

# Dependent case in syntactically ergative languages: Evidence from Inuit and West Circassian

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## 1 Introduction

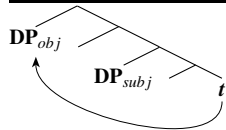
In dependent case theory (Marantz 1991, a.o.), morphological (e.g. ERG, ACC) case is assigned on the basis of **configurational (c-command) relations between DPs**.<sup>1</sup>

**A theoretical gap:** Although it is known that a subset of morphologically ergative languages are **syntactically ergative**, dependent case theory has previously only focused on the former.

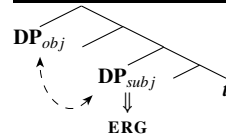
- In syntactically ergative languages, ABS objects raise to a position c-commanding the subject. How does this interact with dependent ERG assignment?

**Proposal:** In syntactically ergative languages, dependent ERG case is (universally) assigned **after object movement**.

### (1) Object moves to high position



### (2) Dependent ERG is assigned



Evidence for this order of operations from two such languages, Inuit and West Circassian.

The **downwards directionality** of ERG case assignment in (2) is at odds with canonical treatments in dependent case theory.

- On this basis, we caution against the conflation of morphological case labels and directionality of case assignment.

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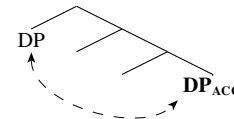
## Roadmap:

- §2 Theoretical premises
- §3 Downwards dependent ERG in Inuit
- §4 Extension to West Circassian
- A A third case study: Yimas

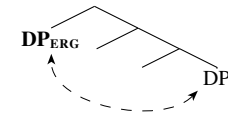
## 2 Theoretical premises

### 2.1 Basics of dependent case

#### (3) Accusative language:



#### (4) Ergative language:



Because dependent case is predicated on the co-occurrence between nominals, it is divorced from thematic roles/argument structure, as well as from the functional heads associated with these notions.

#### *A brief illustration:*

Though normally associated with transitivity, dependent ERG (and ACC) may surface in unaccusative contexts, **so long as another nominal (its “case competitor”) is present**.

- Problematic for case theories that utilize functional heads such as  $v^0$  (e.g. Woolford 1997, 2006; Chomsky 2000).

#### (5) Dependent ERG case in Shipibo:

- a. Kokoti-ra joshin-ke  
fruit-PRT.ABS ripen-PRF  
‘The fruit ripened.’

- b. Bimi-**n**-ra Rosa joshin-xon-ke  
fruit-**ERG**-PRT Rosa.ABS ripen-APPL-PRF

‘The fruit ripened for Rosa.’  
(Baker 2014)

**ERG-ABS with appl.**

As discussed by Baker and Vinokurova (2010) and Baker (2015), dependent case may also be sensitive to **phase boundaries**.

- In Eastern Ostyak, object shift to the  $vP$ -phase edge triggers dependent ERG case on the subject:

(6)  $vP$ -external phase as domain of case assignment (Eastern Ostyak):

- a. **Mä** t’əkājəylämnä **ula** mənəyələm  
**we.DU.NOM** younger.sister.COM **berry** pick.PST.1PS

‘I went to pick berries with my younger sister.’

**no object shift**

- b. **Mə-ŋən ləxə** əllə juɣ kanja \_\_ aməxəloy  
**we-ERG them** large tree beside put.PST.3PO/1PS

‘We put them (pots of berries) beside a big tree.’  
(Gulya 1966, cited in Baker 2015)

**object shift**

- See also Yip et al. (1987); Baker (2015), a.o. for other diagnostics of dependent case.

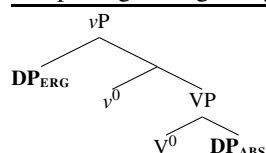
## 2.2 Morphological vs. syntactic ergativity

In addition to morphologically ergative languages like Shipibo, there are **syntactically ergative** languages (Larsen and Norman 1979; Bittner and Hale 1996a; Manning 1996; Deal 2016; Polinsky 2017).

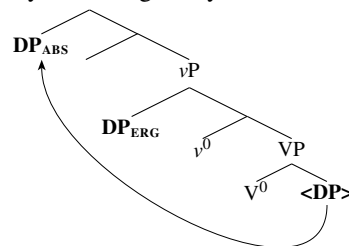
- It is generally assumed that the latter is a subtype of the former.

**Important distinction:** Morphological alignment refers to case/agreement patterns, while syntactic alignment concerns the **clausal organization of nominals**.

(7) Morphological ergativity:



(8) Syntactic ergativity:



Syntactically ergative languages are typified by **high ABS objects**—i.e. ABS subjects and ABS objects occupy a uniform position (e.g. Spec-TP).

- We assume that objects are generated as complements of  $V^0$  and **raise** to their surface position (Bittner and Hale 1996a).

**Question:** How does this movement step affect dependent case assignment?

In other words, how does syntactic ergativity interact with morphological ergativity?

### Proposal at a glance:

- On the basis of two syntactically ergative languages, Inuit and West Circassian, we show that **ERG case is assigned at the clause-level**.
- Thus, case assignment **takes place after object movement**.
- As a result, dependent ERG case is assigned **downwards**, not upwards.
- We derive differences between Inuit and West Circassian based on parameterization of **the phasal status of  $vP$** .

## 3 Downwards dependent ERG in Inuit

### 3.1 Syntactic ergativity in Inuit

**Inuit (Eskimo-Aleut):** polysynthetic, with relatively free word order; Mirror Principle-obeying; displays ergative case patterning (Fortescue 1984; Bittner 1994; Dorais 2010; Yuan 2018).

(9) Ergative case patterning (Kalaallisut):

- a. **miiqqat** piqqip-put  
child.PL.ABS healthy-3P.S

‘The children are healthy.’

**ABS**

- b. Juuna-**p** **miiqqat** paari-vai  
Juuna-ERG child.PL.ABS look.after-3S.S/3P.O

‘Juuna is looking after the children.’

**ERG-ABS**

(Bittner and Hale 1996a,b)

**Evidence for syntactic ergative structure:**

- Relativization available only for ABS subjects and ABS objects, i.e. **the highest clausal argument** (Murasugi 1997).

- (10) a. miiqqat [ \_\_\_ sila-mi pinnguar-tut ]  
 child.PL.ABS (*ec.ABS*) outdoors-LOC play-PART.3S.S  
 ‘the children who are playing outdoors’ ABS subj.
- b. miiqqat [ Juuna-p \_\_\_ paari-sai ]  
 child.PL.ABS Juuna-ERG (*ec.ABS*) look.after-PART.3S.S/3P.O  
 ‘the children that Juuna is looking after’ ABS obj.
- c. \*angut [ \_\_\_ aallaat tigu-sima-saa ]  
 man.ABS (*ec.ERG*) gun.ABS take-PERF-PART.3S.S/3S.O  
 Intended: ‘the man who took the gun’ ERG subj.  
 (Bittner 1994)

- ABS objects **obligatorily take wide scope**, in contrast to antipassive objects (as well as ERG subjects, omitted) (Fortescue 1984; Bittner 1994; Manga 1996).

- (11) a. suli Juuna-p **atuagaaq ataasiq** tigu-sima-**nngi**-laa  
 still Juuna-ERG book.ABS one.ABS get-PERF-NEG-3S.S/3S.O  
 ‘There is one (particular) book Juuna hasn’t received yet.’ ∃ > NEG
- b. suli Juuna **atuakka-mik ataatsi-mik** tigu-si-sima-**nngi**-laq  
 still Juuna.ABS book-MOD one-MOD get-AP-PERF-NEG-3S.S  
 ‘Juuna hasn’t received (even) one book yet.’ NEG > ∃  
 (Bittner 1994)

- The high structural locus for ABS objects is derived by movement: **possible reconstruction (e.g. for NPI-licensing)**.

- (12) **kina=luunniit** taku-**nngi**-laa  
**who.ABS=NPI** see-NEG-3S.S/3S.O  
 ‘He didn’t see anyone.’ NEG > ∃  
 (Fortescue 1984)

**Additional relevant properties:**

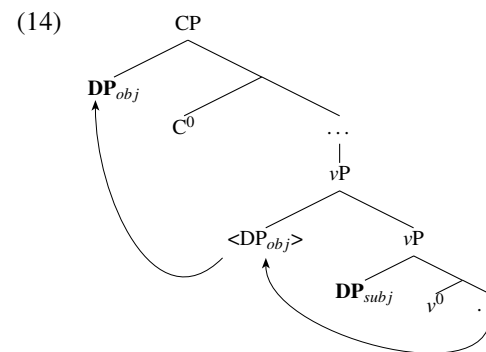
- The landing site for ABS objects is in the CP-domain (taken here to be Spec-CP for expository ease): correlation with word-final **mood-sensitive  $\phi$ -agreement** (cf. Compton 2016).

(13) ABS objects with  $\phi$ -morphology in Spec-CP (Inuktitut)

- a. Taiviti-up **Miali** taku-qqau-**janga**  
 David-ERG Mary.ABS see-REC.PST-3S.S/3S.O  
 ‘David saw Mary.’
- b. Taiviti-up **Miali** taku-qqau-**vauk**  
 David-ERG Miali.ABS see-REC.PST-INTERR.3S.S/3S.O  
 ‘Did David see Mary?’

- vP is a phase boundary:** Following Bittner (1994), Bittner and Hale (1996a), a.o., objects that raise out of vP are ABS, while vP-internal objects are assigned MOD (i.e. antipassive).

**Therefore:** ABS objects in ergative transitive constructions first raise to the Spec-vP phase edge, then to Spec-CP.<sup>2</sup>

**3.2 ERG is dependent**

As shown above, a dependent approach predicts the possibility of ERG case assignment on unaccusative subjects.

- Borne out in Inuit (and related Eskimo-Aleut languages; see Miyaoka 2012 and Baker and Bobaljik 2017 on Central Alaskan Yup'ik):

<sup>2</sup>While Inuit (and West Circassian) are taken by the authors to be right-headed, all syntactic trees in this talk are represented as left-headed purely for expository ease.

(15) ERG case on anticausative subject (Inuktitut):

- a. **niuvirvik** matui-sarait-tuq  
store.ABS open-early-3S.S  
'The store opened early.'
- b. niuvirvi-**up** matui-sarai-gutigi-janga **Miali**  
store-ERG open-early-REAS.APPL-3S.S/3S.O Miali.ABS  
'The store opened early for/because of Miali.'

ERG-ABS with appl.

(16) ERG case on passivized subject (Inuktitut):

- a. **ujamik** niuviq-ta-u-juq  
necklace.ABS buy-PASS.PART-be-3S.S  
'The necklace was purchased.'
- b. ujami-**up** niuviq-ta-u-qatigi-jangit **siutirutiik**  
necklace-ERG buy-PASS.PART-be-COM.APPL-3S.S/3P.O earring.DU.ABS  
'The necklace was purchased with the earrings (i.e. they were purchased at the same time).'

ERG-ABS with appl.

- See also Yuan (2018) for further arguments that ERG in Inuit is dependent.

**Interim summary:** ERG case in Inuit is dependent, and ABS objects raise to Spec-CP, such that they c-command the ERG subject.

⇒ Next: Timing of case assignment vs. movement.

## 3.3 Case assignment after ABS movement

**Proposal:** Dependent case in Inuit is calculated within the vP-external phase (Bittner and Hale 1996a), **after** object movement past the subject.

**Evidence from high nominalizations:** Nominalizer *-lik* ( $n^0$ ) Merges in the CP-domain (above e.g. negation).

- Merging of  $n^0$  eliminates the Spec-CP landing site for high objects (in situ objects instead receive MOD).
- **Crucially, this also blocks dependent ERG case assignment to the subject.**

- (17) a. Taiviti nagli-gi-nngit-ta-**lik** Carol-mik  
David.ABS love-TR-NEG-PART-NMLZ Carol-MOD  
'David doesn't love Carol.'
- b. \*Taiviti-**up** nagli-gi-nngit-ta-**lik** Kiuru  
David-ERG love-TR-NEG-PART-NMLZ Carol.ABS  
*Intended:* 'David doesn't love Carol.'

No ERG-ABS

- **Crucially, the intermediate Spec-vP stopping point (i.e. the phase edge) is still available**—as indicated by the transitive  $v^0$  -gi (underlined above).
- Thus, it cannot be that dependent ERG is calculated when the object is in Spec-vP.

Putting everything together, we propose the dependent case rule in (18):

- (18) **DOWNWARD ERGATIVE RULE:** Within a case domain  $\alpha$ , if  $DP_1$  is c-commanded by another  $DP_2$ , assign ERGATIVE case to  $DP_1$ . Otherwise,  $DP_1$  is ABSOLUTE.

In Inuit,  $\alpha = vP$ -external phase.

⇒ **Next:** Variation in the nature of  $\alpha$ , due to variation in the phasal status of vP.

## 4 Extension to West Circassian

Baker (2015): There may be **multiple instances of downward dependent case** within a single clause.

*How it works:*

In some languages, vP is a "soft phase", i.e. the contents of its complement (VP) is visible for the purposes of case assignment at the CP level.

This derives double object constructions in accusative languages (e.g. Korean, Cuzco Quechua, and Amharic): ACC is assigned down to both internal arguments.

- (19) Cheli-ka [<sub>VP</sub> Mary-**lul** panci-**lul** senmwul-**ul** hay-ss-ta] (Korean)  
Cheli-NOM Mary-ACC ring-ACC gift-ACC do-PST-DEC  
'Cheli presented Mary with a ring.' (Wechsler and Lee 1996, 635 *via* Baker 2015, 231)

**Prediction:**

If (i) ERG may be assigned downward and (ii)  $\nu$ P may be a “soft phase” (i.e.  $\alpha = \text{CP}$ ).  
 $\Rightarrow$  there should be multiple ERG languages.

This is confirmed in West Circassian.

**4.1 Syntactic ergativity in West Circassian**

**Main claim:** Reciprocal binding provides evidence for the absolutive DP moving to a position c-commanding other arguments.

**West Circassian (or Adyghe):** polysynthetic, with free word order, pro-drop, and head marking (Rogava and Keraševa 1966; Arkadiev et al. 2009; Lander and Testelefs 2017; Ershova 2019b, a.o.)

- (20) sə- qə- p- f- a- r- jə- ɬe- λeɸ<sup>w</sup>ə -ɸ  
 1SG.ABS- DIR- 2SG.IO- BEN- 3PL.IO- DAT- 3SG.ERG- CAUS- see -PST  
 ‘He showed me to them for your sake.’ (Korotkova and Lander 2010, 301)

**Anaphor binding** is primarily diagnosed via verbal morphology.

Syntactic position of arguments is systematically reflected in the morphological position of the agreement morphology:

- (21) Order of agreement prefixes:

| 1           | 2                 | 3         |
|-------------|-------------------|-----------|
| Absolutive- | IO + Applicative- | Ergative- |

- (22) **ABS-** **IO-**  
 š<sup>w</sup>ə- qə- d- de- š<sup>w</sup>e -š’t  
 2PL.ABS- DIR- 1PL.IO- COM- dance -FUT  
 ‘You(pl) will dance with us.’ (unergative verb with applied object)

- (23) **ABS-** **IO-** **ERG-**  
 tə- qə- p- f- jə- š’a -ɸ  
 1PL.ABS- DIR- 2SG.IO- BEN- 3SG.ERG- bring -PST  
 ‘S/he brought us to you.’ (transitive verb with applied object)

Reciprocals trigger specialized ‘reciprocal’ agreement, the position of which correlates with the syntactic position of bound pronoun (Letuchiy 2010; Ershova 2019b).

Evidence from unergative and ditransitive verbs: **reciprocal morphology tracks the position of the bound pronoun.**

- (24) Unergative verb with applied object: ABS binds IO; REC agreement in IO position

- a. š<sup>w</sup>ə- qə- **ze-** de- š<sup>w</sup>e -š’t  
 2PL.ABS- DIR- **REC.IO-** COM- dance -FUT  
 b. \***ze-** qə- ž<sup>w</sup>ə- de- š<sup>w</sup>e -š’t  
**REC.ABS-** DIR- 2PL.IO- COM- dance -FUT  
 ‘You(pl) will dance with each other.’

**IO=REC**

- (25) Transitive verb with applied object: ERG binds IO; REC agreement in IO position

- a. te(ERG) wəne-xe-r Ø- **ze-** fe- t- šə -ž’ə -ɸ  
 we house-PL-ABS 3ABS- **REC.IO-** BEN- 1PL.ERG- do -RE -PST  
 b. \*te(IO) wəne-xe-r Ø- t- fe- **ze(re)-** šə -ž’ə -ɸ  
 we house-PL-ABS 3ABS- 1PL.IO- BEN- **REC.ERG-** do -RE -PST  
 ‘We built houses for each other.’

**IO=REC**

**\*\*Other evidence that ze(re)- marks agreement** and not voice or a de-transitivizing operator (Ershova 2019b; cf. Bruening 2004 on Passamaquoddy, Japanese and Chichewa; Labelle 2008 on French):

- (i) overt use of reciprocal pronoun  
 (ii) case marking of antecedent

If extended to cases involving co-indexation of the absolutive theme, it is apparent that **ERG and IO are bound by ABS.**

**$\Rightarrow$  ABS c-commands ERG and IO.**

- (26) Ergative-absolutive frame: REC agreement in ERG position  $\Rightarrow$  ABS binds ERG

- a. **ABS-** **ERG-**  
 wə- s- λeɸ<sup>w</sup>ə -ɸ  
 2SG.ABS- 1SG.ERG- see -PST  
 ‘I saw you.’  
 b. **ABS-** **ERG-**  
 tə- **zere-** λeɸ<sup>w</sup>ə -ɸ  
 1PL.ABS- **REC.ERG-** see -PST

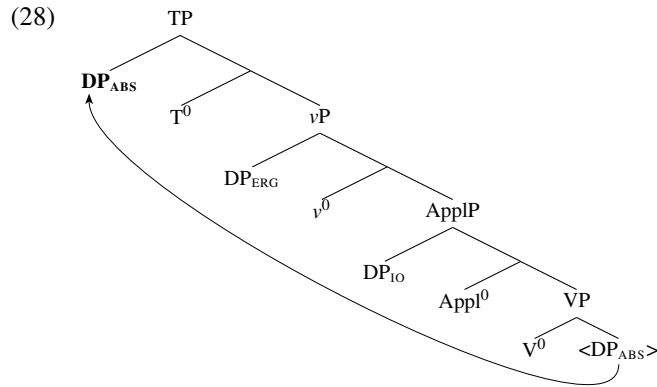
- c. \* **ze(re)-** t- λeɸ<sup>w</sup>ə -ɸ  
 REC.ABS- 1PL.ERG- see -PST  
 ‘We saw each other.’

**ERG=REC**

(27) ERG-ABS verb with applied object: REC agreement in IO position ⇒ ABS binds IO

- a. **ABS-** **IO-** **ERG-**  
 tə- **ze-** f- jə- š’a -ɸ  
 1PL.ABS- REC.IO- BEN- 3SG.ERG- bring -PST
- b. \* **ze-** t- f- jə- š’a -ɸ  
 REC.ABS- 1PL.IO- BEN- 3SG.ERG- bring -PST  
 ‘S/he brought us together (lit. to each other).’

**Proposal:** ABS raises to Spec,TP c-commanding ERG and IO.



\*\*Other evidence for high ABS: conditions on parasitic gap licensing (Ershova 2019a).

## 4.2 Multiple ergative case

**Main claim:** West Circassian presents a case of multiple downward ERG after movement of ABS.

Verbal arguments are assigned one of **two core cases**:

- **-r** (absolutive) = subject of intransitive verb (29a) and theme of transitive verb (29b)
- **-m** (oblique) = agent of transitive verb (29b) and applied objects (29c)

- (29) a. mə pšaše-**r** dax-ew Ø-qa-š<sup>w</sup>e  
 this girl-ABS beautiful-ADV 3ABS-DIR-dance  
 ‘This girl(S) dances well.’
- b. sabəjxe-**m** haxe-**r** Ø-q-a-λeɸ<sup>w</sup>ə-ɸ  
 child.PL-OBL(=ERG) dog.PL-ABS 3ABS-DIR-3PL.ERG-see-PST  
 ‘The children(A) saw the dogs(O).’
- c. žeg<sup>w</sup>ə-**m** sə-qə-Ø-š’ə-š<sup>w</sup>a-ɸ-ep  
 wedding-OBL(=IO) 1SG.ABS-DIR-3SG.IO-LOC-dance-PST-NEG  
 ‘I didn’t dance at the wedding.’

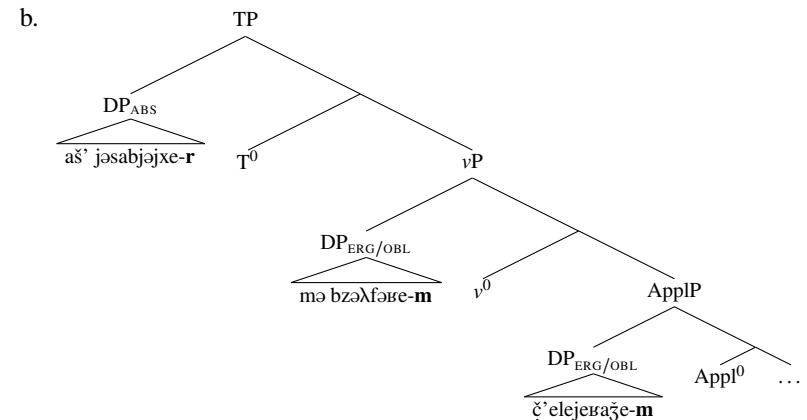
If a clause contains both an applied object and an ergative agent, both are assigned oblique case:

- (30) hač’e-**m** č’ale-**m** š’ə-**r**  
 guest-OBL(=ERG) boy-OBL(=IO) horse-ABS  
 Ø-Ø-r-jə-tə-ɸ  
 3ABS-3SG.IO-DAT-3SG.ERG-give-PST  
 ‘The guest gave the horse to the boy.’ (Arkadiev et al. 2009, 54)

Since ABS moves to Spec,TP, this case system is readily modeled via the downward dependent case rule in (18) after movement of ABS to Spec,TP.

(31) ERG-ABS verb with applied object:

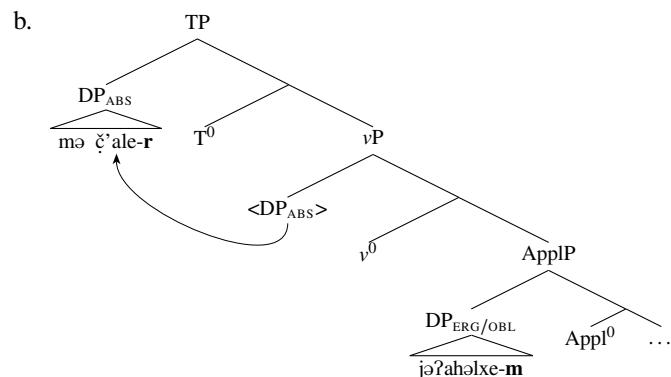
- a. [<sub>ABS</sub> aš’ jəsabjəjxe-**r**] [<sub>ERG</sub> mə bzəλfəɸe-**m**]  
 that.OBL 3SG.POSS.child.PL-ABS this woman-OBL(=ERG)  
 Ø-Ø-f-j-e-š’e-ž’ə [<sub>IO</sub> č’elejeɸaže-**m**]  
 3ABS-3SG.IO-BEN-3SG.ERG-PRS-bring-RE teacher-OBL(=IO)  
 ‘This woman brings his/her children to the teacher.’



The same rule can equally account for case marking of subject and applied object of unergative verbs:

(32) Unergative verb with applied object:

- a. [ABS mə ɕ'ale-r] bere [IO jəʔahəlxə-m] telefonç'e  
 this boy-ABS much 3SG.POSS.relative.PL-OBL telephone.INS  
 Ø-a-fe-tje-we  
 3ABS-3PL.IO-BEN-LOC-hit  
 'This boy calls (lit. rings for) his relatives on the telephone a lot.'



**Summary:** If ergative case is assigned down in syntactically ergative languages, multiple downward ergative is predicted. This is confirmed by West Circassian.

## 5 Conclusion

- In syntactically ergative languages ERG is assigned *downwards* after movement of the absolutive to a higher position.
- This correctly predicts
  - (i) the lack of double absolutive constructions – absolutive is assigned to the single DP that is not c-commanded.
  - (ii) the possibility of double ergative constructions – multiple DPs may be assigned downward dependent case within a given case domain.

Cf. morphologically ergative languages like Shipibo (Baker 2015).

- Whether or not a language allows multiple ergatives is determined by the case domain: vP-external phase in Inuit and CP in West Circassian.

## Implications

- **Dependent case theory:** This paper expands the typology of dependent case by filling in a logical lacuna – given the inventory of dependent case, this is a predicted pattern for high ABS languages.
- **Case typology:** There is no one-to-one mapping between traditional case labels and the syntactic conditions on case assignment. In syntactically ergative languages, ERG=ACC.

- **Syntactic ergativity:**

Larsen and Norman (1979); Dixon (1994); Deal (2016); Polinsky (2017): syntactic ergativity effects are only observed in *morphologically ergative* languages.

New perspective: syntactically ergative languages *need not* be morphologically ergative in a theoretically meaningful way.

Ergative case is *parasitic* on absolutive movement – a potential path for explaining the typological correlation.

⇒ Challenge to case-based approaches to syntactic ergativity (Coon et al. 2014; Polinsky 2016; Deal 2017).

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## A A third case study: Yimas

Yimas (Lower-Sepik language of Papua New Guinea) has three agreement paradigms, analyzed by Yuan (to appear) as **doubled pronominal clitics**. Data from Foley (1991).

(33)

|            | ABS    | ERG    | DAT     |
|------------|--------|--------|---------|
| <b>1sg</b> | ama-   | ka-    | ŋa-     |
| <b>1dl</b> | kapa-  | ŋkra-  | ŋkra-   |
| <b>1pl</b> | ipa-   | kay-   | kra-    |
| <b>2sg</b> | ma-    | n-     | nan-    |
| <b>2dl</b> | kapwa- | ŋkran- | ŋkul-   |
| <b>2pl</b> | ipwa-  | nan-   | kul-    |
| <b>3sg</b> | na-    | n-     | -(n)akn |
| <b>3dl</b> | impa-  | mpi-   | -mpn    |
| <b>3pl</b> | pu-    | mpu-   | -mpun   |

Crucially, the distributions of the clitic paradigms mirror those of **dependent ERG (and DAT) case**.

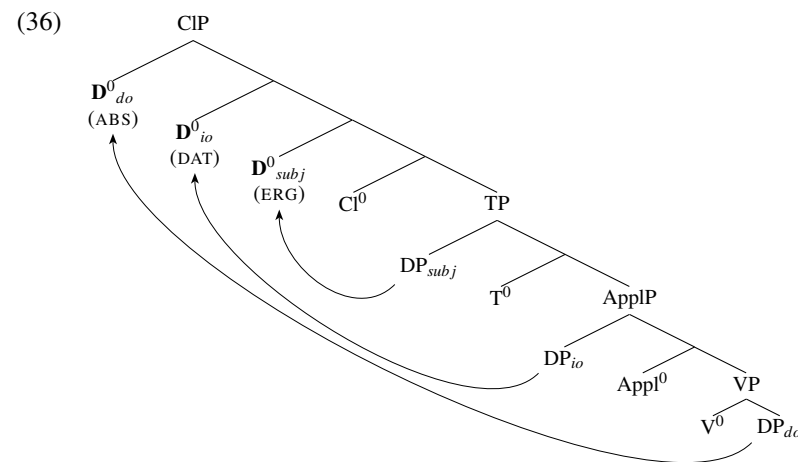
- Evidence from **optional clitic doubling**:

- (34) a. [impram pay- cu- mpwi] **pia-** **n-** kacapal  
 [basket.VII.SG carry- NFN- COMP] COMP.ABS- 3S.ERG- forget  
 ‘He forgot to carry the basket’
- b. [impram pay- cu- mpwi] **na-** kacapal  
 [basket.VII.SG carry- NFN- COMP] 3S.ABS- forget  
 ‘He forgot to carry the basket’

**Yimas is syntactically ergative:** Based on relativization restrictions targeting ABS subjects and ABS objects (Phillips 1993, 1995)—but also as revealed by **clitic displacement effects** (Harbour 2008; Yuan to appear).

- ERG-DAT-ABS clitic displacement ordering in certain constructions reveals base ABS > ERG > DAT clitic structure.

- (35) ta- **kay-** ckam- r- **ŋkan-** **mpan-** ŋ  
 NEG- 1P.ERG- show- PERF- PC(ERG)- 3P.DAT- VI.SG(ABS)  
 ‘We few didn’t show them it (the coconut).’



If dependent ERG and DAT in Yimas is calculated within the clitic cluster (Yuan to appear), then it **necessarily follows clitic doubling (i.e. movement)**.