Blocking of Ergative Movement by Maraudage
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1. Introduction

Question:
What explains the prohibition against movement of ergative subject DPs?

Answer:
If an ergative subject DP undergoes movement, an absolutive object DP cannot get case. Thus, movement of the ergative DP per se is unproblematic; but problems are created for its absolutive co-argument.

Note:
This is radically different from existing accounts which assume that the absolutive DPs has to move to a higher position and thereby blocks displacement of the ergative DP, either via intervention (Campina (1992)) or via blocking the sole escape hatch (Aldridge (2004), Coon (2010)). In contrast, the approach is arguably in the spirit of Polinsky et al. (2011), who suggest that ergative movement leads to a processing problem because removal of an ergative DP from a clause makes identification of the grammatical function of the absolutive DP difficult (but not vice versa).

2. Data

(1) Wh-Movement of D_{erg} vs. D_{abs} in Mam (England 1983a; 1989; Campana 1992:88):
a. ma-a? chi tzaq t-zyu-ʔn Cheep kab’ xinaq
   RPST-EMPH 3PL.ABS DIR 3SG.ERG-grab-DS José two man
   ‘José grabbed the men’
b. alkyee-qa sti tzaq t-zyu-ʔn Cheep
   who-PL RPST-DP 3PL.ABS DIR 3SG.ERG-grab-DS José
   ‘Who did José grab?’
c. alkyee saj tzaq t-zyu-ʔn kab’ xinaq
   who RPST-DEP 3SG.ABS.DIR 3SG.ERG-grab-DS two man
   ‘Who grabbed the men?’

(2) Wh-Movement of D_{abs} in Mam (England 1983a; 1989; Campana 1992:92):
a. ma chi b’eet xinaq
   RPST 3PL.ABS walk man
   ‘The men walked.’
b. alkyee x-li b’et?
   who 3PL.ABS-DEP walk
   Who walked?

(3) Wh-Movement in Katukina-Kanamari (Quezalos 2010):
a. hanan tu Nodia nah=hoho-nin?
   who(m) Q Nodia ERG=call-DURATIVE
   ‘Whom is Nodia calling?’
b. hanan tu waakdiyi-nin?
   who(m) Q arrive here-DURATIVE
   ‘Who is arriving here?’
c. hanan tan wa-duyuan tahi yu?
   who here AP-spread water Q
   ‘Who spread water here?’

(4) Relativization of D_{erg} vs. D_{abs} in Jacaltec (Campina 1992:91 based on Craig 1977):
a. . . . chi’en one [xiiuxiko . . . ]
   the.CLASS earrings buy.3ABS.1ERG
   ‘. . . the earrings that I bought . . . ’
b. x-O-w’il naj [xto ewi]
   ASP-3ABS-1ERG-see CLASS go.3ABS yesterday
   ‘I saw (the man) who went yesterday’
c. * . . . metx’ tx’i [sintx’a ni’an uuni . . . ]
   the.CLASS dog bite.3ABS.3ERG little child
   ‘. . . the dog that bit the child . . . ’

(5) Relativization of D_{erg} vs. D_{abs} in Dyirbal (Dixon 1994:169-170):
a. yuma-0 [cp banaga-yu] yaban-gu bura-n
   father-ABS return-REL.ABS mother-ERG see-NONFUT
   ‘Mother saw father who was returning.’
b. yuma-0 yaban-gu [cp banaga-yu-mu] buna-n
   father-ABS mother-ERG return-REL.ABS see-NONFUT
   ‘Mother, who was returning, saw father.’
c. *yaba-0 [cp bural-yu yuma-0] banaga-n’u
   mother-ABS see-REL.ABS father-ABS return-NONFUT
   ‘Mother, who saw father, was returning.’
d. yaba-0 [cp bural-ya-yu yuma-gu] banaga-n’u
   mother-ABS see-ANTIPASS-REL.ABS father DAT return-NONFUT
   ‘Mother, who saw father, was returning.’

(6) Relativization in Katukina-Kanamari (Quezalos 2010):
(7) a. yo-hik nyan Nodia na=daahuuyi-nin tukuna
   1SG-know DEICTIC Nodia ERG;bring-DEPENDENT Indian
   ‘I know the Indian that Nodia brought’
b. yo-hik nyan waakdiyi-nin anyan piya
   1SG-know DEICTIC arrive here-DEPENDENT this man
   ‘I know the man who arrived here’
c. i-hik nyan piya wa-daahuuyi-nin Hanani
   1SG-know DEICTIC man AP-bring-DEPENDENT H.
I know the man who brought Hanani.

(8) Focus Movement of $DP_{erg}$ vs. $DP_{abs}$ in Man (England 1983b:4)
   a. ma chi kub’ t-tzyu-ʔm xinaq qa-cheej
      ASP 3PL.ABS DIR 3SG.ERG-grab DS man PL-horse
      'The man grabbed the horses.'
   b. qa-cheej xii kub’ t-tzyu-ʔm xinaq
      PL-horse DEP.ASP 3PL.ABS DIR 3SG.ERG-grab DS man
      'The man grabbed THE HORSES.'
   c. *xinaq chi kub’ t-tzyu-ʔm qa-cheej
      man 3PL.ABS DIR 3SG.ERG-grab DS PL-horse
      'THE MAN grabbed the horses.'

(9) Focus Movement of $DP_{abs}$ in Man (England 1983b:4)
   a. ma tz-ul xinaq
      ASP 3SG.ABS-arrive here man
      'The man arrived here.'
   b. xinaq s-ul
      man DEP.ASP 3SG.ABS-arrive here
      'THE MAN arrived here.'

(10) Focus Movement in Katsuina-Kanamari (Queixalos 2010):
   a. Maramaran na=t chemicals kana tona tyo
      M. ERG=daughter FOCUS go.away EXCLAMATIVE
      'It's Maramaran's daughter that went away'
   b. a-otaya kana Aro na=nhuk kariwa
      3SG-wife FOCUS Aro five white.man ERG=LOC
      'It's his own wife that Aro gave to the white man'
   c. waro wa-minkudak-boni wa-pa
      parrot AP-hindquarters-peek dog
      'It's the parrot that pecked the dog's hindquarters'

3. Assumptions
3.1 Clause structure
(11) [CP C [TP T ] P DP-ext ] v [VP V DP-int ]]]]]

3.2 Locality of movement
Assumption:
Movement takes place successive-cyclically, from one XP edge domain to the next one higher up. Given the Phase Impenetrability Condition (PIC; Chomsky (2001)), this follows automatically if every XP is a phase.

(12) Phase Impenetrability Condition (PIC):
The domain of a head X of a phase XP is not accessible to operations outside XP; only X and its edge are accessible to such operations.

3.3 Assignment of structural case

Three proposals in minimalist syntax:
- T assigns nominative=ergative, v assigns accusative=absolutive.
- T assigns ergative, v assigns accusative, nominative=absolutive is default case.
  (Bittner & Hale (1996))

The third type of analysis will be presupposed in what follows.

3.4 Patterns of argument encoding

Timing of elementary operations:
The analysis in Muller (2004), Heck & Muller (2007) crucially relies on timing. Ergative vs. accusative patterns of argument encoding result from different (local optimality-theoretic) resolutions of conflicting faithfulness requirements for Agree and Merge on the vP level: Agree $\gg$ Merge $\rightarrow$ accusative pattern; Merge $\gg$ Agree $\rightarrow$ ergative pattern.

(14) Two types of features that drive operations:
   a. Structure-building features (edge features, subcategorization features) trigger Merge: $[+[F^\star]$.
   b. Probe features trigger Agree: $[+[F^\star]$.
   c. Agree and Merge both take place under m-command (i.e., Agree may affect a head and its specifier).

(15) Agree Condition:
Probes ($[+[F^\star]$) participate in Agree.
(16) **Merge Condition:**

Structure-building features ([F•]) participate in Merge.

**Assumptions about argument encoding:**

(i) There is one structural argument encoding feature: CASE.

(ii) CASE can have two values: ext(ernal) and int(ernal) (determined with respect to vP, the predicate domain).

(iii) [CASEext] = nominative/absolute, [CASEint] = accusative/ergative (Murasugi (1992)).

(iv) [CASE] features figure in Agree relations involving T/v and DP, as in (17).

(17) **The role of T and v in argument encoding:**

a. T bears a probe [*CASEext*] that instantiates a matching [CASEext] goal on DP.

b. v bears a probe [*CASEint*] that instantiates a matching [CASEint] goal on DP.

(18) **Argument encoding by case or agreement:**

a. Argument encoding proceeds by case-marking if [CASE•] is morphologically realized on DP.

b. Argument encoding proceeds by agreement-marking if [*CASE•*] is morphologically realized on T/v.

A *conspicuous property*.

The head v has a dual role: It participates in a Merge operation with a DP, and it also participates in an Agree relation with a DP. This dual role has far-reaching consequences for the nature of argument encoding.

**A constraint conflict:**

Consider a simple transitive context, with two arguments DPint, DPext. Suppose that the derivation has reached a stage Σ where v has been merged with a VP containing DPint, with DPext waiting to be merged with v in the workspace of the derivation. At this point, a conflict arises: AC demands that the next operation is Agree(v,DPint) (see (a)), MC demands that it is Merge(DPext,v) (see (b)). (Application of these constraints at each derivational step derives the effects of the Earliness Principle (Poesl'sky 1989).)

(19) **Stage Σ:**

(20) a. **Agree before Merge: accusative**

b. **Merge before Agree: ergative**

(21) **Specifier Bias:**

Spec-head Agree is preferred to Agree under c-command.

3.5 **Maraudage**

**Assumption:**

Certain goal features require checking in Spec/head configurations; this way, they may “maraud” a functional head and take away features that should normally be reserved for some other item. (See Georgi, Heck & Müller (2009), Georgi (2010), Müller (2011) on maraudage; similar concepts are suggested in Chomsky (2001), Abels (2003), Anagnostopoulou (2005), Adger & Harbour (2007) Béjar & Řezáč (2009); and by Trommer (2011) and Zimmermann (2011) for morphophonology.)

**Case features and maraudage:**

Structural case features trigger maraudage in Spec/head configurations even if they have already been checked (or valued). Independent motivation: the existence of case stacking in the world’s languages.

(22) **Activity of structural case features**

Structural case features act as active goals.

**Note:**

Given the Specifier Bias, the configuration in (23-a) may involve checking of [case:int] by X or not (leading to a crash of the derivation or not because of an unchecked [case:□]), whereas the configuration in (23-b) must involve checking of [case:int] by X (which invariably leads to a crash).
(23) \[ a. \ \left[ X \rightarrow X_{[\text{case}\text{ext}]} [\text{zp} \ldots \alpha_{[\text{case}\text{int}]} \ldots \beta_{[\text{case}\text{int}]} \ldots] \right] \\
\[ b. \ \left[ X \rightarrow X_{[\text{case}\text{ext}]} [\text{zp} \ldots \gamma_{[\text{case}\text{int}]} \ldots \beta_{[\text{case}\text{int}]} \ldots] \right] \]

Note:
There is no minimality condition on Agree or Merge; minimality effects are derivable from
the PIC; see Müller (2011). Suppose that both \( \alpha \) and \( \beta \) are PIC-accessible to \( X \) in (24); this
will imply that the PIC is slightly less restrictive, as eventually proposed in Chomsky (2001),
or that Agree operations can escape the PIC, as suggested by Bošković (2007), among others.

Assumption:
Checking of \([\text{case}\text{int}]\) on \( \alpha \) with a conflicting \([\text{case}\text{ext}]\) on \( X \) is harmless as such; \( \alpha \) will
simply maintain its original feature value. However, \([\text{case}\text{ext}]\) is then discharged, and not
available for further operations anymore.

4. Analysis

Displacement in languages with ergative encoding patterns:
Given the PIC, \( \text{DP}_{\text{erg}} \) needs to move from Spec\( \text{v} \) to Spec\( \text{T} \) if it is to undergo subsequent
movement to Spec\( \text{C} \) (\( \text{wh} \)-movement, focus movement, relativization). Given that the
“ergative” ranking \( \text{Merge} \gg \text{Agree} \) (more precisely, \( \text{MC} \gg \text{AC} \)) is also maintained on
the TP cycle (see Lalme (2008) for an application of this idea to a different empirical domain,
viz., word order), movement of \( \text{DP}_{\text{erg}} \) (as an instance of internal Merge) will have to precede
Agree of \( T \) with with the VP-internal DP that has not yet valued its case feature (as
absolutive). Given the Specifier Bias, \( \text{DP}_{\text{erg}} \) will next maraud \( T \)’s case probe; the internal
argument DP will consequently remain without a checked case feature. Assuming that all
DPs must have their case features checked eventually (and assuming that there is no such
ting as a default case), the derivation will therefore crash. In a nutshell, ergative
movement is impossible because the remaining argument cannot get absolutive case in this context.

No such problem arises for movement of \( \text{DP}_{\text{abs}} \) because \( \text{DP}_{\text{erg}} \) has already been assigned case
when \( \text{DP}_{\text{abs}} \) moves.

Displacement in languages with accusative encoding patterns
The ranking \( \text{Agree} \gg \text{Merge} \) that gives rise to an accusative pattern in the first place (on
the \( \text{vP} \) cycle) is also active on the TP cycle. Here it ensures that Agree with the \( \text{DP}_{\text{nom}} \) in
Spec\( \text{v} \) can be carried out before the \( \text{DP}_{\text{acc}} \) undergoes successive-cyclic movement to Spec\( \text{T} \)
(and then to a higher position).

Similarly to the \( \text{DP}_{\text{abs}} \) case, there is no problem for movement of \( \text{DP}_{\text{nom}} \) because \( \text{DP}_{\text{acc}} \) has
already been assigned case when \( \text{DP}_{\text{nom}} \) moves.

(Note: underlining signals a discharged probe in the following trees.)
(25) Legitimate movement of DP_{abs}
  a. Structure after T is merged

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    DP_{[\text{c-int}]} v'
      DP_{[\text{c-int}]} v''
        T_{[\text{\text{c-ext}}]} v'''
          v_{[\text{\text{c-int}}} v'''
            VP

b. Merge before Agree triggers movement of DP_{abs} first

```

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    t'
      t''
        T_{[\text{\text{c-int}}]} v_{[\text{\text{c-int}}} v'''
          VP

```

c. Finally, Agree with T ensures external case of DP_{abs}; no maraudage

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    T_{[\text{\text{c-ext}}]} v'''
      T_{[\text{\text{c-ext}}]} v'''
        T_{[\text{\text{c-ext}}]} v'''
          v_{[\text{\text{c-int}}} v'''
            VP

```

(26) Legitimate movement of DP_{ace}
  a. Structure after T is merged

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    v_{[\text{\text{c-int}}} v'''
      VP

b. No maraudage: Agree before Merge triggers case valuation of DP_{nom} next

```

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    v_{[\text{\text{c-int}}} v'''
      VP

```

c. Finally, movement of DP_{ace} takes place to SpecT

```
TP
  T' 
  T_{[\text{\text{c-ext}}]} vP
    v_{[\text{\text{c-int}}} v'''
      VP
```

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5.2 Extensions

(28) Generalization:
Argument displacement is impossible if there is a step $\tau$ of the derivation, with $X$ the current phase head, such that (a), (b), and (c) hold.

a. $X$ c-commands $\beta$, and $\beta$ needs to be assigned case from $X$.

b. Merge before Agree holds on the XP cycle.

c. $\alpha$ has already been assigned case and needs to undergo movement via the edge of XP.

A further possible instance of this effect:

(29) Left Branch Condition effects:

a. *Wessen1 hast du [dp t1 Bücher gelesen]?

b. *Antjes habe ich [dp t1 Bücher gelesen]

5. Outlook

5.1 Open Questions

- What about DP$_{erg}$ of unergative intransitive verbs in languages with active encoding patterns? Can they move or not? Does the theory predict them to be mobile or not?
- Why exactly can an active structural case feature be immune to maraudage?
References
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