent bearing the feature [Å] is specified [\( \mathcal{F}[\Å] \)].

\(^{10}\)We assume that the feature sets [D] and [Å] are also internally structured. See Abels 2012 and Aravind 2018 for proposals regarding the structure of the [Å] feature set. Articulation of A-features could provide a means of accounting for variation in different types of A-extraction patterns. For example, Stiebels (2006) lists some high-abs Mayan languages as using AF in wh-questions and focus, but not in relativization (see also Deal 2016 and Heaton et al. 2016 for crosslinguistic discussion). Patterns in which ergative extraction is restricted in some, but not all, A-contexts could be handled by appealing to more fine-grained specifications in the probe’s feature structure. Consider the two articulated C0 probes in (i) and (ii).

(i) Focus probe (restricted)

(ii) Relativization probe (unrestricted)

The probe in (i) derives focus movement that is restricted by the EEC because the probe contains the segment [uD], while the probe in (ii) derives relativization that is not restricted by the EEC.
XPs bearing these features will therefore match any probe searching for $[\mathcal{F}]$. We propose that the $C^0$ head involved in $\bar{A}$-extraction in Mayan bears a fully articulated $\mathcal{F}$-probe, as shown in 50.

(50) Probe on $C^0$ in Mayan $\bar{A}$-extraction

\[
\begin{bmatrix}
    u\mathcal{F} \\
    uD \\
    u\bar{A}
\end{bmatrix}
\]

As noted above, the idea that $\bar{A}$-probes may be relativized to a feature like $[D]$ is found elsewhere in recent literature on special extraction patterns. For example, van Urk (2015) argues that in Dinka, $C^0$ probes for $[\varphi]$ and $[\bar{A}]$ simultaneously, Legate (2014) and Aldridge (2017a,b) propose that Austronesian movement to Spec,CP is driven by $[\varphi]$- or $[A]$-features, and Erlewine (2018) argues that in the Austronesian language Toba Batak, $C^0$ and $T^0$ can be bundled into a single head and probe together. We propose that extraction patterns in high-abs Mayan languages fit into a larger pattern of languages in which $\bar{A}$-probes must be restricted to targeting the closest DP (Aldridge 2004, 2008a, Branan & Erlewine 2020), and we offer a specific implementation of how to formally capture this.

The probe in 50, combined with the assumption that the object moves to a position above the subject, is able to derive the Mayan EEC. Consider first what happens in object-extraction contexts, shown in 51.

(51) Object extraction; $C^0$ agrees with the object

\[
\begin{bmatrix}
    \text{subject} \\
    \text{object}
\end{bmatrix}
\]

Here, the probe on $C^0$ agrees only with the object. This is because there is no closer goal that bears any of the segments of the probe. The complete $[\mathcal{F}]$ feature geometry is copied over to the probe, as indicated by the identifier $[\mathcal{F}]$, valuing the matching segments $[u\mathcal{F}]$, $[uD]$, and $[u\bar{A}]$ on the probe. Across Mayan, $\bar{A}$-elements undergo obligatory movement to the left periphery, commonly taken to be Spec,CP. Therefore, after the Agree relation between $C^0$ and the object DP is established in 51, the object moves to Spec,CP, as shown in 52. Object $\bar{A}$-movement is unproblematic, as $C^0$ has entered into only one Agree relation in 52, and therefore there is only one DP that can potentially move to Spec,CP.

(52) $\bar{A}$-movement of the object

\[
\begin{bmatrix}
    \text{subject} \\
    \text{object}
\end{bmatrix}
\]

Intransitive subjects, having no intervening DP, extract similarly. With respect to the extraction of transitive objects in low-abs languages, we assume that (as in any account of cyclic $\bar{A}$-movement) these must raise to the phase edge in order to extract, and therefore no extraction problem will arise.

Consider next what happens in structures where a transitive subject has an $[\bar{A}]$ feature and the object does not, as in the would-be agent-extraction configuration shown in 53.

(53) $\bar{A}$-feature located on subject $\rightarrow$ gluttony

\[
\begin{bmatrix}
    \text{subject} \\
    \text{object}
\end{bmatrix}
\]
In this scenario, the probe on C\textsuperscript{0} agrees with both the object DP and the subject DP. The object DP is the closest goal matching segments [uF] and [uD] on the probe, and the subject DP is the closest goal matching segment [uA] on the probe.\textsuperscript{11}

The configuration in 53—in which a lower element contains more of the features sought by the probe than a higher element—gives rise to feature gluttony. We propose that the ungrammaticality of ergative extraction in the structure in 53 results from conflicting requirements on movement that are brought about by the fact that (i) C\textsuperscript{0} has entered into Agree relationships with two DPs, and (ii) the A\textbar -probe on Mayan C\textsuperscript{0} requires elements with which it has agreed to undergo movement. This latter requirement is stated in 54, mirroring Coon and Keine’s (2020) requirement for cliticization.

(54) If a segment of a movement-inducing probe on a head H has agreed with an XP, this XP must undergo movement to the specifier of H.

There is broad evidence that the requirement for A\textbar -elements to move is strong in Mayan. Mayan languages prohibit in-situ \textit{wh}-words in interrogative contexts, and generally disallow multiple \textit{wh}-questions and foci. This generalization appears to be robust across the family; see Aissen 1996 and Polian & Aissen 2020 on Tsotsil and Tzeltal, AnderBois & Chan Dzul 2020 on Yucatec Maya, Can Pixabaj 2020 on K’iche’, Mateo Toledo 2020 on Q’anjob’al, Roay 2020a on Chuj, and Vázquez Álvarez & Coon 2020 on Ch’ol.

The requirement in 54 poses no problem for A\textbar -probes that are not gluttonous—as in the A\textbar -object in 52—but causes an irresolvable conflict in gluttony environments like that illustrated in 53. Moving only one of the DPs, or moving neither DP, poses a clear violation of 54. A second possibility would be to move the two DPs one at a time: for example, first move the higher object DP, and then next move the lower subject. However, the first step in this sequence would already violate 54. We assume that every step in the derivation must be well formed, and a sequential movement option is therefore also ruled out. Finally, we consider the possibility that both DPs move simultaneously. While this would not violate the requirement in 54, simultaneous movement of two DPs would require a Merge operation that connects three elements. We follow standard approaches to Merge that take it to be a binary operation, rendering the structure in 53 ineffable (see Coon & Keine 2020 on the same conflict in cliticization). This derives the EEC.

(55) A\textbar -feature located on subject → gluttony

Stepping back, the analysis above formalizes our claim that the EEC is the result of an intervention problem. Specifically, in high-ABS languages the DP object raises to a position above the A\textbar -subject, resulting in a gluttony configuration: the object bears only [D], causing the complex A\textbar -probe to enter into Agree with both the object and the lower

\textsuperscript{11} A referee asks what happens under our analysis when \textit{neither} the object nor the subject bears [\textbar A]. We suggest that the C\textsuperscript{0} in extraction contexts is different from the C\textsuperscript{0} in nonextraction contexts, with the latter lacking a probe altogether. This avoids concerns of the probe moving [D]-bearing elements to Spec,CP in noninterrogative contexts, and is in line with attested variation between different realizations of C\textsuperscript{0} heads (e.g. interrogative vs. noninterrogative) crosslinguistically.
subject. The Mayan Ā-probe mandates that all agreed-with goals undergo movement, an impossibility for two goals that have been agreed with by the same head. In the next section, we examine environments in which transitive subjects can be extracted from regular transitive (non-AF) verb forms. We show that these environments support the intervention-based approach, and we offer a proposal for how our analysis can derive these exceptions to the EEC in terms of relativized probing and feature gluttony. First, however, we briefly address the question of nonargument extraction.

### 3.3. Adjunct extraction

In the system developed above, an XP that successfully undergoes Ā-extraction must be the only XP with which the complex probe on C⁰ enters into Agree. This state of affairs holds when there is no intervening DP between the probe and the Ā-element, as in licit object extraction in 52. It does not hold in would-be transitive subject extraction, because the object DP intervenes, as in 55. Having captured the asymmetry between subjects and objects, we now turn briefly to adjunct extraction. At least two questions arise with respect to adjunct extraction: (i) is it possible to extract adjuncts across an intervening [D]-bearing element?, and (ii) is it possible to ever extract non-DP adjuncts? All else being equal, the system laid out above predicts negative answers to both of these questions. With respect to (i), a DP intervening between the complex probe and the Ā-adjunct will enter into Agree with C⁰, causing gluttony, as shown for a low PP in 56. With respect to (ii), even if the adjunct is high, if it does not itself satisfy the [uD] segment of the probe (for example, it is a PP and does not bear [D]), then the [uD] segment of the probe will enter into Agree with a lower DP, again resulting in gluttony, illustrated in 57.

(56) Ā-feature located on a low PP adjunct with intervening DP → gluttony

(57) Ā-feature located on a high PP adjunct → gluttony

We thus predict that extracting adjuncts must themselves bear a [D] feature, and other [D]-bearing XPs must not intervene. While we do not offer a full account of adjunct extraction here, several types of data suggest that these predictions are on the right track.

First, consider the case of low adjuncts, generated below one or more of the DP arguments. We assume that all [Ā]-bearing elements generated below vP must undergo movement to the edge of vP in order to extract, placing them above argument DPs.

---

12 A referee points out that it should in principle be possible for EPP movement to follow successive cyclic movement, thereby placing the absolutive DP in a higher Spec,vP than the extracting adjunct. We suggest that this is ruled out because EPP movement of the object to Spec,vP is A-movement, while successive cyclic movement of the adjunct is Ā-movement. Assuming that A-movement precedes Ā-movement, the adjunct will always land in a higher Spec,vP. Alternatively, it could be the case that both orders are possible, but only derivations in which successive cyclic movement follows EPP movement converge.
Ayres 1983 on the ‘instrumental voice’ in Ixil, and Henderson 2007, Can Pixabaj 2015, and Mendes & Ranero 2021 for the appearance of a postverbal particle wi in contexts of low-adjunct extraction in Kaqchikel and K’iche’. If we take this morphology to signal movement of low adjuncts to a higher vP-edge position—either along the lines of Rackowski and Richards’s (2005) account of Tagalog ‘voice’ morphology or Mendes and Ranero’s (2021) wh-copying account—then we have added support for the proposal that the configuration in 56 simply does not arise. Coon et al. (2014:§5.3) also discuss the potential extraction of low adverbs in Q’anjob’al, arguing that preverbal manner adverbs have not extracted, but rather, following Mateo Toledo (2003), serve as predicates embedding a lower clause.

Next consider the potential extraction of a high PP adjunct, positioned above the core arguments as in 57. If a high [A¯]-bearing adjunct does not have a [D] feature, then the [uD] segment of the probe will continue searching and enter into Agree with a DP argument, resulting in feature gluttony. Again, we suggest that this configuration does not arise in Mayan languages: elements that A¯-extract must have a [D] feature. Most oblique nominals in Mayan are introduced by one of a set of RELATIONAL NOUNS, noted by Grinevald and Peake (2012) to be a ‘pan-Mayan trait’ (see also Coon 2016, Aissen et al. 2017a). These relational nouns function like prepositions insofar as they introduce nominals, ‘but unlike prepositions they are formally possessed nouns with the following object noun phrase being formally the possessor of the relational noun’ (Larsen 1988:127). Assuming that relational nouns bear [D], they will serve as goals for both segments of the complex probe in contexts of A¯-extraction, avoiding a gluttony configuration.13

In some Mayan languages, all obliques are introduced with relational nouns (see England 1983:195 on Mam). However, in addition to relational nouns, many Mayan languages also have a small number of ‘true’ (i.e. nonagreeing) prepositions (Law 2013). But in at least some Mayan languages, the preposition cannot combine with a DP complement. Aissen (1987:74, n. 2) describes Tsotsil’s preposition ta as tending to combine only with indefinite complements, and both Tzeltal’s preposition ta and Ch’ol’s preposition tiyi are described as incompatible with determiners or demonstratives in their complements (Polian 2013:666, Vázquez Álvarez & Coon 2020). Dayley (1985:282) examines environments in which bare NPs appear in Tz’utujil, and notes that the tendency for bare nominals ‘seems to be strongest in prepositional and relational noun phrases indicating oblique sentential arguments’. Robert Henderson (p.c.) confirms that a corpus search of Kaqchikel’s preposition pa produced roughly 5,000 instances of pa, none of which were followed by the determiner ri. This does not hold in all languages (e.g. it is easy to find examples of pa followed by a determiner in K’iche’ in Can Pixabaj 2015). Nevertheless, we tentatively suggest that these apparent P0s in fact bear a [D] feature themselves. This would explain the fact that—at least in some languages—they resist DP complements, and would avoid the problem shown in the configuration

13 As noted by a referee, this analysis also makes the prediction that bare NPs should not be able to A¯-extract if they do not have a [D] feature. For some Mayan languages, like Chuj, bare NPs are not permitted as true arguments (Royer 2019, 2021b); bare NP internal arguments may be incorporated, but may not extract. In other languages, apparently-bare nominals may undergo focus fronting. We suggest that nominals bearing [A] features always have at least a D0 layer, possibly covert (see Koopman 2012 for the proposal that focused elements must be DPs in Samoan). Note that some Mayan languages have overt focus particles (see e.g. are in 3b, ha in 6b, and re’ in 29; see AnderBois 2017 for general discussion); these particles could plausibly be analyzed as having [D] features. See also n. 16 below on evidence for covert DPs in relation to bare NPs interpreted as specific. On the related prediction that bare NPs should not INTERVENE for extraction of lower DPs, see §4.2.
in 57 (see Grimshaw 2005 for the claim that P^0 is in the nominal extended projection). Alternatively, it could be that features of the nominal complement to the preposition are accessible to the probe. This topic of course deserves more detailed investigation in the individual languages in question. We note for now that our account above is compatible with general patterns found in Mayan adjunct extraction.

4. Evidence for an intervention-based account. Our account of the Mayan extraction restriction laid out above is based on two main ingredients: (i) an intervention problem caused by the object c-commanding the subject; and (ii) the relativization of the A-probe to search for [D] and [\~A] features simultaneously. The present account predicts that transitive subject extraction out of a clause that does not contain an intervening DP object will be licit. This is generally the case in low-abs languages, in which objects remain low and the EEC is absent (§2.2). If, however, in a low-abs language special factors cause the object to raise above the subject, we predict—all else being equal—that an extraction restriction should arise. We suggest that Tsotsil presents evidence that this prediction is borne out, discussed in Appendix A. By the same token, if in a high-abs language we find specific environments that do not involve an intervening DP object, we predict subject extraction to be well formed.

There are three environments in which transitive subjects appear preverbally in high-abs languages without the use of the special AF form, summarized in 58 and examined in turn below. First, when both subject and object DPs appear preverbally in SOV order, transitive (non-AF) verb forms are attested. Second, transitive clauses with bare NP objects have been noted to permit ergative subject extraction in some Mayan languages. Finally, constructions with reflexive and ‘extended reflexive’ objects permit transitive subject extraction. In all of these cases, we provide evidence that either (i) the agent has not extracted, or (ii) no DP object intervenes.

(58) Environments in which the EEC is lifted in high-abs languages
a. Both subject and object appear preverbally, in the order SOV. (§4.1)
   b. The object is a bare NP. (§4.2)
   c. The object is a reflexive or extended reflexive. (§4.3)

In the remainder of this section we examine these patterns in high-abs Mayan languages, arguing that they provide support for our intervention account.

4.1. Topicalized subjects and SOV order. In many Mayan languages, both subject and object DPs can appear simultaneously in preverbal positions, with a noted asymmetry: while OSV order requires the use of AF, SOV order does not. This has been described in a number of K’ichean languages, including for K’iche’ (Larsen 1988, Velleman 2014), Tz’utujil (Dayley 1981), Kaqchikel (García Matzar & Rodríguez Guaján 1997, Broadwell 2000), and Sipakapense (Barrett 1999). An example from K’iche’ is shown in 59.14

(59) a. [SUBJ Lee ch’oh], [OBJ atz’yaq] x-ki-k’ux-uj.
   det  mice  clothes  PFV-A3PL-eat-TV  ‘The mice, they ate CLOTHES.’

   b. [OBJ Lee atz’yaq], [SUBJ ch’oh] x-ee-k’ux-uw-ik.
   det clothes  mice  PFV-B3PL-eat-AF-ITV  ‘The clothes, MICE ate them.’

(K’iche’; Larsen 1988:335)

14A referee points out that Assmann et al. (2015:375) provide an example of OSV in Kaqchikel with a transitive verb form, from their notes. We do not have an explanation of this form, but note that it runs counter to descriptions of Kaqchikel elsewhere in the literature (García Matzar & Rodríguez Guaján 1997, Broadwell 2000). Thanks to Robert Henderson and Rodrigo Ranero for discussion.
The standard analysis of this alternation is the following: the initial element occupies a topic position, while the immediately preverbal element occupies the focus position (see §2.2, and description of these orders in the works cited above). Since ergative topics are independently observed not to require AF (see example 13b above), this pattern is expected. The sentence in 59a involves focus of an object, and no AF is required; 59b involves focus of the agent, and we correctly predict the AF form of the verb.

The question now becomes: why do preverbal foci require AF, while preverbal topics do not? Two different solutions to this puzzle present themselves, and given differences in topic positions described by Aissen (1992)—recall the discussion of ‘internal’ and ‘external’ topics in §2.2—we suggest that both may be available in the grammars of Mayan languages. First, for external topics base-generated in a high clause-peripheral position, AF is predicted not to occur because no extraction has taken place. Instead, the topic is externally merged to a clause-peripheral position and is coindexed with a resumptive pronoun in the base argument position (see Aissen 1992 on the ability of external topics to cross island barriers). Q’anjob’alan languages, which feature overt classifier pronouns, provide evidence that this option must be a possibility. Bielig (2015) demonstrates that in Chuj SOV configurations, a resumptive classifier pronoun is required in the base position of the subject, as shown in 60.

\[(60) \begin{array}{ll}
\text{SUBJ} & \text{Ha} \quad \text{ix} \quad \text{Elsa} \\
\text{TOP} & \text{FOC} \quad \text{clf} \\
\text{OBJ} & \text{ha} \quad \text{te’} \quad \text{k’atzitz} \quad \text{ix-s-xik} \\
\text{TOP} & * (\text{ix}) \\
\end{array} \]

\begin{align*}
\text{As for Elsa, she cuts FIREWOOD.} & \quad \text{(Chuj; Bielig 2015:19)}
\end{align*}

If, however, some topics undergo movement to a clause-initial topic position, all that is required under our account is that the probe triggering topicalization is not bundled with [uD] in the way that the probe triggering focus movement is. An SOV derivation involving topicalization by movement is sketched in 61.

\[(61) \text{SOV: object moves to Spec,CP; subject moves to Spec,TopP} \]

In the derivation in 61, the high A¯-object first extracts to Spec,CP; because it is the highest DP in the clause, no feature gluttony arises (see 51 above). Next, the Top\textsuperscript{0} head merges with a [uTop] feature that will target the subject. Crucially, because the probe is not articulated to search for any other features, it will not interact with intervening material, and the subject is free to move.\textsuperscript{15}

Though the proposal that [uA] but not [uTop] features are bundled with [uD] may seem ad hoc, a natural explanation for this pattern arises directly from the fact that the projections housing topics sit above CP. Specifically, in connection with the work discussed in §3 above, which relates feature inheritance (or a lack thereof) to A¯-extraction asymmetries in unrelated languages, we take the [uD] feature to be generated on C\textsuperscript{0}. This feature may be inherited by T\textsuperscript{0}, as in languages like English, or kept by C\textsuperscript{0}, as in Kaqchikel.

\textsuperscript{15} Erlewine (2016) discusses multiple extraction patterns in Kaqchikel, including patterns that he analyzes as involving multiple focus positions. He argues that antilocality is responsible for the absence of AF in SOV clauses. The patterns he presents run counter to the generalization noted above that Mayan languages appear to feature a single focus or wh-position (Norman 1977, Aissen 1992, Velleman 2014); see Henderson & Coon 2018 for arguments against an antilocality approach. Nevertheless, if some speakers of Mayan languages do permit multiple foci, we can account for the grammar of such speakers without an appeal to antilocality, under the proposal that the trace of the object would not intervene for ergative subject extraction. See Levin 2018 for details and discussion.
Mayan languages (Chomsky 2005, Ouali 2008). When C₀ keeps [uD], that feature may be bundled with other probes on C₀. However, because inheritance is always downward, Top₀ will never inherit [uD], and therefore [uD] will never be bundled with [uTop]. See also Douglas 2018 on a similar distinction in extraction patterns between wh-questions and topics in Māori.

In sum, while transitive subjects fronted to Spec,CP require the use of AF, transitive subjects in the higher topic position do not. On the basis of work which has proposed that only a single focus position exists (Norman 1977, Aissen 1992, Velleman 2014), SOV order necessarily involves an agent in topic position. Two possible analyses were presented for the fact that topics do not trigger AF, compatible with the variation recognized for topics across Mayan languages (Aissen 1992). Either the topic has not extracted in the first place (and so no extraction problem will arise), or the topic has extracted to a distinct projection, triggered by a simplex probe that—searching for only [Top] features—will not cause the feature gluttony problem outlined in §3.2 above.

4.2. NP complements. The intervention-based approach pursued here receives further support from the behavior of bare NP complements in the high-abs language K’iche’. Under our account, if the transitive object is an NP, not a DP, it is predicted to not be a viable target for the [D]-relativized ƛ-probe, even if it occupies a position in the clause that is structurally superior to that of the subject. As demonstrated by Aissen (2011), transitive clauses with bare NPs in K’iche’ permit ƛ-movement of the ergative subject. This is shown for a wh-subject in 62a and a negative existential subject in 62b.

(62) a. Jachiin x-u-loq’ (*rii) uuq?
wh pfv-A3SG-buy det cloth
‘Who bought cloth?’

b. Maj-juun k-u-loq’ (*lee) ojeer siik’.
eg-INDF ipfv-A3SG-buy det old cigarette
‘No one is going to buy old cigarettes.’

(K’iche’; Aissen 2011:12)

This pattern of variation is found in K’iche’ because K’iche’ crucially allows bare NP objects of transitive clauses, in alternation with full transitive DP objects. In many other high-abs Mayan languages—for example, Chuj and Q’anjob’al—bare NP objects trigger an intransitive ‘incorporation antipassive’ construction (Pascual 2007, Coon 2019), independently predicted to permit the agent to extract.

We maintain that the obligatory absence of determiners in 62 indicates that objects in this construction are structurally reduced; they lack D₀ and its concomitant [D]-feature. These objects are nevertheless phrasal. They can be modified by adjectives, as in 62b. In

16 Aissen (2011) presents a fuller picture of the alternation here. Namely, while bare NP objects permit ergative subject extraction from a transitive clause, AF constructions are also found with apparently-bare NP objects. Aissen shows that this variation connects to a semantic contrast: in ergative-extraction contexts with bare NP objects, the object is interpreted as nonspecific if the verb is transitive, and as specific if the verb is in the AF form. We suggest that the semantic difference relates to the presence of covert DP structure on specific objects; these specific objects would then intervene in the same way that DP objects with overt D₀s would, explaining the requirement for AF in these configurations. The presence of null D₀ structure might also provide an account of Tz’utujil, which permits apparently-bare NP objects in transitives, but unlike K’iche’ appears to consistently require AF when ergative subjects are extracted. If our analysis is on the right track, we predict that K’iche’ permits both DP objects with null D₀ (specific NPs) and truly bare NP objects (nonspecific); Tz’utujil would consistently have null DP structure for true transitive objects. Further work is needed to determine if independent support can be found for such a contrast.
fact, these reduced noun phrases are at least as big as NumP, because they can bear plural marking. In such cases, third-person plural set B agreement appears on the verb, as in 63.

(63) Ma jun achi taj k-e’-u-b’oq alaj taq chee’.
NEG INDF man IRV IPFV-B3PL-A3SG-uproot DIM PL tree
‘It’s not a man that is uprooting little trees.’

(K’iche’; Aissen 2011:12, citing López Ixcoy 1997)

Sentences like those in 63 are important to the analysis proposed here. Recall that the realization of set B morphology in high-abs languages like K’iche’ requires the transitive object to undergo movement to a position above the transitive subject; from this higher position, the object is able to enter into Agree with Infl⁰, resulting in set B marking (see §2.2). The presence of the third-person plural set B marker e’- in 63 indicates that Agree between Infl⁰ and the bare NP object has taken place. This presents a problem for the analysis in Coon et al. 2014, where it is proposed that these bare NP objects permit ergative extraction because they remain in their low base-generated positions. Under the proposal developed here, by contrast, the bare NP object, just like a full DP object, stands in a more local relationship to higher functional heads, shown in 64.

(64) Subject can extract if object is NP

\[
\text{In the proposed structure in 64, the NP object is accessible to the set B-generating } \phi \text{-probe on Infl⁰, correctly permitting the appearance of a set B morpheme. However, due to the NP object’s lack of a [D] feature, it is not an accessible goal for the } \bar{A} \text{-probe on C⁰, which—as we proposed in §3—probes simultaneously for [D] and []\bar{A}. In a configuration with a raised bare NP object, the } \bar{A} \text{-probe on C⁰ will skip the object entirely, since it bears none of the features sought by the probe, and enter into Agree with the ergative subject. No gluttony arises, as in 65, and ergative extraction is correctly predicted to be possible.}
\]

(65) Subject can move to Spec,CP across NP object

In sum, the licit A¯-extraction of the ergative subject from a canonical transitive verb in the presence of a structurally reduced nominal object is expected if DP-intervention is the operative constraint in the EEC. When the high object is a DP, it is targeted by the [uD] segment of the complex probe, resulting in a gluttony configuration and thus ungrammaticality (see 53 above). However, when the raised object is not a DP, it is not an eligible goal for the [uD] segment of the complex probe. The probe enters into Agree with only the subject, no gluttony arises, and the EEC is correctly predicted to be lifted.

4.3. Reflexives and extended reflexives. The third environment in which ergative subject A¯-extraction has been described as exceptionally well formed is when the subject binds the possessor of the object in both reflexive and ‘extended reflexive’ constructions (e.g. Craig 1977, Mondloch 1981, Ordóñez 1995, Aissen 1999, 2011, 2017b, Pascual 2007, Coon & Henderson 2011, Hou 2013, Velleman 2014, Coon et al. 2014). These effects are robust across a number of Mayan languages that display the EEC (see
e.g. Aissen 2017b). Examples of ergative subject A¯-extraction from reflexive and extended reflexive configurations in Q’anjob’al and K’iche’ are provided in 66 and 67.

(66) Reflexive objects permit ergative extraction

a. Maktxel max y-il s-b’a?
   who PFV A3-see A3-self
   ‘Who saw herself?’ (Q’anjob’al; Coon et al. 2014:225)

b. Aree jun kumatz u-b’aq’ati-m r-iib’.
   FOC one snake A3sg-roll-prf A3sg-self
   ‘A snake has coiled itself (around the tree).’ (K’iche’; Mondloch 1981:233)

(67) Extended reflexive objects permit ergative extraction

a. Maktxel max s-bon s-na?
   who PFV A3-paint A3-house
   ‘Who1 painted his1/*2 house?’ (Q’anjob’al; Coon et al. 2014:226)

b. Aree lee a Xwaan x-u-k’at r-aqan.
   FOC DET CLF Juan PFV-A3sg-burn A3sg-foot
   ‘Juan burned his1/*2 foot.’ (K’iche’; Mondloch 1981:237)

Reflexive constructions like those in 66 involve a transitive verb stem and a nominal anaphor, often described as a relational noun or a body-part noun, in object position; the anaphor is treated as a third-person object insofar as no set B agreement is visible on the transitive verb. Like other relational nouns, the reflexive noun appears with obligatory set A marking (recall that set A prefixes coindex both transitive subjects and possessors). As the examples in 66 show, transitive subjects may A¯-extract from a transitive verb when the object is a reflexive. The so-called ‘extended reflexives’ in 67 appear structurally similar, but the possessed object is a regular (nonanaphoric) nominal (Aissen 1999). In the examples in 67, the subject binds the possessor of the object, and a transitive subject again appears A¯-extracted in the absence of AF marking. We contend that in these configurations, too, the bound object does not act as an intervener.

Evidence that it is specifically the binding of the object’s possessor that is at issue comes from the sentence in 68, a minimal pair with the extended reflexive in 67a above. In both sentences, the object is the possessed nominal sna ‘his house’. In 67a, when the verb form is transitive, the object’s possessor is interpreted as bound by the subject—an extended reflexive. In 68, the verb is in the AF form and the object’s possessor must be interpreted as disjoint from the subject.

(68) Maktxel max bon-on s-na?
   who PFV paint-AF A3-house
   ‘Who1 painted his1/*2 house?’ (Q’anjob’al; Coon et al. 2014:226)

What we see in the minimal pair in 67a and 68, therefore, is a difference in the semantics of a clause having a syntactic effect. That is, in Q’anjob’al the presence of AF morphology on the verb in 68 forces disjoint reference between the subject and the object’s possessor, while the presence of a transitive verb form in 67a forces a bound interpretation.17 Our proposal below is designed to capture this interaction between semantic interpretation and syntactic extraction.

Extended reflexive objects display two important properties relevant to our analysis. First, the possible appearance of third-person plural set B morphology on the predicate

17 Similar alternations can be found in some of the languages above, while in some other languages, AF is described as optional in bound contexts (see Aissen 2017b:747). We return to how to capture this optionality in our analysis of AF in §5.
provides evidence that extended reflexive objects do undergo movement to a position above the subject. In Kaqchikel, for example, the possessor of the plural object, ri rak’wala ‘his children’, is bound by Juan in 69a and by the subject wh-word in 69b. In both, the object triggers the realization of the overt third plural set B morpheme -e.18

(69) a. Ja ri a Juan x-e-b’e-ru-kano-j  
    ri r-ak’wal-a.  
    FOC DET CLF Juan PFV-B3PL-DIR-A3SG-look.for-DTV DET A3SG-child-PL  
    ‘Juan1 went to look for his1/*2 children.’

b. Achike x-e-b’e-ru-kano-j  
    ri r-ak’wal-a?  
    WH PFV-B3PL-DIR-A3SG-look.for-DTV DET A3SG-child-PL  
    ‘Who1 went to look for his1/*2 children?’ (Kaqchikel)

We propose that the ability for the bound objects to trigger set B morphology in 69 indicates that these objects have, like other objects, undergone movement above the subject, where they establish an Agree relationship with finite Infl0 (on par with the bare NPs from §4.2 above). Second, observe that extended reflexive objects in Kaqchikel may be full DPs—not structurally reduced NPs—as evidenced by the presence of the determiner ri. The question is thus: how can a raised DP object be accessible to the φ-probe on Infl0 (permitting the realization of set B), but then not act as an intervener for the A¯-probe on C0—precisely in contexts in which the subject binds into the object? We propose that semantic binding of the object requires it to reconstruct, removing it as an intervener for the subject.

Before turning to the details of our proposal, we note that this account focuses on extended reflexives, like those in 67 and 69, because the syntactic position of regular reflexives is less clear. Unlike in English reflexives, the anaphoric relational ‘self’ nouns, like -b’a and -iib’ in 66, do not inflect for number. Therefore, we are unable to bring the presence of plural set B agreement to bear on the question of whether reflexive objects have moved above the ergative subject. Moreover, reflexive objects do not appear to be able to cooccur with elements associated with D0, such as determiners or nominal classifiers, and in some languages they have been noted to necessarily appear adjacent to the predicate, even when the canonical word order is VSO (see Coon et al. 2014 on Q’anjob’al; in VSO Mam, reflexive objects appear verb-adjacent and require the use of antipassive, discussed in England 1983).

We thus have multiple viable options for accounting for regular reflexives like the ones in 66. One possibility is that they are structurally reduced, and that the grammaticality of transitive subject extraction is connected to their reduced [D]-less status, as with the NP objects discussed in §4.2 above, or to the possibility that they never raise above the subject (Ordóñez 1995, Coon et al. 2014, Royer 2020b). Alternatively, they could be full DPs, but as with extended reflexives discussed below, they are required to reconstruct to their base position below the subject for binding purposes. Multiple options may exist within Mayan, and we note that any of these possibilities are correctly predicted to obviate the EEC.

Proposal: reconstruction feeds subject extraction. We claim that while the EPP-driven movement of the object to its position above the subject is necessary to trigger the realization of set B morphology, as in 69 above, it is problematic from the point of view of binding. In order to be bound by the subject, the high object must reconstruct

18 We are grateful to Filiberto Patal Majzul and Rodrigo Ranero for Kaqchikel data and discussion of these patterns. Similar data cannot be replicated in Q’anjob’alan languages, where third-person plural DPs do not trigger set B morphology on the predicate (see e.g. Mateo Toledo 2008).
to its base position. In these scenarios, the higher copy of the object is deleted before $C^0$ probes, meaning that the higher copy does not act as an intervener to that probe, as shown in 70.$^{19}$

(70) Object reconstruction for binding feeds subject extraction

```
[CP ⋯ [vP OBJECT [ SUBJECT [vP V OBJECT ]]]]
```

Specifically, our proposal relies on the following assumptions about the nature of phases and spell-out to the interfaces. First, we assume that the **phase impenetrability condition** reduces to transfer to the interfaces: until a domain has been transferred, anything in that domain is visible to probes on heads outside it. Second, following Chomsky (2001), we take the spell-out of a phase to be delayed until the next phase head is merged. Here, this means that the $vP$ phase is not spelled out until $C^0$ is merged, and therefore anything inside $vP$ is potentially accessible to the probe on $Infl^0$. We assume that after spell-out, the phase head complement is transferred to the interfaces, thereby becoming inaccessible to higher operations (the phase head and its specifiers remain accessible). Finally, to derive the invisibility of reconstructed copies to the probe on $C^0$, we propose that reconstruction occurs during spell-out of a phase. Specifically, when a phase is spelled out, chains in that phase are evaluated, and all but one copy in a chain is deleted. We assume that by default the highest copy in a chain will be kept and lower copies will be deleted. However, in the case when a lower copy is necessary for legibility at LF (logical form), a higher copy may be deleted. This is exactly what happens in the case of reconstruction for reflexive binding at issue here.

This proposal derives the circumvention of the EEC by extended reflexive objects in the following way. First, the bound object in question undergoes the usual EPP-driven movement to the edge of $vP$. Second, $Infl^0$ is merged and probes, finding the object in the higher specifier of $vP$ and triggering set B morphology (as in 69 above). Next, $C^0$ is merged, triggering the spell-out of the $vP$ phase; the higher copy of the object is deleted, while the lower copy is kept for binding by the subject. Therefore, the higher copy of the object is not a licit target for the articulated probe on $C^0$, as shown in 71. Once the $vP$ phase has been spelled out, the phase head $v^0$ and its complement are invisible to further operations (indicated by shading in 71). Specifiers at the phase edge remain accessible; recall that the verb moves to the head of the phrase hosting the status suffix, above $vP$.

(71) Reconstruction for reflexive binding feeds subject extraction

```
[CP → $C^0$ ⋯ [vP $<$OBJECT$>$ [ SUBJECT [vP $<$V$>$ OBJECT$]]]]
```

In 71, the articulated probe on $C^0$ agrees only with the subject DP, which matches and removes $[uD]$ and $[uA]$ from the probe. Neither copy of the object DP is a licit target for $C^0$: the higher copy has been deleted, and the lower copy is inside the phase head complement of $v^0$, $VP$, which has been transferred to the interfaces.$^{20}$

$^{19}$ Note that subsequent movement of the subject to a higher position above the object—that is, Spec,$CP$—will not suffice for binding. Movement to Spec,$CP$ is uniformly A$\bar{A}$-movement, which does not create new antecedents for binding.

$^{20}$ Note that this theory of reconstruction applied equally to all languages would make the wrong prediction for the grammaticality of English object extraction in ditransitives like (i).

(i) [Which picture of herself,$_i$] did you give Mary,$_i$ __ ?
Further predictions and evidence for object raising. Because semantic binding is the relevant factor in causing reconstruction, our account makes two predictions. First, we might expect reconstruction to be forced in more complex constructions involving bound pronouns inside raised objects, such as when the subject binds into a relative clause modifying the object. This is borne out in Chuj—but only if the object is also possessed by a bound possessor. If the object is unpossessed, or has an unbound possessor, the AF form is required. Extraction of an ergative wh-word from a transitive verb is shown in 72 (the presence or absence of the -tv status suffix is governed by whether the following pronoun is overt or null; Royer 2021a).

\[
(72) \text{Mach}1_{ix}\text{-}y\text{-}awt\text{-}ej \quad \left[\text{ch’anh s-libro} \quad \text{ix}\text{-}s\text{-}\text{man(-a’) \quad [RC ix}\text{-s-man(-a’)}\right] \quad \text{who PFV-A3-read-DTV CLF A3-book PRON PFV-A3-buTV} \\
\text{PRON} \quad \text{’Who1 read her1/*2 book that she1/2 bought?’} \quad (\text{Chuj})
\]

Chuj is an especially good language in which to test this contrast, because there is an independent difference visible in bound versus unbound pronouns. While most Mayan languages are robustly pro-drop, Q’anjob’alan languages like Chuj possess a series of nominal classifiers that function like pronouns (Craig 1986, Zavala 2000). In Chuj, nominal classifier pronouns like the feminine ix in 72 are generally obligatory in definite contexts (Royer 2019, 2021b), but are impossible in bound pronominal contexts; in 72 the overt classifier forces a nonbound interpretation. In 72 we observe that a bound possessor for the head of the relative clause is required for the transitive form of the verb, regardless of the interpretation of the subject pronoun in the relative clause. We suggest that this receives a natural explanation under the assumption that the relative clause is itself a phase, and/or the relative clause is merged late (Lebeaux 1988, Takahashi & Hulsey 2009); material inside the relative clause would thus not have an effect on object reconstruction.

Second, the analysis proposed above makes a prediction about binding and the A-extraction of objects. Specifically, because an object into which the subject binds must be spelled out in the vP phase (see 71), bound objects should themselves be banned from undergoing regular A-extraction to Spec,CP. Data from several languages with the EEC

Under standard assumptions about the structure of double object constructions, the indirect object Mary is merged higher than the direct object; the wh-phrase direct object subsequently moves over Mary to Spec,vP to be eligible for A-extraction. At the point C⁰ is merged, the structure of the lower phase in (i) is analogous to 71: the bound object is higher than its binder and therefore should have to reconstruct. However, this would make the object inaccessible to the A-probe on C⁰, meaning further A-movement to Spec,CP should be ungrammatical.

We caution here, however, that the theory of reconstruction adopted to explain extended reflexive effects need not be a general theory of reconstruction in all languages. Rather, we contend that in Mayan languages that display amelioration of the EEC in the presence of extended reflexives, both LF and PF (phonetic form) must privilege the lower copy. It is this simultaneous LF- and PF-privileging of the lower copy that renders the higher copy an illicit agreement target. We will see additional evidence for a tight coupling between LF- and PF-realization for higher copies in 76 below, and this is in line with the more general observation that scope-bearing elements must overtly raise to Spec,CP in Mayan languages. We take the many well-known cases, such as (i) above, of reconstruction effects in English to indicate that the LF/PF-coupling in English is looser, and therefore that the higher copy of the bound direct object need not be deleted at spell-out of the vP. We thank Ethan Poole for raising this concern, and leave further discussion of the implications of this proposed crosslinguistic variation to future investigation.
initially appear to provide striking confirmation for this prediction. First consider extraction of a nonbound object in VOS Chuj, shown in (73).

(73) [Mach te’ pat ]i ix-s-chonh __i [ix Malin]?
wh clf house pfv-a3-sell clf Malin
‘Which of the houses did Malin sell?’ (Chuj)

If we add a bound possessor to the object, object extraction becomes ungrammatical, as shown in (74a) (a minimal pair with the grammatical (73)). Recall from (72) that bound possessors must be null in Chuj, represented as ‘∅’. If an overt classifier appears in possessor position, the sentence is grammatical—but now the possessor of the object must be interpreted as disjoint from the subject, shown in (74b).

(74) a. *[Mach te’ s-pat ∅1 ], ix-s-chonh __i [ix Malin]1?
wh clf a3-house pron pfv-a3-sell clf Malin
intended: ‘Which of her1 houses did Malin1 sell?’

b. [Mach te’ s-pat ix2 ], ix-s-chonh __i [ix Malin]1?
wh clf a3-house pron pfv-a3-sell clf Malin
‘Which of her2/*1 houses did Malin1 sell?’ (Chuj)

In order to express the intended meaning in (74a, with an interpretation in which the subject binds into an object that has extracted, we find sentences like that in (75).

(75) [Mach te’ s-pat ix Malin1], ix-s-chonh-o’ ∅1 __ [∅1 ]?
wh clf a3-house clf Malin pfv-a3-sell-tv pron
‘Which of her1 houses did Malin1 sell?’
(lit. ‘Which of Malin’s1 houses did she1 sell?’) (Chuj)

These data initially appear to follow directly from the theory of reconstruction we sketched above: objects into which the subject binds cannot extract because the higher copy at the edge of vP is deleted, and therefore the probe on C0 will never be able to access that copy for extraction. Instead, an R-expression is base-generated in the object, object reconstruction is not forced, and the object may now extract. In the remainder of this section, we show that things are more complicated than this. The result is that while forms like (75) have no direct bearing on our reconstruction account, they do provide striking support for object raising, and thus for a deep syntactic division between low-abs and high-abs Mayan languages (Royer 2020b).

First, as pointed out by a referee, note that the examples in (74–75) could involve accidental coreference, rather than true semantic binding. Ideally, we would want to test sentences of the form: *Which of her1 books did [every girl]1 read?, in which a quantificational subject binds a variable in the object. But here we run into a confound: quantificational elements that bind variables must front to the same preverbal focus position that A-extracted elements occupy. In (76a, for example, the quantificational masaníl forces the subject to appear fronted; leaving the quantifier in postverbal subject position results in ungrammaticality, as in (76b). Because only a single focus position exists, sentences in which an object containing a bound variable fronts to Spec,CP seem to be simply ineffable, at least in Chuj.

21 We are grateful to Magdalena Torres and Mateo Pablo for discussion of Chuj in this section; to Telma Can Pixabaj for K’iche; to Juan Jesús Vázquez Álvarez and Morelia Vázquez Martínez for Ch’ol; to Jaime Pérez González for Tseltal; to Henry Sales and Tessa Scott for Mam; to Hugo Héctor Vázquez López for Tojol-ab’al; and to Judith Aissen and Justin Royer for discussion of these patterns more generally.
(76) a. [SUBJ Masanil heb’ ix ix ] [OBJ ch’anh every PL CLF woman PFV-A3-read-DTV CLF s-libro ∅ ] __i.
A3-book PRON
‘Every woman1 read her1 book.’

b. *Ix-y-awt-ej [ OBJ ch’anh s-libro ∅ ] [ SUBJ masanil heb’ ix PFV-A3-read-DTV CLF A3-book PRON every PL CLF ix ] __i.
woman
intended: ‘Every woman1 read her1 book.’

We have not yet been able to test this across a wider range of high-abs Mayan languages, and this is an important topic for future work.

Second, there is reason to believe that a more general constraint holds, accounting for the surprising distribution of overt and null arguments in the sentence in 75. Aissen (2000) argues—drawing on Craig 1977 and Hoekstra 1989—that for the closely related Q’anjob’alan language Popti’, linear precedence governs the distribution of null anaphoric pronouns. Specifically, Aissen proposes a prosodic constraint, which requires the anaphoric null pronoun to linearly follow its antecedent nominal in a specific domain: the intonational phrase. As Aissen shows for Popti’, and Royer (2020b) confirms for Chuj, no c-command relation is necessary between the two coindexed nominals.

(77) Tz-s-cham-k’ol-ej [OBJ nok’ s-tz’i’ ix Malin] [SUBJ ix ix ipfv-A3-die-stomach-DTV CLF A3-dog CLF Malin CLF woman x-lolon y-et’ok ∅ ] __i.
PVF-speak A3-with PRON
‘The woman that spoke with Malin1 likes her1 dog.’

Royer (2020b) makes two important advances beyond Aissen’s initial proposal. First, he demonstrates that the surface constraint against cataphora is not limited to the distribution of null versus overt classifiers in Q’anjob’alan languages. Rather, it appears to be a more general feature of high-abs Mayan languages, as shown by the Mam and Kaqchikel examples in 78. These examples mirror the Chuj sentence in 75 above: when coreference obtains between the subject and the possessor of the fronted object, the overt nominal must appear as the (linearly first) possessor, and the subject must be null.

(78) a. [OBJ A t-chej Xwan1] o tz’-ok t-b’yo’n det A3SG-horse Juan PFV B3SG-dir A3SG-hit-DIR [SUBJ ∅ ] __i.
PRON
‘Xwan1 hit his1/*2 horse.’

PRON
‘Ana1 sold her1/*2 cow.’

Strikingly, the reverse pattern holds in low-abs languages like Ch’ol and Tojol-ab’al in 79. Here, the null pronoun appears in the possessor position of the fronted object, and the postverbal coreferential subject is overt. Reversing the null and overt nominals results in an obligatorily disjoint interpretation.
(79) a. [OBJ Ja’ ja s-wakax ∅ i x-chon-a __] [SUBJ ja Jwan-i’].
   FOC DET A3-cow PRON A3-sell-TV DET Jwan-DET
   ‘Jwan sold his1/*2 cow.’
   (Tojol-ab’al; low-ABS)

b. [OBJ I-wakax ∅ i tyi i-choñ-o __] [SUBJ aj-Ana1].
   A3-cow PRON PFV A3-sell-TV CLF-Ana
   ‘Ana1 sold her 1/*2 cow.’
   (Ch’ol; low-ABS)

Second, Royer (2020b) argues that the constraint against surface cataphora holds in high-ABS languages precisely because the object has raised to a position above the subject. Assuming this movement to be A-movement, and following work that takes A-movement to not necessarily reconstruct (Chomsky 1995, Lasnik 1999), this results in the absence of a c-command relation between the subject and the possessor of the object in high-ABS languages. Precisely when no c-command relation can be established between two coreferring nominals, a surface condition deletes the linearly second of the two arguments. This proposal follows closely the spirit of Aissen’s, but provides an explanation as to why linear precedence should play a role in the distribution of arguments and anaphors in some Mayan languages, but not others. In low-ABS languages, the object remains low and the possessor is c-commanded by the subject. Assuming that DPs which can be interpreted as bound variables must be (Reinhart 1983, Grodzinsky & Reinhart 1993), we derive the fact that the null bound variable surfaces in object position in Ch’ol and Tojol-ab’al in 79.

Finally, Royer (2020b) argues that traditional semantic binding under c-command need not be abandoned in high-ABS languages. When objects contain an element that must necessarily be interpreted as a bound variable, they either (i) are forced to reconstruct, permitting extraction of the subject that semantically binds them, as in the extended reflexives in 67, or (ii) remain in their base positions, as he argues is the case for reflexive objects in Chuj.

Tying together binding, anaphora, and extraction. We began §4.3 with the widely attested observation that transitive subjects which semantically bind into an object may exceptionally undergo A-extraction from a transitive verb form, circumventing the EEC in a variety of high-ABS languages. For extended reflexives, the possibility of set B agreement with the object in forms like 69 provides evidence that the object undergoes the regular EPP-driven movement above the subject; this led us to propose that it is reconstruction of the object that permits ergative extraction. Specifically, when the raised object in a high-ABS language contains an element that must be interpreted as a bound variable, it reconstructs when the vP phase is spelled out, deleting the higher copy. As a result, because the A-probe on C0 does not have access to the higher copy of the object, no gluttony arises, and the subject successfully extracts.

Importantly, this occurs just in cases of variable binding, not coreference. Investigation of coreference patterns between subjects and the possessors of objects was argued to support our account, albeit indirectly. Specifically, while we cannot test whether an object with a bound variable possessor can extract (because the binder in subject position must itself occupy Spec,CP; see 76), we observe that when an object with a possessor that corefers with the subject appears in Spec,CP, a surprising pattern appears in high-ABS languages. Namely, a surface constraint against cataphora mandates that only the linearly first of coreferring expressions in a specific prosodic domain be pronounced (Aissen 2000, Royer 2020b). Royer (2020b) connects this constraint precisely to the difference in the syntactic structure between high-ABS and low-ABS languages: in high-ABS languages, no c-command relationship can be established between a possessor
in the A-moved object and the lower subject. While objects must reconstruct in cases of true semantic binding, they do not reconstruct under coreference. The reversal in anaphora patterns between high-abs languages and low-abs languages in 78–79 thus provides further support for a deep syntactic difference between two types of Mayan languages. We expand our table from 17 above to that in 80.22

(80) High-abs versus low-abs languages

<table>
<thead>
<tr>
<th>source of set B</th>
<th>low-abs</th>
<th>high-abs</th>
</tr>
</thead>
<tbody>
<tr>
<td>v⁰</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Infl⁰</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ergative available in nonfinite clauses?</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ergative extraction constraint?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>surface constraint against cataphora?</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

Finally, while we are unable to expand this investigation outside of the Mayan family in the present work, we note that in Chamorro, an Austronesian language with an EEC, transitive subjects are described as exceptionally extractable precisely when the object contains a bound pronoun (Chung 1989, discussed in Campana 1992:113), and that linear precedence also plays a role in the distribution of anaphoric pronouns in Chamorro (Chung 1989).

4.4. INTERIM SUMMARY AND COMPARISON WITH OTHER ACCOUNTS. In §3, we proposed that the ergative subject is restricted from undergoing A- extraction in high-abs languages because the object has moved above it (see 37). This configuration permits finite Infl⁰ to enter into Agree with the object (§2.2), but it also makes the object a more local goal for the [D]-relativized A-probe (see 38). If, as we propose, this intervention by the object explains the ungrammaticality of ergative subject A-extraction, we expect to find instances of exceptionally well-formed ergative subject A-extraction just in case the transitive object does not act as an intervener. In this section, we investigated three environments in which ergative subject A-extraction is exceptionally well formed: sentences with topicalized subjects (§4.1), transitives with bare NP objects (§4.2), and transitives in which the subject binds into the object (§4.3). In the first environment, we noted that topics occupy a distinct clause-initial position. In some languages, they are base-generated high; in others, they may undergo movement, but driven by a nonarticulated probe. Either way, the EEC is predicted not to hold. For the latter two environments, we proposed that both cases provide evidence that intervention of a DP object is behind the EEC.23

22 A referee asks about other binding predictions we might make for high-abs Mayan languages. For example, given that the raised object c-commands the ergative subject, can a reflexive anaphor appear in subject position? To our knowledge, this is impossible in Mayan languages; however, we contend that this is independently predicted. The ANAPHOR AGREEMENT EFFECT (Rizzi 1990a) is the observation that reflexive anaphors do not occur in syntactic positions construed with agreement. Since transitive subjects and possessors across Mayan trigger obligatory set A agreement, the absence of ergative reflexives as subjects bound by c-commanding objects or possessors of subjects bound into by c-commanding objects is independently expected (recall that third-person set B agreement never has an overt reflex, making it impossible to determine whether agreement occurs with reflexive objects). Furthermore, ‘picture of’ noun phrases are not attested in Mayan. It is thus also independently expected that logical possessors realized as complements to noun phrases that could serve as potential anaphors in the absence of set A agreement should not exist.

23 One environment not discussed above is the behavior of ergative subject extraction from transitive clauses that take a CP-complement. We might imagine that, like bare NP-complements, CP-complements would permit ergative subject A-movement, because CPs, like NPs, lack [D]. This is not the case. Ergative
Not only do the facts discussed in §4 lend support to the idea pursued here, but they also prove problematic for alternative accounts of the EEC in Mayan. These previous accounts fall into two main groups: (i) the nature of the **ergative subject** prevents extraction, and (ii) ergative extraction creates a problem for LICENSENG of the **object**.24

In the interest of space we do not summarize these alternatives in full, but briefly highlight the issues raised by the facts above.

First, it has been claimed that in at least some languages with syntactic ergativity effects like the EEC, ergative extraction restrictions should be attributable to properties of the ergative subject itself (Deal 2016, Polinsky 2016). Under these accounts, some ergative subjects are proposed not to be viable targets for **A-bar** probes. This could be because ergative subjects are embedded inside an inaccessible PP (possibly with a null P0; Polinsky 2016), or because ergative subjects do not meet the case discrimination requirements of **A-bar** probes (Deal 2016). The exceptional cases considered above are problematic for the application of such analyses to Mayan languages. These demonstrate that extracting ergative subjects is not, in and of itself, a problem. Rather, the availability of ergative subject extraction is sensitive to the nature of the **direct object** (see also discussion in Henderson & Coon 2018). Under proposals that attribute ergative extraction restrictions to properties of the ergative DP, the exceptional well-formedness of

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24 One recent analysis not discussed here at all is Erlewine’s (2016) antilocality account of the EEC. See Henderson & Coon 2018 for a critique of that proposal. We similarly do not provide a detailed discussion of the account in Stiebels 2006, though see Appendix A. Newman (2020) argues that the EEC is only superficial: transitive subjects extract in the same way other arguments do, but morphological interactions between agreement and extraction result in different surface forms (i.e. transitive vs. AF stems). While this captures the basic alternation, it is less clear how to link the variation we find in AF between Q’anjob’al and K’ichean, discussed in §5. Finally, Tollan and Clemens (2021) propose in recent work that the EEC arises due to a grammaticalized processing constraint against crossing movement dependencies. Specifically, they adopt the same background assumption that in EEC-exhibiting Mayan languages, the object has raised to a position above the ergative subject. **A-move** ment of the subject to Spec,CP would then create a crossing dependency. Though fundamentally different in approach, the core pieces of their analysis are compatible with ours insofar as intervention by the moved object is taken to underlie the basic cases of the EEC.
ergative subject A-extraction in environments in which the object is a nonintervener—as with NP objects and bound objects in §4.2 and §4.3 above—is not expected.

The licensing-based accounts of Coon et al. (2014) and Assmann et al. (2015) also face problems in accounting for the data above. In both accounts, the EEC is connected to the licensing needs of the object. For Coon et al. (2014), the movement of the object above the subject is required in order for the object to be licensed by Infl0, but results in the lower subject being trapped inside the vP phase. For Assmann et al. (2015), all DPs must pass through Spec,InflP en route to Spec,CP; if the transitive subject moves through Spec,InflP, however, it marauds the licensing abilities of Infl0, leaving the object without an available licenser. For both accounts, extraction of the ergative subject is predicted to be incompatible with the object entering into Agree with Infl0. The crucial data points from above are repeated in 81; in both, the subject has extracted from a full transitive clause and the object triggers set B (third plural) marking on the verb. Taking set B to indicate that Agree with Infl0 has taken place, and given that these accounts take Infl0 to be the source of object licensing, these sentences demonstrate that ergative extraction should not be incompatible with object licensing.

(81) a. Ma jun achi taj k-e'-u-b'oq alaj taq chee'.
    NEG INDF man irr IPFV-B3PL.-A3SG-uproot DIM PL tree
    ‘It’s not a man that is uprooting little trees.’ (K’iche’; = 63)

b. Achike x-e-b'e-ru-kano-j ri r-ak'wal-a?
    WH PFV-B3PL-DIR-A3SG-look.for-DTV DET A3SG-child-PL
    ‘Who1 went to look for his1/*2 children?’ (Kaqchikel; = 69b)

Coon et al.’s account focuses on Q’anjob’al, where similar facts are independently unavailable. However, if a unified account of the Mayan EEC and AF is desired, these facts show that nominal licensing is not a viable approach.

5. How agent focus circumvents the EEC. Finally, we turn to the AF construction and how it circumvents the EEC. To foreshadow, we propose that the AF morpheme is the realization of a special \( v^0/\text{Voice}^0 \) head \( (v^0_{AF}) \). While regular transitive \( v^0 \) \( (v^0_{TV}) \) triggers raising of the object above the subject in high-Abs languages, \( v^0_{AF} \) does not. As a result, the movement conflict described in §3 does not arise.

While some properties of AF are shared across the family, there are also important points of variation, which we attribute to differences in the details of the features on \( v^0_{AF} \). We begin here in §5.1 with a short review of the properties that a successful account of AF must handle, and we sketch an analysis of what the \( v^0_{AF} \) heads have in common across Mayan languages that exhibit the EEC. We turn to the details of the Q’anjob’alan AF construction in §5.2, followed by K’ichean Proper in §5.3.

5.1. Shared agent focus properties. The core properties of AF to be accounted for are repeated in 82 from 7 and 21 above.

(82) Characteristics of Mayan agent focus
   a. AF is used when the transitive subject is A-extracted.
   b. AF constructions involve dyadic predicates in which neither subject nor object DP is oblique.
   c. Set A (ergative) \( \phi \)-marking is absent.
   d. A special AF suffix appears on the stem.
   e. If a status suffix appears, it is an intransitive status suffix.

As noted at the outset, this section focuses on AF in languages of the K’ichean Proper and Q’anjob’alan branches of the Mayan family. This is due first to the fact that most
recent work on AF and the EEC focuses on these languages, and second to the observation that for some other Mayan languages, constructions used to extract agents appear to be intransitive (e.g. Poqom and Q’eqchi’; see §2.3 above). While these antipassive constructions are interesting in their own right, given the independent extractability of intransitive subjects, they do not pose a puzzle for how the EEC is circumvented.

Q’anjob’al and K’iche’ AF constructions are shown in 83.

(83) Agent focus

a. A naq Xhwan max-ach kol-on-i.
   foc clf Xhwan pfv-b2sg help-AF-ITV
   Xhwan helped you.’
   (Q’anjob’al; Mateo Toledo 2008:334)

b. Are ri sis x-in-ti’-ow-ik.
   foc det coati pfv-b1sg-bite-AF-ITV
   The coati bit me.’
   (K’iche’; Can Pixabaj 2004:55)

Both constructions in 83 share all of the properties in 82 above: AF is used only when the transitive subject is A-extracted (here for focus), and neither subject nor object appears demoted. Focusing on the stems themselves, we find that set A marking is absent entirely, an AF suffix appears on the stem, and the intransitive status suffix appears stem-finally.

An important point of variation, discussed in §2.3 above, concerns which DP the set B morpheme coindexes, repeated in the summary table in 84. In Q’anjob’alan, the set B morpheme consistently tracks the object. In K’ichean Proper, by contrast, set B is hierarchically governed. In 83b, set B tracks the first-person object, but set B may also track the subject if it is higher ranked, discussed further in §5.3 and Appendix B below.

(84) Agent focus agreement patterns

set B = object       e.g. Q’anjob’al, Chuj, Popti’
set B = variable     e.g. K’iche’, Kaqchikel, Tz’utujil

As foreshadowed above, we propose that the AF morpheme—that is, -on in 83a and -ow in 83b—is the overt morphological realization of a v₀ head (v₀AF). Like v₀TV, it introduces the transitive subject in its specifier position. Unlike v₀TV, however, it does not enter into an agreement relationship with the subject, accounting for the absence of set A agreement. Setting aside for now the differences in behavior of the object, transitive and AF clauses are diagrammed in 85 and 86.

(85) Transitive

(86) Agent focus

Following Coon et al. (2014), we take the choice of status suffix—that is, the head of ssP—to be determined based on the direct selectional relationship with vP. Specifically, the transitive form of the status suffix is conditioned by merge with vPs that do assign set A/ergative to their specifiers, as in 85, while the intransitive suffix is conditioned by merge with vPs that do not assign set A/ergative, as in 86. The latter category includes intransitive verbs in the languages in question, but also the AF vP. The picture so far accounts for several of the AF properties in 82 above: it connects the appearance of a spe-
cial suffix 82d to the absence of set A morphology (82c) and the choice of an intransitive status suffix (82e).

We now turn to the property in 82a: AF is limited to constructions in which the external argument has extracted. Ordóñez (1995), Coon et al. (2014), and Assmann et al. (2015) characterize AF as a type of ‘last resort’ strategy, proposing that it is available only in situations in which failure to use AF results in a licensing failure. Note, however, that under the proposal advanced here—that all of the special properties of AF can be traced back to features of $\nu^0$—an alternative that does not require reference to last-resort mechanisms is available. Here we propose that $\nu^0_{AF}$ has a selectional requirement which mandates that the DP merged in its specifier bear an [A¯] feature. Selectional requirements on external arguments are not without precedent; for example, external arguments in Blackfoot must be animate, which Ritter and Rosen (2010) also attribute to a selectional requirement of $\nu^0$. A selectional requirement of this sort immediately derives the fact that AF is possible only with A¯-subjects.

Attributing the use of AF to selection of [A]-bearing subjects permits an explanation of two other puzzles. First, recall from §2.3 above that in some languages, constructions described as AF appear with oblique objects. In certain languages, these constructions may be best considered simple antipassives, since they may be used whether or not the agent has extracted. However, some Mayan languages also have constructions that appear to be antipassives insofar as they select oblique internal arguments, but that are like AF in that they are restricted to use with [A]-bearing agents. Aissen (2017b) labels these ‘AFobl’; see Q’eqchi’ in 31b above, as well as discussion in Aissen 2017b for K’iche’ and Tz’utujil, and in Heaton 2017 and Ranero 2019 for Kaqchikel. Assuming antipassives to also be a specific type of $\nu^0$/Voice head—that is, heads that select an agent but do not license the appearance of DP-internal arguments—the same selectional requirement can be proposed for these cases.

Second, recall from §4.3 that while bound objects consistently permit extraction of ergative subjects without the use of AF, in some languages AF appears to be optional in these reflexive and extended reflexive environments (Aissen 2017b). This type of optionality is unexpected if AF is truly a last-resort operation. However, a selectional account handles this optionality straightforwardly: $\nu^0_{AF}$ is restricted to use with [A]-bearing external arguments; $\nu^0_{TV}$, in contrast, is in principle free to merge external arguments with or without [A]-features. Such derivations will converge only if the object then does not intervene for agent extraction, allowing for the possibility of $\nu^0_{TV}$ in transitives with the binding configuration outlined in §3 above.

The general properties of $\nu^0_{TV}$ and $\nu^0_{AF}$ discussed thus far are summarized in 88. We adopt Longenbaugh’s (2019) notation in 87, drawn from Müller 2010.

(87) Agree and merge feature notation
a. Agree features [X:__], trigger Agree with a YP bearing feature X
b. Merge features [•X•], trigger external merge or A-movement of a YP bearing feature X

(88) Transitive and agent focus $\nu^0$

<table>
<thead>
<tr>
<th>external argument</th>
<th>$\nu^0_{TV}$</th>
<th>$\nu^0_{AF}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>[•DP•]</td>
<td>[•DPA¯•]</td>
<td></td>
</tr>
<tr>
<td>[φ:__]</td>
<td></td>
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<table>
<thead>
<tr>
<th>internal argument</th>
<th>$\nu^0_{TV}$</th>
<th>$\nu^0_{AF}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>[•DP•]</td>
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</tbody>
</table>

In 88, both $\nu^0_{TV}$ and $\nu^0_{AF}$ have a merge feature, triggering external merge of the external argument in their specifier; only $\nu^0_{AF}$ restricts the external argument to [A]-bearing DPs (annotated [•DPA¯•] below). A further difference between the two heads is in the presence or absence of set A agreement: $\nu^0_{TV}$ triggers set A agreement, while $\nu^0_{AF}$ does not.
Following Aissen 2010 and Coon 2017, we assume that set A agreement is the result of a spec-head agreement relation between the external argument and the v^0 head (see §2.2); we annotate this inherent agreement relationship as \[\varphi \Downarrow \mathrm{DP}\]. As discussed above, the internal argument DP in high-abs languages raises to a position above the subject, which we take to be triggered by an additional merge feature on v^0 TV (i.e. what we called an ‘[EPP]’ feature above), as shown in 88. The crucial question now becomes accounting for the property in 82b: what is it about the AF construction that permits the transitive subject to A-bar-extract from a regular dyadic predicate? We propose that this connects to the interaction between v^0 TV and the internal argument—that is, the shaded cell in 88. Specifically, we argue that the AF construction does not trigger raising of the internal argument above the subject. Details of the construction, however, vary across subfamilies, discussed in turn for Q’anjob’alan and K’ichean in the sections below.

5.2. Q’anjob’alan. Our analysis of AF in Q’anjob’alan follows in broad strokes the account in Coon et al. 2014: Q’anjob’alan v^0 AF differs from v^0 TV both in not triggering set A subject marking, as shown in 86 and summarized in 88, and in having a \[\varphi \] probe that enters into Agree with the transitive object, creating the set B/absolutive morpheme. While v^0 TV triggers raising of the transitive object to a position above the subject (§2.2), v^0 AF does not, and the object remains low. The features of v^0 TV and v^0 AF relevant to the internal arguments are shown in 89 and 90.

(89) Transitive object raises

(90) Agent focus object remains low

The source of set B morphology thus differs in Q’anjob’alan transitive and AF clauses. In a transitive clause, the object raises above the subject and from this position is accessible to the high \[\varphi \] probe on Infl^0, as in high-abs languages more generally. In an AF clause, the object remains low, and v^0 AF has the \[\varphi \] probe responsible for triggering the set B morpheme.

The relevant features on v^0 TV and v^0 AF in Q’anjob’alan are summarized in 91. Importantly, transitive and AF v^0 differ in their treatment of the object: v^0 TV has a merge feature that causes the object to raise, but does not have a \[\varphi \] probe. In a transitive clause, the set B marking comes from the high probe on finite Infl^0 (high-abs), as discussed in §2.2.

25 We represented the [EPP] feature driving A-movement of the object as \[\varphi \Downarrow \mathrm{DP}\], but note that at least in K’iche’, bare NP objects must also move above the object, as discussed in §4.2. This suggests that a more general nominal feature must be involved in driving object movement in K’iche’, like \[\varphi \Downarrow \mathrm{NP}\]. Because the other languages discussed either do not allow NP objects or do not show the same properties as K’iche’, we leave \[\varphi \Downarrow \mathrm{DP}\] as the default in the discussion, but nothing hinges on this.

For now we set aside questions of whether the features on a head may be ordered, as for example in Müller 2010, or whether economy conditions determine the order in which features are discharged, as for example in Longenbaugh 2019 and work discussed there. We are grateful to Elise Newman for discussion of these and related matters.
above. In contrast, \( \nu^0 \) AF does have a \( \varphi \)-probe triggering a set B morpheme, and the object remains in situ.\(^{26}\)

(91) Transitive and agent focus \( \nu^0 \) in Q’anjob’alan

<table>
<thead>
<tr>
<th>external argument</th>
<th>([\textbullet\text{DP}])</th>
<th>([\textbullet\text{DP}_A\text{_}])</th>
</tr>
</thead>
<tbody>
<tr>
<td>internal argument</td>
<td>([\textbullet\text{DP}])</td>
<td>([\varphi:__])</td>
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A couple of further notes are in order here. First, under the proposal that set B is triggered by different heads in transitive and AF clauses, one might wonder why the form of set B remains constant, as in the transitive and AF forms in 92.

(92) a. Max-

\[\text{ach}\ \text{y-}\text{il-a’}.
\]

\(\text{PFV-}\text{b2}\text{SG}\ \text{A3}-\text{see-TV}\)

‘She saw you.’

b. Maktxel max-

\[\text{ach}\ \text{il-on-i?}\]

\(\text{who}\ \text{PFV-}\text{b2}\text{SG}\ \text{see-AF-ITV}\)

‘Who saw you?’ \(\)\(\text{Q’anjob’al; Coon et al. 2014}\)

While we do not take a stance on the nature of set B marking across the family, in Q’anjob’alan languages set B morphemes are morphophonological clitics. In clauses containing an overt TAM morpheme, the set B morpheme appears attached high, as in 92. But in clauses lacking overt aspect marking, as with the nonverbal predicates in 93, the set B morpheme appears after the predicate, written as a free-standing morpheme (orthographic \(<\text{h}>\) represents the absence of an initial glottal stop).

(93) a. Chotan \text{hach} ayoq.

\(\text{sitting\ b2}\text{SG\ dir}\)

‘You are sitting down.’ \(\text{Q’anjob’al; Mateo Toledo 2008:54}\)

b. Man kuywom-\text{oq}\ \text{hach}.

\(\text{neg\ student-irr\ b2}\text{SG}\)

‘You are not a student.’ \(\text{Q’anjob’al; Mateo Toledo 2008:69}\)

Following Coon et al., we take these set B morphemes to be syntactic pronominal clitics, triggered by \( \varphi \)-Agree with a probe (see e.g. Kramer 2014 for discussion). Given that we are dealing with a case of pronominalization, the fact that the \( \varphi \)-probes on both \( \text{Infl}^0 \) (in a transitive) and \( \nu^0 \) (in AF) trigger identical forms is unsurprising. Similarly, the fact that the set B morpheme is a clitic whose placement is governed by morphophonological factors (see also §2.2 above) makes it unsurprising that the clitic’s linear position does not directly reflect the functional head responsible for creating it (i.e. it appears ‘high’ in 92b, despite the fact that a low head is proposed to generate it in AF clauses).

Second, as discussed in Coon et al. 2014, the proposal that \( \nu^0 \) AF has a set-B-generating \( \varphi \)-probe offers an immediate explanation for an otherwise puzzling fact in Q’anjob’alan languages: the AF morpheme is obligatory in NONFINITE EMBEDDED TRANSITIVES. Recall from §2.2 above that many high-abs languages disallow nonfinite embedded transitives altogether. In Q’anjob’alan, embedded transitives are possible, but only with the

\(^{26}\) Note that in an AF clause \( \text{Infl}^0 \) does not trigger a (second) set B clitic. One possibility is that the \( \varphi \)-probe on \( \text{Infl}^0 \) in an AF clause is optional, and simply not merged (see e.g. Kalin 2018). Alternatively, it is possible that \( \text{Infl}^0 \) does enter into Agree with the higher subject in an AF clause, but that a morphological constraint prevents the spell-out of two set B morphemes (see also Oxford 2019, 2020 for discussion of related effects). Some support for this view will be found in independently needed morphological constraints on multiple set B morphemes in K’ichean in §5.3 and Appendix B.
AF morpheme. This strategy is expected under this account, in which $v^0_{AF}$ provides a low source for set B morphology.27

(94) Chi uj [hach y-il-on-i].

\[
\begin{array}{c}
\text{IPFV be.able.to} \\
\text{B2SG} \text{ A3SG-sec-AF-ITV}
\end{array}
\]

‘She can see you.’ (Q’anjob’al; Coon et al. 2014:180)

Finally, and most relevant to the discussion at hand, the proposal that the object remains low offers an immediate account of the ability for an [A]-bearing transitive subject to extract from an AF clause. As illustrated in 95, the articulated probe on $C^0$ will find the high subject DP. The subject will fully satisfy the probe and probing will halt, permitting the subject to $A^\perp$-extract.

(95) Probe on $C^0$ finds subject in Spec,$vP$

In sum, the AF corner of Q’anjob’alan behaves as a low-ABS language in permitting the object to remain low, and in providing a low source for the generation of the set B clitics. In turn, this results in the lack of an extraction problem for the ergative subject—again, as in low-ABS languages. This system further accounts both for the consistent pattern of object-triggered set B morphology and for the fact that the AF morpheme is used in nonfinite embedded clauses, where set B would otherwise be unavailable. Finally, recall from §2.3 that some Mayan languages show an overlap between AF morphology and ANTIPASSIVE morphology (see e.g. Smith-Stark 1978, Stiebels 2006). Under our proposal, $v^0_{AF}$ in Q’anjob’al lacks the $[\bullet D\bullet]$ feature that triggers movement of the internal argument; given that antipassives have oblique internal arguments, they would be expected to lack this feature as well, offering a potential connection between these constructions.

5.3. K’ichean. We now turn to AF in the K’ichean Proper branch. Recall that like in Q’anjob’alan, AF clauses lack set A, have a special AF suffix, and appear with an intransitive status suffix (when one is present), accounted for with the basic structure in 86 above. However, we find two important differences between K’ichean Proper and

---

27 We follow Coon et al. (2014) in taking the appearance of set A marking in the embedded clause to be related to nominalization, a common process in nonfinite embedded clauses across Mayan (see also Coon & Carolan 2017 on the same pattern in related Chuj). Specifically, we follow these authors in proposing that in these and other nonfinite clauses, the subject is a null PRO in Spec,$vP$. The embedded clause is nominalized above the $vP$ layer, and a possessor is introduced to bind the subject in its thematic position. Given that set A morphology indexes both possessors and ergative subjects, the appearance of set A marking on these and other embedded clauses is explained. Note that the embedded $v^0$ must differ from main clause $v^0_{AF}$ in not requiring its specifier to have an $[\Lambda]$ feature. Thus, a better unified characterization of the morpheme -on is as an exponent of any $v^0$ that introduces both a nonoblique internal argument and an external argument, but that does not inherently agree with its external argument.
the Q’anjob’alan AF discussed just above. First, set B person marking indexes the highest-ranked DP on the hierarchy in 96, repeated from 26 above.

(96) 1st person/2nd person >> 3rd person plural >> 3rd person singular
A pair illustrating combinations of first- and third-person singular DPs is provided in 97. Note that set B indexes the first-person DP regardless of whether it is the subject (97a) or the object (97b).

(97) a. In x-in-il-ow le achi.
   PRON.1SG PFV-Β1SG-SEC-AF DET man
   ‘I saw the man.’
   b. Le achi x-in-il-ow in.
     DET man PFV-Β1SG-SEC-AF PRON.1SG
     ‘The man saw me.’
     (K’iche’, Davies & Sam-Colop 1990:523)

Second, while in Q’anjob’al the AF morpheme is required in order to embed a nonfinite transitive clause, embedded transitives in K’ichean Proper are simply ungrammatical and a detransitivized verb form must be used instead (see 15 and discussion in §2.2 above).

Our analysis of AF in this group of languages again relies on differences in the specification of the \( v^0_{AF} \) head, shown in the column added to the comparison table in 98. Specifically, K’ichean AF is like Q’anjob’alan AF—and different from full transitive \( v^0 \) in both subfamilies—insofar as \( v^0_{AF} \) does not enter into \( \varphi \)-Agree with the transitive subject merged in its specifier position. However, following the proposal in Levin 2018, K’ichean \( v^0_{AF} \) is closer to \( v^0_{TV} \) insofar as it does trigger raising of the object. The differences in AF features in the two subfamilies are highlighted in 98 below.

(98) Transitive and agent focus \( v^0 \) in Q’anjob’alan and K’ichean compared

| External Argument | \( v^0_{TV} \) | \( v^0_{AF} \) (Q’) | \( v^0_{AF} \) (K’)
<table>
<thead>
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<tbody>
<tr>
<td>Internal Argument</td>
<td>( [\bullet\text{DP}\bullet] )</td>
<td>( [\bullet\text{DP}\bullet] )</td>
<td>( [\bullet\text{DP}\bullet] )</td>
</tr>
<tr>
<td>( \varphi:__ )</td>
<td></td>
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</table>

The proposed featural content of the K’ichean \( v^0_{AF} \) head immediately provides a path to account for the two facts above. First, because K’ichean \( v^0_{AF} \) lacks \( [\varphi:__] \) and is therefore not able to create a set B/absolutive morpheme, it is unsurprising that it is unavailable as a strategy for embedding a full transitive in a nonfinite environment. Second, we propose that raising of the object places it in a specifier of \( v^0_{AF} \). Following the proposal in Levin 2018, the fact that both subject and object occupy specifiers of the AF \( vP \), and neither DP has entered into \( \varphi \)-Agree with \( v^0 \) (as evidenced by the absence of set A), results in a configuration in which both the subject and the object are accessible to the set B-generating \( \varphi \)-probe on Infl\(^0\), as illustrated in 99. The proposal that Infl\(^0\) accesses the subject and object simultaneously provides the environment needed to account for the hierarchy effect, discussed in greater detail in Appendix B.

(99) K’ichean agent focus: subject and object both accessible to Infl\(^0\)
Concretely, we propose that the subject and object DPs in K’ichean AF are equidistant to higher functional projections. There are arguments in the literature both for (Reinhart 1981, Ura 1996, Chomsky 2000, Hornstein 2009, Oxford 2019) and against (Chomsky 2001, Hiraiwa 2001, Doggett 2004) equidistance of multiple specifiers, and we are unable to address these in detail here. This account of the K’ichean hierarchy effect builds specifically on work by Oxford (2019), who employs a structure comparable to that in 99 for the transitive paradigm across the Algonquian family. For Oxford, the consistent equidistance of subject and object DPs, combined with an articulated probe on Infl0, derives the robust hierarchy effects across those languages.

Oxford cites Richards’s (2001) suggestion that multiple specifiers created by A-movement result in equidistance. Importantly for the account here, we stipulate that multiple specifiers are equidistant only in the absence of inherent set A agreement between $v^0$ and the thematic subject. In regular transitives, the $v^0_{TV}$ head enters into Agree with the subject externally merged in its specifier position. We suggest that the spec-head agreement creates a relationship between $v^0_{TV}$ and the subject, which is distinct from that between $v^0_{TV}$ and the not-agreed-with object. As a result, the A-moved object unambiguously c-commands the subject, as in 100. Note that under the proposal that set A agreement takes place immediately upon Merge ($[^{DP^*}]$), there will always be a recoverable record of which DP has merged first in a transitive clause like 100: since the subject has valued the $\phi$-probe on $v^0_{TV}$, it merged with $v^0_{TV}$ first, before remerge of the internal argument with $v^0_{TV}$. The higher probe has access to this difference, resulting in asymmetric c-command between the moved object and the subject.28

(100) Transitive: OBJ >> SUBJ

By contrast, $v^0_{AF}$ does not enter into Agree with the external argument, and we propose that when it attracts the object, both DPs are viewed as equidistant to higher probes. Note that Algonquian consistently lacks inherent ergative agreement, compatible with the proposal that the absence of inherent agreement results in equidistance of multiple $v^0$ specifiers. This proposal provides a means to understand why hierarchy ef-

28 Alternatively, it could be the case that multiple specifiers of a single head created by A-movement are always equidistant (Richards 2001, Oxford 2019) and that the DP object in a transitive is actually moved to a higher functional projection, above the vP containing the subject, ensuring an asymmetric c-command relationship in transitives. See Ranero 2019 for arguments from licit and illicit voice mismatches in Kaqchikel ellipsis constructions for evidence in favor of the view that a higher functional projection exists in active, transitive clauses but not in AF clauses.
fects are language-wide in Algonquian, but confined to the AF corner of K’ichean. We offer a concrete account of the K’ichean hierarchy effect in Appendix B, turning now to the main question of this section: what is it about the K’ichean AF construction that permits the transitive subject to extract?

While in Q’anjob’alan AF the object remained low, here the object is attracted to a specifier of vP. Crucially, the same equidistance of subject and object used to derive the hierarchy effect just above offers an immediate account of the extractability of the agent DP. The relevant configuration with the A-probe on C^0 is shown in 101.

(101) Probe on C^0 finds both arguments in Spec,vP

Here we again draw on Oxford’s (2019) account of Algonquian. Concretely, we adopt his formulation of best match in 102.

(102) Best match (Oxford 2019:970): When a probe P is faced with two equally local goals, P agrees with the goal that matches the most of P’s unvalued features.

Oxford uses this to derive the complex system of hierarchy-based agreement and portmanteau forms across the Algonquian family; here we argue that the same principle allows us to capture not only the hierarchical nature of set B realization (see Appendix B), but also the extractability of A¯-subjects from transitive verb forms. We adopt the idea underlying 102 that a probe is able to evaluate multiple goals without entering into Agree with them, and propose that this is what happens in the case of the equidistant subject and object goals in K’ichean AF. Specifically, when a probe segment [uF] simultaneously encounters multiple instances of [F], [uF] will Agree with the goal bearing [F] that also matches the most of the probe’s other segments. In 101, because the subject has both [D] and [A] features, it is a better match for the complex probe on C^0. C^0 then enters into Agree only with the subject, the gluttony problem described in §3 does not arise, and the subject successfully extracts.

6. Conclusion and crosslinguistic outlook.
6.1. Summary. This article reexamined the empirical landscape of the ergative extraction constraint found in a subset of Mayan languages and offered a proposal for its source. Specifically, we argued that the EEC is the result of an intervention problem, in
which a DP object intervenes between a complex $\tilde{A}$-probe on $C^0$ and the ergative subject. Following previous work on Mayan, DP objects in a subset of languages raise to a position above the subject in order to be targeted by a $\varphi$-probe on Infl0, causing intervention between the ergative subject and the probe on $C^0$. We argued that this intervention problem arises specifically because the probe responsible for $\tilde{A}$-extraction is an articulated probe, relativized to search for both [D] and [A] features simultaneously. This was formalized in §3 by adopting a specific implementation of Agree in which individual segments of a complex probe may enter into Agree with multiple goals, precisely in scenarios in which the lower goal has more of the features sought by the probe than the higher goal. Extending Coon and Keine’s (2020) analysis of hierarchy effects in the domain of $\varphi$-features into a larger set of features ($[F]$), following Baier 2018, we proposed that the offending configurations in Mayan involve constructions in which the lower DP (the $\tilde{A}$-subject) has more of the probe’s features than the higher DP (the DP object). Mirroring the derivation of person case constraint (PCC) effects in inverse configurations, we proposed that these multiple Agree relationships cause an irresolvable conflict for movement.

The proposal that intervention of the DP object between the complex probe on $C^0$ and the $\tilde{A}$-subject is the source of the extraction problem received further support from environments in which properties of the object—that is, a lack of a D0 head, or a need to be bound by the subject—permitted ergative subjects to extract from full transitive clauses (§4). The relevance of the nature of the object to the extractability of the ergative subject, as well as evidence that the object may enter into Agree even when the subject extracts, provided evidence against the applicability of previous accounts that rely either on a problem of object licensing (Coon et al. 2014, Assmann et al. 2015) or on properties of ergative subjects (Deal 2016, Polinsky 2016). While nothing in our proposal—which focuses specifically on the EEC in Mayan—rules out the possibility that features of ergative subjects may underlie extraction restrictions in other languages, here we provided evidence that this cannot be the source of the EEC in Mayan.

We next turned to the special AF constructions used to circumvent the EEC. Again following previous work in Mayan, we proposed in §5 that the AF morpheme is a particular instantiation of $\nu^0, \nu^{0}_{AF}$, which differs from transitive $\nu^0_{TV}$ in important respects. What AF constructions have in common—as expected on our account—is that they solve the intervention problem by not causing the object to raise above the subject. However, the exact features on $\nu^{0}_{AF}$ vary across the family, in a way that we connected directly to the independent variation observed in AF. We adopted the general proposal for Q’anjob’alan AF in Coon et al. 2014: $\nu^{0}_{AF}$ does not cause the object to raise, and instead the set B morpheme is generated by a low functional head, on par with regular transitives in low-ABS languages. This accounts for (i) the fact that set B consistently targets the object in Q’anjob’alan, and (ii) the use of AF morphology in nonfinite environments that would otherwise lack a source for set B. Our account of K’ichean AF drew on the analysis in Levin 2018, in which $\nu^{0}_{AF}$ does cause raising of the object, but to a $\nu P$ specifier that does not asymmetrically c-command the subject, accounting for the hierarchy effects found in set B marking in these languages. Both the set B hierarchy effect and the availability of extraction are directly connected to the fact that higher functional probes access the equidistant subject and object DPs simultaneously. Best match mandates that the probe enter into Agree with the DP that matches more of the probe’s features. This gives rise to the $\varphi$-feature hierarchy effect for the Infl0 probe, and to the extractability of the more featurally specified $\tilde{A}$-subject by the composite $C^0$ probe. Crucially, in AF in both Q’anjob’alan and K’ichean Proper, the DP object no
6.2. CROSSLINGUISTIC OUTLOOK. The present article focuses specifically on the EEC in the Mayan language family. While we leave it as an open question whether it is appropriate to extend a similar account to extraction restrictions elsewhere, we discuss some possible avenues for crosslinguistic comparison here. Specifically, as noted above, our account relies on two special properties argued to be present in Mayan: (i) the high position of the object in a regular transitive clause in high-abs languages, and (ii) a composite probe on C0, which probes for [Ã] and [D] simultaneously.

We suggest that the high position of the object connects directly to the fact that ergative extraction asymmetries appear in a subset of morphologically ergative languages (see e.g. Comrie 1978, Dixon 1979, 1994, and Larsen & Norman 1979; Aissen 2017b on Mayan specifically). On the account here, the Mayan EEC is correlated with morphological ergativity: objects in high-abs languages raise to a high position from which they can enter into Agree with Infl0, while agreement with transitive subjects occurs in situ (i.e. inherent ergative agreement; Coon 2017). All else being equal, we do not expect to find these effects in morphologically nominative-accusative languages, in which subjects are generally taken to establish a relationship with finite T0. Furthermore, the fact that not all morphologically ergative languages show EEC effects can be tied to independent variation in the source of ‘absolutive’ (Legate 2008), but with more nuance than reported in Coon et al. 2014. Specifically, in a language where finite T0/Infl0 is responsible for absolutive clitics/agreement, we expect (all else being equal) the object to raise above the subject. In Mayan languages in which the source of absolutive is low, we do not find an EEC. Note, however, that nothing in principle rules out the possibility that objects that receive absolutive case or agreement low could nonetheless raise above the subject (see discussion of Tsotsil in Appendix A). This is compatible, for example, with the account of Dyirbal in Legate 2012; Legate proposes that absolutive has a low source but that the language nonetheless shows effects of an EEC. See also Aldridge 2004 on variation in Austronesian.

With respect to the mixed probe on C0, we noted above that the proposal that C0 probes for [Ã] and [D] builds on a line of work on the nature of Ã-movement in languages not genetically related to Mayan—see discussion in Legate 2014, Aldridge 2017a,b, Erlewine et al. 2017, Douglas 2018, and Erlewine 2018 for Austronesian languages, and van Urk 2015 for Dinka. Though our account differs crucially from some of these in not relying on licensing, it shares with these works a blurring of the line between A- and Ã-movement, as well as the roles associated with T0 and C0 in driving this movement. We note in closing that Mayan languages conspicuously lack processes associated with movement to T0/Infl0: there are no raising verbs, no evidence that unaccusative or passive subjects undergo A-movement, and in general no evidence for [EPP]-driven movement to Spec,TP; unsurprisingly, these languages are thus generally verb-initial. If A-movement is triggered by nominal features like [D] or [φ] (van Urk
2015), then the fact that $C^0$ is the locus of $[D]$ probing in Mayan could perhaps be connected to this absence. For example, if features on $\text{Infl}^0$ originate on $C^0$ (Chomsky 2001), perhaps in Mayan we find evidence that the $[uD]$ feature is not passed down, instead becoming entangled with the $\bar{A}$-probe, as discussed in many of the works cited above. We leave this and many other future possible directions as topics for crosslinguistic investigation.

**APPENDIX A: WHICH ARGUMENTS TRIGGER AGENT FOCUS?**

Variation has been described in which arguments, or combinations of arguments, trigger AF. As noted in §2.3, three different patterns have been described with respect to the relevance of the person features of the two nominal arguments (Stiebels 2006, Aissen 2017b, Watanabe 2017), summarized in A1.

\[\text{(A1) Person features and agent focus} \]
\[a. \text{At least one DP must be third person in order for AF to occur (e.g. K'iche').} \]
\[b. \text{The agent must be third person in order for AF to occur (e.g. Q'anjob'al).} \]
\[c. \text{Both agent and patient must be third person in order for AF to occur (Tsotsil).} \]

Here we propose that things are in fact simpler than they appear, and that this apparent variation can be traced back to independent differences among the languages in question. Specifically, we maintain that the EEC holds whenever an (interpreted) DP object moves to a position above the subject in a Mayan transitive clause—regardless of the person features of either argument. This is repeated in A2 from 4 in the main text.

\[\text{(A2) MAYAN EEC GENERALIZATION: When an interpreted DP object structurally intervenes between} \]
\[\text{the subject and the $\bar{A}$-probe on $C^0$, the subject is restricted from undergoing $\bar{A}$-extraction.} \]

We discuss each pattern from A1 in turn below, arguing that none presents a counterexample to the generalization in A2.

Our account contrasts explicitly with the proposal in Stiebels 2006, in which the variation seen in A1 is taken to represent a trajectory of development, as in A3, formally regulated by variation in morphological constraint rankings (here and below, ‘$\text{PART}’ = \text{first- or second-person discourse participant}’).

\[\text{(A3) Stiebels’s (2006:538) proposed development of agent focus for object > subject settings} \]
\[\begin{array}{cccc}
\text{STAGE I} & \text{STAGE II} & \text{STAGE III} & \text{STAGE IV} \\
3 > 3 & 3 > 3 & 3 > 3 & 3 > 3 \\
\text{PART > 3} & \text{PART > 3} & \text{PART > 3} & \text{PART > 3} \\
3 > \text{PART} & 3 > \text{PART} & 3 > \text{PART} & 3 > \text{PART} \\
\end{array} \]

\[\text{(e.g. Tsotsil)} \quad \text{(e.g. Q’anjob’al)} \quad \text{(e.g. K’iche')} \quad \text{‘generalized’} \]

As Stiebels notes, due to the lack of case marking on nominals, together with basic verb-initial word order across the family, a DP–V–DP configuration with two third-person DPs is potentially ambiguous in languages that lack AF entirely between SVO and OVS (see e.g. Vázquez Álvarez 2011 on Ch’ol). Stiebels, drawing on earlier work such as Dayley 1981, proposes that AF developed as a morphological means to disambiguate between subject and object extraction, with ‘stage I’ being a language that only uses AF in potentially ambiguous 3–3 scenarios. According to Stiebels, Q’anjob’al would present the next stage, with AF used any time the subject is third person, followed by K’iche’, which disallows AF only in combinations of local participants. Eventually, after completely generalizing AF in stage IV, the final stage is the complete loss of AF, as in the low-abs languages described above.\(^{31}\) Stiebels (2006) formally accounts for the variation between transitive and AF forms through optimality-theoretic constraint rankings governing surface morphology: the AF morpheme competes with the set $A$ morpheme in transitive clauses. Differences in the syntax of the two constructions are not developed (see Aissen 2017b for discussion).

While we do not fully engage with Stiebels’s analysis here, we maintain that abandoning our stronger restriction in A2 above in favor of a violable-constraints approach comes at the cost of missing important patterns in the languages in question, and also runs the risk of overgenerating. As one example, Stiebels accounts for the preference of set $B$ to cross-reference objects in AF through high ranking of the constraint ‘$\text{DEF}(\text{AULT})/ [+\text{hr}]’’, which requires that the set $B$ morpheme index the object by default. This is intended to capture the Q’anjob’alan morphological pattern (in which set $B$ always indexes the object; see §5.2), and

\(^{31}\) While it is generally accepted that Proto-Mayan had AF, and that the absence of AF in Lowland languages like Ch’ol and Tzeltal is an innovation (Smith-Stark 1978, Law 2013), we are not aware of strong historical evidence for the specific scale in A3.
Stiebels extends it to account for the fact that 3 > [part] configurations require AF in Q’anjob’al, but not [part] > 3. Our account in §5 above, in contrast, ties object agreement in AF to the functional head responsible for generating set B and the relative position of the object: in Q’anjob’al, the low v0 head generates the set B morpheme. Our account offers a means of capturing the fact that this strategy has been extended to nonfinite clauses in Q’anjob’al, which lack the head normally used for generating set B morphology. As discussed in §5.3, the same strategy is correctly predicted not to be available in K’ichean, in which Inf0 remains the set B-generating head. Additionally, the fact that K’ichean AF is hierarchically governed is, for us, a direct consequence of the higher source of set B marking. These connections are not obviously captureable by a Stiebels-style constraint-based morphological approach.

Possibly more problematic is that Stiebels’s proposal cannot account for cases in which the EEC is exceptionally obviated. It lacks a developed-enough syntax to make clear predictions about which languages and constructions should require AF (see also Preminger 2014, Aissen 2017b, and Levin 2018 for discussion). In the present account, the lack of AF in low-ABS languages is tied directly to the height of the object, which in turn makes testable predictions for nonfinite embedding (§2.2). We further capture variation internal to high-ABS languages based on properties of the object (§4). Stiebels does address obviation of the EEC in reflexive configurations, noting that such cases are unambiguous with respect to subject versus object extraction; however, it is not clear that this could extend to the full range of data concerning bound pronouns introduced above. The case of bare NPs discussed above is also less easily captured under her account. The bare NP object is predicted to trigger AF in the same way as DP objects. Below, we propose that each of the patterns in A3 can be captured in terms of independently observable syntactic properties of the languages in question.

At least one DP must be third person. First, we examine the at-least-one-third-person restriction in A1a. Recall from above (§2.3) that the set B morpheme in languages of the K’ichean Proper branch is hierarchically governed: either the subject or the object may control the set B morphology, according to the hierarchy in 26. Note, however, that this hierarchy does not determine which argument is indexed in combinations of first- and second-person arguments, and such combinations are generally reported to be impossible in AF clauses (Dayley 1978, Larsen 1988, Preminger 2014). In the Kaqchikel example in A4, for example, the AF form is ungrammatical regardless of the choice of set B morpheme.

(A4) *Ja rat x-[in/at/O]-ax-an yín.
    foc pron.2sg pfv-b1sg/b2sg/b3sg-hear-AF pron.1sg
intended: ‘You heard me.’ (Kaqchikel; Preminger 2014:22)

We follow Aissen 2017b and other previous work that analyzes this as a morphological problem: both first- and second-person forms compete for the set B slot, and the grammar is unable to resolve the conflict (see also Stiebels 2006, Watanabe 2017, and our specific proposal in Appendix B below). One piece of evidence in favor of this analysis comes from Aissen (2017b), who notes that K’iche’ has a second-person formal (polite) pronominal category, expressed as lab in singular and alaq in plural. These morphemes belong to neither the set A nor the set B paradigm, and instead italicize to the right of the verb. Combinations of a second-person formal argument with a first-person argument are grammatical in AF clauses, as shown in A5.

(A5) In x-in-ch’aab’e-n alaq.
    pron.1sg pfv-b1sg-talk.to-AF pron.2pl_formal
‘I talked to you.’ (K’iche’; Mondloch 1981:221)

As Aissen notes, forms like A5 suggest that the ban is not strictly about combinations of first- and second-person DPs, but rather on the clash of two competing set B morphemes; since the formal-second-person morphemes do not occupy the set B ‘slot’, no conflict arises (we return to this in Appendix B).

There are at least three possibilities reported for realizing a focused agent in combinations of first- and second-person DPs with overt set B exponents. The first and least surprising, shown in A6, is to instead use an antipassive construction. Here the object appears in an oblique form, and the now-intransitive agent is free to extract (see §2.3 above).

(A6) Atet x-at-ch’ey-o w-xiin.
    pron.2sg pfv-b2sg-hit-antip a2sg-rn
‘You hit me.’ (Tz’utujil; Dayley 1978:38)

Aissen (2017b) reports that all speakers of Tz’utujil and some speakers of K’iche’ have such an antipassive in their grammars, and simply use this independently available strategy to focus an agent in contexts with two local arguments.

Second, López Ixcoy (1997) reports that some K’iche’ speakers permit the AF construction to be used in combinations of local arguments with set B indexing the internal argument, as in A7. Note that since the agent has extracted, it will always be realized by the full first- or second-person focused pronoun; set B indexes the remaining argument.
Finally, for K’iche’ speakers who do not have an antipassive form, as well as for at least some Kaqchikel speakers (Preminger 2014), we find the appearance of an extracted agent from a regular transitive verb form, as shown in A8.

(A8) In             k-at-in-to’-oh.  
PRON.1SG IFPV-B2SG-A1SG-help-ss  
‘I will help you.’  (K’iche’; Mondloch 1981:223)

Assuming, following previous work, that the ban on multiple morphologically realized local persons is indeed a morphological problem specific to the AF construction—related to competing overt realizations of person features in a construction with a single morphological slot for φ-marking—the next question is: what, if anything, does this have to do with the EEC? Our proposal is that this is not directly related to the EEC. That is, the restriction on extracting ergative subjects from transitive clauses is not lifted in the K’ichean Proper subbranch when both arguments are local. Rather, we propose that the EEC is maintained, and that when faced with the need for agent extraction in these local contexts, speakers must make use of an alternative strategy: either an antipassive (A6), an AF form with special agreement (A7), or—most surprisingly from the point of view of the EEC—apparent extraction from the transitive form, as in A8.

It is important to note that at least in Kaqchikel, recent work has observed a higher degree of variation in the use of AF versus transitive clauses in apparent agent-extraction contexts, especially among younger speakers (Clemens 2013, Heaton et al. 2016, Henderson & Coon 2018). One possibility is that some speakers are making more frequent use of an initial topic position, independently noted not to trigger the use of AF (see §4.1). Recall that while in Q’anjob’alan languages, topicalized subjects require a resumptive classifier pronoun in postverbal base position, this is not the case for K’ichean languages, where it is more difficult to distinguish topics from foci on purely morphological grounds (see e.g. 13 above). Velleman (2014) notes that speakers of the Central Nahualá variant of K’iche’ did not accept forms like A8 in focus contexts, preferring instead antipassive forms like A6. Given that only some speakers permit full transitives like A8, we might predict that these are speakers who are more generally permissive with SVO in the absence of AF—perhaps making more frequent use of topicalization. Future work is needed to test whether forms like A8 correlate with a more general optionality of the AF construction.

An alternative possibility is that speakers who permit clauses like A8 have access to a last-resort mechanism (see e.g. Rezac 2011), allowing a transitive verb form to function as an AF stem in terms of extraction (see §5), exactly when an irresolvable morphological problem prevents the regular AF from being used. While we do not offer further details for this possibility here, we contend that the K’ichean Proper pattern in which AF is possible only if one argument is third person does not necessarily imply a pattern in which the ergative extraction constraint is lifted for combinations of nonthird persons. Rather, an independent morphological conflict creates a problem for the use of AF, which the syntax must resolve through other means. Our account correctly ties the ‘at least one DP must be third person’ restriction directly to the hierarchical pattern of set B marking, analyzed in §5.3 above and Appendix B below.

The agent must be third person. In Q’anjob’alan languages, AF occurs only with third-person agents; first- and second-person agents appear to extract directly from transitive forms, as shown by the pair in A9. In A9a, the extracted third-person agent appears with the expected AF form of the verb. In A9b, however, we find an apparently focused first-person pronoun and a transitive verb form.

(A9) a.  A Juan max maq’-on no tx’i’.  
PRON.1SG IFV hit-ERG CLF dog  
‘JUAN hit the dog.’  (Q’anjob’al; Coon et al. 2014:223)

The Q’anjob’al pattern, we claim, is fundamentally different from the K’ichean Proper pattern discussed above (in contrast with Stiebels 2006, Erlewine 2016, Watanabe 2017, who analyze these person patterns in A1 as being different ‘strengths’ of the same type of restriction). First, note that this restriction cannot be attributed to a morphological source; the set B morpheme in the Q’anjob’alan AF construction consistently targets the object (see 34 above). Here we follow Coon et al. (2014), who propose that the apparent first- and second-person pronouns in Q’anjob’al are base-generated in a high clause-peripheral position, and that AF is not used because no true agent extraction has taken place. As motivation for this special behavior of local person forms, Coon et al. cite Baker (2008), who—following previous work—takes the indexical content of
first- and second-person pronouns to be generated in Spec, CP, with lower first/second-person forms anaphoric to the high operators. Applying this to Q’anjob’alan, we claim that only the high element is pronounced; this clause-peripheral first/second-person form binds a null pronoun in base position.

Mateo Pedro (2001) proposes that these first- and second-person ‘pronouns’ like ayin in A9b are in fact composed of the Q’anjob’alan focus marker (a) plus the set B absolutive clitic (=in in the first-person singular examples above); see also Pascual 2007 and Scharf 2016 for the same conclusion and further related discussion. While free-standing pronouns across Mayan show a formal connection to the set B series, in Q’anjob’al the first- and second-person singular and plural pronouns (ayin ‘1sg’, ayach ‘2sg’, ayon ‘1pl’, ayet ‘2pl’) are exactly identical to the focus marker combined with the set B series (=in, =ach, =on, =ex), plus an epenthetic glide. We thus follow Mateo Pedro, Scharf, and others in analyzing these as synchronically complex forms, not as true extracted pronouns. As further support, note that the first- and second-person pronouns in Q’anjob’alan are ungrammatical in postverbal argument position, as shown by the intransitive and transitive pairs in A10 and A11.

32 Similar facts can be replicated for Chuj, another language that does not show AF when local agents extract. Scharf (2016) describes an additional set of first- and second-person forms in Q’anjob’alan that occur together with the demonstrative ni’; these may appear to the right of the verb, but he provides semantic evidence that the ni’-forms are high external topics, and are not in low base-generated position.
Both agent and patient must be third person. Finally, we turn to Tsotsil. Tsotsil is an outlier in the Greater Tzeltalan branch in having an AF construction. Like the other members of its subfamily, it has a series of stem-final set B markers, which at least in some environments appear to be available in TAM-less environments, as in A12a—hallmarks of low-abs languages.33

(A12) a. X-tal [a-tek’-ik-on].
   ASP-come A2-step-2PL-B1
   ‘You (all) will come and step on me.’ (Tsotsil; Aissen 1984:561)
b. Ak’-o [s-mala-otiktik] li Maruch-e.
   let-IMP A3-wait.for-B1PL.EXCL DET Maruch-ENC
   ‘Let Maruch wait for us.’ (Tsotsil; Aissen 1987:222)

Nonetheless, AF in Tsotsil shares the properties from 21 above: it is limited to contexts of transitive subject extraction, neither DP is oblique, set A marking disappears, and a cognate form of the AF suffix appears on the stem. As Aissen (1999:456) notes, like AF in other languages, the Tsotsil AF stem appears with intransitive status suffixes in certain environments.34 However, Tsotsil AF occurs only when both arguments are third person (Haviland 1981, Aissen 1999, 2017a). Compare the 3 > 3 forms in A13a and A13b with the ungrammatical form in A13c.

(A13) a. Buch’u i-maj-on li Petul-e?
   who PFV-hit-AF DET Pedro-ENC
   ‘Who hit Pedro?’ (Tsotsil; Aissen 1999:456)
b. J-bankil i-maj-on.
   A1-older.brother PFV-hit-AF
   ‘My older brother hit him.’
c. *Vo’on l-i-maj-on.
   pron.1SG PFV-B1-hit-AF
   intended: ‘I hit him.’ (Tsotsil; Aissen 1999:456)

To express the meaning in A13c, a transitive form is used, as in A14. AF forms are similarly impossible when the object DP is first or second person.

(A14) Vo’on i-j-maj.
   pron.1SG PFV-A1-hit
   ‘I hit him.’ (Tsotsil; Aissen 1999:456)

While AF is limited to agent extraction in 3 > 3 contexts in Tsotsil, not all 3 > 3 environments with extracted agents require AF. This means that in certain contexts, there is ambiguity as to whether the subject or object DP has extracted, as in A15.

(A15) Buch’u i-s-kolta li tzeb-e?
   who PFV-A3-help DET girl-ENC
   ‘Who helped the girl?’/‘Who did the girl help?’ (Tsotsil; Aissen 1999:459)

Aissen notes that while this kind of optionality is possible in elicited material, in practice it is generally quite clear whether a certain 3 > 3 construction will make use of AF. Specifically, the choice between a transitive or AF form depends on a variety of factors related to the relative prominence of subject and object DPs, including animacy, definiteness, individuation, and discourse role. Specifically, ‘the AF form requires that the object be more prominent than the subject; the TV form requires roughly the opposite’ (Aissen 1999:459). To give one example related to the property of animacy, consider the question in A16.

(A16) K’usi i-s-ti’?
   what PFV-A3-bite/eat
   ‘What did he eat?’/*‘What bit him?’ (Tsotsil; Aissen 1999:459)

While the verb ti’ can mean either ‘eat’ or ‘bite’, the transitive verb form in A16 is unambiguously interpreted as a case of patient extraction (cf. the optionality in A15). This is because an AF form is required when the patient outranks the agent on the animacy scale, as would be the case in the ungrammatical reading of A16. Further examples are given by Aissen (1999), who draws parallels between AF in Tsotsil and systems of obviation in languages like those in the Algonquian family. Because AF occurs when the lower-ranked argu-

33 Tsotsil also has a reduced set of ‘high’ set B morphemes; see Aissen 1987 and Woolford 2011 for discussion.
34 Aissen (1999:457) describes the set B marker in the AF construction as preferentially targeting the object but with subject agreement also attested, repeated in Stiebels 2006. In a later work, however, Aissen (2017a:150) states that set B is in fact possible only with objects.
ment is the subject, AF forms in Tsotsil are thus like inverse forms in languages with systems of obviation (Aissen 1997). We suggest, following work in Algonquian syntax (e.g. Bruening 2009 and discussion there), that obviation systems relate to binding. Specifically, in strings with more than one third-person argument, the proximate nominal must c-command the obviative nominal. This means that if the proximate argument is generated as the patient, it must move to a position above the agent—effectively mirroring the general syntax of high-abs languages discussed in §2.2 above. Compare the ‘direct’ form in A17, in which the subject is proximate and the object is obviative, with the inverse form in A18.

\[(\text{A17}) \text{[subjprox [VP V objobv ]]} \] (direct)
\[(\text{A18}) \text{[objprox [subjobjv [VP V objprox ]]]} \] (inverse)

Again, the generalization from 24c above is descriptively correct: AF in Tsotsil occurs only when both arguments are third person. However, this restriction can once again be reduced to a language-specific property. Systems of obviation operate only with two third-person arguments, and it is exactly in inverse contexts (i.e. when the patient is proximate) that the object moves above the subject, mirroring the normal syntax of a high-abs language, consistent with our generalization from A2.35

APPENDIX B: THE K’ICHEAN HIERARCHY EFFECT

The K’ichean hierarchy that governs the realization of the single set B morpheme in the AF construction is visually represented in A19; set B morphemes from one K’ichean language, Kaqchikel, are provided for reference in A20.

(A19) K’ichean person hierarchy36

<table>
<thead>
<tr>
<th>COMBINATION OF DPs</th>
<th>SET B</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [PART] ↔ [3SG/PL]</td>
<td>[PART]</td>
</tr>
<tr>
<td>b. [PART] ↔ [PART]</td>
<td>*</td>
</tr>
<tr>
<td>c. [3PL] ↔ [3SG]</td>
<td>[3PL]</td>
</tr>
<tr>
<td>d. [3PL] ↔ [3PL]</td>
<td>[3PL]</td>
</tr>
</tbody>
</table>

(A20) Kaqchikel set B series (Bennett et al. 2018)

<table>
<thead>
<tr>
<th>SINGULAR</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST</td>
<td>i/-in-</td>
</tr>
<tr>
<td>2ND</td>
<td>a/-at</td>
</tr>
<tr>
<td>3RD</td>
<td>∅</td>
</tr>
<tr>
<td></td>
<td>öj-</td>
</tr>
<tr>
<td></td>
<td>ix-</td>
</tr>
<tr>
<td></td>
<td>e/-e’-</td>
</tr>
</tbody>
</table>

Recall from Appendix A that the hierarchy effect is not about first- or second-person arguments, per se, but rather the competition for set B marking. As discussed in Aissen 2017b, the second-person formal pronouns have clitic forms that do not belong to the set B series and do not participate in this hierarchy (see A8 above). We do not offer an account of the source of second-person formal morphology, but simply note here that from the point of view of the set B hierarchy patterns, second-person formal pronouns behave as third-person arguments do in not triggering any morphology in the set B slot. Because our analysis below ties the ungrammaticality of combinations of nonformal [part] forms to this morphological competition, we correctly expect forms like A8 above to be grammatical.

With respect to the set B morphemes in A20, the facts to be accounted for in A19 can be stated as follows: in any combination of first- or (nonformal) second-person [part] DP with a third-person DP, the [part] set B morpheme will be realized, regardless of the number features of either DP (row (a)). Combinations of two set B-triggering [part] DPs are simply ineffable in the AF construction (Appendix A); again, this is irrespective of their number features (row (b)). In combinations of third-person arguments, if there is a third-person plural

35 Aissen (2017a) argues that some dialects of Tsotsil have reanalyzed the AF form as a passive, noting functional motivation for this collapse. Specifically, transitive verb forms are generally impossible in Tsotsil inverse environments: a transitive verb may not appear with an indefinite inanimate agent and a definite animate patient, irrespective of extraction. In sentences without Ā-extraction of the subject, a passive form is required when the patient outranks the agent on the obviation scale; in extraction contexts, the AF form is used. This might suggest that v0 is not able to raise the object above the subject, as shown in A18. We are not able to offer a full account of Tsotsil AF, but simply note that whatever the ultimate analysis, the restriction to third-person environments can be connected to systems of obviation more generally, in line with our claim that apparent restrictions on person features of arguments can be traced to independent properties of the languages in question.

36 See Preminger 2014:64 for a full table of combinations and outputs, not included here for reasons of space.
DP, the third plural set B marker will be realized; combinations of two third plural DPs are acceptable and re-
result in a (single) plural exponent (rows (c)–(d)).

As in the derivations above, we take the probe responsible for generating the set B morphemes to be located on Infl\(^0\). In order to account for the privileged role of person features in the hierarchy, we take the probe to be an articulated person probe, shown in A21; on splitting φ-probes into distinct person (α) and number (θ) probes, see Taraldsen 1995, Sigurđsson 1996, Anagnostopoulou 2003, and Béjar & Rezac 2003, among others.\(^{37}\)

(A21) Articulated person probe on Infl\(^0\)

\[
\begin{array}{c}
\text{ut} \\
\text{upart}
\end{array}
\]

We assume that the K’ichean set B morphemes—for example, those from Kaqchikel in A20—are morphol-
ogical agreement, that is, the spell-out of φ-features copied to Infl\(^0\) when the φ-probe on Infl\(^0\) enters into Agree with a goal DP, possibly a null pro.\(^{38}\) Following previous work on agreement (Béjar & Rezac 2009, Deal 2015, Coon & Keine 2020), we assume that feature copying is coarse: when an unvalued probe segment [uF] enters into Agree with a DP, the entire feature geometry that contains [F] is copied back to the probe. What

this means in the present system is that while probing is driven by unvalued person features, as in A21, Agree with a goal DP will result in both person and number features being copied back to the probe. See Deal 2015 for a related account of agreement in Nez Perce.

Our account of the hierarchy effect in K’ichean also relies on the principles of feature gluttony used to de-
rive the EEC in §3 above. Because the specifiers of vP are equidistant from Infl\(^0\), as shown above in 99, when the articulated person probe probes, it will have access to the subject and object simultaneously; best match (see §5.3) will ensure that if one DP is a better match for the features of the probe, only that DP will enter into Agree. If both goals are equally good matches, a gluttonous configuration will arise. We continue to assume that a gluttonous configuration is not in itself problematic, but that the way such a configuration interacts with other aspects of the grammar may be. Above, in deriving the EEC, the problem resulted from a conflict for syntactic movement. Here we propose, following Coon and Keine (2020) on gluttony in morphological agreement, that a morphological problem may arise when conflicting vocabulary items (VIs) compete for insertion into a single node. We demonstrate below how these assumptions derive the pattern in A19, tackling each combination in turn.

[part] ↔ [3sg/pl]. When one argument is first or (nonformal) second person, and the other is third person (row (a) in A19), the articulated person probe in A21 will enter into Agree with only the first- or second-

person DP, as shown in A22 (borrowing Oxford’s representation for probing equidistant DPs). This is because a [part] DP will always have more of the features sought by the probe in A21 than a third-person DP, and thus will qualify as the best match. This is the case regardless of whether the [part]-bearing DP is the subject or the object. The number specification of either DP is similarly irrelevant because best match is calculated only with respect to the features of the probe. The probe will copy back all features of the [part]-bearing DP, spelling them out as the set B morpheme.\(^{39}\)

\(^{37}\) It is possible that there are distinct person ([ut]) and number ([u#]) probes, with [ut] ordered before [u#], as in Preminger’s account. In our system, there is no role for the number probe, and we set it aside here.

\(^{38}\) Preminger (2014) proposes that the first- and second-person set B morphemes in Kaqchikel are pronom-
nal clitics, while the third-person plural is morphological agreement. Preminger uses this distinction to account for the preference of [part] over third person, via a stipulation that the realization of clitics is privileged over the realization of agreement. As support for this division, Preminger cites the fact that the first- and second-

person set B forms look morphologically more similar to full pronouns than the third-person plural mor-
pheme. However, it has been noted that morphological similarity is not a sufficient diagnostic for the distinction between clitics and agreement (Bennett et al. 2018, Yuan 2018), and we are unaware of other evidence for a distinction in status among the set B forms. Furthermore, there is an independent explanation of the morphological distinction that Preminger discusses (see Preminger 2014:26)—namely, the addition of the segment <j> in the third-person pronouns is likely historically related to the focus marker ja. Under our ac-
count, the set B morphemes have the same status, which we take to be an advantage.

\(^{39}\) The general thrust of our analysis is similar to the morphological account in Watanabe 2017 insofar as agreement forms are competing for a single slot, but the two accounts also differ in important respects. For Watanabe, the preferential insertion of [part] over third-person agreement is governed by the subset princi-
ple (Halle 1997). Watanabe formulates the ban on two nonthird-person DPs as a variant of the obligatory contour principle, relativized specifically to [+part]. Our account of the ungrammaticality of multiple [part] DPs (row (b) of A19), but the grammaticality of multiple third plural DPs (row (d) of A19) relies di-
rectly on their morphological forms and does not require this type of additional stipulation.
One argument is third person

\[
\text{Agree} \quad \pi [\text{part}] \rightarrow [\text{π}] \quad [\text{spkr/addr}] \rightarrow [\text{π}] \quad \text{Agree}
\]

\[\text{DP} \quad [\pi [\text{part}] [\text{addr}]]]\]

(A22) Both arguments are third person

\[\text{Infl}^b \quad [\pi [\text{part}] [\text{addr}]]]\]

(A23) Both arguments are first/second person

\[\text{Infl}^b \quad [\pi [\text{part}] [\text{addr}]]]\]

Strikingly, though the syntax of the constructions in rows (b)–(d) in A19 is proposed to be identical, the outcomes of the configurations in A23 and A24 are different. All possible combinations of third persons are grammatical—with the third-person plural morpheme exponed if present on either or both DPs—while all possible combinations of (nonformal) [part] DPs are ineffable.

To account for this contrast, we adopt the general line of approach to gluttony in morphological agreement in Coon & Keine 2020:§4. Specifically, when a probe enters into Agree with more than one DP, the full feature geometries from each DP are copied back to the probe. Each set of features will demand a specific VI, and only a single VI may be inserted into a given head (Halle & Marantz 1993, 1994, Arregi & Nevins 2012). These assumptions, together with the assumption that third-person singular in K'ichean corresponds to the absence of a VI (vs. a null VI; see Baker 2006 on this distinction), correctly derive the patterns above. We walk through each of the remaining three cases in turn.

Beginning in row (b), when two [part] DPs have entered into Agree with Infl\(^b\), each will copy back a set of φ-features. Note that these will always be two distinct sets of features (e.g. a first person combined with a second person), since reflexive constructions are formally different; see §4.3. Each set of features will thus demand a different VI from the top two rows of the table in A20. Since only a single VI may be inserted, the derivation will crash, resulting in ineffability of these forms (see Appendix A). See Coon & Keine 2020 and references cited there for precedents of competing VIs resulting in ungrammaticality from a variety of syntactic domains.

In cases where two third-person arguments have entered into Agree, no such conflict arises. Since [3sg] corresponds to the absence of a VI, combinations of two [3sg] DPs result in no VI being inserted. In a similar vein, for a combination of a [3pl] and a [3sg] DP, only [3pl] corresponds to a VI; the single [3pl] VI is inserted, and again, no conflict arises (row (c) in A19). Finally, for the case of two [3pl] DPs, each DP will copy back its feature geometry to the probe. Here, however, each set of features demands insertion of the same VI—third-person plural e-/e’- in Kaqchikel—and no morphological conflict arises. This state of affairs finds precedent in resolution of morphological conflicts via syncretism, also discussed in Coon & Keine 2020.

The outcomes of the various argument combinations, along with a summary of how the outcome is formally achieved, are summarized in A25. Notably, our morphological account successfully derives the fact that combinations of two [part] DPs and combinations of two [3pl] DPs differ in their outcomes. We connect

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\(^{40}\) Note that since best match is evaluated against the features of the probe, first- and second-person DPs will be equally good matches for this [π[part]] probe regardless of whether both first- and second-person are fully specified, as represented in A24, or whether one is underspecified (i.e. if second person is missing the [addr] node; e.g. as in Harley & Ritter 2002).
this directly to the fact that two [\textsc{part}] DPs will always be distinct (resulting in a morphological conflict and hence ineffability), while two [\textsc{3pl}] DPs will demand the same form, resulting in the insertion of a single [\textsc{3pl}] set B morphe.

(A25) Constraints in the K'ichean hierarchy

\begin{tabular}{llll}
combination of DPs & set B & account & \\
\hline
\textsc{part} & \textsc{part} & best match = [\textsc{part}]; only [\textsc{part}] enters into Agree & \\
\textsc{part} & * & both Agree; conflicting VIs result in ineffability & \\
\textsc{3pl} & \textsc{3pl} & both Agree; only [\textsc{3pl}] demands a VI & \\
\textsc{3pl} & \textsc{3pl} & both Agree; a single VI is compatible with both & \\
\end{tabular}

In sum, the proposed configuration in which both the subject and object DPs in K'ichean AF are equidistant to the higher functional probes allows us both to capture the ability for an [A]-bearing subject to extract (see §5.3), and to capture the fact that hierarchy effects are found in AF clauses, but not in regular transitive constructions. Positing that the q-probe on Inflv is articulated to [\textsc{part}], and that agreement with equidistant goals is subject to best match, allowed us to account for the privileged status of first- and second-person DPs with respect to third persons. All other combinations result in feature gluttony. The principles of vocabulary insertion, together with the assumption that the null third-person cell in the paradigm corresponds to the absence of a vocabulary item, resulted in the full range of patterns.

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