Investigating the macroparameters and/or microparameters of ergativity
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1.0 Introduction

Questions
• Does grammatical theory need both macro- and micro- parameters?
• How does ergativity (and its continuum) fit into a system of parameters?
• How does one go about studying microvariation?
• What can one conclude (about I-language) from the results (E-language)?

2.0 Parameters: Macro vs. Micro

(1) The necessity of studying language variation: from Kayne, 2005: pg 9
   “… study of the principles of syntax is not and cannot be a separate enterprise from
study of the parameters”

(2) Parameters as representing a cluster of properties: from Chomsky, 1981: page 6
   ‘Ideally, we hope to find that complexes of properties differentiating otherwise
   similar languages are reducible to a single parameter, fixed in one or another way.’

→ Does grammatical theory need both macro- and micro- parameters?

2.1 Overview: Acquisition vs. Language variation and change

(3) Parameters and Acquisition: Plato’s problem (from Chomsky, 1986: pg xxv)
   “How comes it that human beings, whose contacts with the world are brief and
   personal and limited, are nevertheless able to know as much as they do know?”

→ acquisition by giant steps: clusters of properties (√ macro-parameters)

(4) Parameters and Language Change:
   Need mutual intelligibility between generations (and dialects)

→ language change by baby steps (√ micro-parameters)

2.2 Micro-parameters: Kayne (e.g. 2005)
   ‘… apparently macroparameter differences might all turn out to dissolve into arrays of
   microparametric ones.’

Kanye 2005: page 10

(5) Micro-variation: from Kayne, 2005: pg 8
   ‘Microcomparative syntax … is the closest we can come to a controlled experiment in
   comparative syntax.’
2.3 Macro-parameters: Baker (e.g. 2008)

It can’t be just micro-parameters

(6) relative consistency of headedness: (from World Atlas of Language Structures)

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-O and P-NP:</td>
<td>417 lgs</td>
<td>consistently head-initial</td>
</tr>
<tr>
<td>O-V and NP-P:</td>
<td>427 lgs</td>
<td>consistently head-final</td>
</tr>
<tr>
<td>V-O and NP-P:</td>
<td>38 lgs</td>
<td>INCONSISTENT</td>
</tr>
<tr>
<td>O-V and P-NP:</td>
<td>10 lgs</td>
<td>INCONSISTENT</td>
</tr>
</tbody>
</table>

Kayne again

‘Yet it may, and very likely will, also turn out that the type of parametric explanation
put forth twenty-five years ago in the early stages of comparative syntax will have
long-term validity and long-term importance.’

Kayne, 2005: page 11

2.4 Where are parameters encoded?

(1) Like principles, in the grammar (Baker 1996, 2008)
(2) On (functional) heads: in the lexicon (Borer 1984)

‘There is an interesting view that is intermediate between (1) and (2), but has not been very
clearly distinguished from them in the literature. This is the view that languages can differ
in the properties that large classes of lexical items have…

I would not be surprised if most (all?) of the macroparameters that I envision could be cast
in this way.’

Baker 2008 fn 2, page 354

2.5 A possible model – Roberts and Holmberg (2010)

A hierarchy of parameters → from micro- to macro-

Decision tree: top = macro; bottom = micro

(7) **Question 1 (are all categories head-initial?)**

- **YES**
- **NO**

Stop: **Question 2 (are all functional categories head-initial?)**

Language Type A

- **YES**
- **NO**

Stop: **Question 3**

Language Type B

The lower in the decision tree, the more subtle/fragile, the more subject to reanalysis
3.0 Ergativity Background

→ Patients of transitives marked like single arguments of intransitive

(8) Q’anjob’al (Mayan)
   a. Max-ach y-il-a’ Coon et al. (2011:3)
      ASP-ABS2 ERG3-see-TV
      ‘S/he saw you.’
   b. Max-ach way-i Coon et al. (2011:3)
      ASP-ABS2 sleep-ITV
      ‘You slept.’

→ subtlety of the distinction

(9) Variation within the Austronesian language family (Chung 1977)
   ‘On the Gradual Nature of Syntactic Change’

   Polynesian languages

<table>
<thead>
<tr>
<th>ERGATIVE</th>
<th>NOMINATIVE/ACCUSATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tongan</td>
<td>Pukapukan</td>
</tr>
<tr>
<td>Niuean</td>
<td>Maori</td>
</tr>
<tr>
<td>Samoan</td>
<td>Hawaiian</td>
</tr>
<tr>
<td>Kapingamarangi</td>
<td>Tahitian</td>
</tr>
</tbody>
</table>

Surface similarities between ergative and nom/acc languages (from Chung 1977)

<table>
<thead>
<tr>
<th>TRANSITIVE</th>
<th>PASSIVE</th>
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</thead>
<tbody>
<tr>
<td>Nom/Acc</td>
<td>Transitive</td>
</tr>
<tr>
<td>Tns V 0-Subj i-Obj</td>
<td>Tns V-Cia e-Agt 0-Subj</td>
</tr>
<tr>
<td>Agent Patient</td>
<td>Agent Patient</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANTI-PASSIVE</th>
<th>TRANSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ergative</td>
<td>Tns V 0-Subj i-ki-Obj</td>
</tr>
<tr>
<td>Agent Patient</td>
<td>Agent Patient</td>
</tr>
</tbody>
</table>

†† †† †† ††
Nom Oblique? Oblique? Nom
vs. Abs Acc vs. P P vs. Erg vs. Abs

→ (in vP?)

… and verbal morphology (-Cia suffix → is it a mark of transitivity??)
4.0 Variation within the ergative system:

4.1 High vs. Low ABS

LOW (Abs=DEF(ault)) vs. HIGH (Abs=NOM) Abs (Aldridge 2004, Legate 2008)

(10) Basics
Low ABS = ABS comes from v (like ACC)
High ABS = ABS comes from T (like NOM)  (but still have a question of where it is)

(11) One Legate test (others are morphological patterning, caseless DPs, multiple ABS, …)

Low ABS = Doesn’t disappear in [-finite] contexts (because comes from v)
(examples in Legate from Georgian)
High ABS = Does disappear in [-finite] contexts (because dependent on T)
(examples in Legate from Warlpiri, Enga, Hindi)

(12) And (near) correlation with this variation: Coon, Mateo-Pedro, and Preminger 2011)
• If High Abs, then extraction is restricted (Erg cannot extract)
• If Low Abs, then extraction is not restricted (Erg can extract)
(outliers Yukatek, Ixil – have high Abs morphology but no extraction restriction:)

(13) a. Q’anjob’al (=HIGH-ABS)
Max-ach hin-[way-tzene-j].
ASP-ABS2 ERG1-sleep-CAUS-DTV
‘I made you sleep.’

b. Chol (=LOW-ABS)
Tyi k-[wäy-is-ä]-yety.
ASP ERG1-sleep-CAUS-DTV-ABS2
‘I made you sleep.’

Q’anjob’al
⇒ Theme (ABS) but not Agent (ERG) can extract with the transitive form of the verb

(14) a. Transitive (-Ø ABS added:ldt) Coon et al. (2011:42)
Max-Ø y-il[-a’] naq winaq ix ix
ASP-ABS3 ERG3-see-TV CL man CL woman
‘The man saw the woman.’

b. Theme Extraction Coon et al. (2011:43a)
Maktxel, max y-il[-a’] naq winaq –i
Who ASP ERG3-see-TV CL man
‘Who did the man see?’
c. **AGENT EXTRACTION**  

Coon et al. (2011:43b)

* Maktxel, max-Ø y-il[-a’] _ii ix ix

Who ASP-ABS3 ERG3-see-TV CL woman

Intended: ‘Who saw the woman?’

Compare with Chol (LOW ABS language)

(15)  

a. **TRANSITIVE**

Coon et al. (2011:52)

Tyi y-il-ä x-’ixik ji̱i wiñik.

ASP ERG3-see-DTV CL-woman DET man

‘The man saw the woman.’

b. **AGENT/ THEME EXTRACTION**

Coon et al. (2011:43a)

Maxki’m tyi y-il-ä {ti} ji̱i wiñik {ti}?

who ASP ERG3-see-TV DET man

‘Who saw the man?’ / ‘Who did the man see?’

c. **AGENT EXTRACTION**

Coon et al. (2011:43b)

Maxki’ tyi y-il-ä-yety?

Who ASP ERG3-see-TV-ABS2

‘Who saw you?’

---

**RELATIONSHIP BETWEEN LOCATION OF ABSOLUTIVE AND AF**

<table>
<thead>
<tr>
<th></th>
<th>+AF</th>
<th>-AF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH-ABS</strong></td>
<td>Q’anjob’al, Akaktek, Jakaltek, Chuj, Q’eqchi’, Uspantek, Poqomchi’, Poqomam, K’ichee’, Kaqchikel, Tz’utujil, Sakapultek, Sipakapense, Mam, Awakatek</td>
<td></td>
</tr>
<tr>
<td><strong>LOW-ABS</strong></td>
<td>Yukatek, Ixil</td>
<td>Lakandon, Mopan, Itza’, Chol, Chontal, Tseltal, Tojol’ab’al</td>
</tr>
</tbody>
</table>
4.2 Malagasy and Tagalog are High Abs?
→ they famously (Keenan 1972) have extraction restrictions

(16) a. **ACTOR TOPIC**: Agent is **SUBJECT**
   
   \[\text{Manasa ny lamba amin’ny savony} \text{ ny lehilahy}\]
   
   \[\text{PRES-AT.wash DET clothes with-DET soap DET man}\]
   
   ‘The man washes the clothes with the soap.’

b. **THEME TOPIC**: Theme is **SUBJECT**
   
   \[\text{Sasan’ny lehilahy amin’ny savony} \text{ ny lamba}\]
   
   \[\text{TT.wash-DET man with-DET soap DET clothes}\]
   
   ‘The man washes the clothes with the soap.’

c. **CIRCUMSTANTIAL TOPIC**: non-Agent/non-Theme is **SUBJECT**
   
   \[\text{Anasan’ny lehilahy ny lamba ny savony}\]
   
   \[\text{CT.wash-DET man DET clothes DET soap}\]
   
   ‘The man washes the clothes with the soap.’

(ii) **SUBJECT** is the only element that can relativize (Keenan 1972, Schachter 1976)

(17) a. **ACTOR TOPIC**: only Agent can relativize
   
   \[\text{ny lehilahy izay manasa ny lamba amin’ny savony}\]
   
   \[\text{DET man REL PRES-AT.wash DET clothes with-DET soap}\]
   
   ‘the man who washes the clothes with the soap’

b. **THEME TOPIC**: Agent may not relativize
   
   * \[\text{ny lehilahy izay sasana amin’ny savony ny lamba}\]
   
   \[\text{DET man REL TT.wash with-DET soap DET clothes}\]
   
   ‘the man who washes the clothes with the soap’

c. **CIRCUMSTANTIAL TOPIC**: Agent may not relativize
   
   * \[\text{ny lehilahy izay anasan’ny lamba ny savony}\]
   
   \[\text{DET man REL CT.wash DET clothes DET soap}\]
   
   ‘the man who washes the clothes with the soap’

Malagasy as a High Abs language

(18) a. **ACTOR TOPIC**: “ANTI-PASSIVE” (since the Agent is “ABS”)
   
   \[\text{Manasa ny lamba amin’ny savony ny lehilahy}\]
   
   \[\text{PRES-AT.wash DET clothes with-DET soap DET man}\]
   
   ‘The man washes the clothes with the soap.’

\[\text{1 Rather than translating with a passive as is sometimes done, I have indicated the sentence final element (the SUBJEC}t\text{t)} with boldface.\]
b. **THEME TOPIC:** TRANSITIVE (since the Patient is “ABS”)  
\[_[vp Sasan’ny lehilahy amin’ny savony] ny lamba\]  
\[TT.wash-DET man with-DET soap DET clothes\]  
“The man washes the **clothes** with the soap.”

### 4.3 How high is High ABS?

**Observations:**

- Abs linked to T – but what does this mean?
- But sometimes still in vP?
  - Is it subject or object (or I-subject … Borer 1986)

**Malagasy:** High [ High ABS ] = Abs outside of vP

(19) \[_[vp Sasan’ny lehilahy amin’ny savony] ny lamba\]  
\[TT.wash-DET man with-DET soap DET clothes\]  
“The man washes the **clothes** with the soap.”

→ can conjoin the vP to the exclusion of the Abs (see work by Ed Keenan)

**Q’anjob’al (and Kaqchikel):** Low [ High ABS ] = ABS within vP

(20) **TRANSITIVE** (-Ø ABS added:ldt)  
Coon et al. (2011:42)  
\[Max-Ø y-il[-a’] naq winaq ix ix\]  
\[ASP-ABS3 ERG3-see-TV CL man CL woman\]  
“The man saw the woman.”

→ cannot conjoin the vP to the exclusion of the Abs  
(p.c. re: Kaqchikel from R. Henderson)

**Sketch of an account for High High ABS:** see e.g. Pearson 2005)

- Base-generated high
- Linked to an empty category
- Role marked by the morphology on the verb

(21) a. \[V_{at} ... ec_i ... \] Agent_i  
b. \[V_{tt} ... ec_i ... \] Theme_i  
c. \[V_{ct} ... ec_i ... \] Oblique_i
(22) Pearson (2001) view of Malagasy

a. **ACTOR TOPIC**

```
Asp_e P  
DP_{nomp} Asp_e'  
Asp_e m-
```

b. **THEME TOPIC**

```
Asp_e P  
DP_{acmp} Asp_e'  
Asp_e -in
```

Where are we?

(23) **ABS**

```
LOW ABS  HIGH ABS  
Chol  
HIGH HIGH ABS  LOW HIGH ABS  
Malagasy  Q’anjob’al/Kaqchikel
```

### 4.4 Variation among Low High ABS languages (from Coon, Henderson, and Travis 2013)

- a distinction between Q’anjob’al and Kaqchikel
- Kaqchikel sometimes like Malagasy and Tagalog (High High ABS)

→ way to extract Agent: use Agent Focus construction

(24) Q’anjob’al Agent Focus Construction (from Coon et al. 2011)

```
Maktxel max-ach il-on-i  
Who  ASP-ABS2 see-AF-ITV  
‘Who saw you?’
```

“… we propose that the morpheme -on in the AF construction is a Voice head which alters the case-assignment properties of the clause. Specifically, it assigns case to the transitive object.”

N.B. So no longer comes from T (High ABS)

(25) Elements of the account

- What used to be a High Abs Patient now gets case from within vP
- Abs isn’t high
- Extraction of Agt isn’t blocked
This construction also used in –finite clauses in **Q’anjob’al** (remember, High ABS not available for embedded Patients)

(26) * Chi uj [ hin yil-a’ ] \* because no case for Patient
    ASP be.able.to ABS1 GEN3-see-TV
    Intended: ‘It is possible for her to see me.’

(27) Chi uj [ hin yil-on-i ] √ because AF assigns case to Patient
    ASP be.able.to ABS1 GEN3-see-AF-ITV
    ‘It is possible for her to see me.’

Question: How similar is Kaqchikel to Q’anjob’al?

→ Kaqchikel has extraction restrictions

(28) * Achike x-Ø-u-tz’ët ri ixoq.
    who ASP-ABS3-ERG3-see the woman
    Intended: ‘Who saw the woman?’

→ Kaqchikel uses AF to extract the ergative

(29) Achike x-Ø-tz’ët-o ri ixoq
    who ASP-ABS3-see-AF the woman
    ‘Who saw the woman?’

→ BUT Kaqchikel cannot use AF in –finite contexts

-- Can see that it is High ABS since no ABS in embedded structures

(30) * X-Ø-in-chäp [ e-w-aq’omaj-ik ]
    ASP-ABS3P-GEN1-start ABS3P-ERG1-heal-NOM
    Intended: ‘I started to heal them’

But AF does not fix this

**PROPOSAL:**

• AF in Kaqchikel is like High High ABS (i.e. Malagasy)
• AF does NOT license case on Patient (like Q’anjob’al) but allows Agent to be base-generated high (like Malagasy clitic structures)
• Therefore High High ABS not available in –finite contexts (too high)

Confirmation? Kaqchikel also uses such clitics for adjunct extraction (clitic allows adjuncts to be base-generated high)
(31) Akuchi’ x-Ø-a-lōq’ *(wi’)
   where ASP-ABS3-ERG2-buy F.AD
   ‘Where did you buy it?’

→ Some Low High Abs languages (Kaqchikel) have High High Abs constructions (AF)

5.0 The ergativity continuum

5.1 The fragile end: the anti-passive

(32) Anti-passive in Inuktitut (Johns 2006)

   “…it is properties of the antipassive construction, not the ergative construction, which
have led the change in eastern dialects and are thus the focal point of ergativity change
in Inuktitut.”

(33) Inuktitut (from Johns 2006)
   a. anguti-up nanuq kapi-jaa [Ergative construction]
      man-ERG polar.bear(ABS) stab-3s/3s
      ‘The man stabbed the polar bear.’

   b. angut pisuk-tuq [Intransitive construction]
      man(ABS) walk-3s
      ‘The man is walking.’

   c. angut nanur-mik kapi-si-juq [Antipassive construction]
      man(ABS) polar.bear-mik stab-AP-.3s
      ‘The man is stabbing the polar bear.’

(34) Variation in specificity of Patient in anti-passive
Western dialect (*Iñupiaq*) (conservative: more ‘ergative’)

   John(ABS) see-3s. Mary-MIK
   ‘John sees Mary’

Eastern dialect (*Labrador Inuttut*) (innovative: less ‘ergative’)

b. Margarita Kuinatsa-*i-juk Ritsati-*mik Labrador Inuttut
   Margarita(ABS) tickle-AP-3s Richard-MIK
   ‘Margarita is tickling Richard’

“Anti-passive” – (i.e. Agt is ABS) – in Tagalog and Malagasy

(35) Tagalog like Western dialects: cannot (generally) have specific objects
   B-um-ili ang babae ng isda.
   AT.PERF-buy NOM woman ACC fish
   ‘The woman bought a/*the fish.’

(36) Malagasy like Eastern dialects: can have specific objects
   [*vp Manasa ny lamba amin’ny savony] ny lehilahy
   PRES-AT.wash DET clothes with-DET soap DET man

N.B. Can have secondary predication in both Tagalog and Malagasy
   so not an oblique

(37) Secondary predication in Malagasy (from Paul and Travis 2005)
   a. Misotro mangatsiaka ny kafe Rasoa
      AT.drink cold DET coffee Rasoa
      ‘Raso drinks coffee cold.’

   b. Mipasoka mandro ny lamba Rasoa
      AT.iron damp DET clothes Rasoa
      ‘Rasoa irons the clothes damp.’

(38) Secondary predication in Tagalog: from Schachter (1996: 5)

   Naghain si Mary ng isda kay John na hilaw
   AT.served NOM Mary ACC fish DAT John LNK raw
   ‘Mary served fish to John raw.’

(39) Austronesian continuum of Patient in anti-passive

<table>
<thead>
<tr>
<th></th>
<th>OBLIQUE</th>
<th>INDEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSO?</td>
<td>ERGATIVE</td>
<td>Y</td>
</tr>
<tr>
<td>VSO</td>
<td>Tagalog</td>
<td>N</td>
</tr>
<tr>
<td>VOS</td>
<td>Malagasy</td>
<td>N</td>
</tr>
</tbody>
</table>
6.0 The robust end: the ergative DP
Indonesian/Javanese as SVO ergative languages

(40) Dia me-lihat perempuan itu BAHASA INDONESIA (SVO)
    he MEN-see woman that
    ‘He sees that woman.’

6.1 Ways they are like Malagasy/Tagalog type ergativity

→ High anaphors (High High Abs languages have A’ ‘subjects’)
(41) Novonoin’ny lehilahy ny tenany.
    PST.TT.kill-DET man DET self-3
    ‘The man killed himself.’

(42) Diri saya saya serahkan ke polisi
    Self 1 1SG surrender to police
    ‘I surrendered myself to the police.’

→ Ergative DP (though conditions different: only pronouns)
(43) Buku itu saya/kamu/dia baca
    book that 1SG/2/3 ∅-read
    ‘That book was read by me/you/him.’

6.2 Ways they are not like Malagasy/Tagalog type ergativity

SVO
Also has a true passive

(44) Buku itu di-baca oleh Amir
    book that PASS-read by Amir
    ‘The book was read by Amir.’

What is tied to presence of ergative DP

High anaphor
(45) Diri saya saya serahkan ke polisi
    Self 1 1SG surrender to police
    ‘I surrendered myself to the police.’
(46) [Hajain’ny vehivavy, ny tenany.
respect.GEN.DET woman DET body.3
‘The woman respects herself.’ Or ‘Herself is respected by the woman’

N.B. ungrammatical with non-ergative (i.e. passive)

(47) ?* Dirinya di-serahkan ke polisi oleh Amir
self.3 PASS-surrender to police by Amir
‘Himself was surrendered to the police by Amir.’

What is not tied to presence of ergative DP
Extraction restriction

(48) a. Inilah buku, [yang saya sudah ∅-baca ] (Object Relativization)
this.LAH book COMP ISG already read
‘This is the book that I have read.’ (YT)

b. Inilah buku, [yang i sudah saya ∅-baca] (Subject Relativization)
this.LAH book COMP already ISG read
‘This is the book that Badu has read’ (YT)

(49) Austronesian continuum

<table>
<thead>
<tr>
<th>PATIENT (of antipassive)</th>
<th>AGT (of ergative)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OBLIQUE</td>
</tr>
<tr>
<td>VSO? ERGATIVE</td>
<td>Y</td>
</tr>
<tr>
<td>VSO Tagalog</td>
<td>N</td>
</tr>
<tr>
<td>VOS Malagasy</td>
<td>N</td>
</tr>
<tr>
<td>SVO Indonesian</td>
<td>N</td>
</tr>
<tr>
<td>SVO Javanese</td>
<td>N</td>
</tr>
<tr>
<td>SVO? NOM/ACC</td>
<td>N</td>
</tr>
</tbody>
</table>

7.0 Preliminary work on the parameter

(50) Does the Agent get licensed in Spec, vP

\[
\begin{array}{c}
\text{No} \\
\text{Nom/Acc}
\end{array}
\quad
\begin{array}{c}
\text{YES} \\
\text{Is the Patient licensed by } v \text{ or } T?
\end{array}
\quad
\begin{array}{c}
\text{BY } v \\
\text{Low ABS}
\end{array}
\quad
\begin{array}{c}
\text{BY } T \\
\text{Does the Patient stay in } vP?
\end{array}
\quad
\begin{array}{c}
\text{YES} \\
\text{Q’anjob’al}
\end{array}
\quad
\begin{array}{c}
\text{No} \\
\text{Malagasy}
\end{array}
\]
Subparameters:
  licensing of Patients that aren’t Abs (anti-passive)?
  etc…

8.0 Thoughts on methodology

‘Microcomparative syntax … is the closest we can come to a controlled experiment in comparative syntax.’

Kayne, 2005: pg 8

Some thoughts:
  – Microparameters can mask a change in macro-parameters
  – Adjacent generations (mutual intelligibility) doesn’t necessarily give a controlled experiment
  – Closeness of the E-languages tells us nothing about the closeness of the I-language

9.0 Conclusions

Macroparameters represent a language learner’s first guess (Top of decision tree)
Microparameters found at the tendrils
Surface similar languages don’t point to similar grammars

Comments welcome: lisa.travis@mcgill.ca

References


