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Datives with psych nouns and adjectives in Basque

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Abstract: This paper explores the formal expression of two Basque dative argument types in combination with psych nouns and adjectives, in intransitive and transitive clauses: (i) those that express the experiencer, and (ii) those that express the stimulus of the psychological state denoted by the psych noun and adjective. In the intransitive structure involving a dative experiencer (DatExpIS), the stimulus is in the absolutive case, and the intransitive copula *izan* 'be' shows both dative and absolutive agreement. This construction basically corresponds to those built upon the *piacere* type of psychological verbs typified in (Belletti, Adriana & Luigi Rizzi. 1988. Psych-verbs and θ -theory. Natural Language and Linguistic Theory 6. 291– 352) three-way classification of Italian psych verbs. In the intransitive structure involving a dative stimulus (DatStimIS), the experiencer is marked by absolutive case, and the same intransitive copula shows both absolutive and dative agreement (with the latter corresponding to the dative stimulus and not to the experiencer). We show that the behavior of the dative argument in the two constructions is just the opposite of each other regarding a number of morphosyntactic tests, including agreement, constituency, hierarchy and selection. Additionally, we explore two parallel transitive constructions that involve either a dative experiencer and an ergative stimulus (DatExpTS) or a dative stimulus and an ergative experiencer (DatStimTS), which employ the transitive copula *edun 'have'. Considering these configurations, we propose an extended and more fine-grained typology of psych predicates.

Keywords: datives, psych nouns, psych adjectives, Basque

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1 Introduction

Most studies of predicative psych expressions focus on verbs; studies of psych nouns and adjectives are rare. Belletti and Rizzi (1988) proposed a three-way classification of psych verbs which has been widely used in the literature. The three types are temere 'fear' (I), preoccupare 'worry' (II), and piacere 'please' (III). This three-way typology is illustrated for Italian in (1):

- (1) Gianni teme questo. G.NOM fear.3sg this.ACC 'Gianni fears this.'
 - b. Ouesto preoccupa Gianni. This.NOM worry.3sg G.ACC 'This worries Gianni.'
 - c. Α Gianni piace questo / questo piace aGianni. G.DAT please.3sg this.NOM this.NOM pleases PG.DAT 'This pleases Gianni.' (Belletti and Rizzi1988: 291)

In this typology, the experiencer and stimulus thematic roles (or 'theme' in Belletti and Rizzi's terms) are expressed by different grammatical relations and, thus, marked differently for each class in languages with overt nominal case. With Class I verbs (temere 'fear'), the experiencer is the subject and takes nominative case, whereas the stimulus is the object and takes accusative case. With Class II verbs (preoccupare 'worry'), the stimulus is the subject and takes nominative case, whereas the experiencer is the object and takes accusative case. Lastly, with Class III verbs (piacere 'please'), the experiencer is the subject and takes the dative, whereas the stimulus is assigned nominative case.

Many languages in the world can be described with the three-way typology of psych-verbs proposed by Belletti and Rizzi (1988): French (Ruwet 1993); German (Haiden 2005); Greek (Anagnostopoulou 1999); Hebrew (Arad 1998, 1999; Landau

Psych verbs (based on Belletti and Rizzi 1988)	Case frame and agreement pattern		
	Experiencer	Stimulus	
Class I (temere)	NOM	ACC	
Class II (preoccupare)	ACC	NOM	
Class III (piacere)	DAT	NOM	

2009); Icelandic (Barðdal 1999, 2001); Italian (Belletti and Rizzi 1988); and Spanish (Franco 1992), among many others – see especially Landau (2009) and references there.

Basque also fits in this typology of psych verbs although the case frames of Class I and Class II psych predicates involve ergative and absolutive case rather than nominative and accusative; Class III involves dative and absolutive (rather than nominative). See Etxepare (2003: 403-411) and Fernández and Ortiz de Urbina (2010: 75–107) for a description. The three classes are exemplified in (2). It is worth noting that, Basque being a language with auxiliary alternation, 1 Classes I and II select the transitive auxiliary *edun 'have', whereas Class III selects the intransitive auxiliary izan 'be'. Moreover, because Basque exhibits agreement with the arguments marked by the ergative, absolutive and dative cases, Classes I and II show ergative and absolutive agreement on the transitive auxiliary, whereas Class III shows absolutive and dative agreement in the intransitive one. (In order to illustrate Class I, we have substituted *gorrotatu* 'hate' for *temere*.)

- (2)a. Ion-ek hau gorrota-tzen I.-ERG this.ABS hate-IPFV have[3sgAbs.3sgErg] 'Jon hates this.'
 - b. Hon-ek Ion kezka-tzen du. J.ABS have[3sgAbs.3sgErg] this-ERG worry-IPFV 'This worries Ion.'
 - c. Ion-i hau zaio. gusta-tzen be.3sgDat[3sgAbs] J.-DAT this.ABS please-IPFV 'This pleases Jon.'

The case frame and agreement patterns attested with Basque psych verbs are summarized in Table 2:

Table 2: Belletti and Rizzi's	typology o	f psych verbs a	applied to Basque verbs.
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Psych verbs (based on Belletti and Rizzi 1988)	izzi 1988) Case frame and agreeme in Basque	
	Experiencer	Stimulus
Class I (temere) gorrotatu 'hate'	ERG	ABS
Class II (preoccupare) kezkatu 'fear'	ABS	ERG
Class III (piacere) gustatu 'like'	DAT	ABS

¹ Basque shows auxiliary alternation: the intransitive auxiliary (izan 'be') is selected with unaccusative verbs, and the transitive auxiliary (*edun 'have') is selected with unergatives, transitives and ditransitive verbs.

In addition, Basque is particularly interesting because many psychological events or states are expressed by means of nouns or adjectives. Some of the structures involving nouns and adjectives are similar to those with Classes I and III verbs in Belletti and Rizzi's typology.

(3) a. Jon-ek hau gorroto du. have[3sgAbs.3sgErg] I.-ERG this.ABS hatred 'Jon has a hatred for this.' Ion-i b. hau atsegin zaio. I.-DAT this.ABS pleasure/pleasant be.3sgDat[3sgAbs]

'This is pleasant to Jon.'

In (3a), the noun *gorroto* 'hate/hatred' occurs instead of its verbal counterpart *gorrotatu* 'hate' (Class I). Still, the same case frame is attested, namely ergative experiencer and absolutive stimulus, transitive copula and ergative-absolutive agreement pattern. Note that the noun *gorroto* shows no aspectual morphemes, such as the imperfective morpheme *t(z)en*, which is available with its verbal counterpart *gorrotatu* 'hate' in (2a). In turn, (3b) shows the same pattern attested with Class III verbs (*piacere* 'please'): dative experiencer and absolutive stimulus, along with their corresponding dative and absolutive agreement in the intransitive copula. However, this example shows the noun or adjective *atsegin* 'pleasure/pleasant' instead of the verb *gustatu* 'please' (exemplified above in [2c]). Note that the very same noun/adjective *atsegin* 'pleasure/pleasant' can also appear in the pattern corresponding to Class I, i.e., it behaves like *gorroto* 'hate'. This is illustrated in (4):

(4) Jon-ek hau atsegin du.

J.-ERG this.ABS pleasure/pleasant have[3SGABS.3SGERG]

'Jon finds pleasure in this.'

We find that Basque psych noun and adjectives show counterparts of Belletti and Rizzi's Classes I and III only; there is no nominal/adjectival counterpart to Class II verbs. Nevertheless, Basque psych noun/adjectives show three other configurations not considered in Belletti and Rizzi's typology.

First, if we focus on structures involving datives, a pattern converse to that found with Class III verbs (*piacere* 'please') is attested, i.e., with an absolutive experiencer and a dative stimulus:

(5) Jon horr-i leiala da.

J.[ABS] that-DAT loyal be[3SGABS]

'Jon is loyal to that.'

Second, Basque also shows two kinds of structures combining ergative and dative arguments. The first is a transitive structure involving an ergative experiencer and

a dative stimulus, a case frame unattested in Belletti and Rizzi's typology. In fact, the Basque counterpart to the Italian psych verb temere 'fear' corresponds to this particular ergative-dative configuration:

(6) Ion-ek horr-i beldur dio. I.-ERG that-DAT fear have.3sgDat[3sgAbs.3sgErg] 'Jon has a fear of that.'

This structure includes a copula that shows not only absolutive and ergative agreement but also dative agreement, thereby resembling a ditransitive structure.²

The second structure is the mirror image of the previous one, i.e., a transitive structure with an ergative stimulus and a dative experiencer, as in (7):

(7) Horr-ek Ion-i ardura dio. J.-DAT that-ERG have.3sgDat[3sgAbs.3sgErg] care 'That matters to Jon.'

Therefore, Belletti and Rizzi's typology must be extended in order to consider psych nouns/adjectives attested in Basque. In fact, there are many other languages where psychological events/states are expressed by means of nouns or adjectives instead of verbs. Adger and Ramchand (2006) analyze psych nouns in Scottish Gaelic and propose that experiencers can relate to them in two ways and are therefore of two types: with intransitive predicates – involving a single argument, e.g., in tha cùram orm [is anxiety on.me] 'I am anxious' - the experiencer is a locative adpositional phrase; with transitive predicates – involving two arguments, e.g., in tha gaol agam ort [is love at.me on.you] 'I love you' - the experiencer is a locative adpositional phrase that also expresses possessors. Ingason (2016) has shown for Icelandic that a dative experiencer or benefactive can be introduced together with event-denoting nouns. Finally, in Basque, Berro and Fernández (2019) have explored the interaction between event-denoting nouns/adjectives and dative arguments, and have proposed that goal datives and experiencer datives are syntactically different.

In the present paper, we analyze the syntactic behavior of different predicative configurations involving psych nouns/adjectives in Basque and propose a classification in the light of Belletti and Rizzi's typology of psych verbs. In Section 2, we describe the four patterns attested in Basque with psych nouns/adjectives. In

² The 3SG.ABS agreement varies depending on tense and mood (Albizu and Eguren 2000; Arregi and Nevins 2012; Gómez and Sainz 1995; Laka 1993; Rebuschi 1999; Trask 1977) and always occurs on the auxiliary, whether there is a third-person absolutive argument or not (thus, it can be considered default agreement). In fact, Laka (1993) claims that what are described as 3sg.abs markers are nothing else than tense and mood markers.

Section 3, we briefly discuss the categorial status of the psych word involved in the intransitive structures. Sections 4 and 5 explore the relevant morphosyntactic details of the intransitive and transitive constructions under scrutiny, respectively. Section 6 discusses some of the consequences of our study and propose an extended typology of psych predicates. Finally, Section 7 presents the main conclusions of the study.

2 Psych nouns/adjectives in Basque and predication

Basque shows different structures involving psych nouns and adjectives. In these structures, a dative argument can be either the experiencer or the stimulus of the psychological state denoted by the psych noun/adjective, as can be seen in the intransitive examples (8a) and (8b):

- (8)a. Ion-i txakolin-a atsegin zaio. I.-DAT txakolin-DET[ABS] pleasure/pleasant be.3sgDat[3sgAbs] 'Jon likes / finds pleasure in txakolin (a Basque white wine).'
 - $zaio.^3$ b. Ion hizkuntza-ri leial(-a) J.[ABS] be.3sgDat[3sgAbs] language-DAT loval-DET 'Jon is loyal to the language.'

The psych predicates in (8a-b) differ from prototypical psych verbs in Basque in that they do not combine with aspectual suffixes and still have an imperfective aspectual interpretation.⁴

The structures in (8a-b) are similar to each other in two respects. First, both involve two arguments, i.e., the experiencer and the stimulus of the psychological state denoted by the psych noun/adjective. Second, both include the intransitive copula izan 'be' that cross-references the experiencer and the stimulus. There is a significant difference between them, however, as the experiencer (ni 'I') is marked by the dative case suffix -(r)i and its corresponding agreement morpheme in (6a)

³ This example is reminiscent of *hizkuntza-ri leial iraun du* (language-DAT loyal remain.pfv have [3SGABS.3SGERG]) 'he/she has remained loyal to the language' by the Basque linguist Koldo Mitxelena (MEIG IX 40).

⁴ The psych noun/adjective atsegin 'pleasure/pleasant' partially contradicts this generalization as it can be combined with the suffix -go, an aspectual/modal suffix denoting prospectiveness or irrealis mood, e.g., atsegin-go 'will like / find pleasure'. However, it cannot take perfective or imperfective suffixes and thus behaves similarly to all the other psych noun/adjectives. For instance, there are no search results for *atsegi-ten* with the imperfective suffix -t(z)en, in *Egungo* Testuen Corpusa (ETC) [Corpus of Contemporary Basque] (Sarasola et al. 2016).

whereas the same case along with its agreement mark the stimulus (hizkuntza-ri 'to the language') in (6b). We will refer to the former configuration as DatExpIS (8a) and to the latter as DatStimIS (8b).

Basque has also transitive counterparts of these constructions:

- (9)a. Arkitektura-k Ion-i ardura dio. architecture.DET-ERG J.-DAT care have.3sgDat[3sgAbs.3sgErg] 'Architecture matters to Jon.'
 - Ion-ek espinak-ei b. die. I.-ERG spinach-PLDAT repulsion have.3pLDat[3sgAbs.3sgErg] 'Jon has a strong distaste for spinach / spinach disgusts Jon.'

These structures differ from those in (8) in that the non-dative argument is in the ergative instead of the absolutive. Moreover, unlike in (8), a transitive copula, known in Basque linguistics as *edun 'have', is selected. This copula cross-references both the dative and the ergative arguments; the dative experiencer occurs with an ergative stimulus in (9a), and the dative stimulus occurs vis-à-vis an ergative experiencer in (9b). An unmarked third-person singular absolutive is also morphologically involved in the copula, but this does not correspond to any argument in the clause.

In this paper, we present these structures and explore how the dative argument (either experiencer or stimulus) behaves both morphologically and syntactically. As we will see, although the experiencer and the stimulus share case and agreement morphological specifics in the intransitive structure, they behave in an opposite way regarding dative agreement alternation, constituency, hierarchy, and selection. On the other hand, in the transitive structure, the behavior of the stimulus and the experiencer is similar regarding constituency but not dative agreement alternation.

The psych noun and adjectives we address here are listed in Table 3.

3 Double categorial status: Nouns or adjectives

The categorial status of the psych predicates under analysis is controversial. They do not behave like verbs since they do not take aspectual suffixes as verbs do in Basque, and it is also unclear whether they are strictly nominal or adjectival. The items with double nominal/adjectival behavior in Basque are, among others: atsegin 'pleasure, pleasant', gaitzi 'resentment, hateful' (formal), higuin 'abhorrence, disgusting', laket 'pleasure, pleasant', and neke 'fatigue, tired'. Other items involved in those structures are only nouns, such as irudi 'image' and plazer 'pleasure'. It is worth noting that in Scottish Gaelic and Icelandic, only psych nouns have been attested in predicative constructions (Adger and Ramchand 2006; Ingason 2016).

aiher	'hatred'	igual	'matter' (lit. 'same')
amorru	'anger'	inbidia	'envy'
ardura	'care, worry'	inporta	'matter'
atsegin	'pleasure, pleasant'	irudi	'image'
axola	'care, worry'	izu	'terror'
beldur	'fear'	laket	'pleasure, pleasant'
berdin	'matter' (lit. 'same')	leial	'loyal'
berdin-berdin	'matter'	fidel	'faithful, loyal'
damu	'regret, regretful'	narda	'disgust'
enpagu	ʻabhor' (western)	nazka	'repulsion, revulsion'
erruki	'pity'	neke	'fatigue, fatigued'
eskerdun	'grateful'	plazer	'pleasure'
gaitzi	'resentment, hateful' (formal)	urriki	'pity'
gorroto	'hatred'	zordun	'debtor, indebted'
higuin	'abhorrence, abhorrent'		

Table 3: Psych nouns and adjectives addressed in this paper.

Let us zoom in on *atsegin* 'pleasure, pleasant'. In three contemporary Basque dictionaries (*Elhuyar*, *Egungo Euskararen Hiztegia* (EEH) [Dictionary of Contemporary Basque] (Sarasola 2008), and *Nola erran* (NE) [French-Basque Dictionary] (Oyharçabal 2009–2013)), the lexical entry *atsegin* is characterized both as a noun and an adjective because it may behave like either a noun or an adjective. On the one hand, as a noun, *atsegin* combines with elements that usually occur with nouns, such as determiners, adpositional modifiers and adjectives. For instance, in (10a-b), *atsegin* is modified by an adpositional phrase headed by relational *-ko* 'of' (in [10a], it additionally occurs with a determiner); in these examples, the nominal phrases headed by *atsegin* act as direct objects of the verbs. Finally, in (10c), *atsegin* is combined with the adjective *handi* 'big'

(10) a. Gauza oso ederr-a-ren bizi-tze-ko atsegin-a izan-en thing very lovely-det-gen live-nmlz-rel pleasure-det be-pros duzu.

have.2erg[3sgAbs]

'You will have the pleasure of living lovely things.' (*Herria, Argiaren bidaia*, 2003-04-24, p. 6)

b. Biziko atsegin-ak eta atsegabe-ak onhar-ten life.rel pleasure-pl.det[abs] and sorrow-pl.det[abs] accept-ipfv zituen bere eztitasunekin.

have.3PLABS.PST[3SGERG] 3SG.PSR sweetness.COMIT

'She accepted the pleasures and sorrows of life with its sweetness.' (*Herria, Behorlegi, Herrietako kronikak*, 2004-04-09, p. 5)

c. atsegin handiz
 pleasure great.INS
 'with great pleasure.' (Manhattan Transfer, J. Dos Passos/Lopez de Arana)

Categorially unambiguous psych nouns occur in similar contexts. For instance, *irudi* 'image' is modified by the adjective *irribarretsu* 'smiling' in (11a), and *plazer* 'pleasure' is headed by the demonstrative determiner *horren* 'of that' in (11b):

- (11)Popeve marinela-ren irudi irribarretsu-a-k apain-tzen a. P. sailor.DET-GEN smiling-DET-ERG decorate-IPFV image zuen-a have.pst.subr[3sgAbs.3sgErg]-DET 'the one decorated by the smiling face of Popeye the sailor' (Rock'n'roll, A. Epaltza, p.162)
 - b. Nerabezaro-a-n hartu zuen plazer horren adolescence-DET-INE take have.PST[3SGABS.3SGERG] pleasure that.GEN kontzientzia.
 conscience.DET[ABS]
 'S/he became aware of that pleasure during adolescence.'

On the other hand, *atsegin* can also behave like an adjective. It can be modified by degree adverbs such as *oso* 'very' (12a) and it can take the comparative suffix *-ago* (12b) and the superlative suffix *-en* (12c):

(12) a. Oso atsegin-a zara.

very pleasant-DET[ABS] be.2ABS

'You are very nice.' (Fidel izan beharraz, O. Wilde/A. Olano)

(Zortzi unibertso, zortzi idazle, A. Urkiza, p. 232)

- b. Giro-a askozaz ere atsegin-ago-a da orain. atmosphere-DET[ABS] much too pleasant-COMPR-DET be[3SGABS] now 'The atmosphere is much more pleasant now.'
- c. Sentsaziorik atsegin-en-a, zinez. sensation.PTV pleasant-SUP-DET truly 'The most pleasant sensation, truly.' (Onan, A. Arana)

As mentioned above, this kind of categorial variation extends to other psych nouns that can occur in the configuration depicted in (8a). In particular, the variation found in *laket* 'pleasure, pleasant' has been analyzed in Fernández and Berro

(2018). See also Zuñiga and Fernández (to appear) for a discussion of *laket* in relation to (lexically constrained) antipassives. Additionally, the predicate *zordun* 'debtor, indebted' belonging to the *leial*-type is also considered a noun and an adjective in *Elhuyar*, but only an adjective in EEH. We have only found instances of the nominal use in the corpora, e.g., the one in (13):

(13) Zordun-a-ri bost eguneko epe-a eman zaio
debtor-DET-DAT five day.REL period-DET[ABS] give be.3SGDAT[3SGABS]
borondatezko ordainketa egin dezan.
voluntary payment.DET[ABS] do have.SUBR[3SGABS.3SGERG]
'They have given the debtor a five-day period to make the voluntary payment.'
(Berria, 2004-02-08)

Other predicates of the *leial*-type (*leial* itself, as well as *fidel* 'faithful, loyal' and *eskerdun* 'grateful') are considered adjectival in the dictionaries. In fact, only adjectival and predicative uses are attested in the corpora, e.g., examples like (14):

(14) [...] ikus ez zitezen gizon baten malko eskerdun-ak, see NEG be.3PLABS.PST.SUBR man DET.GEN tear grateful-DET.PL[ABS] lehenbiziko aldia baitzuen. first.REL time[ABS] have.PST.SUBR[3SGABS.3SGERG] '...so they didn't see the grateful tears of a man, as it was his first time.' (Maitea, T. Morrison, transl. A. Garitano)

As can be seen, in (13) the noun *zordun* 'debtor' occurs with a determiner and is dative-marked. In (14), on the other hand, *eskerdun* 'grateful' behaves as an adjective and modifies the noun *malko* 'tear'.

Note that, unlike <code>atsegin</code> 'pleasure/pleasant', most of these psych predicates have a verbal counterpart with similar meaning. For instance, <code>gaitzi</code> 'resentment, hateful' (formal) has <code>gaitzitu</code> 'hate'; <code>higuin</code> 'abhorrence, disgusting' has <code>higuindu</code>; <code>laket</code> 'pleasure, pleasant' can be paired with <code>laketu</code>, and finally, <code>irudi</code> 'image' has the verbal version <code>iruditu</code> 'seem'. The noun/adjective <code>neke</code> 'fatigue, tired' also has a parallel verb <code>nekatu</code>, although the latter has a different syntactic configuration and different aspectual semantics, i.e., it is eventive ('get tired') rather than stative ('being tired') (see also Section 5.1 for the verbal counterparts of the psych nouns/adjectives occurring in transitive structures). In this paper, we leave aside these verbal predicates and focus on their nominal and adjectival counterparts.

4 Dative experiencer vs. dative stimulus: **Exploring asymmetries in intransitive** constructions

This section explores several asymmetries between the dative arguments in the intransitive constructions. We first report on possible alternations regarding case frames Section 4.1) and agreement patterns (Section 4.2). Then we apply to Basque some tests previously applied by Adger and Ramchand (2006) to Scottish Gaelic regarding constituency (Section 4.3), hierarchy (Section 4.4), and selection (Section 4.5).

4.1 Dative vs. ergative experiencer alternation

One of the respects in which the dative experiencer and the dative stimulus differ from each other has to do with the alternation of the former (but not the latter) with an ergative experiencer. This alternation is shown in (8a), repeated here as (15), and (16).

- (15)Ion-i txakolin-a atsegin zaio. txakolin-DET[ABS] be.3sgDat[3sgAbs] Ion-DAT pleasure/pleasant 'Jon likes / finds pleasure in txakolin.'
- (16)Ion-ek txakolin-a dи. atsegin Jon-ERG txakolin-DET[ABS] pleasure/pleasant have.3sgErg[3sgABS] 'Jon likes / finds pleasure in txakolin.'

In (16), the experiencer is marked by the ergative case whereas the stimulus is marked by the absolutive case. The noun or adjective expressing the psychological state is exactly the same in both clauses. However, in (16) the selected copula is transitive *edun 'have', which shows ergative and absolutive agreement with the experiencer and the stimulus, respectively. This second configuration (16) corresponds to the temere class of psych verbs in Italian (Belletti and Rizzi 1988). Thus, the noun/adjective involved in the predicate gives rise to a piacere-like configuration in (15) and a temere-like alternative in (16).

The nouns and adjectives involved in this alternation can be illustrated with (17)-(18) from the Ereduzko Prosa Gaur/Contemporary Reference Prose (EPG) corpus (Sarasola et al. 2001–2007):

(17) a. Laket zait bakarrik egotea
pleasure/pleasant be.1sgDat[3sgAbs] alone be.nmlz[abs]
eta ixilik.
and quiet
'I find pleasure in being alone and quiet.' (Santiago oinez, P. Aintziart,
p. 28)

b. Euskara-k laket baitu

Basque-ERG pleasure/pleasant because.have.1sgErg[3sgAbs]

hitz-en

word-PLGEN
laburtze-a...
shorten.NMLZ-DET[ABS]

'Since Basque likes to shorten words...' (Luzaiden gandi, A.
Aitzinburu /I.B Etxarren, p. 74)

(18) a. *Pastorala Iruñean ez emate-a damu* pastoral.ABS Pamplona.INESS NEG perform.NMLZ-DET[ABS] regret zaio.

be.3sgDat[3sgAbs]

'He/she has regrets about not performing the pastoral (i.e., a Souletin traditional play) in Pamplona.'

(*Berria*, Kultura, J.L. Davant, 2004-05-14)

b. *Bai*, *bat-batean*, *damu nuen amarekin bortitza* yes suddenly regret have.1sgErg[3sgAbs] mother.comit hard *izanik*.

be.PTCP.PTV

'Yes, suddenly, I had regrets about being hard on my mother.' (*Anaiaren azken hitzak*, D. Landart, p. 163)

Other lexical items seem to participate in the alternation under discussion although the DatExpIS seems to be much less frequently used than the structure including an ergative experiencer. This is the case with *higuin* 'abhorrence, disgusting' and *plazer* 'pleasure' in (19)–(20):

(19) a. Herri beltz hau higuin zait.

country black this abhorrence/disgusting be.1sgDat[3sgAbs]

'I hate this sad country.' (Volt 136, in Fernández and Ortiz de Urbina 2010: 211)

⁵ The morphemic analysis of the word *bat-bat-ean* is 'one-one-iness', but the expression is lexicalized with the meaning 'suddenly'. *Bat-batean* is the standard spelling.

- b. Eta, ondorioz, higuin duguna, therefore abhorrence/disgusting have.1PLERG.SUBR.DET[3SGABS] and gaitza deitzen dugu. disease call.IPFV have.1PLERG[3SGABS] 'And, therefore, we call "disease" what we abhor.' (Etika, B. Spinoza/ P. Xarriton, 305)
- Plazer zaio (20)a. Euskal Herrian ere be.1sgDat[3sgAbs] Basque Country.INESS too pleasure agertze-a appear.NMLZ-DET[ABS] uztail-agorriletan. July-August.INESS 'He/she likes to appear in the Basque Country in July and August.' (Herria, M. Etchenic, 2002-08-08), in Fernández and Ortiz de Urbina (2010:11)
 - b. Plazer nuke zurekin solastatze-a pleasure have.1sgErg.pot[3sgAbs] 2COMIT talk.NMLZ-DET[ABS] 'I would like to talk with you.' (*Bihotzeko mina*, J. Dirassar, 18)

The only lexical item that does not take part in this DAT-ERG alternation is gaitzi 'resentment, hateful'; in both older and contemporary texts, it only appears in the DatExpIS (21) (see Table 4):

Table 4: Psych nouns/adjectives involved in the dative-ERGative alternation.

Psych noun/adjectives	Dative experiencer, ergative stimulus	Ergative experiencer, absolutive stimulus
atsegin 'pleasure/pleasant'	✓	√
damu 'remorse, guilty'	✓	✓
gaitzi 'resentment, hateful'	✓	X
higuin 'abhorrence, disgusting'	(✓)	✓
laket 'pleasure/pleasant'	√	✓
plazer 'pleasure'	(✓)	✓

(21)Bihotz duen gizonari deus on-a heart good-DET[ABS] have.subr[3sgAbs.3sgErg] nothing man.DAT etzaio hain gaitzi nola eskergabekeri-a. neg.be.1sGDat[3sGABS] as hateful as ingratitude-DET[ABS] 'A good-hearted man hates nothing more than ingratitude.' (*Mintzaira*, *aurpegia*: *gizon*, J. Hiriart Urruti, XIX century)

The noun/adjectives described so far contrast with adjectives such as *leial* 'loyal', *fidel* 'faithful, loyal', *eskerdun* 'grateful' and *zordun* 'indebted' (Rezac 2009), which do not show a dative-ergative alternation. It is worth remembering that the dative accompanying *leial* 'loyal' does not express an experiencer but a stimulus (22a). Thus, in a hypothetical alternating variant, the stimulus would be marked by the ergative case and the experiencer by the absolutive case, as shown in (22b). Nevertheless, this hypothetical clause is ungrammatical.

- (22) a. Jon hizkuntza-ri leial(-a) zaio.

 J.[ABS] language-DAT loyal-DET be.3SGDAT[3SGABS]

 'Jon is loyal to the language.'
 - b. *Hizkuntza-k Jon leial-a du. language-ERG J.[ABS] loyal-DET have[3SGABS.3SGERG] (Intended: 'Jon is loyal to the language.')

The ungrammaticality of (22b) does not seem to be related to a restriction on the case the stimulus can take. In principle, nothing prevents the stimulus from being marked by the ergative case (and the experiencer by the absolutive case) as is the case with psychological verbs of the *preoccupare* type (Class II in Belletti and Rizzi 1988) such as *kezkatu* 'worry' (23):

(23) Jon-ek (ni) kezkatzen nau.

J.-ERG 1SG[ABS] worry.IPFV have.1SGABS[3SGERG]

'Jon worries me.'

However, as far as we are aware, there is no structure involving a psych noun or adjective where the experiencer is marked by the absolutive case and the stimulus by the ergative case, as in (22b). Actually, this seems to be the only verbal predicate type in Belletti and Rizzi (1988) that has no nominal or adjectival counterpart in Basque (see Table 2). Note in passing that there is a structure similar to (22b), in

which leial 'loyal' seems to co-occur with an ergative-marked phrase that is usually covert but triggers ergative agreement; see (24):

(24)Leial-a al zaitut leial-a nauzun loyal-det ptcl have.2ABS.1SGERG 1SG[ABS] loyal-det have.1SGABS.2ERG.SUBR bezala?

as

'Are you loval "on me", as I am loval "on you"?' (lit. 'Do I have you as loyal, like you have me as loyal?') (Elizen arteko biblia, 2 Kings 10:15)

In (24), *leial* 'loyal' appears with a covert ergative argument as can be seen from the inflected transitive copula (i.e., *edun 'have') and their corresponding agreement markers. Thus, at least at first sight, (24) corresponds to the ungrammatical example in (22b). However, the covert arguments triggering ergative agreement in (24) express neither the stimulus, as intended in (22b), nor the experiencer of being loyal. Rather, the covert ergative argument in (24) corresponds to the speaker (zaitut 'I have you') and the addressee (nauzun 'you have me'), respectively. Rebuschi refers to such arguments as ergatives éthiques 'ethical ergatives' and to the structure in (24) as implication or implicative form (1984: 569-581); see also Etxepare (2003) and Etxepare and Uribe-Etxebarria (2012). Actually, this implicative form involving *leial* 'loyal' could also include a dative-marked stimulus (25):

(25)Hizkuntzari leial-a al zaitut? language.DAT loval-DET PTCL have.2ABS.1SGERG 'Are you loyal to the language "on me"?'

Hence, the seemingly similar structures in (22b) and (24) have nothing to do with each other; the dative stimulus does not alternate with an ergative stimulus, in contrast to dative experiencers that show ergative counterparts with atsegin 'pleasure, pleasant'-like predicates.

4.2 Dative agreement alternations

The dative experiencer and the dative stimulus differ with respect to their behavior regarding agreement. Whereas dative experiencers obligatorily show dative agreement, dative stimuli can optionally drop it as in the following example from Fernández (2010), analyzed in Berro and Fernández (2019). In (26a), the copula dira shows agreement only with the covert 3pl subject ('they') and not with the dative phrase. Still, the example is as grammatical as its counterpart with a dative agreement marker on the finite form zaizkio corresponding to the dative phrase (the morpheme -o), as in (26b).

(26) a. Liburu-a-ri fidel-ago-a-k izan dira.

book-DET-DAT faithful-COMPR-DET-PL be.PTCP be[3PLABS]

(Berria 2011-02-17)

b. Liburu-a-ri fidel-ago-a-k izan zaizkio.
 book-DET-DAT faithful-COMPR-DET-PL be.PTCP be.3PLABS.3SGDAT
 Both: 'They have been more faithful to the book.'

Since Basque normally shows obligatory agreement with ergative-, absolutive-, and dative-marked phrases, (26a) without dative agreement might be surprising. However, the dative stimulus in (26a–b) seems to be adjective-internal, as proposed by Fernández and Ortiz de Urbina (2010) and further discussed by Berro and Fernández (2019). If this is the case, then the lack of dative agreement in (26a) will come as no surprise. Similar instances without dative agreement are also attested with *aiher* 'hatred', as in Orixe's translation of the *Confessions* of St Augustine (27):

(27) Gizon bakarrea-n bi nahi-ukaite elkar-i aiher

Man single.det-iness two will-have.nmlz each.other-dat hatred

dira-la ikuste-an,...
be[3PLABS]-SUBR see.nmlz-iness

'When they perceive two wills to be antagonistic to each other in the same

man, ...'

(Or Aitork)

At this point, it is necessary to make an observation on Basque dialects. Eastern varieties show dative agreement drop in general, which is absent in central and western varieties (Etxepare and Oyharçabal 2008, 2013; Fernández and Landa 2009; Fernández, Ortiz de Urbina and Landa 2009). As *aiher* 'hatred' is a psych noun/adjective attested mainly in eastern varieties, it can be seen as an instance of a more general phenomenon affecting dative agreement when the texts and authors are originally eastern, as those in (28).

(28) a. Badira beste anitz eta anitz oraingo moda lizuneri
PFX.be.1PLABS other many and many now.REL fashion indecent.PL.DAT
aiher direnak.
hatred be.1PLABS.SUBR.DET.PL
'There are many others that hate indecent current fashions.'
(Manezaundi, Emazte koskak, adapted)

b. aiher edo bederen ez ikusiarena Bertzeer da, other.DET.PL hatred be[3ABS] or at.least NEG see.PTCP.DET.GEN.DET egiten do.IPFV deie. have.3ABS.3PLDAT.3SGERG 'He/she hates the others, or at least turns a blind eye to them.' (JE Bur 55)

We cannot be sure about this because of the indeterminacy of the data, but the dative agreement drop in (28) seems to be a phenomenon beyond dialects that has to do with the nature of these noun/adjective internal datives and not with the dialectal dative agreement drop of eastern varieties.

The behavior of these dative stimuli contrast drastically with dative experiencers: the latter exclude the possibility of dative agreement drop. Thus, the nonagreeing counterpart to (8a) is ungrammatical:

(29)txakolin-a *Ion-i atsegin da. txakolin-DET[ABS] pleasure/pleasant be[3sgAbs] J.-DAT (Intended: 'Jon likes txakolin.')

There is no dialectal or historical exception to this, as previously shown by Fernández and Landa (2009) and Fernández, Ortiz de Urbina and Landa (2009).

4.3 Constituency

Dative experiencers and dative stimuli also differ with respect to constituency. As shown in Fernández and Berro (2018), based on some tests proposed in Adger and Ramchand (2006), the dative experiencer and the psych noun/adjective involved in the structure are not in the same constituent unlike the stimulus and the psych noun/adjective, which are. Note that the stimulus forms a constituent with the psych noun only when it is dative or adpositional (and not absolutive). We report the results of three tests in what follows: clefting, negative sentences with baizik 'but', and fragment answers.

4.3.1 Clefting

We will take Basque clefts to be structures consisting of a clefted focused constituent, the copula izan 'be', and a subordinate clause. The latter (i.e., the cleft clause), is headed by the subordinator -(e)n and features a determiner. Let us consider (8a), repeated here as (30a); its cleft counterpart can be seen in (30b):

- (30) a. Jon-i txakolin-a atsegin zaio.

 J.-DAT txakolin-DET[ABS] pleasure/pleasant be.3sgDAT[3sgABS]

 'Jon likes txakolin (a Basque white wine).'
 - b. *Txakolin-a da Jon-i atsegin* txakolin-DET[ABS] be[3ABS] J.-DAT pleasure/pleasant *zaiona*.

be.3sgDat.subr.det[3sgAbs] 'It is txakolin that John likes.'

In the cleft construction, there is a clefted constituent, i.e., *txakolina* 'txakoli', in sentence-initial position followed by a finite form of the copula agreeing with the clefted constituent. Immediately after the copula, the cleft clause is introduced. Note that the verbal finite form of the subordinate clause (*zaio*) includes the 3sg.dat agreement marker, i.e., -o, which cross-references the dative experiencer also in the cleft clause. As we will see, the presence or absence of this dative agreement marker is particularly relevant for the asymmetries between both *atsegin* 'pleasure, pleasant' and *leial* 'loyal'-type noun/adjectives in clefting.⁶ Note also that the cleft clause is marked by the subordinator -(*e*)*n* and followed by a determiner -*a*.

This cleft construction is reminiscent of English inverted pseudo-clefts, although there is no relative pronoun of the *wh*-type preceding the cleft clause. (For English clefts, see Collins (1991); Calude (2009) and references there.) The Basque cleft clause shows the determiner -*a* marked in absolutive case, the same case that marks the clefted constituent.⁷ Besides, the *gapped* element involved in the cleft clause is coreferential with the clefted constituent – in (30), *txakolin* 'txakoli'.

Fernández and Berro (2018) show, based on Adger and Ramchand (2006), that the experiencer cannot be clefted along with the psych noun/adjective, whereas the stimulus can. Note that the construction is a transitive one, including an ergative experiencer and a stimulus marked by an inessive postposition; see (31):

⁶ We want to thank an anonymous reviewer for bringing this to our attention.

⁷ In this respect, Basque clefts behave similarly to extraposed relatives; see Oyharçabal (2003b: 806, 815) for a description of the latter. We do not address the question whether cleft clauses are actually relative clauses or not; this is still under debate, see Calude (2008) for references and discussion.

- (31)Zerri-a-k zikinpe-a-n laket dи. a. pig-DET-ERG dirt-DET-INESS pleasure/pleasant have[3SGABS.3SGERG] 'The pig likes [to be] in the dirt.'
 - laket] b. [Zikinpe-a-n da zerri-a-k dirt-DET-INESS pleasure/pleasant be[3sgABs] pig-DET-ERG duena.

have.subr.det[3sgAbs.3sgErg]

'It is finding pleasure [in being] in the dirt that the pig is.'

*[Zerri-a-k laketl da zikinpe-a-n c. pig-DET-DAT pleasure/pleasant be[3sgABs] dirt-det-iness duena.

have.subr.det[3sgAbs.3sgErg]

We will now see if either the dative experiencer or the absolutive stimulus and the psych noun/adjective can be clefted together. (32a) shows a cleft constituent including the experiencer and the psych noun/adjective whereas (32b) shows the absolutive stimulus clefted along with the psych noun/adjective. Both are ungrammatical.

(32)*[Jon-i atsegin] da txakolin-a a. J.-DAT pleasure/pleasant be[3ABS] txakolin-DET[ABS] zaiona.

be.3sgDat.subr.det[3sgAbs]

(Intended: 'Pleasant to Jon is what *txakolin* is.')

*[Txakolin-a atsegin] b. da Ion-i txakolin-DET[ABS] pleasure/pleasant be[3ABS] J.-DAT zaiona.

be.3sgDat.subr.det[3sgAbs]

(Intended: 'Txakolin's pleasure is what Jon is.')

Two issues must be considered regarding the ungrammatical examples in (32). First, the dative-marked experiencer behaves like the ergative experiencer in (31): neither the former nor the latter can be clefted together with the psych noun/adjective since they do not share the same constituent. Second, the absolutive-marked stimulus behaves differently from the stimulus marked by the inessive postposition previously seen in (31): the inessive stimulus belongs together with the psych noun/adjective, but the absolutive stimulus seems to be independent from it. Therefore, it seems to us that in order to show the asymmetries between experiencer and stimulus only the stimulus marked by dative or alternatively by an adposition can be taken into account. As can be seen in (33), the dative stimulus behaves like the inessive stimulus in that it can be clefted together with the psych noun/adjective. Hence, both the psych noun/adjective and the dative stimulus share the same constituent (Berro and Fernández 2019).

- (33) a. Jon hizkuntza-ri leial(-a) da.

 J.[ABS] language-DAT loyal-DET be[3SGABS]

 'Jon is loyal to the language.'
 - b. [Hizkuntza-ri leial-a] da Jon dena. language.DET-DAT loyal-DET be[3SGABS] J.[ABS] be.SUBR.DET[3SGABS] 'Loyal to the language is what Jon is.'

Note that (33a) and its clefted counterpart in (33b) do not show dative agreement. Interestingly, if we add dative agreement to the examples in (33), as in (34), then the non-clefted variant is grammatical but its clefted counterpart is not.

- (34) a. Jon hizkuntza-ri leial(-a) zaio.

 J.[ABS] language-DAT loyal-DET be.3SGDAT[3SGABS]

 'Jon is loyal to the language.'
 - b. *[Hizkuntza-ri leial-a] da Jon zaiona. language.det-dat loyal-det be[3sgAbs] J.[abs] be.3sgDat subr.det[3sgAbs]

(Intended: 'Loyal to the language is what Jon is.')

This seems to show a correlation between dative agreement and clefting. When dative agreement is present, clefting is impossible. In contrast, when dative agreement is absent, clefting is possible – a possibility available only for the *leial* 'loyal'-type because *atsegin* 'pleasure, pleasant' requires obligatory dative agreement. Hence, once the dative stimulus shows dative agreement, the behavior of *leial* 'loyal' converges with that of *atsegin* 'pleasure, pleasant' in clefting. Still, when the subordinate verb form does not show dative agreement, clefting is possible, as in (33b).

In sum, Basque experiencers, either ergative or dative, do not form a constituent with a psych noun/adjective as they cannot be clefted together. On the other hand, stimuli marked by dative case or by an adposition do form a constituent with the psych noun/adjective for the same reason.

4.3.2 Negative sentences with baizik 'but'

The results obtained by the clefting test are similar to those of negative sentences with *baizik* 'but'. In addition, the word order is modified when *baizik* is present: both the constituent and *baizik* are fronted before the negative particle, and thus the constituent is dislocated outside the scope of negation, as shown in (35b):

- (35)Ion-i ez zaio txakolin-a atsegin. a. J.-DAT NEG be.3sgDat[3sgABs] txakolin-DET[ABS] pleasure/pleasant 'Iohn does not like txakolin.'
 - Ion-i [txakolin-a b. baizik ez zaio atsegin. J.-DAT txakolin-DET[ABS] but neg be.3sgDat[3sgAbs] pleasure/ pleasant 'John only likes txakolin.'(lit.: 'John does not like anything but

txakolin.')

Regarding psych nouns/adjectives and their dative arguments, baizik can take scope over the psych adjective and the dative stimulus, and the three of them can be fronted before the negative particle with a grammatical result as shown in (36b):

- (36)a. Ion ezda hizkuntza-ri leial-a. be[3sgAbs] J.[ABS] neg language.DET-DAT loyal-DET 'John is not loyal to the language.'
 - b. Ion [hizkuntza-ri leial-a baizik ezda. J.[ABS] language.DET-DAT loval-DET be[3sgABs] but neg 'John is not but loyal to the language.'

In contrast, the sentence is ungrammatical if we try to dislocate the psych noun/ adjective together with the dative experiencer. In (37a), the word order is such that the stimulus is focalized and the dative experiencer comes after the negation. In (37b), the psych noun/adjective, the dative experiencer and baizik have been fronted to a position before the negative particle:

- (37)Txakolin-a ezzaio Jon-i atsegin. a. txakolin-Det[ABS] neg be.3sgDat[3sgABs] J.-Dat pleasure/pleasant 'Txakolin John does not like.'
 - *Txakolin-a b. Ion-i atsegin baizik eztxakolin-DET[ABS] pleasure/pleasant I.-DAT but NEG zaio / da. be.3sgDaT be [3sgAbs] [3sgAbs]

(Intended: '*Txakolin* is nothing but pleasant to Jon.')

4.3.3 Fragment answers

The above results regarding constituency are confirmed by the behavior of both dative experiencers and dative stimuli in fragment answers (Berro and Fernández 2019). Following Merchant (2004), we take fragment answers to form a constituent stranded by deletion. As we can see in (38A), the dative stimulus and the psych noun/adjective can form a fragment answer when the question is about the experiencer:

(38) Jon hizkuntza-ri leial(-a) da.
J.[ABS] language-DAT loyal-DET be[3SGABS]
'Jon is loyal to the language.'

Q.: Zer da Jon? what be[3sgAbs] J.[Abs] 'What is John?'

A.: Hizkuntza-ri leial-a. language.DET-DAT loyal-DET 'Loyal to the language.'

The dative experiencer, however, cannot form a fragment answer along with the psych noun/adjective when the question is about the stimulus (39A):

(39) Jon-i txakolin-a atsegin zaio.

J.-DAT txakolin-DET[ABS] pleasure/pleasant be.3sgDAT[3sgABS]

'Jon likes txakolin.'

Q.: Zer da txakolin-a?
what be[3sgAbs] txakolin-DET[Abs]
'What is txakolin?'

A.: *Jon-i atsegin(-a)

J.-DAT pleasure/pleasant(-DET)

(Intended: 'Pleasant/pleasure for John.')

4.4 Hierarchy

Another test provided by Adger and Ramchand (2006) in order to distinguish experiencers and stimuli and establish hierarchical relationships between these arguments and the psych noun/adjective involved in the construction, has to do with binding. As noted by Rezac (2009: 310), in these structures the experiencer marked by absolutive case precedes and c-commands the dative, as the following examples show:

- (40)a. Ion here buru-a-ri fidel-a zaio. I.[ABS] head-DETfaithfulbe.3sgDaT 3SG.PSR DAT DET [3sgAbs] 'Jon is faithful to himself.'
 - b. Lagun-a-k elkarr-i fidel-a-k zaizkio. friends-DET-PL each.other-DAT faithful-DET-PL be.3PLABS.3SGDAT '(The) friends are faithful to each other.' (Berro and Fernández 2019)

(40a) and (40b) include the reflexive anaphor bere burua ('himself/herself', lit. 'his/her head') and the reciprocal anaphor elkar 'each other', respectively. Both anaphors are marked by the dative case as well as preceded and bound by the experiencer marked by the absolutive case. Note that the inverted counterparts are ungrammatical:

(41)a. *Bere buru-a Jon-i fidel-a zaio. faithful-DET 3SG.PSR head-DET[ABS] I.-DAT be.3sgDat[3sgAbs] zaizkio. b. *Elkar lagun-ei fidel-a-k each.other[ABS] friend-DET.PLDAT faithful-DET-PL be.3PLABS.3SGDAT

The hierarchical structure and c-command relationships revert when the dative experiencer is involved:

- (42)Ion-i bere burua atsegin zaio. a. J.-DAT 3SG.PSR head-DET[ABS] pleasure/pleasant be.3SGDAT[3SGABS] 'John likes himself.'
 - b. Lagun-ei elkar atsegin zaizkio. friend-Det.PlDat each.other[ABS] pleasure/pleasant be.3plabs.3sgDat '(The) friends like each other.'

In (42a-b), the dative experiencers marked by dative precede and bind the reflexive and reciprocal anaphors.

4.5 Selection

The last piece of evidence in order to distinguish dative experiencers and dative stimuli comes from selection. Adger and Ramchand (2006) observe that in Scottish Gaelic psych constructions involving two prepositional phrases the experiencer is systematically marked by the same preposition whereas the stimulus can be marked by several prepositions depending on the particular psych noun involved in the construction. Basque is slightly different in that the experiencer is marked by the absolutive case whereas the stimulus can be marked by the dative or by some postpositions even with the same psych noun/adjective. Even though the particular configuration of the data differs in the two languages, we think that the test is valid also in Basque because it shows that the diverse marking of the stimulus depends on the selectional properties of the psych noun/adjective involved in the construction while the experiencer is in principle independent from it. For instance, *leial* 'loyal' can select not only dative case but also the comitative post-position as well as the comitative plus the relational adposition, ⁸ as shown in (43):

- a. Bere printzipio-ekin leial izatearren hainbeste sufritzen
 3SG.PSR principle-DET.PLCOMIT loyal be.NMLZ.CAUS so.much suffer.IPFV
 zuten pertsonaiek.
 have.3PLERG[3SGABS] character.DET.PLERG
 'Characters suffered a lot for being loyal to their principles.'
 (Zortzi unibertso, zortzi idazle, Ana Urkiza, p. 343)
 - b. Jende gogorra zen, bere jaun-a-reki-ko leiala.

 People rough[ABS] be[3SGABS], 3SG.PSR lord-DET-COMIT-REL loyal

 'They were rough people, loyal to their Lord.'

 (Eraztunen Jauna III, J.R. Tolkien/A. Otsoa, p. 86)

Zordun 'indebted' shows a more complex picture; in addition to dative case, the stimulus can be marked with the genitive (44a), or adlative (44b) postpositions, or even with the complex postposition *-(ren) aldera* (44c):

- (44) a. Jose Antonio Agirre eta Telesforo Monzonen ideologiak
 J. A. A. and T. Monzon.GEN ideology.DET.PL[ABS]
 egokitu zitzaien inguru-a-ren zordun
 correspond be.PST.SUBR[3PLABS] environment-DET-GEN indebted
 dira.
 - be[3PLABS]
 - 'Jose Antonio Agirre and Telesforo Monzon's ideologies are indebted to the environment that fate dealt them.' (lit. 'the environment that corresponded to them') (Berria, Kultura, 2004-12-05)
 - b. Fernando zordun da Azpeitiko alkate-a-rengana zein markes F.[ABS] indebted be[3SGABS] A.P mayor-DET-ADL and marquis jaun-a-rengana.

lord-DET-ADL

- 'Fernando is indebted to the mayor of Azpeitia and to the marquis.' (Markos Zapiain, *Errua eta maitasuna*, 51)
- c. Denak zordun gara horrelako gizon-en alde-ra. all[ABS] indebted be.1PLABS those.P men-DET.PLGEN side-ADL 'All of us are indebted to those men.' (NE)

⁸ The *Basque General Dictionary* (OEH), a historical dictionary of Basque, also mentions other postpositions (e.g., adlative *-ra(t)* and destinative *-rentzat*). We have not found any examples with these postpositions in contemporary texts.

In DatExpIS, by contrast, the experiencer always takes dative case irrespective of the particular psych noun/adjective; it does not alternate with any postposition. Examples such as (45) involving comitative and adlative experiencers are ungrammatical in all dialects and unattested in corpora:

(45)*Jon-ekin / *Jon-engana txakolin-a atsegin da. txakolin-DET[ABS] pleasure/pleasant be[3sgABS] I.-COMIT J.-ADL (Intended: 'John likes *txakolin*.')

Therefore, as far selection is concerned, the dative experiencer seems to be independent of the particular psych nouns/adjective whereas the dative stimulus is much more closely related to it.

4.6 Interim summary

The results obtained by DatExpIS and DatStimIS in each test are shown in Table 5.

As can be seen, the two intransitive configurations behave syntactically very differently; in the DatExpIS, the experiencer can show ergative-dative alternation while the dative experiencer must always have an agreement marker on the copula, does not form a constituent with the psych noun, precedes and c-commands the absolutive stimulus, and does not alternate with any other postposition. In contrast, in the DatStimIS the dative stimulus does not alternate with an ergative stimulus; dative agreement can be dropped, the dative forms a constituent with the psych noun and is preceded and c-commanded by the absolutive experiencer, and lastly, the dative marking can alternate with some postpositions, depending on the psych noun. As will be shown in the next section, transitive structures do not show such a clear-cut two-way classification in these tests, but there are nonetheless significant contrasts between the two configurations.

Table 5: Results of DatExpIS and DatStimIS in the syntactic test	ts.
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	Psych nouns in intransitive structures	
	DatExpIS atsegin-type	DatSimIS <i>leial-</i> type
ERG-DAT alternation	√	X
DAT agreement alternation	X	✓
[psych noun + DAT] constituency	X	✓
[ABS] > [DAT] hierarchy	X	✓
[DAT] > [ABS] hierarchy	✓	X
DAT-POST alternation (selection)	X	✓

5 Dative experiencer and dative stimulus in transitive constructions

The other two structures involving psych nouns in Basque involve transitive clauses. Unlike the main structures presented in (1), they do not select the intransitive copula *izan* 'be' but the transitive **edun* 'have'. Besides, these two transitive structures in (9) (reproduced as (46) below) are mirror images of each other. In (46a), the experiencer takes dative case and the stimulus appears in the ergative (DatExpTS); in (46b), the stimulus takes dative case while the experiencer appears in the ergative (DatStimTS):

- (46) a. Arkitektura-k Jon-i ardura dio.
 architecture.DET-ERG J.-DAT care have.3sgDat[3sgAbs.3sgErg]
 'Architecture matters to Jon.'
 - b. Jon-ek espinak-ei nazka die.

 J.-ERG spinach-PLDAT repulsion have.3PLDAT[3SGABS.3SGERG]

 'Spinach disgusts Jon.'

In both structures, the experiencer and the stimulus are cross-referenced by their corresponding dative and ergative agreement markers on the inflected copula. (With ergatives other than a 3sg, non-zero segmental material appears on the copula.) As for the unmarked third-person singular absolutive in the inflection, it does not correspond to any argument in either of the two structures.

Psych nouns that occur in the DatExpTS structure in (46a) are not numerous and seem to be semantically related to each other: *ardura* 'care, worry'; *axola* 'care, worry'; *berdin*, lit. 'same; matter' (also in its reduplicated form *berdin-berdin*, lit. 'same-same; matter'); *igual*, lit. 'same; matter'; and *inporta* 'matter'. Examples from the EPG corpus are given in (47):

- (47) a. Berdin dit!

 Care have.1sgDat[3sgAbs.3sgErg]

 'I don't care!' (Anne Franken egunkaria, A. Frank/ J. Zabaleta, p. 214)
 - b. Berdin-berdin dio zu-ri gustatzen care-care have.3sgDat[3sgAbs.3sgErg] 2sg-dat like.ipfv zaizun edo ez. be.2dat.subr[3sgAbs] or NEG

'It doesn't matter if you like it or not.' (*Hona hemen gu biok*, D. Parker/M. Larrañaga, p. 89)

Baina, ez dio inporta, axola. c. ezNEG have.3sgDat[3sgAbs.3sgErg] matter but NEG care 'But it doesn't matter, it doesn't care,' or 'He/she doesn't matter, he/she doesn't care' (Naturaren mintzoa, P. Zabala, p. 476)

Conversely, psych nouns occurring in the DatStimTS are more numerous and include amorru 'anger', beldur 'fear', enpagu 'abhor' (western Basque), gorroto 'hatred', inbidia 'envy', izu 'terror', mania 'abhor', and nazka 'repulsion, revulsion'. We present some examples from the EPG corpus in (48):

- (48)Askatasun zaharr-ek heldur a. diote freedom old-DET.PLERG fear have.3sgDat.3plErg[3sgAbs] askatasun berri-a-ri. freedom new-DET-DAT 'Old freedoms fear the new freedom.' (K. Izagirre, Idi orgaren *karranka*-V. Hugo, p. 92)
 - b. Izua zien sigl-ei, esaten terror have.3PLDAT.PST[3SGABS.3SGERG] acronym-PLDAT said zuen deabru-a-ren mozorro-ak zirela. have.pst[3sgAbs.3sgErg] demon-det-gen disguise-det.PlAbs were.subr 'He was terrified by the acronyms, he said that they were disguises of the devil.'

(*Ihes betea*, A. Lertxundi, p. 124)

Paulina-ri mania ziola iruditzen c. P.-DAT mania have.3DAT.PST.SUBR[3SGABS.3SGERG] seem.IPFV zitzaidan.

be.1sgDat.pst[3sgAbs]

'It seems to me that he/she disliked Paulina.' (lit. 'had mania to Paulina')

(Soinujolearen semea, B. Atxaga, p. 333)

d. Nazka digute. arrazaz, eta horrekin repulsion have.1PLDAT.3PLERG[3SGABS] race.INS and that.COMIT NEG dago ezer egiterik. be[3sgABs] nothing do.PTV

'They disgust us, by [virtue of their] race, and there is nothing we [can] do about that.'

(Hemingway eta euskaldunak zerbitzu sekretuetan, E. Jimenez, p. 118)

In this section, we explore the behavior of the dative experiencer and the dative stimulus in the transitive structures. We begin by describing the verbal counterparts to these psych nominals Section 5.1). Next, we compare the behavior of the dative arguments in these transitive constructions applying the tests explored in the intransitive ones: dative-ERGative alternation (Section 5.2.1), hierarchy (Section 5.2.2), selection (Section 5.2.3), dative agreement alternations (Section 5.2.4) and constituency Section 5.2.5).

5.1 A note on the verbal counterparts of the psych nouns

Most of the psych nouns involved in the DatStimTS have a verbal counterpart; see Table 6 for a list (and note that some do not have verbal counterparts, e.g., *inbidia* 'envy' but not **inbidiatu* and *mania* 'abhor' but not **maniatu*).

amorru	'anger'	amorratu	'be(come) angry'
beldur	'fear'	beldurtu	'be frightened / frighten'
izu	'terror'	izutu	'be frightened / frighten'
nazka	'repulsion, revulsion'	nazkatu	'repulse'

Table 6: Psych nouns involved in the DatStimTS with a verbal counterpart.

These verbal counterparts do not occur in the structure under discussion but they do in the causative alternation illustrated in (49b) and (49c):

- (49) a. Jon-ek espinak-ei nazka / *nazkatu die.

 J.-ERG spinach-PLDAT repulsion repulse have.3PLDAT[3SGABS.3SGERG]

 'Spinach disgusts Jon.'
 - b. Jon espinak-ez nazkatzen da.
 J.[ABS] spinach-PLINS repulse.IPFV be[3SGABS]
 'Jon is repulsed by spinach.'
 - c. Espinak-ek Jon nazkatu dute.
 spinach-PLERG J.[ABS] repulse have.3PLERG[3SGABS]
 'Spinach disgusts Jon.'

The psych noun *nazka* 'repulsion' appears in the DatStimTS in (46b), repeated here as (49a), but not its verbal counterpart *nazkatu* 'repulse', which is ungrammatical in the same structure. In order to find this verbal predicate, we need to look at the causative alternation in both its inchoative and causative variants,(49b) and (49c) respectively. The inchoative variant in (49b) involves a single argument marked by

absolutive case and cross-referenced correspondingly on the intransitive auxiliary (izan 'be'). The causative variant involves two arguments, subject and object, marked by ergative and absolutive respectively and cross-referenced on the transitive auxiliary (*edun 'have'). The ergative corresponds to the causing stimulus while the absolutive argument is the experiencer of the psychological change. This alternation has been recently explored for Basque and analyzed by Berro et al. (2018), based on Wood (2016) for Icelandic (for previous accounts on this alternation in Basque, see Oyharçabal (2003a) and Ormazabal (2008)). Interestingly, Gorroto 'hatred' also has a verbal counterpart gorrotatu 'hate' but it does not occur in either the structure under discussion (49a) or the causative alternation in (49b-c). Gorrotatu 'hate' corresponds to Belletti and Rizzi's Class I (temere) and thus appears in a transitive structure with an absolutive stimulus (50b). (50a) shows the DatStimTS under discussion:

- (50)Duffy jaunak a. gorroto zion D. mister hatred have.3sgDat[3sgAbs.3sgErg] desordena fisikoa disorder physical or mentala adierazten duen edoze-ri. mental express have.subr[3sgAbs.3sgErg] whatever-DAT 'Mr. Duffy abhorred anything which betokened physical or mental disorder.' (Dublindarrak, J. Joyce/ I. Aldasoro, p. 156)
 - b. Ero-a-ren gisan gorrotatzen zuen. fool-DET-GEN like hate.IPFV have.pst[3sgAbs.3sgErg] 'He/she hates him/her like a fool.' (Zalakain abenturazalea, P. Baroja/K. Navarro, p. 46)

In contrast to DatStimTS, the psych nouns/adjectives appearing in DatExpTS do not have verbal counterparts. The exception is arduratu 'worry', counterpart to the noun ardura 'worry', which occurs in the causative alternation illustrated in (33b) and (33c), with the ergative argument corresponding to the causing stimulus and the absolutive denoting the experiencer.

The particular analysis of the causative alternation or verbal psych predicates falls outside the scope of this paper (we refer the reader to the works already mentioned and the references within). Nevertheless, the contrasts found in case assignment as well as in the theta roles of the arguments in psych nouns/adjectives and in their verbal counterparts is a good starting point for the analysis of the dative arguments in psych nouns/ adjectives.

5.2 Dative experiencer vs. dative stimulus: Exploring asymmetries in transitive structures

In Section 3, we explored the asymmetries between dative experiencers and dative stimuli in intransitive constructions using a number of morphosyntactic tests (3.1– 3.5). In what follows, we briefly review some of the tests in order to ascertain the behavior of dative experiencers and stimuli in transitive structures. First, we will briefly deal with the ergative-dative alternation, which, like the transitive structures we are now dealing with, includes both an ergative and a dative constituent (Section 5.2.1). Second, we will show that hierarchy does not reverse in these transitive structures because the ergative always binds on the dative, be it experiencer or stimulus (5.2.2). Third, as we will see, there is no contrast as far as selection is concerned, given that neither the dative experiencer nor the dative stimulus alternates with any postpositions (Section 5.2.3). This leaves us with only two tests that show a contrast between DatExpTS and DatStimTS, viz., dative agreement alternations and constituency (Sections 5.2.4 and 5.2.5, respectively).

5.2.1 Ergative-dative alternation

In Section 3.1 we have shown that the predicates occurring in the DatExpIS configuration, namely the atsegin-type, allow the ergative-dative alternation of the experiencer argument. In contrast, those appearing in the DatStimIS are not acceptable with an ergative stimulus argument. Transitive configurations involving psych nouns pattern with the latter group in not allowing such an alternation. In fact, the transitive structures we are now dealing with include both an ergative and a dative constituent, and it is not possible to have two ergative arguments in the same clause. Similarly, a transitive clause involving an ergative and an absolutive constituent is similarly not available in this kind of predicates, irrespective of the theta-role assigned to each argument. This is the case in both DatStimTS (51) and DatExpTS (52).

(51)*Arkitektura-k du. a. Ion ardura architecture.DET-ERG J.[ABS] have[3sgAbs.3sgErg] care b. *Ion-ek arkitektura ardura du. J.-ERG arkitektura.DET[ABS] care have[3sgAbs.3sgErg]

(Both intended: 'Architecture matters to Jon.')

(52)*Ion-ek espinaka-k nazka ditu. a. J.-ERG spinach-PL[ABS] repulsion have.3PLABS[3SGERG] *Espinak-ek nazka b. Ion dute.

spinach-PL.ERG J.[ABS] repulsion have.3plErg[3sgAbs]

(Both intended: 'Spinach disgusts Jon.')

An ergative-absolutive configuration would only be grammatical in the verbal counterparts of these psych nouns, namely arduratu 'worry' and nazkatu 'disgust, bore', which, as commented on in Section 4.1, have an ergative argument interpreted as the causing stimulus and an absolutive argument interpreted as the experiencer undergoing the change.

5.2.2 Hierarchy

As seen in Section 3.4, the hierarchical relation in DatExpIS is one in which the dative precedes and c-commands the absolutive. The reverse holds for the Dat-StimIS, where the absolutive precedes and c-commands the dative. As for transitive configurations, no contrast is observed between the two configurations at least as far as reciprocal anaphors are considered. In both DatExpTS and DatStimTS the ergative comes before and c-commands the dative (53–54):

- (53)a. Ion-ek eta Mikel-ek elkarri ardura diote. each.other.DAT matter have.3SGDAT.3PLERG I.-ERG and M.-ERG [3sgAbs]
 - 'John and Michael matter to each other.'
 - b. *Elkarrek Ion-i eta Mikel-i ardura diote. each.other.ERG I.-DAT and M.-DAT matter have.3sgDat.3plErg [3sgAbs]

(Intended: 'John and Michael matter to each other.')

- Ion-ek eta Mikel-ek elkarri (54)nazka diote. J.-ERG and M.-ERG each.other.DAT disgust have.3SGDAT.3PLERG [3sgAbs]
 - 'John and Michael disgust each other.'
 - Jon-i eta Mikel-i nazka diote. *Elkarrek b. each.other.ERG J.-DAT and M.-DAT disgust have.3.3PLERG[3SGABS] (Intended: 'John and Michael disgust each other.')

The reciprocal anaphors are grammatical in a configuration where they bear dative case and their antecedent has ergative case. Thus, regarding reciprocal anaphors, there seems to be no difference between DatExpTS and DatStimTS in terms of hierarchy.

Facts are slightly different with the reflexive anaphor, however. On the one hand, the DatStimTS configuration involving a reflexive anaphor behaves the same as in (54); i.e., the anaphor must bear dative case and have an ergative antecedent. The result is not altered even if the order of constituents is changed (55):

- (55) a. Jon-ek bere buru-a-ri nazka dio.

 J.-ERG 3SG.PSR head-DET-DAT disgust have.3SGDAT[3SGABS.3SGERG]

 'John disgusts himself.'
 - b. *Bere buru-a-k Jon-i nazka dio.

 3SG.PSR head-det-ERG J.-DAT disgust have.3SGDAT[3SGABS.3SGERG]

 (Intended: 'John disgusts himself.')
 - c. *Jon-i bere buru-a-k nazka dio.

 J.-DAT 3SG.PSR head-DET-ERG disgust have.3SGDAT[3SGABS.3SGERG]

 (Intended: 'John disgusts himself.')

In DatExpTS, a reverse relation seems to hold between the two constituents, especially when the dative precedes the ergative in the linear order as in (56c):

- (56) a. **Jon-ek bere buru-a-ri ardura dio.

 J.-ERG 3SG.PSR head-DET-DAT matter have.3SGDAT[3SGABS.3SGERG]

 (Intended: 'John matters to himself.')
 - b. [?]Bere buru-a-k Jon-i ardura dio.

 3SG.PSR head-det-ERG J.-DAT matter have.3SGDAT[3SGABS.3SGERG]

 (Intended: 'John matters to himself.')
 - c. Jon-i bere buru-a-k ardura dio.

 J.-DAT 3SG.PSR head-det-ERG matter have.3SGDAT[3SGABS.3SGERG]

 'John matters to himself.'

This surprising relation may be related to the backward binding⁹ effect attested in psychological predicates (e.g., Belletti and Rizzi 1988; Giorgi 1984; Pesetsky 1987, 1995; Postal 1971 and many others, see Temme and Verhoeven 2017 for a recent approach to the issue). The backward binding effects have been reported in psychological predicates where the stimulus is in nominative case and the experiencer bears accusative or dative case, that is, in Belletti and Rizzi's Class II (*preoccupare*) and Class III (*piacere*) verbs. In these configurations, an anaphor embedded in the constituent denoting the stimulus – marked nominative – can be co-indexed with the constituent – bearing accusative or dative – expressing the experiencer (57):

- (57) a. His_i health worried every patient_i. (Reinhart 2002)
 - b. *Pictures of each other*_i *annoyed the politicians*_i. (Pesetsky 1995)

⁹ Binding refers to the anaphoric relations held between anaphoric elements and their antecedents. In the examples, the sub-indexes indicate specific discourse referents. Shared sub-indexes mean co-indexation, i.e., that the anaphors refer to the same discourse referent.

According to Temme and Verhoeven, dative experiencers trigger stronger psych effects than accusative experiencers in German. Additionally, these effects only arise in a subset of the verbs that have an accusative experiencer; factors such as the lack of agentivity or subject matter¹⁰ (Pesetsky 1995) of the stimulus favor the appearance of backward binding (Reinhart 2002). Artiagoitia (1995, 2003) has also reported similar cases for Basque psych verbs: in the verbs *nazkatu* 'disgust' and *kezkatu* 'worry', which have an ergative stimulus and absolutive experiencer, the reflexive anaphor occurring in the ergative can be bound by the absolutive experiencer (58):

- (58) a. Ni, neure buru-a-k nazka-tzen nau.

 1SG.ABS 1SG.PSR head-DET-ERG disgust-IPFV have.1SGABS[3SGERG]

 'Me, I disgust myself.'
 - Bere buru-a-ren irudi-a-k Jon asko kezka-tzen
 3SG.PSR head-DET-GEN picture-det-ERG J.[ABS] a.lot worry-IPFV zuen.

have.pst[3sgAbs.3sgErg]

'Pictures of himself worried John.' (Artiagoitia 2003)

As can be seen in (58a), the reflexive anaphor can be bound also when it is not embedded while with the reciprocal, only the embedded configuration gives rise to backward binding (59):

- (59) a. *Elkarrek nazka-tzen gaitu.

 each.other.ERG disgust-IPFV have.1PLABS[3sgErg]

 (Intended: 'We worry each other.')
 - b. Elkarren inguruko istorio-ek nazkatu egin each.other.GEN about story-DET.PL.ERG disgust.PFV do gaituzte.

have.1PLABS.3PLERG

'Stories of each other have disgusted us.' (Artiagoitia 2003)

The reflexive anaphor means literally 'X's head', so backward binding may arise because, as pointed out by Rebuschi (1993), only the possessor part of the expression is a true anaphor (Artiagoitia 2003). Therefore, the reflexive anaphor in

As can be seen, subject matter subjects favor the appearance of backward binding (Reinhart 2002).

¹⁰ According to Pesetsky (1995), a subject matter subject differs from a causer in that the subject matter is really the source or reason of the experience, whereas with the causer there is just a causing relation between the argument and the experience. For example, in (ib), the letter causes the worry, but the worry is not necessarily about the letter. In contrast, in (ia), the worry is about his health.

⁽i) a. His_i health worried every patient_i.

b. "His; doctor's letter worried every patient;.

Basque would be, as it were, already be embedded. This seems indeed to be the case. For instance, as we have shown, in the case of Basque psych nouns occurring in transitive structures, particularly in DatExpTS, the experiencer is a dative constituent and the stimulus is ergative, and backward binding arises only with the reflexive anaphor and not with the reciprocal (53b/56c). However, if we embed the reciprocal in the stimulus argument, the result is grammatical (60):

(60)Elkarren irudi-ek Ion-i eta Mikel-i ardura each.other.GEN picture-DET.PL.ERG J.-DAT and M.-DAT matter diete.

have.3plDat.3plerg[3sgAbs]

'Pictures of each other matter to John and Michael.'

Thus, it must be concluded that backward binding arises both with the reflexive and the reciprocal anaphors but, interestingly, only in the DatExpTS configuration and not in DatStimTS (see [55b] and [61]):

(61)*Elkarren irudi-e-k Mikel-i nazka Jon-i eta each.other.GEN picture-DET.PL-ERG I.-DAT and disgust M.-DAT diete.

have.3plDat.3plErg[3sgAbs]

(Intended: 'Pictures of each other disgust John and Michael.')

In the DatStimTS, the ergative argument bearing the experiencer role must precede and c-command the dative, and backward binding does not take place, also not in the usual contexts that favor it.

5.2.3 Selection

In Section 3.5 we have seen that dative experiencers and dative stimuli can be distinguished also by selection. As we have shown, following Adger and Ramchand (2006), the stimulus can be marked either by dative or by some postpositions depending on the selection of the particular psych noun/adjective involved in the intransitive construction. This alternating marking contrasts to the systematic marking of the experiencer by absolutive in *leial* 'loyal'-type predicates or by dative in *atsegin* 'pleasure, pleasant'-type predicates (Class III). Unfortunately, this test does not show any contrast in transitive structures as the experiencer and the stimulus must remain dative in both DatExpTS and DatStimTS. Any other marking carries ungrammaticality in both cases (62):

(62)a. *Arkitektura-k Ion-ekin ardura du. architecture.DET-ERG I.-COMIT have[3sgAbs.3sgErg] (Intended: 'Architecture matters to Jon.')

b. *Jon-ek espinak-ekin/ espinak-ez nazka du. J.-ERG spinach-PLCOMIT spinach-PLINS repulsion have [3sgAbs.3sgErg] (Intended: 'Spinach disgusts Jon.')

Hence, selection is a significant criterion in order to distinguish dative experiencers and dative stimuli in intransitive structures. However, in transitive structures, it must be discarded.

5.2.4 Dative agreement alternations

One of the asymmetries observed between dative experiencers and dative stimuli in intransitive constructions has to do with the possibility for the stimuli, but not for the experiencers, to appear with or without dative agreement. This asymmetry is not observed in transitive constructions, which do not allow stimuli to appear without dative agreement. Thus, dative experiencers and dative stimuli without dative agreement are excluded, as shown in (63) and (64) respectively:¹¹

- (63)*Arkitektura-k Jon-i ardura du. architecture.DET-ERG J.-DAT have[3sgAbs.3sgErg] care (Intended: 'Architecture matters to Jon.')
- (64)*Jon-ek espinak-ei nazka du. spinach-PLDAT repulsion have[3sgAbs.3sgErg] I.-ERG (Intended: 'Spinach disgusts Jon.')

The ungrammaticality of both examples is due to the lack of a dative agreement marker for the experiencer and the stimulus. We do not expect the experiencer to allow dative-agreement drop, however, as experiencers never drop dative agreement in Basque – not even in those varieties in which dative agreement seems to be optional in several contexts. Thus, the significant example is the one that shows a dative stimulus (64). The impossibility for this dative stimulus to drop agreement, in contrast to what we observed before in intransitive structures, leads us to think that dative stimuli are not syntactically equivalent in both structures. In the intransitive structure, dative stimuli seem to be internal to the psych noun/adjective whereas they behave as if they were necessarily in the sphere of inflection in the transitive structure. This, of course, needs a particular analysis that will vary depending on the linguistic approach - for a recent generative account of the intransitive structures under discussion, see Berro and Fernández (2019). We

¹¹ Certain instances of dative agreement drop can be found for DatStimTS. See Section 5.2.5.

reserve transitive structures such as (63), as well as possible analyses, for further research.

5.2.5 Constituency

As we saw in Section 4.3, dative experiencers and dative stimuli do not behave in the same fashion with regard to constituency in intransitive structures: the dative experiencer and the psych noun/adjective cannot form a constituent, but the dative stimulus and the psych noun/adjective can. This asymmetric behavior is also found in transitive structures.

Let us start with clefting in DatExpTS. Notice that as these transitive structures involve a transitive copula, i.e., *edun 'have', the same copula appears in the subordinate clause (the cleft one) in (65). Notice also in (65) that the copula shows dative agreement:

(65) a. Arkitektura-k Jon-i ardura dio.
architecture.DET-ERG J.-DAT care have.3SGDAT
[3SGABS.3SGERG]

'Architecture matters to Jon.'

b. *Jon-i ardura da arkitektura-kJ.-DAT care be[3SGABS] architecture.DET-ERG diona.

have.3sgDat.subr.det[3sgAbs.3sgErg]

(Intended: 'Matter to John is what architecture does (to him).')

As can be seen in the cleft construction in (66), the dative experiencer and the psych noun cannot be clefted together. The ungrammaticality still holds even if the copula in the cleft does not include dative agreement:

(66) *Jon-i ardura da arkitektura-k duena.

J.-DAT care be[3SGABS] architecture.DET-ERG have.SUBR.DET

[3SGABS.3SGERG]

(Intended: 'Matter to John is what architecture does.')

Thus, as with the intransitive structures analyzed in Section 4.3, we interpreted this as a consequence of the fact that the experiencer and the psych noun are not together in the same constituent.

Now let us move to the DatStimTS. Remember (2b), repeated here as (67a), along with its intended cleft counterpart in (67b). The cleft construction in the latter, with the copula of the subordinated clause including dative agreement, is ill-formed:

- (67)Ion-ek espinak-ei nazka die. a. spinach-PLDAT repulsion have.3pldat[3sgAbs.3sgErg] I.-ERG 'Spinach disgusts Jon.'
 - [?]/*Espinak-ei b. nazka da Ion-ek spinach-PLDAT repulsion be[3sgABs] J.-ERG diena.

have.3plDat.subr.det[3sgAbs.3sgErg]

(Intended: 'It is repulsion to spinach that Jon has.')

Remember that the same correlation between the presence of dative agreement and ungrammatical clefting has been already shown in intransitive structures – see Section 4.3.1 Also, as we have seen in Section 5.2.4, psych transitive structures do not allow dative-agreement drop, see (64). However, if we omit dative agreement in the copula of the cleft clause, then the sentence is grammatical (68):

(68)Espinak-ei nazka da Ion-ek duena. spinach-PLDAT repulsion be[3SGABS] J.-ERG have.SUBR.DET [3SGABS.3SGERG]

'Repulsion to spinachs is what Jon has.'

Hence, there seems to be a correlation between the presence of dative agreement and ungrammatical clefting on the one hand and the absence of dative agreement and grammatical clefting on the other. Moreover, this correlation is attested for both intransitive and transitive structures. This raises some questions that go beyond the limits of this paper and need an independent study. As far as the nature of psych structures is concerned, the asymmetries between dative experiencers and dative stimuli are confirmed in both intransitive and transitive structures by clefting.

On the other hand, we have seen in Section 4.3 that dative experiencers and stimuli also contrast in negative sentences including baizik 'but' and fragment answers. In transitive structures, the situation is very similar. In negative sentences with baizik, the dative experiencer and the psych noun cannot be dislocated outside the scope of negation (69b):

- (69)Arkitektura-k ezdio Ion-i ardura. a. architecture.DET-ERG NEG have.3SGDAT[3SGABS.3SGERG] J.-DAT care 'Architecture does not matter to John.'
 - baizik b. *Arkitektura-k [Jon-i ardura] ezarchitecture.DET-ERG J.-DAT care but NEG dio / du.

have.3sgDat[3sgAbs.3sgErg] have[3sgAbs.3sgErg]

(Intended: 'Architecture does nothing but to John matter.')

Contrastively, the dative stimulus and the psych noun are grammatical in the fronted position (70b):

- (70) a. Jon-ek ez die espinak-ei nazka.

 J.-ERG NEG have.3PLDAT[3SGABS.3SGERG] spinach-PLDAT repulsion

 'Spinach does not disgust Jon.'
 - b. Jon-ek espinak-ei nazka baizik ez die /
 J.-ERG spinach-PLDAT repulsion but NEG have.3PLDAT
 [3sgAbs.3sgErg]

du.

have[3sgAbs.3sgErg]

'John does not have for spinach but disgust.' / 'John does not have but disgust for spinach.'

It must be noted that in (70b), the copula can optionally drop dative agreement and that the sentence is ambiguous: in one of the interpretations, *baizik* only takes scope over the noun *nazka* 'disgust', while in the other, it takes scope over the dative argument and the noun. Crucially, the agreement-less form gives rise to the second reading, the one that we are interested in. Two issues must be highlighted here: first, the dative stimulus and the psych noun behave as a single constituent with respect to dislocation with *baizik*, particularly in the second interpretation; second, the transitive structure involving a dative stimulus can drop the dative agreement under certain circumstances as we have seen in cleft sentences and with *baizik* dislocation.

Finally, regarding fragment answers, we also find a similar situation to that of intransitive structures (71–72):

- (71) Arkitektura-k Jon-i ardura dio.
 architecture.det-ERG J.-DAT care have.3SGDAT[3SGABS.3SGERG]
 'Architecture matters to Jon.'
 - Q.: Zer du arkitektura-k?
 what have[3sgAbs.3sgErg] architecture.DET-ERG
 'What does architecture have?'
 - A.: *Jon-i ardura.

 Jon-DAT care

 (Intended: 'Care to Jon')
- (72) Jon-ek espinak-ei nazka die.

 J.-ERG spinach-PLDAT repulsion have.3PLDAT[3SGABS.3SGERG]

 'Spinach disgusts Jon.'
 - Q.: Zer du Jon-ek?
 what have[3sgAbs.3sgErg] J.-Erg
 'What does Jon have?'

A.: Espinak-ei nazka. spinach-PLDAT repulsion 'Repulsion to spinach.'

The above examples show that the dative experiencer and the psych noun cannot form a fragment answer (71), but the dative stimulus and the psych noun can (72). Thus, like in the other constituency tests, fragment answers show that while the dative experiencer and the psych noun are not in the same constituent, the dative stimulus and the psych noun are.

5.2.6 Interim summary

As can be seen in Table 7, the syntactic contrast between DatExpTS and DatStimTS is not as sharp as in intransitive structures, but there are still significant contrasts. In fact, even though both behave alike for the ergative-dative alternation and selection tests, there is a difference regarding the constituency relation maintained with the psych noun. In DatExpTS, the dative does not form a constituent with the noun and in DatStimTS it does. Similarly, they do not show the same behavior in binding. In both configurations, the erg>dat hierarchy seems to be the unmarked general one. Nevertheless, DatExpTS is subject to backward binding in specific contexts whereas DatStimTS does not admit it. Finally, although DatStimTS does not freely allow dative agreement drop, instances of this phenomenon occur in certain contexts also analyzed in this paper, namely, in cleft sentences and in negative sentences including baizik 'but'.

6 Typology of psych nouns/adjectives: Extending Belletti and Rizzi's classification

So far, the syntactic tests indicate that we can distinguish four types of psych nouns/adjectives in Basque. On the one hand, those that have a dative and an absolutive argument, that is, psych nouns/adjectives occurring in intransitive structures can clearly be differentiated in two groups. In fact, apart from their different theta-role distribution, they also exhibit very different syntactic behavior as shown in Section 3. On the other hand, the psych nouns occurring in transitive structures, that is, those taking an ergative and a dative argument, also seem to belong to two different classes. Although they behave similarly in some tests, they do contrast regarding constituency and, to a certain extent, in dative-agreement drop and hierarchy (as well as for their thematic configuration).

	Psych nouns in transitive structures		
	DatExpTS ardura-type	DatStimTS nazka-type	
ERG-DAT alternation	Х	Х	
DAt agreement alternation	X	X/√(in certain contexts)	
[psych noun + DAT] constituency	X	✓	
[ERG] > [DAT] hierarchy	✓	✓	
[DAT] > [ERG] hierarchy	$\chi/\sqrt{\text{(in specific contexts)}}$	X	
DAT-POST alternation (selection)	X	X	

Table 7: Results of DatExpTS and DatStimTS in the syntactic tests.

The inclusion of psych nouns/adjectives instead of verbs enriches Belletti and Rizzi's three-way classification of psych predicates. On the one hand, Class I (temere 'fear') and Class III (piacere 'like') have nominal/adjectival counterparts in Basque, exemplified in (3a) and (3b), respectively. However, no nominal/adjectival counterpart has been attested in Class II (preoccupare 'worry') for reasons that are not entirely clear to us. On the other hand, DatStimIS does not correspond to any class of Belletti and Rizzi's typology, and additionally, the appearance of an ergative-marked argument gives rise to psych structures that combine ergative and dative in a way that is unattested in accusative languages such as Italian and many of the languages that have been explored in order to analyze psychological events and states. Our new classification of psych predicates is presented in Table 8 below. This table is an extension of Table 2.

A matter worth exploring is whether the patterns observed in Basque are also observed in other languages with ergative case and ergative agreement patterns. In fact, the presence or absence of the ergative is interesting per se since it raises interesting questions about its nature. For instance, why does a case mainly but not exclusively associated with agentive events emerge here in stative contexts such as those with Class II predicates, or the transitive structures attested in Basque with nazka 'disgust' and ardura 'worry'? Leaving aside this and other questions that have both empirical and theoretical interest, the key aspect here that leads to crosslinguistic variation can be related to the fact that, in Basque there is a dual marking of the subject, viz. ergative and absolutive. As a consequence, there are two possible cases to be combined with the dative. In Italian or any other similar language, however, only a nominative-marked subject is available (again, apart from dative-marked subjects). Therefore, the logical possibilities of case combinations expand in an ergative language, and Basque shows that these possibilities are not only hypothetical but also real.

Psych verbs (based on Belletti and Rizzi 1988)	Case frame and agree- ment pattern		Psych noun/adjectives
	Experiencer	Stimulus	
Class I (temere) gorrotatu 'hate'	ERG	ABS	atsegin 'pleasure/pleasant'
Class II (preoccupare) kezkatu 'fear'	ABS	ERG	Not attested
Class III (piacere) gustatu 'like'	DAT	ABS	atsegin 'pleasure/pleasant'
some dialectal instances	ABS	DAT	leial 'loyal'
(eastern interesatu 'interest')			
no verbal counterpart	ERG	DAT	nazka 'disgust'
no verbal counterpart	DAT	ERG	ardura 'worry'

Table 8: Typological classification of psych nouns and adjectives in comparison to their verbal counterparts.

It is worth pointing out that beyond psych verbs, nouns and adjectives, Basque combines ergative and dative arguments with other predicates as well in a case frame called alternating verbs by Etxepare (2003: 412–414) and bivalent unergatives by Fernández and Ortiz de Urbina (2010: 109–171), illustrated here in (73) below – see also Ortiz de Urbina and Fernández (2016) and references therein.

As commented on above, the inclusion of psych noun/adjectives in Table 8 reveals another possibility not considered in Belletti and Rizzi's classification, which is available with Basque psych verbs, namely the one including an absolutive experiencer and a dative stimulus, that is, the verbal counterpart of DatStimIS. It should be noted that this particular configuration is attested almost only in northeastern varieties of Basque. We are referring to instances with verbs such as fidatu 'rely on', interesatu 'interest', ohartu 'be aware of' and urrikitu 'to feel pity for'. We illustrate this type with the verb *interesatu* 'interest' in (73a-b), from the corpora and dictionaries:

among others

'Since I started painting, I began to become interested in form, by means of artists like Picasso and Modigliani, among others.' (*Herria*, N. Arbelbide, 2004-03-25) (Fernández and Ortiz de Urbina 2010: 91)

b. 1920-1950 urte-etako margolari-a-k, bereziki baiones-a-k,
1920-1950 year-PLREL painter-DET-PL specially Bayonnais-DET-PL

zer-i interesa-tzen ote ziren?

what-DAT interest-IPFV Q be.PST[3PLABS]

'The painters from 1920 to 1950, specially those from Bayonne, what do they were interested in?' (NE Oyharçabal 2009–2013)

Notice that the auxiliary accompanying the verb *interesatu* 'interest' does not show dative agreement with the dative stimulus in any of the sentences. This is a northeastern dialectal phenomenon that allows some instances of the dative agreement to be dropped (the interested reader should consult Etxepare and Oyharçabal (2013) and references therein for details). The emergence of a dative instead of, or alternating with, an adposition has been interpreted as the result of French-Basque contact (see Pikabea (1993) for a detailed diachronic description). Be that as it may, dative stimuli in (73a–b) are not cross-referenced on the auxiliary, and in contrast, dative experiencers of the Class III (*piacere* 'please') are not allowed to drop dative agreement in any dialect.

In relation to that, it is also worth noting that the verb *interesatu* 'interest' belongs to Class III in southwestern varieties of Basque as can be seen in (74) from the EPG:

(74)Kixote-a dio Menar-ek – izugarri interesa-tzen Quixote-DET[ABS] sav[3sgAbs] M.-erg enormously interest-IPFV zait, baina ez irudi-tzen, nola esan? zait be.1sgDat[3sgAbs] but NEG be.1SGDAT[3SGABS] seem-IPFV how say Ezinbesteko-a. necessary-DET[ABS] "The Quixote really interests me," says Menard, "but it does not seem to me,

how can I say? Necessary." (Ipuin hautatuak, J.L. Borges / J. Garzia 1998) (EPG, Sarasola et al. 2001–2007)

As far as we know, the only southwestern exception is *errukitu* 'feel pity for', with

As far as we know, the only southwestern exception is *errukitu* 'feel pity for', with the same structure as that in northeastern examples in (73), but with obligatory agreement as dative agreement drop is non-attested in this geographical area. Its nominal counterpart *erruki* 'pity' behaves alike (75–76):

- (75)Iainko-a errukituko zaizu-la uste God-DET[ABS] feel.sorry.PROS be.2DAT[3SGABS]-SUBR think.PFV al duzu? have.2ERG[3SGABS] PTCL 'Do you think that God will feel sorry for you?' (Kontu-jaten, Arantza Iturbe, p. 59)
- (76)Jaun-a-k bedeinka eta gorde zaitzala; bere God-Det-erg bless and protect be.2DAT SUBR[3SGABS] 3SG.PSR aurpegi-a erakutsi eta erruki dakizula. face-DET[ABS] show and feel.sorry be.2DAT.IMPER[3SGABS] 'May God bless you and protect you; may he show you his face and feel sorry for you.' (Asisko Frantzizko, Asisko Klara, Askoren artean, p. 68)

Going back to interesatu 'interest', this verb is remarkable for any researcher interested in variation within or beyond Basque: it does not only appear as in Class III (piacere 'please') type predicates in southwestern varieties, it also occupies a particular class not included in Belletti and Rizzi's classification, as seen in (73). Moreover, northeastern varieties show also Class-II-like configurations with an ergative stimulus and an absolutive experiencer as has been observed by the dictionaries EEH and NE. Such a structure is shown in (77):

ez zaituzte (77)Okupazio garai-ko istorio-ek interesa-tzen. occupation time-REL story-DET.PL.ERG NEG have.2ABS.3PLERG interest-IPFV 'Stories about the time of the occupation do not interest you.' (Anbroxio, E. Bidegain, p. 117)

This gives us the opportunity to reflect briefly on variation within Basque. To begin with, it is not clear to us why the same psych noun/adjective can alternate between different structures and thus, different classes. For instance, why do we find the noun/adjectives atsegin 'pleasure, pleasant' and laket 'pleasure, pleasant' participating in Class I and III with apparently no semantic difference? In relation to this, it should be noted that the two configurations are sometimes attested in the same dialectal area. For example, the noun/adjective laket 'pleasure, pleasant' is only attested in northeastern varieties of Basque but nonetheless shows at least the two possible configurations corresponding to Class I and III in these same varieties. Thus, the division between one class and another is not necessarily dialectally groundedsince the two configurations coexist within the same variety.

Nevertheless, sometimes the alternating patterns seem to carry semantic nuances. For instance, let us take again the northeastern configurations of interesatu 'interest', that is, the transitive structure exemplified in (77) and the intransitive structure unattested in Belletti and Rizzi's classification shown in (73). The information provided by Oyharcabal (2009–2013) in NE, his French-Basque dictionary, for the French entry *intéresser* is, on the one hand, *verbe transitif* with the meaning captiver 'charm, amuse' for the transitive structure; and on the other, verbe pronominal as in s'intéresser with the meaning 'be interested in, take interest in'. Both French structures involving intéresser are translated into Basque as interesatu 'interest'. However, only the latter meaning ('be interested in, take interest in') can be expressed via an absolutive experiencer plus dative stimulus in (Eastern) Basque, not the former. Hence, at least in some cases, syntactic patterns show semantic nuances that are worth exploring. Besides, cross-linguistic comparison, particularly with French and Spanish the two Romance languages in contact with Basque, also seems relevant in order to understand alternating patterns and their presence or absence in some varieties but not others. The case of the intransitive *interesatu* involving a stimulus dative is a case in point, as it happens almost only in Northeastern Basque, in the contact area with French, usually together with dative-agreement drop which, as we have already said, is a genuinely northeastern phenomenon.

Moreover, the configurations that arise from the analysis of psych-nominal structures in Basque need to be analyzed in a broader study involving also intransitive structures with postpositions instead of datives. For instance, *erruki* 'pity' occurs in the case frame with an absolutive experiencer and a dative stimulus, shown in (75), but also in an alternative configuration involving the instrumental postposition.

(78) Erruki nitaz, ene Jainko, zapal-du-a bai-naute
pity 1sg.ins 1sg.psr God oppress-pfv-res subr-have.1sgAbs.3plErg
'Take pity on me, my God, because I am oppressed.' (Asisko Frantzizko,
Asisko Klara, Askoren artean, p. 78)

These intransitive structures with absolutive experiencers and postpositional stimuli have been deliberately left out of the paper and were only mentioned in order to clarify the nature of dative stimuli in comparison to experiencers. In addition, transitive structures need particular attention. They have been mentioned here only in order to show ergative-dative alternations for the experiencer – see Ex. (17b) in Section 4.1. Actually, in order to understand some of the reasons behind the alternating patterns in psych structures, we have to take a more general perspective on Basque transitivity and intransitivity.

Finally, yet importantly, the comprehensive study on Basque we have carried out here might be combined with more specific studies on particular varieties of Basque, which will hopefully provide a more complete understanding of psych nominals across dialects.

7 Conclusions

In this paper, we have presented and discussed psych nouns/adjectives and the particular predicative structures they give rise to in an ergative language such as Basque. As we have seen, Belletti and Rizzi's Class I (temere) and Class III (piacere) have a nominal psych counterpart in Basque, exemplified by atsegin 'pleasure, pleasant', but Class II (preoccupare) does not. Besides, we have identified a structure exemplified by leial 'loyal' with an absolutive experiencer and a dative stimulus, which behaves inversely to atsegin 'pleasure, pleasant' in the piacereconfiguration (with a dative experiencer and an absolutive stimulus). Moreover, we have also identified two nominal configurations that are not included in Belletti and Rizzi's classification and have no verbal counterpart in Basque. These are exemplified respectively by nazka 'disgust', which has an ergative experiencer and a dative stimulus, and ardura 'worry', which has the opposite configuration.

Although some of the structures identified in the paper seem to be quantitatively more restricted than others (for instance, that with leial 'loyal' and ardura 'worry'), the inclusion of all the nominal predicate types and their interactions with ergative experiencers and stimuli reveals a more fine-grained picture that is worth exploring not only in Basque but also cross-linguistically. On the other hand, we have shown that some tests, such as those previously employed in Scottish Gaelic by Adger and Ramchand (2006) and the dative agreement alternation explored in Basque by Berro and Fernández (2019), as well as the ergative-dative alternation for the experiencer included in this paper, allow us to identify some syntactic properties of these structures. ¹² Based on the latter, particular analyses can be developed from different theoretical perspectives. Berro and Fernández (2019) provide a generativist analysis that covers atsegin 'pleasure/pleasant' of the piacere-type and leial 'loyal'-type predicates and related structures. The analysis of nazka 'disgust' and other structures mentioned in the paper is left for future

¹² Psych adjectives have been documented for several languages (see Anscombre 2004, Bouillon 1996 for French; Caluianu 1996, 2009 for Japanese; Goy 2000 for Italian; Kim 2008 for Korean; Klimek and Rozwadowska 2004 for Polish; Rákosi 2006 for Hungarian; and Temme 2014 for German). To our knowledge, no comparative studies have been conducted on the topic so far. The extant evidence from German suggests both parallels and differences when compared to Basque.

research, along with a cross-linguistic comparison that could shed some light on the nature of psych nominals in human languages, particularly in ergative ones.

Abbreviations

ABS absolutive ACC accusative adlative ADL attributivizer ATTR CAUS causal comitative COMIT COMPR comparative DAT dative DET determiner ERG ergative GEN genitive imperative IMPE R INES S inessive INS instrumental IPFV imperfective MP modal particle negation NEG nominalizer NMLZ NOM nominative preposition Р PFV perfective plural PLpresent **PRES** prefix PRF **PROS** prospective possessor PSR PST past PTCP participle PTCL particle partitive PTV question Q relational REL RES resultative singular SG SUBR subordinator SUP superlative

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