

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

Arguments

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'ābahriy
[to-wife-his faithful- def]_{AP} character
- (6) [ibaab yä-gäddäl-ä- u]_{RC} lidzdz
[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: $X*Y \rightarrow Y-X$

$[D [N]] \rightarrow N-D$

2P: Amharic D must have a host and must attach to its right.

Cf. Anderson 2005 for 2P effects in various domains.

$[]_{AP}$ 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) ip dɔ jəm- ip let-tahĕkən-a
 1sg C rice- **1sg.cl** eat-ant.past.-fin
 “I had eaten rice”
- (9) ip rojhila isku:l baŋ- ip cəla-a
 1sg daily school neg- **1sg.cl** go-fin
 “I don’t go to school every day”
- (10) ip [dɔ a:m cəla- ip] mitad-amɛ-a
 1sg [C 2sg home.go- **1sg.cl**] ask-2sg-fin
 “I asked you to go home”
- (11) pɛlkɛt- kɪn- a- ip
 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

$A[BC]D \rightarrow A-BC-BC-D$

$A[B \rangle C]D \rightarrow A-\boxed{B}C-BC-D \rightarrow A-C-BC-D$ (Skip B in left copy)

$A[B \langle C]D \rightarrow A-BC-B\boxed{C}-D \rightarrow A-BC-B-D$ (Skip C in right copy)

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

$A[B \rangle \langle C]D \rightarrow A-\boxed{B}C-B\boxed{C}-D \rightarrow A-C-B-D$ (Metathesis!)

Allow these operations to happen **after Linearization and Vocabulary Insertion**

(18) venda [n \rangle \langle lo] \rightarrow venda - \boxed{n} lo - n \boxed{lo} \rightarrow venda - lo - n

(19) venda [n \langle lo] \rightarrow venda - n lo - n \boxed{lo} \rightarrow venda - n 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”

	Absolute	Conjunct	
1	singular	biru	-biur
2	singular	biri	-bir
3	singular	berid	-beir
1	plural	bermai	-beram
2	plural	beirthe	-berid
3	plural	berait	-berat

Paduan

Cardinaletti & Repetti: different form with enclitic and proclitic.

- (21) a. te magni
you eat
'You eat.' *Paduan*
- b. magni-to
eat-you
'Do you eat?' *Paduan*

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) ABS – T+AGR – DAT – ERG

ABS, ERG, DAT 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) Zu-k gu-∅ Ikus-i g -aitu -zu.
 you-E us-A see-PRF ABS.1PL -PRS.1PL -ERG.2SG

(24) Zu-k gu-∅ Ikus-i g -intu -zu -n.
 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- \emptyset ikusi **s** -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- \emptyset .
 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- \emptyset ekar- \emptyset **d** -o -t.
 1S-E book-A bring-PRF **L** -PRS -ERG.1S
 'I have brought the book.'

Metathesis and Doubling

(28) **Ergative Metathesis:**

$$\#[T \rangle \langle \text{ERG}] \rightarrow \# - \boxed{T}_{\text{ERG}} - T_{\boxed{\text{ERG}}} \rightarrow \# - \text{ERG} - T$$

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

(29) **Ergative Doubling:**

$$\#[T \rangle \langle \text{ERG}] \rightarrow \# - \boxed{T}_{\text{ERG}} - T \text{ ERG} \rightarrow \# - \text{ERG} - T \text{ ERG}$$

(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

- └ Arguments
- └ It's not syntax

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- \emptyset ikus-i z -u (- \emptyset) -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 $-\emptyset$.

- └ Arguments
 - └ It's not syntax

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) d -o -tze -o (<dotzo)
 L -PRS -DAT.3SG -ERG.3S

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

(38) ∅ -o -tze -n
 ERG.3SG -PST -DAT.3SG -N

⇒ Ergative Metathesis applies even if ergative is 3rd.

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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)

	Ergative	Dative/Absolutive
	[+participant]	[+participant]
<u>and either</u>	[-author]	[+author –singular]
<u>or</u>	[+author –singular]	[-author]

Microvariation in Basque Operations

g/z-repair 1: Impoverishment of 2nd erg in the context of 1PI 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 1PI dat in the context of 2nd erg: (Zamudio, Alboniga, Ondarru, Butroi)

(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 1PI 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 1PI 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:

OP1 → SPELLOUT → OP2 → LINEARIZATION → 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

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

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

$$(46) \quad \begin{array}{l} \text{Su-k} \quad \text{gu-}\emptyset \quad \text{ikus-i} \quad \mathbf{g} \quad \text{-endu} \quad \mathbf{-su} \quad \text{-n} \rightarrow \\ \text{you-E} \quad \text{us-A} \quad \text{see-PRF} \quad \mathbf{\text{ABS.1P}} \quad \text{-PST} \quad \mathbf{-\text{ERG.2S}} \quad \text{-C} \rightarrow \\ \mathbf{s} \quad \text{-endu} \quad \text{-n} \\ \mathbf{\text{ERG.2S}} \quad \text{-PST} \quad \text{-N} \quad (\text{Ondarru}) \end{array}$$

Opposite derivational order would mean no metathesis, and g/z afterwards: **endu-su-n* 'PST-ERG.2S-N'.

⇒ **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:

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

$$\xrightarrow{L-supp.} \text{L -T -DAT.2}$$

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

$$(48) \quad \text{Gu-k su-ri emo-n } \mathbf{g} \text{ -eun -tzu -n} \rightarrow \text{d -a -tzu}$$

$$\text{we-E you-D.S give-PRF } \mathbf{ERG.1P} \text{ -PST -DAT.2S -N} \rightarrow \mathbf{L} \text{ -PST -DAT.2S}$$

$$\text{-n}$$

$$\text{-C (Gallartu)}$$

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

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