Ergative Proclisis in Basque: Wackernagel-driven Metathesis

Karlos Arregi & Andrew Nevins
University of Illinois & Harvard University

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Introduction

(1) Leading Ideas:
   a. 2nd-Position Effects Occur within the Word
   b. Morphological Metathesis can Provide an Edge
   c. This Metathesis is Demonstrably Postsyntactic
   d. This Metathesis is Partial Reduplication a la Halle-Harris
   e. When Metathesis unavailable, Dummy Insertion occurs
Outline

Morpheme Placement, Dislocation, and Metathesis

Ergative Proclisis in Basque

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- It’s not (morpho)phonology
- It’s not syntax

A Further Argument: Interaction with g/z Constraint
- g/z Constraint
- Order of Operations
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Amharic Definite Marking (Kramer 2007)

(2) bet-  u  
    house-  def

(3) tillik’-  u  bet  
    big-  def house

(4) [ bät’am tillik’-  u  ]AP bet  
    [ very  big-  def ]AP house

(5) [ lä-mist-u  tammaññ-  u  ]AP gäs’äbahriy  
    [ to-wife-his faithful-  def ]AP character

(6) [ ibaab yä-gäddäl-ä-  u  ]RC lid3dz  
    [ snake C-kill-3sg-  def ]RC boy

(7) tillik’-  u  ti’ik’ur bet  
    big-  def black  house
2nd-Position and Local Dislocation

Trades immediate precedence for affixation: \( X \star Y \rightarrow Y - X \)
\([ D [ N ] ] \rightarrow N - D\)

2P: Amharic D must have a host and must attach to its right.
\([ \]_{AP} \) and \([ \]_{RC}\) are phases and thus treated as an internally-opaque head. Each A heads its own AP.
(Note that this could be either pre- or post- Vocabulary Insertion)
Santali 2nd-to-Last Subject Clitics (Kidwai 2005)

(8) i₃n  dɔ jɔm-  i₃n  lɛt-tahɛkən-a
    1sg C  rice-  1sg.cl  eat-ant.past.-fin
    “I had eaten rice”

(9) i₃n  rojhi-la  iskuːl  baŋ-  i₃n  cəla-a
    1sg daily  school  neg-  1sg.cl  go-fin
    “I don’t go to school every day”

(10) i₃n  [dɔ aːm  cəla-  i₃n]  mitad-amɛ-a
    1sg [C  2sg  home.go-  1sg.cl]  ask-2sg-fin
    “I asked you to go home”

(11) nɛlket-  kɪn-  a-  i₃n
    see.past-  3dual-  fin-  1sg.cl
    “I saw them two”

Idea: enclitic originates on verb and dislocates left whenever it can.
Clitic Climbing in Italian

(12) Vorrei poter andar- ci con Maria
Would.want.1sg be.able go- there with Maria

(13) Vorrei poter- ci andar- e con Maria
Would.want.1sg be.able- there go- R with Maria

(14) Ci vorrei poter andar- e con Maria
there would.want.1sg be.able go- R with Maria

Cardinaletti & Shlonsky 2004: -e after infinitives is in complementary distribution with enclitic. Notice that also it does not appear after intermediate infinitives, e.g. (14).

Proposal: -e is a dummy enclitic, used to fulfill a non-final requirement on the infinitive morpheme -r, otherwise satisfied by a clitic or by a following verb in the restructuring domain.
Metathesis and Partial Reduplication in Spanish

(15) Venda- n lo
  Sell- 3pl it.cl
  Sell it! (Standard Spanish)

(16) Venda- lo- n
  Sell- it.cl - 3pl

Looking at (16) one might think it is movement of the clitic inside the Agr position. But this is untenable given the existence of:

(17) Venda- n lo- n
  Sell- 3pl it.cl - 3pl

(Note that if abstract PL were moving prior to Vocabulary Insertion, we would expect lo-s, not lo-n)
Halle & Harris’ (2005) Formalism


This is how partial reduplication is done. Now consider the consequences of two partial redups:

Allow these operations to happen after Linearization and Vocabulary Insertion

(18) venda [n ⟨ lo] → venda – n lo – n [lo] → venda – lo – n

The insight/advantage to doing metathesis / positional switching by this formalism is that it predicts a minimal change will yield doubling.
Old Irish (Adger 2006)

Object clitic starts postverbally, and local dislocates to a non-final host whenever possible:

(20)  
   a. Comallaid-i
        fulfill.Absol-3sg
       ‘He fulfills it’
   b. Imm- us- n(d)ích
        PV- 3pl- protect.Conj
       ‘He protects them’

Clitic-preceding T takes the absolutive form, e.g. “carry”

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<tr>
<td>3</td>
<td>plural</td>
<td>berait</td>
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Paduan

Cardinaletti & Repetti: different form with enclitic and proclitic.

(21) a. te magni
     you eat
     ‘You eat.’

     b. magni-to
        eat-you
        ‘Do you eat?’

Same feature bundle realized differently depending on linear position wrt the verb.
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- Like Amharic/Santali, displays a non-edge requirement
- Like Italian, satisfies this with morphological epenthesis if necessary
- Like Halle/Harris facts, dialectal variation shows metathesis or doubling
- Like Old Irish, this dislocation **must** apply **before** Vocabulary Insertion
- Like Paduan, same features have different from when pro- vs. en-clitic

Basic fact: the auxiliary root in Basque is 2nd-position within-the word. Normally an absolutive proclitic precedes it. However, there are no 3rd person absolutive clitics in Basque.
Important Assumption: Basque has Clitics

Basque finite auxiliaries:

\[(22) \quad \text{ABS} - T + \text{AGR} - \text{DAT} - \text{ERG}\]

\text{ABS, ERG, DAT} \text{ are clitics.}

What almost everybody (e.g. Boeckx 07) calls Agreement is really Clitics. Our diagnostic: clitics do not vary with tense, real agreement does.

\[(23) \quad \text{Zu-k gu-∅ Ikus-i g -aitu -zu.}\]
\[\text{you-E us-A see-PRF ABS.1PL -PRS.1PL -ERG.2SG}\]

\[(24) \quad \text{Zu-k gu-∅ Ikus-i g -intu -zu -n.}\]
\[\text{you-E us-A see-PRF ABS.1PL -PST.1PL -ERG.2SG -N}\]
Normal satisfaction of 2p requirement by absolutive proclitic:

(25) Ni-k su-∅ ikusi ∅ -atxu -t.
    I-E you-A see-PRF abs.2s -PRS -ERG.1s
    ‘I have seen you.’

If no proclitic present (because absolutive argument is 3rd or absent), two repair strategies:
(i) Metathesis of ERG clitic: realized as proclitic n- (cf. ERG -t in (25) & (27))

(26) Ei-txen n -eb -an au-∅.
    do-PRF erg.1s -PST -N this-A
    ‘I used to do this.’

Must occur before Vocabulary Insertion.
(ii) L-support: epenthetic insertion of prefix (in present tense)

(27) Ni-k liburu-∅ ekar-∅ d -o -t.
    1s-E book-A bring-PRF L -PRS -ERG.1s
    ‘I have brought the book.’
Metathesis and Doubling

(28) **Ergative Metathesis:**

\[
\#[T \langle \text{ERG} ] \rightarrow \# - [T\text{ERG} - T\text{ERG}] \rightarrow \# - \text{ERG} - T
\]

Given the Halle-Harris formalism for metathesis, we expect there to be dialectal variants in which (28) occurs:

(29) **Ergative Doubling:**

\[
\#[T \langle \text{ERG} ] \rightarrow \# - [T\text{ERG} - T\text{ERG}] \rightarrow \# - \text{ERG} - T\text{ERG}
\]

(30)  

s -ittu -su -n

erg.2s -pst -erg.2s -COMP

(Oñate, Yrizar: 1992)

Notice that 2P requirement is still satisfied in case of doubling, but each positionally-dependent allomorph receives different spellout.
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It’s not a (morpho)phonological condition

Albizu and Eguren (2000); Laka (1993): Initial slot in auxiliary can’t be $\emptyset$.
Problem (noted by Albizu and Eguren): L-support (the other repair) can insert a $\emptyset$-prefix to satisfy 2p requirement:

(31) Ondo etor $\emptyset$ -a -tzu -n
well come.PRF L -PST -DAT.2SG -COMP
‘You deserve it.’ (Zamudio)

It’s an abstract 2p morphological condition; it applies before Vocabulary Insertion.
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It’s not a syntactic phenomenon

Laka 1993:
(i) No change in case-marking on arguments.
(ii) No effect on c-command relations among arguments:

(32) *Gure buru-ek gu-∅ ikus-i g -aitu -zte.
     our head-E.PL us-A see-PRF ABS.1PL -PRS -ERG.3P
(33) Gu-k geure buru-ak ikus-i d -itu -gu.
     we-E our head-A.PL see-PRF L -PRS -ERG.1P
(34) *Gure buru-ek gu-∅ ikus-i g -intu -zte
     our head-E.PL us-A see-PRF ABS.1PL -PRS -ERG.3P
     -n.
     -N
(35) Gu-k geure buru-ak ikus-i g -enu -en.
     we-E our head-A.PL see-PRF ERG.1P -PST -N
Rezac (2003): a syntactic analysis that doesn’t predict changes in arguments.

(i) 3rd person is absence of person features.
(ii) Prefix position is realization of person agreement by v.
(iii) v first probes in c-command domain and finds the object → prefix is absolutive agreement.
(iv) If object is 3rd person (or absent), v probes its specifier (the subject) → prefix is ergative agreement.
(v) If subject is 3rd person too, v doesn’t agree → default prefix inserted (like our L-support).

(36)    Jon-ek Miren-∅ ikus-i  z -u  (-∅)  -en.
         Jon-E   Miren-A see-PRF L  -PST  (-ERG.3S)  -N

Problem with point (v): we don’t know for sure that there is no 3rd ergative suffix, since it would be -∅.
Zamudio dialect shows that (v) is wrong. Ergative Metathesis applies even if ergative clitic is 3rd. 3rd ergative is -o in a particular context. In the present tense (no metathesis expected):

\[(37) \quad d \ -o \ -tze \ -o \quad (<\text{dotzo})\]
\[L \ -\text{PRS} \ -\text{DAT.3SG} \ -\text{ERG.3S}\]

In the past, metathesis does apply, so -o disappears:

\[(38) \quad \emptyset \quad -o \ -\text{tze} \ -\text{n}\]
\[\text{ERG.3SG} \ -\text{PST} \ -\text{DAT.3SG} \ -\text{N}\]

\[\Rightarrow \quad \text{Ergative Metathesis applies even if ergative is 3rd.}\]
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Order of Operations
In Bizkaian dialects of Basque, there is a “dissimilation” constraint that bans adjacent [+participant] features on the same auxiliary. (Zamudio, Alboniga, Ondarru, Butroi, Maruri, Gallartu)

(39)

<table>
<thead>
<tr>
<th>Ergative</th>
<th>Dative/Absolutive</th>
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<tbody>
<tr>
<td>[+participant]</td>
<td>[+participant]</td>
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</table>

and either

| [−author]                     | [+author −singular]             |

or

| [+author −singular]           | [−author]                       |
Microvariation in Basque Operations

**g/z-repair 1:** Impoverishment of 2nd erg in the context of 1Pl abs: (Maruri, Alboniga)

(40)    Su-k gu-∅ ikus-i  g   -aittu -su  →  g
you-E us-A see-PRF ABS.1P -PRS -ERG.2s  →  ABS.1P
-aittu -∅
-PRS -ERG.3s

**g/z-repair 2:** Obliteration of 1Pl dat in the context of 2nd erg: (Zamudio, Alboniga, Ondarru, Butroii)

(41)    Su-k gu-ri emo-n  d -o  -sku -su  →  d -o
you-E us-D  give-PRF L -PRS -DAT.1P -ERG.2s  →  L -PRS
-su
-ERG.2s
g/z-repair 3: Obliteration of 1Pl erg in the context of 2nd dat: (Zamudio, Gallartu)

(42) Gu-k su-ri emo-n d-o -tzu -u → d-a
    you-E us-D give-PRF L -PRS -DAT.2s -ERG.1p → L -PRS
    -tzu
    -DAT.2s

g/z-repair 4: Obliteration of 1Pl abs in the context of 2nd erg: (Ondarru)

(43) Su-k gu-∅ ikus-i g -atxu -su → d-o
    you-E us-A see-PRF ABS.1p -PRS -ERG.2s → L -PRS
    -su
    -ERG.2s
Where Impoverishment and Obliteration Happen

g/z constraint is postsyntactic and applies before Linearization & Vocabulary Insertion.

Not a syntactic operation:

- Ergative-dative interaction hard to implement syntactically.
- Arguments doubled by the clitics are unaffected.
- Variation in triggering context and repair: (41) vs. (42); (43) vs. (40).

⇒ Not due to person/case hierarchies.
⇒ Postsyntactic obliteration/impoverishment triggered by markedness.

It occurs before Linearization and Vocabulary Insertion:
sensitive to abstract features; not triggered to satisfy some linear template.
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The Ordering of Operations in the Grammar

Postsyntactic Morphological Structure is modular: operations at MS can apply before or after **Linearization**, which provides precedence relations among morphemes.

⇒ **Three kinds of operations**, depending on their position in the derivation:

\[ \text{OP1} \rightarrow \text{Spellout} \rightarrow \text{OP2} \rightarrow \text{Linearization} \rightarrow \text{OP3} \]

- **OP1**: **syntactic** operations (Merge, Move, Agree), constrained by syntactic principles.

- **OP2**: **postsyntactic** operations that are sensitive to Word-Internal feature co-occurrence combinations.

- **OP3**: **postsyntactic** operations that are sensitive to linear order.
Two Separate Operations in Basque

Recall that we have looked at two operations:

- **g/z- impoverishment and obliteration**: Word-internal sensitivity of two [+participant] morphemes and concomitant deletion operations. It occurs before Linearization.

- **Ergative Metathesis**: Movement of Ergative to Proclitic position to satisfy Non-initiality of **aux**. It occurs after linearization.

**Prediction**:

(44) \( g/z\)-repair \( > \) **Ergative Metathesis**

Rezac’s (2003) prediction: opposite order, since Ergative Metathesis is syntactic.
Prediction 1: g/z-deletion creates context for Ergative Metathesis

\[(45) \quad \texttt{ABS.1PL} - \text{T} - \texttt{ERG.2} \xrightarrow{g/z} \_ \_ - \text{T} - \texttt{ERG.2} \xrightarrow{\texttt{Erg. Met.}} \texttt{ERG.2} - \text{T} \]

Obliteration of \texttt{ABS.1PL} makes initial position empty. Subsequent non-initiality triggers Ergative Metathesis.

\[(46) \quad \text{Su-k gu-∅ ikus-i } \text{g} \quad -\text{endu} -\texttt{su} \quad -n \rightarrow \quad \text{you-E us-A see-PRF } \texttt{ABS.1P} \quad -\text{PST} \quad -\texttt{ERG.2S} -\text{C} \rightarrow \quad \text{ERG.2S} \quad -\text{PST} \quad -\text{N} \quad (\text{Ondarru}) \]

Opposite derivational order would mean no metathesis, and g/z afterwards: \(^{*}\text{endu-su-n} \text{ ‘PST-ERG.2S-N’}.

\[\Rightarrow \text{ Ergative Metathesis is not a syntactic phenomenon.} \]
Prediction 2: g/z-deletion prevents subsequent Ergative Metathesis

3rd absolutive object would normally trigger Ergative Metathesis. But 2nd dative’s presence causes Ergative to be deleted before it can metathesize:

(47) \[ \_ -T -\text{DAT.2} -\text{ERG.1P} \xrightarrow{g/z} \_ -T -\text{DAT.2} \rightarrow \text{No Ergative Metathesis} \]

\[ L-\text{supp.} \]

\[ \xrightarrow{} L -T -\text{DAT.2} \]

Obliteration of \text{ERG.1P} prevents Ergative Metathesis from applying. L-support applies instead.

(48) \[ \text{Gu-k} \text{ su-ri} \text{ emo-n} \text{ g} \text{-eun} \text{-tzu} \text{ -n} \rightarrow \text{d} \text{-a} \text{-tzu} \]
\[ \text{we-E you-D.S give-PRF} \text{ ERG.1P} \text{-PST} -\text{DAT.2S} \text{-n} \rightarrow L \text{-PST} -\text{DAT.2S} \]
\[ -n \]
\[ -\text{C} \text{ (Gallartu)} \]
Conclusions

In the division of labor between syntax and morphology, word-internal Wackernagelity is best accomplished by a post-syntactic but pre-phonological metathetic operation.


Cardinaletti, Anna, and Lori Repetti. 2006. Proclitic vs. enclitic pronouns in northern Italian dialects. Ms., University of Venice and Stonybrook University.


