Syntactic Ergativity as Case Discrimination

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1. Introduction: restrictions on ergative $\bar{A}$ extraction

A variety of languages with ergative case systems show a ban on $\bar{A}$-movement of ergative subjects. Such bans are the most common type of syntactic ergativity. In West Greenlandic, for instance, ergative subjects may not relativize, (1).

(1) *angut [$_{RC}$ _ERG aallaat tigu-sima-sa-a]
man.ABS [gun.ABS take-PRF-REL.TRANS-3SG.SG]
Intended: the man who took the gun (Bittner, 1994:58)

Subject relativization in notionally transitive clauses requires an antipassive, as in (2), in which the relative operator is not ergative. (Compare antipassive matrix clause (3).)

(2) angut [$_{RC}$ _ABS aallaam-mik tigu-si-sima-su-q]
man.ABS [gun-INST take-ANTIPASS-PRF-REL.INTR-SG]
the man who took the gun (Bittner, 1994:58)

(3) Juuna miiqqa-nik paar-si-v-u-q.
Juuna.ABS child-PL.INST look.after-ANTIPASS-IND-INTR-3SG
Juuna is looking after the children. (Bittner, 1994:23)

Similar effects are seen in Tongan, which responds to the ban on ergative extraction with a different "repair". Instead of avoiding ergative, as West Greenlandic does (by using its antipassive construction), Tongan avoids $\bar{A}$ movement; it uses resumption for $\bar{A}$ dependencies involving ergative subjects. Contrast the gap strategy seen in absolutive relativization, (4-a,b), with the obligatory resumptive in ergative relativization, (4-c).

(4) a. e fefine [na'e kata _ABS]
DEF woman [PAST laugh]
the woman who laughed (Otsuka, 2010)
b. e leo [$_{RC}$ 'oku ako'i [$_{DP}$ 'e he faiako] _ABS]
DET language [PRES teach [ERG DET teacher]]
the language that the teacher teaches (Polinsky, 2015)
c. e faiako [$_{RC}$ 'oku *(ne) ako'i [$_{DP}$ 'a e leo faka-Tonga]]
DET teacher [PRES 3SG.CL teach [ABS DET language Tongan]]
the teacher who teaches the Tongan language (Polinsky, 2015)

The most straightforward approach to data like these would be to treat $\bar{A}$ extraction in such languages as incapable of applying to ergative (Otsuka 2006, 2010). It is this type of approach I develop in this paper. In particular, I argue that ergative extraction restrictions arise from *case discrimination*–the requirement that the probe driving $\bar{A}$ movement Agree only with a goal bearing a certain case. This proposal puts together the idea that $\bar{A}$ movement is driven by heads which bear [EPP] and Agree in an OP(erator)-feature with Bobaljik's (2008) proposal that Agree may be possible only for DPs with certain types of

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case. A ban on ergative $\bar{A}$ extraction arises when the $\bar{A}$ probe can agree only with unmarked DPs, not with DPs in dependent case.

I present further details of the case discrimination proposal in section 2 below. Sections 3 and 4 then discuss empirical advantages. In section 3, I discuss variable syntactic ergativity: in Chukchi, one variety of $\bar{A}$ movement, but not another, shows ergative extraction restrictions. This is accounted for on the case discrimination view by reference to the distinct operator features present in different types of $\bar{A}$ dependencies. In section 4, I discuss the proposal that ergative is a dependent case, rather than an inherent one, and how this connects to syntactic ergativity. The case discrimination view allows for a natural treatment of languages like Shipibo, where ergatives are subject to extraction restrictions but ergative does not behave as an inherent case. Section 5 compares the case discrimination view to other approaches to syntactic ergativity, showing that no other view provides an account of both variable syntactic ergativity and syntactic ergativity in dependent-ergative languages. In section 6, I consider implications beyond ergative and beyond morphological case.

2. Case discrimination in $\bar{A}$ movement

The core idea of case discrimination is that a DP's ability to participate in the operation Agree may be determined in part by its (morphological) case. In Hindi-Urdu, for instance, DPs with marked case, whether ergative or accusative, may not participate in verbal agreement (Bhatt, 2005). Bobaljik (2008) proposes that language variation concerning accessibility for ϕ-Agree is regulated by the hierarchy in (5), drawing on the configurational definitions of unmarked and dependent case from Marantz (1991) (see §4). The accessibility of any case category entails the accessibility of categories to its left.

(5) unmarked case $\ll$ dependent case $\ll$ lexical/oblique case

Because only unmarked case is accessible for ϕ-Agree in Hindi-Urdu, ergative subjects are ignored for ϕ-Agreement. ϕ-Agree targets the highest DP in unmarked case, whether subject (6) or object (7).

(6) [[Rahul kitaab paRh-taa thaa] T]
[3,M,SG]
Rahul.M book.F read-Hab.MSg be.Pst.MSg
Rahul used to read (a/the) book.

(7) [[Rahul-ne kitaab paRh-ii thii] T]
[3,F,SG]
Rahul-Erg book.F read-Pfv.F be.Pst.FSg
Rahul had read the book.

Preminger (2014) incorporates hierarchy (5) into a theory of A-movement, based on the idea that movement to subject position in certain languages is possible only for arguments that pass a case-discrimination test. In French dative experiencer constructions, for instance, the dative may not A-move to Spec,TP, even though it is closest to T. Preminger proposes that in French, like in Hindi-Urdu, T may agree only with DPs in unmarked case (nominative). Unlike in Hindi-Urdu, however, if the closest DP is not nominative in French, ϕ-Agree simply fails. In (8), the closest DP is dative.

(8) Merger of T, ϕ-Agree fails:
$T_{[u\phi, EPP]}$ semble [à Marie] que [Hélène a du talent]
*** seems to Marie that [Hélène has.3SG of talent]

Preminger proposes that A-movement in French is tightly connected to successful ϕ-Agreement. If ϕ-Agree fails, A-movement fails; an expletive must be inserted to satisfy [EPP]. His proposal for A-movement in French is shown in lightly edited form in (9). The central idea is similar to what Mikkelsen (2005:p 183) dubs "clumping": [EPP] must be checked by the same DP that checks $u\phi$.

(9) Movement to Spec,TP = Move(XP successfully targeted by FIND_ϕ)

Given this connection between ϕ-Agree and A-movement, (10) cannot be generated; the failure of ϕ-Agree precludes A-movement for [EPP]. Furthermore, if [EPP] cannot be left unsatisfied, (11) cannot be generated as a final output either.

(10) * [À Marie]$_1$ T$_{[u\phi,\cancel{EPP}]}$ semble $\__1$ [Hélène a du talent]
to Marie seem [Hélène has.3SG of talent]

(11) * T$_{[u\phi,EPP]}$ semble [à Marie] que [Hélène a du talent]
seems to Marie that [Hélène has.3SG of talent]

The only well-formed output to the derivation arises if an expletive is inserted as a last resort.

(12) Il semble [à Marie]$_1$ que [Hélène a du talent]
It seems to Marie that [Hélène has.3SG of talent]
It seems to Marie that Hélène has talent

The case-discrimination approach to syntactic ergativity extends precisely the same logic to $\bar{A}$ movement. Syntactic ergativity arises because $\bar{A}$ movement to phase head H requires Agree in an operator feature F,[1] and Agree-F may be case-discriminating. If only elements in unmarked case are accessible to Agree-F, then ergatives will not be able to $\bar{A}$ move. In West Greenlandic relative clauses, for instance, H is the relativization head and F is the feature [REL]. Just as in French (8), when H is merged, [REL]-Agree fails:

(13) (angut) [H$_{[uRel,EPP]}$ [OP.ERG aallaat tigu-sima-sa-a]]
(man.ABS) [[OP.ERG gun.ABS take-PRF-REL.TRANS-3SG.SG]]
*** (Agree fails)

Just as in French (10), the failure of [REL]-Agree precludes $\bar{A}$-movement for [EPP], preventing the generation of (14). Meanwhile, (15), like (11), is ruled out because $\bar{A}$ [EPP] cannot be left unsatisfied. These factors together prevent relativization on ergatives.

(14) * (angut) [OP.ERG$_1$ H$_{[uRel,\cancel{EPP}]}$ [$\__1$ aallaat tigusimasaa]]
(man.ABS) [OP.ERG$_1$ [gun.ABS take]]

(15) * (angut) [H$_{[uRel,EPP]}$ [OP.ERG aallaat tigusimasaa]]
(man.ABS) [[OP.ERG gun.ABS take]]

Unlike in French, no expletive strategy is available for $\bar{A}$ movement in West Greenlandic. Rather, the antipassive "repair" involves an OP subject which is absolutive and so accessible for Agree-[REL], (16).

(16) (angut) [OP.ABS H$_{[\cancel{uRel},\cancel{EPP}]}$ [<OP.ABS> aallaam-mik tigusisimasuq]]
(man.ABS) [gun-INST take.ANTIPASS]]
☺ (Agree succeeds)
Move

This "repair" is by no means restricted to $\bar{A}$ contexts in West Greenlandic, Dyirbal, and Chukchi. Antipassive is possible with or without $\bar{A}$ movement, suggesting it arises via an independent morpheme. To extract a notionally transitive subject, the antipassive morpheme must be in the numeration.

In Tongan relative clauses, the same prohibition meets a different response: the ergative $\bar{A}$ dependency is established by binding, without movement. In a Tongan absolutive relative, [REL]-Agree is successful and $\bar{A}$ movement takes place. I take the possibility of movement to block resumption (Shlonsky 1992, among many others).

(17) e leo [$_{RC}$ OP.ABS H$_{[\cancel{uRel},\cancel{EPP}]}$ 'oku ako'i ['e he faiako] <OP.ABS>]
DET language [PRES teach [ERG DET teacher]
the language that the teacher teaches
Move ☺

[1] I use 'operator features' as a shorthand for the class of [WH], [REL], and [FOC].

A Tongan ergative relative, by contrast, displays a last resort non-movement resumptive strategy. The relative head must be one that semantically binds a resumptive pronoun without movement, $H_{[\lambda_i]}$.

(18) e faiako $[_{RC}$ $H_{[\lambda_i]}$ 'oku *(ne$_i$) ako'i ['a e leo faka-Tonga]]
DET teacher [PRES 3SG.CL teach [ABS DET language-Tongan]]
the teacher who teaches the Tongan language

The prohibition on $\bar{A}$ movement in a structure like (18) stems from case-discrimination; the ergative cannot [REL]-agree. In a familiar way, resumption emerges as a last resort when movement is blocked.

Typologically, the case discrimination view predicts that $\bar{A}$ extraction will reflect the hierarchy from (5), repeated below. This means it will be regulated in terms of (morphological) case, rather than grammatical function, contrary to the classic hierarchy from Keenan & Comrie 1977 (Otsuka, 2006).

(19) unmarked case $\ll$ dependent case $\ll$ lexical/oblique case

Among ergative languages, if only unmarked case is accessible for Agree-F, an ergative extraction restriction results. This yields "syntactically ergative" languages such as Tongan and West Greenlandic. If both unmarked case and dependent case are accessible for Agree-F, there is no ergative extraction restriction. This yields "morphologically ergative" languages such as Tsez and Warlpiri. By contrast, given the hierarchy, there can be no language where only dependent case is accessible for Agree-F. Accordingly, there is no language where *only* ergatives can extract.

The typology of $\bar{A}$ extraction is thus deeply parallel to the typology of ϕ-agreement from Bobaljik (2008). If only unmarked case is accessible for Agree-ϕ, a language shows absolutive agreement (e.g. Tsez). If both unmarked and dependent case are accessible for Agree-ϕ, a language shows both ergative and absolutive agreement (e.g. West Greenlandic). But there is no language where only dependent case is accessible for Agree-ϕ, and therefore there is no language where *only* ergatives can ϕ-Agree.[2]

A noteworthy consequence of this view is that the cut-off point for case discrimination must be set probe-by-probe, not language-by-language. Tsez, for instance, cuts off Agree-ϕ at unmarked, but allows Agree-F for both unmarked and dependent. West Greenlandic shows the opposite pattern, cutting off Agree-F at unmarked, but allowing Agree-ϕ for both unmarked and dependent. In the next section, I show how this type of variation may be exploited to yield an analysis of variable syntactic ergativity.

3. Variable syntactic ergativity

Polinsky (To appear) observes a puzzle about syntactic ergativity in Chukchi: ergatives in Chukchi may *wh*-move but not relativize. Starting from baseline sentence (20), compare the relativization pattern in (21) to the pattern of *wh*-questions in (22).

(20) ənpənačg-e milger kun-nin. (Baseline)
old.man-ERG gun.ABS buy-AOR.3SG.SBJ.3SG.OBJ
The old man bought a gun.

(21) Relative clauses: no $\bar{A}$ extraction of ergatives

a. [ənpənačg-e _ABS kənnə-l?-ən] milger
[old.man-ERG buy-PTCP-ABS] gun.ABS
the gun that the old man bought

b. * [_ERG milger kənnə-l?-ən] ənpənačg-ən
[gun.ABS buy-PTCP-ABS] old.man-ABS
Intended: the old man who bought the gun

(22) *Wh*-questions: extraction of both ergatives and absolutives

a. Req-ən ənpənačg-e _ABS kun-nin?
what-ABS old.man-ERG buy-AOR.3SG.SBJ.3SG.OBJ
What did the old man buy?

[2] This assumes a non-ϕ-Agree analysis for languages like Halkomelem (Gerdts, 1988), discussed in Deal (2015).

b. Mikəne _ERG milger kun-nin?
who.ERG gun.ABS buy-AOR.3SG.SBJ.3SG.OBJ
Who bought a/the gun?

A natural response to this dilemma would be to claim that *wh*-questions in Chukchi do not feature $\bar{A}$ movement.[3] Yet Polinsky points out significant challenges for this approach. First, *wh*-words obligatorily move to the left periphery in Chukchi: OSV and OVS orders are generally possible, but $OS_{wh}V$ and OVS_{wh} orders are ungrammatical. Second, *wh*-words are impossible in relative clauses, suggesting an island effect:

(23) * [mikəne _ABS kənnə-lʔ-ən] milger
[who.ERG buy-PTCP-ABS] gun.ABS
Intended: the gun that who bought?

Accepting that Chukchi questions do indeed feature $\bar{A}$-movement, the case discrimination theory provides an explanation for variable syntactic ergativity based on differences among $\bar{A}$ heads in susceptibility to case discrimination. Agree-[WH] is not case discriminating in Chukchi: any DP bearing a [WH] feature may Agree with C in this feature. Therefore, an ergative subject is fully capable of moving to Spec,CP in a constituent question like (22-b). Relative clauses are different because the operator feature is different, and so a different Agree operation is involved. Agree-[REL] crucially *is* case-discriminating in Chukchi, making XPs accessible for Agree with relative C only if they are in unmarked case. This explains why a ban on ergative extraction appears in relative clauses, as in (21-b).

The Chukchi facts reveal that a ban on ergative relativization must not be taken to reflect *too* general a fact about clause structure or about $\bar{A}$ dependencies. The case discrimination view makes the right cut: it allows extraction possibilities to be directly tied to the distinct $\bar{A}$ heads independently posited in questions and relative clauses.

4. Dependent ergative

The case categories invoked by (5) conform naturally to the varieties of case-assignment rules posited in 'configurational' case theories (e.g. Baker & Vinokurova 2010, Baker 2014, 2015), wherein case features are distributed based on the configuration of arguments in a domain, rather than (purely) based on agreement between arguments and functional heads. Unmarked, dependent, and lexical/oblique case categories may be described as in (24).

(24) a. Lexical/oblique case (e.g. dative): determined for an argument given the particular properties of the head selecting it, such as a verb or adposition
b. Dependent case (ergative, accusative): determined for an argument based on the presence of another argument in the domain
c. Unmarked case (nominative, absolutive): determined for an argument in a particular domain as an elsewhere case

This type of theory crucially treats ergative as a dependent case, alongside accusative. For Baker (2014), ergative is assigned via the dependent case rule in (25).

(25) If there are two distinct argumental NPs in the same phase such that NP_1 c-commands NP_2, then value the case feature of NP_1 as ergative unless NP_2 has already been marked for case.

This treatment of ergative contrasts with the widely adopted view of ergative as an inherent case, assigned by (transitive) v to its specifier in concert with θ-assignment (i.a. Legate 2008). Baker argues that the dependent case view offers improved empirical coverage over the inherent ergative view in light of patterns of ergativity in applicative unaccusatives. In Shipibo, he argues, unaccusative subjects 'raise

[3] This conclusion may be appropriate for West Greenlandic, where a similar split between relative clauses and *wh*-questions obtains. This conclusion is especially plausible in view of examples from Sadock (1984:210) which show licit *wh*-in-situ inside West Greenlandic adjunct clauses. The absence of an adjunct island effect suggests that there is neither overt nor covert movement of *wh*-phrases.

to ergative' over applicative arguments. These theme subjects are not θ-marked by v, and so could not receive ergative case on the inherent ergative proposal. Compare basic unaccusative (26-a), where the theme subject is absolutive, with applicative version (26-b), where the theme subject shows ergative.

(26) a. Kokoti-ra joshin-ke.
fruit.ABS-EV ripen-COMPL
The fruit ripened. (Baker, 2014:345)
b. Bimi-n-ra Rosa joshin-xon-ke.
fruit-ERG-EV Rosa.ABS ripen-APPL-COMPL
The fruit ripened for Rosa. (Baker, 2014:346)

I discuss similar patterns in Nez Perce in Deal 2016b, arguing that movement of the theme past the applicative argument results from (spec-to-spec) antilocality (Erlewine 2016, Bošković To appear).[4] Movement out of the vP phase requires a stop in Spec,vP, but this movement is too short for applicative arguments. For dependent case theorists, what matters is the output configuration, (28): the raised internal argument c-commands another NP in the same domain, triggering ergative rule (25). Contrast basic unaccusative structure (27).

(27) $[_{TP}$ fruit.ABS$_i$ $[_{vP}$ t_i $[_{VP}$ t_i ripen] v] T]

(28) $[_{TP}$ fruit.ERG$_i$ $[_{vP}$ t_i $[_{ApplP}$ Rosa.ABS $[_{VP}$ t_i ripen] Appl] v] T]

Baker's argument for a dependent-case analysis of ergative in Shipibo is significant for the analysis of syntactic ergativity because Shipibo features syntactic ergativity in its internally headed relative clauses (IHRCs). Ergatives may not be relativized in this structure. In (29) and (30), admissible internal heads of the IHRC are underlined. Absolutive arguments may serve as internal heads, but ergative arguments may not.[5]

(29) [Mi-bé ainbo jo-a]-ra no-n onan-yama-ke.
2-COM woman.ABS come-PP2.ABS-EV 1P-ERG know-NEG-COMPL
We don't know the woman who came with you. (Valenzuela, 2002:67)

(30) [Pitso-n bake natex-a]-tonin-ra joshin pi-ke.
parakeet-ERG child.ABS bite-PP2-ERG-EV banana.ABS eat-COMPL
The child the parakeet bit ate the banana. (Valenzuela, 2002:66)
NOT: The parakeet that bit the child ate the banana.

This pattern is readily captured on the case discrimination view: Shipibo features case discrimination in covert $\bar{A}$ movement. Ergative is assigned by a dependent case rule; only DPs in unmarked case, not dependent case, may covertly $\bar{A}$ move.

5. Comparison to alternatives

The case-dependency view stands in contrast to the standard theory of syntactic ergativity, which appeals to subject-object inversion (understood loosely): the object must be licensed by T, and/or the object moves past the subject within vP. Meanwhile, the subject is licensed by v, inherently. (See Campana 1992, Ordóñez 1995, Bittner & Hale 1996, Aldridge 2004, 2008, 2012, Coon et al. 2015, Assmann et al. 2015.) I review and compare a variety of versions of the standard view in Deal (2015, 2016c). I will limit the discussion here to three roughly representative proposals.

For Aldridge (2004, 2008, 2012), syntactic ergativity arises in languages where [EPP] on v attracts the object to an outer Spec,vP. Transitive subject extraction is ruled out by (unrelativized) minimality

[4] This diverges from Baker's (2014) proposal that a covert adposition encases the applicative argument, preventing it from moving. See Deal (2016b) for discussion.

[5] Valenzuela (2002) shows that this holds even when the result is pragmatic anomaly.

("Attract Closest"). Because the object occupies an outer Spec,vP, the subject cannot $\bar{\text{A}}$ move from an inner Spec,vP.

(31) * $[_{CP}$ DP_{subj} [C … $[_{vP}$ DP_{obj} $[_{vP}$ t_{subj} [$v_{[EPP]}$ V t_{obj}]]]]]

***

For Coon et al. (2015), syntactic ergativity is also motivated by object movement, but the cause of this movement is different. They propose that the object in syntactically ergative Mayan languages requires Case from T; it must move to the edge of the first phase for Case-licensing. In this position, the object occupies the sole escape hatch in the lower phase (labeled here as HP). Transitive subject extraction is thus ruled out by the PIC.

(32) * $[_{CP}$ DP_{subj} [C … $[_{HP}$ DP_{obj} [H $[_{vP}$ t_{subj} [v V t_{obj}]]]]]]

***

Assmann et al. (2015) also connect syntactic ergativity to the need for the object to be Case-licensed by T. They propose that TP is a phase and that movement to Spec,CP must accordingly pass through Spec,TP. If the subject moves through Spec,TP, however, then T assigns its Case to the subject under Spec-head agreement. This leaves the object without a source for Case, and the derivation crashes.

(33) * $[_{CP}$ DP_{subj} [C $[_{TP}$ $\overset{\textit{Case}}{\text{DP}_{subj}}$ [T $[_{vP}$ t_{subj} [$\overset{\textit{Case}}{v}$ V DP_{obj}]]]]]

****Caseless****

These proposals face a pair of challenges in the Chukchi and Shipibo data analyzed on the case discrimination view in sections 3 and 4. Consider, first, variable syntactic ergativity in Chukchi. On the standard view, the inability of ergatives to $\bar{\text{A}}$ move arises from the syntax of the object and the vP layer, rather than the CP layer. For Aldridge, inversion is due to [EPP] on v; for Coon et al., it is due to the Case needs of the object. Neither factor plausibly distinguishes between questions and relative clauses. For Assmann et al., ergatives are unable to $\bar{\text{A}}$ move essentially due to the phasehood of TP, plus the fact that T assigns Case to its (first) specifier. If all TPs are phases, as Assmann et al. propose, syntactic ergativity is again falsely predicted to hold across the board. In the Assmann et al. system, the Chukchi facts suggest that TP is a phase in relative clauses but not in questions – a conclusion independently advanced in Deal (2016a).

Dependent ergative in Shipibo is likewise challenging for the standard view. (Indeed, as Polinsky (To appear) notes, nearly all modern approaches to syntactic ergativity explicitly assume that ergative is an inherent case.[6]) On the Aldridge and Coon et al. proposals presented above, for instance, the same locality principles (unrelativized minimality or PIC) that block subject $\bar{\text{A}}$ movement also block the subject from engaging in Agree with T or A-movement. The subject must therefore be licensed in situ, in keeping with the inherent ergative approach. Likewise, on the Assmann et al. proposal, object licensing requires that the object move to Spec,TP; the subject must be licensed in situ. The arguments for dependent ergative in Shipibo therefore constitute a significant challenge to the standard view across its various versions.

Finally, the case-discrimination view can be contrasted with the PP-ergative proposal recently developed by Polinsky (To appear). On this view, ergative "case" is an adposition, and transitive v requires a PP specifier. This is therefore a version of the inherent ergative theory, as Polinsky notes. Syntactic ergativity arises in languages where ergative is adpositional, but P-stranding and PP-pied piping are ruled out. To handle variable syntactic ergativity, Polinsky proposes that Chukchi allows PP *wh*-operators but not PP relative operators. The remaining challenge is dependent ergative. Given that ergative PPs may only originate in Spec,vP, on Polinsky's proposal, the PP approach remains incompatible with the arguments for case-dependency and raising to ergative in Shipibo.

[6] The exception is Otsuka (2006, 2010), a direct precusor to the case discrimination approach advanced here.

6. Beyond ergative/morphological case

6.1. Beyond case: Pure head-marking languages

Bobaljik (2008) explicitly treats agreement as a post-syntactic matter. Case is determined post-syntactically, Bobaljik assumes, and since Agree is sensitive to case, Agree must be post-syntactic as well. This conclusion is challenged by Preminger (2014), who observes that case discrimination plays a role in determining possible A-movement. On the case discrimination approach to syntactic ergativity, likewise, case discrimination plays a role in determining possible $\bar{A}$-movement. In pushing both case and Agree back into the syntax proper, these proposals raise questions for how far case discrimination may extend beyond morphological case systems. For instance, in the Mayan, Tsimshianic, and Salish families–by contrast to West Greenlandic, Tongan, Chukchi, Dyirbal, and Shipibo–an ergative pattern exists purely in agreement; there is no nominal marking. Nevertheless, these pure head-marking languages have been influentially analyzed as showing a ban on ergative extraction (e.g. Larsen & Norman 1979). Much contemporary work on Mayan agent focus in particular adopts this view (e.g. Campana 1992, Ordóñez 1995, Assmann et al. 2015, Coon et al. 2015).

The distribution of agent focus in questions in one Mayan language, Q'anjob'al, is shown in (34). In (34-a,b), the verb has standard agreement morphology, and the gap may only be absolutive. In (34-c), the verb bears agent focus suffix *-on* and the gap corresponds to the transitive subject. For Larsen & Norman (1979) and following work, the agent focus represents a de-transitivizing strategy comparable to antipassive. On this approach, the gap in (34-c) is therefore assumed to be absolutive.

(34) Q'anjob'al (Coon et al., 2015)

a. Maktxel max-∅ way-i _ABS ?
who ASP-3ABS sleep-intrans _
Who slept?

b. Maktxel max-∅ y-il-[a'] _*ERG naq winaq _ABS ?
who ASP-3ABS 3ERG-see-TRANS CL man
Who did the man see? (NOT: Who saw the man?)

c. Maktxel max-∅ il-on[-i] [_??] naq winaq ?
who ASP-3ABS see-AF-INTRANS CL man
Who saw the man?

Can the agent focus pattern be subsumed under the case discrimination approach? The question depends on learnability. Since case features are syntactic, they may presumably exist in syntactic representations without receiving (distinctive) morphological realization. The question is whether an ergative case system is learnable without phonological case distinctions in NP/DP – a version of the "triggering" question familiar from early work on parameter setting. If morphological case is not needed to acquire syntactic ergative case, then the case-dependency view readily extends to pure head-marking languages, and Larsen & Norman's (1979) approach to Mayan languages as syntactically ergative can be adopted.

If the learning of syntactic case rules requires phonological case distinctions, on the other hand (as I assume in Deal 2016c), some other explanation must be given for apparent syntactic ergativity in pure head-marking languages. One such explanation is defended for Mayan by Stiebels (2006), who proposes that the agent focus pattern is, in essence, a type of *wh*-agreement. When the transitive subject is an $\bar{A}$ operator, the form of the verb changes, but the clausal syntax does not change; in particular, the clause remains transitive. The gap in (34-c) is therefore just as "ergative" on this approach as any other transitive subject would be, and Mayan languages actually do not display bans on ergative $\bar{A}$ movement after all.

6.2. Beyond ergativity: "Syntactic accusativity"?

If bans on ergative $\bar{A}$ movement are really bans on $\bar{A}$ movement of elements in dependent case, we expect to see instances of the same pattern in nominative-accusative languages. After all, the hierarchy in (35-a) may be recast as (35-b), where accusative and ergative visibly occupy the same place:

(35) a. unmarked case $\ll$ dependent case $\ll$ lexical/oblique case
b. nominative / absolutive $\ll$ accusative / ergative $\ll$ dative, etc

The ways in which this prediction may be tested depend in part on the question of pure head-marking languages. Alongside ergative languages with special verbal morphology for ergative extraction, there do exist accusative languages with special verbal morphology for accusative extraction. If special morphology is considered evidence of a ban on ergative $\bar{A}$ movement in the former case, it is potentially evidence of a ban on accusative $\bar{A}$ movement in the latter case. In Irish, for instance, $\bar{A}$ movement of an object in the progressive construction requires a change from normal progressive particle *ag* to a special leniting particle *a* (Clements et al. 1983). McCloskey (2014) analyzes this *a* as a special form of v.

(36) a. Tá sé **ag** ceannach teach.
is he PART buy a.house
He is buying a house.

b. [Cén teach]$_1$ a tá sé **a** cheannach _$_1$?
which house C is he PART buy _
Which house is he buying?

Perhaps similarly, object $\bar{A}$ movement in the Bantu language Ndebele requires special object agreement (Nico Baier, p.c.). On the case dependency approach, these patterns could perhaps be analyzed as reflecting a strategy for avoiding (abstract) accusative on objects that are to be extracted, much as West Greenlandic antipassive avoids ergative on subjects that are to be extracted.

A further potential example of a case-dependent $\bar{A}$ probe in an accusative language comes from Slovenian. Slovenian relative clauses with C head *ki* feature a pattern of resumption that clearly correlates with case, not with grammatical function (Hladnik, 2015), just as predicted by the case dependency theory. Nominatives are relativized with a gap:

(37) Poznam človeka, ki mislim, da _NOM išče službo.
know.1SG man.ACC C think.1SG that search.3SG job
I know a man who I think is looking for a job.

Accusatives and datives, on the other hand, show obligatory resumption, regardless of whether an object or quirky subject is extracted.

(38) a. prijateljica, ki *pro*$_{subj}$ *(jo) pogrešam
friend.FEM C *pro*$_{subj}$ *(she.ACC.CL) miss.1SG
the friend who I miss
b. Poznam človeka, ki *(ga) zebe.
know.1SG man.ACC C he.ACC be.cold
I know a man who is cold.

This pattern is notably similar to Tongan; the Tongan parallel might be taken to suggest a reconsideration of Hladnik's (2015) proposal that resumption in Slovenian does indeed involve $\bar{A}$ movement.[7]

7. Conclusions

I have outlined a treatment of syntactic ergativity as case discrimination – a pattern in $\bar{A}$ movement parallel what Bobaljik (2008) proposes for ϕ-agreement and Preminger (2014) proposes for A-movement. The case discrimination approach straightforwardly accounts for "repairs" for ergative extraction bans: languages either avoid ergative (West Greenlandic) or avoid movement (Tongan). It allows for variable syntactic ergativity: case discrimination is set probe-by-probe, not language-by-language. It allows for syntactic ergativity in languages where ergative is demonstrably not inherent. And finally, albeit tentatively, I suggest that it may be correct to predict "syntactic accusativity". One consequence is that the driving factor behind syntactic ergativity is actually not a special quirk of ergative languages after all.

[7] An alternative approach to Slovenian simply capitalizes on the fact that the language uses clitic resumptives but lacks (overt) nominative clitics; this perhaps suggests a null nominative clitic in (37). Thanks to Miloje Despic for discussion.

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