Obliteration vs. Impoverishment in the Basque g-/z- Constraint

The Harvard community has made this article openly available. Please share how this access benefits you. Your story matters

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Published Version</td>
<td><a href="http://www.ling.upenn.edu/papers/v13.1-contents.html">http://www.ling.upenn.edu/papers/v13.1-contents.html</a></td>
</tr>
<tr>
<td>Citable link</td>
<td><a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:3716610">http://nrs.harvard.edu/urn-3:HUL.InstRepos:3716610</a></td>
</tr>
<tr>
<td>Terms of Use</td>
<td>This article was downloaded from Harvard University’s DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA">http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA</a></td>
</tr>
</tbody>
</table>
Obliteration vs. Impoverishment in the Basque g/-z- Constraint

Karlos Arregi and Andrew Nevins

1 Overview

This paper examines the *you-ar and *we-you agreement restriction (grouped together under the label g/-z- constraint) here, due to its morphological exponents), a Person-Case effect that is found throughout Bizkaian Basque. We motivate the g/-z- constraint as a dissimilation rule on adjacent [-Participant] features, and consider the role of morphological markedness as a trigger of postsyntactic feature deletion rules. The g/-z- restriction shows a great deal of microvariation in the repair it triggers; we examine six dialects. Understanding these phenomena requires a distinction between two postsyntactic and pre-spellout operations: impoverishment, which deletes the features at a node (e.g., deletes [-Participant] on an ergative agreement morpheme), and obliteration, which deletes an entire morpheme (e.g., deletes ergative agreement), with concomitant effects on the allomorphy of other terminals.

The Basque g/-z- constraint is a person-case restriction that bans the cooccurrence of a 2nd person and a 1st person plural agreement morpheme within the same verbal complex. The ban on agreement with these two persons within a single auxiliary gives rise to a number of distinct realizations of the constraint as manifested by various distributions of 2nd person and 1st plural within argument roles. The following combinations are banned within the indicated varieties of Bizkaian Basque:

\[(1) \quad a. \quad 2 \text{ eritive, 1P1 dative (\textit{you-ar}, Alboniga, Ondarru, Buirio)}
\]
\[b. \quad 2 \text{ eritive, 1P1 absolutive (\textit{you-ar}, Alboniga, Maruri, Ondarru)}
\]
\[c. \quad 1P1 eritive, 2 dative (\textit{we-you}, Zamudio)
\]
\[d. \quad 1P1 eritive, 2 absolutive (\textit{we-you}, Alboniga, Gallartu, Zamudio)
\]

The right model of the Basque g/-z- constraint cannot be understood in terms of grammaticalization of usage tendencies (e.g. Haspelmath 2004), as both 1st and 2nd person are frequent agents in discourses. Nor can the Basque g/-z-

*Thanks to Asaf Bashbach, Eloi Gamide, José Ignacio Hazide, Julie Legate, and Gesoan Müller, and the participants and organizers of the PLC Workshop on Distributed Morphology for important observations and questions. Our sources for all the dialects reported here, except Ondarru, are indicated next to each relevant example. The Ondarru data are from Inaika Armaña-Bufola (personal communication).

constraint be understood in terms of alignment of persons with particular argument roles (e.g. Ross 1990), as both IPI Erg-2 Abs and 2 Erg-IPI Abs may be triggering contexts (cf. Albornoz in (1), which bans both combinations, for example). Our proposal is thus that the Basque g-ia- constraint may trigger the post-syntactic operation of either impoverishment or obliteration rules (Bonet 1991, Noyer 1992 et seq. on impoverishment). Importantly, we claim that morphosyntactic markedness and dissimilation of adjacent identical features are two factors that govern the distribution of impoverishment.

2 Markedness and Dissimilation Trigger Impoverishment

Within Distributed Morphology, two sources of syncretism are distinguished: underspecified Vocabulary Items, and impoverishment, defined as in (2).

(2) Impoverishment: feature deletion prior to morphosyntactic realization.

Let us take as an example the fact that 1st person pronouns do not bear gender distinctions in many languages. This systematic neutralization of gender in the presence of first person is due to a systematic rule of impoverishment that applies to the output of syntax:

(3) Delete [Feminine] on all terminal nodes that bear [+Author].

Such a rule systematically enforces neutralization of gender in the environment of a [+Author] person feature, in the same way that a rule of final devoicing in German systematically enforces neutralization of a voicing contrast in the environment of a syllable coda. A partial list of marked environments, in which impoverishment is likely to occur, are first person, plural number, feminine gender, oblique case, non-present tense, and so forth. Many of these marked environments host systematic syncretisms, as observed by Greenberg (1963). Thus, the first trigger for impoverishment rules is either a presence or absence of a feature on the right side of the rule.

A second trigger for impoverishment rules is dissimilation of adjacent identical features. In clitic-agreement clusters, impoverishment is due to dissimilation. Under this view, impoverishment is OCP-like. Nveys (2005) analyzes the spurious se rule in Spanish (Perlmutter 1971, Bonet 1991) as the result of dissimilation of adjacent clitics bearing the feature [+Participant]).


Deletion of [−Participant] leads to insertion of least-specified clitic se, instead of expected le. In this paper, we present a case which is formally identical to the dissimilation-based impoverishment in (4), but which involves a different value of the feature: the Basque g-ia- constraint is the result of dissimilation of adjacent [+Participant] features.

3 Formal Foundations

The general model of grammatical computation assumed here is one in which syntactic operations put together phrases and heads, and in which agreement involves copying of abstract morphosyntactic features with no phonological content. After syntactic operations are complete, terminal-by-terminal, phonological content is inserted for morphosyntactic features at PF.

Importantly, in between the conclusion of syntactic operations and the commencement of phonological realization, certain rules may delete (but not add) structure, triggered in either a context-free or context-sensitive structural description. Given a syntactic terminal S, impoverishment deletes a feature on S, and obliteration deletes the terminal S entirely.

In the Basque g-ia- constraint, obliteration is best detected when the presence of S conditions allomorphy elsewhere. As we will see, obliteration (not impoverishment) of an ergative agreement morpheme renders an auxiliary root form identical with an intransitive variant, even when the overt ergative pronoun argument remains.

The basic currency of agreement relations and impoverishment and obliteration operations are abstract morphosyntactic features. We provide the inventory of features and their definitions that are relevant for this paper below. Note that [+F] = [−F].

   a. [+Author] true iff the reference set contains the speaker.
   b. [+Participant] true iff the reference set contains one of the discourse participants.
   c. [−Author, −Participant] = 1st person.
   d. [−Author, +Participant] = 2nd person.
   e. [−Author, +Participant] = 3rd person.
   f. [+Author, +Participant] = logically impossible.
   g. Marked value = + for both [+Participant] and [+Author].

4 The Basque Auxiliary-Agreement Complex

The locus of the Basque g-iz constraint is the auxiliary, which is composed of three distinct types of elements: agreement for the arguments ergative, dative, and absolutive; tense; and auxiliary root (either have or be). The auxiliary is generally sentence final in canonical word order; some representative sentential contexts are provided below, along with a general schematic template for the auxiliary. The following are some relevant examples from Zamudio, a representative variety of Bizkaian Basque:

(9) Bakotx-a bere etze-an bixi d- a.
each-SG his house-SG in live 3S-A- INT
"Each person lives in their house."

(10) Sa-k ni-k bato giis-o etxe-o d- o- su.
"You have brought more than me."

(11) Bat-an hat-eri enmo-ngo d- o- tae- t.
one-SG one-OG give-PART 3S-A- TR- 3S-D- 1S.E
"I'll give it to someone or other."


4.1 Agreement

We provide a list of the agreement affixes in Zamudio in table 1 (the items in bold will be important in our exposition of the g-iz constraint in later sections). In (13), we present representative Vocabulary Items (which pair phonological content with morphosyntactic features that they realize) for the

```
<table>
<thead>
<tr>
<th>Dative Agr</th>
<th>Absolutive Agr</th>
<th>Ergative Agr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S $ -st$</td>
<td>1S $ -n$</td>
<td>1S $ -t$</td>
</tr>
<tr>
<td>1P $ -sku/ku$</td>
<td>1P $ -g$</td>
<td>1P $ -a$</td>
</tr>
<tr>
<td>2S.M.COLL $ -k$</td>
<td>2S.COLL $ -b$</td>
<td>2S.M.COLL $ -k$</td>
</tr>
<tr>
<td>2S.F.COLL $ -na$</td>
<td>2S.FORM $ -s$</td>
<td>2S.F.COLL $ -na$</td>
</tr>
<tr>
<td>2S.FORM $ -tsa$</td>
<td>2P $ -s$</td>
<td>2S.FORM $ -su$</td>
</tr>
<tr>
<td>2P $ -tsu$</td>
<td>3S $ -d$</td>
<td>2P $ -s$</td>
</tr>
<tr>
<td>3S $ -tsi/kie$</td>
<td>3P $ -d$</td>
<td>3S $ -W-o$</td>
</tr>
<tr>
<td>3P $ -tsi/kie$</td>
<td>3P $ -e$</td>
<td></td>
</tr>
</tbody>
</table>
```

Table 1: Agreement morphemes in Zamudio Basque

ergative agreement node. A more complete analysis of the morphology of the auxiliary complex in Zamudio Basque is provided in an online appendix to this paper (Arregi and Nevins 2006).

(13) $ -al$ $ -[+Author,+Participant, -Sing]$

$ -al$ $ -[+Author,+Participant]$

$ -kl$ $ -[Colloquial, -Feminine]$

$ -ma$ $ -[Colloquial, +Feminine]$

$ -al$ $ -[+Participant]$

$ -al$ $ -[Sing]$  

$ -al$ $ -[-Participant], [ -Participant, +Sing, +Motion]$

The Basque g-iz constraint is the auxiliary, which is composed of three distinct types of elements: agreement for the arguments ergative, dative, and absolutive; tense; and auxiliary root (either have or be). Arregi (2004) presents thorough argumentation that the have/be alteration in Basque is based on the presence/absence of ergative agreement, and not on the ergative DP argument. That this is the case can be best detected when ergative agreement and argument arguments part ways.

The first demonstration comes from the fact that some psych verbs usually take be, since they have no ergative argument. This is exemplified for Osolarru:

(14) Ni-ri ber-a gusta-tea g- a-sta.
1S.D 3S.A like-IMP 3S-A- INT-1S.D
"I like him."

As the *me-lui* constraint bars 1 Dat – 2 Abs, the particular repair employed
is that absolute agreement in Ondarroa is realized instead by ergative morphology. Importantly, this use of ergative morphology triggers the presence of have (16), even though there is no ergative DP argument.

    ‘I like you.’

    ‘I like you.’

Thus, (16) shows that ergative agreement, and not an ergative argument, triggers the presence of the transitive auxiliary have.

Additional evidence comes from possessive have in Standard Basque:

(17) Jon-ek liburu bat-∅ d- u- 0
    Jon-E book one-A 3S.A- have- 3S.E
    ‘Jon has a book.’

Non-finite verbal forms in Basque do not contain agreement morphology. In a non-finite possessive clause, be surfaces instead of have, even in the presence of an ergative subject:

    ‘Jon wants me to have a book.’

Despite licensing an ergative argument, non-finite verbal forms have no ergative agreement, so the root of the verb must be be, not have.

Thus, as be can occur with an ergative DP subject, and have can occur without an ergative subject, the intermin summary is that the have/be alternation in Basque is determined by the presence of ergative agreement, and is thus a post-syntactic determination of allomorphy, which will become important in our analysis of the g-iz- constraint, as will be seen below.

5 The g-iz- Constraint in Six Bizkaian Dialects

In this section, we present our analysis of the g-iz- constraint. The basic idea is that it is a dissimilation rule triggered by adjacent [+Participant] features. As we will see, there is significant dialectal variation in the application of this rule; the next section illustrates this with six different Bizkaian varieties.

We provide a unified analysis for all varieties involved by separating the structural description (triggering context) of the dissimilation rule from the structural change (repair) it effects. Dialectal variation can be witnessed in both parts of the rule. We begin with the structural description, of which there are two types: (i) 2 ergative and 1PI dative/absolute (*you-us), and (ii) 1PI ergative and 2 dative/absolute (*we-you). In terms of the features involved, this can be schematized as follows:

<table>
<thead>
<tr>
<th>Erg</th>
<th>Dat/Abs</th>
</tr>
</thead>
<tbody>
<tr>
<td>+[Participant]</td>
<td>+[Participant]</td>
</tr>
<tr>
<td>+Author</td>
<td>+[Author, -Singular]</td>
</tr>
<tr>
<td>+Author, -Singular</td>
<td>-Author</td>
</tr>
</tbody>
</table>

What is common to all dialects is that the structural description contains two adjacent [+Participant] features, which is what triggers dissimilatory repair.

The structural change triggered by this structural description is also of two different kinds. It can be either impoverishment or obliteration. That is, it can involve deleting either a [+Participant] feature on one of these terminals (impoverishment), or one of these terminals entirely (obliteration).

Which specific terminal is affected by it is also subject to dialectal variation. For instance, the context 2 Erg – 1PI Abs (*you-us) triggers impoverishment of 1PI Abs in Ondarroa, but impoverishment of 2 Erg in Maruri (see subsections 6.2 and 6.3, respectively).

This dialectal variation is discussed in the following two sections, where we present the different implementations of the dissimilation rule. Section 6 concentrates on *you-us, and section 7, on *we-you.

6 Resolving *you-us: Three Repairs

Across all Bizkaian dialects, we have found three different implementations of of *you-us, which applies whenever the auxiliary contains a 1PI Dat/Abs and a 2 Erg terminal: obliteration of 1PI Dat, impoverishment of 1PI Abs, and impoverishment of 2 Erg in the context of 1PI Abs. We discuss each of these in three separate subsections.

6.1 Obliteration of 1PI Dat when there is 2 Erg

This g-iz- rule applies in Alboniga, Butroi and Ondarroa. In all these dialects the exponent of 1PI Dat ska is absent in the presence of 2 Erg:
6.3 Impoverishment of 1Pl Abs When There is 2 Erg

In Ondarru, 1Pl Abs is impoverished in the presence of 2 Erg:

(25) (Suk gu likat) g- skitu-su → d- o- su.
    (You saw) 1Pa:TR- 2E → 3sA:TR- 2sE
    ‘You saw us.’ (Ondarru)

(26) (Suk gu likat) g- skitu-sue → d- o- sue.
    (Y’all saw) 1Pa:TR- 2P.E → 3sA:TR- 2P.E
    ‘Y’all saw us.’ (Ondarru)

(27) Impoverish the Abs node containing [+Author, –Singular].

A direct result of this rule is that the elsewhere absolute prefixes d- is inserted (see section 4). Furthermore, the auxiliary goes from the expected -skitu-, to

\[ \text{–o-}, \text{the elsewhere transitive auxiliary. (See Arregi and Nevins 2006 for details of the Vocabulary items involved.)} \]

7 Resolving *we-you: Three Repairs

The constraint *we-you (1Pl Erg with 2 Abs/Dat) triggers two different types of repair across Basque dialects: in the context of 2 Abs, 1Pl Erg is impoverished or obiterated, and in the context of 2 Dat, 1Pl Erg is obiterated.

7.1 Impoverishment of 1Pl Erg when there is 2 Abs

In Alborniga, 2 Abs triggers impoverishment of 1Pl Erg:

(31) (Guk sukikat) s- skitu-sie gu → s- skitu-sie. 0.
    We y’alld saw 2Pa:TR- 2P.E → 2P.A:TR- 2sE
    ‘We saw y’alld.’ (Alborniga, de Yrizar (1992, vol. 1: 463))
(32) Improverish the Erg node containing [+Author, –Singular].

In this case, the 1PI Erg exponent qa is replaced by the default (35g) suffix ə. Note that nothing else changes in the auxiliary. In particular, the auxiliary root retains the transitive form aita, which, as will be seen in the next subsection, is an indication that the ergative node is still present.

7.2 Obliteration of 1PI Erg When There is 2 Abs

In precisely the same context as the previous subsection, 1PI Erg is obliterated in Gallaruto and Zamudio.

(33) (Guk xeeb iakai) s- aittu e- ga s- ara e. (We you now) 2A- TR- PA- 1ST- RE- 2A- INT- PA

“We saw y’all.” (Gallaruto, de Yrizar, 1992, vol. 2: 127)

(34) (Guk sa ikasi) s- aittu u s- ara. (We you seem) 2A- TR- 1ST- RE- 2A- INT

“We saw you.” (Zamudio, Gamimunde 2000:573)

(35) Obliterate the Erg node containing [+Author, –Singular].

Even though the triggering context and the terminal affected are the same as in the previous case, the changes in the auxiliary are clearly more radical. In particular, the auxiliary root changes from the expected transitive aita to intransitive aru. This shows that the ergative terminal is completely deleted, since a transitive form of the auxiliary is only possible if this terminal is present. In other words, the ergative terminal is obliterated, not simply impoverished. In the case of impoverishment, as we saw in the previous subsection, the ergative terminal is still present (even though it is realized as ə), which triggers the insertion of the transitive auxiliary form.

7.3 Obliteration of 1PI Erg when there is 2 Dat

In Zamudio, 1PI Erg is also obliterated in the context of 2Dat:

(36) (Guk hiri emon) d- o- tzu u d- a- tzu. (We you gave) 3A- TR- 2A- 1ST- RE- 3A- INT- 2A- D

“We gave it to you.” (Zamudio, Gamimunde 2000)

As in the previous case, [+Author] is deleted in addition to [+Participant].

*The Gallaruto data are from Gamimunde 1983, as reported in de Yrizar 1992.

The forms a-ara-e in Gallaruto surfaces as nar-e due to reanalysis of rules (see Arregi and Nevins 2006.)

8 Why Obliteration Never Happens to 2nd Person

In considering the range of repairs to the g-ə constraint across dialects in the previous sections, an important generalization emerges. Improverishment can affect either a 1st plural or 2nd person node, by deleting the marked feature [+Participant], and possibly other features on the node, but retaining the node nonetheless. However, the more radical operation of obliteration, which deletes the entire “offending” node (thus removing the presence of ergative agreement in certain cases, and hence changing the form of the auxiliary root allomorph from have to be), only affects 1st plural nodes, and never 2nd person nodes. While this could be considered an accidental fact about the typology of repairs, in this section we attempt to derive the fact that an obliteration operation only affects 1st plural nodes based on the logic of the person features we have adopted throughout.

To begin, we must note that although we have used the term ‘improverishment’ to refer to feature deletion, there are in fact two distinct types of impoverishment operations that have been proposed in the literature. The first, in (39a), is more commonly assumed (e.g. Bonet 1991, Haile and Marantz 1993): a deleted feature simply means that nothing is left. The second (39b), however, has been shown to be empirically necessary by Noyer (1998) and Harbour (2002b): deleting a particular feature leads to insertion of the opposite value of that feature.

(37) a. Feature deletion: [əF] → ə, or

b. Reversal: deletion followed by insertion: [əF] → ə → [¬əF]

Importantly, in the Basque g-ə repairs we have been considering, since the Vocabulary Item realizing 3 Erg is the zero morpheme /θ/, impoverishment in
impovery with feature reversal:

(45) 'Obliteration' = Feature reversal + Eradicate contradictory nodes

In summary, while the repair to the g/-e- constraint always involves impoverishment of the targeted feature [+Participant], the choice between feature deletion and feature reversal will yield either ambiguous effects or distinct effects depending on the value of the cooccurring feature [+Author]. Deletion or reversal in 2nd person yield insertion of default θ. However, while feature deletion in 1Pl yields insertion of the elsewhere form, feature reversal in 1Pl leads to logical incompatibility, which is resolved by eradication of the entire node.

This ambiguity between feature deletion (traditional impoverishment) and feature reversal (which may be followed by (45), yielding obliteration) is probably rampant throughout many proposed cases of impoverishment in the literature, and has thus far not received a great deal of attention towards the latter. Biskain Basque provides a unique diagnostic for when obliteration is occurring due to the "voice-sensitive" allomorphy of the root auxiliary node discussed in section 4. When a contradictory [+Participant, -Author] ergative node is entirely deleted via obliteration, not only is the Vocabulary Item in question affected, but a corresponding change from have to be on a separate node ensues as well.

9 Implications

From this study of morphological markedness and its repairs in Basque auxiliary complexes, three larger points emerge. The first important conclusion is that 1st and 2nd person share a marked feature: +[Participant]. The second point is that Obliteration and Impoverishment are formally distinct operations. Finally, in inspecting the various repairs in the six dialects we have studied here, a more general point that emerges is that a key source of morphological microvariation is due to different structural changes that target the same structural description.

References

Arregi, Karlos. 2004. The have/be alternation in Basque. Ms., University of Illinois at Urbana-Champaign.
Arregi, Karlos, and Andrew Nevins. 2006. The auxiliary system in Zamudio: An
Restructuring in Japanese Revisited: A Phrasal Movement Analysis of Purpose Expressions

Yukiko Asano*

1 Introduction

Purpose Expressions (PES) in Japanese consist of an animate NP, an infinitival phrase (InP), and a motion verb (MV) such as iku 'go' or kuru 'come'.

(1) John-ga (te-hippo dono kai-ni) it-ta
    *John went to buy books.

PES in Japanese show restructuring phenomena (Miyagawa 1987, Tsujimura 1993, Wurmbrand 1998, 2001); they show 'mono-clausal' behavior in one context and 'bi-clausal' behavior in others. In this paper, I provide a unified account for both of these types of PES. Specifically, I propose that PES constructions involve a mono-clausal structure, and (i) the so-called bi-clausal behavior of PES is a consequence of the interaction of two independently motivated syntactic movements, the movement of an element out of the InP and the movement of the InP itself.

2 “Mono-clausal” / “Bi-clausal” Alternation of PES

It has been discussed in the literature that PES in Japanese pattern with mono-clausal constructions with respect to the distribution of the focus particle sika ‘only’ and the nominative-object in some contexts, while they pattern with bi-clausal constructions in other contexts (Miyagawa 1987, Tsujimura 1993, Wurmbrand 1998, 2001). In this section, we briefly review the licensing conditions for sika ‘only’ and the nominative-object. Then, the mono-bi-clausal alternation of PES discussed in Miyagawa (1987) is introduced.

* I thank Heejoung Ko, Richard Larson, Edith Aitken, and Susi Wurmbrand for their helpful discussion and comments. I also thank the participants of PLC30 for their valuable comments and questions. Finally, I am also indebted to Toroko Kawamura, Marianne Borroff, Carlos de Caba, as well as to Massani, Yamiko, and Chamu Asano for their help and encouragement. Needless to say, all errors are mine.

UNIVERSITY OF PENNSYLVANIA
WORKING PAPERS IN LINGUISTICS

Proceedings of PLC 30

Issue editors
Tatjana Scheffler, Joshua Tauberer, Aviad Elgam, and Laila Mayol