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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-Arbelaiz 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>², 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 be_{AUX} and $have_{AUX}$.

2.2. Simplex verbs

Using ‘oblique’ as a cover term for all cases other than absolutive and ergative, five possible coding frames can be identified among the psych verbs of Basque³ :

- AbsExp-OblStim (1);
- ErgExp-AbsStim (2);
- ErgExp-OblStim (3-4);
- AbsStim-DatExp (5);
- ErgStim-AbsExp (6).⁴

- (1) *Jon ehizaz aspertu da.*
 Jon hunting.INSTR bore.CPL be_{AUX} .PRS.A3SG
 ‘Jon got bored of hunting.’
- (2) *Jonek zure portaera gaitzesten du.*
 Jon.ERG 2SG.GEN behavior.SG disapprove.ICPL $have_{AUX}$.PRS.A3SG.E3SG
 ‘Jon disapproves of your behavior.’
- (3) *Jonek etxeari ederretsi zion.*
 Jon.ERG house.SG.DAT like.CPL $have_{AUX}$.PST.A3SG.D3SG.E3SG
 ‘Jon liked the house.’
- (4) *Jonek biziaz etsi du.*
 Jon.ERG life.SG.INSTR despair.CPL $have_{AUX}$.PRS.A3SG.E3SG
 ‘Jon despairs of life.’
- (5) *Joni txokolatea gustatzen zaio.*
 Jon.DAT chocolate.SG please.ICPL be_{AUX} .PRS.A3SG.D3SG
 ‘Jon likes chocolate.’
- (6) *Zure portaerak Jon asaldatzen du.*
 2SG.GEN behavior.SG.ERG Jon upset.ICPL $have_{AUX}$.PRS.A3SG.E3SG
 ‘Your behavior upsets Jon.’

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 = incomplete, INSTR = instrumental, MTV = motivative, 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 errekek 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 zitzaien 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 alternation 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*
 repentance 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’, *higuin ukan/izan* ‘abhor’, *laket ukan/izan* ‘like’), and with the simplex verb *ederretsi* ‘like’.

- (16a) *Higuin dut gezurra.*
 disgust have.PRS.A3SG.E1SG lie.SG
 ‘I abhor lie.’
- (16b) *Higuin 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 have_{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

Higuindu ‘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) *Urrikitzen naiz nire hutsez.*
 regret.ICPL be_{AUX}.PRS.A1SG 1SG.GEN mistake.INSTR
 ‘I regret my mistake.’

- (19b) *Nire hutsa. urrikitzen zait.*
 1SG.GEN mistake.SG regret.ICPL be_{AUX}.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 be_{AUX}.PRS.A3SG
 ‘Mikel was interested in that.’
- (20b) *Hori Mikeli interesatu zai.*
 DEM.SG Mikel.DAT interest.CPL be_{AUX}.PRS.A3SG.D3SG
 ‘That interested Mikel.’
- (20c) *Arteak Mikel interesatzen du.*
 art.SG Mikel interest.ICPL have_{AUX}.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 have_{AUX}.PST.A3SG.E1SG.REL trouble.SG
 ‘We don’t regret the trouble we went to.’
- (21c) *Damu izango dugu hura erosiaz.*
 repentance have.FUT have_{AUX}.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.⁶

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.

(22)	Basque	Spanish	Akhvakh	
	puskatu (intr./tr.) $nC=C$	romper-se $nC<C$ / romper	biq’- $nC>C$ / biq’-aj-	‘break (intr./tr.)’
	erre (intr./tr.) $nC=C$	quemar-se $nC<C$	č’aj- $nC>C$	‘burn (intr./tr.)’

⁶ 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*.

		/ quemar		/ č'aj-aj-		
lehortu (intr./tr.)	nC=C	secar-se / secar	nC<C	buq:' / buq:'-aj-	nC>C	'dry' (intr./tr.)'
itzali (intr./tr.)	nC=C	apagar-se / apagar	nC<C	bis:- / bis:-aj	nC>C	'go out / put out (fire)'
handitu (intr./tr.)	nC=C	ampliar-se / ampliar	nC<C	ik'al- / ik'ar-aj-	nC>C	'increase (intr./tr.)'
urtu (intr./tr.)	nC=C	derretir-se / derretir	nC<C	miñ- / miñ-aj-	nC>C	'melt (intr./tr.)'
mugitu (intr./tr.)	nC=C	mover-se / mover	nC<C	kokor- / kokor-aj-	nC>C	'move (intr./tr.)'
pitzatu (intr./tr.)	nC=C	hendir-se / hendir	nC<C	q:ar- / q:ar-aj-	nC>C	'split (intr./tr.)'
hedatu (intr./tr.)	nC=C	extender-se / extender	nC<C	bač- / bač-aj-	nC>C	'spread (intr./tr.)'

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_{AUX}.PRES.A2SG
 'Because of what are you perturbed?'

(23b) *Zerk asaldatzen zaitu?*
 what.ERG get.perturbed/perturb.ICPL have_{AUX}.PRES.A2SG.E3SG
 'What perturbs you?'

- (24a) *Sutea itzali da.*
 fire.SG go.out/put.out.CPL be_{AUX}.PRES.A3SG
 ‘The fire has gone out.’
- (24b) *Nork itzali du sutea?*
 who.ERG go.out/put.out.CPL have_{AUX}.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.

(25)	Spanish	Akhvakh ⁷	Basque	
	entristecer-se / entristecer	mizañilaj- / mizañilaj-ut’-	muzindu (intr./tr.)	‘get sad or angry / annoy’
	ofender-se / ofender	mañ:eq’ / mañ:eq’-aj-	gaitzitu (intr./tr.)	‘get annoyed / annoy’
	enojar-se / enojar	č’añinaj- / č’añinaj-ut’-	unatu (intr./tr.)	‘get tired/ tire (mentally)’
	consolar-se / consolar	rãq’:as:- / rãq’:as:-aj-	konsolatu (intr./tr.)	‘get comforted / comfort’
	impresionar-se / impresionar	tamañilaj- / tamañilaj-ut’-	liluratu (intr./tr.)	‘get dazzled / dazzle’
	divertir-se / divertir	rak’wãkelaj- / rak’wãkelaj-ut’-	dibertitu (intr./tr.)	‘get amused / amuze’
	asustar-se / asustar	ñib- / ñib-aj-	beldurtu (intr./tr.)	‘fear / frighten’
	alegrar-se / alegrar	beç:- / beç:-aj-	poztu (intr./tr.)	‘rejoice / delight’
	inquietar-se / inquietar	rak’wãq’:warañ- / rak’wãq’:warañ-aj-	kezkatu (intr./tr.)	‘worry (tr./intr.)’
	avergonzar-se / avergonzar	surilaj- / surilaj-ut’-	lotsatu (intr./tr.)	‘be ashamed / put to shame’
	volver-se loco volver loco	ñadar- / ñadar-aj-	zoratu (intr./tr.)	‘get mad / make mad’

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.

Secondly, the verbs *higuindu* ‘disgust’ and *urrikaldu* ‘pity’, which took the AbsStim-DatExp coding frame in the oldest texts, developed the ErgExp-AbsStim 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’, *liluratu* ‘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’, *damutu* ‘regret’, *dibertitu* ‘amuse’, *dolutu* ‘regret’, *gaitzitu* ‘bother’, *interesatu* ‘interest’, *laketu* ‘like’, *poztu* ‘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.

(a) AbsExp-OblStim: *beldur izan* ‘fear’, *damu izan* ‘regret’, *herabe izan* ‘be ashamed’, *ahalke izan* ‘be ashamed’, *fida izan* ‘trust’.

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

(c) ErgExp-AbsStim: *damu ukan* ‘regret’, *erruki ukan* ‘feel sorry’, *gupida ukan* ‘feel sorry’, *gorroto ukan* ‘hate’, *hastio ukan* ‘hate’, *maite ukan* ‘love’, *plazer ukan* ‘desire’, *urrikari ukan* ‘pity’.

(d) ErgExp-OblStim: *dolu ukan* ‘regret’, *atsegin ukan* ‘like’, *damu ukan* ‘regret’.

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’, *higuin izan* ‘disgust’, *ahalke izan* ‘be ashamed’. This evolution

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.

<i>Gauza</i>	<i>berén</i>	<i>zuei</i>	<i>skribatzera</i>	<i>niri</i>	<i>etzait</i>	<i>herabe.</i>
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 absolute 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

- Borschev, V. & Partee, B. (2002). The Russian genitive of negation: theme-rheme structure or perspective structure?. *Journal of Slavic Linguistics*, 10, 105-144.
- Creissels, D. (Forthcoming). The noncausal-causal alternation and the limits of ambitransitivity in the languages of Sub-Saharan Africa.
- Creissels, D. & Mounole, C. (2017). Non-canonical valency patterns in Basque, variation and evolution. L. Hellan, A. Malchukov & M. Cennamo (eds.), *Contrastive studies in verbal valency* (151-174). Amsterdam: John Benjamins.
- Davies, W. D. & Martínez-Arbelaiz, A. (1995). Mapping Basque psych verbs. C. S. Burgess, K. Dziwired & D. B. Gerdts (eds), *Grammatical relations: Theoretical approaches to empirical questions* (33-44). Stanford, California: CSLI Publications.

- Etxepare, R. (2003). Valency and argument structure in the Basque verb. J.I. Hualde & J. Ortiz de Urbina (eds.), *A Grammar of Basque* (363-426). Mouton de Gruyter.
- Fernández, B. & Ortiz de Urbina, J. (2010). *Datiboa hiztegia*. UPV/EHU.
- Fernández, B. & Berro, A. (2018). Orhiko xoria Orhin lakhet : izen/adjektibo psikologikoak, gai lokatiboak eta predikazioa. J. A. Lakarra & B. Urgell (eds.), *Studia Philologica et Diachronica in honorem Joakin Gorrotxategi* (253-270). UPV/EHU.
- Haspelmath, M. (1993). More on the typology of inchoative/causative verb alternations. B. Comrie & M. Polinsky (eds.), *Causatives and transitivity* (87-120). Amsterdam: John Benjamins.
- Haspelmath, M. (2016). Universals of causative and anticausative verb formation and the spontaneity scale. *Lingua Poznaniensis*, 58(2), 33-63.
- Hualde, J.I. & J. Ortiz de Urbina (eds.). (2003). *A Grammar of Basque*. Berlin / New York: Mouton de Gruyter.
- Mitxelena, K. & Sarasola I. (1987-2005). *Diccionario General Vasco-Orotariko Euskal Hiztegia*. Bilbo: Euskaltzaindia.
- Mounole, C. (2018). *Le verbe basque ancien: étude philologique et diachronique*. ASJU XLVIII. 516 p.
- Nichols, J., Peterson, D. & Barnes J. (2004). Transitivity and detransitivizing languages. *Linguistic Typology*, 8, 149–211.
- Partee, B. H. & Borschev, V. (2004). The semantics of Russian genitive of negation: the nature and role of perspectival structure. K. Watanabe & R. B. Young (eds.), *Proceedings of Semantics and Linguistic Theory (SALT) 14* (212-234). Ithaca NY: CLC Publications.

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

	AbsExp -OblStim	ErgExp -AbsStim	ErgExp -OblStim	AbsStim -DatExp	ErgStim -AbsExp
<i>adoratu</i> ‘adore’		+			
<i>ahalke izan</i> ‘be ashamed’	+				
<i>ahalketu</i> ‘be ashamed’	+				+
<i>aiher izan</i> ‘long for’	+				
<i>aihertu</i> ‘long for’	+				
<i>alaitu</i> ‘gladden’	+				+
<i>amestu</i> ‘long for’		+	+		
<i>amets ukan</i> ‘long for’		+			
<i>arranguratu</i> ‘worry’	+				+
<i>artegatu</i> ‘worry’	+				+
<i>asaldatu</i> ‘upset, perturb’	+				+
<i>aspertu</i> ‘bore’	+				+
<i>atsegin izan/ukan</i> ‘like’		+		+	
<i>atsekabetu</i> ‘distress’	+				+
<i>aztoratu</i> ‘confuse, disturb’	+				+
<i>beldur izan/ukan</i> ‘fear’	+		+		
<i>beldurtu</i> ‘fear’	+				+
<i>damu izan/ukan</i> ‘regret’	+	+	+	+	
<i>damutu</i> ‘regret’	+			+	(+)
<i>desio/desira ukan</i> ‘desire’		+			
<i>desiratu</i> ‘desire’		+			
<i>dibertitu</i> ‘amuse’	+				+
<i>dolu izan/ukan</i> ‘regret’	+	+	+		
<i>dolutu</i> ‘regret’	+			+	(+)
<i>eder izan</i> ‘like’				+	
<i>ederretsi</i> ‘like’		+	+	+	
<i>eraman</i> ‘bear’		+			
<i>errespetatu</i> ‘respect’		+			
<i>erruki izan/ukan</i> ‘feel sorry’	+	+			
<i>errukitu</i> ‘feel sorry’	+				+
<i>estimatu</i> ‘appreciate’		+			
<i>etsi</i> ‘despair’			+		
<i>fida/fio izan</i> ‘trust’	+				
<i>fidatu</i> ‘trust’	+				
<i>gaitzetsi</i> ‘disapprove’		+			
<i>gaitzi izan</i> ‘bother’				+	
<i>gaitzitu</i> ‘bother’	+			+	+
<i>gogoko ukan</i> ‘like’		+			
<i>gorrotatu</i> ‘hate’		+			
<i>gorroto ukan</i> ‘hate’		+	+		
<i>grinatu</i> ‘bother’	+				+
<i>gupida izan/ukan</i> ‘feel sorry’	+	+	+		
<i>gupidatu</i> ‘feel sorry’	+				(+)
<i>gurtu</i> ‘adore’		+			

<i>gustatu</i> ‘please’				+	
<i>gutxietsi</i> ‘despise’		+			
<i>harritu</i> ‘surprise’	+				+
<i>haserre izan</i> ‘be angry’	+				
<i>haserretu</i> ‘be angry’	+				(+)
<i>hastio ukan</i> ‘hate’		+			
<i>herabe izan/ukan</i> ‘be ashamed’	+		+		
<i>herabetu</i> ‘be ashamed’	+				+
<i>higuindu</i> ‘disgust’	(+)	+			+
<i>higuin izan/ukan</i> ‘disgust’		+		+	
<i>ikara izan</i> ‘fear’	+				
<i>ikaratu</i> ‘fear’	+				+
<i>interesatu</i> ‘interest’	+			+	+
<i>irrikatu</i> ‘yearn for’		+			
<i>kezkatu</i> ‘worry’	+				+
<i>kontsolatu</i> ‘comfort’	+				+
<i>laketetsi</i> ‘like’		+			
<i>laket izan/ukan</i> ‘like’		+		+	
<i>laketu</i> ‘like’	+		+	+	
<i>liluratu</i> ‘dazzle’	+				+
<i>loriatu</i> ‘delight’	+				+
<i>lotsa izan</i> ‘be afraid’	+				
<i>lotsatu</i> ‘get ashamed’	+				+
<i>maitatu</i> ‘love’		+			
<i>maite ukan</i> ‘love’		+			
<i>miretsi</i> ‘admire’	+	+			
<i>muzindu</i> ‘annoy’	+				+
<i>nardatu</i> ‘disgust’	+				+
<i>nazkatu</i> ‘disgust’	+				+
<i>nerbiostu</i> ‘make nervous’	+				+
<i>okaztatu</i> ‘disgust’	(+)				+
<i>onetsi</i> ‘love’		+			
<i>plazer ukan</i> ‘like’		+			
<i>poztu</i> ‘gladden’	+				+
<i>txunditu</i> ‘astound’	(+)				+
<i>unatu</i> ‘tire (mentally)’	+				+
<i>urduritu</i> ‘make nervous’	+				+
<i>urrikaldu</i> ‘pity’	+	+		+	
<i>urrikari ukan</i> ‘pity’		+			
<i>urrikitu</i> ‘regret’	+			+	
<i>zapuztu</i> ‘frustrate’	+				+
<i>zoratu</i> ‘madden’	+				+