Towards a uniformly structural account of ergative case

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1 Introduction

Canonical ergative alignment:

- **Intransitive subject** and **transitive object** marked alike (*absolutive*).
- **Transitive subject** marked differently (*ergative*).

Canonical ergative alignment in a case system:

(1) a. nguma yabu-nggu bura-n
    father.abs mother-erg see-nfut
    ’Mother saw father.’

b. yabu banaga-n’u
    mother.abs return-nfut
    ’Mother returned.’ (Dyirbal, Dixon 1994:161)

The major GB/P&P/MP approaches to ergative case:

- **Inherent** — ergative case is assigned to NPs alongside an agent/external-argument \( \theta \)-role.

(2) VoiceP

   NP \[ \text{[ERG,}\theta] \]
   \[ \rightarrow \]
   Voice

   - **Dependent** — ergative case is assigned to an NP which c-commands a clusemate NP.

(3)

First, I demonstrate a problem for both analyses. In Choctaw (Muskogean), we find ergative NPs which are simultaneously...

(a) internal arguments — a problem for inherent ergative;

(b) alone in their clause — a problem for dependent ergative.

(4)

How is it ERG? \( \rightarrow \) NP[ERG] V
Second, I propose that we need structural ergative case to account for the distribution of ergative in Choctaw.

- Akin to classic structural case (e.g. nominative in Chomsky 1981), structural ergative is:
  - non-θ-related
  - assigned from a functional head

Tentatively, structural ergative might supercede both inherent and dependent ergative.

Preview of proposal

- In Choctaw, Voice (Kratzer 1996) assigns ergative to all external arguments (as in the inherent ergative analysis):

\[ (5) \]

\[
\begin{array}{c}
\text{VoiceP} \\
\text{NP} \\
\vdots \\
\text{Voice} \\
[\text{ERG}] \\
\end{array}
\]

but also...

- Sometimes, Voice assigns ergative downwards to subjects of unaccusatives.

\[ (6) \]

\[
\begin{array}{c}
\text{VoiceP} \\
\text{XP} \\
\text{Voice} \\
\text{NP} \\
\vdots \\
\text{[ERG]} \\
\end{array}
\]

2 Current approaches to ergative case

In this section:

§2.1 Inherent ergative (and where it undergenerates)

§2.2 Dependent ergative (and where it undergenerates)

2.1 Inherent ergative

- An observation: there is a close connection between ergative case and the agent/external-argument θ-role.

- Inherent ergative: ergative is assigned in tandem with the E.A. θ-role.

they receive ergative case in a Spec-head configuration. The two approaches are equivalent, and in the absence of overt evidence for the movement operation I adopt the movement-free analysis here.
Inherent ergative faces an **under-generation problem**: some internal arguments do get marked as ergative.

- This often occurs in the presence of a *second* internal argument.

   fruit.ABS-EVID ripen-PERF
   ‘The fruit ripened.’

b. Bimi-n-ra Rosa joshin-xon-ke.
   fruit-ERG-EVID Rosa ripen-APPL-PERF
   The fruit ripened for Rosa.’

(9) a. Jiisusi tuqu-lauq-tuq
    Jesus.ABS die-PST-3sgS
    ‘Jesus died.’

b. Jiisusi-up tuqu-jjutigi-lauq-taatigut
    Jesus-ERG die-APPL-TR-PST-3sgS/1PLO
    ‘Jesus died for us.’

→ This pattern provides support for an alternative theory of ergative case...

### 2.2 Dependent ergative

- An observation: ergative case shows up in the presence of a *second, lower* NP.

- **Dependent** ergative: ergative is assigned to the higher of two clausemate NPs in an asymmetric c-command relation:

(10) NP[ERG]

→ Patterns like (8) and (9) now accounted for: the ergative NP need not be an external argument. It just needs to be the higher of two arguments.

Dependent ergative also faces an **under-generation problem**: some intransitive subjects do get marked as ergative.

(11) Klara-k ondo eskia-tzen du.
    Klara-ERG well ski-IMPF AUX
    ‘Klara skis well.’

→ *N.B.* examples like (11) — where an unergative subject receives ergative case — suggest an **inherent** analysis!

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4. Note that the argument which becomes ergative in (8) and (9) is the theme argument and not the applied beneficiary argument. Given that applied arguments are generally taken to be merged above themes, Baker (2014, 2015) has the theme raise over the applied argument prior to the computation of dependent case. See Deal (to appear) for discussion of this issue.

5. Halle and Marantz (1993), Laka (1993), Bobaljik (1993) and Baker and Bobaljik (2017) propose that there are no true ergative subjects of intransitives, and that apparent counterexamples are are 'concealed' transitives. See Preminger (2012) for counterarguments.
Theories of ergative (and where they under-generate)

- **Inherent** ergative — tied to E.A. 0-role.
  - Problem: unaccusative subjects marked as ergative \[8,9\].

- **Dependent** ergative — tied to presence of lower clausemate NP.
  - Problem: subjects of intransitives marked as ergative \[11\].

*N.B.* Both theories also *over*-generate in different ways (see Appendix A), but these issues can be easily argued away with language-specific conditions suppressing case-assignment.

- Today, I argue that this structure is found in Choctaw:

\[
\begin{array}{c}
\text{(12) VoiceP} \\
\text{XP} \quad \text{Voice} \\
\text{NP[ERG]} \ldots
\end{array}
\]

- It has both under-generation problems: there is an ergative-marked *intransitive unaccusative subject*.

How do we account for it?


- Structural ergative is...
  - **non-0-related**
    → avoiding the under-generation problem of inherent ergative theory.

Aside: morphological and syntactic ergativity

- Ergative alignment in case/agreement may be accompanied by some degree of *syntactic ergativity*, in domains such as A’-extraction, control, conjunction reduction, binding and reflexivization. See Deal (2016) and Polinsky (2017) for recent overviews.

- Here, I focus narrowly on ergativity in case/agreement.
3 Background on Choctaw

In this section: what you need to know about Choctaw to follow the argumentation in subsequent sections.

§3.1 General background

• Choctaw is a Western Muskogean language, spoken in Mississippi (all ages) and Oklahoma (mainly elderly people).

• Data comes largely from:
  – fieldwork conducted in several Mississippi Choctaw communities, 2017-2019.

• Important orthographical note! Underlined vowels (ã ñ ò) are nasalized (/ã ñ ò/).

§3.2 Choctaw syntax

• Rigidly head-final, mirror-principle respecting.

• NOM/ACC case-marking:

(14) Alikchi-yat alla-m-a masaali-ch-aachi-h.
     doctor-NOM child-DEM-ACC heal-CAUS-FUT-TNS

‘The doctor will heal that kid.’

• Pervasive argument drop:

(15) pro pro pro Im-aa-tok.
     DAT-give-pst

‘She gave it to him.’

• An active agreement system, dissociated from NOM/ACC case-marking.

→ Active alignment is where an NP’s marking is determined (in part) by its thematic role:

(16) a. Chishnaak-oosh ish-taloowa-h.
     you.foc-nom 2sg.erg-sing-TNS

‘YOU sang.’ (erg agent)

b. Chishnaak-oosh chi-ttola-h.
     you.foc-nom 2sg.abs-fall-TNS

‘YOU fell.’ (abs theme)

c. Chishnaak-õ chi-shooli-li-h.
     you.foc-acc 2sg.abs-hug-1sg.erg-TNS

‘I hugged YOU.’ (erg agent, abs theme)

• What I refer to as ‘ergative’ NPs are those which control erg agreement, as in (16a) and (16c).

6. The examples in (16) show that Choctaw’s agreement system can’t be captured by a straightforward Bobaljik (2008)-style agreement hierarchy: agreement makes distinctions that are neutralized in the (nominal) case system.
3.3 The syntax of active alignment

Assumption: Choctaw ergative NPs (those which control \textsc{erg} agreement), have an \textsc{[erg]} case feature, assigned by Voice (Tyler in press)\footnote{For in-depth discussion of the syntax of active alignment, see J. Baker (2018).}

(17) \textbf{Unergative} (16a):

\begin{center}
\begin{tikzpicture}
  \node [label=above:VoiceP] (VP) at (0,0) {VoiceP};
  \node [label=above:NP] (NP) at (1.5,0) {NP};
  \node [label=above:V] (V) at (3,0) {V};
  \node [label=above:Voice] (Voice) at (4.5,0) {Voice};
  \draw [->] (VP) -- (NP);
  \draw [->] (NP) -- (V);
  \draw [->] (V) -- (Voice);
\end{tikzpicture}
\end{center}

(18) \textbf{Unaccusative} (16b):

\begin{center}
\begin{tikzpicture}
  \node [label=above:VoiceP] (VP) at (0,0) {VoiceP};
  \node [label=above:NP] (NP) at (1.5,0) {NP};
  \node [label=above:VP] (VP) at (3,0) {VP};
  \draw [->] (VP) -- (NP);
  \draw [->] (NP) -- (VP);
\end{tikzpicture}
\end{center}

(19) \textbf{Transitive} (16c):

\begin{center}
\begin{tikzpicture}
  \node [label=above:VoiceP] (VP) at (0,0) {VoiceP};
  \node [label=above:NP] (NP) at (1.5,0) {NP};
  \node [label=above:VP] (VP) at (3,0) {VP};
  \draw [->] (VP) -- (NP);
  \draw [->] (NP) -- (VP);
\end{tikzpicture}
\end{center}

→ So far, this is a very ‘pure’ expression of an \textit{inherent ergative} system (i.e. with no transitivity restriction).

- \textit{N.B.} I assume absolutive arguments are syntactically caseless (cf. Tyler \textit{in press} see also Arregi and Nevins 2012 on Basque absolutive, Kornfilt and Preminger 2015 on Turkish nominative).

But, up next: evidence for \textbf{unaccusative subjects} with \textbf{ergative case}.

(20) \begin{center}
\begin{tikzpicture}
  \node [label=above:VoiceP] (VP) at (0,0) {VoiceP};
  \node [label=above:NP] (NP) at (1.5,0) {NP};
  \node [label=above:XP] (XP) at (3,0) {XP};
  \draw [->] (VP) -- (NP);
  \draw [->] (NP) -- (VP);
  \draw [->] (VP) -- (XP);
\end{tikzpicture}
\end{center}

→ This cannot be captured with inherent ergative (nor dependent ergative).

→ So far, this is a very ‘pure’ expression of an \textit{inherent ergative} system (i.e. with no transitivity restriction).

4 How to identify unaccusative verbs in Choctaw

§4 How to identify unaccusative verbs in Choctaw

→ Diagnostics for internal argumenthood are established.

§5 Ergative-marked internal arguments

→ The diagnostics are applied, and some \textbf{ergative intransitive subjects} are found to be underlyingly \textbf{internal} arguments.

Aside: two case systems!?


- A solution: NPs can bear multiple case features/values (Béjar and Massam 1999, Yoon 2004, Pesetsky 2013, Levin 2017), including e.g. \textsc{[erg.nom]}.

### 4.1 Agreement: an imperfect diagnostic of internal vs. external status

### 4.2-5 Four other properties correlating with internal vs. external status

- Auxiliary selection
- Plural allomorphy
- Compatibility with dative subjects
- Surviving the causative alternation
4.1 Agreement

We saw that intransitive subjects may control **erg** or **abs** agreement ((16)). There are also subjects that control **dat** agreement:

(21) Chishnaak-oosh chi-takoobi-h.
    you.foc-nom 2sg.dat-lazy-tns
    ‘You’re the one who’s lazy.’


- Agent/external-argument ↔ **erg**:

(22) Ii-taloow-aachi-h.
    1pl.erg-sing-fut-tns
    ‘We will sing.’

- Theme/internal-argument ↔ **abs/dat**:

(23) a. Hapi-ll-aachi-h.
    1pl.abs-die-fut-tns
    ‘We will die.’

b. Hapi-takoobi-h.
    1pl.dat-lazy-tns
    ‘We are lazy.’

- The ‘classic’ approach: agreement diagnoses internal vs. external argumenthood (Davies 1981, 1986).

However, Munro and Gordon (1982) point out that there’s too much arbitrariness for this to be the whole story. E.g.:

(24) a. Katii-fokaali-h-0 tamaaha okla
    int-approximately-tns-ds town pl
    ii-may-aachi-h.
    1pl.erg-be.plng-fut-tns
    ‘How long will we be in town?’

b. [Sa-ttiyaapishi ii-toklo-k-at] chokfi awatta-t
    1sg.abs-sibling 1pl.erg-be.two-comp-nom rabbit hunt-ptcp
    il-iya-tok.
    1pl.erg-go-pst
    ‘My brother and I went hunting rabbits.’

- The bolded arguments do not appear to be external arguments.

- We will investigate this intuition more rigorously, having established four further properties that diagnose unaccusativity/unergativity.

4.2 Auxiliary selection

Unaccusative verbs select a different completive auxiliary from unergative/transitive verbs (Broadwell 1988, 2006):

- Unergative and transitive verbs use **tahli**:

(25) a. Suzie-at taloowa-t tahli-h.
    Suzie-nom sing-ptcp finish.act-tns
    ‘Suzie’s finished singing.’

b. [Nana-m-a ikbi-t tahli-hm-a]
    thing-dem-acc make-ptcp finish.when-ds
    oppani-mqma-tok.
    break.act-again-pst
    ‘When I had fixed that thing, they broke it again.’
• Unaccusative verbs use taha:

(26) Achi-yat shila-t taha-h.
blanket-NOM dry-PTCP finish.NACT-TNS
‘The blanket has dried.’


Unaccusative vs. unergative differences so far:

(27) verb type Agreement Aux selection
unaccusative ABS ABS
unergative ERG ERG

4.3 Plural allomorphy

Only internal arguments can condition plural allomorphy/suppletion.

• Plural allomorphy conditioned by transitive objects:

(28) bakaffi ‘to split up [sg. object]’
bakah(li)ch ‘to split up [pl. object]’ [Broadwell 2006:135]

• Plural allomorphy conditioned by unaccusative subjects:

(29) bakaafa ‘to be split up [sg.]’
bakahli ‘to be split up [pl.]’ [Broadwell 2006:135]

• I believe unergative subjects never condition plural allomorphy (cf. [Broadwell 1988]).

→ Cross-linguistically, generally only internal arguments can condition plural allomorphy (see [Durie 1987], [Harley 2014], [Bobaljik 2015], [Bobaljik and Harley 2017] pace [Toosarvandani 2016]).

• Diagnostic: if the subject of an intransitive verb conditions plural allomorphy, the verb is unaccusative.

Unaccusative vs. unergative differences so far:

(30) verb type Agreement Aux selection Pl Allomorphy
unaccusative ABS ABS Y
unergative ERG ERG N

4.4 Compatibility with dative subjects

Only unaccusative verbs are compatible with having applied dative subjects added (cf. [Davies 1986], [Munro 1999], [Broadwell 2006], [Tyler 2018b] in press).

• Dative subjects have a limited range of interpretations: indirect causer [31], affected experiencer [32], external possessor (e.g. [43]), predicative possessor (e.g. [47]).

(31) a. Abooshi móma-k-at kashoofa-t táaha yaa-tok.
room all-comp-NOM clean.NACT-PTCP finish.NACT.LG be-PST
‘All the rooms had been cleaned.’ (unacc.)

b. Miko-yat abooshi móma-k-a i-kashoofa-t
chief-NOM room all-comp-ACC DAT-clean.NACT-PTCP
táaha yaa-tok.
finish.NACT.LG be-PST
‘The chief had all of the rooms cleaned.’ (unacc. with DAT subject)
(32) a. Chi-holisso-at ittola-tok
   2SG.DAT-book NOM fall-PST
   'Your book fell down.' (unacc.)
   ↓

b. pro1SG Chi-holisso am-ittola-tok
   2SG.DAT-book 1SG.DAT-fall-PST
   'I dropped your book.' (unacc. with DAT subject)

- Unergative verbs cannot have applied DAT subjects:

(33) a. *Hoshi a-taloowa-tok.
   bird 1SG.DAT-sing-PST
   ('My bird sang.' /'I had the bird sing.')

b. #Alíkchi-yat ofi i-wohwa-tok.
   doctor NOM dog DAT-bark-PST
   ('The doctor's dog barked.' /'The doctor had the dog bark.')
   actual meaning: 'The doctor barked for the dog.' (!!)

- Diagnostic: if the verb admits an applied dative subject, the verb is unaccusative.

Unaccusative vs. unergative properties so far:

(34) | verb type | Agr | Aux | Pl | All | DAT subject |
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4.5 Participation in the causative alternation

Choctaw has a (partly lexicalized) causative alternation — the active, transitive alternant is marked by -li or -chi.

(35) a. fakoh-li-h she peeled it off
    fakooh-a-h it peeled off
b. koo-li-h she smashed it
    koow-a-h it smashed
c. haksi-h he is confused/drunken
    haksi-chi-h she tricked him
d. shila-h it dried
    shilaa-chi-h she dried it

- Diagnostic: if the verb has a transitive alternant, the verb is unaccusative.

Summary of the behaviors of unaccusative verbs

Unaccusative subjects arguments generally control ABS or DAT agreement. In addition, they...

- condition taha-class auxiliaries (§4.2).
- may condition plural allomorphy (§4.3).
- admit applied dative subjects (§4.4).
- may have active transitive alternants (§4.5).

(36) | verb type | Agr | Aux | Pl | All | DAT subj | Trans Alternant |
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</table>

11. In addition to forming lexical causatives for some verbs, -chi also forms syntactic causatives from all verbs (Broadwell 2006). In this way it is like Japanese -sae—see Tyler (2018a) for morphosyntactic decompositions of Choctaw lexical and syntactic causatives.
• Up next: we use these properties as diagnostics.
• We apply them to some ‘suspicious’ ergative intransitive subjects (e.g. (24)).
  → I show that some ERG subjects are internal arguments.

(37) VoiceP
     XP Voice
     NP[ERG] ...

→ Recall that ergative-marked unaccusative subjects are problematic both for inherent and dependent accounts of ergative!

5 Ergative-marked unaccusative subjects

Three classes of intransitive verb whose ERG subject patterns otherwise like an internal argument:

§5.1 Motion verbs

§5.2 Positional verbs

§5.3 Quantifier verbs

Analysis: some internal arguments are exceptionally assigned ergative:

(38) regular unacc.

(39) unacc. with [ERG]

5.1 Motion verbs

The subjects of motion verbs control ERG agreement (ish- = 2SG.ERG):

(40) a. ish-baliilih 'you run'
b. ish-okshinillih 'you swim'c. ish-lah 'you arrive'd. ish-chokkowah 'you enter'

But they pattern like unaccusatives in...

• Auxiliary selection: they may select for unaccusative auxiliary taha [Broadwell1988 Broadwell and Martin1993]:
  (41) a. Baliili-t taha-h. run-PTCP finish.NACT-TNS
       'He’s finished running.'
b. Okl=aayala-t taha-h. PL=arrive.PL-PTCP finish.NACT-TNS
       'Everybody has arrived.'

• Plural allomorphy (and suppletion):

(42) a. iyah 'she goes'
    ittiyaachih 'they two go'
    ilhkoolih 'they go'
b. alah 'she arrives'
    ittalaachih 'they two arrive'
    aayalah 'they arrive'

12. Speakers also allow the unergative-class auxiliary tahli, shown below, but allowing taha makes them exceptional among verbs with erg subjects

(i) Ii-baliili-t tahli-h.
   PFL.ERG-run-PTCP finish.ACT-TNS
   'We finished running.'
Compatibility with dative subjects, for some speakers 13

(43) a. Pam-at katos-at i-balili-h. Pam-NOM cat-NOM DAT-run-TNS 'Pam’s cat is running.' (Broadwell 2006:307)

b. Jan-at ofi-at i-yopi Jan-NOM dog-NOM DAT-swim 'Pam’s dog is swimming.' (Chickasaw, Carden et al. 1986)

Updated table:

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5.2 Positional verbs

The subjects of positional verbs control ERG agreement:

(45) a. li-binohmáya-h.  
1PL.ERG-sit.PLNG-TNS  
'Vere sitting.'

b. Ish-hikiya-h.  
2SG.ERG-stand.NG-TNS  
'You’re standing.'

But they pattern like unaccusatives in...

• Plural allomorphy (and suppletion) 15

(46) a. biniili-h  
chiiya-h  
binohli-h/binohmáya-h  
'she sits'  
'they two sit'  
'they sit'

b. takaali-h  
takooha-h  
takohli-h/takohmáya-h  
'it hangs'  
'they two hang'  
'they hang'

• Compatibility with dative subjects:

(47) a. Alikchi-yat ofi i-kahmáya-h.  
doctor-NOM dog DAT-lie.PLNG-TNS  
'The doctor has dogs.'

b. [pro.sg] Car palhki-t a-hikiya-h-aatok-oosh  
car fast-NOM 1SG.DAT-stand.NG-TNS-because-ss  
nokoowa-chi-tok.  
angry-CAUS-PST  
'I had a fast car, which made people mad.'

13. The speakers I consulted generally did not allow applied dative subjects with motion verbs—this is likely a generational difference among Choctaw speakers.

14. There is only one Chocotaw verb that clearly participates in the causative alternation: yilhiblih 'to run (them) off' / yilhiipah 'to be run off', hence the '?'.

15. Two different plural forms are shown because an aspectual distinction is made in the plural that is not made in the singular/dual: -máya verbs are in the n-grade and have an obligatory stative interpretation: -li verbs are eventive.
• They have **transitive alternants**

(48) a. binii-li-h  ‘it is sitting’
    binii-chi-h  ‘she sat it down’

b. takaa-li-h  ‘it is hanging up’
    takaa-chi-h  ‘she hung it up’

c. hiki-ya-h  ‘it is standing’
    hilii-chi-h  ‘she stood it up’

Updated table:

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5.3 **Quantifier verbs**

The subjects of quantifier verbs control ERG agreement (ii- = 1PL.ERG):

(50) a. ii-lawah  ‘there’s a lot of us’
    b. ii-tóchchinah  ‘there’s three of us’

But, again, they pattern like unaccusatives in...

• **Auxiliary selection**: they select for unaccusative-class auxiliary *taha*:

(51) Okla ii-lawaw-t  *taha*-h.
    PL 1PL.ERG-be.many-PTCP finish.NACT-TNS
    ‘There are (already) a lot of us.’

---

16. Evidence that the pairs in (48) are lexical rather than syntactic causatives comes from (a) that they encode direct rather than indirect causation, (b) that they show root allomorphy (e.g. (48c)), which syntactic causatives never show; and (c) that they may be causativized themselves (e.g. *takaachi-chi-h* ‘she made him hang it up’), which syntactic causatives do not allow.

17. I currently lack data on the auxiliary selection properties of positional verbs.

---

• **Compatibility with dative subjects**:

(52) a. [Hattak-m-at] na ataklāmma i-lawa-h.
    man-DEM-NOM thing bother.NMLZ DAT-be.many-TNS
    ‘That man has a lot of troubles.’

b. [prosg] Alla a-tóchchina-h.
    child 1SG.DAT-be.three-TNS
    ‘I have three kids.’

• They have **transitive alternants**:

(53) a. moma-h  ‘they are all’
    momi-chi-h  ‘she did it to all them’

b. lawa-h  ‘they are many’
    lawaa-chi-h  ‘she did it to many of them’

c. toklo-h  ‘they are two’
    tokli-chi-h  ‘she did it to two of them’

---

**Aside: the syntax of causative quantifier verbs**

They are generally adjoined to the main clause and quantify over the main clause object.

(54) a. Alikhi-yat alla momichi-t masaali-chi-tok.
    doctor-NOM child all.CAUS.NG-PTCP heal.CAUS-TNS
    ‘The doctor cured all the kids.’

b. Ofi aa-toklích-t ii-lhiyohli-tok.
    dog LOC-two.CAUS.NG-PTCP 1PL.ERG-chase-PST
    ‘We chased the two dogs.’

• See [Broadwell (2006) ch.14] and [Munro (2017)] for discussion.
5.4 Interim summary

Some ergative-marked intransitive subjects — motion, positional and quantifier verbs — pattern like unaccusative subjects:

(55)

<table>
<thead>
<tr>
<th>verb type</th>
<th>Agr</th>
<th>Aux</th>
<th>Pl</th>
<th>All</th>
<th>DAT subj</th>
<th>Trans</th>
<th>Alt</th>
</tr>
</thead>
<tbody>
<tr>
<td>unaccusative</td>
<td>ABS</td>
<td>ABS</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>quantifier</td>
<td>ERG</td>
<td>ABS</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>positional</td>
<td>ERG</td>
<td>ERG</td>
<td>Y</td>
<td>%</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>motion</td>
<td>ERG</td>
<td>ERG</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unergative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Analysis:

- Motion, positional and quantifier verbs are unaccusative verbs with ergative subjects.
- Proposal: ergative case is exceptionally assigned downwards with some unaccusative verbs:

(56)

\[ \text{VoiceP} \]

\[ \text{VP} \quad \text{Voice}^0 \]

\[ \text{NP} \quad \text{V} \]

\[ [\text{ERG}] \]

\\( \rightarrow \) See [Deal (2010) to appear], [Rezac et al. (2014)], [Bjorkman (2018)] and [Tyler (in press)] for some slightly different implementations of structural ergative.

18. No quantifier verbs participate in plural allomorphy. This is likely a result of their function, as quantifiers — plural entities often associate with a different set of quantifiers from singular entities.

Implications for a theory of ergative case

- An argument may receive ergative case even though...
  (a) it is \textit{not} associated with an external-argument \(\theta\)-role;
  (b) it is the only NP in its clause.
- This flummoxes both \textit{inherent} and \textit{dependent} theories of ergative case, but it’s fine under the structural account!
  \( \rightarrow \) Structural ergative is \textit{necessary}

Up next — more support for the structural ergative analysis:

\( \S 6 \) Evidence for \textit{downward ergative assignment}

\( \rightarrow \) And — some especially problematic facts for the dependent account of ergative.

\( \S 7 \) On the apparent evidence for dependent ergative.

6 Evidence for downward ergative assignment: dative intervention

Ergative case-assignment is subject to \textit{dative intervention}.

(57)

\[ \text{VoiceP} \]

\[ \text{VP} \quad \text{Voice} \]

\[ \text{NP} \quad \text{V} \]

\[ [\text{ERG}] \]

(58)

\[ \text{VoiceP} \]

\[ \text{ApplP} \quad \text{Voice} \]

\[ \text{NP[DAT]} \quad \text{V} \]

\[ [\text{ERG}] \]

\( \times \)
We get a dative-intervention configuration by adding an **applied DAT subject**:

(59) a. Alla-yat okla máyā-(móma)-h.
    child-NOM PL be.PL,NG-(still)-TNS 'The kids are (still) here.' (unacc.)

    ↓

    b. \( \text{pro}_{\text{SG}} \) Alla okla \( \text{chi} \)-máyā-h-\( \text{q} \)?
    child PL 2SG.DAT-be.PL,NG-TNS-Q 'Do you have kids?' (unacc. with DAT subject)

• But wait! **ERG** and **ABS** agreement are not distinguished in the 3rd-person! (cf. (59)). So how do we know the theme argument (alla 'kids') is 'truly' **ABS**?

→ Answer: **PCC effects**.

### 6.1 Diagnosing **ABS**-hood with the PCC

**Basic PCC generalizations:**

- There are no restrictions on **ERG+ABS/DAT** clusters. E.g.

  (60) \( \text{i}-\text{chi}-\text{aapil-aachít} \text{-h}. \)
  1PL.ERG-2SG.ABS-help-FUT-TNS 'We will help you.'

- There are restrictions on **ABS+DAT** clusters (Tyler in press). E.g. [19]

  (61) \*\( \text{Chi}-\text{pi}-\text{nokshoopa} \text{-h}. \)
  2SG.DAT-1PL.ABS-scare.NACT-TNS ('We are afraid of you.')</p

So we have a test for sentences like (59b):

- If the theme is **ERG**:
  - A 1st/2nd theme would **control ERG agreement**; no PCC restrictions.

- If the theme is **ABS**:
  - A 1st/2nd theme would be **un-utterable** thanks to **ABS+DAT** PCC.

**Results:**

- 1st/2nd-person themes **cannot** control **ERG** agreement:

  (62) \*\( \text{Ish}-\text{im} \text{-átt} \text{-a} \text{-h}. \)
  2SG.ERG-DAT-be.NG-TNS ('He has you.')

- 1st/2nd-person themes are in fact **un-utterable** in this construction—i.e. PCC restrictions obtain [20]

  (63) \*\( \text{I}-\text{chi}-\text{átt} \text{-a} \text{-h}. \)
  DAT-2SG.ABS-be.NG-TNS ('He has you.')</p

→ Conclusion: the theme argument is **not** assigned ergative in the presence of the dative argument.

\[ \text{VoiceP} \]

\[ \text{ApplP} \]

\[ \text{NP[DAT]} \]

\[ \text{VP} \]

\[ \text{Appl} \]

\[ \text{V} \]

\[ \text{[ERG]} \]

\[ \text{[ARG]} \]

20. These kinds of sentence are not ruled out on semantic grounds; speakers just use a verb with a different case array, e.g. jshí 'have', with an **ERG** subject and **ABS** object.
6.2 Analysis

- Dative intervention is well-attested in agreement and movement (e.g. Chomsky 2001, Holmberg and Hróarsdóttir 2003, Hiraiwa 2005, Preminger 2009 a.m.o.).

- The dative intervention pattern is also attested in nominal case-marking in Basque (Arregi 2018):

(65) a. Olatzek pozik dirudi. Olatz.\textsc{erg} happy seems 'Olatz seems happy.' (Basque, Arregi 2018:11)

b. Miren\textsc{.dat} Olatz\textsc{.abs} pozik iruditzen zaio. Miren DAT Olatz ABS happy seem.impf aux 'Olatz seems happy to Miren.' (Basque, Arregi 2018:11)

→ Regardless of the implementation, it is clear that the relation between the erg-assigner and the erg-bearer is subject to dative intervention.

  - This is only possible on a structural analysis of ergative.

A broader question:

- If structural ergative is necessary, where does this leave inherent and dependent ergative?
  - \textit{Up next}: on dependent ergative.
  - In the conclusion: some thoughts on inherent ergative.

---

### An equivalent alternative: raising-to-ergative

Instead of having ergative exceptionally assigned downwards, some internal arguments could exceptionally raise to Spec-VoiceP, where ergative is obligatorily assigned (see Tyler in press on Choctaw; Arregi and Nevins 2012 and Arregi 2018 on Basque; see also Deal to appear on Nez Perce):

(66)

\[
\begin{align*}
\text{VoiceP} & \quad \text{DP} \\
\text{XP} & \quad \text{Voice}^0 \quad \boxed{\text{[ERG]}} \\
\end{align*}
\]

- Gain: ergative is only ever assigned in a Spec-Head configuration.
- Loss: Spec-VoiceP is no longer a ‘strict’ \(\theta\)-position; unmotivated movement operation.

---

7 On the apparent evidence for dependent ergative

Recall the following patterns — ergative shows up on an internal argument of a dyadic unaccusative in the presence of a second internal argument:

(67) a. Kokoti-ra joshin-ke. fruit.abs-evid ripen-perf 'The fruit ripened.'

b. Bimi-n-ra Rosa joshin-xon-ke. fruit.\textsc{erg}-evid Rosa ripen-appl-perf 'The fruit ripened for Rosa.' (Shipibo, Baker 2014:345-6)
(68) a. Jiisusi tuqu-lauq-tuq
    Jesus.ABS die-PST-3SG
    'Jesus died.'

    b. Jiisusi-up tuqu-jiutigi-lauq-taatigut
    Jesus-ERG die-APPL-TR-PST-3SG/1PLO
    'Jesus died for us.'
    (Inuktitut, Yuan 2018:106)

• This pattern is often presented as evidence for dependent ergative (Baker 2014, 2015, Baker and Bobaljik 2017, Yuan 2018).

• However, we see this same pattern for a subclass of verbs in languages with active alignment.

→ Implying that the pattern in (67-68) can have an alternative source than dependent ergative.

→ Thus weakening the evidence for dependent ergative.

7.1 Transitive psych verbs in Choctaw

• Preliminary: intransitive psych verbs pattern like unaccusatives, e.g. ABS subject agreement:

(69) a. Sa-nokshoopa-h.
    1SG.ABS-scare.NACT-TNS
    'I'm scared.'

    b. *Nokshoopa-li-h.
    scare.NACT-1SG.ERG-TNS
    ('I'm scared.')

• Structure from Tyler (in press):

(70) VoiceP
    ApplP Voice
    NP
    VP Appl
    V

• But, when there is a DAT object (with a 'stimulus'/'subject matter' role), the ABS subject is optionally 'promoted' to ergative (Tyler in press).


(71) a. Chi-¯sa-nokshoopa-h.
    2SG.DAT-1SG.ABS-scare.NACT-TNS
    'I'm scared of you.'
    (no promotion)

    b. Chi-nokshoopa-li-h.
    2SG.DAT-scare.NACT-1SG.ERG-TNS
    'I'm scared of you.'
    (promotion)

21 Rezac (2008) in fact refers to the equivalent Basque phenomenon, discussed in the next section, as 'Absolutive Displacement'.

Note also that the 'promoted' ERG subject does not receive a different 0-role: speakers report no change in interpretation, and the ABS-class auxiliary taha is still selected:

(i) Mary ish-j-nokshoopa-t taha-h.
    Mary 2SG.ERG-DAT-scare.NACT-PTCP finish.NACT-TNS
    'You're terrified of Mary.'
• Schematization:

\[(72) \]
\[
\text{VoiceP} \\
\text{ApplP} \longrightarrow \text{Voice} \\
\text{NP} \leftrightarrow \text{[ERG]} \\
\text{VP} \longrightarrow \text{Appl} \\
\text{NP}[\text{DAT}] \longrightarrow \text{V}
\]

The pattern:

\[(73) \]
\[
\text{a. } [\text{NP-Exp}]_{\text{ABS}} \text{ V}_{\text{unacc}}. \\
\text{b. } [\text{NP-Exp}]_{\text{ERG/ABS}} [\text{NP-Stim}]_{\text{DAT}} \text{ V}_{\text{unacc}}.
\]

→ Note the similarity to the dependent ergative pattern in \[(67)\] and \[(68)\].

See Appendix B for more instances of the ‘dependent-ergative-like’ pattern appearing in active languages.

\section*{8 Conclusion}

I have made the case that Choctaw has some unaccusative subjects with ergative case.

\[(74) \]
\[
\text{VoiceP} \\
\text{XP} \longrightarrow \text{Voice} \\
\text{NP}_{[\text{ERG}]} \longrightarrow \text{... V}
\]

• This was done on the basis of 4 distinct unaccusativity diagnostics.

These subjects are a problem for:

• \textbf{Inherent} accounts of ergative
  → Unaccusative subjects are not external arguments, so why should they get inherent ergative?

• \textbf{Dependent} accounts of ergative
  → Unaccusative clauses are (usually) intransitive, so why should they give rise to dependent ergative?

Analysis: Choctaw has \textbf{structural ergative case} — ergative that is:

• assigned by a functional head (Voice)
• not \(\theta\)-related

\[(75) \]
\[
\text{VoiceP} \\
\text{NP} \leftrightarrow \text{[ERG]} \\
\text{V}
\]

Further support for structural ergative comes from \textbf{dative intervention} (§6).
Finally, what to do with inherent and dependent ergative?

- Dependent-like patterns in Choctaw (and other active languages, cf. Appendix B) undercut the argument for dependent ergative case. (§7).
  - Still open: how should the dependent-like pattern be accounted for (without dependent case)?

- Regarding inherent ergative:
  - Choctaw structural ergative is, effectively, inherent ergative (e.g. (75)) plus exceptional downward assignment (e.g. (76)).
  - Languages with more clearly inherent ergative just have fewer/zero exceptional ergative assignments.

Therefore: structural ergative is the only ergative we need?

References

Appendix A: Over-generation problems with existing analyses of ergative

Inherent ergative

Over-generation problem: Some external arguments don’t get marked as ergative.

   ‘The man is cutting a tree.’

(Yidiny, [Dixon]1979:74)
b. Jinta-kari-Ø ka-rla ngirrily-ngirrily-wangka
one-other-ABS PRES-IMPF-3DAT aggressive-aggressive-speak.NPAST
jinta-kari-ki, kulu-kungarni,
one-other-DAT fight.in.preparation.for
‘One is provoking the other to fight.’ (Warlpiri, Legate 2012:187)

→ In light of these cases, some authors propose a **transitivity condition** on the assignment of ergative case (Woolford 1997, 2006, Deal 2010, Legate 2012).

- A transitivity condition can account for the absence of ergative on intransitive subjects like (77a), but not for non-ergative transitive subjects like (77b). For similar problematic cases see Preminger (2012) on Basque and Tollan (2018) on Samoan.

### Dependent ergative

**Over-generation problem:** Some transitive subjects don’t get ergative case, leading to ABS-ABS arrays.

(78) a. José-Ø ra yapa-Ø keen-ai.
José-ABS-PRT fish-ABS want-IMPF
‘José wants some fish.’ (Shipibo, Baker 2014:344)

b. Jé-Ø kámán peesá-Ø d-á-can-abaa.
I-ABS some money.X-ABS D-1SGOBJ-need-1SGSUBJ.PRES

→ Baker (2014:2015) and Baker and Bobaljik (2017) provide various technologies to account for the absence of ergative in ABS-ABS arrays like (78), including covert PPs, and relativizing case computation to phases.

### Appendix B: ‘Dependent ergative’ in active languages

#### Western Basque dialects

Person-conditioned **Absolutive Promotion** in transitive psych verbs (Rezac 2008, Arregi and Nevins 2012):

(79) a. Itxaso-ri **hura** gustatzen zaio.
Itxaso-DAT **him.abs** liking AUX.3DAT
‘Itxaso likes him.’

b. Itxaso-ri **zu-k** gustatzen diozu.
Itxaso-DAT **you-erg** liking AUX.3DAT.2ERG
‘Itxaso likes you.’ (Rezac 2008:81, reglossed)

#### Timucua (extinct isolate, Florida)

Person-conditioned ‘agreement switch’ (Broadwell 2016):

(80) a. Mare-ma **chi**-nahiabo-haue-ti-la.
never-ART 2SG.ABS-know-IRR-NEG-AFF
‘You will never know (it).’

b. chabeta-co ta=ni-nahiabo-bi-ch-o?
where-INDF away=1 1SG.ABS-know-PST-2SG.ERG-Q
‘Where did you know me?’ (Broadwell 2016)

#### Creek and Alabama (Muskogean)

‘Agreement shift’ when dative argument is added in comparatives (obligatory in Creek, optional in Alabama):

(81) a. ca-má:h-i:-t ô:-s
1SG.PAT-tall-DUR-T be.FGR-IND
‘I’m tall.’

b. is-cim-má:h-ay-i:-t ô:-s
INST-2.DAT-tall-1SG.AGT-DUR-T be.FGR-IND
‘I’m taller than you.’ (Creek, Martin 2011:177)

(82) a. Cha-hoopa-hchi.
1SG.ABS-be.sick-ASP
‘I’m sick.’

PER-2SG.ABS-DAT-sick.FR.GEN-1SG.ERG-ASP
‘I’m sicker than you.’ (Alabama, Hardy and Davis 1993:470, reglossed)