The psychological verbs of Basque
in typological and diachronic perspective

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Abstract. Among the languages that have a strong preference for the ambitransitivity strategy in the noncausal-causal alternation, Basque is characterized by systematic recourse to the same strategy in psych alternation. Diachronically, ergative coding of the experiencer of compound verbs developed from the 18th century, and we argue that analogy with compound verbs is responsible for the increase in the number of simplex verbs with the ErgExp-AbsStim frame, and for the emergence of the ErgExp-OblStim frame among simplex verbs.

1. Introduction

This presentation is about the Basque verbs denoting psychological processes or states affecting experiencers in reaction to stimuli. Note that this definition of psych verbs is narrower than that underlying previous works on this question (Davies & Martínez-Arbelaitz 1995, Etxepare 2003, Fernández & Ortiz de Urbina 2010).¹

Psych verbs are often found in pairs expressing the same denotative meaning with two distinct perspectivizations of the same argument structure <Experiencer, Stimulus>, and there is cross-linguistic variation in the possible formal relationships between the two members of such pairs.

After presenting the coding frames of the psych verbs of Basque (section 2) and the valency alternations to which they lend themselves (section 3), we discuss their valency properties in typological perspective (section 4), and the way these properties evolved through the documented history of Basque (sections 5 to 7).

2. The coding frames of the psych verbs of Basque

2.1. A preliminary note on the conjugation of Basque verbs and the distinction between simplex verbs and compound verbs

The vast majority of Basque verbs don’t have synthetic finite forms, and can only occur as nuclei of independent clauses in combination with an auxiliary inflected for tense-mood and

¹ In this presentation, the polysemous verbs that meet this definition in some of their uses are considered only in constructions in which they express the <Experiencer, Stimulus> argument structure.
² The notion of perspectivization (Partee & Borschev 2004, Borschev & Partee 2002) accounts for alternating constructions that involve no difference in the denotative meaning, and cannot be entirely explained in terms of information structure either, such as the relationship between locational and existential predication, or the active-passive alternation. This notion, discussed in cognitive linguistics in terms of ‘viewpoint’ or ‘semantic starting point of predication’, is based on the idea that the first operation in the elaboration of a sentence consists in ‘scanning’ the situation to which the sentence refers, which implies taking one of its elements as the starting point.
argument indexation, either ‘be’ (in intransitive constructions) or ‘have’ (in transitive constructions). Since Basque makes a wide use of compound verbs combining a non-verbal element with a light verb, and ‘be’ and ‘have’ are widely used as light verbs in such compounds, this raises the question of distinguishing analytical forms of simplex verbs from compound verbs, and even more so because many lexemes that occur as the non-verbal element of compound verbs also occur as verb roots. For example, haserre ‘anger’ occurs as the non-verbal element of the compound verb haserre izan ‘be angry’ (lit. ‘be anger’), and as the root of the synonymous verb haserre-tu (where -tu is the ending of the completive participle, used in Basque as the quotation form of verbs).

In order to facilitate the understanding of the examples quoted in this presentation, ‘be’ and ‘have’ in auxiliary function in analytical verb forms are glossed beAUX and haveAUX.

### 2.2. Simplex verbs

Using ‘oblíque’ as a cover term for all cases other than absolutive and ergative, five possible coding frames can be identified among the psych verbs of Basque:

- AbsExp-oblStim (1);
- ErgExp-absStim (2);
- ErgExp-oblStim (3–4);
- AbsStim-datExp (5);
- ErgStim-absExp (6).

1. **Jon ehez aspertu da.**
   
   Jon hunting.INSTR bore.CPL beAUX.PRS.A3SG
   
   ‘Jon got bored of hunting.’

2. **Jon ek zure portaera gaitzesten du.**
   
   Jon.ERG 2SG.GEN behavior.SG disapprove.ICPL haveAUX.PRS.A3SG.E3SG
   
   ‘Jon disapproves of your behavior.’

3. **Jon etxeari ederretsi zion.**
   
   Jon.ERG house.SG.DAT like.CPL haveAUX.PST.A3SG.D3SG.E3SG
   
   ‘Jon liked the house.’

4. **Jon ebiziaz etsi du.**
   
   Jon.ERG life.SG.INSTR despair.CPL haveAUX.PRS.A3SG.E3SG
   
   ‘Jon despairs of life.’

5. **Joni txokolatea gustatzen zaio.**
   
   Jon.DAT chocolate.SG please.ICPL beAUX.PRS.A3SG.D3SG
   
   ‘Jon likes chocolate.’

6. **Zure portaera Jon asaldatzen du.**
   
   2SG.GEN behavior.SG.ERG Jon upset.ICPL haveAUX.PRS.A3SG.E3SG
   
   ‘Your behavior upsets Jon.’

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3 Abbreviations in the schematization of coding frames: Abs = absolutive, Dat = dative, Erg = ergative, Exp = experiencer, Stim = stimulus.

4 Abbreviations in the glosses of examples: A = absolutive index, ALL = allative, COM = comitative, CPL = completive, D = dative index, DAT = dative, DEM = demonstrative, E = ergative index, ERG = ergative, GEN = genitive, ICPL = incompletive, INSTR = instrumental, MTV = motive, NEG = negation, PL = plural, PRS = present, PST = past, REL = relativizer, SG = singular.
As can be seen from the list of psych verbs in the appendix, these five coding frames are unevenly represented in the lexicon. The only ones that are not statistically marginal are those including an absolutive term.5

2.3. Compound verbs

In this study, we only consider strongly lexicalized compound verbs whose verbal element is izan ‘be’ or ukan ‘have’. As a matter of fact, the construction of compound verbs such as poz eman ‘please’ (lit. ‘give joy’) or plazer egin ‘please’ (lit. ‘make pleasure’) is nothing more than the construction of the verbal element of the compound with the non-verbal element of the compound as the absolutive term of the construction, and the stimulus and experiencer NPs as the ergative and dative terms.

As shown by the list of psych verbs in the appendix, the compound psych verbs whose verbal element is izan ‘be’ or ukan ‘have’ may have one of the following coding frames:

– AbsExp-OblStim (7-8);
– ErgExp-AbsStim (9);
– ErgExp-OblStim (10-11);
– AbsStim-DatExp (12).

(7) Euskaldun izateaz ahalke zen

Basque being.SG.INSTR shame be.PST.A3SG
‘He was ashamed of being Basque.’

(8) Haren lotsa gara.

DEM.SG.GEN fear be.PRS.A1PL
‘We fear him.’

(9) Haltzak errekak eta aintzirak laket ditu.

alder.SG.ERG river.PL be.PRS.1PL lake.PL pleasure have.PRS.A3PL.E3SG
‘The alder likes rivers and lakes.’

(10) Herabe dut gezurra esatera.

shyness have.PRS.A3SG.E1SG lie.SG saying.SG.ALL
‘I dare not tell a lie.’

(11) Zergatik didazu halako gorrotoa?

what.MTV have.PRS.A3SG.D1SG.E2SG such hate.SG
‘Why do you hate me so much?’

(12) Haurrei negua ez zitzaient gaitzi.

child.PL.DAT winter.SG NEG be.PST.A3SG.D3PL hostility
‘Winter was not unpleasant for children.’

The coding frames of compound verbs do not fully coincide with those of simplex verbs: the variant of the AbsExp-OblStim frame with the stimulus in the genitive has no equivalent for simplex verbs, and conversely, ErgStim-AbsExp, widely attested with simplex verbs, is not found with compound verbs.

5 Fernández Fernández & Ortiz de Urbina (2010: 76, 106) also mention the DatExp-InstrStim coding frame (as in Damutu zaio hori eginaz ‘He is sorry for doing that’), probably an accidental hybrid of the regular AbsExp-OblStim and AbsStim-DatExp coding frames – see also section 7.
3. The psych alteration in Basque

Several valency alternations are found among the psych verbs of Basque. In fact, those having a single possible construction are rather the exception than the norm. In this section, we describe the valency alternations in which the psych verbs of Basque may be involved with reference to common use in present-day Standard Basque.

A remarkable property of Basque, in comparison with other languages, is that none of these alternations involves a change in the verb stem. In particular, Basque does not use causative derivation in the psych alternation, or only in a very marginal way. For example, the same verb beldurtu is productively used intransitively as the equivalent of English ‘fear’, and transitively as the equivalent of English ‘frighten’. The causative form beldurarazi ‘make fear’ exists, but its subject represents an instigator rather than the direct cause of fear, as in English Don’t try to frighten me with such stories.

3.1. The AbsExp-OblStim ~ ErgStim-AbsExp alternation

As can be seen in the appendix, this alternation, illustrated in (13), is by far the most widespread one among simplex verbs, but is not attested at all among compound verbs (none of which is attested with the coding frame ErgStim-AbsExp).

(13a) Jon ehizaz aspertu da.  
Jon hunting.INSTR bore.CPL be.AUX.PRS.A3SG  
‘Jon got bored of hunting.’

(13b) Ehizak Jon aspertu du.  
hunting.SG.ERG Jon bore.CPL have.AUX.PRS.A3SG.E3SG  
‘Hunting bored Jon.’

3.2. The AbsExp-OblStim ~ ErgExp-AbsStim (~ ErgExp-OblStim) alternation

In this section, we group the verbs having two or three possible constructions in which the experiencer is invariably, either the absolutive term of an intransitive construction, or the ergative term of a transitive construction, as in (14).

(14a) Jon miretsi zen han ikusi zuenez.  
Jon be.amazed.at.CPL be.AUX.PST.A3SG there see have.AUX.PST.A3SG.E3SG.REL.INSTR  
‘Jon was amazed at the things he saw there.’

(14b) Jonek haren trebatasuna beti miretsi du.  
Jon.ERG DEM.GEN talent.SG always be.amazed.at.CPL have.AUX.PRS.A3SG.E3SG  
‘Jon has always been amazed at his talent.’

We came across this alternation with one simplex verb (miretsi ‘be amazed at’) and three compound verbs (dolu izan/ukan ‘regret’, erruki izan/ukan ‘feel sorry’, gupida izan/ukan ‘feel sorry’). Dolu izan/ukan and gupida izan/ukan also have ErgExp-OblStim as a possible coding frame:

(15a) Ez naiz batere dolu.  
Jon be.PRS.A1SG at.all repentance  
‘I do not regret anything.’

(15b) Dolu dut zure kontra hori egin izana  
repenance have.PRS.A3SG.31SG 2SG.GEN against DEM do.CPL have.CPL.SG  
‘I regret that I did that against you.’
(15c) *Dolu* *dut* zu *joateaz*.
repentance have.PRS.A3SG.E1SG 2SG going.SG.INSTR
‘I regret that you are leaving.’

3.3. The *ErgExp-AbsStim (~ ErgExp-OblStim) ~ AbsStim-DatExp* alternation

The *ErgExp-AbsStim ~ AbsStim-DatExp* alternation, illustrated in (16), is attested with three compound verbs (*atsegin izan/ukan ‘like’, *higuit ukan/izan ‘abhor’, *laket ukan/izan ‘like’), and with the simplex verb *ederretsi* ‘like’.

(16a) *Higuit* *dut* *gezurra*.
disgust have.PRS.A3SG.E1SG lie.SG
‘I abhor lie.’

(16b) *Higuit* *zait* *haren* *akatsa*.
disgust be.PRS.A3SG.D1SG DEM.GEN fault.SG
‘I abhor his faults.’

Among these verbs, *laket izan* and *ederretsi* are also found with the *ErgExp-OblStim* coding frame.

(17a) *Ehun* *urte* *eta* *gero* *pintura* *zahar* *horiek* *ederretsi* *dituzte*.
hundred year and later painting old DEM.PL like.CPL hav_AUX.PRS.A3PL.E3PL
‘One hundred years later, they have liked those old pictures.’

(17b) *Etxeari* *ederretsi* *zion*.
house.SG.DAT like.CPL have_AUX.PST.A3SG.D3SG.E3SG
‘He liked the house.’

(17c) *Ederresten* *zaio* *bere* *emaztea*.
like.ICPL be_AUX.PRS.A3SG.D3SG his wife.SG
‘He likes his wife.’

3.4. The *ErgExp-AbsStim ~ ErgStim-AbsExp* alternation

*Higuitu* ‘disgust’ is the only verb for which we have observed the alternation between two equally transitive constructions:

(18a) *Hori* *higuintzen* *dut*.
DEM.SG disgust.ICPL have_AUX.PST.A3SG.E1SG
‘That disgusts me.’

(18b) *Horrek* *higuintzen* *nau*.
DEM.SG.ERG disgust.ICPL have_AUX.PST.A1SG.E3SG
‘That disgusts me.’

3.5. The *AbsExp-OblStim ~ AbsStim-DatExp (~ ErgStim-AbsExp)* alternation

In this section, we group the verbs that may have two intransitive constructions with a different choice of the absolutive argument, as in (19):

(19a) *Urrikitez* *naiz* *nire* *hutsez*.
regret.ICPL be_AUX.PRS.A1SG 1SG.GEN mistake.INSTR
‘I regret my mistake.’
(19b) Nire hutsa, urrikiten zait.
1SG.GEN mistake.SG regret.ICPL beAUX-PRS.A3SG.D1SG
‘I regret my mistake.’

We have found this alternation with damutu ‘regret’, dolutu ‘regret’, gaitzitu ‘bother’, interesatu ‘interest’, laketu ‘like’, urrikitu ‘regret’. Some of these verbs are also compatible with the ErgStim-AbsExp coding frame, as in (20):

(20a) Mikel horretan interesatu da.
Mikel DEM.SG.LOC interest.CPL beAUX-PRS.A3SG
‘Mikel was interested in that.’

(20b) Hori Mikeli interesatu zaio.
DEM.SG Mikeli.DAT interest.CPL beAUX-PRS.A3SG.D3SG
‘That interested Mikel.’

(20c) Arteak Mikeli interesatzen du.
art.SG Mikeliinterest.ICPL haveAUX-PRS.A3SG.E3SG
‘Art interests Mikel.’

3.6. The particular case of damu izan/ukan ‘regret’

This verb has four possible constructions, which can be analyzed as the combination of two alternations: AbsExp-OblStim ~ ErgExp-AbsStim (~ ErgExp-OblStim) (see 3.2) and AbsExp-OblStim ~ AbsStim-DatExp (see 3.5):

(21a) Ez gara ezertaz damu.
NEG be.PRS.A1PL nothing.INSTR repentance
‘We do not regret anything.’

(21b) Ez dugu damu hartu genuen nekea.
NEG have.PRS.A3SG.E1PL repentance take.CPL haveAUX-PST.A3SG.E1SG.REL trouble.SG
‘We don’t regret the trouble we went to.’

(21c) Damu izango dugu hura erosiaz.
repentance have.FUT haveAUX-PRS.A3SG.E1PL DEM.SG buy.CPL.SG.INSTR
‘We will regret having bought this.’

(21d) Damu zaigu hori egina.
repentance have.PRS.A3SG.D1PL DEM.SG do.CPL.SG
‘We regret having done this.’

4. The psych alternation of Basque in typological perspective

In this section, we discuss the relationship between the basic valency orientation of Basque and the valency properties of the psych verbs in typological perspective.

4.1. The basic valency orientation of Basque

The notion of basic valency orientation, developed and discussed a.o. by Haspelmath (1993, 2016) and Nichols et al. (2004), refers to the prevailing tendencies in the coding of ‘noncausal-causal’ verb pairs. The two verbs constituting a noncausal-causal pair may refer to the same
events, but the causal verb has an additional argument in the role of instigator, encoded as the agent of a transitive construction.  

Five types of strategies may be involved in the coding of noncausal-causal pairs of verb meanings:

- the *suppletivism* strategy $nC \neq C$: in a suppletive pair, the formal difference between the noncausal verb and its causal counterpart cannot be analyzed as a particular instance of some more or less regular pattern;
- the *ambitransitivity* strategy $nC = C$: in an ambitransitive pair, there is no formal difference between the noncausal verb stem and its causal counterpart;
- the *causativization* strategy $nC > C$: in a causative pair, the causal verb can be analyzed as formally more complex than its noncausal counterpart;
- the *decausativization* strategy $nC < C$: in a decausative pair, the noncausal verb can be analyzed as formally more complex than its noncausal counterpart;
- the *equipollence* strategy $nC \sim C$: the two members of an equipollent pair are formally related, but the relationship cannot be directed from $nC$ to $C$ or from $C$ to $nC$; this definition embraces several subtypes that Nichols & al. (2004) designate as double derivation, conjugation class change, auxiliary change, and ablaut.

The noncausal-causal pairs particularly relevant for characterizing languages according to their basic valency orientation are those whose noncausal member is a monovalent verb referring to a process (not a state) typically undergone by concrete inanimate entities, and easily conceived as occurring without the involvement of a clearly identified external instigator. The reason is that, cross-linguistically, in comparison with other semantic types of noncausal-causal pairs, this type seems to show the following two particularities: on the one hand, a relatively high proportion of pairs whose members are either morphologically related or identical, and on the other hand, a particularly important cross-linguistic variation between the possible strategies (cf. in particular Haspelmath 2016).

In the coding of such noncausal-causal pairs, some languages (the ‘causativizing’ or ‘transitivizing’ languages) show a marked preference for the causativization strategy, whereas some others (the ‘decausativizing’ or ‘detransitivizing’ languages) show a marked preference for decausativization. For example, Romance languages belong to the latter category, due to the development of a middle voice via grammaticalization of the Indo-European reflexive pronoun.

However, there are also languages in which none of the possible strategies is particularly prominent, and also languages showing a marked preference for ambitransitivity, such as Basque. In (22), we compare a sample of noncausal-causal pairs in Spanish (a typical detransitivizing language), Akhvakh (an East Caucasian languages showing a very strong preference for causativization), and Basque. As can be seen from the English translations, the preference for ambitransitivity in Basque is at least as strong as in English.

<table>
<thead>
<tr>
<th></th>
<th>Basque</th>
<th>Spanish</th>
<th>Akhvakh</th>
</tr>
</thead>
<tbody>
<tr>
<td>puskatu (intr./tr.)</td>
<td>$nC=C$</td>
<td>romper-se</td>
<td>biq’- / biq’-aj-</td>
</tr>
<tr>
<td>erre   (intr./tr.)</td>
<td>$nC=C$</td>
<td>quemar-se</td>
<td>$nC&lt;C$</td>
</tr>
</tbody>
</table>

The labels ‘noncausal’ and ‘causal’ (abbreviated as $nC$ and $C$) refer to purely semantic notions, as opposed to ‘causative’ (which implies derivation from $nC$ to $C$) and ‘decausative’ (or ‘anticausative’, which implies derivation from $C$ to $nC$). ‘Noncausal’ and ‘causal’ are relative notions: a verb (or predicate) is not noncausal or causal in the absolute, but only in relation to another verb with which it forms a noncausal-causal pair (Haspelmath 2016). For example, *show* is causal in relation to *see*, but noncausal in relation to *make show*.  

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4.2. Basic valency orientation and psych alternation in Basque

Cross-linguistically, the coding of pairs of psych verbs expressing two distinct perspectivizations of the same psychological process or state is often similar to the coding of noncausal-causal pairs. For example, in Spanish (a typical decausativizing language), asustarse ‘fear’ / asustar ‘frighten’ (psych alternation) and romper-se ‘break (intr.)’ / romper ‘break (tr.)’ are formally similar, since the psych verb expressing the Exp > Stim perspectivization (asustar-se) derives from that expressing the Stim > Exp perspectivization (asustar) in the same way as the noncausal verb (romper-se) from the causal verb (romper) in the noncausal-causal alternation. In fact, in the literature, the confusion between the psych alternation and the noncausal-causal alternation is common. However, they differ in that, in the psych alternation, both verbs express the same argument structure <Experiencer, Stimulus> and differ only in terms of perspectivization, whereas in the noncausal-causal alternation, the monovalent argument structure <Theme> alternates with the bivalent argument structure <Agent, Patient>. However, the tendency to code the psych alternation in the same way as the noncausal-causal alternation is not surprising, since in a psychological process or state, the stimulus is the triggering element, which gives it some affinity with the agent in typical transitive events.

A remarkable property of Basque is that it makes extensive use of ambitransitivity, not only in the noncausal-causal alternation, but also in the psych alternation, with an important proportion of psych verbs lending themselves to a morphologically unmarked AbsExp-OblStim ~ ErgStim-AbsExp alternation (see section 3). For example, a psych verb such as asaldatu ‘get perturbed / perturb’ expresses two possible perspectivizations of the argument structure <Experiencer, Stimulus> in the same way as a verb such as itzali ‘go out / put out (fire)’ expresses the relationship between a process conceived as more or less spontaneous and the same process conceived as triggered by the action of an agent – examples (23) and (24).

(23a) Zergatik asaldatzen zara?
    what.MTV get.perturbed/perturb.ICPL be_2SG.AUX.PRES
    ‘Because of what are you perturbed?’

(23b) Zerk asaldatzen zaite?
    what.ERG get.perturbed/perturb.ICPL have_3SG.AUX.PRES
    ‘What perturbs you?’
Sutea itzali da.
fire.SG go.out/put.out.CPL beAUX.PRES.A3SG
‘The fire has gone out.’

Nork itzali du sutea?
who.ERG go.out/put.out.CPL haveAUX.PRES.A3SG.E3SG fire.SG
‘Who has put out the fire?’

In (25), we compare a sample of psych verbs lending themselves to a transitivity alternation in Spanish (a typical decausativizing language), Akhvakh (a typical causativizing language), and Basque.

<table>
<thead>
<tr>
<th>(25)</th>
<th>Spanish</th>
<th>Akhvakh⁷</th>
<th>Basque</th>
</tr>
</thead>
<tbody>
<tr>
<td>entristecer-se / entristecer</td>
<td>mizalilaj- / mizalilaj-ut’-</td>
<td>muzindu (intr./tr.)</td>
<td>‘get sad or angry / annoy’</td>
</tr>
<tr>
<td>ofender-se / ofender</td>
<td>mal:eq’ / mal:eq’-aj-</td>
<td>gaitzitu (intr./tr.)</td>
<td>‘get annoyed / annoy’</td>
</tr>
<tr>
<td>enojar-se / enojar</td>
<td>č’aśinaj- / č’aśinaj-ut’-</td>
<td>unatu (intr./tr.)</td>
<td>‘get tired/ tire (mentally)’</td>
</tr>
<tr>
<td>consolar-se / consolar</td>
<td>râq’:as:- / râq’:as:-aj-</td>
<td>kontsolatu (intr./tr.)</td>
<td>‘get comforted / comfort’</td>
</tr>
<tr>
<td>impresionar-se / impresionar</td>
<td>tamašalilaj- / tamašalilaj-ut’-</td>
<td>liluratu (intr./tr.)</td>
<td>‘get dazzled / dazzle’</td>
</tr>
<tr>
<td>divertir-se / divertir</td>
<td>rak’waxelaj- / rak’waxelaj-ut’-</td>
<td>dibertitu (intr./tr.)</td>
<td>‘get amused / amuse’</td>
</tr>
<tr>
<td>asustar-se / asustar</td>
<td>ġib- / ġib-aj-</td>
<td>beldurtu (intr./tr.)</td>
<td>‘fear / frighten’</td>
</tr>
<tr>
<td>alegrar-se / alegrar</td>
<td>beχ:- / beχ-aj-</td>
<td>poztu (intr./tr.)</td>
<td>‘rejoice / delight’</td>
</tr>
<tr>
<td>inquietar-se / inquietar</td>
<td>rak’waq’:waral- / rak’waq’:waral-aj-</td>
<td>kezkatu (intr./tr.)</td>
<td>‘worry (tr./intr.)’</td>
</tr>
<tr>
<td>avergonzar-se / avergonzar</td>
<td>surilaj- / surilaj-ut’-</td>
<td>lotsatu (intr./tr.)</td>
<td>‘be ashamed / put to shame’</td>
</tr>
<tr>
<td>volver-se loco / volver loco</td>
<td>Šadal- / Šadar-aj-</td>
<td>zoratu (intr./tr.)</td>
<td>‘get mad / make mad’</td>
</tr>
</tbody>
</table>

However, this extension of the ambitransitivity strategy to the psych alternation is less trivial than it may seem, since it is far from being general among the languages that have a marked preference for ambitransitivity in the noncausal-causal alternation. For example, English shows a preference for the ambitransitivity in the noncausal-causal alternation comparable to that observed in Basque, but has very few ambitransitive psych verbs; In English, the preferred strategies in the psych alternation are rather decausativization (get bored / bore) or equipollence (get ashamed / put to shame). Creissels (Forthcoming) makes similar observations on ten languages of Subsaharan Africa that also show a strong preference for ambitransitivity in the noncausal-causal alternation. We can therefore conclude that the very

⁷ Akhvakh has two causative suffixes in complementary distribution, -aj- and -ut’-. In order to facilitate the understanding of the examples, verb stems are given in their underlying morphological form, abstracting from the morphophonological processes occurring at morpheme boundaries.
wide use of the ambitransitivity strategy in the psych alternation is a salient characteristic of the transitivity system of Basque, even in comparison with other languages making a wide use of ambitransitivity in other domains.

5. The valency properties of simplex psych verbs in the history of Basque

5.1. The coding frames in the oldest texts

In our corpus of 16th and 17th century texts, the following coding frames are attested for simplex verbs:


In this corpus, the ErgExp-OblStim coding frame is not attested among simplex psych verbs.

5.2. Historical evolution

A few simplex verbs underwent a change of coding from the 16th century onwards. We observe two directions of change.

Firstly, urrikaldu ‘pity’ and gaitzitu ‘bother’ lost the AbsStim-DatExp frame and adopted the AbsExp-OblStim one – example (26). In the 20th c. texts, interesatu ‘interest’ changed in the opposite direction, from AbsExp-OblStim to AbsStim-DatExp.

(26a) Etxeberri, 18th c.
    Gaitzituuko zaie abre mutuekin konparatzea.
    bother.FUT be_AUX.PRS.A3SG.D3PL animal dumb.PL.COM comparing.SG
    ‘Comparing them with dumb animals will bother them.’

(26b) Zub, OEH-DGV
    Amerikanoa gaitzitzen da gauza horien oroitarazteaz.
    American.SG bother.1CP be:AUX.PRES.A3SG fact DEM.PL.GEN reminding.SG.INSTR
    ‘Reminding these facts bothers the American.’

For this research, we analyzed a corpus consisting of the main texts from the 16th century (Leizarraga, Etxepare, Lazarraga, RS, Garibai, Betolatza, Zalgize, Oihenart, Textos Arcaicos vascos) and some others from the 17th century (Gazteluzar, Mikoleta, Berito Bizkaitarra, Egiaien Kanta, Voltoire, Kapanaga, Amileta, Beriai). The historical dictionary from Mitxelena and Sarasola (Orotariko euskal hiztegia) enabled us to confirm the evolution of the verbs included in our corpus of Old Basque and Modern Basque (cf. sections 2 and 3).
Secondly, the verbs higuindu ‘disgust’ and urrikaldu ‘pity’, which took the AbsStim-DatExp coding frame in the oldest texts, developed the ErgExp-AbsExp frame later on. As we will see below (section 7), this evolution certainly occurred by analogy with the compound form of those verbs (higuin ukan ‘disgust’ and urrikari izan ‘pity’).

5.3. Psych alternation

In the 16th-17th century texts, the AbsExp-OblStim ~ ErgStim-AbsExp alternation, particularly productive in present-day Basque, is already attested for the following verbs: ahalketu ‘be ashamed’, asaldatu ‘upset, perturb’, aspertu ‘bore’, beldurtu ‘fear’, grinatu ‘bother’, harritu ‘surprise’, ikaratu ‘fear’, kontsolatu ‘comfort’, liratu ‘dazzle’, loriatu ‘delight’, lotsatu ‘get ashamed’, nardatu ‘disgust’, unatu ‘tire (mentally)’, zoratu ‘madden’. In other words, the verbs that have the ErgStim-AbsExp coding frame in the oldest texts also have the AbsExp-OblStim frame (cf. section 5.1).

However, we notice that this alternation spread over the centuries. Firstly, it is recent for some verbs that did not code their stimulus in the ergative in 16th-17th (and 18th) centuries: arranguratu ‘worry’, damatu ‘regret’, dibertitu ‘amuse’, dolatu ‘regret’, gaitzitu ‘bother’, interesatu ‘interest’, laketu ‘like’, pozu ‘gladden’. Secondly, the verbs okaztatu ‘disgust’ and txunditu ‘astound’, which still have the ErgStim-AbsExp coding frame in some 19th-20th century texts, developed the AbsExp-OblStim frame very recently. Lastly, among the verbs listed in section 2.1, all those which have been formed recently have this alternation: alaitu ‘gladden’, artegatu ‘worry’, atsekabetu ‘distress’, aztoratu ‘confuse, disturb’, errukitu ‘feel sorry’, gupidatu ‘feel sorry’, herabetu ‘be ashamed’, kezkatu ‘worry’, muzindu ‘annoy’, nazkatu ‘disgust’, nerbiostu ‘make nervous’, urduritu ‘make nervous’.

6. The compound psych verbs in the history of Basque

6.1. The coding frames in the oldest texts

In 16th-17th century texts, the compound psych verbs consisting of a non-verbal element and izan ‘be’ or ukan ‘have’ take the same coding frames as in Modern Basque, with the exception of ErgExp-DatStim, which is not attested in Old Basque.

However, the coding frames do not always concern the same verbs as in Modern Basque.


(b) AbsStim-DatExp: herabe izan ‘be ashamed’, gaitzi izan ‘bother’, laket izan ‘like’, higuindu izan ‘disgust’.


6.2. Historical evolution

We observe two opposite trends:

Firstly, a tendency towards ergative coding of experiencers that were coded in the absolutive or the dative in the oldest texts. This change concerns: beldur izan ‘fear’, laket izan ‘like’, herabe izan ‘be ashamed’, higuindu izan ‘disgust’, ahalke izan ‘be ashamed’. This evolution
affected the psych verbs is a particular case of a more general evolution that affected the compound verbs in historical times. Many compound verbs that consisted of a non-verbal element and izar ‘be’ in the 16th century (e.g. behar izar ‘need’, nahi izar ‘want’, gura izar ‘want’), replaced the verbal element izar ‘be’ by ukan ‘have’. As a result, coding frames lacking an absolutive term spread among the psych verbs. Whereas initially the non-verbal element occupied the absolutive slot, with the experiencer in the ergative and the stimulus in an oblique case, after the incorporation of the noun in the absolutive, the Erg-Obl coding frame spread to many verbs beldur izar ‘fear’ <ABS, GEN-DAT-POST> → <ERG, GEN-POST>; ahalke izar ‘be ashamed’ <ABS, POST> → <ERG, POST>, herabe izar ‘be ashamed’ <ABS, POST> → <ERG, POST>. Sometimes, we observe different evolutions across dialects. For example, damu izar ‘regret’ has the ErgExp-OblStim frame in the Eastern dialects and ErgExp-AbsStim in the Western ones. In other words, the lexicalisation of the compound verb may give rise to the displacement of the absolutive term, from the non-verbal element to the stimulus.

(27a) Oihenart, 17th c.

Eztu nehork zer zingiten ari,

NEG.have.PRS.A3SG.E3SG nobody.ERG what swearing need
egia laket etzialionari.

truth.SG pleasure NEG.be.PRES.A3SG.D3SG.REL.SG.DAT

‘It useless to swear to someone who doesn’t like the truth.’

(27b) Duvoisin, 19th c.

Laket ditut toki hauk.

pleasure have.PRS.A.3PL.E1SG place DEM.PL

‘I like these places.’

Secondly, we notice that in some cases the coding of the experiencer changed from ergative to absolutive or dative coding. This concerns the following verbs: erruki izar ‘feel sorry’, gupida izar ‘feel sorry’, urrikari izar ‘pity’, atsegan izar ‘like’, damu izar ‘regret’. However, the majority of these uses are late and marginal. Sometimes, the ergative experiencer was maintained and the stimulus changed from absolutive to oblique coding (gorroto ukan ‘hate’, gupida ukan ‘feel sorry’); but this evolution too is rare.

(28a) Lazarraga, 16th c.

Zuk ni erruki ez nauzu.

2SG.ERG 1SG compassion NEG have.PRS.A.1SG.E2SG

‘You don’t fell sorry for me.’

(28b) Kardaberatz, 19th c.

Nere burua ez ni erruki ez banaz...

1SG.GEN self.SG.STR 1SG compassion NEG if.be.PRS.A.1SG

‘If I don’t fell sorry for me...’

7. Comparison of simplex and compound verbs in diachrony

In Old Basque, as in Modern Basque, we notice differences in coding between simplex verbs and compound ones. They share three coding frames: AbsExp-OblStim, ErgExp-AbsStim and AbsStim-DatExp, but simplex verbs also display the ErgStim-AbsExp frame, whereas the ErgExp-OblStim frame is originally found only with compound verbs. Its extension to simplex
verbs is recent; and was certainly triggered by analogy with compound verbs. By contrast, the compound verbs did not acquire the ErgStim-AbsExp coding frame.

From the 18th century onwards, there is a tendency to code in the ergative the experiencer of compound verbs; this evolution also concerns the simplex verbs urrikaldu ‘pity’, higuindu ‘disgust’ and laketu ‘like’, which have a compound form that codes its experiencer in the ergative since the first texts (urrikari izan ‘pity’), or that evolved in this direction (higuin ukan ‘disgust’, laket ukan ‘like’). The analogy with compound verbs is obvious.

The cohabitation of the AbsStim-DatExp and AbsExp-OblStim frames among psych verbs has resulted in the appearance of the DatExp-OblStim frame in garbaitu ‘regret’; herabe izan ‘be ashamed’; gaitzitu ‘bother’; urrikitu ‘regret’; damutu ‘regret’.

(29) Leizarraga, 16th c.

\[
\text{Gauza berën zuei skribatzera niri etzait herabe.}
\]
\[
\text{thing same GEN 2PL.DAT writing.ALL 1SG.DAT NEG.be.PRS.A3SG.D1SG shame}
\]

‘I’m not ashamed to write you the same things.’

The coding frames without any absolutive term are marginal; the majority of them have a historical explanation.

8. Conclusion

In the first part of our presentation, after describing the coding frames of psych verbs and the alternations in which they are involved in present-day Standard Basque, we have proposed a typological characterization of this situation, whose most salient feature is a very wide use of ambitransitivity, since even among the languages making a wide use of ambitransitivity in the noncausal-causal alternation, the extension of the ambitransitivity as the preferred strategy in the psych alternation is far from being general.

In the second part, as regards the historical evolution of the coding frames of psych verbs, we have observed an evolution towards ergative coding of the experiencer of compound verbs that started in the 18th century, and we have hypothesized that analogy with compound verbs was responsible for the subsequent changes in the coding frames of simplex psych verbs: increase in the proportion of simplex verbs compatible with the ErgExp-AbsStim coding frame, and emergence of the ErgExp-OblStim coding frame. We also have observed that the psych alternation was already present in the most ancient texts, but spread to an important proportion of verbs in the 18th century and later.

9. References


Creissels, D. (Forthcoming). The noncausal-causal alternation and the limits of ambitransitivity in the languages of Sub-Saharan Africa.


Appendix : A list of psych verbs with their possible coding frames

<table>
<thead>
<tr>
<th>Verb</th>
<th>AbsExp-OblStim</th>
<th>ErgExp-AbsStim</th>
<th>ErgExp-OblStim</th>
<th>AbsStim-DatExp</th>
<th>ErgStim-AbsExp</th>
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<td>ahalke izan ‘be ashamed’</td>
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<td>ahalketu ‘be ashamed’</td>
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<td>aihier izan ‘long for’</td>
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