

Extraction asymmetries via case discrimination: evaluating the prospects*

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1 Introduction: a tale of two hierarchies

- Forty years ago this year, Keenan and Comrie (1977) published their accessibility hierarchy for relativization, (1).
 - (1) Subject > DO > IO > Oblique > Genitive > Obj of Comparison
 - ▷ Any single relativization strategy (e.g. movement rather than base-generated resumption) will correspond to a contiguous region of the hierarchy
 - ▷ Subjects are always relativizable
- Both the terms in which the hierarchy is stated and the particulars of the ordering it imposes echo Moravcsik's (1974) proposal for ϕ -agreement:
 - (2) Subject > Direct Object > Indirect Object > Adverb
 - ▷ The connection between these two hierarchies suggests that A and \bar{A} dependencies are potentially regulated by the same principles (as Keenan and Comrie themselves suggest, in connection with passives)
- Recent work by Otsuka (2006) and Bobaljik (2008) has borne out the intuition that the two hierarchies are related, but also that neither should be understood in terms of grammatical function *per se*...
 - ▷ Accessibility, both for ϕ -agreement (Bobaljik) and for \bar{A} -movement (Otsuka), should be regulated in terms of **(morphological) case**.
 - ▷ Marantz's (1991) case hierarchy:
 - (3) Unmarked > Dependent > Lexical/Oblique
- To distinguish between grammatical function and case, one of our clearest bets will be ergative/absolutive languages:
 - ▷ Both ergatives and intransitive absolutes have subject properties (Anderson, 1976)
 - ▷ 'Quirks of subject extraction' are reliably found for ergative subjects but not absolutive ones – it is case, not grammatical function, which regulates extraction strategy / accessibility for extraction
- > Goal of this talk: starting from extraction asymmetries in ergative/absolutive languages, build a theory of extraction asymmetries based as directly as possible on (3), and see where it goes.

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Roadmap

- I first lay out a theory of ergative extraction asymmetries built around (3):
 - ▷ \bar{A} movement is driven by heads which bear [EPP] and which Agree in an OP-feature
 - ▷ Agree is possible only for DPs with certain types of (m-)case (Bobaljik, 2008)
 - ▷ A ban on ergative \bar{A} extraction arises where the \bar{A} probe can agree only with unmarked DPs, not DPs in dependent case
- I then discuss empirical advantages over various previous views of ergative extraction restrictions:
 - ▷ Variable syntactic ergativity: We can account for languages in which some varieties of \bar{A} movement, but not others, show ergative extraction restrictions
 - ▷ Dependent case: We can account for extraction restrictions in languages in which ergative demonstrably behaves like a dependent case, rather than an inherent one
 - ▷ Subextraction: We can account for asymmetries in subextraction using the same core tools (Branan, To appear)
- Lastly, I turn to questions raised by this approach as a general theory of extraction asymmetries:
 - ▷ Do we find the same patterns in pure head-marking languages as in languages with overt morphological case?
(The issue: need the case features involved be visibly *morphological*?)
 - ▷ Do we find the same patterns in accusative languages as in ergative ones?
(We should.)
 - ▷ Are all constraints on ergative extraction statable purely in terms of properties of the ergative argument?
(Here lies a twist.)

2 A case discrimination approach to syntactic ergativity

2.1 The phenomenon

- Various languages with ergative case show a ban on \bar{A} extraction of ergative subjects. (This is the most common type of syntactic ergativity.)
 - ▷ Two “repairs”:
 - * Avoid ergative (e.g. use an antipassive) West Greenlandic (5)
 - * Avoid movement (e.g. use [base-generated] resumption) Tongan (7)

• West Greenlandic (Bittner 1994, Bittner and Hale 1996)

(4) Basic clauses: intransitive, transitive, antipassive

- a. Arna-t mirsur-p-u-t.
 woman-PL.ABS sew-IND-[-tr]-3PL
 The women are sewing.
- b. Juuna-p miiqqa-t paar(i-v)-a-i.
 Juuna-ERG child-PL.ABS look.after-IND-[+tr]-3SG.3PL
 Juuna is looking after the children.
- c. Juuna miiqqa-nik paar-si-v-u-q.
 Juuna.ABS child-PL.INST look.after-AP-IND-INTR-3SG
 Juuna is looking after the children.

(5) Relativization accessibility: intransitive subjects, antipassive subjects, and objects (ABS), not transitive subjects (ERG)

- a. arna-nut [_ABS mirsur-tu-nut]
 woman-PL.DAT [RC _ sew-REL[-tr]-PL.DAT]
 INTRANS SUBJ: for the women who are sewing
- b. miiqqa-nut [RC Juuna-p _ABS paari-sa-i-nut]
 child-PL.DAT [Juuna-ERG _ look.after-REL[+tr]-3SGi.PL-DAT]
 OBJ: for the children that Juuna is looking after
- c. angut [RC _ABS aallaam-mik tigu-si-sima-su-q]
 man.ABS [_ gun-INS take-AP-PRF-REL.INTR-SG]
 ANTIP SUBJ: the man who took the gun
- d. *angut [RC _ERG aallaat tigu-sima-sa-a]
 man.ABS [_ gun.ABS take-PRF-REL.TRANS-3SG.SG]
 *ERG SUBJ: the man who took the gun

• Tongan (Otsuka 2006, Polinsky 2016)

(6) Basic clauses: intransitive, transitive¹

- a. 'Oku tangi/kata/kaukau ['a e fefine].
 PRS cry/laugh/bathe [ABS DET woman]
 The woman is crying/laughing/bathing.
- b. Na'e ako'i ['e he faiako] ['a e lea faka-Tonga.]
 PST teach [ERG DET teacher] [ABS DET language Tongan]
 The teacher taught the Tongan language.

(7) Relativization accessibility: objects and intransitive subjects (ABS), not transitive subjects (ERG)

- a. e fefine [RC na'e kata _ABS]
 DEF woman [PAST laugh]
 the woman who laughed

¹ There is also a 'middle' with a different case array; see Polinsky (2016).

- 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
- 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

“Only absolutive arguments can undergo A-bar movement with a gap. All other cases, including ergative, require a resumptive element in the gap position. In fact, this is a primary manifestation of syntactic ergativity: when an ergative expression is relativized, it must be “resumed” by a subject clitic in the relative clause. [...] Extraction of the ergative is impossible without the [resumptive] subject clitic, whereas extraction of the absolutive is impossible with that clitic” (Polinsky, 2016)

2.2 The proposal: case discrimination in \bar{A} movement

- Case discrimination: a DP’s ability to participate in the operation Agree may be determined in part by its morphological case (Bobaljik, 2008)
 - ▷ Premise: Agree is a syntactic operation, not merely a PF one (*pace* Bobaljik)
 - ▷ Consequence: m-case assignment takes place in the syntax
 - ▷ Accessibility for ϕ -Agree is regulated by hierarchy (8):

(8) unmarked case \ll dependent case \ll lexical/oblique case

- Hindi-Urdu: pure case-discriminating ϕ -Agree (Bobaljik, 2008). DPs with marked case, whether ergative or accusative, may not participate in verbal agreement (Bhatt, 2005)

(9) a. [[Rahul kitaab parh-taa thaa] T]
 Rahul.M book.F read-Hab.MSg be.Pst.MSg
 Rahul used to read (a/the) book.

b. [[Rahul-ne kitaab parh-ii thii] T]
 Rahul-Erg book.F read-Pfv.F be.Pst.FSg
 Rahul had read the book.

- ▷ ϕ -Agree targets the highest DP in unmarked case, whether subject or object
- French: case-discriminating ϕ -Agree along with a ϕ -Agree requirement on A-movement (Preminger, 2014)
 - ▷ T may agree only with DPs in unmarked case (nominative)
 - ▷ If the closest DP is not nominative, ϕ -Agree fails
 - ▷ If ϕ -Agree fails, A-movement fails; an expletive must be inserted to satisfy [EPP]

(10) Merger of T, ϕ -Agree fails:

$\left\{ \begin{array}{c} \text{---} \odot \text{---} \\ \text{---} \end{array} \right\}$
 $T_{[\phi, EPP]}$ semble [à Marie] que [Hélène a du talent]
 seems to Marie that [Hélène has.3SG of talent]

a. The failure of ϕ -Agree precludes A-movement for [EPP]:

* [À Marie]₁ $T_{[\phi, EPP]}$ semble t₁ [Hélène avoir du talent]
 to Marie seem [Hélène have.INF of talent]

b. [EPP] cannot be left unsatisfied:

* $T_{[\phi, EPP]}$ semble [à Marie] que [Hélène a du talent]
 seems to Marie that [Hélène has.3SG of talent]

c. An expletive is inserted as a last resort:

Il semble [à Marie]₁ que [Hélène a du talent]
 It seems to Marie that [Hélène has.3SG of talent]

(11) Preminger's proposal for A movement in French (lightly edited):

Movement to Spec,TP = Move(XP successfully targeted by FIND ϕ)

cp. Mikkelsen (2005, p 183) on "clumping": [EPP] must be checked by the same DP that checks $u\phi$

- Syntactically ergative languages (e.g. West Greenlandic, Tongan): same pattern. Case-discriminating Agree in an operator feature (e.g. [WH], [REL] or [FOC]), and \bar{A} -[EPP]

▷ \bar{A} movement of relative OP to phase head H requires Agree in an operator feature F

▷ Agree-F is case-discriminating: elements in ergative case (which is *not* the unmarked case) are not accessible for Agree with H

(12) Merger of H, [REL]-Agree fails:

$\left\{ \begin{array}{c} \text{---} \odot \text{---} \\ \text{---} \end{array} \right\}$
 (angut) [H_[Rel, EPP] [OP.ERG aallaat tigu-sima-sa-a]]
 (man.ABS) [[OP.ERG gun.ABS take-PRF-REL.TRANS-3SG.SG]]

a. The failure of [REL]-Agree precludes \bar{A} -movement for [EPP]:

* (angut) [OP.ERG₁ H_[Rel, EPP] [₋₁ aallaat tigusimasaa]]
 (man.ABS) [OP.ERG₁ [₋₁ gun.ABS take]]

b. \bar{A} [EPP] cannot be left unsatisfied:

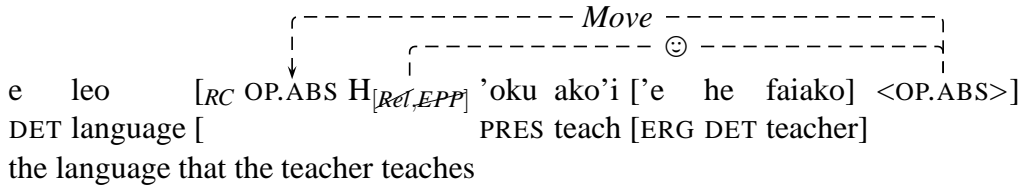
* (angut) [H_[Rel, EPP] [OP.ERG aallaat tigusimasaa]]
 (man.ABS) [[OP.ERG gun.ABS take]]

- "Repair" by antipassive: the OP subject is absolutive and so accessible for Agree-F

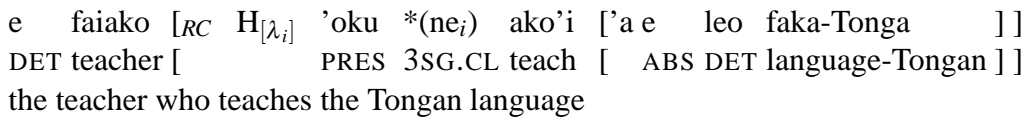
$\left\{ \begin{array}{c} \text{---} \odot \text{---} \\ \text{---} \end{array} \right\}$
 (13) (angut) [OP.ABS H_[Rel, EPP] [<OP.ABS> aallaam-mik tigusisimasuq]]
 (man.ABS) [\uparrow [OP.ERG gun-INS take.ANTIP]]
 $\left\{ \begin{array}{c} \text{---} \\ \text{---} \end{array} \right\}$ Move

- ▷ West Greenlandic, Dyirbal, Chukchi: antipassive is possible with or without \bar{A} movement
- ▷ To extract a notionally transitive subject, the antipassive morpheme must be in the numeration
- “Repair” by resumption: the \bar{A} dependency is established by binding, without movement

(14) Tongan absolutive relative: successful [REL]-Agree and movement; possibility of movement blocks resumption



(15) Tongan ergative relative: last resort non-movement resumptive strategy



- ▷ Resumption emerges in a familiar way as a last-resort strategy movement is blocked (Shlonsky 1992 among many others)
- The typology of \bar{A} extraction in ergative languages reflects the hierarchy from (8):

(8) unmarked case ≪ dependent case ≪ lexical/oblique case

- ▷ Only unmarked case is accessible for Agree-F: ergative extraction restriction (“syntactically ergative”, e.g. Tongan, West Greenlandic)
- ▷ Both unmarked case and dependent case are accessible for Agree-F: no ergative extraction restriction. (“morphologically ergative”, e.g. Tsez, Warlpiri)
- ▷ Only dependent case is accessible for Agree-F: impossible. There is no language where *only* ergatives can extract.
- This is parallel to the typology of ϕ -agreement: (Bobaljik, 2008)
 - ▷ Only unmarked case is accessible for Agree- ϕ : absolutive agreement (e.g. Tsez)
 - ▷ Both unmarked case and dependent case are accessible for Agree- ϕ : both ergative and absolutive agreement (e.g. West Greenlandic)
 - ▷ Only dependent case is accessible for Agree- ϕ : impossible. There is no language where *only* ergatives can ϕ -Agree.²

• A noteworthy consequence:

The cut-off point for case-discrimination is set probe-by-probe, not language-by-language

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

- Analysis: 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. → no syntactic ergativity in questions, (20b)
 - ▷ Agree-[REL] *is* case-discriminating in Chukchi, making only DPs in unmarked case accessible for Agree. → syntactic ergativity in relatives, (19b)
- > 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

3.2 *Dependent ergative*

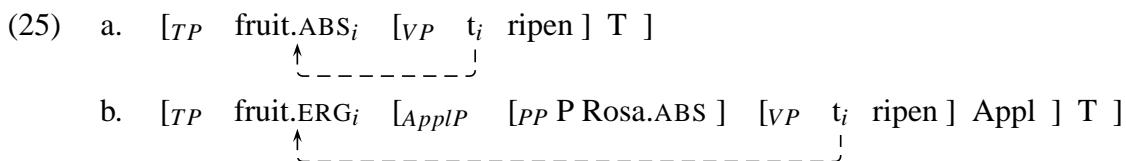
- The case categories invoked by (8) conform naturally to the varieties of case-assignment rules posited in ‘configurational’ case theories (e.g. Baker and Vinokurova 2010, Baker 2014, 2015, building on Yip, Maling, and Jackendoff 1987, Marantz 1991):
 - ▷ Case features are distributed based on the configuration of arguments in a domain, rather than (purely) based on agreement between arguments and functional heads
 - ▷ 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
 - ▷ Dependent case (ergative, accusative): determined for an argument based on the presence of another argument in the domain
 - ▷ Unmarked case (nominative, absolutive): determined for an argument in a particular domain as an elsewhere case
- Ergative as a *dependent* case: (Baker, 2014)
 - (22) If there are two distinct argumental NPs in the same phase such that NP₁ c-commands NP₂, then value the case feature of NP₁ as ergative unless NP₂ has already been marked for case.
- Cf. ergative as an *inherent* case: (Woolford 1997, Legate 2002, Aldridge 2004)
 - (23) a. Ergative is assigned by (transitive) ν to its specifier, the DP that it theta-marks
 - b. ν is transitive if it assigns accusative under c-command to an object DP
- Baker’s argument: ergative appearing in applicatives of unaccusatives [Shipibo]
 - (24) 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)

- Raising-to-ergative: the unaccusative subject raises past an applicative argument to Spec,TP

- ▷ Appl is merged above an unaccusative VP
- ▷ The applicative specifier contains a null P, preventing A-movement of the applicative argument. Instead, the internal argument raises.

(Sidenote: in Deal 2016b, I argue for a derivation that instead turns on Spec-to-Spec antilocality à la Erlewine (2016) – a stop at the vP edge is required, but the applicative argument is too close to raise to v)

- ▷ The raised internal argument c-commands another NP in the same domain, triggering ergative rule (22).



- ▷ *Joshin* ‘become ripe’ lacks an external argument (see Baker (2014) for several language-internal arguments). So, on the inherent case theory, ergative is not predicted.

- Shipibo features syntactic ergativity in its internally headed relative clauses (IHRCs): ergatives may not be relativized (Valenzuela, 2002)

(26) [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)

(27) [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.

- Analysis: case discrimination in covert \bar{A} movement

- ▷ Ergative is assigned by a dependent case rule
- ▷ Only unmarked case, not dependent case, may covertly \bar{A} move

3.3 Comparison to alternatives

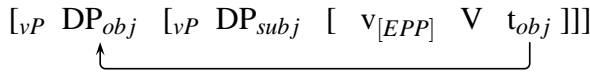
- The case-dependency view stands in contrast to the standard theory of syntactic ergativity, which appeals to subject-object inversion (understood loosely):
 - ▷ The object is licensed by T, and/or
 - ▷ The object moves past the subject within vP

Meanwhile, the subject is licensed by v, inherently.

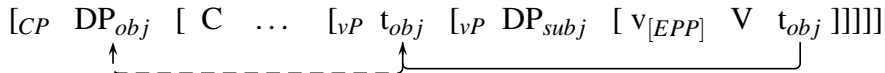
(Campana 1992, Ordóñez 1995, Bittner and Hale 1996, Aldridge 2004, 2008a, 2012, Coon, Mateo Pedro, and Preminger 2015, Assmann et al. 2015; review in Deal 2015)

- Aldridge (2004, 2008b, 2012): [EPP] on v attracts the object to an outer Spec,vP in syntactically ergative languages. Object \bar{A} movement proceeds from Spec,vP:

(28) Basic vP structure

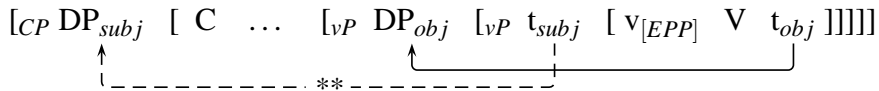


(29) Object \bar{A} movement



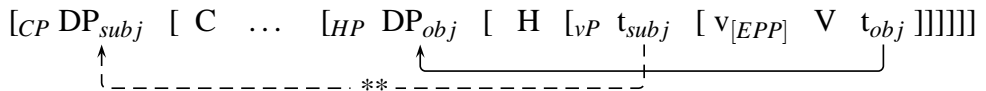
- ▷ Transitive subject extraction is ruled out by (unrelativized) minimality

(30) *Transitive subject \bar{A} movement: a violation of Attract Closest



- Coon et al. (2015): the object requires Case from T; it must move to the edge of the first phase for Case-licensing.

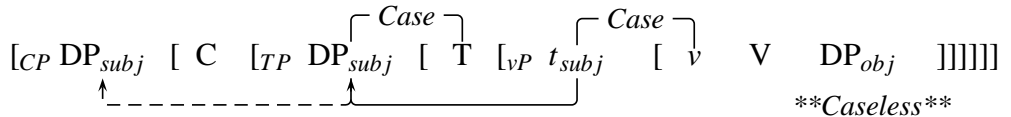
(31) *Transitive subject movement: a violation of PIC



- ▷ The object occupies the sole escape hatch in the lower phase (here HP).
- ▷ Transitive subject extraction is ruled out by the PIC.

- Assmann et al. (2015): T is a phase head; subject movement must pass through Spec,TP

(32) *Transitive subject movement: a violation of the Case Filter



- ▷ The object requires Case from T.
- ▷ Subject movement through Spec,TP bleeds Case assignment to the object.

- Challenges for the standard view

- ▷ Inversion is due to [EPP] on v (Aldridge) or to the case needs of the object (Coon et al.), not to a property of the C system. → No account for variable syntactic ergativity (Chukchi)

(An account is perhaps possible on the Assmann et al. 2015 view if TP is a phase only in relative clauses, as in Deal 2016a)

- ▷ (Unrelativized) minimality (Aldridge) or PIC (Coon et al.) blocks all subject movement: the subject must be licensed in situ. Likewise on the Assmann et al. view; the only source for subject case is v . (inherent ergative) → Incompatible with the arguments for case-dependency and raising to ergative in Shipibo

- The case-dependency view can also be contrasted with the PP-ergative proposal from (Polinsky 2016, To appear):
 - ▷ Ergative “case” is an adposition (Mahajan 1997, Stepanov 2004)
 - ▷ Modified inherent ergative: transitive v requires a PP specifier
 - ▷ Where P-stranding and PP-pied piping are ruled out, ergatives cannot \bar{A} move
 - ▷ Variable syntactic ergativity: Chukchi allows PP *wh*-operators but not PP relative operators
 - ▷ The challenge: ergative is still treated as an inherent case → Still incompatible with the arguments for case-dependency and raising to ergative in Shipibo

3.4 An extension: Branan on subextraction

- A further application of case-discrimination in \bar{A} movement (less immediately comparable to competing theories of syntactic ergativity) is developed by Branan (To appear):
 - (33) Extraction generalization
Extraction of non-arguments from DP cannot take place from a phrase that is not targeted for [ϕ -]Agree.
 - ▷ ϕ -Agree with a phase head “unlocks” the phase for further Agree (Rackowski and Richards, 2005)
 - ▷ \bar{A} movement out of a phase (to whose edge movement is independently impossible) depends on this unlocking
 - ▷ If Agree- ϕ is case-discriminating, \bar{A} movement is therefore (indirectly) case-discriminating
 - If Branan is right about subextraction, then we expect that extraction of DPs and from DPs may show different patterns, since Agree-F and Agree- ϕ may have different case discrimination settings. Data from Sidaama (Cushitic):

(34) Extraction from an object is ok:

[OP_i Bule [ama t_i] la'-'-ino] manč-i
 [Bule [mother.Acc] see-3sg.-P.Prf.3] person-Nom.Mod.M
 da- \emptyset -i
 come-3sg.M-S.Prf.3sg.M
 The man whose mother Bule saw came.

(35) Extraction from an oblique is impossible:

* [OP_i ise [miní-nni t_i] ful-t-ino] mančó
 [3sg.f.nom [house-Gen.M-Abl] exit] person.Acc
 af-oo-mm-o
 get.to.know-P.Prf.1-1.sg-M
 intended: I know the person whose house she exited from.

(36) But extraction *of* an oblique is possible:

isi [OP_i ise hakk'ičó t_i mur-t-anno] meesané
 3sg.M.Nom [3sg.f.Nom tree(acc) cut-3sg.F-Impf.3] ax(acc)
 hiikk'- \emptyset -i
 break
 He broke the axe with which she habitually cut the tree

- ▷ On this proposal, the ability to “set” different probes differently in terms of case discrimination plays a second role in capturing extraction patterns

4 Beyond ergative morphological case: two preliminary questions (and answers)

4.1 The question of pure head-marking languages

- Case dependency arises because case is assigned in syntax and subsequently referenced by syntactic rules (*pace* Bobaljik 2008)
- West Greenlandic, Tongan, Chukchi, Dyirbal, Shipibo: case is visible morphologically at the NP/DP level
- If the same case system is learnable without phonological case distinctions in NP/DP, then the case-dependency view could be straightforwardly extended to putative ergative extraction bans in pure head-marking languages (e.g. Mayan)
 - ▷ Larsen and Norman (1979): Mayan “agent focus” reflects an ergative extraction ban, like in Dyirbal
 - * Ergative pattern is purely in agreement; no nominal marking
 - * Extraction of intransitive subject or transitive object: regular verb form
 - * Extraction of transitive subject (mostly): special “agent focus” verb form, leaving an absolutive \bar{A} gap

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

- a. Maktxel max- \emptyset way-i __{ABS} ?
 who ASP-3ABS sleep-intrans _
 Who slept?
- b. Maktxel max- \emptyset 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- \emptyset il-on[-i] $\boxed{\text{_}_{\text{ABS}}}$ naq winaq ?
 who ASP-3ABS see-AF-INTRANS CL man
 Who saw the man?

- ▷ The ergative-extraction-ban view is presupposed by Campana 1992, Ordóñez 1995, Assmann et al. 2015, Coon et al. 2015

- If the learning of syntactic case rules requires phonological case distinctions in NP/DP, then some other explanation must be given for the Mayan pattern. (Deal, 2016c)
 - ▷ Connection between agent focus and “high absolutive” (inversion) (Coon et al., 2015) – maybe there is indeed inversion in these languages
 - ▷ Alternatively, since verb agreement is what is at stake: connection to *wh*-agreement and anti-agreement
 - ▷ Stiebels (2006): “agent focus” as, essentially, *wh*-agreement
The gap in (37c) is ergative, not absolutive!
 - ▷ Special forms of *wh*-agreement/anti-agreement are not unique to ergatives or subjects, but may be found for absolutives or objects as well (Baier 2017)
- Interim summary (to be revisited): we have a range of options for handling ergative extraction patterns in pure head-marking languages in a way more or less in keeping with the case discrimination view.

4.2 “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

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

- There are various contenders, all of which require further investigation:
 - ▷ The kind of pattern we would expect to see for a case-dependent probe in an accusative language: Slovenian *ki* (data from Hladnik 2015)

- (39) Nominative: relativization with a gap
- a. Poznam človeka, ki _{nom} / *on išče službo.
 know.1SG man.ACC C _{nom} / *he.NOM search.3SG job
 I know a man who is looking for a job.
- b. Poznam človeka, ki mislim, da _{nom} / *on išče službo.
 know.1SG man.ACC C think.1SG that _{nom} / *he.NOM search.3SG job
 I know a man who I think is looking for a job.

- (40) Accusative: obligatory resumption (whether object or quirky subject!)
- 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.

(41) Dative: obligatory resumption (whether object or quirky subject!)

- a. prijateljica, ki *pro_{subj}* *(ji) zaupam
friend.FEM C *pro_{subj}* *(she.DAT.CL) trust.1SG
the friend who I trust
- b. Poznam človeka, ki *(mu) paše plesati salso.
know.1SG man.ACC C he.DAT pleases to.dance salsa
I know a man who likes to dance salsa.

▷ Notable similarity to Tongan

▷ The difference in relativization strategies clearly correlates with case, not with grammatical function, just as predicted by the case dependency theory

▷ The challenges:

- * Ruling out a morphological gap analysis: resumptives are clitics in Slovenian, but there are no clitic forms for nominative
- * Reassessing Hladnik's (2015) arguments that resumption in Slovenian does indeed involve movement

- If we allow that case discrimination may also feature in instances that don't involve morphological case, relevant data could also come in forms like the Irish pattern discussed by Clements et al. 1983, McCloskey 2014:

- (42) a. Tá sé **ag** ceannach teach.
is he PART buy a.house
He is buying a house.
- b. Cén teach a tá sé **a** cheannach _?
which house C is he PART buy –
Which house is he buying?

▷ Progressive preverb *ag* replaced with *a* iff the object extracts

▷ The challenge—just as with agent focus—is to show that the special morphology appearing in extraction is really playing the role we would expect it to play, viz allowing the object to be non-accusative and therefore extractable

5 The more interesting challenge

- Two distinctive aspects of the case discrimination analysis:

▷ Ergative extraction restrictions arise from the properties of the ergative argument itself.

▷ The object plays a role only insofar as it conditions ergative case assignment to the subject (e.g. via a dependent case assignment rule)

- A basic prediction: manipulating the object will not change the extractability of the subject, so long as the *case* of the subject stays the same

- A potential challenge for this prediction has recently been presented by Henderson and Coon (To appear), from Kaqchikel

- ▷ A pure head-marking Mayan language; ergative and absolutive agreement only
- ▷ Normal transitive clause: the subject controls ergative agreement and cannot extract while still controlling that agreement. Agent focus is required.
- ▷ Extended reflexive, CP complementation, light verb constructions: the subject controls ergative agreement, but CAN extract while still controlling that agreement

(43) [Ja ri ixoq]_i x- \emptyset -u_i-ch'ëy_{TV} r_i-i'.
 [FOC the woman]_i CPL-ABS3S-ERG3S-hit ERG3S-self
 It's the woman who hit herself.

(44) ri nik'aj chik winäq ri ni- \emptyset -ki-b'ij [chi
 the half again people REL ICPL-ABS3S-ERG3P-say [that
 ni- \emptyset -ki-b'än jun kosa y...
 ICPL-ABS3S-ERG3P-do one thing and
 the other half of the people who say [that they do one thing and...]

(45) Achike x- \emptyset -u-b'än manifestar pa b'ey?
 who ICPL-ABS3S-ERG3P-do protest in street
 Who protested in the street?

- ▷ Henderson and Coon (To appear): these are environments where the object does not require case from T, and therefore does not interfere with subject \bar{A} movement
- ▷ Extraction restrictions are not about what controls ergative agreement (and so potentially bears covert ergative case). Rather, they are about the syntax of the object.
- Coon (2016) suggests a typology of ergativity where both inherent and dependent ergative case exist, and Mayan features inherent ergative.
 - ▷ Perhaps suggests that case discrimination accounts for syntactic ergativity in dependent-ergative languages whereas some version of the standard (inversion) view holds in inherent-ergative languages.
 - ▷ How could this be learned??
- A speculation in a slightly different direction: *case discrimination requires morphological case after all.*
 - ▷ In a m-case-ful language, ergative could be inherent OR dependent and still be subject to case discrimination
 - ▷ In a m-case-less language, there can be no case discrimination. But this is not to say that other factors in the syntax might not make some subjects inaccessible for extraction (as on the standard, inversion-based view).
 - ▷ Overt morphological case is plausibly the acquisition trigger for a case-discrimination analysis.

6 Conclusions

4 benefits of treating syntactic ergativity as case discrimination (and some connections and additional conclusions):

Case discrimination. . .

1. Straightforwardly accounts for “repairs”: avoid ergative or avoid movement
 - ▷ Resumption (e.g. in Tongan) as a last resort (cp. Shlonsky 1992)
2. Connects the hierarchy of accessibility for \bar{A} extraction to a parallel hierarchies for ϕ -agreement
 - ▷ \bar{A} accessibility is case-based, not GF-based (Otsuka 2006)
 - ▷ ϕ -agreement accessibility is case-based, not GF-based (Bobaljik 2008)
3. Allows for variable syntactic ergativity: case discrimination is set probe-by-probe, not language-by-language
 - ▷ Variation is in the functional lexicon (Chomsky-Borer conjecture)
4. Allows for dependent ergative: case discrimination can treat ergative as a dependent case
 - ▷ Ergative is sometimes dependent (not inherent), or (Baker 2014)
 - ▷ Ergative is *only ever* dependent (not inherent) (Baker and Bobaljik 2017)

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