

A LOOK INTO THE BILINGUAL GRAMMAR THROUGH THE STUDY OF BASQUE-
SPANISH NULL OBJECTS AND BASQUE DIFFERENTIAL OBJECT MARKING

BY

ALMIKE VÁZQUEZ-LOZARES

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Doctoral Committee:

Associate Professor Jonathan E. MacDonald, Chair and Director of Research
Professor José Ignacio Hualde
Professor Tania Ionin
Assistant Professor Aida Talić

ABSTRACT

In this dissertation I analyze two contact phenomena: null objects in the Spanish spoken in the Basque Country, and Differential Object Marking (DOM) in Basque. I frame these contact phenomena within López's (2020) 1Lex model of bilingual grammar where the central argument is that bilinguals have a single integrated lexicon, a single phonology, and a single computational system. By framing the analyses for these phenomena in the 1Lex model, I account for the interaction between Spanish and Basque that gives rise to them. Additionally, I present acceptability judgments from four groups of Spanish/Basque bilinguals: one Spanish-dominant group from a region where the intensity of language contact is low and Spanish is the most used language; and three groups from an intense language contact region, with Spanish-dominant, Basque-dominant, and balanced bilingual profiles. This categorization of speakers based on societal and individual factors allows to determine the effects of individual language dominance and societal bilingualism on the contact phenomena under study.

For the analysis of null objects, I show that the relevant feature in the object is lack of case. This is supported with data from ditransitive constructions with animate direct objects and from constructions with DOM inanimate objects. Once I identify case as the key aspect, I develop an analysis in which a D-feature in v licenses (caseless) null objects. Different Vocabulary Insertion Rules determine whether the object is spelled out overtly or is null, depending on its being in the context of v or $v_{[D]}$. Access to the $v_{[D]}$ which is originally associated with Basque is possible thanks to the integrated lexicon assumed in the 1Lex model.

In the analysis of Basque DOM, DOM objects have a case phrase (KP) that prevents them from checking case in situ. These objects have to move to an αP where they can check dative case. In Spanish, this αP is related to dative case assignment, and its goal is to host the moved object. αP is available to use in Basque thanks to the integrated List 1 of Spanish/Basque bilinguals.

The results of the Acceptability Judgment Tasks for both phenomena indicate that the primary factor influencing them is societal bilingualism. The participants from the intense-contact region find null objects in Basque-Spanish and DOM in Basque more acceptable than the participants

from the low-contact region. Secondly, among the groups from the intense contact region, there is a small effect of language dominance, but, importantly, higher rates of self-reported codeswitching translate to higher acceptability of both contact phenomena. This leads me to argue that the contact phenomena, whose surface form or morphophonology appears to be monolingual, can be analyzed as cases of *covert* codeswitching within the 1Lex model. The term *codeswitching* is normally used to refer to the overt, perceptible switch between vocabulary items from two discrete languages. Within Distributed Morphology, this would be switching on the level of List 2, where the rules for vocabulary insertion are stored. Meanwhile, I propose that codeswitching happens on List 1 as well, where roots and functional elements are found. This can account for the contact phenomena under study: using in Basque the αP that is available thanks to Spanish, and using in Spanish the $v_{[D]}$ that is available thanks to Basque are both a form of codeswitching. This argument is supported by the fact that participants who are aware of codeswitching overtly find these constructions more acceptable than those who do not report codeswitching.

Finally, I propose that probabilistic weights or word activation levels may regulate some aspects of bilinguals' codeswitching, and this allows to account for the differences in acceptability rates found across the different groups. By adding these probability weights to the model, I make a contribution to López's (2020) 1Lex model of bilingual grammar, and to models of bilingual grammar in general.

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LIST OF GLOSSES

BQ	Basque
SP	Spanish
1	first person
2	second person
3	third person
SG	singular
PL	plural
DO	direct object clitic
IO	indirect object clitic
CL	clitic
ACC	accusative case
DAT	dative case
DOM	case marker for differential object marking
ERG	ergative case
ABS	absolutive case
PRS	present
PST	past tense
CPST	past tense complementizer
D	determiner
INF	infinitive

CHAPTER 1: INTRODUCTION

1.1. Introductory remarks

The goal of this dissertation is to analyze two contact phenomena in Basque and Spanish within López's (2020) 1Lex model of bilingual grammar. This model proposes that bilinguals have a single lexicon, as well as a single computational system and a single PF component. I will propose analyses for null objects in the Spanish in contact with Basque (henceforth, Basque-Spanish or B-Spanish), illustrated in (1a), and for Basque Differential Object Marking (DOM), illustrated in (2a).

- (1) a. *Basque-Spanish Null object*
No \emptyset_i he leído. (el libro_i)
Not DO have.1.SG read the book
- b. *Overt object*
No lo_i he leído. (el libro_i)
Not DO.ACC have.1.SG read the book
'I haven't read it.'
- (2) a. *Basque DOM*
Ni-k zu-ri ikusi d-i -zu -t.
I-ERG you-DAT see L-PRS.3.SG -CL.DAT.2.SG -CL.ERG.1.SG
- b. *Non-DOM, absolutive*
Ni-k zu ikusi z -aitu -t.
I-ERG you.ABS see CL.ABS.2.SG -PRS.2.SG -CL.ERG.1.SG
'I have seen you'.

Null objects refer to the missing direct object (DO) clitic as in (1a) (*cf.* the overt clitic in (1b)), and DOM entails having dative case in the DO and in its agreeing clitic as in (2a), as opposed to canonical absolutive in (2b). By framing the analyses for these phenomena in the 1Lex model of bilingual grammar, I will account for the interaction between Spanish and Basque that results in both contact phenomena. Furthermore, I will present acceptability judgments from bilinguals

with four different language profiles. In doing so, I aim to determine the extent to which societal factors, language dominance, and differences in language profiles affect the contact phenomena under study.

This chapter discusses the necessary background literature and information for the goals of the dissertation. The chapter is organized as follows. In section 1.2, I discuss language contact and bilingualism, by first making a distinction between individual and societal bilingualism and then focusing on the Basque/Spanish contact situation. In section 1.3, I briefly review previous literature on models of bilingualism and codeswitching; I then focus on López's (2020) 1Lex model, the framework that I will use in my syntactic analyses; then, I make a case for contact phenomena as forms of covert codeswitching within the 1Lex model. In section 1.4., I summarize the contact phenomena under study and the analyses that I propose for them within the 1Lex model. To finish the chapter, I present the outline of the rest of the dissertation in section 1.5.

1.2. Language contact and bilingualism

In this section, I first review some definitions of bilingualism and what it means to be a bilingual. I then discuss the language contact situation in the Basque Autonomous Community, in order to establish the types of bilinguals that are the focus of this study.

1.2.1. Individual bilingualism

Definitions of bilingualism in the literature vary in terms of the factors they consider relevant: language use, knowledge or proficiency, and frequency of use, amongst others. For example, Grosjean (2008: 10) defines bilingualism as “the regular use of two or more languages (or dialects)”, thus making bilinguals “those people who use two or more languages (or dialects) in their everyday lives”. Montrul (2008) defines bilingualism as “knowledge and command of two or more languages, albeit to different degrees”. She considers a bilingual to have a stable and functional command of two or more languages, regardless of the level of knowledge or lack of use in everyday life. By stable, she means that the person is not in the process of learning a

language, but they instead have a relatively fixed knowledge of the language. Montrul's definition of bilingualism better encompasses the different types of bilinguals and the factors that distinguish them. These factors include age of acquisition of the second language, the context of acquisition, the degree to which each language is used, and the degree to which each is known (Montrul 2012).

In terms of the bilingual I-language, there is a view that a bilingual is “two monolinguals in one person”, having “two separate and isolable language competencies” (Grosjean 2008: 10). This view, which Grosjean terms the monolingual or fractional view of bilingualism (also referred to as “separationist” by López 2020), results in the idea that “the contact of the bilingual's two languages is [...] accidental and anomalous” (Grosjean 2008: 12). Since the two language systems are considered to be autonomous, Grosjean explains, phenomena such as codeswitching are seen as “sloppy” language. In contrast, the view supported by Grosjean is what he terms the bilingual or wholistic view of bilingualism, which sees the bilingual as an “integrated whole which cannot easily be decomposed into two separate parts” (2008: 13). That is, the bilingual has a “unique and specific linguistic configuration” (13) and both languages are always active, to a greater or lesser degree, depending on the context. Thus, the two languages interact almost constantly, in various ways. From this, it follows that “there can be a long-term influence of one language on the other, usually the first language on the second. It involves static interferences (permanent traces of one language on the other) and concerns language competence” (Grosjean 2008: 27). This wholistic view of bilingualism is the one assumed in this work, which is compatible with López's (2020) integrated model of bilingualism. López's description of the bilingual I-language as “integrated” captures the idea that two systems are combined in a way that they become a whole, forming a single, unique linguistic system.

Even if the bilingual I-language is integrated, bilinguals may be more dominant in one language than in the other. Previous definitions of language dominance have been based on factors such as proficiency (Deuchar & Muntz 2003, Petersen 1988), input (Yip & Matthews 2006), levels of language activation (Pavlenko 2014), frequency of use, overall fluency and domains of use, age of acquisition, ability to read or write in the different languages (Grosjean 2008), among others (see Treffers-Daller 2015, and Silva-Corvalán and Treffers-Daller 2015 for discussion of language dominance). Because of this lack of consensus, measuring language dominance

presents a challenge. The Bilingual Language Profile (BLP) questionnaire from the University of Texas Austin (Birdsong, Gertken & Amengual, online) was developed to fill the “need for fine-grained assessments of dominance both within and outside of research settings”. It collects information about age of acquisition/exposure, years of schooling, frequency/function of use, linguistic environment, language attitudes, proficiency, and processing ability, organized in four modules: 1) language history, 2) language use, 3) language proficiency, and 4) language attitudes. It returns a score from –218 to +218 indicating more dominance in one language or in the other. I used the BLP to assess the language profiles of the participants in the experimental tasks (Chapters 3 and 5). Consequently, the factors covered by the BLP are the factors that define the notion of *language dominance* in this study.

1.2.2. Societal bilingualism

‘Societal bilingualism’ is a broad term used to refer to any kind of bilingualism or multilingualism at a level of social organization beyond the individual or nuclear family (Sebba 2011: 445). In a context of societal bilingualism, individual language use can range from monolingual to fully bilingual, with speakers being dominant in one language or the other, and with some speakers having only passive knowledge of one of the languages. What is more, each language in a bilingual society can play different roles, for example, in cases in which only one of the languages has official status, cases where there is a majority and a minority language, and so on. Thus, societal bilingualism can refer to a variety of contexts of languages in contact. A common consequence of language contact is borrowing. Borrowing may happen at different levels (morphology, phonology, lexicon, and syntax), but the most common form of borrowing is lexical (Austin, Blume and Sánchez 2015).

Societal bilingualism, then, focuses on languages coexisting and interacting in a community rather than in an individual or the individuals’ language dominance. Both individual and societal bilingualism will be relevant throughout this dissertation. On the one hand, I present data collected from bilinguals with different bilingual profiles and degrees of language dominance; on the other hand, I discuss phenomena that affect language on the dialectal and societal level irrespective of individual bilingualism or language dominance.

1.2.3. Basque/Spanish language contact

In this section I discuss the status and distribution of Basque and Spanish in the Basque Autonomous Community in Spain.

The Basque Country is a region that spans from the north of Spain to the southwest of France. It is formed by seven provinces: Bizkaia, Gipuzkoa, Araba, and Nafarroa are on the Spanish side, and Lapurdi, Nafarroa Beherea, and Zuberoa are on the French side. Basque coexists with the corresponding language in each nation state. It has co-official status with Spanish in the Basque Autonomous Community, an entity formed by the provinces of Bizkaia, Gipuzkoa, and Araba. In Nafarroa, Basque has a more limited official status. In France, it has no official status.

Basque has several traditional dialects, which have been transmitted across generations (see Zuazo 2003 for a description of traditional dialects and Hualde 2016 for an overview of geographical variation in Basque), as well as a standard form, *Euskara Batua* lit. ‘unified Basque’. Standard Basque was developed starting in the late 60s by the Royal Academy of the Basque language. It was officially established as the language of instruction thanks to the 1982 *Law on the Normalization of the Basque Language*, whose objective was to empower the use of the Basque language, after the strong repression it suffered during Francisco Franco’s dictatorship (1939-1975). The result nowadays is “a very large number of people who have learned standard Basque through the school system, including both people whose home language is [a traditional dialect of] Basque, and people whose home language is Spanish or French” (Hualde 2016: 18).

Nowadays, most young people in the Basque Autonomous Community are bilingual in Spanish and Basque. Still, the patterns of language use in the Basque Autonomous Community are not homogeneous. The contact between Basque and Spanish is more intense in some regions than in others. In areas where the spoken varieties of Basque have been maintained, such as the town of Gernika, both Spanish and Basque are used in everyday life. Meanwhile in areas such as Bilbao, capital of Bizkaia, the use of Basque was greatly diminished due to different factors throughout the centuries, and the majority of the population is dominant in Spanish. Standard Basque is learned at school through what would be considered an immersion program, with subject classes taught in Basque. This distinction regarding the presence and use of Basque is relevant in this

study, since intensity of contact is considered an important predictor of interaction between languages in contact (Rodríguez-Ordóñez 2016: 13).

Data will be presented from bilingual speakers from Gernika, a semi-urban town where a local dialect of Basque is spoken, as well as Spanish. I will refer to this context as “intense-contact”. Data will also come from bilinguals from the greater Bilbao area, where Spanish is the dominant language. Therefore, I will refer to this context as “low-contact”. Table 1 presents the distribution of the population according to mother tongue and language spoken at home in the town of Gernika, in the Greater Bilbao area, and in the town of Leioa: half of the participants from the Greater Bilbao area in this study come from Leioa, so the information is included for comparison purposes. In the table, Basque is abbreviated as ‘BQ’, and Spanish as ‘SP’.

Table 1. *Population distribution according to mother tongue and language spoken at home, data from 2016 (Eustat, online)*

	TOTAL	MOTHER TONGUE				LANGUAGE SPOKEN AT HOME			
		BQ	SP	BOTH	OTHER	BQ	SP	BOTH	OTHER
Gernika	16,664	8,425 50.5%	5,837 35%	1,492 8.9%	910 5.46%	6,402 38.4%	6,796 40.7%	2,823 16.9%	643 3.8%
Greater Bilbao	343,072	17,554 5.1%	293,280 85.4%	15,682 4.6%	16,556 4.8%	11,149 3.2%	298,767 87.1%	23,372 6.8%	9,784 2.8%
Leioa	31,049	2,188 7%	26,007 83.7%	1,918 6.2%	936 3%	1,346 4.3%	26,328 84.7%	2,801 9%	574 1.8%

As can be seen in the table, about half of the population in Gernika have Basque as their mother tongue, and about a third have Spanish as the mother tongue. For the languages spoken at home, the distribution between Basque and Spanish is rather even, and there is also a significant number of the population that uses both languages at home. Meanwhile, in Greater Bilbao, including in Leioa, both the mother tongue and the language spoken at home is Spanish for most of the respondents. When discussing language contact effects, this stark contrast will be relevant: Basque has a strong presence in Gernika but a very small one in Bilbao, which will allow to explain differences found between the two linguistic communities.

Basque and Spanish have been in contact for centuries, which has led to mutual influence in both languages. The phenomenon of null objects in the Spanish in contact with Basque, which is the topic of Chapter 2, has received much scholarly attention (Landa 1995, Franco & Landa 2003,

Urrutia Cárdenas 2003, Gómez Seibane 2011, 2012, Camus Bergareche & Gómez Seibane 2015, Sainz-Maza Lecanda & Schwenter 2017, among others). Many of these studies have argued that the availability of null objects in B-Spanish is due to some type of influence from Basque (Mendieta-Lombardo and Molina 1995, Eguía 2002, Urrutia Cárdenas 2003, Gómez-Seibane 2011, 2012, Sainz-Maza Lecanda & Schwenter 2017, a.o.). The argument has been backed by evidence that Spanish/Basque bilinguals produce null objects in contexts in which monolinguals do not. However, previous studies have not made a distinction based on different degrees of bilingualism or language dominance in the way that the present study does. Similarly, Basque DOM, addressed in Chapter 4, is believed to be an effect of transfer from Spanish, based on the similarities of the structures in both languages as well as evidence that verbs borrowed from Spanish favor DOM in Basque (Austin 2006, 2015, Rodríguez-Ordóñez 2016, 2017). The goal of this dissertation is to analyze both of these phenomena from the standpoint of an integrated model of bilingual grammar and to investigate the source of these linguistic phenomena: language dominance versus societal bilingualism.

1.3. Models of codeswitching and bilingual grammar

In this section, first, I briefly review previous proposals for codeswitching and findings about the bilingual grammar. Then, I lay out the details of the framework I adopt for my syntactic analyses: López's (2020) 1Lex model of bilingual grammar. Finally, I make a case for contact phenomena as a form of covert codeswitching, and I argue for the benefits of analyzing them within the 1Lex model.

1.3.1. Previous models of codeswitching

Previous syntactic analyses of bilingual grammar have typically focused on the phenomenon of codeswitching, since it provides a concrete manifestation of the interaction of two systems in one speaker, thus opening a window into the bilingual mind. Codeswitching, in MacSwan's (1997: 45) terms, "is a speech style in which fluent bilinguals move in and out of two (or conceivably more) languages". Different syntactic analyses have been proposed to try to explain how

codeswitching happens. MacSwan (2008) distinguishes two types of approaches: constraint-based approaches (Joshi 1985, Myers-Scotton 1993, de Bot 1992, Azuma 1991, 1993) and constraint-free approaches. Nowadays it is accepted that there are restrictions in codeswitching, that is, the switches are not “accidental and anomalous”, but there are instead rules that govern what types of switches are grammatical, as shown by the contrast in (3) from Belazi, Rubin & Toribio (1994).

- (3) a. The students *habían visto la película italiana*
The students had.3PL seen the movie Italian
'The students *had seen the Italian movie.*'
- b. * The students had *visto la película italiana*

We can conclude from (3) that there is some rule that makes switching between the auxiliary and the lexical verb ungrammatical in English/Spanish codeswitching. An influential model in the constraint-based approaches is Myers-Scotton's (1993) Matrix Language Frame, which proposes that there is a Matrix Language and an Embedded Language in codeswitching, and that the surface structure is determined by the Matrix Language. Attempts have also been made to propose a model of codeswitching within versions of Optimality Theory (see for example Bhatt 1997, Koontz-Garboden 2004, Hogeweg 2009, Bhatt and Bolonyai 2011).

In contrast, according to MacSwan (2008), formulating rules that are *specific* to codeswitching is not desirable nor theoretically well-defined. When rules refer specifically to codeswitching, this refers to switching between discrete entities (languages). However, “grammars are formally blind to the languages they generate” (MacSwan 2008: 153). While it is clear from (3) that there have to be limits to when codeswitching can take place, these can be derived from a lack of feature matching in the syntax, without any rule that refers to switching of discrete languages. This type of approach would argue that the “English”¹ T has a set of features that do not match the features of the “Spanish” *v-V*, and this accounts for the ungrammaticality in (3).

¹ I use language descriptors to identify the set of features that a functional head has, and what grammar it originally comes from, i.e. “*English*” T refers to the T with the set of features that speakers of English have in their lexicon. This description should not be confused with the type of language feature proposed in Belazi, Rubin, and Toribio

MacSwan (2008) argues that nothing constrains codeswitching apart from the requirements of the mixed grammars. In MacSwan’s model, the lexical items in a bilingual’s repertoire are mentally compartmentalized in some way, with a specific set of phonological and morphological operations associated with each subset. MacSwan proposes two lexicons, as well as two phonologies that apply separately to each lexicon, and a single computational system.

However, this separation of the systems brings about some undesirable consequences. For example, this system cannot account for intra-word switching, in which a lexical root from one language is produced with morphology from another language. As an illustration, observe the sentence in (4) where four Norwegian nouns are inflected with Turkish case markers. Norwegian is represented with *italics* and Turkish with regular font.

- (4) *Stabekk*-ten çık-tığ-ım-da e: *sentrum*-a gel-iyor-um
Stabekk-ABL get.out-PART-1.SG-LOC hmm center-DAT come-PROG-1.SG
o-ra-da-ki *forelesning*-ler-e *gruppearbeid*-e gir-mek için
that-DER-LOC-DER lecture-PL-DAT groupwork-DAT enter-INF for
‘After leaving *Stabekk* – hmm – I come to the city center to attend the lectures and group studies.’ (Turkish-Norwegian; Türker 2000: 69)

These cases need to be categorized as borrowings and stored in both lexicons, which would violate the principle of economy. Another problem with separating the two systems has to do with the cost of processing of codeswitching. As noted by López (2020: 163), separationist models predict that starting a codeswitch and ending it are both costly, since starting it entails activating an additional system, and ending it entails inhibiting a system that was active. However, there does not seem to be a cost to codeswitching among “deep bilinguals”, those people who learn two languages from birth or an early age and fully develop them into adulthood (López 2020: 7).

(1994), where each lexical entry is proposed to be tagged with a language label. I use quotation marks around the language to convey this meaning that it represents a set of features, and I still assume that the grammar is blind to discrete languages.

The debate around the bilinguals' two lexicons being separate or integrated is a major one in the field of psycholinguistics. A number of experimental studies have found that bilinguals access information from both languages simultaneously when they hear spoken words (Spivey and Marian 1999, Marian and Spivey 2003, Thierry and Wu 2007, FitzPatrick and Indefrey 2010, Marchman, Fernald, and Hurtado 2010); for example, the recognition of words that belong exclusively to one language is affected by orthographic neighbors in the same or in the other language (van Heuven, Dijkstra and Grainger 1998).

1.3.2. López's (2020) *1Lex* model

López (2020) argues that *deep* bilinguals have a single, fully integrated I-language built like any other I-language. The emphasis on deep bilinguals is important, because López does not assume that the model applies to the grammar of any type of bilingual; it is a model developed to account for the grammar of those people that have fully developed their two languages since birth or early childhood and into adulthood. López frames his model of a bilingual I-language within Minimalism (Chomsky 1993, 1995, 2000) and Distributed Morphology (DM) (Halle and Marantz 1993). First, let us review the basic relevant aspects of DM. In DM the jobs of the traditional lexicon are distributed in two lists. List 1 includes two types of items: lexical roots and grammatical features. List 2 consists of Vocabulary Insertion Rules which bind phonological representations to syntactic terminals. Parts of speech are determined by the closest c-commanding f-morpheme (Harley & Noyer 1999). For example, a 'noun' is a root whose nearest c-commanding f-morpheme is a determiner. Thus, roots have no "grammatical information such as gender, noun class, declension or conjugation class"; that is, these are not inherent features of the lexical item (López 2020: 28). As such, the same root can be selected by different f-morphemes, which will result in different parts of speech. This is illustrated in (5).

- (5) √(estudi-) +v → estudiar 'to study'
 +a → estudioso 'studious'
 +n[f] → estudiante 'female student'
 +n[m] → estudiante 'male student' (López 2020: 24)

Under this framework, López proposes that bilinguals have one integrated lexicon and one integrated PF. Below I summarize some of his arguments. The first one has to do with mixed selection, which refers to the “fact that a head from a lexicon can select a head in the other lexicon”, as he illustrates with the example in (6c), from acceptability judgments provided in González-Vilbazo and López (2012).

- (6) a. Juan hizo la cena.
 Juan made.3.SG the dinner
 ‘Juan made dinner.’
- b. María hizo trabajar a Santiago.
 María made.3.SG work DOM Santiago
 ‘María made Santiago work.’
- c. Juan hizo *arbeiten*. (Spa/Ger)
 Juan made.3.SG work
 ‘Juan did *work*.’ = ‘Juan worked.’ (González-Vilbazo and López 2012: 35)

As seen in (6), in Spanish, *hacer* ‘to do’ can be a lexical verb (6a), and it can also be a causative verb (6b). What we see in (6c) is a common codeswitching phenomenon in which a light verb is taken from one lexicon (in this case, Spanish *hacer*), and the lexical verb from the other. Crucially, *hacer* can only function as a light verb if it takes a German infinitive. This is an additional use of *hacer* which does not exist in monolingual Spanish speakers. Furthermore, consider an additional example of *hacer* in combination with a transitive German verb:

- (7) Hizo *nähen* das Hemd. (Spa/Ger)
 did.3.SG sew.INF the shirt
 ‘She/he sewed the shirt.’ (González-Vilbazo and López 2012: 35)

In a monolingual German sentence with an auxiliary or modal, the order would be OV, but what we find in (7) is VO. González-Vilbazo and López (2012) take word order to be dependent on the properties of the phase head, Voice. They also propose that the light verb *hacer* is the spellout of Voice when it takes a German verb. Voice, in (7), has properties of Spanish that go beyond it being spelled out as /aθer/, it imposes the VO word order that is found in

(monolingual) Spanish. Accounting for these facts would pose a big challenge for a separationist model. A separationist model such as MacSwan's (1997, 2000, 2005, 2008), for example, can explain these data in terms of selecting *hacer* from the Spanish lexicon, and the rest from German. This, however, cannot capture the structural effects that selecting *hacer* has in word order.

Secondly, consider the following morphological phenomena in the combination of 3rd dative and 3rd accusative clitics in Spanish and Catalan. In the data that come below, López illustrates a type of contact phenomenon in Spanish and Catalan. In Spanish, a dative clitic spells out as 'se' in combination with a third-person accusative clitic.

(8) *Spanish*

* Pedro **le** **lo** dijo. → Pedro **se lo** dijo.

Pedro 3.DAT 3.ACC said.3.SG

'Pedro said it to him.'

(López 2020: 118)

López proposes that Spanish clitics either have a person feature (*me, te, nos, os*) or a case feature (*la(s), lo(s), le(s)*). However, *se* has neither case nor person, it is the least marked clitic in Spanish (Halle and Marantz 1994). Therefore, López puts forth the impoverishment rule in (9).

(9) *Spanish*

CL_[dative] → CL || _____ [accusative]

(López 2020: 118)

Here, the dative feature is erased from the syntactic terminal when it is adjacent to an accusative third-person clitic. Since the terminal CL ends up with no features, only *se* can be inserted, given López's analysis of the featural makeup of clitics.

In Catalan, there is also an impoverishment rule for the same combination of clitics, but in this case, the accusative clitic disappears, as shown in (10). Notice that, regardless of the spelling, the pronunciation of *li* and *l'hi* is the same.

(10) *Catalan*

* El Pere **li** **ho** va dir → El Pere **l'hi** va dir. (l'hi: /li/)

The Pere 3.DAT 3.ACC PST say

'Pere said it to him.'

(López 2020: 119)

The impoverishment rule proposed for the Catalan clitic combination is as follows:

(11) *Catalan*

CL_[accusative] → ∅ || [dative] _____ (López 2020: 119)

The interesting piece of data comes from contexts in which the Spanish rule in (9) applies to Catalan, as shown in (12).

(12) *Catalan*

El Pere s' ho va dir.

the Pere se 3.NEUT.ACC PST say

'Pere said it to him.'

(López 2020: 119)

In this example, instead of applying rule (11), i.e. the “Catalan” rule which would delete the IO clitic, rule (9) from Spanish is applied, which results in *le* being spelled out as *se*. Forms such as (13) in which the accusative disappears in Spanish are also found among Catalan bilinguals.

(13) *Spanish*

Pedro le dijo.

Peter CL.DAT said.3.SG

'Peter said it to him.'

(López 2020: 120)

As López explains, this might be the result of applying the “Catalan” rule in (11), according to which the accusative clitic is spelled out as zero in the context of a dative clitic. The fact that bilingual speakers can apply a rule from one language to the other provides evidence that the I-language of bilinguals has only one morphology module.

1.3.3. *Contact phenomena as forms of codeswitching*

While the term “codeswitching” has generally been reserved to refer to the *overt* mixing of two languages at the surface level (perceivable most often in the phonology), in a bilingual model framed within Distributed Morphology such as the 1Lex, it makes sense to suggest that codeswitching can happen at the different levels of representation. Because it deals with the bilingual I-language, the 1Lex model accounts for numerous ways in which two languages are integrated and might interact. For example, in the 1Lex model, the difference between

codeswitching and borrowing becomes irrelevant (López 2020): these two processes have generally been distinguished by the integration or lack thereof of a word from one language in the lexicon of another language. Since there is a single lexicon in the 1Lex model, the distinction between labels such as codeswitching, borrowing, calque, etc. is eliminated. While these labels are useful to categorize the outcomes and phenomena present in contact linguistics, under the 1Lex model they can all be explained in terms of codeswitching at different levels. For example, a calque is explained by using a combination of roots and functional items that belong to one language but inserting vocabulary items from the other.

López's examples with the Spanish and Catalan clitics show that a form of codeswitching can happen at levels other than the surface form; that is, there is a form of *covert* codeswitching. The examples appeared to be monolingual in Catalan and monolingual in Spanish, but there is codeswitching at the morphological level, as a result of applying to one language a VIR that belongs to another language. These examples serve as support for the goal of this study, which is to argue that what superficially looks like a monolingual expression, as is the case with (12) and (13), is the result of the interaction between two languages, in a form of covert codeswitching. Additionally, the data with German/Spanish codeswitching show the effect of mixed selection at the syntactic level, on List 1. This type of mixed selection resulted in a change in word order that can only be explained by assuming some type of codeswitching in the syntax.

The phenomena analyzed in this dissertation deal with the interaction of Basque and Spanish at the morphosyntactic level too. Null objects, I will argue, result from the use of “Basque” *v* in Spanish. Similarly, Basque DOM is enabled through the use of an α P that comes from “Spanish”. In both phenomena, the surface form is monolingual, without apparent codeswitching. But on the morphosyntactic level, I propose, there is covert codeswitching between Basque and Spanish.

1.4. The contact phenomena under study

In my dissertation, I use the 1Lex model as a framework to analyze two contact phenomena: null objects in the Spanish in contact with Basque, and DOM in the Basque in contact with Spanish. In this section I introduce these two phenomena and summarize the proposed analyses.

1.4.1. Null objects in Spanish in contact with Basque

The availability of null direct objects in most varieties of Spanish is limited to arbitrary referents, such as in example (14) from Bosque Muñoz & Gutiérrez-Rexach (2009: 362).

- (14) Ellos habían traído dinero, pero yo no había traído.
They had.3.PL brought money but I not had.1.SG brought
'They had brought money, but I hadn't brought any.'

But in the Spanish in contact with Basque, referential null direct objects are available too.

- (15) Le he dado el dinero, pero ya no \emptyset_i necesita.
IO.DAT have.1.SG given the money but now not DO need.3.SG
'I've given him the money, but he doesn't need it anymore.'

This feature of Basque-Spanish has been argued to result from contact with Basque. Basque is a morphologically rich language. Arguments are doubled by pronominal clitics, except for third-person absolutive arguments (Arregi and Nevins 2012).

Following analyses that assign the responsibility of null argument licensing to a D feature in a verbal functional projection (e.g. Rizzi 1986, Holmberg 2005, Frascarelli 2007, Roberts 2010), I assume that null objects in Basque are licensed by a D feature in *v*. Because the lexicon of deep bilinguals is integrated, this $v_{[D]}$ is available for use in Spanish too. This use in "Spanish" of an item that is originally from "Basque", I will argue, is a form of covert codeswitching: while a sentence with a null object may appear to be fully in Spanish in its surface form, underlyingly, there is a "Basque" $v_{[D]}$ head that licenses the null object.

Access to the $v_{[D]}$ head, I suggest, is regulated by frequency effects or resting activation levels in the same way that is proposed for words in studies of lexical access. For example, for a monolingual English speaker, the word *dog* or *coffee* is more frequent and therefore more active and accessible than a word such as *ephemeris*. Among deep bilinguals, I suggest that roots or items with similar features such as *v* and $v_{[D]}$ have different activation levels based on their frequency of use, which results from the bilingual language profile: a Basque-dominant bilingual may have a higher activation of $v_{[D]}$ than a Spanish-dominant bilingual, because $v_{[D]}$ comes from Basque. Therefore, $v_{[D]}$ is more active and accessible for the former type of bilingual, which is

expected to translate in a higher acceptability of null objects among Basque-dominant than among Spanish-dominant bilinguals. In chapter 6, I formalize the activation of a given lexical item in terms of probability weights: an item with a higher probability weight is likelier to be selected than its counterpart with a lower probability.

At the same time, because the use of $v_{[D]}$ in Spanish is a form of covert codeswitching, speakers who are used to codeswitching overtly are also expected to find null objects more acceptable than those speakers who do not codeswitch regularly. The jobs of the lexicon are divided in DM, and the codeswitching that we are used to, i.e., overt codeswitching, is most commonly what happens at the moment of Vocabulary Insertion, with the rules in List 2. However, there are cases in which codeswitching applies to both List 1 and List 2, such as in some of López’s (2020) examples above. One such example is repeated in (16) for convenience.

- (16) Hizo *nähen* *das Hemd.* (Spa/Ger) = (7)
 did.3.SG sew.INF the shirt
 ‘She/he sewed the shirt.’ (González-Vilbazo and López 2012: 35)

In this example, there is an overt switch from Spanish to German which results from inserting vocabulary items from both Spanish and German, that is, from applying VIRs in List 2 from two “languages”. But the word order in the “German” portion of the sentence follows the Spanish VO order, instead of the German OV order. This can be accounted for by the fact that the Voice head where “*hizo*” is inserted has certain features that result in this “Spanish” word order. This is related to List 1 selection, where heads or features from the different “languages” can be mixed. This example shows the interconnectedness of the Lists when it comes to codeswitching, and it serves as argument that speakers who are aware of codeswitching overtly do so covertly as well, on the level of List 1.

1.4.2. Differential Object Marking in Basque in contact with Spanish

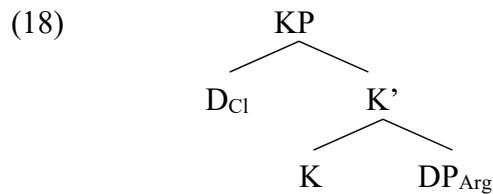
Canonically, DOs in Basque bear absolutive case, as in (17a). In some Basque varieties, the canonical form may coexist with or be replaced by the form with DOM. DOM in Basque

consists in marking a human specific DO with dative case and a coreferent dative clitic, as illustrated in (17b).

- (17) a. (Ni-k) **neskia** ikusi d-o -t.
 I-ERG **girl.ABS** see L-PRS.3.SG -CL.ERG.1.SG
- b. (Ni-k) **neskia-ri** ikusi d-o -tza -t.
 I-ERG **girl-DAT_i** see L-PRS.3.SG -CL.DAT.3.SG_i -CL.ERG.1.SG
 ‘I saw the girl.’ (Fernández and Rezac 2016: 104)

In Spanish, DOM is also reflected in dative(-like) case marking on the object, and it applies to human, specific DOs too. Additionally, in Basque-Spanish, DOM entails doubling of the object by a dative clitic. Because of the similarities between Basque-Spanish DOM and Basque DOM, Basque DOM has been argued to result from contact with Spanish.

My proposal for an analysis of DOM includes ideas from López’s (2012) analysis of Spanish DOM and from Arregi and Nevins’s (2012) analysis of Basque verb cliticization. Following Arregi and Nevins (2012), I propose the structure in (18) for DOM objects.



K is the head where the case marker is inserted (*a* in Spanish, *-ri* in Basque), and D_{Cl} is where the clitic is originally generated, agreeing with the argument DP. Following López (2012), the DOM object cannot check case in its base position and moves to an αP . I follow López’s (2012) distinction between $\alpha P_{[AppI]}$, which introduces an argument, and αP , which does not. This αP is part of the Spanish lexicon but only available in Basque for deep bilinguals thanks to the integrated nature of the bilingual grammar. DOM in Basque, then, results from selecting the αP that is available thanks to Spanish.

I posit that DOM in both Basque and B-Spanish is the spellout of K when it is within αP . The DOM object in αP agrees with v and gets its case valued. In turn, the D_{Cl} which is in the specifier of KP also gets dative case, as a result of the agree process.

As with the null objects analysis, the accessibility of αP is regulated by its probability weight, which results from the bilingual profile: a Spanish-dominant bilingual is expected to access this item more frequently because it comes from Spanish. Therefore, its use in Basque is expected to be more acceptable for Spanish-dominant bilinguals than for Basque-dominant bilinguals. Additionally, speakers that favor codeswitching should do so on the level of List 1 as well, where αP is stored.

Importantly, recall that the 1Lex model (López 2020) is meant to apply to deep bilinguals. A strong rejection of the contact phenomena, indicated by low ratings in the Acceptability Judgment Tasks, could be an indication that those speakers are not what López considers deep bilinguals. For example, participants from the low-contact area of Bilbao can be considered not to be deep bilinguals because their use of Basque is low and commonly restricted to a few contexts. Alternatively, rather than arguing that *non-deep* bilinguals have a different system than deep bilinguals, I still assume that the 1Lex model applies to all bilinguals in this study and I will propose to use the probabilistic weights as a way to account for lower or higher acceptability of the contact phenomena.

1.5. Outline of the dissertation

The rest of the dissertation is organized as follows:

Chapter 2: Null objects in Basque-Spanish. In this chapter, I propose an analysis of Basque-Spanish null objects which relies on contact from Basque. I first show that null objects are available in contexts where a caseless clitic would be found. Then, I argue that null objects are licensed in these contexts thanks to the “Basque” v which has a D-feature. This D-feature in v licenses an empty category without any phonological content. $v_{[D]}$ is available for use in “Spanish” because bilinguals have an integrated lexicon, following López’s (2020) 1Lex model.

Chapter 3: Null objects acceptability judgment task. In this chapter, I present and discuss the results of an aural acceptability judgment task on null objects in Spanish. I collected data from Basque-dominant, Spanish-dominant, and balanced bilingual speakers from an intense-contact region, and Spanish-dominant speakers from a low-contact region. Thanks to this four-way distinction based on individual and societal bilingualism, the results show that 1) the feature is only available in the intense-contact region, and 2) there is a relation between the rate of self-reported codeswitching and the acceptability ascribed to null objects. With regards to the first conclusion, this could indicate that null objects are a regional feature. However, it could also indicate that the bilinguals in this region are *deep* bilinguals, whereas those in the low-contact region are not. As I mentioned, instead of assuming that the 1Lex model does not apply to the bilinguals in the low-contact region, I explore the addition of probabilistic weights in Chapter 6.

Chapter 4: Differential Object Marking in Basque. The analysis of Basque DOM proposed in this chapter involves an α P where certain objects move to check their case. In α P objects get dative case, which is the case of DOM objects in both Basque and Spanish. α P is originally from Spanish, and it is only available in Basque thanks to the integrated lexicon that is assumed for deep bilinguals in the 1Lex model.

Chapter 5: Differential Object Marking acceptability judgment task. In this chapter, I present and discuss the results of an aural acceptability judgment task on DOM in Basque. I collected data from the same four bilingual groups as in Chapter 3. Again, the main difference in the results is dialectal, which can be interpreted in the context of the model as an indication that the bilinguals from the low-contact region are not truly deep bilinguals. Secondly, there is a positive effect of codeswitching: those participants with higher rates of self-reported codeswitching rated DOM more highly than participants with lower rates of codeswitching.

Chapter 6: Conclusion. In this chapter I dive deeper into the idea of integrating probability weights to the relevant items in my analysis. The goal of these probability weights is to help provide an explanation to the variability found for the acceptability of the phenomena among the different bilingual profiles.

CHAPTER 2: NULL OBJECTS IN BASQUE-SPANISH

2.1. Introduction

Null objects are one of the most widely discussed features in the variety of Spanish spoken in the Basque Country (from now on Basque Spanish or B-Spanish) (Camus Bergareche & Gómez Seibane 2015, Gómez Seibane 2011, 2012, Franco & Landa 2003, Landa 1995, Urrutia Cárdenas 2003, Sainz-Maza Lecanda & Schwenter 2017, a.o.). Null objects, illustrated in (19a), refer to the missing direct object clitic that typically replaces direct object DPs in most Spanish varieties, as in (19b).

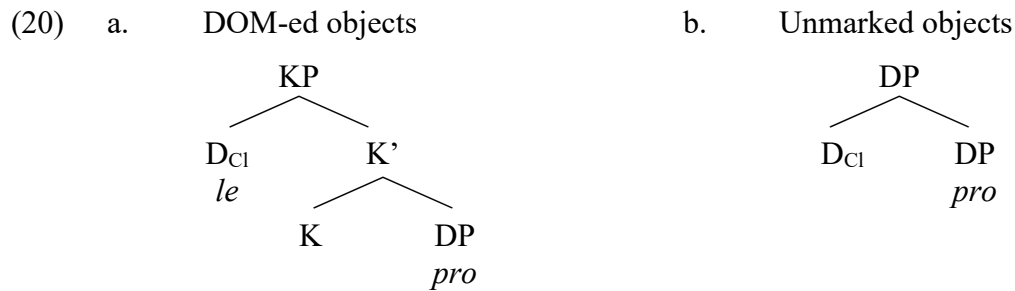
- (19) a. *B-Spanish*
Ya \emptyset he visitado.
Already DO have.1.SG visited
'I have already visited it.'
- b. *Standard Spanish*
Ya lo he visitado.
Already DO.ACC have.1.SG visited

Previous studies on Basque Spanish null objects agree that definiteness, specificity and inanimacy of the antecedent are the key factors that allow direct object clitics *lo(s)*, *la(s)* to be dropped. Looking at data from Person Case Constraint (PCC) contexts and data with DOM-ed inanimate objects, I show that the case of the object determines whether it can be null: unmarked objects can be null, while DOM objects cannot. Following this observation, I base my analysis on Arregi and Nevins's (2012) analysis of Basque clitics, in which dative arguments have a KP where the clitic is generated, but absolutive arguments do not.

Section 2.2 lays out the distribution of null objects in Basque-Spanish, presenting data related to Differential Object Marking (DOM), *leísmo* and the PCC. These data show that null objects are only available for objects that would not be morphologically case marked (DOM-ed), which are also the objects that could be cliticized in the accusative form of the clitic *lo*, *la*. These are typically inanimate objects, while animate specific objects get DOM and *leísmo*. PCC contexts

offer revealing data because they show that, when *leísmo* is not allowed, the animate DO can be cliticized with *lo* or it can be null. Interestingly, in these contexts, the animate DP may lose DOM too. Conversely, in certain cases where inanimate objects must have DOM, these objects cannot be null. The conclusion drawn from these data is that lack of case in the DO results in the possibility to have null objects.

Section 2.3 proposes an analysis of null objects as *pro*, supported by data from idioms, secondary predicates, and reflexives. I argue that, while DOM-ed objects have a KP, unmarked objects do not (Arregi and Nevins 2012, López 2012). Based on Arregi and Nevins’s (2012) analysis of Basque clitics, I propose for (B-)Spanish that clitics are generated in the specifier of their arguments, as shown in (20).



My analysis is framed within López’s (2020) 1Lex model which is, in turn, framed within Distributed Morphology (Halle and Marantz 1993), where vocabulary insertion only takes place after syntax. In the syntax, we find functional heads, features, and roots. Therefore, an unmarked object D_{Cl} could have the features [fem, sing]. Whether this $D_{Cl}[fem, sing]$ ends up being *la* or null, depends on the relevant Vocabulary Insertion Rule (VIR).

Following much literature that ascribes the licensing of null arguments to a D-feature in the relevant probe (e.g. Rizzi 1986, Holmberg 2005, Frascarelli 2007, Roberts 2010), I propose that Basque has a D-feature in v that licenses null objects. Following López’s (2020) 1Lex model, this $v_{[D]}$ is part of the integrated lexicon of bilingual Spanish/Basque speakers, and it can be used in Spanish as a form of covert codeswitch. I argue that null objects result from a caseless D_{Cl} in the context of $v_{[D]}$, following the VIR in (21).

(21) $\emptyset \leftrightarrow D_{Cl} \mid [v_{[D]} \text{ ____}]$

Section 2.4 presents arguments in favor of contact effects from Basque to Spanish. Section 2.5 concludes the chapter.

2.2. The relevance of case

In this section, I first present the semantic factors that have been reported to contribute to DOs being null in B-Spanish, as well as the types of constructions in which they are most common. In sections 2.2.1 and 2.2.2, I present cases of null objects with semantic factors different than the ones reported, which makes me pursue an analysis of null objects not based on semantic factors, but on case.

Null objects in Spanish refer specifically to the missing third-person direct object accusative clitics *lo(s)*, *la(s)* in the context of a transitive sentence. Arbitrary null DOs are available with indefinite, non-specific antecedents such as in (22), in all varieties of Spanish, including Basque and non-Basque Spanish (NB-Spanish). However, these semantic restrictions do not seem to apply in B-Spanish, where definite, specific referential null objects are possible too, as in (23c).

- (22) A: Quiero comprar unos pastelitos_i para la fiesta.
 Want.1.SG buy some cakes for the party
 B: Ya \emptyset_i compraré yo.
 Already DO buy.will.1.SG I
 ‘–I want to buy some cakes for the party. –I will buy some myself.’

- (23) a. Hemos visto la televisión.
 Have.1.PL seen the television
 ‘We’ve watched television.’
 b. La hemos visto.
 DO.ACC have.1.PL seen
 ‘We’ve watched it.’
 c. $\% \emptyset$ hemos visto. (OK in B-Spanish; * in NB-Spanish)
 DO have.1.PL seen

Previous studies have extensively shown that specificity, definiteness and inanimacy (or non-humanness) of the antecedent are the key semantic factors that contribute to null objects in B-Spanish (Landa 1995, Landa & Franco 2000, Camus Bergareche & Gómez Seibane 2015, a.o.). Gómez Seibane (2011) looks at data from six Basque-dominant bilingual participants² from the linguistic corpus ESESCA and finds that 94.7% of the null objects they produced are definite, 100% are specific, and 73.7% are inanimate. Rather than on semantic factors, my analysis is based on the case of the object being omitted, as I will explain in section 2.3.

Additionally, in terms of structures that favor null objects, these are more commonly found in ditransitive constructions (24), with a topicalized antecedent (25), and in infinitival constructions (26) (Camus Bergareche and Gómez Seibane 2015, Sainz-Maza Lecanda 2014).

(24) Le \emptyset he dicho a María. (* in NB-Spanish)
 IO.DAT DO have.1.SG told DOM María
 ‘I told it to María.’

(25) Ese jarrón_j, la abuela \emptyset_j compró. (* in NB-Spanish)
 That vase the grandma DO bought.3.SG
 ‘That vase, grandma bought it.’

(26) Hay que pelar las patatas_j y cortar- \emptyset_j así. (* in NB-Spanish)
 Have that peel the potatoes and cut -DO like.this
 ‘You have to peel the potatoes and cut them like this.’

All the above examples would require DO clitics in NB-Spanish in the position where we find a null element. As stated before, NB-Spanish only allows null objects with non-specific, indefinite antecedents; that is, arbitrary null objects.

² Gomez Seibane explains that her aim is not to give a sociolinguistic representation of the phenomenon, but all the six participants were 58-85 years old, they had a low education level and their usual language of communication was Basque.

2.2.1. Null animate DOs in PCC cases

In this section I propose that the availability of null referential objects in B-Spanish is linked to lack of case. First, I show that animate DOs bear case in B-Spanish, evident in the *a*-marking (DOM) of the DP which also gives rise to *leísmo*. Then, I discuss PCC contexts in which *leísmo* is blocked and, instead, the animate DO can be cliticized with *lo* or it can be null. Interestingly, in these contexts, the animate DP may lose the *a*-marking too. Lack of case in the DO results in the possibility of licensing null objects.

A crucial assumption in previous literature has been that null objects are most common with inanimate antecedents. In fact, this is true for all the examples presented so far. Example (27) with an animate antecedent is ungrammatical or, at least, degraded for most speakers of B-Spanish.

(27) A: ¿Dónde está Juan?

Where is Juan

* B: Ahora no sé, pero \emptyset he visto antes.

Now not know.1.SG but DO have.1.SG seen earlier

‘–Where is Juan? –I don’t know where he is now, but I saw him earlier.’

In B-Spanish, animate DOs are pronominalized with the dative *le(s)* as opposed to the accusative *lo(s)/la(s)*, a phenomenon known as *leísmo*.³

³ Different types of *leísmo* are present in several varieties of Spanish. Within Peninsular Spanish alone, there are two widespread forms of *leísmo*: the *animate leísmo* found in B-Spanish, and *Central Peninsular leísmo* (term borrowed from Ormazabal & Romero 2013). In animate *leísmo*, animate DOs are replaced or doubled by the dative clitic instead of the accusative clitic, regardless of gender. Meanwhile, in Central Peninsular *leísmo*, only masculine DOs are replaced by the dative clitic, and no doubling is allowed. There is another less common form of *leísmo* in the Basque Country, which affects inanimate objects, as in (i) below. Rodríguez-Ordóñez (2017: fn. 10) describes this use as rare and restricted to elderly people. This *leísmo* can be found in other areas of Spain as well.

(i) El teléfono_i le_i he dejado en la mesa.

The phone DO.DAT have.1SG left on the table.

‘The phone, I have left it on the table.’

(28) Ahora no sé, pero **le** he visto antes.
 Now not know.1.SG but DO.DAT have.1.SG seen earlier

B-Spanish *leísmo* overlaps with Spanish Differential Object Marking (DOM). In the DP, animate direct objects get DOM in the form of *a*-marking when specific. In B-Spanish, as in other Spanish varieties, animate, specific objects need to receive DOM as in (29c) and (29d) whereas inanimate objects (29a) and animate, non-specific objects (29b) cannot.

- (29) a. Cortaron el / ***a** -l árbol. (inanimate, specific)
 Cut.3.PL the / **DOM**-the tree
 ‘They cut the tree.’
- b. Deben traer un acompañante a la fiesta. (animate, non-specific)
 Must.3.PL bring a partner to the party
 ‘They must bring a partner to the party.’
- c. Vieron **a** una niña en el parque. (animate, specific)
 Saw.3.PL **DOM** a girl in the park
 ‘They saw a (specific) girl in the park.’
- d. Vieron *(**a**) María en el parque. (non-specific reading imposible)
 Saw.3.PL **DOM** María in the park
 ‘They saw María in the park.’

In (29a) and (29b) where only one of the relevant features is present, the objects do not and cannot bear DOM. It is only when the object is both animate and specific that we see DOM, as in (29c). Example (29d) contains a proper noun which is intrinsically specific, and it serves to illustrate that DOM is obligatory with animate, specific objects. Cross-linguistically, DOM can be an adposition, case marker, agreement, or, as with DO *le*, clitic doubling (Bossong 1982, 1985, 1991). In NB-Spanish, DOM is only realized through the adposition or case marker *a*; B-Spanish DOM involves *a*-marking as well as clitic doubling with *leísmo*.

One particular case in which *leísmo* is blocked in Peninsular varieties of Spanish concerns the Person Case Constraint (PCC). In broad terms, the PCC bans certain sequences of clitics or agreement markers (see Perlmutter 1971, Bonet 1991). In Spanish, it blocks combinations of two clitics unless the second one is an accusative 3rd person (*lo(s)*, *la(s)*). That is why when a dative

indirect object clitic is already present, *leísmo* cannot take place, as shown in (30a) and (31a). In these cases, direct objects need to be cliticized with the etymological accusative form *lo(s)/la(s)*, regardless of animacy, as in (30b) and (31b).

- (30) a. *A Juan_j, me **le_j** presentaron ayer.
 DOM Juan IO DO.DAT presented.3.PL yesterday
- b. A Juan_j, me **lo_j** presentaron ayer.
 DOM Juan IO DO.ACC presented.3.PL yesterday
 ‘Juan, they introduced him to me yesterday.’
- (31) a. *A los niños_i, me **les_i** ha mandado María.
 DOM the kids IO DO.ACC have.3.SG sent María
- b. A los niños_i, me **los_i** ha mandado María.
 DOM the kids IO DO.DAT have.3.SG sent María
 ‘The kids, María sent them to me.’

In these restricted cases in which human direct objects *have* to be pronominalized with the accusative clitic *lo,la*, B-Spanish allows null objects too, as in (32).

- (32) a. A Juan_j, me \emptyset_j presentaron ayer.
 DOM Juan IO DO presented.3.PL yesterday
- b. A los niños_i, me \emptyset_i ha mandado María.
 DOM the kids IO DO have.3.SG sent María

The cases where *leísmo* is blocked, that is, in the presence of an IO dative, are also cases in which DOM can be optionally dropped, with lexical DPs. In ditransitive constructions with two object DPs, the animate, specific DO may optionally *not* get DOM in some cases, as noted first by Bello (1847) and illustrated in the Spanish example in (33).

- (33) Han presentado **a-** **l / el** nuevo estudiante a la clase.
 Have.3.PL introduced DOM- the / the new student to the class
 ‘They introduced the new student to the class.’

As shown in (34), *al/el nuevo estudiante* could be replaced accordingly: (34b) with *le* corresponds to the DOM-ed form, and (34c-d) to the unmarked form. In (34c) an IO pronoun is introduced to make the lack of *leísmo* natural in B-Spanish. As expected, in this context, the DO clitic can be null, as in (34d).

- (34) a. Ahí está el nuevo estudiante_i.
 There is the new student
- b. Sí, ya le_i han presentado a la clase_k.
 Yes already DO.DAT have.3.PL introduced to the class
- c. Sí, ya nos_k lo_i han presentado (a la clase_k).
 Yes already IO DO.ACC have.3.PL introduced to the class
- d. Sí, ya nos_k ø_i han presentado (a la clase_k).
 Yes already IO DO have.3.PL introduced to the class
 ‘There’s the new student. Yes, they already introduced him to the class.’

In this section I showed that regardless of animacy, when *leísmo* is unavailable, the animate object can be null. This blocking of *leísmo* corresponds with cases in which the object DP can optionally not show DOM. Note in the examples above that DOM takes the same form as the dative marker *a*. In fact, it is not uncommon to find analyses that propose that DOM and dative marking are the same element or assigned by the same head (Rodríguez Mondoñedo 2007, Ormazabal and Romero 2013, Kalin 2018, a.o.). Similarly, Ormazabal and Romero (2013) show that B-Spanish DO *le* behaves like IO dative *le* in contexts of clitic doubling, and unlike DO accusative *lo, la*. The examples in this section illustrated that lack of (dative) case marking in the DO is a necessary requisite for null objects.

2.2.2. Inanimate DOM-ed objects that cannot be null

Let us now turn to cases in which inanimate objects *cannot* be null in B-Spanish. First, observe in (35b) an example of a null object in a response to the question in (35a).

- (35) a. ¿Los niños siguen las normas?
 the children follow.3.PL the rules
 ‘Do children follow the rules?’
- b. Sí, claro que \emptyset_i siguen.
 Yes clear that DO follow.3.PL
 ‘Yes, of course they do.’

This example shows that the verb *seguir* ‘to follow’ in this response allows a null object. In contrast, observe what happens in (36), when the inanimate DO is DOM-ed. It is worth noting that the meaning of *seguir* in (35) and (36) is not exactly the same. In (35) it has a sense of ‘comply with’, while in (36), this use which imposes DOM to inanimate objects⁴ refers to position.

- (36) a. ¿Los verbos siguen a los sujetos?
 The verbs follow.3.PL DOM the subjects
 ‘Do verbs follow subjects?’
- b. * Sí, claro que \emptyset_i siguen.
 Yes clear that DO follow.3.PL
 ‘Yes, of course they do.’
- c. Sí, claro que les_i siguen.
 Yes clear that DO.DAT follow.3.PL

The response in (36b) is ungrammatical because it has a null object referring to the DOM-ed object in (36a). In contrast, (36c) has the dative form of the DO clitic, which is the preferred option in B-Spanish. A similar example concerns *caracterizar*.

⁴ There is a group of verbs with which inanimate DOs get DOM systematically, presumably because the subject in these contexts is inanimate too. Fábregas (2013: 15) includes in this group the verbs in (i):

- (i) *preceder* ‘precede’, *anteceder* ‘go before’, *suced* ‘go after’, *seguir* ‘follow’, *sustituir* ‘substitute’, *reemplazar* ‘replace’, *modificar* ‘modify’, *incluir* ‘include’, *excluir* ‘exclude’, *clasificar* ‘classify’, *caracterizar* ‘characterize’.

- (37) a. ¿El género caracteriza a los sustantivos?
 The gender characterize.3.SG DOM the nouns
 ‘Does gender characterize nouns?’
- b. Sí, claro que *(les_i) caracteriza.
 Yes clear that DO.DAT characterize.3.SG
 ‘Yes, of course it does.’

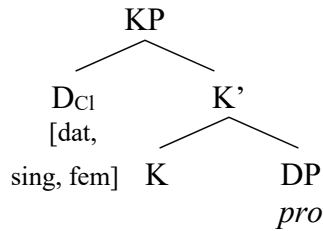
Again, regardless of the object being inanimate, it cannot be null because it is (dative-)case-marked, i.e., DOM-ed.

The data from DOM-ed inanimates, together with the PCC contexts with null human objects, present a picture in which case is key in the availability of null objects. I have shown that DOM in the object corresponds to dative case in the clitic in B-Spanish, while lack of case marking on the noun corresponds to the accusative form of the clitic or the possibility to drop it. I take the lack of case marking to mean lack of case on the DP and on the clitic, and I propose that it is caseless objects that can be null.

2.3. Analysis

In this section I propose an analysis for referential null objects in B-Spanish. First, I examine the nature of the null object itself and, following Landa (1995), I argue it is *pro*. For that, I summarize some of her arguments and I add more: I show that null objects are allowed with reflexives and in secondary predicates and that they are not allowed in idioms. These arguments will also show that this DO *pro* is phi-complete, since all genders and numbers are licensed. Rather than being a different element, this *pro* is like the one we find in subject position in Spanish. Furthermore, I propose that third-person objects that do not show case marking (DOM) are structurally deficient when compared to other cases and persons, following Arregi and Nevins (2012). Third-person objects with case marking have a KP layer where the clitic *le* is generated, as shown in (38). (38a) shows the structure of the object, and (38b) contains the relevant Vocabulary Insertion Rule (VIR) which shows that a D_{Cl} is realized as *le* when it has the features feminine, singular, and, crucially, dative.

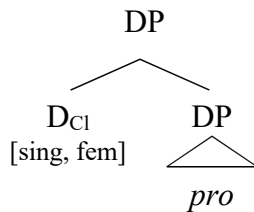
(38) a. 3rd-person dative DOs



b. /le/ ↔ D_{Cl}[dat, sing, fem]

On the contrary, third-person objects without case lack a KP. To account for the fact that *lo* and *la* are grammatical in B-Spanish (and obligatory in NB-Spanish) when the lexical DP is dropped, I assume the structure in (39), in which there is no KP but the second specifier of DP hosts the features of the clitic.

(39) 3rd-person caseless DOs



The difference that causes these features to be spelled out as zero or as *la* lies in the VIRs that apply in each context. Following work that assumes that referential null objects are licensed by *v* (Rizzi 1986, Roberts 2010, Maddox 2019), I argue that B-Spanish speakers have, besides a regular *v* from (NB-)Spanish, a *v*_[D] that licenses null objects. Thus, the relevant VIRs are in (40).

(40) a. ∅ ↔ D_{Cl}[sing, fem] | [*v*_[D] _____]

b. /la/ ↔ D_{Cl}[sing, fem] | [*v*_____]

The VIR in (40a) inserts a null element for a caseless D_{Cl} in the context of *v*_[D]. Meanwhile, in the context of a regular *v* in (40b), a caseless feminine singular D_{Cl} is spelled out as *la*. These two *v*s and, therefore, the two VIRs in (40), are available to B-Spanish speakers. Within López's 1Lex model, both *v* and *v*_[D] are part of the lexicon of B-Spanish speakers. In section 2.3.4, I argue that a higher preference for *v*_[D] in B-Spanish results from a higher dominance in Basque, where *v*_[D] originally comes from. The use of *v*_[D] in B-Spanish, then, is a form of covert codeswitching under the 1Lex model. Note that the proposed analysis accounts for *referential*

null objects in Basque-Spanish, but it is not intended for non-referential null objects. Non-referential null objects are found in all varieties of Spanish, and they are arguably not *pro*, but a different category (see Campos 1986, Franco and Landa 1991, and Landa 1995).

2.3.1. Null objects are *pro*

Landa (1995) argues that referential null DOs in B-Spanish are *pros* that agree with a zero morpheme on the verb, while arbitrary null objects are variables. She cites Franco and Landa's (1991) work that shows that B-Spanish contains null objects with the status of a variable (arbitrary null objects) as well as null objects that are *pro* (referential). To illustrate that, Franco and Landa test the B-Spanish data on the Weak Crossover Constraint and principle C of binding theory. Landa explains that, according to the Weak Crossover Constraint, variables cannot be coindexed with a non-c-commanding pronominal element on the left. Here, she seems to be assuming Chomsky's (1976) Leftness Condition account of the Weak Crossover Constraint, in (41).

(41) *Leftness Condition*

A pronoun cannot be linked to a variable to its right.

Landa explains that the constraint has effects on arbitrary null objects, such as in (42), which suggests it is a variable.

- (42) OP_{arb} su_{i/*arb} guisado deja e_{arb} con ardor de estómago.
 OP his stew leave.3.SG with burn of stomach
 'His stew leaves one with heartburn.'

Since the pronominal *su* cannot be coindexed with an empty category and receive an arbitrary interpretation, Franco and Landa (1991) assume that the empty category is a variable following the weak crossover constraint (variables cannot be coindexed with a non-c-commanding pronominal element on the left).

On the other hand, they claim that the weak crossover constraint does not apply to referential null objects in B-Spanish:

- (43) A: ¿Qué hace esto_i aquí? (Landa 1995: 99)
 What do.3.SG this here
 B: No sé. Su_i dueño e_i trajo para arreglar y no ha vuelto.
 Not know.1.SG His owner brought.3.SG to fix and not have.3.SG return
 ‘–What is this doing here? –I don’t know. His owner brought it to fix and has not come back.’

Since referential null objects in B-Spanish do not follow the weak crossover constraint, Franco and Landa take it to mean that they are not variables. Furthermore, Landa (1995) shows that B-Spanish referential null objects behave like *pro* in contexts which Campos (1986) uses to argue that arbitrary null objects are *wh*-traces bound by an abstract operator. Campos checks a number of constraints in *wh*-extraction found in Chomsky (1981): complex NPs, doubly filled COMP and sentential subjects, to which he adds a fourth constraint: adjunct islands. Landa shows that referential null objects in B-Spanish do not follow these constraints and behave like a *pro* instead. For illustration, observe extraction from complex NPs in (44b) and (45b), as answers to the questions in (44a) and (45a).

- (44) a. ¿Juan traerá cerveza a la fiesta?
 Juan bring.will.3.SG beer to the party
 ‘Will Juan bring beer to the party?’
 b. %Existe el rumor de que traerá \emptyset . (Campos 1986: 355)
 Exist.3SG the rumor of that bring.will.3.SG DO
 ‘Rumor has it that he will bring it.’
- (45) a. ¿Quién trajo cerveza a la fiesta?
 Who brought.3.SG beer to the party
 ‘Who brought beer to the party?’
 b. %No conozco a -l muchacho que trajo \emptyset . (Campos 1986: 355)
 Not know.1.SG DOM-the guy that brought.3.SG DO
 ‘I don’t know the guy that brought it.’

Campos marks the sentences in (44b) and (45b) as ungrammatical in standard Spanish, while Landa marks them as grammatical in B-Spanish. Campos takes these data, and data following the

aforementioned constraints, as indication that arbitrary null objects are variables. Landa, on the other hand, takes it to mean that referential null objects in B-Spanish are not variables.

Below, I offer more support in favor of null objects as *pro*, with data concerning secondary predicates, reflexives, and idioms. The idiom examples will also show that there is a featural difference in a structure with null or overt clitics, which I propose is the presence or absence of D in *v*.

Landau (2010) argues that implicit arguments must be “strong” (either PRO or *pro*)⁵ in order to license secondary predicates. Secondary predicates seem to be allowed with null objects in B-Spanish, as shown in (46) and (47).

- (46) Nos gusta comer los postres calientes pero, ayer,
IO like.3.SG eat the desserts hot but yesterday
ø_i comimos fríos_i.
DO ate.1.PL cold
‘We like to eat our desserts hot but, yesterday, we ate them cold.’

- (47) A: Ya he comprado el pollo.
Already have.1.SG bought the chicken
B: ¡ø_i has comprado grande!
DO have.2.SG bought big
‘– I already bought the chicken. –You bought it big!’

The fact that secondary predicates are available suggests that there is a null element, *pro*, that licenses them.

Secondly, reflexives need to be bound by an antecedent, as shown in (48) below. In (48a) the reflexive *sí misma* agrees in person, gender and number with *María*. In (48b), *sí mismos*, in the masculine plural, does not agree with *María* and hence the ungrammaticality.

⁵ Landau (2010) establishes a distinction between strong implicit arguments, which are PRO and *pro*, and weak implicit arguments, which are the passive agent and implicit objects.

- (48) a. María se llamó a sí misma.
 María REFL called.3.SG DOM self same.FEM.SG
 ‘María called herself.’
- b. *María se llamó a sí mismos.
 María REFL called.3.SG DOM self same.MASC.PL

In NB-Spanish, the antecedent of reflexives can be null if it is a subject *pro*, as in (49).

- (49) *pro* se llamó a sí misma.
pro REFL called.3.SG DOM self same
 ‘(She) called herself.’

Although reflexives with inanimate objects are less common, the data in (50) and (51) offer possible scenarios in which a reflexive may be used with an inanimate referent.

Context: We were passing by an old house and suddenly the house collapsed to the ground.

- (50) La hemos visto derrumbarse sobre sí misma.
 DO.ACC have.1.PL seen collapse on.top.of self same
 ‘We saw it collapse.’

Context: my cell phone went crazy and it started doing things on its own.

- (51) Lo he visto apagarse por sí mismo.
 DO.ACC have.1.SG seen turn.off by self same
 ‘I saw it turn off on its own.’

In these constructions null objects are available in B-Spanish, as shown in (52)-(53) below.

- (52) \emptyset hemos visto derrumbarse sobre sí misma.
 DO have.1.PL seen collapse on.top.of self same
 ‘We saw it collapse.’

- (53) \emptyset he visto apagarse por sí mismo.
 DO have.1.SG seen turn.off by self same
 ‘I saw it turn off on its own.’

In these examples, there needs to be a syntactically present element that binds the reflexives, agreeing in phi features with it: in (52) it is *casa* ‘house’ and we see the feminine gender marking in the reflexive, while in (53) it is *teléfono* ‘phone’ and the reflexive shows masculine gender. Notice that, in these cases, the null object takes its referent from the physical context, instead of the discourse. In this respect, it behaves like a pronoun as well. Furthermore, these examples indicate that the null *pro* is not feature deficient, since all genders and numbers of the reflexive and secondary predicates are licensed.

Finally, ellipsis of idioms and idiom parts allows to keep the idiomatic interpretation, but null objects do not. This shows that 1) null objects are not cases of ellipsis, and 2) something in the structure of the idiom is different when there is a null object: the insertion of a D-feature in v. Example (54) contains the expression *dar la lata*, which literally means ‘give the can’, but which has a second idiomatic meaning, roughly, to bother someone by being repetitive, annoying, etc. Example (55) has the expression *dar la espalda*, similar to English ‘to turn your back on someone’, (lit. ‘to give the back’). TP-ellipsis of these expressions allows to keep the idiomatic meaning.

(54) Tú no me diste la lata, pero María sí.
 You not IO gave.2.SG the can but María yes
 ‘You didn’t bother me, but María did.’ (lit. ‘You didn’t give me the can, but María did.’)

(55) Quería dar-me la espalda, pero no pudo.
 Wanted.3.SG give-IO the back, but not could.3.SG
 ‘He wanted to turn his back on me, but he couldn’t.’ (lit. ‘He wanted to give me his back, but he couldn’t.’)

Furthermore, when only *part* of an idiom is elided, the idiomatic meaning is still present. For this example, consider the idiom *matar dos pájaros de un tiro* ‘to kill two birds with one stone’ (lit. ‘to kill two birds with one shot’).

Context: Juan and María want to watch a soccer game tonight, but they also want to visit their friend Pedro. A minute ago, they were debating what to do. At the moment, they are talking about birds, and Juan says to María:

- (56) Hablando de pájaros, podemos matar dos de un tiro si Pedro quiere
 Speaking of birds can.1.PL kill two of one shot if Pedro want.3.SG
 ver el partido.
 watch the game
 ‘Speaking of birds, we can kill two with one stone if Pedro wants to watch the game.’

In (56), the elision of the noun *pájaros*, indicated by the underscore, does not eliminate the idiomatic interpretation. Idioms can also be kept with pronominalizations: going back to our first idioms, when the nouns *lata* and *espalda* are pronominalized, in (57) and (58) respectively, the idiomatic meaning is still present. In fact, in (57), line A can be interpreted as the literal meaning, as shown in the gloss, while the response in B seems to favor the idiomatic meaning.

- (57) A: ¿Te doy la lata cuando termine?
 IO give.1.SG the can when finish.1.SG
 B: ¡Ya me la das todos los días!
 Already IO DO.ACC give.2.SG all the days
 ‘– Should I give you the can when I am done?
 – You already do it every day!’ (Intended: – You already bother me every day!)

- (58) A: Juan me dio la espalda.
 Juan IO gave.3.SG the back
 B: Tú también se la diste en su día.
 You also IO DO.ACC gave.2.SG in his day
 ‘– Juan turned his back on me. (lit. ‘Juan gave me his back’)
 – You did the same to him, back in the day.’

In contrast, when the objects are null in B-Spanish, many B-Spanish speakers report the idiomatic interpretation to be lost, as shown in (59) and (60). This suggests that null objects are

not a case of ellipsis in B-Spanish; otherwise, we would expect the idiom to hold, as was the case with ellipsis in (54)-(56) above.

- (59) A: ¿Te doy la lata cuando termine?
IO give.1.SG the can when finish
* B: ¡Ya me *pro* das todos los días!
Already IO DO give.2.SG all the days

- (60) A: Juan me dio la espalda.
Juan IO gave.3.SG the back
* B: Tú también le *pro* diste en su día.
You also IO DO gave.2.SG in his day

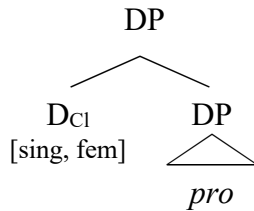
When an idiom is modified or some material is missing from the structure, the idiomatic meaning is lost, as shown in (61): when the DP changes the number feature as in (61a) or when the determiner is deleted as in (61b), the idiom is lost.

- (61) a. #Siempre me dan las latas.
Always IO give.3.PL the cans
'They always give me the cans.' (No idiomatic interpretation possible)
- b. # Juan me dio \emptyset espalda.
Juan IO gave.3.SG \emptyset back
Intended: 'Juan gave me his back.' (No idiomatic interpretation possible)

Note that in (61a), where one feature in the idiom changes (number), the idiom is lost. Similarly, in (61b), there might be a D that is spelled out as null, i.e. the structure is the same, but the vocabulary item inserted is null, and the idiomatic interpretation disappears. Crucially, in (59) and (60), I will argue in my analysis, there is a D-feature in *v* which is required to license null objects. Since these idioms include the verb, arguably up to *v*, the structure with the null object has an additional feature which is not present in the original idiom. This additional feature in the structure causes the idiom to be lost.

Idioms and reflexives provide further support that referential null objects are pronominal, and they are not cases of ellipsis. I suggest that while the structure of both overt clitics and null objects is as in (62), null objects do not have a phonetic realization of the clitic, as illustrated in the VIR in (63a).

(62) 3rd-person accusative DOs (=39)



(63) a. $\emptyset \leftrightarrow D_{Cl}[\text{sing, fem}] \mid [v_{[D]} \text{ ____}]$ (B-Spanish)

b. $/la/ \leftrightarrow D_{Cl}[\text{sing, fem}] \mid [v \text{ ____}]$ ((NB-)Spanish)

Since vocabulary insertion is a post-syntactic phenomenon in Distributed Morphology (Halle & Marantz 1993), the syntax of the overt clitic and the null object DP is the same, but the difference is in the features of the *v* that licenses each. Note that the idiom facts indicate that the *structure* with a null object does not have the same syntax as the structure with an overt object. This precludes an analysis in which the same type of *v* licenses both overt and null objects and competition exists between a VIR with an overt clitic and a VIR with a null element.

This is reminiscent to Landa's (1995) proposal of null objects being a 'zero morpheme' that agrees with *pro*. Landa argues that a null object is a *pro* which is doubled by a zero morpheme in the place where the clitic *lo/la* would be. She uses tests with parasitic gaps, doubling, left dislocations, and *wh*-islands, some of which I summarize below, to argue for the presence of this zero morpheme. Her assumption is that the zero morpheme is syntactically present, behaving like other clitics, which has the result that structures with null objects are parallel to structures with overt clitics.

One of Landa's tests concerns parasitic gaps. Landa shows that parasitic gaps are not allowed in (B-)Spanish with animate antecedents, and a clitic must be present instead, as shown by the contrast in (64). Examples (64) through (67) are from Landa (1995), glosses and translations are mine.

- (64) a. *María quería invitar-*le*_i *e*_i sin conocer *e*_i. (Landa 1995: 105)
 María wanted.3.SG invite-DO.DAT without know
 b. María quería invitar-*le*_i *e*_i sin conocer-***le***_i.
 María wanted.3.SG invite-DO.DAT without know-DO.DAT
 ‘María wanted to invite him without knowing him.’

On the other hand, parasitic gaps are allowed with inanimates, as shown in (65).

- (65) María quería comprar(*lo*_i) *e*_i sin probar \emptyset _i *e*_i. (Landa 1995: 106)
 María wanted.3.SG buy DO.ACC without try DO
 ‘María wanted to buy it without trying it.’

Her assumption is that, because a clitic is required in (64b), the only way (65) is available is if, in fact, a zero morpheme is present in the place of the null object.

A similar logic follows from doubling data. Doubling of animate DOs by *le* is common in B-Spanish, as in (66), while it appears to be ungrammatical with inanimate DOs, as in (67a). Her proposal is that, if inanimate DOs are doubled by a zero morpheme, there would be no exceptions to doubling in B-Spanish, as I show in (67b), and inanimates would have the same doubling structure as animates.

- (66) *Le*_i he visto a Pedro_i.
 DO.ACC have.1.SG seen DOM Pedro
 ‘I have seen Pedro.’ (Landa 1995: 107)

- (67) a. (**La*_i) he visto la casa_i.
 DO.ACC have.1.SG seen the house (Landa 1995: 106)
 b. \emptyset _i he visto la casa_i.
 DO have.1.SG seen the house
 ‘I have seen the house.’

The arguments regarding left dislocations and extraction out of wh-islands follow the same logic, by which the structure of sentences with null objects is proposed to be parallel to the structure with overt clitics, thanks to a zero morpheme. In my analysis within DM, what is present in the

syntax is not a zero morpheme, but simply the D_{Cl} and its features which are present regardless of what vocabulary item will be inserted postsyntactically.

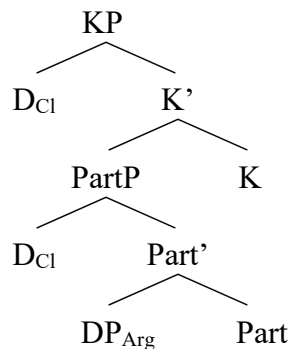
2.3.2. Null objects in Basque (Arregi and Nevins 2012)

The analysis I propose for B-Spanish null objects finds inspiration in Arregi and Nevins's (2012) account of Basque verbal morphology. Basque is an ergative-accusative language (Ortiz de Urbina 1989), with rich verbal morphology and SOVAux order. It marks the case of nouns with postpositions, and the verb shows agreement with its arguments. Traditionally, Basque auxiliaries have been taken to be formed by agreement morphemes (Laka 1993, Fernández & Albizu 2000, Rezac 2003). Alternatively, Arregi and Nevins (2012) analyze Basque auxiliary verbs as being formed by pronominal clitics, as illustrated in (68).

- (68) Ni- k_i zu- ri_j lore-a- k_k ekarri d- i_k -zki -zu $_j$ - t_i .
 I-ERG you-DAT flower-D.ABS-PL brought L-PRS.3.SG -PL -CL.DAT.2.SG -CL.ERG.1.SG
 'I brought you (the) flowers.'

Adopting a version of the big-DP analysis (Torrego 1992, Uriagereka 1995, Cecchetto 2000, Belletti 2005, Franks and Rudin 2005, van Craenenbroeck and van Koppen 2008), Arregi and Nevins (2012) account for cliticization (that is, formation of the auxiliary), and clitic doubling in Basque. They analyze each clitic as being generated in the specifier of its argument, as in (69).

- (69) The structure of big-DPs (Arregi & Nevins 2012: 53)



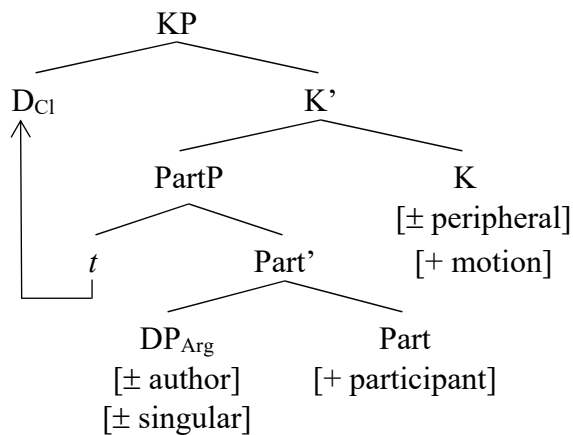
They argue that K hosts case features, containing the combinations of [\pm motion, \pm peripheral] found in (70), which Arregi and Nevins (2012: 7) adopt from Calabrese (2008).

- (70) a. [+motion, –peripheral] = ergative
 b. [+motion, +peripheral] = dative
 c. [–motion, –peripheral] = absolutive

The head Part has a [+ participant] feature, and it has the argument as its complement. The argument, which can be covert (*pro*), hosts the rest of the ϕ -features. The clitic is originally generated in the specifier of PartP, and it moves to the specifier of KP. From that position, the clitic agrees in case and ϕ -features with the argument, and then raises to a clitic host: a [+fin]-bearing head (T or C in Basque).

Not all arguments have both PartP and KP. Only first- and second-person arguments contain a [+participant] feature and thus have a PartP. Ergative and dative cases are syntactic cases, as opposed to absolutive, which they see as a postsyntactic default. Therefore, these are the only cases that have a KP. For example, a participant (first or second) argument in dative or ergative case would have the structure in (71).

- (71) Participant arguments with ergative or dative case (Arregi & Nevins 2012: 54)




Absolutive arguments lack KP, and the Case features [– peripheral, – motion] are provided in the postsyntactic component. In participant absolutive arguments, the clitic is generated in PartP and later moves to a clitic host. Third-person arguments lack PartP, so the argument DP hosts a [– participant] feature. Third-person ergative or dative arguments only have a KP, where the clitic is generated. In turn, third-person absolutive arguments lack both of those projections, which entails that they pattern differently with respect to cliticization:

(72) Basque has no third-person absolutive clitics.

(Arregi & Nevins 2012: 55)

Third-person absolutive arguments are generated as DPs, without additional functional projections.

(73) DP

pro

2.3.3. Licensing conditions of null arguments in Spanish

Arregi and Nevins's (2012) analysis finds an interesting parallelism in the B-Spanish clitic system, as illustrated below. Third-person accusative direct objects are the only objects that can be omitted in B-Spanish. First, observe that first- and second-person clitics can never be deleted, regardless of function, as shown in (74).

- (74) a. *(Te) envié flores por tu cumpleaños.
IO sent.1SG flowers for your birthday
'I sent you flowers for your birthday.'
- b. *(Nos) vieron por la calle.
DO saw.3PL around the street
'They saw us in the street.'

Third-person dative clitics with a referential meaning cannot be deleted either: (75a) shows this for an animate IO, (75b) for an inanimate IO, and (75c) for a DO *le*ista *le*.

- (75) a. *(Le) envié flores por su cumpleaños.
IO sent.1.SG flowers for his/her birthday
'I sent him/her flowers for his/her birthday.'
- b. *(Le) puse decoraciones. (le = a-l árbol)
IO put.1.SG decorations le = to-the tree
'I put decorations on it.'

- c. *(Les) vieron por la calle.
 DO saw.3.PL around the street
 ‘They saw them in the street.’

On the other hand, third-person accusative clitics are the only ones that can be null. These are objects which do not show case marking in the full DP; they do not show DOM. This fact offers support for the argument that inanimate DOs have no KP: if we take *a* to be the reflection of case, and inanimate DOs show no *a*-marking, it follows that they have no KP. And since these are 3rd-person objects, they do not have a participant feature. For my analysis here and later in Chapter 4, I adopt KP for Basque dative (and ergative) arguments following Arregi and Nevins (2012), and I also assume this phrase is present in DOM-ed objects in Spanish, following López (2012). As for PartP, it will not be crucial for my analysis to specify whether participant arguments have a PartP projection, or whether this is simply a feature in the argument. Specifically for Spanish, since I assume that KP is projected for marked objects, and participant objects (i.e. first and second persons) are always marked, participant objects will always have a projection where the clitic can be generated (KP). The necessary presence of KP in participant arguments already captures the fact illustrated in (74) that participant arguments always require a clitic. Therefore, the nature of Part as a phrase or a feature becomes irrelevant with regards to clitic generation in Spanish, and I choose to present it as a feature in (76a) below for the sake of simplicity. So far, then, we can propose the following structure for case-marked (IO dative or DOM) objects in B-Spanish:

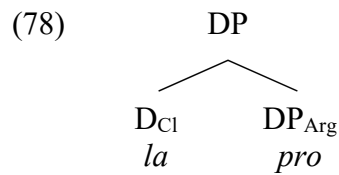
- (76) a. Case-marked participant object b. Case-marked non-participant object



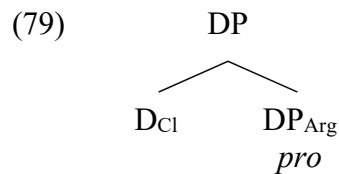
As for third-person unmarked objects, recall that Arregi and Nevins (2012) propose for Basque that these have no projection for a clitic. But if third-person unmarked objects do not have a clitic, sentences like (77), with an overt clitic, would not be available in B-Spanish.

- (77) La he visto.
 DO have.1.SG seen
 ‘I have seen it.’

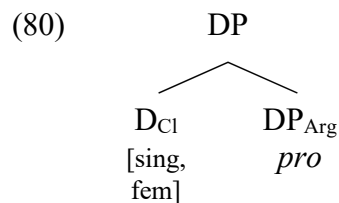
The sentence in (77) is an example of object pronominalization in (NB-)Spanish, where a DP is replaced by a clitic. Since this clitic still lacks participant and case features, I follow the ‘big DP’ proposals that include the clitic under the same DP node as the doubled element (Torrego 1998, Uriagereka 1995, Nevins 2011, Roberts 2010, Kramer 2014, amongst others), as in (78).



And if third-person unmarked objects in Spanish have that additional DP layer where a clitic can be generated, I propose that this is so in all cases. That is, the structure of the null object in B-Spanish is as in (79).

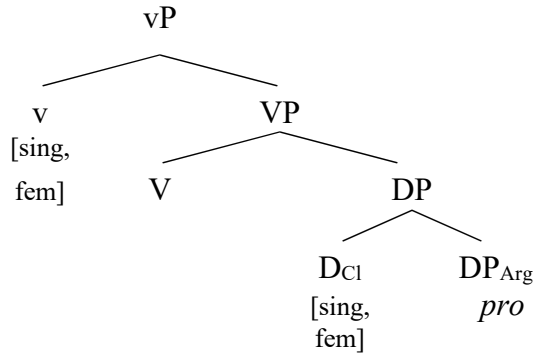


Remember that in DM, List 1 consists of only roots and features. Therefore, in the syntax, the structures in (78) and (79) contain the same features.



In both cases, *v* agrees with the D_{Cl} head to value its ϕ -features. Recall that I assume lack of case marking to reflect lack of case altogether, which means that there is no case feature that gets checked as a result of Agree.

(81)



2.3.4. B-Spanish null objects in the ILex model

The difference in the realization of (80) as /la/ or as null, then, results from different VIRs that make reference to the context in which (80) is found. I follow much previous work in assuming that null arguments need licensing by functional projections (Chomsky 1981 et seq.): specifically, null subjects are licensed by T (e.g. Holmberg 2005, Frascarelli 2007, Roberts 2010) and null objects, by v (Rizzi 1986, Roberts 2010). Because DOs are licensed by v, I argue that bilingual speakers of Basque and Spanish have two different types, or flavors, of v. And following work where the licensing of null arguments is dependent on the presence of a D-feature in the relevant probe (Holmberg 2005, 2010, Roberts 2010, Maddox 2019), I propose that Basque and B-Spanish v have a D-feature which the Spanish v does not have (Vázquez-Lozares 2022). I propose that null objects in B-Spanish result from the VIR in (82) in the context of $v_{[D]}$, since all gender and number combinations can be null.

(82) $\emptyset \leftrightarrow D_{Cl} \mid [v_{[D]} \text{ ____}]$

$v_{[D]}$, then, licenses a null element without phonetic realization. Meanwhile, in the context of v, the possible VIRs for D_{Cl} are as in (83):

(83) D_{Cl}
/la/ \leftrightarrow [sing, fem] \mid [v ____]
/lo/ \leftrightarrow [sing, masc] \mid [v ____]
/las/ \leftrightarrow [pl, fem] \mid [v ____]
/los/ \leftrightarrow [pl, masc] \mid [v ____]

The fact that B-Spanish speakers have access to both types of *v*s can be accounted for under López's (2020) 1Lex model, since there is a single List 1 where both of them are, and bilingual speakers can choose between one or the other. I propose that the choice of one over the other is related to lexical access. In studies of lexical access, words are assumed to have a specific resting activation level. A more frequent word has a higher resting activation level than an infrequent word (see Morton 1969 for the original proposal that words are accessed by being activated at a certain threshold, and Morton 1979, and Morton and Patterson 1998 for revisions to the model). With the functional heads *v* and *v*_[D], since their difference is featural, I propose that the difference in their probability and, thus, in their resting activation level, comes from language dominance. Words need to reach a specific threshold to be accessed, which means that a word with a higher activation level is more readily accessible. Therefore, the expectation is that bilingual speakers who are dominant in Basque select *v*_[D] more frequently than Spanish-dominant speakers, because *v*_[D] has a higher probability weight for the former group. The Acceptability Judgment Task discussed in Chapter 3 will help to shed light on this expectation and allow me to make it more concrete.

2.4. Null objects with and without language contact

In this section I present some support in favor of contact effects from Basque to Spanish. First, I comment on the similarity of B-Spanish with the Spanish in contact with Quechua, which also has null objects. Then, I discuss other possible explanations of how null objects come to be licensed in B-Spanish: 1) since NB-Spanish already allows arbitrary null objects, contact with Basque causes the restriction on null objects to become laxer and to allow referential null objects too (Landa 1995); 2) referential null objects arise cyclically in monolingual varieties of Spanish as a result of the clitic *D* being reanalyzed as part of the verb (Maddox 2019), and contact with Basque accelerates the cycle; or, the analysis pursued in this chapter, 3) Basque verbs contain a specific feature that licenses null objects and that is borrowed into Spanish by B-Spanish speakers.

Firstly, a piece of support in favor of contact effects comes from Spanish in contact with Quechua. This variety shows parallelisms with B-Spanish in terms of allowing referential null

objects. Both Quechua and Basque allow referential null objects, as illustrated in (84) for Basque and in (85) for Central Quechua, from Sánchez (1999).

(84) Ez n- u- e- n ikusi.
 Not CL.ERG.1.SG-PST.3.SG-HAVE-CPST⁶ see
 ‘I didn’t see her/him/it.’

(85) Manam rikura- ø- ni- chu (Sánchez 1999: 234)
 not see.1.SG- ø- 1.SG- NEG
 ‘I did not see her/any.’

Spanish in contact with Quechua allows null objects too, as illustrated in (86).

(86) A veces en la noche dejo su quacker ya preparado, en la
 At times in the night leave.1.SG their oatmeal already prepared in the
 mañana ø calientan y ø toman. (Escobar 1990: 89)
 morning DO heat.up.1.PL and DO take.1.PL
 ‘Sometimes I leave their oatmeal already prepared at night and in the morning they heat it
 up and they eat it.’

This phenomenon is not attested in the Spanish in contact with other languages that do not allow referential null objects such as Catalan, Galician, English. Therefore, it follows to argue that the possibility to have referential null objects in B-Spanish (as well as in Spanish in contact with Quechua) is related to contact with the other language and that there are parallelisms in the verbal agreement of the languages in contact. In the case of B-Spanish, several studies have argued and shown that the direction of contact effects is from Basque to Spanish (Mendieta-Lombardo and Molina 1995, Eguia 2002, Urrutia Cárdenas 2003, Gómez-Seibane 2011, 2012, Sainz-Maza Lecanda & Schwenter 2017, a.o.).

Specifically, Landa (1995) proposes that the effect from Basque to Spanish is of the restructuring type: B-Spanish has taken a construction that was already available for arbitrary DOs and has

⁶ CPST = past tense complementizer (from Arregi and Nevins 2012).

extended it to referential DOs by making the restrictions on null objects laxer. Remember that arbitrary null objects are grammatical in all varieties of Spanish, as illustrated in (87) (= (22)).

- (87) A: Quiero comprar unos pastelitos_i para la fiesta.
 Want.1.SG buy some cakes for the party
 B: Ya ø_i compraré yo.
 Already DO buy.will.1.SG I
 ‘–I want to buy some cakes for the party. –I will buy some myself.’

This is indeed a possibility, because Basque does not distinguish between arbitrary and referential objects in terms of their encoding on verbal morphology, as shown in (88) and (89).

- (88) Pasteltxo batzuk erosi nahi **d-it -u -t.**
 Cake some buy want L -3.PL -PRS.3 -CL.ERG.1.SG
 ‘I want to buy some cakes.’

- (89) Eskatu zen -izki -da -n pasteltxo-ak ekarri
 Asked CL.ERG.2.SG-3.PL -CL.DAT.1.SG -CPST cake-ABS.DEF.PL brought
d-it -u -t.
 L -3.PL -PRS.3 -CL.ERG.1.SG
 ‘I brought the cakes that you asked me for.’

Since the arbitrary / referential distinction does not exist in Basque, it is possible that B-Spanish speakers eliminate the distinction too, simplifying the grammar.

Another possible explanation is found within the confines of non-contact Spanish grammar. First, observe that null objects are licensed in certain constructions in all varieties of Spanish, when the referent is recoverable from the context (Masullo 2003).

Context: two persons leaving a room, one says to the other:

- (90) Apaga ø [i.e. la luz, la televisión, etc.] (Alamillo & Schwenter 2007)
 Turn.off DO [the light, the television, etc.]
 ‘Turn it off.’

Monolingual varieties may also allow null DOs with propositional antecedents: Alamillo & Schwenter (2007) find that, in Madrid, these null DOs are restricted to expressions like *no sé* ‘I don’t know’ and to non-declarative sentences; in Mexico City, null DOs are not restricted to those contexts but they are dependent on other factors such as the presence of *ya* ‘already’, the presence of modal adverbials, and the person (1st and 2nd vs. 3rd), amongst others. More relevantly, there are other monolingual varieties, such as Rioplatense Spanish, which have referential null DOs across the board (Masullo 2003, Schwenter 2006, Maddox 2019).

Maddox (2019) proposes that referential null DOs are licensed in Rioplatense by a D-feature in *v*, in the same way that Holmberg (2005, 2010) and Holmberg et al. (2009) propose that null subjects are licensed by a D-feature in T. Maddox builds upon van Gelderen’s (2011) Object Agreement Cycle, and he argues that the D feature is present in *v* as a result of the reanalysis of clitics that is part of the Cycle. Supported by data from Clitic Left Dislocations, accusative clitic doubling, and referential null objects, he argues for the stages in (91), each represented by the variety of Spanish listed on the right.

- (91) Stage (a): clitic = DP Old Spanish
 Stage (b): clitic = DP/D-*v* Modern “Standard” Spanish
 Stage (c): clitic = *v* Rioplatense Spanish

At stage (a) the pronoun is a full DP that merges as a complement. At stage (b) the DP merges as a complement and moves to Spec,*v*. After m-merger, the DP and *v* form a complex head which results in D being realized as a clitic in *v*. At stage (c), the clitic D is reanalyzed as a feature on *v*, and this is the stage at which we can find referential null objects (Maddox 2019: 173).

While I argue that the availability of null objects in B-Spanish results from contact with Basque, they are also allowed within monolingual varieties of Spanish, arising at a specific stage in a historical cycle. NB-Spanish has not reached that stage, but B-Spanish has. Thus, in the case of B-Spanish, it could alternatively be argued that contact with Basque has simply accelerated a natural process, i.e. the D feature in *v* that licenses null objects has resulted from the Object Agreement Cycle developed in Maddox (2019).

In any case, B-Spanish bilinguals allow both overt and null objects, which indicates that both *v* and *v*_[D] are available in their lexicon. Since the availability of null objects in B-Spanish is

affected by contact with Basque, an analysis under the 1Lex model can better capture the B-Spanish null object phenomenon. By using the $v_{[D]}$ from “Basque”, B-Spanish speakers maximize the “common ground”⁷ (Filipović and Hawkins 2019: 1229) of both languages such that the structure in B-Spanish aligns with the structure in Basque.

2.5. Conclusion

In this chapter, I have argued for an analysis of referential null DOs in B-Spanish which depends on the case of the DO: only unmarked (or caseless) objects can be null. While typical null objects in B-Spanish are inanimates, I showed that, in fact, it is objects that do not get DOM nor *leísmo* that can be null. I supported this claim with data from ditransitive/PCC contexts and from contexts with marked inanimates. I argued that null objects are instances of *pro* with a D_{CI} that does not get phonetic realization in Vocabulary Insertion. While DOM arguments have a KP projection above the argument, 3rd-person caseless arguments do not. 3rd-person accusative clitics in NB-Spanish are generated in the specifier of DP, but not associated to K. Because in the syntax words are simply a combination of features within DM, the structure of the object in B-Spanish and NB-Spanish is the same, with a D_{CI} head in the specifier of DP. As for the licensing of null objects in B-Spanish, I argued that it is due to contact from Basque. Assuming that Basque *v* has a D-feature that licenses null objects, because of the integrated nature of the bilingual grammar within the 1Lex model, this $v_{[D]}$ is available to B-Spanish speakers for use in Spanish too. I proposed that in the context of $v_{[D]}$, a third-person caseless D_{CI} is realized as zero. Meanwhile, in the context of the canonically Spanish *v*, for the same D_{CI} , *lo*, *la*, *los*, or *las* will be inserted, depending on gender and number.

⁷ Filipović and Hawkins (2019) propose five general principles that underlie bilingual speakers’ language behavior, amongst which we find maximizing common ground. This means that if the two languages share a given construction, this shared construction will be used more frequently in both languages, even if that means using a structure that is not the preferred or majority one in one of the languages (i.e. one of the two languages might have a more common structure to express the same). In this case, monolingual Spanish has overt clitics *lo*, *la*, which are more common than null objects. However, a bilingual Basque-Spanish speaker prefers the null object option because it is common to both languages.

CHAPTER 3: NULL OBJECTS ACCEPTABILITY JUDGMENT TASK

3.1. Introduction

In Chapter 2, I developed an analysis of null objects which assumes that they are the result of language contact effects in Basque-Spanish. In my analysis, I propose that $v_{[D]}$, which is originally from Basque and which licenses null objects, is available to use in Spanish thanks to the integrated lexicon that is assumed in the 1Lex model. In order to add support to my proposal that contact with Basque affects the acceptability of null objects in Spanish, I administered an Acceptability Judgment Task (AJT) to different types of Spanish/Basque bilinguals. This chapter discusses the task and its results.

I created an aural AJT which was completed by Basque-dominant, Spanish-dominant, and balanced bilingual speakers from an intense-contact region, and Spanish-dominant speakers from a low-contact region. Recall that the distinction between intense and low contact is based on societal language use. As presented in chapter 1, in Gernika, the intense-contact area, half of the population's mother tongue is Basque and about a third of the population's is Spanish. As for the language spoken at home, 40% of the population speaks Basque, and another 40% speaks Spanish. Meanwhile, in the low-contact area of Bilbao, the majority of the population (~85%) have Spanish as their mother tongue and speak Spanish at home. Only 5% reported Basque as their mother tongue in Bilbao, and 3% reported using it at home. Therefore, in Gernika, both Basque and Spanish have a strong presence, whereas in Bilbao, the presence of Basque is rather small. Language dominance is measured by the Bilingual Language Profile questionnaire and used to distinguish between Basque-dominant, balanced bilinguals, and Spanish-dominant speakers (see section 3.2.3.2). By creating a four-way distinction crossing individual and societal bilingualism, the results will tell us whether null objects are solely the result of language dominance, or whether the feature is present regionally, regardless of individual language profiles. If acceptability of null objects is higher only among Basque-dominant speakers, this would indicate an effect of language dominance. In contrast, if acceptability is higher among groups from the intense-contact region, this would point to an effect of societal bilingualism.

Inanimacy and definiteness of the antecedent have previously been found to be key features in favoring null objects (Landa 1995, Landa & Franco 2000, Camus Bergareche & Gómez Seibane 2015, amongst others). Because of that, the tokens in the AJT crossed the factors of animacy and definiteness. Additionally, the AJT was aural, for two reasons: first, null objects are most common in spoken, informal speech, and not in written form, and second, in order to avoid prescriptivism as much as possible. By presenting spoken tokens recorded by speakers from the Basque Country, the goal was to provide examples that were as realistic as possible.

Many previous studies on B-Spanish null objects have mainly focused on (1) determining the semantic factors of null objects; and (2) studying the rate of null objects (v. overt clitics v. lexical objects) in naturalistic data and comparing it to the rates of null objects in monolingual speakers. The experimental group in most studies has included speakers from an old generation with a low level of education (e.g., Urrutia Cárdenas & Fernández-Ulloa 1997, Urrutia Cárdenas 2003, Gómez Seibane 2011, Sainz-Maza Lecanda & Schwenter 2017). Furthermore, systematic comparisons have only been made between speakers coming from a Basque-Spanish intense contact situation and speakers from monolingual regions. The few studies that have carried out AJTs (e.g. Zinkunegi-Uzkudun 2010) have done so in written form, with a small sample of participants, and with a limited set of tokens. My study aims to provide a more thorough representation of the acceptability ascribed to null objects by different types of bilingual groups.

The chapter is organized as follows: in section 3.2 I discuss the methodology; in section 3.3 I motivate and lay out my predictions about the results; in section 3.4 I present the results, by reporting descriptive and inferential statistics; in section 3.5 I discuss the implications of the results as they pertain to dialectal differences, and their implications for the analysis of null objects proposed in chapter 2; in section 3.6 I conclude the chapter.

3.2. Methodology

3.2.1. Participants

A total of 112 participants took part in the study: 66 participants from Gernika, 26 participants from Bilbao, and 20 participants from Madrid. Due to the goals of this dissertation in

determining the effects of language dominance in Spanish/Basque contact phenomena, the Bilingual Language Profile (BLP) language questionnaire was used to measure language dominance and divide groups based on Spanish or Basque language dominance. See section 3.2.3.2 for an overview of the BLP questionnaire, and 3.2.2.2 for an explanation of dominance cutoff points.

From the 26 participants from Bilbao, 22 participants were Spanish-dominant (henceforth, BISP group). One participant was Basque-dominant, and three participants were balanced bilinguals. Because of the small, unrepresentative number of non-Spanish-dominant speakers from the Bilbao area, these four participants were removed from the analyses (see section 3.2.2.2). In Bilbao, Spanish-dominant bilinguals are the most common bilingual profile, given that most speakers learn Standard Basque at school and use Spanish as their everyday language.

Table 2. *Participant demographics by group.*

GROUP		GEBQ	GEBB	GESP	BISP	MAD
NUMBER OF PARTICIPANTS		30	18	18	22	20
GENDER	male	12	6	11	14	7
	female	18	12	7	8	10
	other					2
EDUCATION	< high school	2	1	1	2	
	high school	2			1	2
	trade school		3	2	3	
	some years college	5	4	2	1	4
	college	16	7	9	13	9
	master's	5	3	4	1	5
	doctorate				1	
AGE	mean	27.37	29.12	31.5	26.1	25.05
	median	23	26.5	24.5	26	25
	min	19	20	18	21	18
	max	59	51	62	49	36

Participants from Gernika were split into three groups, based on their results in the BLP questionnaire: a Basque-dominant bilingual group (GEBQ), a balanced bilingual group (GEBB), and a Spanish-dominant bilingual group (GESP).

Finally, the group from Madrid (MAD) served as the control monolingual Spanish group. This breakdown resulted in the distribution of participants per group shown in Table 2.

3.2.2. Procedure

3.2.2.1. Recruitment and task completion

Participants were recruited through friend-to-friend method or snow-ball sampling, and they were contacted through WhatsApp messaging or email. They were sent a link to a questionnaire in Qualtrics, which contained both the Spanish experimental task discussed in this chapter and a Basque experimental task discussed in Chapter 5. The Qualtrics questionnaire also included a language background questionnaire, three questions about codeswitching habits, and, in the BISP group, a Basque proficiency test (see section 3.2.3 for discussion of materials).

Participants completed everything in one session of about 30 minutes for experimental groups, and about 15 minutes for the control group. They completed it at a location of their choice, on their phone or computer. To counterbalance the order of the tasks, approximately half of the participants in each of the experimental groups completed the Spanish task first, and the other half completed the Basque task first. Before each task, participants completed half of the Bilingual Language Profile (BLP) (Birdsong, Gertken & Amengual, online) questionnaire in the language of the upcoming task, to diminish effects of language mode (Grosjean 2008). Control participants completed the full language background questionnaire before the Spanish AJT.

At the start of each AJT, there were instructions and three practice questions. In the AJT, participants were presented with a screen with a single audio player. After the participants provided a rating, the screen advanced automatically to the next token. At the end of the session, participants in the BISP group completed a proficiency test. Experimental participants (who also completed a Basque Acceptability Judgment Task) were compensated with 8€ sent through electronic transfer and control participants were compensated with 3€.

3.2.2.2. Data processing

Since the BLP was implemented on Qualtrics rather than on the original Google forms provided on the website, the answers for each participant were transferred from the spreadsheets Generated by Qualtrics to individual Google forms, in order to obtain the BLP scores. The results from the Google forms are automatically sent to an auto-generated spreadsheet on Google Drive that contains a summary of each participant's response. The scores were retrieved from this auto-generated spreadsheet. Additionally, for the BISP group, the answers to the proficiency test (20 questions) were manually reviewed: a correct answer was computed as a 1 and an incorrect answer was computed as a 0, such that the maximum score was 20. The responses to the codeswitching questions were also converted to a score out of 10, by calculating the mean of the three questions. In this score, 0 indicated no codeswitching, and 10 indicated that a participant codeswitched all the time and that they found codeswitching more natural than staying in one language only. Data cleaning at this stage involved removing the original BLP, codeswitching, and proficiency test answers and replacing each of those categories with a single score column.

After converting the Qualtrics default wide format to long format by using R's `pivot_longer` function from the `tidyr` package, the target tokens were coded for object type and animacy.

The next step in the data cleaning involved consideration of the grouping of experimental participants according to language dominance. In the BLP, a score near zero indicated balanced bilingualism. As stated by Birdsong (2015: 95), "balanced bilingualism presents familiar concerns for operationalization and categorization, in particular how to motivate cut-offs in dominance indices for assigning participants to groups of balanced and non-balanced bilinguals." Different approaches have been used to distinguish balanced from non-balanced bilingualism (see Birdsong 2015 for a summary of some of those approaches and Treffers-Daller and Korybski 2015 for discussion). For this study, a cutoff had to be established around the score of zero, since this is the midpoint that indicates balanced bilingualism. In order to do that, first, a participant from the Bilbao group who was Basque-dominant was removed, because no such profile is included in this study. Then, participants were pre-divided into Spanish- or Basque-dominant speakers, based on whether their BLP score was positive or negative, respectively. The cutoff was made at one standard deviation away from the mean in the the negative direction for

the Spanish-dominant groups and in the positive direction for the Basque-dominant group: the standard deviation was either subtracted (Spanish-dominant) or added (Basque-dominant) from the mean. Table 3 shows the means, standard deviations, and the resulting cutoff points.

Table 3. *Mean, standard deviation and cutoff point of BLP scores by language dominance.*

	MEAN BLP	SD BLP	CUTOFF
SPANISH-DOMINANT	66.498	42.295	24.203
BASQUE-DOMINANT	-74.281	43.036	-31.245

These results, with a lower mean and a smaller cutoff in the Spanish-dominant group, are consistent with what was observed for the individual BLP modules, especially the fourth module. In the fourth module, which addresses language attitudes, many participants had a higher score in the Basque portion than in the Spanish, even participants that scored as Spanish-dominant globally. This module had questions such as ‘I identify with a Basque / Spanish culture’, ‘it is important for me that people think that I am a native speaker of Basque / Spanish’. These questions were overall rated highly for Basque, which reflects the idea that, regardless of language use, most participants had a stronger feeling of Basque identity.

Following these cutoffs, participants from Gernika that scored between -31.245 and 24.203 in the BLP were considered balanced bilinguals. Three participants from the Bilbao group that fell within the cutoff points were removed from the study because of the lack of representation of such a small group. The resulting number of participants and the descriptive statistics for the BLP results among those participants are included in Table 4 below.

Table 4. *Descriptive statistics of the BLP results by group.*

GROUP		GEBQ	GEBB	GESP	BISP
NO. OF PARTICIPANTS		30	18	18	22
BLP	mean	-90.62	0.87	87.48	75.75
	med	-87.45	-1.62	71.66	75.2
	min	-137.13	-31.06	28.16	33.24
	max	-31.51	24.61	179.35	113.52

3.2.3. Materials

The bilingual participants in the experimental groups completed the Bilingual Language Profile (BLP) questionnaire from the university of Texas Austin (Birdsong, Gertken & Amengual, online), an AJT in Spanish, an AJT in Basque, and the BISP group completed a Basque proficiency test. The Spanish AJT, which is the focus of this chapter, studied null objects. The Basque AJT tested DOM, and it will be discussed in Chapter 5.

The control group completed a different language background questionnaire which did not focus on bilingualism, and the Spanish AJT.

3.2.3.1. Spanish null objects Acceptability Judgment Task

The AJT was aural, and all the tokens had the structure of a dialogue: the first speaker said or asked something, and the second speaker replied to it. Participants were asked to rate the acceptability of the second speaker's response on a scale from 1 to 5, where 1 indicated "this sounds weird/unnatural to me" and 5 indicated "this sounds natural to me". Throughout the task, the endpoints were labeled as '1-*raro*' ('weird'), and '5-*natural*' ('natural').

The task had a 2x2 design crossing the factors of animacy and object type, thus resulting in four conditions: human-overt, human-null, inanimate-overt, and inanimate-null. While the analysis presented in Chapter 2 argues for a distinction between DOM-ed and unmarked objects regardless of animacy, the need to create tokens minimally different within each token set causes the DOM/unmarked distinction to be confounded with animate/inanimate. Therefore, the results of the AJT will not shed light on the case issue discussed in Chapter 2.

A sample token set is illustrated in (92) and (93) where the (a) examples provide the first sentence in the dialogue and the (b) and (c) examples show the conditions of null and overt, respectively.

(92) *Inanimate object*

- a. ¿Ya has visto la peli?
Already have.2.SG seen the movie
'Have you seen the movie yet?'
- b. No, todavía no \emptyset he visto. [null]
No yet not DO have.1.SG seen
'No, I haven't seen it yet.'
- c. No, todavía no **la** he visto. [overt]
No yet not DO.ACC have.1.SG seen

(93) *Animate object*

- a. ¿Ya has visto a la camarera?
Already have.2.SG seen DOM the waitress
'Have you seen the waitress yet?'
- b. No, todavía no \emptyset he visto. [null]
No yet not DO have.1.SG seen
'No, I haven't seen her yet.'
- c. No, todavía no **le** he visto. [overt]
No yet not DO.DAT have.1.SG seen

The two two-level factors result in four conditions, so four lists were created to avoid using more than one token from each token set. 24 token sets were created, which can be found in Appendix A. In each list, there were six tokens per condition from different token sets: for example, in list 1, the inanimate_null condition was taken from token sets 1-6, the inanimate_overt from token sets 7-12, the animate_null from 13-18 and the animate_overt from 19-24. Those tokens did not appear in any other list. In lists 2, 3, and 4, the same distribution was followed but taking tokens that had not been selected for another list (e.g. inanimate_null from 7-12, inanimate_overt from 13-18, and so on), such that each token set showed up in a different condition in each list. Each list had the same amount of filler tokens ($n=24$) as of target tokens. Filler tokens followed the same dialogue format, but they tested a different clitic phenomenon: *laísmo*, a morphological phenomenon through which feminine IOs are coded in the feminine accusative form of the clitic *la*, instead of the canonical dative *le*. Blocking was used to control for the order of presentation

of the tokens, to prevent several target tokens of the same category from appearing too close together and to ensure an even distribution of target and filler tokens.

Animate and inanimate nouns within each token set were checked for frequency using *Corpus del Español*⁸ frequency tool. This corpus allows to specify the country of interest, in this case Spain, to get a number indicating the amount of times the given word is found throughout the texts. The animate and inanimate nouns were checked manually and paired together within a token set according to similarity of results.

I also controlled for the semantic characteristics of the antecedents and for verb transitivity, such that antecedents were definite and specific, which are the prerequisite features for null objects in B-Spanish. Verbs were transitive, avoiding ditransitive constructions in the target sentences (the responses), since these constructions have been reported to favor null objects in B-Spanish (Camus Bergareche and Gómez Seibane 2015, Sainz-Maza Lecanda 2014).

3.2.3.2. Language background questionnaire

For this study, the experimental groups completed the Bilingual Language Profile questionnaire (Birdsong, Gertken & Amengual, online). The BLP is “an instrument for assessing language dominance through self-reports” which consists of four categories of questions that evaluate the participant’s language history, use, proficiency, and attitudes. The results of the BLP provide a score between -218 and +218 indicating dominance in one language or the other; in this study, a negative score meant Basque-dominance and a positive score meant Spanish-dominance. A score around 0 indicated balanced bilingualism. The BLP is available for 15 language combinations, and it is backed by many researchers in bilingualism (see “Publications” section in the Bilingual Language Profile website (Birdsong, Gertken & Amengual, online) for a list of peer-reviewed publications that use the BLP). The BLP was used in this study because it provided a proven method to determine language dominance and because of the statistical advantages of receiving a numeric result for each participant’s profile. A copy of the BLP is included in Appendix B.

⁸ Corpus del Español, “frequency” tab <<https://www.corpusdelespanol.org/web-dial/>>

Additionally, based on the intense contact situation of Basque and Spanish in Gernika, gathering some information about codeswitching was considered relevant for the study. Participants were asked to answer the following questions related to codeswitching in a scale from 0 to 6.

- (94)
- a. I switch between Basque and Spanish... 0 = never / 6 = constantly
 - b. It is easy for me to switch between Basque and Spanish within the same sentence.
0 = I don't agree / 6 = I agree
 - c. It is more natural for me to codeswitch, than to speak only Basque or only Spanish. 0 = I don't agree / 6 = I agree

The control monolingual group completed a language background questionnaire which was not focused on bilingualism. Instead, the language questionnaire included basic questions about the language used the majority of the time, language of education, the parents' mother tongue, and so on (see Appendix C).

3.2.3.3. Proficiency test

A Basque proficiency test was administered to the Standard Basque speakers from the Bilbao area. Participants from Gernika did not take a proficiency test because there is no proficiency test available for Gernika Basque. Participants from Gernika could have taken the same test as standard Basque speakers, but this would have had misleading results in native Gernika Basque speakers who are less proficient in the standard variety. Furthermore, since the Basque AJT (see Chapter 5) for the Gernika groups measured acceptability of Differential Object Marking in Gernika Basque, measuring these speakers' proficiency in standard Basque was not relevant to the experimental task.

The proficiency test that standard Basque speakers completed contained 20 multiple-choice questions selected from different versions of the standardized Basque test *Euskararen Gaitasun Agiria* 'Certificate of Basque Proficiency' (see Rodríguez-Ordóñez 2015, 2016, Siebecker 2015 for the use of this same method to test Basque proficiency). The questions targeted various aspects of the Basque language from vocabulary, idioms, and fixed expressions, to conditional sentences and verbal morphology, among others. See Appendix D for the full set of questions.

The purpose of the proficiency test was to ensure at least an intermediate knowledge of Basque. In previous studies (Rodríguez-Ordóñez 2015, 2016, Siebecker 2015), the start of the intermediate level cutoff was set at 50% of correct answers. Following that cutoff, 10 correct answers out of 20 was established as a minimum requirement among Standard Basque Speakers from Bilbao. All the participants recruited met this cutoff.

3.3. Predictions

3.3.1. Previous literature

In previous studies of null objects, the highest rates of null object production have been found in Basque-dominant participant pools from a rural area. Gomez Seibane (2011), looking at data from the corpus ESESCA⁹ found that 83.1% of objects were lexical DPs, 5.6% were clitics, and 11.2% were null objects. Sainz-Maza Lecanda (ms.) found 60% null objects (23.9% overt clitic, 16.1% lexical DP¹⁰) in data from the COSER corpus (*Corpus Oral y Sonoro del Español Rural* ‘oral and sound corpus of rural Spanish’, Fernández-Ordóñez, 2015). In both studies, participants produced double or more null objects than pronominal clitics, and the population was rural, with little education, and Basque-dominant bilinguals.

Camus Bergareche and Gomez Seibane (2015) collected audiovisual data from TV, which allowed them to distinguish speakers according to region, but not according to language profile. They found a contrast between Spanish-dominant and Basque-dominant *regions*: in the former, they report an approximate 25% object omission (when considering only pronominal and null objects), whereas in the latter, they found null object rates of up to 80-90%, with a mean around 50% (Camus Bergareche and Gomez Seibane 2015: 227).

⁹ Corpus built for the project “Estudio pancrónico experimental y documental del seseo vasco” (FFI-2008-02377).

¹⁰ The lexical DP rate found by Sainz-Maza Lecanda appear lower than what is common in other studies of objects in naturalistic data. This number is nevertheless comparable to what she found for Castilian Spanish: 14.8% lexical DPs, 5.7% null objects, 79.5% overt clitics. This lower production of lexical objects both in Castilian- and in Basque-Spanish could be due to the type of conversations found in the COSER corpus (*Corpus oral y sonoro del español rural*, Fernández-Ordóñez 2015), which Sainz-Maza Lecanda used for her study.

Zinkunegi-Uzkudun (2010) collected both naturalistic data and acceptability judgments from a sample of 8 Spanish-dominant participants from the Bilbao Area, and 13 Basque-dominant participants from Azpeitia, a small town in the province of Gipuzkoa. Most participants produced some null objects in the naturalistic data: overall, in the Spanish-dominant group, 15% (21/138) of all the pronominal objects were null, and 85% of them were overt clitics (117/138); and in the Basque-dominant group, 12% (13/107) of the objects were null and 88% (94/107) were clitics. It is necessary to note here that the Basque-dominant participants from Azpeitia were all 25-26 years old, while the Spanish-dominant participants from Bilbao were 25-59 (mean=41). Ander Beristain Murillo (p.c.), a native of Azpeitia, indicates that while older generations in Azpeitia may produce null objects, their use declines with younger generations. This could explain a null object production rate by Basque-dominant speakers which is lower than that of Spanish-dominant speakers from Bilbao. In Zinkunegi-Uzkudun's (2010) Acceptability Judgment Task, only one participant from each group rated some null objects as acceptable. The rest of the participants did not rate any sentence with null objects as acceptable, even if they produced null objects in conversation.

3.3.2. Predictions for the current study

Considering the results from Gomez Seibane (2011), Sainz-Maza Lecanda (ms.), and Camus Bergareche and Gomez Seibane (2015), I expect to find a regional difference, that is, I expect that participants from Gernika will show higher acceptability rates of null objects than participants from Bilbao (BISP). I take Zinkunegi-Uzkudun's (2010) results with some caution, because the two groups in her study were, at the same time, from a very different region and with a different dominant-language. Her findings could indicate a lack of effect from language dominance, or they could reflect an effect of age, or of region. A relevant observation from her study is the fact that null objects may be rated with low acceptability, even by speakers who use them. So the expectation for the AJT results is that the ratings of null objects will be lower than overt objects, even if some of the participants could produce more null than overt objects.

If there is an effect of language dominance within the Gernika groups, I expect that Basque-dominant speakers will rate the acceptability of null objects higher than Spanish-dominant

speakers, based on the analysis I developed in Chapter 2: if null objects are made available by a feature from Basque, speakers whose dominant language is Basque are expected to access this feature more easily and frequently than Spanish-dominant speakers. On the other hand, an integrated model such as 1Lex may predict that balanced bilinguals, those speakers with equal or similar dominance in both languages, will also have high ratings for null objects since both v and $v_{[D]}$ are similarly accessible in their lexicon.

It is also worth reminding the reader that the 1Lex model is designed to account for the grammar of *deep bilinguals* (López 2020). Among deep bilinguals, there should not be sharp contrasts between the null and the overt object conditions because the grammars are integrated and codeswitching should be acceptable, even if with variation. If any of the bilingual groups shows a big difference between the ratings of null objects and overt objects, this could indicate that these are not deep bilinguals. This could be expected of the BISP group, because they learned Basque through schooling and their use of Basque in their everyday lives is limited. However, I do not pursue the idea that the 1Lex model does not apply to non-deep bilinguals. Instead, I will relate the results to the probabilistic weights that will be discussed in Chapter 6: non-deep bilinguals have lower activation of the relevant vocabulary items, and this will cause lower acceptability ratings.

3.4. Results

3.4.1. Descriptive statistics

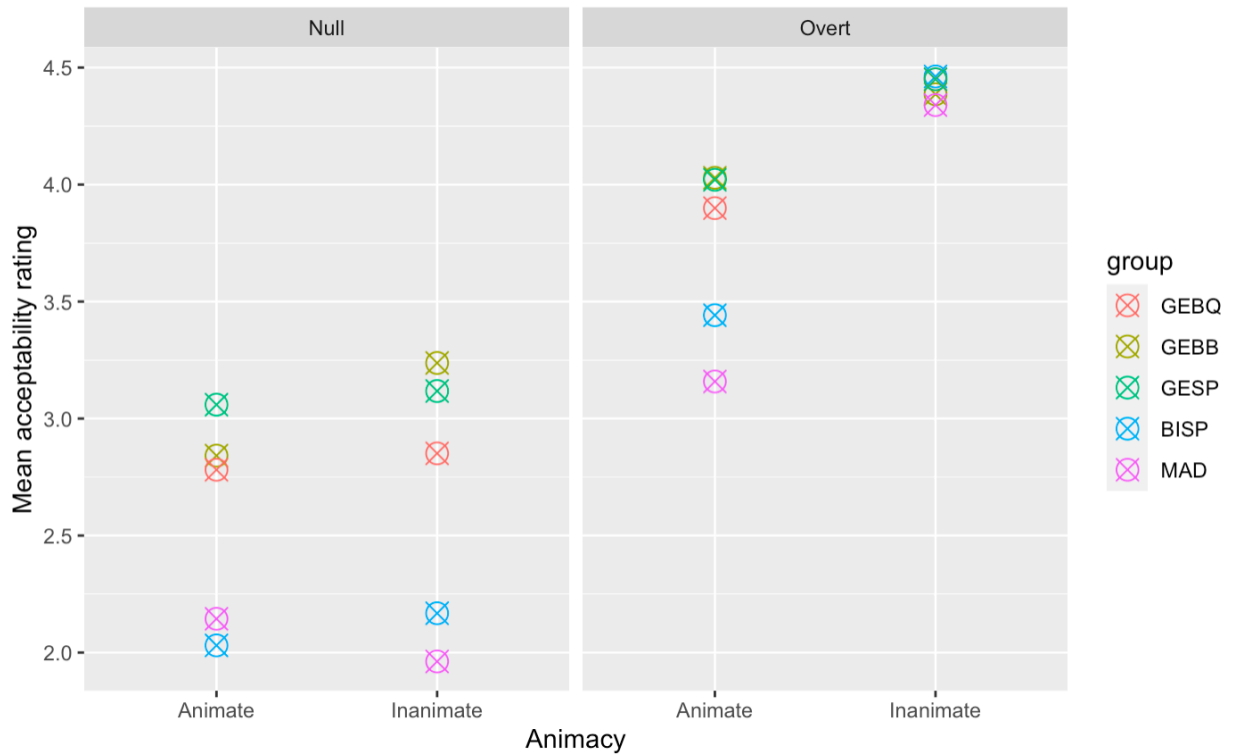
Table 5 contains descriptive statistics of the results. Recall that participants rated the tokens on a scale from 1 to 5, where 1 was the lowest rating and 5, the highest. First, the means and medians for both null conditions are higher in the three GE groups when compared to the BISP group as well as the control MAD. From the three GE groups, the GEBB group has the highest mean rating for the null inanimate condition and the GESP group for the null animate. In all groups except the control, the null animate conditions are lower than the null inanimate ones.

Table 5. *Descriptive statistics of conditions by group.*

		NULL_ANIM	NULL_INANIM	OVERT_ANIM	OVERT_INANIM
GEBO (n=30)	MEAN	2.78	2.85	3.9	4.45
	MED.	3	3	4	5
	S.D.	1.56	1.5	1.3	0.93
GEBO (n=18)	MEAN	2.84	3.24	4.03	4.39
	MED.	3	3	5	5
	S.D.	1.58	1.53	1.32	1.13
GESB (n=18)	MEAN	3.05	3.11	4.02	4.45
	MED.	3	3	4	5
	S.D.	1.57	1.41	1.12	0.96
BISP (n=22)	MEAN	2.03	2.17	3.44	4.46
	MED.	1	2	4	5
	S.D.	1.35	1.4	1.45	1.1
MAD (n=20)	MEAN	2.14	1.96	3.16	4.34
	MED.	2	1	3	5
	S.D.	1.34	1.21	1.61	1.13

Across all groups, the overt conditions are consistently rated higher than their null counterparts, with the overt inanimate condition being rated the highest. A factor that is potentially causing lower ratings for overt animate tokens compared to overt inanimates is that overt animate objects were pronominalized with *leísmo*, which is the use of the dative *le* form instead of the canonical accusative for direct objects. Generally speaking, in the Basque country, *leísmo* applies to both masculine and feminine nouns, but in Madrid it only applies to masculine nouns. Some participants may have rated some overt animate tokens lower because of *leísmo*, due to prescriptivism. Figure 1 shows the mean acceptability ratings by animacy, according to group and faceted by object type, where the trends described above can be seen with more clarity.

Figure 1. Mean acceptability ratings by animacy according to group and faceted by object type.



Bilingual participants responded to questions regarding codeswitching practices and their results were computed in a scale from 0 to 10. Table 6 below shows the descriptive statistics by group.

Table 6. Descriptive statistics of self-reported codeswitching by group (scale=0-10).

	GEBQ	GEBB	GESP	BISP
MEAN	4.38	6.45	5.13	5.09
MEDIAN	4.44	5.55	6.11	5.55
S.D.	2.43	2.66	2.51	3.36

All groups reported some degree of codeswitching. Focusing on the three Gernika groups, the GEBB group, the balanced bilinguals, have the highest mean of codeswitching scores. The GESP group follows with a lower codeswitching mean but with the highest median out of the three groups. The GEBQ had the lowest codeswitching score not only in Gernika, but among all four bilingual groups.

Figure 2. Mean acceptability rating by codeswitching rates for each group, faceted by animacy and object type.

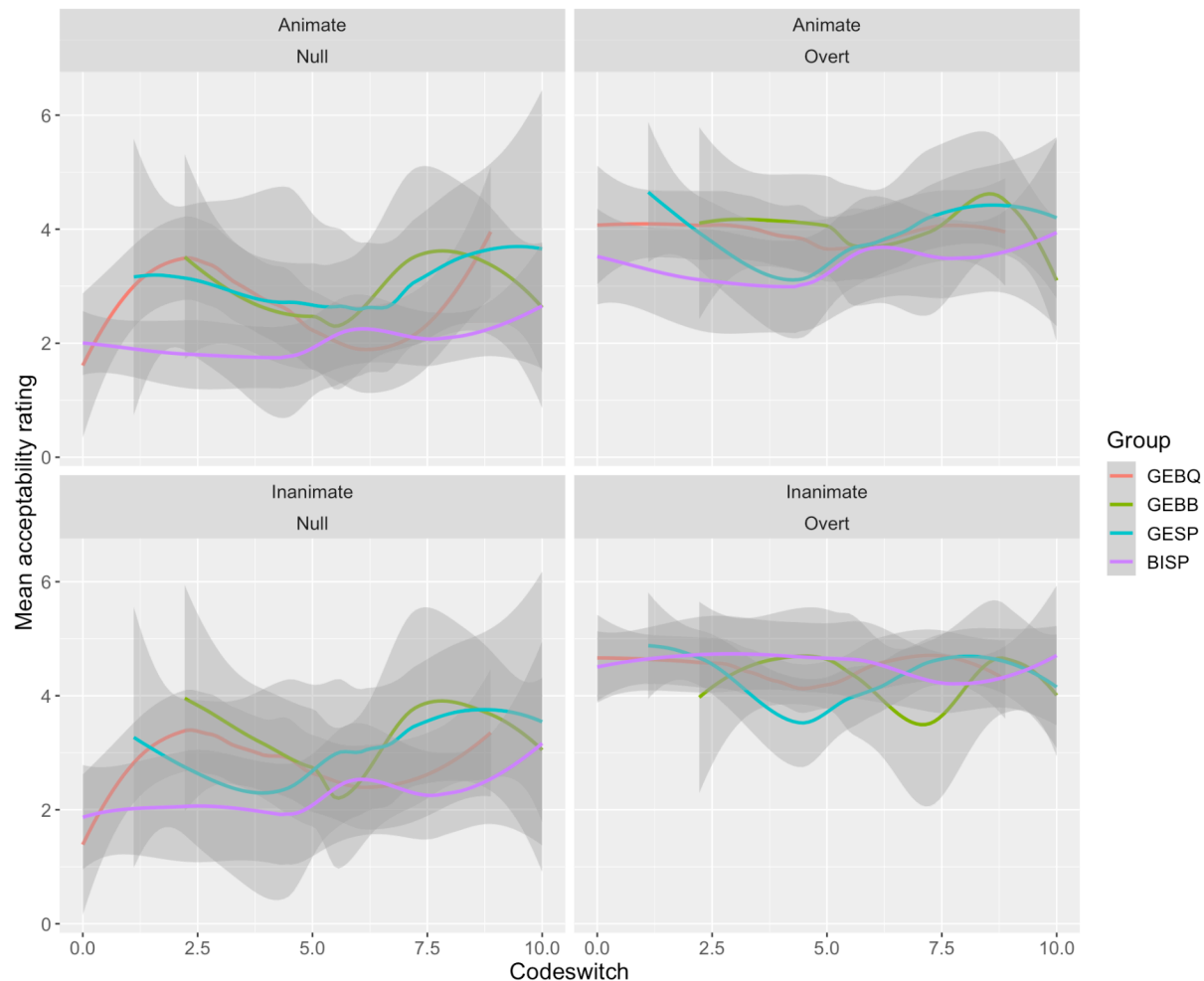


Figure 2 above illustrates the relation between self-reported codeswitching scores and mean acceptability ratings by group, animacy, and object type. First of all, this graph provides more insight into the profiles of the participants: BISP participants are distributed in the codeswitching scale from 0 to 10; GEBQ participants range from 0 to ~9; GEBB participants from ~2.5 to 10; and GESP participants, from ~1 to 10.

As for the relations between rates of self-reported codeswitching and acceptability rates, in the overt conditions, all groups pattern similarly, with only small variation in mean acceptability ratings across the codeswitching scale. In the null conditions, the GEBB and GESP groups show a similar lack of relation between the acceptability means and codeswitching; but it is noteworthy that towards the highest rates of codeswitching, both groups show a slight increase in

acceptability means. What is more, GEBQ and BISP groups show a clearer upward trend in acceptability means towards the end of the codeswitching scale.

All in all, codeswitching does not seem to affect ratings of animate objects. In contrast, it appears to have a positive effect in the rating of null objects, such that a higher rate of self-reported codeswitching results in higher ratings for null objects.

3.4.2. Inferential statistics

In order to determine whether each independent factor had a significant effect on the acceptability ratings, a cumulative link mixed model was run using the *clmm* function from the ordinal package (Christensen, 2018) in R (R Core Team, 2020). The *clmm* function is similar to the *lmer* function, but it is designed to analyze ordinal data such as the 5-point rating scale from this task.

First of all, a stepwise variable selection test was run to select the best fitted model. The selected model had rating as dependent variable, and animacy, object type, and group as fixed effects. Then the model without interactions was compared with other models with interactions by using the function *anova*. The model with a two-way interaction between object type and group, and the model with a three-way interaction between animacy, object type, and group had similarly low AIC scores. Therefore, the simpler model with the two-way interaction between object type and group was selected. Finally, participant number, token number, and list number were set as random effects, with participant nested in list, since each participant only saw one list.

The reference levels of the categorical variables in the model were inanimate, null object, and GEBQ group. The results of the model are in Table 7. The results show a significant effect of animacy, indicating that the lower rating of null animate tokens compared to their inanimate counterparts was statistically significant. There was also a significant effect of object type according to which overt objects were rated significantly higher than null objects for inanimate objects. As for group levels, the results for GEBQ versus GESP indicate that the GESP group's slightly higher rating of inanimate null objects is only marginally significant. While the estimate for GEBB is also slightly higher, this difference is not significant. Meanwhile, the differences

between GEBQ, and both BISP and MAD were statistically significant, with both BISP and MAD groups rating inanimate null objects significantly lower than GEBQ.

Table 7. *Coefficients for the results of the clmm model.*

	ESTIMATE	STD. ERR.	Z-VALUE	P-VALUE	
AnimacyAnimate	-0.855	0.195	-4.392	<0.001	***
ObjectOvert	2.297	0.240	9.576	<0.001	***
GroupGEBB	0.460	0.360	1.277	0.202	
GroupGESP	0.598	0.358	1.669	0.095	.
GroupBISP	-1.048	0.339	-3.095	0.002	**
GroupMAD	-1.072	0.359	-2.986	0.003	**
Overt*GEBB	-0.136	0.264	-0.515	0.606	
Overt*GESP	-0.496	0.253	-1.963	0.050	*
Overt*BISP	0.659	0.237	2.776	0.005	**
Overt*MAD	0.381	0.260	1.467	0.142	

The estimated variance of the random intercept of *token* is 0.769.

The estimated variance of the random intercept of *participant* nested in *list* is 1.111.

Regarding the interaction of object type and group, the interaction of overt object and the BISP group was statistically significant, suggesting a higher rating of this condition in reference to the intercept of inanimate null objects in GEBQ. The interaction between overt object and GESP group suggests that, in this condition, ratings are estimated to be lower in contrast to the intercept level, and this was significant too. Finally, the estimate for the overt condition in the GEBB group is also lower than the intercept, but this is not significant.

Three post-hoc tests were run using *emmeans* to confirm the significance of the contrasts between conditions and groups. For the groups, in both null conditions, the contrast pairs of GEBQ-BISP ($\beta = 1.048, z = 3.095, p = 0.017$), GEBQ-MAD ($\beta = 1.072, z = 2.986, p = 0.0237$), GESP-BISP ($\beta = 1.646, z = 4.304, p < 0.001$), GESP-MAD ($\beta = 1.67, z = 4.164, p < 0.001$), GEBB-BISP ($\beta = 1.508, z = 3.927, p < 0.001$), and GEBB-MAD ($\beta = 1.533, z = 3.817, p = 0.001$) were statistically significant, confirming that all GE groups rated null objects significantly higher than the BISP group, as well as the control. The lack of statistical significance in the pairs BISP-MAD, and GEBQ-GESP, GEBQ-GEBB, GESP-GEBB indicated that the groups within these pairs behaved similarly to each other in the conflated null condition.

Additionally, for each variation of group_ animacy condition, the contrast between null and overt conditions was statistically significant, in all cases supporting a preference for the overt conditions. Finally, for each group_ object-type condition, the contrast between animate and inanimate was also statistically significant, and in all conditions, there was a higher estimate for the inanimate conditions.

3.5. Discussion of results

3.5.1. Dialectal differences and language dominance

These results indicate that the acceptability of referential null inanimate objects is higher due to the effects of intense language contact in the region of Gernika. As expected, null objects are rated higher in the three Gernika groups than in the BISP group. However, contrary to what was expected, there is no significant effect of language dominance among the Gernika groups in the acceptability ratings of null objects. This can be interpreted in the context of societal bilingualism. If we assume, as my analysis in Chapter 2 does, that null objects become available through Basque, the use and acceptability of null objects in Gernika Spanish could have been driven by Basque-dominant speakers. Once the use of $v_{[D]}$ that licenses null objects starts becoming generalized in Spanish, its use propagates in the community in Gernika, even among bilingual speaker profiles that may not have favored it in a different bilingual setting (e.g. Spanish-dominant speakers in Bilbao), and it becomes grammaticalized.

As for the Bilbao group, BISP participants were bilingual Spanish/Basque speakers, yet they rated both null conditions as low as the monolingual control group. It is important to remember that while BISP participants rated the null conditions rather low, they may produce some null objects in their speech, based on Zinkunegi-Uzkudun's (2010) findings. Thus, while the BISP participants pattern like the control monolingual group in the results of the AJT, some differences may be expected between the two groups in a production task. Regardless, it seems that only being bilingual in Basque is not enough for null objects to become acceptable in Spanish. In fact, the results of the BISP group are in sharp contrast with those for the GESP group: both of these groups are Spanish-dominant, but the ratings of null objects for the GESP group are much higher, which points to a dialectal difference.

Overall, the results suggest that null objects are acceptable in an intense language contact context, but they are not part of the grammar of bilingual speakers in a low-contact situation. To fully confirm the effects of societal and individual bilingualism, it would be necessary to test Basque-dominant speakers from the Bilbao area. If this profile of bilingual speakers found null objects more acceptable than their Spanish-dominant counterparts, this would both confirm an effect of language dominance and an effect of societal bilingualism, as follows. An effect of language dominance would be confirmed because participants from the same region (BISP group) rated null objects rather low. The effect of societal bilingualism would be confirmed because, in the Bilbao area, Basque-dominant bilingual speakers are much rarer than Spanish-dominant bilingual speakers. Thus, even if Basque-dominant speakers from Bilbao were to find null objects highly acceptable, they do not have the numbers to produce a change in society. See Table 8 (adapted from Table 1 from Chapter 1), which shows that only a small amount of people in the Greater Bilbao Area report Basque or both Basque and Spanish to be their mother tongue and the language they speak at home. The table also shows that, in Gernika, the split is more even between the two languages. What is more, data collected in 2016 in three main streets and three school areas in Gernika showed that 49.4% of the conversations took place in Basque and 47.3% in Spanish (3.3% in other languages) (Soziolinguistika Klusterra, online), again showing an even distribution of Basque and Spanish, with a slight preference for Basque. Having a similar number of Basque- and Spanish- dominant speakers in Gernika, and an awareness in the population that null objects mark Basque identity, a feature that starts among Basque-dominant speakers can easily be picked up among Spanish-dominant speakers too, leading to its grammaticalization in the local dialect.

Table 8. *Population distribution according to mother tongue and language spoken at home, data from 2016 (Eustat, online)*

	TOTAL	MOTHER TONGUE				LANGUAGE SPOKEN AT HOME			
		BQ	SP	BOTH	OTHER	BQ	SP	BOTH	OTHER
Gernika	16,664	8,425 50.5%	5,837 35%	1,492 8.9%	910 5.46%	6,402 38.4%	6,796 40.7%	2,823 16.9%	643 3.8%
Greater Bilbao	343,072	17,554 5.1%	293,280 85.4%	15,682 4.6%	16,556 4.8%	11,149 3.2%	298,767 87.1%	23,372 6.8%	9,784 2.8%

3.5.2. Codeswitching

The results indicate that language dominance is not a determining factor in the acceptability of null objects in Gernika. There were only small differences among Gernika groups in the ratings of null objects and they were not in the expected direction: balanced bilinguals rated null objects the highest in the inanimate condition; Spanish-dominant speakers in the animate condition; and Basque-dominant speakers rated both conditions the lowest out of the three groups. This lack of correlation between language dominance and acceptability of the feature suggests that nowadays $v_{[D]}$ is present in the Spanish spoken in Gernika, and that other factors in the profiles of the participants would be influencing the small differences. The results can be related to the rates of self-reported codeswitching. Among the three Gernika groups, GEBQ was the one with the lowest mean and median rates of self-reported codeswitching, and the GEBB group had the highest mean, followed by the GESP group which had the highest median.

Groups with higher rates of self-reported *overt* codeswitching are also those with the highest acceptability rates for null objects. If we frame the use of $v_{[D]}$ in Spanish as a form of *covert* codeswitching in the 1Lex model, there is a correlation between the two forms of codeswitching. Speakers who have awareness of codeswitching overtly seem to be codeswitching covertly as well. Generally, codeswitching involves mixing languages in a way that is perceivable, by mixing words from different languages. This would be codeswitching at the level of List 2, where vocabulary items are inserted. What the results indicate is that people who regularly codeswitch on the level of vocabulary insertion do so on the level of List 1 as well, where roots and functional items are selected.

3.5.3. Implications for syntactic analysis

In terms of the linguistic features of null objects, as expected, null animate objects are significantly less acceptable than null inanimates. Even though the effects of only DOM cannot be tested, and in the task, DOM is confounded with animacy, the results support an analysis in which inanimate objects, those which would appear in the accusative form of the clitic, can be realized null.

As for the syntactic analysis within the 1Lex model, I proposed that bilingual speakers have access to both v and $v_{[D]}$ thanks to the integrated lexicon. I suggested that a higher preference for $v_{[D]}$ in Spanish corresponds to a higher activation level of this head compared to v , driven by Basque dominance. In studies of lexical access, words need to reach a specific threshold to be accessed, which means that a word with a higher activation level is more readily accessible. Assuming that the propagation of null objects happens as suggested in section 3.5.1, this analysis could apply to Basque-dominant speakers in Gernika, as well as to balanced bilinguals. In contrast, for Spanish-dominant bilingual speakers in Gernika, the higher activation of $v_{[D]}$ does not need to be driven by language dominance, but by the prevalent use of $v_{[D]}$ in Spanish in their society. Thus, while the result is the same, the conditions under which $v_{[D]}$ becomes the preferred option are not necessarily the same.

In the BISP group acceptability of null objects was rated so low because neither condition, language dominance nor a high use of $v_{[D]}$ in the population, is met in this group. There is another explanation for this fact based on the model itself: it is possible that the participants in the BISP group are not considered deep bilinguals. There are no clearly defined criteria to determine who qualifies as a deep bilingual whose grammar can therefore be accounted for under the 1Lex model. Participants in the BISP group started learning Basque at age 2 and continued using it into adulthood. The use of Basque is more limited in this group and there is a clear distinction with all of the Gernika groups who are exposed to Basque every day.

In order to complete the analysis and account for the variation among groups, Chapter 6 will explore the possibility of specifying resting activation levels or frequency rates for the relevant items, v and $v_{[D]}$, in each group.

As discussed in Chapter 2, null objects are present in several varieties of Spanish under different sets of conditions. A similar case to B-Spanish is Spanish in contact with Quechua: null objects are part of the grammar of Quechua, and the feature is transferred to Spanish under the same conditions that are assumed here for Basque-Spanish contact. In monolingual varieties such as Rioplatense Spanish, null objects do not result from language contact, but from a historical process that causes $v_{[D]}$ to become part of the monolingual Spanish grammar. The presence of null objects in different varieties of Spanish with different characteristics could indicate that the D-feature in v that licenses null objects may be dormant in all varieties of Spanish and the right

sets of conditions activate it. Once it becomes active, there may be coexistence of v and $v_{[D]}$ as is the case in B-Spanish, such that null objects are licensed, but overt clitics are still grammatical.

3.6. Conclusion

To conclude, this chapter discussed the acceptability judgment task carried out to investigate the acceptability of null objects among three different Spanish/Basque bilingual profiles. This task was an attempt to collect formal judgments from a variety of bilingual speakers through an exercise that would tap into speakers' competence. The results of the task indicated that null objects are more acceptable when they are inanimate (or caseless) than when they are animate or DOM-ed. Groupwise, the most notable difference was a regional one, whereby speakers from Gernika rated null objects overall higher than speakers from Bilbao. Presumably, this higher acceptability of null objects in Gernika was driven by the intense language contact situation that this region has sustained over the years. While the use of $v_{[D]}$ in Spanish may have been a characteristic of Basque-dominant speakers, it is widespread among Basque- and Spanish-dominant and balanced bilingual speakers in Gernika thanks to the large number of Basque-dominant speakers and to the predominant use of Basque in the region.

CHAPTER 4: DIFFERENTIAL OBJECT MARKING IN BASQUE

4.1. Introduction

Differential Object Marking (DOM) is a morphological marking on an object which establishes a contrast between elements that have the same syntactic function (Bossong 1982, 1985, 1991), for example, animate versus inanimate DOs, or specific versus non-specific DOs. DOM is found in some Basque varieties, and it entails coding DOs as IOs in both case and agreement; that is, absolutive objects are coded as dative, with dative case on the DP and dative agreement on the auxiliary verb (Fernández and Rezac 2010, 2016, Odria 2012, 2014, Rodríguez-Ordóñez 2016, 2017), as shown in (95b).

(95) *Lekeitio Basque (DOM variety)*

- a. Ni-k su ikusi s -aittu -t.
I-ERG you.ABS see CL.ABS.2.SG -PRS.2.SG -CL.ERG.1.SG
- b. Ni-k su-ri ikusi d-o -tzu -t.
I-ERG you-DAT see L-PRS.3.SG -CL.DAT.2.SG-CL.ERG.1.SG
'I have seen you.'

(adapted from Hualde, Elordieta and Elordieta 1994: 126)

In DOM varieties, as in Lekeitio Basque, the non-DOM option (95a), coexists with the DOM option (95b). In its non-DOM form, in (95a), the auxiliary encodes two arguments: the ergative first-person subject '-t', and the absolutive second-person DO 's-'. In (95b), the DO pronoun has dative case '-ri', and the auxiliary contains dative agreement with the DOM object, '-tzu-'.

The goal of this chapter is to propose an analysis of Basque DOM within López's (2020) 1Lex model of bilingual grammar. For that, I first discuss the distribution of the data in section 4.2, focusing on the features of animacy, person, specificity, null object, and tense. I then show that DOM objects are DOs in section 4.3 by looking at their behavior with secondary predication. In section 4.4 I present data from ditransitives and ECM constructions which show that the dative case of DOM objects is assigned structurally. In section 4.5 I discuss the similarities and differences between Basque and B-Spanish DOM, and it is shown that B-Spanish and Basque

DOM share most properties. Finally, in section 4.6 I develop the analysis of Basque DOM, by first reviewing previous analyses of Basque DOM (Odria 2012 and Fernández and Rezac 2016), then adopting some features of a previous analysis (López 2012) of Spanish DOM within Distributed Morphology (DM) (Halle and Marantz 1993), and finally specifying the features of an analysis of Basque DOM within López's (2020) 1Lex model. Specifically, I adopt López's (2012) idea that Spanish has two types of αP available in the vP domain: one that introduces an IO ($\alpha P_{[AppI]}$), and one that does not introduce an argument (αP) and where DOM objects move as a result of object shift. Presumably, non-DOM Basque only has the $\alpha P_{[AppI]}$ type, which introduces IOs, but it does not have the bare αP , since the goal of this phrase is to host the moved DOM DO. Crucially, under the 1Lex model, bilingual grammars are integrated, that is, there is only one lexicon; therefore, bilingual Basque and Spanish speakers can select αP in Basque where certain DOs move and get dative case instead of canonical absolutive. The objects that move are those preceded by the case-bearing K head, which makes the objects unable to value case in situ. Finally, according to previous findings in Rodríguez-Ordóñez (2016, 2017), Gernika Basque DOM is more common with verbs borrowed from Spanish, which can be captured by vocabulary insertion rules where the root is spelled with the Spanish-borrowed verb in the context of αP .

4.2. Distribution of the data

DOM has been studied in various traditional Basque dialects in order to understand its properties as well as the similarities and differences among the dialects. Basque DOM may be influenced, as in other languages, by properties of the DP such as animacy, person, and definiteness and specificity, but also by features of tense and finiteness of the clause, rarely attested in other languages (Fernández and Rezac 2016). In the following sections, I discuss each of those properties and I present data from different dialects taken from previous works (Iglesias (2005) for Arratia and Tolosa Basque, Arraztio (2010) for Araitz-Betelu Basque, Odria (2012, 2014) for Elgoibar Basque, and Fernández and Rezac (2016) for Dima Basque). I also discuss Rodríguez-Ordóñez's (2016, 2017, 2020) findings for Gernika Basque for each of those properties.

4.2.1. Animacy

First and foremost, animacy plays a crucial role in Basque DOM: inanimate DOM-ed objects have not been reported in any Basque variety (Arraztio 2010, Mounole 2012, Odria 2012, Fernández and Rezac 2016, Rodríguez-Ordóñez 2016) and are considered ungrammatical, as exemplified by (96) from Odria (2012).

- (96) a. Ordenagailu-a ikusi d-o -t.
 computer-D.ABS see L-PRS.3.SG -CL.ERG.1.SG
 ‘I have seen the computer.’
- b. * Ordenagailu-a-ri ikusi d-i -o -t
 computer-D-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG (Odria 2012: 15)

Note that dative-marking of inanimate objects is available with alternating verbs. There is a group of monotransitive verbs which are known as ‘alternating verbs’ and which have been analyzed as ‘bivalent unergatives with an indirect object’ (Fernández and Ortiz de Urbina 2010, 2012, Ortiz de Urbina and Fernández 2016). Alternating verbs, some of which are listed in (97), have an ergative subject and an object which can be absolutive, as in (98a) and (98c), or dative as in (98b) and (98d).

- (97) *abisatu* ‘warn’, *begiratu* ‘look’, *bultzatu* ‘push’, *deitu* ‘call’, *entzun* ‘hear’, *eskertu* ‘thank’ *itxaron* ‘wait’, *lagundu* ‘help’ or *ukitu* ‘touch’
 (Fernández and Ortiz de Urbina 2012: 85)
- (98) a. (Ni-k) mahaia bultzatu d-u -t.
 I-ERG table.ABS push L-PRS.3.SG -CL.ERG.1.SG
 ‘I pushed the table.’
- b. (Ni-k) mahaia-ri bultzatu d-i -o -t.
 I-ERG table-DAT push L-PRS.3.SG -CL.DAT.3.SG -CL.ERG.1.SG
 ‘I pushed the table.’ (Fernández and Rezac 2016: 102)

- c. (Ni-k) zu bultzatu z -aitu -t.
 I-ERG you.ABS push CL.ABS.2.SG -PRS.2.SG -CL.ERG.1.SG
 ‘I pushed you.’ (Fernández and Rezac 2016: 102)
- d. (Ni-k) zu-ri bultzatu d-i -zu -t.
 I-ERG you-DAT push L-PRS.3.SG -CL.DAT.2.SG-CL.ERG.1.SG
 ‘I pushed you.’ (Fernández and Rezac 2016: 102)

While seemingly parallel to the DOM/non-DOM distinction, the alternating verb constructions are not linked to the phenomenon of DOM. Alternating verbs are present in all dialects, and in some, the alternation may have a slight change in meaning. When the object of an alternating verb bears dative case, it behaves like an IO, which is not true of dative DOM objects, as will be discussed in section 4.3.

Turning back to animacy, as seen in (98b), inanimate objects can bear dative case with alternating verbs. Additionally, inanimate IOs are always marked dative. This shows that there is no restriction on inanimacy per se when it comes to dative case marking; the restriction on inanimate objects in DOM, as illustrated in (96b) above, is unique to DOM itself.

Some rare examples have been reported of DOM with animate, non-human objects (Hurtado Mendieta 2001:104, Arraztio 2010: 192, Odria 2012: 14), as illustrated in (99) and (100) below.

- (99) Zein-ek eruan-go d-i -o -ø txakurr-a-ri
 who-ERG carry-FUT L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.SG dog-D-DAT
 albaitarix-a-ngana?
 veterinarian-D-to
 ‘Who is going to take the dog to the veterinarian?’ (Odria 2012: 14)
- (100) Ni-k zakur bat-i ikusi d-i -o -t.
 I-ERG dog one-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG
 ‘I have seen a dog.’ (Arraztio 2010: 192)

The most common across varieties, however, is for DOM to apply to human objects, and to be ungrammatical with non-human objects, as illustrated in (101) and (102) from Lekeitio Basque.

In this variety, the DOM option (101b) coexists with the canonical absolutive one (101a) for human antecedents. Meanwhile, non-human antecedents cannot be DOM-ed, as shown in (102b).

- (101) a. (Ni-k) neskia ikusi d-o -t.
I-ERG girl.ABS see L-PRS.3.SG -CL.ERG.1.SG
- b. (Ni-k) neskia-ri ikusi d-o -tza -t.
I-ERG girl-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG
'I saw the girl.' (Fernández and Rezac 2016: 104)
- (102) a. (Ni-k) txakurra ikusi d-o -t.
I-ERG dog.ABS see L-PRS.3.SG -CL.ERG.1.SG
- b. *(Ni-k) txakurra-ri ikusi d-o -tza -t.
I-ERG dog-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG
'I saw the dog.' (Fernández and Rezac 2016: 104)

In her study of Gernika Basque, Rodríguez-Ordóñez (2016, 2017) did not find a single instance of DOM-ed inanimate or non-human objects, whereas 36.8% of human objects were marked among Gernika speakers (2016: 147).

4.2.2. Person

The second feature that affects the availability of DOM is grammatical person. Specifically, there is a distinction between 1st and 2nd persons on the one hand, and 3rd person on the other. Different distributions of this distinction are listed in (103) alongside varieties that represent the distributions.

- (103) *Distribution of DOM across varieties of Basque*
- a. Available and optional for all persons (human): Lekeitio Basque (Hualde et al. 1994)
- b. Obligatory for 1st and 2nd persons, unavailable for 3rd: Arratia Basque (Mounole 2012 based on data from Iglesias (2005)), Dima Basque (Mounole 2012 based on data from Iglesias (2005), Fernández and Rezac 2016)

- c. Obligatory for 1st and 2nd persons, optional for 3rd: Elgoibar Basque (Odria, 2014, 2017), Ultzama Basque (Ibarra Murillo 1995:427), Erroibar and Esteribar Basque¹¹ (Ibarra Murillo 2000)

As pointed out by Fernández and Rezac (2016), even in varieties where DOM can be found with 3rd-person objects, it is more common with 1st and 2nd person (Hualde et al. 1994: 125–127 for Lekeitio Basque and Odria 2012 for Elgoibar Basque). Rodríguez-Ordóñez (2016, 2017, 2020) confirms this pattern for Gernika Basque, where DOM is used for 1st and 2nd persons almost categorically (averaging a usage rate of 93.5% when compared to absolutive), but only marginally for 3rd person (14.85%, considering only the specific objects).

In Gernika Basque, Rodríguez-Ordóñez (2016: 172, 2017) finds that first-person objects have the highest DOM production rates, and more so in singular (97.5%, $n=77/79$) than in plural (92.3%, $n=12/13$), followed by second-person singular objects (non-specific 85.7%, $n=12/14$; specific 90.7%, $n=39/43$ ¹²). In contrast, specific third-person singular objects only appeared DOM-ed 21.1% ($n=46/219$) of the time, and plural ones 8.6% ($n=6/70$). There were no second-person plural objects in her data, and non-specific third-person objects were never DOM-ed (see next section for discussion of specificity).

4.2.3. *Definiteness or specificity*

Additionally, as discussed by Mounole (2012), objects need to be definite in order to be DOM-ed in Lekeitio (104)-(105) and in Tolosa Basque (106)-(108). The following examples contain indefinite DOs that cannot be DOM-ed, as shown in the (a) examples, and they can only be in absolutive instead, as shown in the (b) examples.

¹¹ In these varieties, it may be categorical across the three persons, but an exception is found with an absolutive 3rd person in Ibarra Murillo (2000:152–3).

¹² Rodríguez-Ordóñez (2016) makes a distinction between specific (referential) and non-specific (generic *you*) second person objects.

- (104) a. *Ez -t -o -tza -t ezaututen iñor-i.
not -L -PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG knowing anybody-DAT
- b. Ez -t -o -t ezaututen iñor.
not -L -PRS.3.SG -CL.ERG.1.SG knowing anybody.ABS
‘I don’t know anybody.’ (Mounole 2012: 367)
- (105) a. *Morroi bat-i ikusi d -o -tza -t.
guy one-DAT see L -PRS.3.SG -CL.DAT.3.SG-CL.ERG.1.SG
- b. Morroi bat ikusi d -o -t.
guy one.ABS see L -PRS.3.SG -CL.ERG.1.SG
‘I’ve seen a guy.’ (Mounole 2012: 367)
- (106) a. *Ni-k ez d-i -o -t iñor-rei ikusi.
I-ERG not L-PRS.3.SG -CL.DAT.3.SG -CL.ERG.1.SG anybody-DAT see
‘I haven’t seen anybody.’ (Mounole 2012: 369)
- b. Ni-k ez d-u -t iñor ikusi.
I-ERG not L-PRS.3.SG -CL.ERG.1.SG anybody.ABS see
- (107) a. *Jon-ek neska asko-ri ikusi d-i -o -ø.
Jon-ERG girl.ABS many-DAT see L-PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG
‘Jon has seen many girls.’ (Mounole 2012: 369)
- b. Jon-ek neska asko ikusi d-u -ø.
Jon-ERG girl.ABS many.ABS see L-PRS.3.SG -CL.ERG.3.SG
- (108) a. *Elkar-ri ikusi d-i -o -te.
each.other-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.PL
‘They have seen each other.’ (Mounole 2012: 369)
- b. Elkar ikusi d-u -te.
each.other-ABS see L-PRS.3.SG -CL.ERG.3.PL

As seen in the above examples, indefinite DPs as in (104) to (106), quantifiers as in (107), and reciprocals (108) cannot be DOM-ed and must, instead, take canonical absolutive. Note that the

reciprocal is specific, since it refers to the subject that has already been introduced. Nevertheless, DOM is ungrammatical because it is indefinite. However, note the following example from Gernika Basque, where an indefinite specific DO is produced with DOM:

- (109) ba (polizíxe-k) pille -z -kui -e -n pare batzu-ri
 so (police.PL-ERG) catch -PRS.3.SG -CL.DAT.1PL -CL.ERG.3PL -CPAST couple some-DAT
 berbetani
 talking
 ‘The police caught some of us talking.’ (Rodríguez-Ordóñez 2016: 79)

Additionally, Fernández and Rezac (2016) find that the reflexive is also excluded from DOM in Dima Basque.

- (110) a. Lurr-ek bere buru-e ikusi d-au -ø ispilu-e-n.
 Lur-ERG her head-D.ABS see L-PRS.3.SG -CL.ERG.3.SG mirror-D-in
 ‘Lur saw herself in the mirror.’
- b. *Lurr-ek bere buru-a-ri ikusi d-o- tza -ø
 Lur-ERG her head-D-DAT see L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.SG
 ispilu-e-n.
 mirror-D-in
 ‘Lur saw herself in the mirror.’ (Fernández and Rezac 2016:107)

Rodríguez-Ordóñez (2016: 172, 2020:248) also found a difference among native Gernika Basque speakers in the use of DOM with 3rd-person specific versus 3rd-person non-specific referents: specific referents were produced with DOM 21.1% (singular), and 8.6% (plural) of the time, whereas there were no cases of DOM with non-specific referents, confirming the observation made by Mounole (2012).

4.2.4. Null object

Perhaps less studied is the effect of null DOs in the presence of DOM. Since DOM in Basque is seen in both case on the object and agreement on the verb, the DO can be null, and DOM will

still be present in the form of agreement in the auxiliary. It is Austin (2006) who suggests the possibility that null objects may open a window for reanalysis of ambiguous verbal agreement, when the two objects of a ditransitive are null. Specifically, she points to a possible confusion from the learner’s perspective to differentiate whether the dative agreement morpheme in forms such as (111) corresponds to the direct or indirect object.

(111) Lagundu egin-go d-i -o -t.
 Help do-FUT L-PRS.3.SG -CL.DAT.3.SG -CL.ERG.1.SG
 ‘I will help him/her.’ (Austin 2006: 143)

Since “in Basque absolutive agreement is obligatory on the auxiliary when other agreement markers are present, even with dummy arguments” (Austin 2006: 143), she suggests that a learner could hypothesize that in (111), absolutive agreement is default and dative agreement is marking the DO. This confusion could further be reinforced by the tendency to morphologically distinguish human from non-human objects.

In fact, *lagundu* ‘help’ is a verb from the category of alternating verbs mentioned above in 4.2.1, in which the object of the verb can take absolutive or dative case. With these verbs, when the object takes dative case, it actually behaves like an indirect object and not a direct object, contrary to what we see for DOM objects (see section 4.3.1). If we were to discuss a possible effect of confusion or reanalysis from the part of the learner, perhaps it could be from over-generalizing the pattern of alternating verbs to encompass other similar or related verbs.

In any case, based on Austin’s (2006) suggestion that null objects can lead to reanalyze the internal arguments of the verb, Rodríguez-Ordóñez (2016, 2017) examines the distinction between null and overt DOM objects. She finds that the most common form of DOM in her data is with a null object and dative agreement in the verb (2016: 157), which provides support for Austin’s suggestion. Other forms of DOM include having DOM only in the object’s case but with absolutive in the auxiliary, or absolutive case in the object and DOM (dative) agreement in the auxiliary (see e.g. Fernández and Rezac 2010).

4.2.5. Tense

In some Basque varieties, DOM has been shown to be restricted to the past tense, or more common in the past tense than in the present. Yrizar (1997: 716-750) shows that DOM is restricted to the past in Azpilikueta; Sagarzazu (2005: 82) notes that in Irun Basque DOM is more frequent in the past; and Fernández and Rezac (2016: 107-8), looking at Arraztio's (2010: 189-90) data in (112) and (113) below, note that for one speaker of Araitz-Betelu Basque DOM is optional in the present but obligatory in the past.

- (112) a. Ni-k zu ikusi z -attu -t.
I-ERG you.ABS see CL.ABS.2.SG -PRS.2.SG -CL.ERG.1.SG
b. Ni-k zu-i ikusi d-i -zu -t.
I-ERG you-DAT see L-PRS.3.SG -CL.DAT.2.SG-CL.ERG.1.SG
'I have seen you.' (Arraztio 2010: 189)
- (113) a. *Ni-k zu ikusi z -intu -da -n.
I-ERG you.ABS see CL.ABS.2.SG -PST.2.SG -CL.ERG.1.SG -CPST
b. Ni-k zu-i ikusi n -i -zu -n.
I-ERG you-DAT see CL.ERG.1.SG -PST.3.SG -CL.DAT.2.SG -CPST
'I saw you.' (Arraztio 2010: 190)

In other varieties, DOM is found both in the present and in the past, as could be seen in many of the examples in the present tense in the previous sections, which come from Lekeitio, Araitz-Betelu and Dima Basque, among others.

For Gernika Basque, Rodríguez-Ordóñez (2016: 169, 2017) found that both present and past simple were the most common tenses with DOM, followed closely by the present perfect.

In this section, I have discussed data from previous literature which show that DOM is favored when the objects is human, 1st or 2nd person, and definite or specific. Additionally, DOM may be more common with a null object, and, in some varieties, when the verb is in the past tense.

4.3. The function of DOM objects

Morphologically, DOM objects are like IOs: they have dative case on the object and dative agreement on the verb. Syntactically, however, DOM objects behave like and *are* DOs. In this section, I discuss previous work which shows that DOM objects behave like DOs and unlike IOs in secondary predication.

4.3.1. Secondary predication

In Basque, only subjects and DOs can license secondary predication, but not IOs (Zabala 1993, 2003, Arregi & Molina-Azaola 2004, Oyharçabal 2010), as shown in (114).

- (114) Ni-k_i zu-ri_j ume-a_k haserretuta_{i/*j/k} eramán
I-ERG you-DAT child-D.ABS angry take
n -i -zu -n.
CL.ERG.1.SG -PST.3.SG -CL.DAT.2.SG-CPST
'I brought you the child angry.'

If DOM-ed DOs were structurally like IOs, we would expect them not to allow secondary predication. However, the opposite is true, as shown in (115).

- (115) Ni-k_i zu-ri_j haserretuta_{i/j} ikusi n -i -zu -n.
I-ERG you-DAT angry see CL.ERG.1.SG -PST.3.SG -CL.DAT.2.SG-CPST
'I saw you angry.'

Alternating verbs provide further support for the fact that DOM objects are true DOs. Remember that alternating verbs have an ergative subject and an object which can be absolutive as in (116a) or dative as in (116b).

- (116) a. Ni-k Miren bergiratu n -ue -n.
I-ERG Miren.ABS look CL.ERG.1.SG -PST.3.SG -CPST

- b. Ni-k Miren-i begiratu n -i -o -n.
 I-ERG Miren-DAT look CL.ERG.1.SG -PST.3.SG -CL.DAT.3.SG -CPST
 ‘I looked at Miren.’

Both of the examples in (116) with the alternating verb *begiratu* are grammatical in all Basque varieties. Now compare the sentence in (117) with an alternating verb, with the example in (115).

- (117) Ni-k_i Miren-i_j pozik_{i/*j} begiratu n -i -o -n.
 I-ERG Miren-DAT happy look CL.1.SG -PST.3.SG -CL.DAT.3.SG -CPST
 ‘I looked at Miren happy.’ (Odria 2012: 22)

The sentence in (117) contrasts directly with that in (115), and it shows two apparently equal constructions with an ergative subject and a dative object. However the dative internal argument of the alternating verb in (117), *Mireni*, does not license secondary predication, while the DOM object in (115), *zuri*, does. The difference is in the function and position of the object: it is a DO in (115), generated as complement to V, but an IO in (117), generated in a low Applicative Phrase (see Arregi and Nevins 2012, Fernández and Ortiz de Urbina 2012, amongst others).

4.4. The case of DOM objects

In this section, I discuss DOM objects in ditransitive constructions and in ECM constructions. In ditransitives, DOM objects must always agree with the auxiliary, even if that means that the IO does not (Odria 2014, Fernández and Rezac 2016). In ECM constructions, the subject of the small clause may get DOM. Together, these two observations have been taken in the literature to indicate that DOM objects get their dative case structurally (Odria 2014, Fernández and Rezac 2016).

4.4.1. Ditransitive constructions with an IO and a DOM object

The Basque agreement complex permits only one instance of dative agreement. Therefore, the combination of a DOM object with an IO allows to examine the agreement of DOM objects.

Fernández and Rezac (2016) present the following examples of Markina Basque from Albizu and Fernandez (2006).

(118) a. Marta-k Ane-ri_i eraman d -i -o_i -∅
 Marta-ERG Ane-DAT carry L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG
 ikastola-ra.
 school.D-to
 ‘Marta carried Ane to school.’

b. * Marta-k Ane-**ri** eraman d -i -o -∅
 Marta-ERG Ane-DAT carry L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG
 amona-**ri**.
 grandma.D-DAT
 ‘Marta carried Ane to (her) grandma.’ (Albizu and Fernández 2006)

In (118a), there is a DOM object and an allative-marked adjunct, and the auxiliary agrees with the DOM object. In contrast, (118b) shows that the combination of two dative-marked objects (an IO and a DOM object) is ungrammatical. There is no auxiliary form that can encode two dative objects, and as a result, one of the dative-marked objects in (118b) does not agree, leading to ungrammaticality. Arguably, the DOM object is the agreeing object in this example (see the examples in (122) below). As an alternative, the DO can revert to canonical absolutive as in (119a), and the verb agrees with the IO, or the goal is marked allative, and the DO maintains DOM and agrees with the verb, as in (119b).

(119) a. Marta-k Ane eraman d -i -o -∅
 Marta-ERG Ane.ABS carry L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG
 amona-ri.
 grandma.D-DAT
 ‘Marta carried Ane to (her) grandma.’

- b. Marta-k Ane-ri eramand -i -o -ø
 Marta-ERG Ane-DAT carry L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG
 amona-rengana.
 grandma.D-to
 ‘Marta carried Ane to (her) grandma.’ (Albizu and Fernández 2006)

Observe additional ditransitive examples presented by Odria (2014) in (120), in which a DO that could otherwise bear DOM appears as absolutive, as illustrated for third (120a), first (120b), and second (120c) persons.

- (120) a. Traidori-ek etsai-a-ri Miren saldu
 traitor.D-ERG.PL enemy-D-DAT Mary.ABS sell
 d -i -o -te.
 L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.PL
 ‘The traitors have sold Mary to the enemy.’
- b. Traidori-ek ni etsai-a-ri saldu
 traitor.D-ERG.PL I.ABS enemy-D-DAT sell
 n -au -te.
 CL.ABS.1.SG -PRS.1.SG -CL.ERG.3.PL
 ‘The traitors have sold me to the enemy.’
- c. Traidori-ek zu etsai-a-ri saldu
 traitor.D-ERG.PL you.ABS enemy-D-DAT sell
 z -aitxu -zte.
 CL.ABS.2.SG -PRS.2.SG -CL.ERG.3.PL
 ‘The traitors have sold you to the enemy.’ (Odria 2014: 303-4)

Interestingly, as Odria points out, when the absolutive DO is first or second person, (120b) and (120c) respectively, the auxiliary verb agrees with it. In contrast, when the absolutive DO is third person, as in (120a), the auxiliary verb agrees with the dative IO. Odria argues that this distinction has to do with the distinction between a double object construction (DOC) and a prepositional ditransitive construction: in (120a), where the IO triggers agreement, the IO must

precede the DO, indicating it is an Applicative Phrase in a DOC; in (120b-c), DOs trigger agreement while the dative IOs do not, indicating that the IO is a PP¹³.

Additionally, for some speakers, first- and second-person DOs may appear with DOM, as long as still only one object agrees with the auxiliary which, importantly, has to be the DOM (1st/2nd person) DO, as illustrated in (121) from Elgoibar Basque. Odria explains that this double dative construction is marginal in Basque, and even in varieties where it is available, the first option would be to keep the DO in absolutive, as in the examples in (120).

- (121) a. Traidori-ek (ne-ri) etsai-a-ri saldu d-i -a -te /
 traitor.D-ERG.PL I-DAT enemy-DAT sell L-PRS.3.SG -CL.DAT.1.SG-CL.ERG.3.PL
 *d-i -o -te.
 L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.PL
 ‘The traitors have sold me to the enemy.’
- b. Traidor-ek (zu-ri) etsai-a-ri saldu
 traitor.D-ERG.PL you-DAT enemy-DAT sell
 d-i -zu -te / *d-i -o -te.
 L-PRS.3.SG -CL.DAT.2.SG-CL.ERG.3.PL L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.PL
 ‘The traitors have sold you to the enemy.’

In these examples, the IO shows case but not agreement because, according to Odria, it is a PP. This allows the IO to not agree with the verb. Meanwhile, the first- and second-person object, whether in absolutive or in dative (DOM), must always trigger agreement with the auxiliary. The obligatory agreement of the DO indicates that its case must be structural.¹⁴

¹³ In Basque, dative objects may be generated above absolutive arguments, in the specifier of ApplP, or below the absolutive, as a PP. PP datives are limited to interpretations like goals, but Appl datives can have additional interpretations such as experiencer, possessor, and causee. PP datives do not need to show verbal agreement in some dialects, while Appl datives must always agree (Albizu 1997, 2001, 2011, Elordieta 2001, Rezac 2008, 2011, Fernández and Landa 2009, Fernández and Ortiz de Urbina 2010, Fernández 2011, Etxepare and Oyharçabal 2013, Rezac, Albizu and Etxepare 2014, Fernandez and Rezac 2016).

¹⁴ The distinction between inherent and structural case comes from Case Theory (Chomsky 1986, 2000, 2001). Inherent case results from the selection of an argument by a predicate, whereas structural case reflects the Agree

Finally, observe the following two ungrammatical sentences with two third-person arguments presented by Odria: in (122a), the auxiliary agrees with the DOM object, whereas agreement is with the IO in (122b).

- (122) a. *(Ni-k) umi-eri_i amama-ri_j eruan
 I-ERG child-DAT.PL grandmother.D-DAT carry
 d -i -e_i -t.
 L -PRS.3.SG -CL.DAT.3.PL -CL.ERG.1.SG
- b. *(Ni-k) umi-eri_i amama-ri_j eruan
 I-ERG child-DAT.PL grandmother.D-DAT carry
 d -i -o_j -t.
 L -PRS.3.SG -CL.DAT.3.SG -CL.ERG.1.SG
 ‘I have carried the children to the grandmother.’

Although both sentences were considered ungrammatical, only (122a), with DOM object agreement was understandable for the speakers.

In sum, DOM objects must always trigger agreement, even over IOs. Meanwhile, it is only the IO that can appear as a PP without agreement. These observations are taken to indicate that DOM objects check their case structurally, rather than having inherent case.

4.4.2. ECM: transitive predication with *eduki*

Another argument in favor of structural case comes from Exceptional Case Marking (ECM) constructions, as presented in Fernández and Rezac (2016). Fernández and Rezac discuss the case of the subject in *transitive predication* which has been analyzed as ECM. In these constructions, the subject of the subordinate clause has no selectional relationship with the matrix clause, so its case must be structural. *Transitive predication* (named by de Rijk 2008:

relationship between a probe and its goal. In Basque, dative case in ditransitive constructions is taken to be inherent (Rezac 2011, Arregi and Nevins 2012), while absolutive is either structural (Rezac et al. 2014: 1314) or it is a post-syntactic default (Arregi and Nevins 2012: 21-22).

675-677) is the transitive counterpart of intransitive predication. In intransitive predication, the subject of a small clause subject-predicate structure raises to become the subject of *be*, as illustrated in (123).

(123) *Intransitive predication*

- a. Xabier mutil azkarr-a d-a.
 Xabier.ABS boy quick-D.ABS L-PRS.3.SG
 ‘Xabier is a clever boy.’
- b. [Xabier_i [SC [SUBJ t_i] [PRED mutil azkarra]] da] (Fernández and Rezac 2016: 113)

In transitive predication, *edun* (*have*) works as the copula which relates the subject-predicate relation of the small clause to the ergative subject of the matrix clause, without entailment of possession.

(124) *Transitive predication*

- a. Orain datoz -en -a -k adiskide -a -k
 now come.3.PL-COMP -D.ABS -PL friend -D.ABS -PL
 d-itu -gu.
 L-PRS.3.PL -CL.ERG.1.PL
 ‘Those who are coming now are our friends.’ (de Rijk 2008: 676)
Lit: ‘Those we are coming now, we have them friends.’
- b. Nor z -aitu -gu, ba?
 who.ABS CL.ABS.2.SG -PRS.2.SG -CL.ERG.1.PL then
 ‘Who are you, then?’ (de Rijk 2008: 676)
Lit: ‘Who do we have you, then?’
- c. Xabier mutil azkarr-a d-u -zu /-gu
 Xabier.ABS boy quick-D.ABS L-PRS.3.SG -CL.ERG.2.SG / CL.ERG.1.PL
 /-te.
 / CL.ERG.3.PL
 ‘Xabier is an intelligent boy, which benefits/interests you/us/them.’
 (Etxepare and Uribe-Etxebarria 2012: 323)
Lit: ‘You/We/They have Xabier an intelligent boy.’

Fernández and Rezac (2016) adopt Etxepare and Uribe-Etxebarria's (2012: sec. 6) analysis of transitive predication as ECM, illustrated in (125).

(125) BE [PP we [P_{exp} [SC [SUBJ Xabier] [PRED a clever boy]]]]

Building from the structure of intransitive predication constructions, Etxepare and Uribe-Etxebarria's analysis of transitive predication in (125) also has a small clause subject-predicate complement of the verb *be*. The applicative head P_{exp} introduces an experiencer that ends up as ergative, and P+*be* ends up as *have* following Kayne (1993). Fernández and Rezac (2016) adopt the small clause and ECM part of the analysis, leaving aside the Agree and Case relations.

The subject of the small clause is thus not an argument of the main verb, but of the small clause predicate. Consequently, if the subject of a small clause could have dative case (DOM), since this position does not receive inherent case, it would point to DOM being structural case, resulting from Agree with a probe in the main clause.

In varieties such as Itsasondo and Dima Basque DOM is required for 1st- and 2nd-person objects. In these varieties, transitive predication with *edun* is available with absolutive but not with DOM objects. However, there are a limited number of expressions that allow transitive predication with the verb *eduki*, which also means *have*. In those few constructions, 1st- and 2nd-person subjects of small clauses can appear with DOM. Example (126) shows this for Itsasondo Basque, where the expression *alboan eduki* (to have beside) as in (126a) is grammatical in this transitive predication with *eduki*, but other expressions such as the one in (126b) are more restricted.

(126) Transitive predication in Itsasondo Basque

- a. Alboan eduki-ko n -au -zu /
 beside have-FUT CL.ABS.1.SG -PRS.1.SG -CL.ERG.2.SG /
 d-i -da -zu.
 L-PRS.3.SG -CL.DAT.1.SG -CL.ERG.2.SG
 'I will always be beside you, which benefits/interests you.'

- b. Nevada-n artzain eduki-ko n -au -zu /
 Nevada-in shepherd.ABS have-FUT CL.ABS.1.SG -PRS.1.SG -CL.ERG.2.SG /
 *d-i -da -zu.
 L-PRS.3.SG -CL.DAT.1.SG -CL.ERG.2.SG

‘I will be shepherd in Nevada, which benefits/interests you.’

(Fernández and Rezac 2016: 116)

In Dima Basque, the transitive predication with *eduki* extends to other additional expressions, as shown in (127b-c) (*cf.* (126b) with (127c)).

(127) Transitive predication in Dima Basque

- a. Ondoan eduki-ko d -o -ste -zu beti.
 beside eduki.FUT L -PRS.3.SG -CL.DAT.1.SG -CL.ERG.2.SG always
 ‘I will always be beside you, which benefits/interests you.’
- b. Abertzale-a eduki-ko d-o -ste -zu beti.
 Nationalist-D.ABS eduki.FUT L-PRS.3.SG -CL.DAT.1.SG -CL.ERG.2.SG always
 ‘I will always be a nationalist, which benefits/interests you.’
- c. Ne-(r)i artzain d-eko -ste -su Nevada-n.
 I-DAT shepherd.ABS L-eduki.PRS.3.SG -CL.DAT.1.SG -CL.ERG.2.SG Nevada-in
 ‘I am shepherd in Nevada, which benefits/interests you.’

(Fernández and Rezac 2016: 116-7)

Since case in ECM constructions is assigned structurally, Fernández and Rezac (2016) take these data as evidence that DOM is assigned structurally.

In the previous sections, I have summarized work on Basque DOM which shows that 1) crossdialectally, Basque DOM may be regulated by the factors of animacy, specificity, person, and tense, as well as by null objects in Gernika Basque; 2) based on secondary predication facts, DOM objects are base-generated as DOs; and 3) the case of DOM objects is structural, and it is dative or dative-like, both in the case adposition and in verbal agreement.

4.5. Spanish DOM

In this section, I briefly present the basic facts of B-Spanish DOM, and I draw some similarities and differences between Basque and B-Spanish DOM. Throughout the section, when I describe basic features of DOM that are not characteristic to B-Spanish but are instead from Spanish in general (across dialects), I will speak of *Spanish* DOM. If the features are unique or characteristic of B-Spanish DOM, I will refer to it as *B-Spanish* DOM.

In Spanish, animate specific DOs get DOM, which consists in marking the DO with the dative marker *a*.

- (128) Hemos visto **a** la niña en el parque.
Have.1.PL seen DOM the girl in the park
'We have seen the girl in the park.'

In B-Spanish, DOM objects additionally trigger *leísmo*, which means that the DOM object can be replaced or doubled by the dative form of the clitic *le* (as opposed to accusative *lo*, *la*).

- (129) Le_i hemos visto (a la niña_i) en el parque.
DO have.1.PL seen DOM the girl in the park
'We have seen her (the girl) in the park.'

Therefore, in B-Spanish, as in Basque, DOM entails both dative(-like) case on the object and dative(-like) agreement on the verb.

In terms of the features that regulate Spanish DOM, animacy and specificity are the most agreed-upon properties. These are also relevant in Basque DOM, as shown in sections 4.2.1 and 4.2.3. A notable difference in how animacy affects DOM is that no inanimate object has been reported in any Basque dialect, whereas inanimate DOM objects are common in Spanish if the subject is also inanimate. A further difference between Spanish and Basque DOM is that Spanish DOM is not affected by tense, but it can be affected by agentivity and telicity (see Torrego 1998), which do not seem to be active in Basque DOM. Person does not directly affect DOM in Spanish, but note that 1st- and 2nd-person objects must always be DOM-ed in Spanish, while 3rd-person objects are only DOM-ed if they are animate and specific. Consequently, if Basque DOM results from contact, it follows that DOM is most common with 1st and 2nd persons.

As in Basque, structurally, Spanish DOM objects behave like DOs and unlike IOs: they can be passivized, and they license secondary predication. In the sets of examples (130) to (131), the sentences in (a) are in the active voice, and the sentences in (b-c) contain the respective passive counterparts. Example (130a) contains an inanimate, unmarked DO which is passivized in (130b). In contrast, the IO in (131a) cannot be passivized, as shown in (131b), and only the inanimate DO can be passivized in this example, as in (131c).

- (130) a. Vieron la maleta en la estación.
 Saw.3.PL the suitcase in the station
 ‘They saw the suitcase at the station.’
- b. La maleta fue vista en la estación.
 The suitcase was.3.SG seen in the station
 ‘The suitcase was seen at the station.’
- (131) a. Enviaron la maleta a María.
 Sent.3.PL the suitcase to María
 ‘They sent the suitcase to María.’
- b. *María fue enviada la maleta.
 María was.3.SG sent the suitcase
 Intended: ‘María was sent the suitcase.’
- c. La maleta fue enviada a María.
 The suitcase was.3.SG sent to María
 ‘The suitcase was sent to María.’

Observe in (132) that the DOM-ed DO can be passivized, thus patterning like the unmarked DOs in (130b) and (131c).

- (132) a. Vieron a María en la estación.
 Saw.3.PL DOM María in the station
 ‘They say María at the station.’

- b. María fue vista en la estación.
 María was.3.SG seen in the station
 ‘María was seen at the station.’

As for secondary predication, IOs do not license secondary predication but DOM-ed objects do, just like unmarked DOs. First observe in (133) that unmarked DOs license secondary predication.

- (133) Tiré la manzana_i podrida_i.
 Threw.1.SG the apple rotten
 ‘I threw away the rotten apple.’

Meanwhile, while both objects in (134) are *a*-marked, (134a) is a DOM-ed DO and (134b) is an IO and only the DO allows secondary predication, a contrast first noted by Bresnan (1982).

- (134) a. Juan la_i encontró a ella_i borracha_i.
 Juan CL.ACC found.3.SG DOM her drunk
 ‘Juan found her drunk.’
- b. *Juan le_i habló a ella_i borracha_i.
 Juan CL.DAT spoke.3.SG to her drunk
 Intended: ‘Juan talked to her drunk.’ (Bresnan 1982: 401)

The data above indicate that DOM objects in Spanish are true DOs, as was the case in Basque too.

4.6. Analysis

Because of their similarities, Basque DOM has been argued to be the result of influence from Spanish (Austin 2006, 2015, Rodríguez-Ordóñez 2013, 2016, 2017, 2020). In *Euskera Batua* (lit. ‘unified Basque’), the standard variety taught in schools, it is common for children to use DOM, and for teachers to strongly condemn and criticize it as an *erderakada* (lit. ‘Spanishism’) (Ezeizabarrena 1996). In dialectal varieties, there is also awareness of the phenomenon and of the fact that “[t]hat [=DOM] is Spanish heritage”, in the words of a native Gernika speaker

reported in Rodríguez-Ordóñez (2016: 217). Nevertheless, previous syntactic analyses of Basque DOM do not include any reference to Spanish transfer. In this section, I first review previous analyses of Basque DOM, then I discuss an analysis of Spanish DOM within Distributed Morphology, and I adopt some of its components for my analysis of Basque DOM within the 1Lex model.

4.6.1. Previous analyses of Basque DOM

Odria (2012) and Fernandez and Rezac (2016) propose syntactic analyses of DOM based on the sets of facts that have been presented in the above sections. Odria's (2012) analysis relies on the visibility of objects. She proposes the generalization in (135).

- (135) Inanimate direct objects are not visible for *v*. The only NPs that are visible for *v* are animate direct objects and all indirect objects. (Odria 2012: 45)

This condition, according to Odria, is not a restriction on *v*, but on the objects themselves. Based on this generalization, and after ruling out any form of Applicative construction for DOM objects, Odria argues that *v* assigns dative case to any object that is visible: animate DOs and all IOs. In contrast, absolutive case is assigned by default.

What Odria's analysis is lacking is a way to determine why some objects are not visible to *v*. That is, there is no specific property or process that renders some objects visible to *v* but not others. Additionally, the analysis is unable to capture the optional nature of DOM that is present in many dialects.

Fernández and Rezac (2016) argue that both absolutive case and DOM dative are the result of Agree with *v*. They propose a P feature in *v* which is responsible for dative rather than absolutive agreement with DOs. A *v* with P values the [uCase] of its goal to a value spelled out as dative, and valued [u ϕ] is spelled as dative agreement morphology on a *v* with P. What is more, because DOM is sensitive to the goal's properties of animacy and referentiality, which are typical of object shift, they suggest that P is a trigger for object shift. Additionally, based on analyses where the functional architecture from *v* to Fin amalgamates in a single agreement complex (which is visible in the auxiliary verb, in ergative, dative, absolutive, mood, tense, and

complementizer morphology) (Laka 1993, Haddican 2007), Fernández and Rezac (2016) propose that the presence of this P on *v* can be sensitive to properties of Fin and T, thus accounting for the effect of tense found in some DOM varieties.

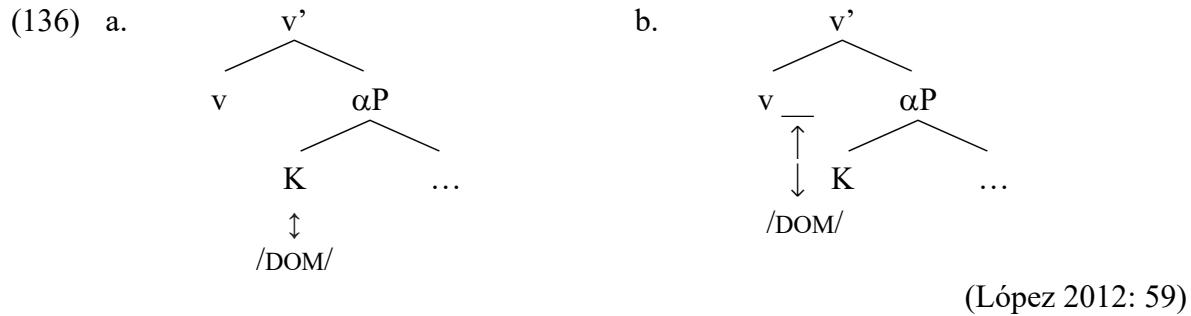
Fernández and Rezac's (2016) analysis pinpoints a specific feature, i.e. P in *v*, whereby agreement with DOM objects is different from agreement with unmarked DOs. Presumably, this P is absent in non-DOM varieties, and it is optional in DOM dialects where DOM coexists with canonical absolutive case. Still, this analysis does not consider any sort of influence from Spanish. If Basque DOM does indeed result from Spanish influence, an analysis of Basque DOM needs to consider how this influence comes about and what exactly is transferred from Spanish to give rise to Basque DOM. For example, one could argue that this P feature is present in the Spanish *v*, since DOM is present in all Spanish varieties. Meanwhile, in Basque, the P feature is only present thanks to the integrated bilingual lexicon assumed in the 1Lex model.

4.6.2. A Distributed Morphology analysis of (Spanish) DOM

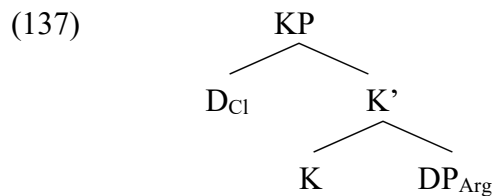
Within Distributed Morphology, López (2012: 59) proposes that DOM objects are morphologically prefixed by a K head that unmarked DOs do not have. This K head prevents them from checking case in situ, so they raise to a specifier position directly below *v*. The phrase that the DOM object moves to is α P. López takes this phrase to be a combination of two types of proposals: those that take α P to introduce IOs (e.g. Marantz 1993, Cuervo 2003, Pylkkänen 2008, Bruening 2010), and those in which α P is related to inner aspect (Travis 2010). López considers both properties relevant to α P in an analysis of DOM because, from a crosslinguistic perspective, DOM can be identical to IO marking, and telicity may be a factor in DOM.

Furthermore, López (2012) proposes that there are two types of α Ps: one that introduces an IO, which he represents as α P_[App], and one that does not, just like some *vs* introduce an external argument and some *vs* do not. The landing site of DOM objects is in the specifier of the second type of α P, which does not introduce an argument. I adopt this idea that Spanish has these two types of α P and this will be the relevant functional projection that results in DOM both in Spanish and Basque. First, I propose an analysis of DOM, based on López (2012).

Some languages, like Spanish, express DOM with a case marker on the noun. In these languages, López (2012) proposes that DOM is the Vocabulary Item inserted in the K terminal when *v* “governs”, or immediately c-commands K, as in (136a). In some other languages, DOM is a morpheme that attaches to *v* when *v* governs K, as in (136b).



I suggest that in Basque (as well as in B-Spanish), DOM is a combination of both: a vocabulary item inserted in K as in (136a), as well as agreement or a clitic on the verb, as shown in (136b) above. In Chapter 2, I adopted Arregi and Nevins’s (2012) proposal that third-person DOs do not have any functional projections like a Case phrase. Crucially, and in line with López (2012), it is unmarked DOs that do not have a KP in Basque and in Spanish, while DOM objects do. I adopt Arregi and Nevins’s analysis of clitics being generated in the specifier of the nominal functional projections, as in (137), which illustrates the structure for a DOM object. Note that, in contrast to López who locates K in the specifier of α , I assume that K heads its own KP.



K is the head where the case marker is inserted (*a* in Spanish, *-ri* in Basque), and D_{Cl} is where the clitic is originally generated, agreeing with the argument DP. López (2012) assumes that unmarked objects check case through incorporation to V, whereas marked objects cannot incorporate to V because KP prevents it. The unvalued case feature of K is not checked in situ, and so these objects need to move elsewhere for case checking purposes, following the assumption in the Minimalist Program that movement is motivated by an unvalued feature in the goal. While I adopt this movement approach to marked objects, I assume that lack of KP in

unmarked objects results in lack of a Case feature altogether. Others such as Rodríguez Mondoñedo (2007: 207) and Ormazabal and Romero (2013) have proposed this idea that the contrast between marked and unmarked objects reflects a case/caseless difference, and that caseless objects remain in situ due to the lack of an unvalued feature that would motivate movement. Therefore, I follow López (2012) in assuming that *v* cannot check the case of KP in situ, but I follow other proposals (Rodríguez Mondoñedo 2007, Ormazabal and Romero 2013) for unmarked objects in which these objects do not have a case feature.

In order to have its case valued, I assume the popular idea that DOM objects undergo some sort of object shift (e.g. Torrego 1998, Rodríguez Mondoñedo 2007, Ormazabal and Romero 2013), which is also proposed by Fernández and Rezac (2016) for Basque. Specifically, adopting López's (2012) α P as the landing site, I posit that DOM in both Basque and B-Spanish is the spellout of K when it is within α P. The DOM object in α P agrees with *v* and gets its case valued. The rule in (138) contains both possible vocabulary items for K in Basque/Spanish bilinguals, when K is within α P.

(138) $\{/a/, /ri/\} \leftrightarrow K \mid [\alpha P \text{ ___ } \alpha]$

In turn, the D_{Cl} which is in the specifier of KP also gets case, as a result of the agree process. Assuming that this case is dative, this results in a [dat] feature in D_{Cl} . The clitic then moves to the verbal complex where the relevant Vocabulary Insertion Rule will apply, as illustrated in (139) for a third-person singular object.

(139) $\{/e/, /o/\} \leftrightarrow D_{Cl} [-part, sing, dat]$

Note that the rule in (139) is indistinguishable from IO cliticization. Because clitics get their case feature as a result of the argument's own case valuing (for structural case) or its inherent case, if the proposal is that DOM objects get dative case, the rules for the clitics will involve dative case. This would not hold in other varieties of Spanish where DOM does not affect the case of the clitic which still appears in accusative.

This DM analysis of DOM in Basque and in B-Spanish relies on the position of the object within a functional projection. This position, following López, is the same for IOs and for DOM objects (α P, albeit two slightly different ones: α P and $\alpha P_{[AppI]}$), and it is consistent with the fact that

DOM morphology is equivalent to IO morphology. Rather than αP , as proposed by López and adopted here, DOM objects could move to another phrase. Proposals of phrases where the DOM object lands as a result of object shift include, among others, a Dative Phrase above vP (Rodríguez Mondoñedo 2007), or the specifier of vP. Torrego (1998) proposes the landing site to be the second specifier of vP, higher than the external argument; Ormazabal and Romero (2013) identify the specifier of vP as the landing site, but it is not made clear whether the object is tucked in, or higher than the external argument. Ormazabal and Romero (2013) propose that both DOM objects and IOs move to the specifier of vP, and stress the fact that whether DOM reflects dative or accusative case is irrelevant in their analysis. As such, Ormazabal and Romero's (2013) analysis also conflates the position of both types of objects in favor of one with the same case morphology for both objects.

In López's (2012) analysis which I adopt here, the appeal of proposing a common phrase for both IOs and DOM objects, albeit with a distinguishing [Appl] feature, lies on the fact that both types of objects receive dative(-like) case. The analysis allows αP to be the locus of dative case, but [Appl] is present when αP introduces an argument, and it is related to inherent case; meanwhile lack of [Appl] results in structural case. One final note regarding the distinction between αP and $\alpha P_{[Appl]}$ has to do with secondary predication. Recall that Odria (2012) and Fernández and Rezac (2016) ruled out ApplP as the locus of DOM objects, because Applicative objects (IOs) do not license secondary predicates (see Pylkkänen 2008), while Basque DOM objects do (Fernández and Rezac 2016). Crucially, αP is not an Applicative phrase, rather, it is the landing phrase of the DOM object. In contrast, the object introduced by $\alpha P_{[Appl]}$, by virtue of having that [Appl] feature, is an Applicative object, and is subject to the restrictions regarding secondary predication.

4.6.3. Basque DOM in the 1Lex model

In this section I develop more features of the analysis of Basque DOM within López's (2020) 1Lex model. What the 1Lex model adds to the analysis presented so far is the idea that bilingual speakers have two vocabulary items for the same root, as was shown in the rules in (138) and (139) above.

Rodríguez-Ordóñez (2017) analyzes the speech of native speakers of Gernika Basque, and she finds that the phenomenon is most common among Spanish-dominant speakers using verbs borrowed recently (first recorded in the 20th century) from Spanish, and with 1st and 2nd persons. If the results of the Basque DOM Acceptability Judgment Task in the next chapter corroborate her findings, they can be used as indication that DOM is part of Basque speakers' competence as a result of Spanish influence. This would support an analysis in which the α P originally coming from Spanish is used in Basque too.

To continue with the analysis developed so far, let us assume that Spanish has both the α P and α P_[App] proposed by López, but that non-DOM Basque only has α P_[App]. Remember that α P_[App] is only projected in sentences with an IO, and the role of the α P_[App] is to introduce it. Then, in a monotransitive construction, non-DOM varieties will not project any type of α P. Therefore, DOs always stay in situ and get canonical absolutive case.

DOM in Basque, I argue, results from selecting the α P that is available thanks to Spanish, the type of α P that does not introduce an argument. If Basque DOM is likelier with verbs borrowed from Spanish as found in Rodríguez-Ordóñez (2017), proposing that α P is the point of variation allows to relate the phenomenon to the verb structure. Let us look at a specific example. The Basque verb for 'understand' is *ulertu*. In Gernika Basque we also find *konprendidu* (Rodríguez-Ordóñez 2016), from Spanish *comprender*. This is illustrated in (140).

(140) List 1: $\sqrt{345}$

List 2: $\sqrt{345} \leftrightarrow \{/uler-/ /komprend-/\}$

List 1 has the relevant root, let us say it is $\sqrt{345}$. In List 2, we have the vocabulary insertion rule for the root, with two exponents, which are */uler-/* and */komprend-/*. The VP with the root $\sqrt{345}$ can be selected by α or directly by *v*. If the change starts with verbs borrowed from Spanish, we can posit a rule such as (141), which reads that root $\sqrt{345}$ will be spelled out as */konprend-/* when it is selected by α .

(141) [α P α [VP $\sqrt{345}$]] \leftrightarrow */komprend-/*

Then, DOM itself results from the rules in (138) and (139) above.

What allows DOM to be used in Basque is the fact that List 1 is integrated and that Basque/Spanish bilinguals have access to the α P that is originally Spanish. It is then expected that Spanish-dominant speakers will have higher rates of DOM, because they have higher frequency and probability of projecting α P for certain roots. This hypothesis will be tested in the AJT proposed in the next section, which will allow to check not only DOM acceptability rates among different bilingual groups, but also the effects of verb type as well as person. The results will allow to corroborate the analysis or to refine it, and to test the effects of language dominance.

Finally, note that since α P is located in the verbal domain, α can arguably be affected by the features of T in the same way proposed by Fernández and Rezac (2016) for the P feature in v. This would be able to account for the cases in which tense has an effect on DOM, such as in Azpilikueta or Irun.

4.7. Conclusion

In this chapter, I have shown that the features of Basque and B-Spanish DOM overlap to a large extent. Specifically, animacy and specificity are pre-requisites for DOM in both languages, DOM objects are true DOs, and they get case structurally. Following López's (2012) analysis of Spanish DOM, I relate DOM to the presence of a non-applicative α P. This α P is only available in Basque because of the bilingual integrated lexicon that is assumed in López's (2020) 1Lex model. When Spanish/Basque bilinguals produce DOM in Basque, they are borrowing the α P or codeswitching covertly for this functional category which is originally Spanish.

If this analysis is on the right track in assuming that Basque DOM results from Spanish contact, we would expect bilingual French/Basque speakers not to produce DOM in Basque. French is not a DOM language: objects do not have any form of case marking, regardless of features such as animacy or specificity, and clitics have a direct case–function relationship, with dative clitics being used only in place of IOs, and accusative clitics in place of DOs. Therefore, French/Basque

speakers should not have αP available in their lexicon, because αP is not originally from either of these languages. Without this category, we should not find DOM in the Basque of these bilinguals. Based on Rodríguez-Ordóñez's (2016) findings, this prediction is borne out. Rodríguez-Ordóñez (2016) included 15 French/Basque bilinguals from the area of Baiona, the largest city in the French Basque Country. In sociolinguistic interviews, she found that Basque speakers from Baiona produced with DOM only 2% of all human direct objects, compared to 36.8% in Gernika, and 21.1% in Bilbao. Participants also completed an elicited production task, in which participants from Baiona did not produce a single object with DOM, compared to 19.7% of all human objects being DOM-ed in the Gernika group, and 8.1% in Bilbao.

To conclude, my analysis captures the idea that Basque DOM comes from Spanish, thanks to the integrated lexicon that is assumed in the 1Lex model. Bilingual Spanish/Basque speakers use the αP that is originally from "Spanish", and it is this phrase that results in DOM both in Basque and in Spanish.

CHAPTER 5: DIFFERENTIAL OBJECT MARKING ACCEPTABILITY JUDGMENT TASK

5.1. Introduction

To better inform the syntactic analysis of Basque Differential Object Marking (DOM) developed in the previous chapter, I conducted an Acceptability Judgment Task (AJT) on four different groups of Spanish/Basque bilinguals: Spanish-dominant speakers of standard Basque coming from the low-contact area of Bilbao, Spanish-dominant speakers from the intense-contact region of Gernika, balanced bilinguals from Gernika, and Basque-dominant speakers from Gernika. Dominance was determined by the results of the Bilingual Language Profile questionnaire (Birdsong, Gertken & Amengual, online) as discussed in section 5.2.3.2. By distinguishing these four groups, the results of the AJT are able to tell us if there is a difference in dialect and/or in language dominance in terms of acceptability of Basque DOM and therefore, if an analysis of Basque DOM that relies on some feature of Spanish, as I proposed in Chapter 4, is motivated. Based on Rodríguez-Ordóñez's (2016, 2017) findings, besides the factor of case, this AJT included the factors of person and verb type, in order to determine whether these are relevant to an analysis of Gernika Basque DOM. Recall that Rodríguez-Ordóñez (2016, 2017) found that, in Gernika Basque, first person, followed closely by second, was likelier to appear with DOM than third person. Additionally, DOM was favored in verbs borrowed from Spanish, rather than etymological Basque verbs.

The chapter is organized as follows: in section 5.2 I discuss the methodology; in section 5.3 I outline the predictions of the study; in section 5.4 I present the results, by reporting descriptive and inferential statistics; in section 5.5 I discuss the implications of the results as they pertain to dialectal differences, effects of language dominance, and their significance to the analysis of Basque DOM proposed in Chapter 4; and in section 5.6 I conclude the chapter.

5.2. Methodology

In this section, I discuss the key points of the methodology that were already introduced in Chapter 3. All sections summarize the information that was introduced in section 3.2, except for section 5.2.3.1 which discusses the Basque AJT materials. The reader is welcome to skip sections 5.2.1. and 5.2.2. For the full discussion of the methodology, the reader is referred to Chapter 3, Section 3.2.

5.2.1. Participants

This study included four experimental groups: a Basque-dominant bilingual group from Gernika (GEBQ), a balanced bilingual group from Gernika (GEBB), a Spanish-dominant bilingual group from Gernika (GESP), and a Spanish-dominant bilingual group from the Bilbao area (BISP). Because there are no monolingual Basque speakers, there is no monolingual Basque control group. The distribution of participants across groups was as in Table 9.

Table 9. *Participant demographics by group.*

GROUP		GEBQ	GEBB	GESP	BISP
NUMBER OF PARTICIPANTS		30	18	18	22
GENDER	male	12	6	11	14
	female	18	12	7	8
	other				
EDUCATION	< high school	2	1	1	2
	high school	2			1
	trade school		3	2	3
	some years college	5	4	2	1
	college	16	7	9	13
	master's	5	3	4	1
	doctorate				1
AGE	mean	27.37	29.12	31.5	26.1
	median	23	26.5	24.5	26
	min	19	20	18	21
	max	59	51	62	49

5.2.2. Procedure

5.2.2.1. Recruitment and task completion

Participants were recruited through friend-to-friend method, and they were contacted through WhatsApp messaging or email. They were sent the link to a questionnaire in Qualtrics, and they completed everything in one session of about 30 minutes, at a location of their choice, on their phone or computer. To counterbalance the order of the tasks, approximately half of the participants in each group completed the Spanish task first, and the other half completed the Basque task first. Before each task, participants completed half of the Bilingual Language Profile (BLP) questionnaire in the language of the upcoming task, to diminish effects of language mode (Grosjean 2008).

At the start of each AJT, there were instructions and three practice questions. In the AJT, participants were presented with a screen with a single audio player. After the participants provided a rating, the screen advanced automatically to the next token. At the end of the session, participants in the BISP group completed a proficiency test. Participants were compensated with 8€ sent through electronic transfer.

5.2.2.2. Data processing

Since all of the materials were completed on Qualtrics, the initial data processing involved removing the individual answers to the BLP, codeswitching, and proficiency test questions (see next section for materials) and replacing each of those categories with a single score column. For the specific procedure required in each category, refer to Chapter 3, section 3.2.3.2.

After converting the Qualtrics default wide format to long format by using R's `pivot_longer` function from the `tidyr` package, the target tokens were coded for case, person, and number.

Then, experimental participants were grouped according to language dominance. A score near zero in the BLP indicated balanced bilingualism, so a cutoff had to be established around zero. After pre-dividing participants into Basque- or Spanish-dominant based on them having a positive or a negative score, the cutoff was established at one standard deviation away from the

mean in the positive direction for the Basque-dominant group and in the negative direction for the Spanish-dominant groups: the standard deviation was either subtracted (Spanish-dominant) or added (Basque-dominant) from the mean. Table 10 (=Table 3) shows the means and standard deviations and the resulting cutoff points.

Table 10. *Mean, standard deviation and cutoff point of BLP scores by language dominance.*

	MEAN BLP	SD BLP	CUTOFF
SPANISH-DOMINANT	66.498	42.295	24.203
BASQUE-DOMINANT	-74.281	43.036	-31.245

Table 11 (=Table 4) below shows the resulting number of participants and the descriptive statistics for the BLP results per group.

Table 11. *Descriptive statistics of the BLP results by group.*

GROUP		GEBQ	GEBB	GESP	BISP
NO. OF PARTICIPANTS		30	18	18	22
BLP	mean	-90.62	0.87	87.48	75.75
	med	-87.45	-1.62	71.66	75.2
	min	-137.13	-31.06	28.16	33.24
	max	-31.51	24.61	179.35	113.52

5.2.3. Materials

The participants in this study completed the BLP questionnaire from the university of Texas Austin (Birdsong, Gertken & Amengual, online), an AJT in Basque and an AJT in Spanish, and the BISP participants completed a Basque proficiency test. The focus of this chapter is on the Basque AJT, leaving aside the Spanish one, which was discussed in Chapter 3.

5.2.3.1. Basque DOM Acceptability Judgment Task

Like the Spanish AJT, the Basque AJT was also aural, and all the tokens had the structure of a dialogue: the first speaker said or asked something, and the second speaker replied to it.

Participants were asked to rate the acceptability of the second speaker's response. The recordings

were done in two varieties of Basque: Gernika Basque recordings were done by two native bilingual speakers of Gernika Basque, and standard Basque recordings were done by bilingual speakers of standard Basque. The BISP group listened to the standard Basque recordings and all GE- groups listened to the Gernika Basque recordings.

The task had a 2x2x2 design crossing the factors of case, person, and verb type, thus resulting in 8 conditions. Case had the levels DOM and absolutive. Verb type could either be Basque (BQ) or recently borrowed from Spanish (SP). The selection of verbs was taken from Rodríguez-Ordóñez (2016, 2017), who classifies the verbs as Basque verbs or Spanish borrowings based on the first date they were documented. Verbs that were borrowed in the 20th century are classified as Spanish borrowings, whereas those whose first documentation is from before (ranging from the 16th to the 19th century), are considered Basque verbs. Finally, person was first/second combined, or third, based on much literature (see Chapter 4 section 4.2.2) that finds cross-dialectal differences between first and second on the one hand, and third person on the other. All persons were singular, and the tense of the auxiliaries was in the present. Direct objects were null in the target sentence. A sample token set is illustrated in (142) through (145), where the (a) examples provide the first sentence in the dialogue and the (b) and (c) examples show the conditions of absolutive and DOM, respectively.

(142) *Basque verb, 1st/2nd person*

- | | | | | | | | |
|----|-----------------------------|----------|-------------------|-------------|--------------------------|--------------|-----------------------|
| a. | Zelako | lioa | monteu | d-o | -t | -en! | |
| | What | mess.ABS | create | L-PRS.3.SG | -CL.ERG.1.SG | -COMP | |
| | ‘What a mess I’ve created!’ | | | | | | |
| b. | Bai, | Ama-k | zigortu-ko | z | -aitzu | -ø. | [<i>absolutive</i>] |
| | Yes | mom-ERG | punish-FUT | CL.ABS.2.SG | -PRS.2.SG | -CL.ERG.3.SG | |
| | ‘Yes, mom will ground you.’ | | | | | | |
| c. | Bai, | Ama-k | zigortu-ko | d -o | -tzu | -ø. | [<i>DOM</i>] |
| | Yes | mom-ERG | punish-FUT | L -PRS.3.SG | -CL.DAT.2.SG-CL.ERG.3.SG | | |

(143) *Basque verb, 3rd person*

- a. Zelako lioa monteu d-au -∅ -en!
What mess.ABS create L-PRS.3.SG -CL.ERG.3.SG -COMP
'What a mess s/he's created!'
- b. Bai, Ama-k **zigortu-ko** **d-eu** -∅. [absolutive]
Yes mom-ERG punish-FUT L-PRS.3.SG -CL.ERG.3.SG
'Yes, mom will ground her/him.'
- c. Bai, Ama-k **zigortu-ko** **d-otz** -o -∅. [DOM]
Yes mom-ERG punish-FUT L-PRS.3.SG -CL.DAT.3.SG-CL.ERG.3.SG

(144) *Spanish-borrowed verb, 1st/2nd person*

- a. Zelako notak atara d-o -t -ez -en!
What grades.ABS.PL get L-PRS.3 -CL.ERG.1.SG-PL -COMP
'What terrible grades I've gotten!'
- b. Bai, Aitxe-k **kastige-ko** **z** -aitzu -∅. [absolutive]
Yes dad-ERG punish-FUT CL.ABS.2.SG -PRS.2.SG -CL.ERG.3.SG
'Yes, dad will ground you.'
- c. Bai, Aitxek **kastige-ko** **d -o** -tzu -∅. [DOM]
Yes dad-ERG punish-FUT L -PRS.3.SG -CL.DAT.2.SG -CL.ERG.3.SG

(145) *Spanish-borrowed verb, 3rd person*

- a. Zelako notak atara d-ab -∅ -ez -en!
What grades.ABS.PL get L-PRS.3 -CL.ERG.3.SG-PL -COMP
'What terrible grades s/he's gotten!'
- b. Bai, Aitxe-k **kastige-ko** **d-eu** -∅. [absolutive]
Yes dad-ERG punish-FUT L-PRS.3.SG -CL.ERG.3.SG
'Yes, dad will ground her/him.'
- c. Bai, Aitxe-k **kastige-ko** **d-otz** -o -∅. [DOM]
Yes dad-ERG punish-FUT L-PRS.3.SG -CL.DAT.3.SG -CL.ERG.3.SG

The three two-level factors result in 8 conditions, which would require the creation of 8 different lists. What is more, for each list to have 6 tokens per condition, there need to be 48 target tokens per list. Therefore, 48 token sets would be the ideal in order to avoid the same participant seeing more than one token from the same token set. However, the number of Basque verbs that also have a Spanish-borrowed equivalent in Gernika Basque *and* that take an animate DO is limited. Considering this limitation, 12 token sets were created (a total of 96 tokens). To avoid much lexical repetition, some irrelevant words within the same token set varied, such as *mom/dad* or *mess/grades* in the token set illustrated above. Two lists were created, and the tokens were distributed as follows: one list included half of the token sets in the DOM condition and included all DOM tokens from those sets with both person types and verb types. For example, from the token set above in (142)-(145), one list contained all the (c) examples. The other half of the token sets in this list were included in the absolutive condition. The second list had this distribution reversed. That is, in each list, the factor of case was kept constant within the token set. Each list had the same amount of filler tokens ($n = 48$) as of target tokens. Filler tokens followed the same dialogue format, but they tested unrelated phenomena: ergative marking and plural agreement. Blocking was used to control for the order of presentation of the tokens, to prevent several target tokens of the same category or of the same token set from appearing after too close together.

5.2.3.2. Language background questionnaire

The participants in the Basque AJT completed the Bilingual Language Profile (Birdsong, Gertken & Amengual, online), as well as questions regarding codeswitching, both of which were introduced in Chapter 3. Recall that the results of the BLP provide a score between -218 and +218 indicating dominance in one language or the other; in this study, a negative score meant Basque-dominance and a positive score meant Spanish-dominance. A score around 0 indicated balanced bilingualism. The questions regarding codeswitching are repeated in (146) for convenience.

- (146) a. I switch between Basque and Spanish... 0 = never / 6 = constantly
- b. It is easy for me to switch between Basque and Spanish within the same sentence.
0 = I don't agree / 6 = I agree
- c. It is more natural for me to codeswitch, than to speak only Basque or only Spanish. 0 = I don't agree / 6 = I agree

5.2.3.3. Proficiency test

A Basque proficiency test was administered to the Standard Basque speakers from the Bilbao area. The test contained 20 multiple-choice questions selected from different versions of the standardized Basque test *Euskararen Gaitasun Agiria* 'Certificate of Basque Proficiency' (see Rodríguez-Ordóñez 2015, 2016, Siebecker 2015 for the use of this same method to test Basque proficiency). The purpose of the proficiency test was to ensure at least an intermediate knowledge of Basque. In previous studies (Rodríguez-Ordóñez 2015, 2016, Siebecker 2015), the start of the intermediate level cutoff was set at 50% of correct answers. Following that cutoff, 10 correct answers out of 20 was established as a minimum requirement among Standard Basque Speakers from Bilbao, and all participants met this cutoff.

5.3. Predictions

As explained in Chapter 4, section 4.6, there is awareness both among Standard Basque and Gernika Basque speakers of the fact that DOM is wrong, and there is the belief that it comes from Spanish. Still, it is much more strongly condemned in standard Basque, and accepted as a dialectal feature in Gernika (Rodríguez-Ordóñez 2016, 2017). A speaker of Standard Basque in Rodríguez-Ordóñez (2016: 218) remembers "that we understood that THAT [=DOM] was wrong because the teacher, who was the authority a little bit, used to tell us that THAT was wrong, and not to say that, that people who do not know [Basque] say it." A common method used by teachers after a child says something such as "I have-DOM seen Mikel-DOM" is to ask "what have you seen of him: his hand? his face? You *have* seen *Mikel*." This type of response from the teacher often causes laughter among classmates, especially if the teacher chooses a body part

such as “bottom”. Then the teacher can either give the correct form, or, if the child is aware of the error, they will correct it themselves. This error may persist over the years, although it declines as proficiency in Standard Basque increases. Because of the constant explicit corrective feedback¹⁵ and strong rejection of DOM in Standard Basque, speakers in the Bilbao (BISP) group are expected to rate DOM tokens in the task rather poorly. In this sense, the first prediction is that there will be a dialectal difference, between the BISP group and the three Gernika groups (GESP, GEBB, and GEBQ). Consider the following commentary by a speaker from Gernika reported in Rodríguez-Ordóñez (2016: 218): “[...] [h]ere [=Gernika], people use it big time, but it is wrong. We were born saying that, wrong, and I don’t know why”. This statement highlights the fact that DOM is considered to be wrong in Gernika too. However, it also shows acceptance of DOM as a feature of Gernika Basque, evidenced in the choice of words that people from Gernika are “born saying that”. Participants in this task were asked to rate the tokens in a scale whose endpoints were *natural* and *weird*, in order to get judgments on what participants consider acceptable in their dialect. Therefore, it is expected that DOM will be rated more natural in the Gernika groups than in the BISP group.

The second prediction pertains to a language dominance difference within Gernika. Assuming that Basque DOM is a result of transfer from Spanish, Spanish-dominant speakers from Gernika (GESP) and balanced bilinguals (GEBB) are expected to show higher acceptability of DOM than Basque-dominant speakers (GEBQ). This is based on the analysis proposed in Chapter 4 and in combination with the idea of probability weights or activation levels that will be further explored in Chapter 6: if the structure that enables Basque DOM is present in the bilingual

¹⁵ Explicit corrective feedback has been shown to be effective in helping learners acquire a feature of the second language (L2) (see Carroll and Swain 1993, Nagata 1993, Havranek and Cesnik 2003, Lyster 2004, and Ellis, Loewen, and Erlam 2006, amongst others). The studies on explicit corrective feedback, often carried out in contrast with implicit corrective feedback, show that learners do better when they receive explicit explanation that they made an error and are either given the right form or are asked to produce the right form. The context in which Basque is learnt in schools is not the same as the regular L2 context: the Basque school system works more as an immersion program where all communication is in Basque. Nevertheless, what has been shown about corrective feedback still applies to the context of Spanish-dominant children acquiring Basque in the school setting, and it can be concluded that the type of feedback generally given by teachers to the use of DOM in Standard Basque can result in both explicit and implicit knowledge (Ellis, Loewen, and Erlam 2006).

Basque/Spanish grammar thanks to Spanish, speakers whose dominant language is Spanish, or who have similar dominance in both languages, have an overall greater absolute use of DOM in their language, thus making the structure more accessible or active to use in both “Basque” and “Spanish”.

In terms of the model, a separationist model might predict that DOM should be rated poorly by all groups when compared with the absolute conditions, because the items that allow DOM in Basque would be stored in a completely separate lexicon. Other factors such as language dominance might still be at play, but, overall, based on the idea that intra-sentential codeswitching is “costly” (e.g. Moreno, Federmeier, and Kutas 2002, Proverbio, Leoni, and Zani 2004), the conditions with DOM would be more costly and difficult to process than those in absolute. In contrast, within the 1Lex model, we would expect less sharp contrasts between the DOM and absolute conditions among deep bilinguals. Recall that the 1Lex model applies to deep bilinguals, those speakers who have fully developed two languages since childhood. If the contrasts between DOM and absolute in some of these groups are very sharp, this could indicate that they are not what López (2020) considers deep bilinguals.

As for the linguistic factors, based on previous literature summarized in Chapter 4 and focusing specifically on Rodríguez-Ordóñez’s work on Gernika Basque, first/second-person tokens are expected to be rated higher than third, at least in the Gernika groups. As for verb type, Spanish borrowings are expected to be rated higher than Basque verbs, both based on Rodríguez-Ordóñez’s findings as well as on the analyses developed in Chapter 4.

5.4. Results

5.4.1. Descriptive statistics

Table 12 contains descriptive statistics of the results. The abbreviations on the left column represent ABS(OLUTIVE) case or DOM, 1st/2nd person or 3rd, and Basque (BQ) verb or Spanish (SP) borrowing. Recall that participants rated the tokens on a scale from 1 to 5, where 1 was the lowest rating and 5, the highest. Overall, the means for the four conditions with absolute do not differ much across groups, and all three of them display the same pattern, with tokens with

Spanish-borrowed verbs rated lower than their Basque counterparts. In the BISP, and to a lesser extent, in the GEBQ group, there is an overall difference in the means with the absolutive conditions versus those with the DOM conditions. For these two groups, absolutive conditions are more highly rated than DOM conditions. On the other hand, in the GEBB and GESP groups, both absolutive and DOM conditions range around 4 points, and some DOM conditions are higher than their absolutive counterparts. In general, there do not seem to be big differences across conditions in these two groups.

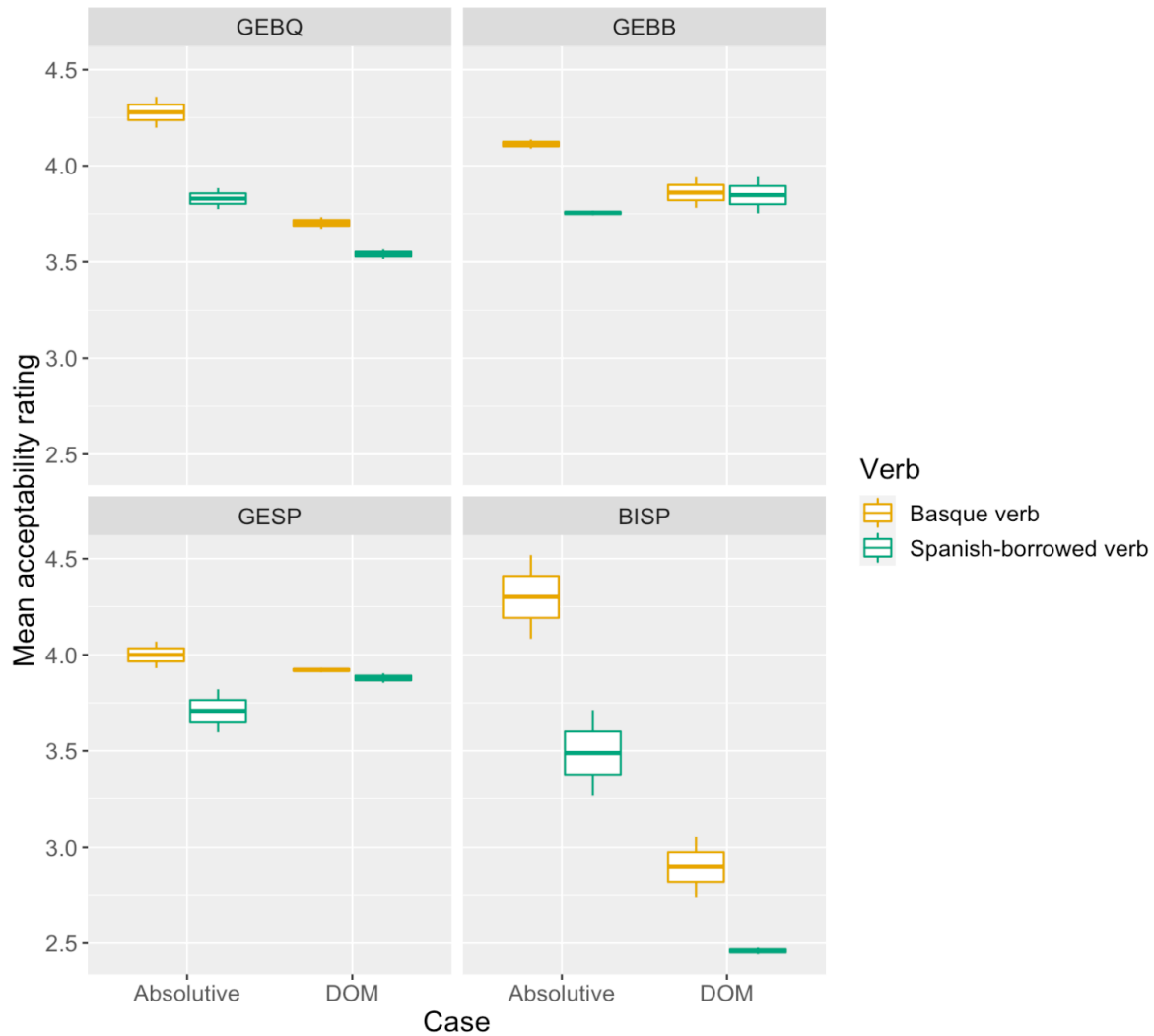
As for the other two linguistic factors, means with Spanish-borrowed verbs are lower than their Basque verb counterparts in the BISP and GEBQ groups, and slightly lower too in most conditions in the GEBB and GESP groups. In terms of person distinctions, there do not seem to be any major differences between 1/2 and 3 persons.

Table 12. *Descriptive statistics of combined conditions by group.*

	GEBQ (n=30)			GEBB (n=18)			GESP (n=18)			BISP (n=22)		
	MEA	MED	SD	MEA	MED	SD	MEA	MED	SD	MEA	MED	SD
ABS_1/2_BQ	4.20	5	1.23	4.09	5	1.31	4.07	4	1.06	4.52	5	1.05
ABS_1/2_SP	3.88	4	1.32	3.77	4	1.42	3.82	4	1.14	3.71	5	1.57
ABS_3_BQ	4.36	5	1.05	4.14	5	1.36	3.93	4	1.12	4.08	5	1.35
ABS_3_SP	3.77	4	1.32	3.74	4	1.41	3.60	4	1.32	3.26	3	1.60
DOM_1/2_BQ	3.73	4	1.47	3.94	5	1.45	3.91	4	1.19	2.74	2	1.74
DOM_1/2_SP	3.56	4	1.50	3.75	5	1.52	3.85	4	1.33	2.44	2	1.57
DOM_3_BQ	3.67	4	1.45	3.78	5	1.57	3.93	4	1.27	3.05	3	1.62
DOM_3_SP	3.51	4	1.48	3.94	5	1.38	3.90	4	1.17	2.48	2	1.50

Figure 3 represents mean acceptability ratings for the conditions of case and verb origin, by group. A longer box indicates a bigger difference between the means of the two levels of person. This figure shows two noteworthy trends. Firstly, the tokens with absolutive case and Basque verbs (which could be considered the canonical Basque form) are clearly higher than any of the other conditions in the BISP and GEBQ groups, but this difference is smaller in the GEBB group, and missing altogether from the GESP group, where the means for the other conditions are close below. And secondly, there is an increasing acceptability of DOM from the BISP group, to the GEBQ, to both GEBB and GESP, with a bigger difference between BISP and the Gernika groups, pointing first toward a dialectal difference and secondly toward an effect of language dominance.

Figure 3. Mean acceptability ratings by case according to verb origin and faceted by group.



This graph also helps to visualize the large gap between the ratings for the conditions with Basque and Spanish-borrowed verbs in the BISP group, consistent with a more prescriptivist or purist approach in standard Basque which condemns Spanish influence. Similarly, by grouping together Spanish-borrowed verbs and DOM as Spanish influence, the picture in the GEBQ group is one where participants rate more poorly those conditions that have more Spanish influence: distinguished from the other three is the condition that has neither DOM nor a Spanish-borrowed verb; then the canonical absolute case with Spanish borrowings, followed by DOM with Basque verbs, and finally DOM with a Spanish verb. Note that in the two groups that rate DOM the highest out of the four groups, GEBB and GESP, there is a lower rating for absolute conditions with Spanish verbs than with Basque verbs, but this verb origin distinction disappears

in the DOM conditions. This could indicate that the structure that results in DOM facilitates the insertion of “Spanish” roots in a way that does not happen in the canonical absolute structure.

Below I turn to the relation between acceptability scores and self-reported codeswitching rates. But before doing so, observe Table 13 below, repeated from Chapter 3.

Table 13. *Descriptive statistics of self-reported codeswitching by group (scale=0-10).*

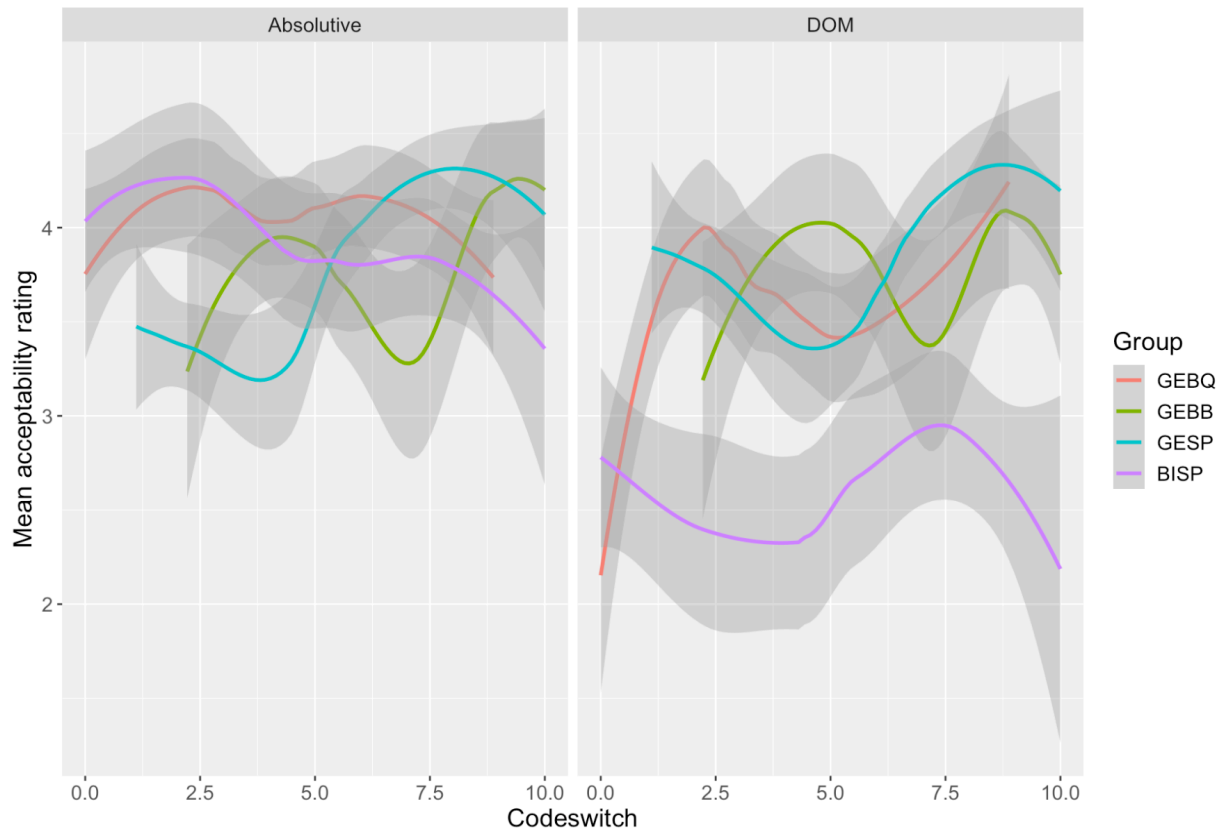
	GEBQ	GEBB	GESP	BISP
MEAN	4.38	6.45	5.13	5.09
MEDIAN	4.44	5.55	6.11	5.55
S.D.	2.43	2.66	2.51	3.36

In Gernika groups, the GEBB group has the highest mean of codeswitching scores. The GESP group has a slightly lower mean but the highest median out of the three groups. The GEBQ had the lowest codeswitching score not only in Gernika, but among all four bilingual groups.

Figure 4 below illustrates the relation between self-reported codeswitching scores and mean acceptability ratings by group and by case. At first sight, it is interesting to note that the GEBQ participants seem to pattern with the BISP participants for the absolute conditions, but with the GESP participants for DOM.

For the absolute conditions for the GEBQ and the BISP groups, the highest acceptability means cluster around the lower end of the codeswitching scale, whereas the lowest acceptability means are found with the highest rates of codeswitching, indicating that the less codeswitching these participants reported, the higher they rated canonical absolute conditions. The trend for the GESP group for absolute tokens follows an opposing pattern, with lower acceptability means for lower codeswitching scores and higher acceptability for higher codeswitching. The GEBB group shows fluctuations in mean acceptability ratings across the codeswitching scale, which makes it difficult to find a pattern. Similarly to the GESP group, however, the highest acceptability means for absolute are found at the very end of the codeswitching scale.

Figure 4. Mean acceptability ratings by codeswitching rates for each group and faceted by case.



Turning now to the DOM conditions, the highest acceptability means for each group are found toward the higher end of the codeswitching scale, and more clearly for the GEBQ and GESP groups. Interestingly, all acceptability means in the GESP group are high, regardless of codeswitching scores. In contrast, the lowest acceptability means in the GEBQ group, and to a lesser extent in GEBB, correspond with the lowest codeswitching scores. Overall, these statistics seem to point towards an effect of codeswitching on DOM acceptability. In the next section we turn to inferential statistics in order to further explore the initial observations made in this section.

5.4.2. Inferential statistics

A cumulative link mixed model was run using the *clmm* function from the ordinal package (Christensen, 2018) in R (R Core Team, 2020). First, a stepwise variable selection test was run to select the best fitted model. The result of this test had rating as a dependent variable, and case,

verb origin, number, group, and codeswitching were set as fixed effects. Then the model without interactions was compared with other models with interactions by using the function *anova*. The model with the lowest AIC was selected, which included a three-way interaction between case, group, and codeswitching. Finally, participant number, token number, and list number were set as random effects, with participant nested in list, since each participant only saw one list.

The reference levels of the categorical variables in the model were as follows: Case: DOM, group: GEBQ, verb: Basque. The reference level for the continuous variable of codeswitch was 0. The results of the model are in Table 14.

Table 14. *Coefficients for the results of the clmm model*

	ESTIMATE	STD. ERR.	Z-VALUE	P-VALUE	
CaseABS	1.309	0.235	5.561	<0.001	***
GroupGEBB	0.555	0.767	0.724	0.469	
GroupGESP	0.281	0.686	0.409	0.682	
GroupBISP	-0.763	0.562	-1.356	0.175	
Codeswitch	0.143	0.077	1.859	0.063	.
Verb SP	-0.553	0.101	-5.480	<0.001	***
ABS*GEBB	-1.792	0.417	-4.297	<0.001	***
ABS*GESP	-1.867	0.356	-5.239	<0.001	***
ABS*BISP	1.157	0.327	3.539	<0.001	***
ABS*CS	-0.146	0.044	-3.281	0.001	**
GEBB*CS	-0.049	0.122	-0.404	0.686	
GESP*CS	-0.018	0.124	-0.145	0.885	
BISP *CS	-0.140	0.102	-1.373	0.169	
ABS*GEBB*CS	0.234	0.069	3.393	0.001	**
ABS*GESP*CS	0.233	0.068	3.421	<0.001	***
ABS*BISP*CS	0.030	0.059	0.506	0.613	

The estimated variance of the random intercept of *token* is 0.062.

The estimated variance of the random intercept of *participant* nested in *list* is 0.364.

The results show a significant effect of absolutive case, suggesting that absolutive tokens were rated significantly higher than DOM tokens. In terms of groups, the GESP and GEBB levels do not show a statistically significant effect, but the positive estimates in both conditions confirm what was observed in the descriptive statistics, namely, that the GESP and GEBB groups rated DOM tokens slightly higher than the reference level group, GEBQ. The BISP group showed

lower acceptability of DOM, but this was not significant. There was an effect of codeswitch: as codeswitching increased in the GEBQ group, so did the estimate rating of DOM. Conversely, the interaction between absolutive and codeswitching suggests that for absolutive tokens, higher codeswitching meant lower ratings in the GEBQ group, and this was statistically significant. As for verb origin, there was a negative effect which indicated that Spanish-borrowed verbs were rated significantly lower than Basque verbs in the GEBQ group.

The interactions between absolutive case and the three other groups were significant: the interaction between absolutive and both GEBB and GESP groups indicates that the rating of absolutive tokens in this group is significantly lower than the intercept, and the interaction between absolutive and BISP group show a significantly higher estimate of absolutive tokens in the group. As for the interactions between codeswitching and the groups, their effects were not significant, which means that codeswitching did not significantly impact how these groups rated DOM tokens. Finally, there was a significant effect in the interaction between absolutive case, GESP group and codeswitching, which indicated an increase in acceptability of absolutive tokens in this group as codeswitching increased. The same is true for the interaction between absolutive, GEBB and codeswitching, which was statistically significant.

A post-hoc pairwise comparison using *emmeans* confirmed that none of the groups were significantly different from each other for absolutive case, but the BISP group was significantly different from the other three groups when it comes to DOM (GEBQ-BISP: $\beta = 1.481$, $z = 4.909$, $p < 0.001$, GEBB-BISP: $\beta = 1.783$, $z = 4.930$, $p < 0.001$, and GESP-BISP: $\beta = 1.670$, $z = 4.984$, $p < 0.001$). Gernika groups were not significantly different from each other, neither in the absolutive condition nor in DOM. Within each group, the difference between absolutive and DOM was significant in the BISP (DOM-abs: $\beta = -1.868$, $z = -12.532$, $p < 0.001$) and GEBQ groups (DOM-abs: $\beta = -0.5578$, $z = -4.066$, $p < 0.001$), but not in the GESP or GEBB groups.

5.5. Discussion of results

The results of the model point mainly towards a dialectal distinction whereby participants from Gernika rated DOM significantly more highly than participants from Bilbao. Within Gernika participants, the results suggest a positive effect of codeswitching. The effect of language

dominance was not significant, but balanced bilingualism and dominance in Spanish result in slightly higher ratings of DOM when compared to Basque dominance. In this section, I discuss these two effects, as well as the implications that these results have for the syntactic analysis developed in the previous chapter.

5.5.1. Dialectal differences

Dialectally, there is a clear distinction between the BISP group, from Bilbao, and the other groups from Gernika in their acceptability of DOM. This comes as no surprise, because, as discussed in the previous chapter, speakers from Bilbao speak the standard variety, which they have learned through schooling, and which is strongly linked to prescriptivist rules. It is common for children learning standard Basque at school to use DOM until they learn from their teachers that this is an “error”, a transfer from Spanish that must be avoided (Ezeizabarrena 1996, Rodríguez-Ordóñez 2016). The Bilbao participants in this study had an intermediate-advanced level of proficiency in (standard) Basque, and, as a result, their awareness of Basque DOM as an error is reflected in the low ratings they assigned to these tokens. Among speakers of standard Basque, that is, in the Bilbao group where speakers were Spanish-dominant, Spanish dominance does not translate to acceptability of DOM, because this feature is highly stigmatized in standard Basque. This low acceptability of Spanish influence can be seen in the BISP group’s rating of tokens with Spanish-borrowed verbs too, which BISP participants consistently rated the lowest out of the four groups, as well as within the group when compared to the Basque verb counterparts.

Rodríguez-Ordóñez (2016, 2017) finds that there is awareness among Gernika speakers too of the fact that DOM is not fully correct, but it is accepted as a dialectal feature, as part of the way the people of Gernika speak. In contrast, use of DOM among standard Basque speakers is seen as an error made by someone who is still learning Basque, and something that should be corrected. Recall that participants in this study were asked to rate if sentences were natural, not correct, in an effort to elicit a more realistic reflection of their mental grammar. Gernika groups were significantly different from Bilbao participants in their acceptability of DOM because this is a dialectal feature of Gernika Basque. As found by Rodríguez-Ordóñez (2016), DOM among

Gernika speakers might not be seen as fully correct when participants are asked to reflect on it, but it is nevertheless seen as authentic or as natural.

5.5.2. Language dominance and codeswitching

Within the Gernika groups, GESP and GEBB participants rated DOM tokens slightly higher than GEBQ participants, but these differences were not significant. An important difference between the groups is the amount of variation in the acceptability given to DOM tokens. In the GESP group, the standard deviations from the means were lower than in the GEBB and GEBQ groups, which indicated that all GESP participants rated DOM rather high, whereas not all GEBB and GEBQ participants did. Furthermore, the GEBQ group rated absolute as more acceptable than DOM. It seems that in this group, the canonical absolute option is still preferred, and we can say this is the “pure Basque” option, or at least, based on the Gernika speakers’ attitudes reported in Rodríguez-Ordóñez (2016, 2017), the correct option. The same is not true about the GESP and GEBB groups. Recall that the post-hoc test confirmed that there is no significant difference between DOM and absolute in the GEBB and GESP groups: in these groups, both cases are similarly acceptable.

It is important to consider that Gernika participants are all from the same town, and they speak the same dialect of Basque. The main difference between the groups is language dominance and use. So far, the discussion points towards the idea that Basque-dominant speakers, presumably those with the lowest use rate of Spanish, are also those with the lowest ratings for DOM in Gernika. In contrast, Spanish-dominant participants and balanced bilinguals favor DOM. In the GESP group, this can be argued to be an effect of language dominance: a more frequent use of Spanish and Spanish features and lexical items facilitates the use of those in Basque too. In the balanced bilingual group, an equal frequency in all items is expected to yield interactions and mixing of the items from the different “languages”.

But there is more to the story: within the GEBQ group, a higher self-reported codeswitching score translated into higher acceptability of DOM and lower acceptability of absolute, making GEBQ participants behave more similarly to GESP participants as codeswitching increased. What this suggests is that codeswitching influences the acceptability of DOM. Codeswitching,

understood as the overt, externally perceptible mixing of two languages, translates to a form of covert codeswitching too, in which rules and processes of one language (in this case, Spanish DOM) are applied on another language (Basque). As was the case with null objects, with Basque DOM too, participants who are aware of codeswitching, that is, mixing of languages on List 2, are also more likely to codeswitch on the level of List 1, where roots and functional items are selected.

5.5.3. Informing the syntactic analysis of Basque DOM

The results showed an effect of codeswitching as well as a small effect of Spanish in the acceptability of Basque DOM in Gernika. The presence of these effects supports the proposed analysis that Basque DOM is enabled through a feature of Spanish which is accessible in Basque because of the integrated lexicon. Higher scores of codeswitching resulted in higher acceptability of DOM, which reinforces the idea that this phenomenon is an instance of *covert* codeswitching. Secondly, a high activation of the structure that yields DOM, which comes from “Spanish”, can result from Spanish-dominance, or from an overall high activation of the features from both “languages” which follows from balanced bilingualism and frequency of codeswitching. Balanced bilinguals and Spanish-dominant bilinguals have a higher preference for DOM than Basque-dominant bilinguals because the structure that results in DOM (the structure with αP) is more active among these speakers: it has a higher resting activation due to its frequency of use which results from the language profile. Among these participants, the structure is more active to use in both “Basque” and “Spanish”. The specifics of these activation levels or probability weights will be further elaborated in Chapter 6.

The results related to self-reported codeswitching support the idea that codeswitching happens at different levels, not only in the morphophonology (that is, with the borrowing of vocabulary items), but in the narrow syntax. Participants that have awareness of switching between Basque and Spanish and that self-reported codeswitching rated DOM conditions as more acceptable than those with lower levels of codeswitching. Participants that report “overt” codeswitching appear to be doing so covertly too, by using a functional category from Spanish in Basque, which results in DOM.

As for the specific verbs that favor this structure with α P, in my analysis of Basque DOM, I explored the idea of DOM being more acceptable with Spanish-borrowed verbs, following Rodríguez-Ordóñez (2016, 2017). I accounted for this idea in terms of the insertion of one vocabulary item or another (etymologically Basque or Spanish-borrowed verb) for the same root, depending on the functional projection that selects the root: if α P selects the VP containing the root, the vocabulary item inserted is the Spanish-borrowed verb, and α P results in DOM, but if vP directly selects the VP containing the root, the vocabulary item inserted is the etymological Basque option, and the object stays with canonical absolutive case. However, the results of the current study do not support such an effect of the structure in the vocabulary item inserted, because Spanish-borrowed verbs were overall rated lower than with Basque verbs, including in the DOM conditions. This could indicate an effect of the task, which caused participants, especially Basque-dominant ones, to apply a more prescriptive judgment in the rating of Spanish borrowings. Among Spanish-dominant Gernika Basque speakers and, to a lesser extent, among balanced bilinguals, Spanish borrowings were not rated much lower than Basque verbs, which is another indication of Spanish transfer in these groups.

Finally, the dialectal differences discussed in section 5.5.1 can be interpreted within the 1Lex model as a distinction between deep bilinguals, i.e., the participants from Gernika, and the bilinguals from Bilbao who, arguably, have not “developed” both of their languages to the same extent. For those bilinguals that do not qualify as “deep bilinguals” in López’s (2020) terms, it is not clear what the proposed alternative system is in López (2020). Presumably, the lexicons of these bilinguals are not fully integrated, which explains why this form of interaction between the two discrete languages is rated poorly. Instead of pursuing this idea further, I use probabilistic weights in the next chapter to try to account for the differences in acceptability.

5.6. Conclusion

To conclude, in this chapter I presented an acceptability judgment task administered to four bilingual groups of Spanish/Basque speakers. The results indicated that Basque DOM was first a dialectal feature of Gernika Basque, and, secondly, it was affected by language dominance and codeswitching in Gernika. In the Gernika groups, the GESP and GEBB groups found DOM

slightly more acceptable than the GEBQ group: these were the groups with higher rates of self-reported codeswitching. What is more, In the GEBQ group, a higher rate of codeswitching translated into a higher rating for DOM acceptability. Therefore, self-reported overt codeswitching translates as covert codeswitching in the case of DOM too.

In terms of the linguistic features that favor DOM, the results of the AJT did not support an effect of person. Among the GEBB and GESP groups, the conditions with verbs borrowed from Spanish were less acceptable than Basque verbs in the absolute conditions, but the difference was minimal with the DOM conditions. This further supports the idea that Basque DOM is influenced by Spanish, since Spanish borrowings had negative effects in the acceptability of absolute but not of DOM conditions.

CHAPTER 6: CONCLUSION

6.1. Recap

In this dissertation, I explored two contact phenomena within López's (2020) 1Lex model of bilingual grammar: null objects in Spanish in contact with Basque, and DOM in Basque in contact with Spanish. I argued that the phenomena can be explained as forms of covert codeswitching within the 1Lex model thanks to the distribution of labor assumed in Distributed Morphology, which entails that the syntax is blind to discrete languages. Therefore, using in one "language" functional heads or features from the other "language", which I argue is the case for null objects and DOM, is comparable to mixing the languages overtly.

For the analysis of null objects, I showed that the relevant feature in the object is lack of case. This was supported with data from ditransitive constructions with animate DOs and from constructions with DOM-ed inanimate objects. Once I identified case as the key aspect, I developed an analysis with different Vocabulary Insertion Rules based on the context in which the (caseless) clitic is found. Licensing of null objects is made possible thanks to a D-feature in v to which bilingual Spanish/Basque speakers have access as part of their integrated lexicon. The results of the AJT showed that the main distinction in the acceptability assigned to null objects is a dialectal one rather than one based on language dominance (dominance as determined by the Bilingual Language Profile): speakers from Bilbao rated null objects similarly to speakers from the monolingual control group, while Gernika groups rated them more highly, without significant differences between the three groups. I accounted for this by arguing that dominance in Basque may have been the initial trigger for the change, combined with the fact that the number of Basque-dominant speakers in Gernika has been and continues to be higher than the number of Spanish-dominant speakers. Additionally, codeswitching plays an important role in the acceptability that Gernika speakers assigned to null objects: those groups with higher scores of self-reported codeswitching were also those who rated null objects more highly.

I analyzed Basque Differential Object Marking by following López's (2012) analysis of Spanish DOM, whereby DOs that have a KP cannot check case in situ. These objects move to an αP where they check dative case. This αP is only available to use in Basque because it is part of the integrated List 1 of Spanish/Basque bilinguals. The results of the DOM AJT also indicated that

there was a dialectal difference: Gernika Basque speakers rated DOM overall higher than Standard Basque Speakers from Bilbao. The differences between the three Gernika groups were not significant, but Spanish-dominant speakers and speakers with higher rates of codeswitching rated DOM higher than Basque-dominant speakers, who were also the group with the lowest codeswitching scores. Interestingly, in the Basque-dominant group from Gernika, higher self-reported codeswitching corresponded with a higher acceptability of DOM.

These phenomena were framed in the 1Lex model by proposing that mixing functional projections from different languages in the way outlined above is a form of covert codeswitching. While there is no obvious switch between Spanish and Basque in either contact phenomenon, the analyses developed rely on codeswitching on the syntactic level, on the use of material that belongs to the other “language”. Note that for this codeswitching to take place, as in all cases of codeswitching, the features need to match. For example, v does not license null objects and, based on the complexity of the Basque verbal structure, it may be missing other important features that $v_{[D]}$ has and that are needed in the Basque verbal complex. Therefore, using v in Basque would result in ungrammaticality, and it can be postulated that codeswitching does not occur in this direction.

6.2. Probabilistic weights in the 1Lex model

One question that remains open is how to account for variation in null object and DOM acceptability among the different bilingual groups. First of all, the 1Lex model is aimed to account for the I-Language of deep bilinguals, i.e. “people who learned two languages from birth or from a very early age (that is, they are early bilinguals) and were able to fully develop them into adulthood” (López 2020: 7). With that in mind, one could argue that the bilingual speakers from Bilbao did not *fully develop* their competence in Basque, since they learned it through schooling and its use outside an academic context was limited. That being the case, it is expected that bilingual speakers from Bilbao would not codeswitch in such a way that leads to the acceptability of Basque DOM and Spanish null objects. In contrast, speakers from Gernika are deep bilinguals who codeswitch both in intra-sentential and extra-sentential positions (Etxebarria

1998). Regardless of this contrast, in this section I discuss how probabilistic weights or resting activation levels can be added to the model to account for the observed variation.

López (2020) suggests the possibility of specifying probabilities to the different exponents in List 2 as a way to account for a new exponent replacing an older one. For example, he discusses how the Latin word *cervesia* ‘beer’ was replaced by the Old Germanic one *bior* in French (*la biere*) and Italian (*la birra*) (López 2020: 54, 140). The idea is that there was a period in which both the Latin and the Old Germanic exponents coexisted. Then, there had to be an increasing probability among French and Italian speakers to select the new exponent, until the old exponent’s probability reached 0. López does not offer a proposal for how probability weights might be integrated in the model, but he points towards an analysis such as Adger and Smith’s (2010). Adger and Smith (2005, 2010) and Adger (2006) account for inter- and intra-speaker variation in subject-verb agreement in the English of Buckie, a town in North-East Scotland. Copula agreement in the past is as follows: *I was, you was/were, (s)he was/were, we was/were, you(pl) was/were, they were*. Where there is variation between *was* and *were*, the distribution is not equal, but one form is generally preferred over the other. To account for this, Adger and Smith (2010) use an algorithm proposed in Adger (2006: 518), according to which single-feature items are first matched to a form, as in (147).

- | | | | |
|----------|----------------------|----|------------------------------|
| (147) a. | [singular: +] was | d. | * [participant: –] was, were |
| b. | [singular: –] were | e. | [author: –] were |
| c. | [participant: +] was | f. | [author: +] was |

Since line (d) contains two possible forms, this line is rejected (Reject Optionality). In the context of a second-person singular subject, for example, three items in (147) match its features: (a), (c), and (e). This will generate a *pool of variants*, shown in (148).

- (148) [singular: +, participant: +, author: –] (a) was, (c) was, (e) were

In this case, the uneven distribution of the phonological forms will result in the form *was* being selected 66% of times and *were*, 33%. This makes the right prediction for their corpus, where the form *was* was used 69% of times for second-person singular subjects. The prediction is also shown to work with *we* and *you(pl)*.

However, the analyses I proposed for the contact phenomena deal with a specific functional projection being more frequent among a specific type of bilingual speakers, and not with competition of vocabulary items from List 2: for null objects, the null exponent is the only vocabulary item for D_{CI} in the context of $v_{[D]}$, and in DOM we deal with the presence or absence of α . Even if López suggests the idea of probabilistic weights for the different exponents in List 2, I want to suggest that the same is true in List 1, at least in cases with two functional projections with similar roles, as in contexts involving αP or lack of it, and choice between $v_{[D]}$ and v . In previous chapters, I have mentioned that the choice of one item versus the other is related to their frequency and to their resting activation level: a more frequent word has a higher resting activation level than an infrequent word (Morton 1969, 1979, and Morton and Patterson 1998).

Specifically, Bender (2000) develops a production model that includes probability rates as a form of resting activation rate, and which incorporates social meaning and context. She builds on the work of Jurafsky (1996) and Kemmer and Israel (1994). Kemmer and Israel (1994) propose an analysis of the grammatical and social constraints on *t/d* deletion within a usage-based model. For example, for a word like *last* which has the options /læs/ and /læst/, the more frequent option has a higher resting activation. When a speaker produces the word *last*, the option with the higher activation usually wins out, depending on how much higher its activation is.

Jurafsky (1996) proposes a computational model of language processing. This model consists of a parallel parser with probabilities associated with each construction. Every context-free rule has a prior probability, which resembles the “resting activation” of the frequency-based models. Every predicate with valence (subcategorization) bears probabilistic expectations for its valence-fillers. Consider the example in (149), where the probability of an NP expanding into ‘Det N’ is .63, in a 0-1 scale.

(149) (.63) NP \rightarrow Det N (Jurafsky 1996: 148)

The combination of the probabilities of each construction and valence pattern can provide the probability of an entire parse. However, these frequencies can be overridden by the context. Borrowing the example provided by Bender (2000), the classical garden-path sentence in (150) can be rendered interpretable in a context such as (151).

(150) The horse raced past the barn fell.

(151) The horse that was raced down the hill got there just fine. The horse that was raced along the river had some trouble. And the horse raced past the barn fell.

(Bender 2000: 288)

Bender proposes to adapt Jurafsky's parser model to a production model. However, she notes that this would mean that a speaker would always select the most frequent variants, thus resulting in lack of variation. Therefore, she proposes to combine such a model with Kemmer and Israel's (1994) association of variants to social value, such that a disfavored variant may be chosen if there is a desire to express the social value associated with it. She offers a proposal for the use of the overt and silent copula in AAVE in which two competing entries have different degrees of resting activation represented between 0 and 1. The entries in her proposal have social context information embedded in them, as shown in (152).

(152) Competing entries for copular sentences with NP predicates (Bender 2000: 292)

$$.4 \left[\begin{array}{ll} \textit{copula-be} & \\ \text{COMPS} & \langle \text{NP} \rangle \\ \text{CTXT | SOCIAL} & \textit{'educated'} \end{array} \right] \quad .6 \left[\begin{array}{ll} \textit{silent-copula-ph} & \\ \text{ARGS} & \langle \text{NP} \rangle \end{array} \right]$$

The *silent-copula-ph(rase)* entry only contains information for the type of argument, whereas the overt *copula-be* entry has an 'educated' context in it. With the numbers proposed above, the silent copula is the preferred choice in most contexts, indicated by the higher resting activation. A speaker must want to express the social value associated with the overt copula in order to override the higher activation rate of the silent copula.

It is not my goal to investigate whether social meaning and context are part of the grammar. For exploratory purposes, I will simply follow Bender in assuming that they are, so I can propose a way to integrate the results of the experimental tasks with the theoretical analysis. In the results of null objects, the differences between the Gernika groups were small, and the GEBB and GESP groups rated null objects slightly higher than the GEBQ group. Therefore, I propose the following tentative resting activation levels for the two competing v and v[D] entries.

- (153) a. BISP group
- $$.8 \left[v \right] \qquad .2 \left[\begin{array}{l} v_{[D]} \\ \text{SOCIAL Basque id.} \end{array} \right]$$
- b. GEBQ group
- $$.4 \left[\begin{array}{l} v \\ \text{CTXT. formal} \end{array} \right] \qquad .6 \left[v_{[D]} \right]$$
- c. GEBB and GESP groups
- $$.3 \left[\begin{array}{l} v \\ \text{CTXT. formal} \end{array} \right] \qquad .7 \left[v_{[D]} \right]$$

In the BISP group, the $v_{[D]}$ entry has a low activation rate. This rate considers that this group is Spanish-dominant, and that average use of Basque among these speakers is low (see Table 15 and its discussion below). Nevertheless, because there is awareness among Spanish/Basque bilinguals that null objects can be used as a Basque identity marker (Mendieta-Lombardo & Molina 1995), there is a social meaning of Basque identity associated with it. A speaker from the BISP group could select $v_{[D]}$ rather than v when they wish to show their connection to their Basque identity.

Conversely, the Gernika groups are proposed to have the resting activations in (153b) and (153c). These numbers account for the fact that overt clitics, i.e. the use of v instead of $v_{[D]}$ were rated high throughout, but also for the fact that null objects were rated higher in Gernika, with slightly higher ratings in the GEBB and GESP groups. Therefore, $v_{[D]}$ is more strongly activated than v for all the Gernika groups, considering both its use in Basque contexts and in Spanish contexts. In fact, it can be argued that, among these groups, v is only selected in formal Spanish contexts, as suggested in the entries for v above.

Note that these numbers are an approximation. They assume that the results of the AJT are a reflection of I-Language. What is more, these tentative numbers consider the average amount of Spanish and Basque use that the participants reported as part of the Bilingual Language Profile, presented in Table 15 below. While participants were asked to make the sum percentage of Spanish and Basque add to 100 in each category, some participants did not follow that direction.

This could be a simple mistake, or it could also mean that some participants intended to account for codeswitching.

Table 15. *Average percentages of self-reported language use in a regular week.*

	BISP		GESP		GEBB		GEBQ	
	SPAN.	BASQ.	SPAN.	BASQ.	SPAN.	BASQ.	SPAN.	BASQ.
WITH FRIENDS	96%	14%	87%	33%	68%	40%	34%	77%
WITH FAMILY	100%	6%	87%	23%	74%	46%	49%	67%
AT WORK/SCHOOL	75%	44%	76%	52%	53%	65%	45%	68%

In the case of DOM, the analysis proposed relies on the projection of α where DOs move to check case. The α head itself is not in competition with another head that results in canonical absolutive case, rather, it is its projection or lack of it that results in DOM. This head can be suggested to have a higher resting activation level in Spanish-dominant speakers than in Basque-dominant speakers, since it is selected in Spanish contexts any time there is an animate, specific DO. Thus, we may propose that among Spanish-dominant speakers this head has a resting activation level of .8 whereas it is at .6 among Basque-dominant speakers, for example.

As for Basque DOM, it is the constructions with or without α P rather than the α head that would be in competition. These could be represented in the form of phrase structure rules, such as in Jurafsky's (1996) example (149) above, by assigning the number to the probability that vP expands to [v α P] or to [v VP]. For consistency, however, I will continue following Bender's format.

- (154) a. BISP group
- .9 [$v_{[D]}$ VP [V ...]] .1 [$v_{[D]}$ α P [α ...]]
- b. GEBQ group
- .7 [$v_{[D]}$ VP [V ...]] .3 [$v_{[D]}$ α P [α ...]]

c. GEBB and GESP groups

$$.6 \left[v_{[D]} \text{ VP} [V \dots] \right] \quad .4 \left[v_{[D]} \alpha P [\alpha \dots] \right]$$

In the BISP group, the construction with $v_{[D]}\text{-}\alpha\text{P}$ is low, because this combination is not frequent in this group, evidenced by the low ratings in the AJT. In fact, in Standard Basque, DOM is known to be incorrect, and this combination is avoided. Meanwhile, in the Gernika groups, and more so in the GEBB and GESP groups, the DOM option was as acceptable as the non-DOM option. Considering, however, that inanimate DOs would only be found with the $v_{[D]}\text{-VP}$ constructions, this combination must have an overall higher frequency. The $v_{[D]}\text{-}\alpha\text{P}$ combination could also have a “Basque identity” meaning associated with it in the Gernika groups in (154b) and (154c), because, even if there is awareness of the feature as not being fully correct, it is accepted as a feature of the traditional dialect (Rodríguez-Ordóñez 2016, 2020).

This proposal for DOM would be problematic if the assumption is that the entries with a higher resting activation are always selected. That being the case, the $v_{[D]}\text{-}\alpha\text{P}$ option would not be used in Gernika groups either, which is not correct. While I followed Bender in proposing these numbers as resting activation levels, they can also be seen as probability rates which indicate how likely an exponent is to be selected. These would be similar to what is known as *prior probability* in studies of word probability (e.g. Moers, Meyer and Janse 2017). Prior probability refers to a word’s probability without considering any contextual factor. If we propose a scale as a true probability rate, in any given context, all else being equal, an entry with a higher number simply has a higher probability of being selected, but that does not mean that it will always be selected.

Integrating probabilities in a bilingual model seems necessary since it provides a way to account for variation in cases with two competing functional heads that fulfil the same role. In DM, words are a combination of roots (List 1), vocabulary insertion rules (List 2), and encyclopedia entries (List 3). When discussing word frequency, then, we should be discussing frequency both in List 1 and in List 2. Frequency distinctions in List 2 may be necessary when two vocabulary items for the same root are in competition, as in López’s (2020) *beer* example. But word frequency or activation is also a relevant topic in contexts without a direct competition. For example, an everyday word such as *chair* will typically be more active than a lesser used word,

such as *solstice*. It follows to argue that the probability rates or resting activation levels are in List 1 where the roots for the relevant words are first selected. I argued that this is so for functional heads as well, and that it is, in fact, necessary for functional heads that are in competition such as v and $v_{[D]}$. The activation levels or probability rates are affected by several factors, and I considered language dominance and use when I proposed the tentative numbers for the relevant entries. Having entries with different probability rates allows to capture variation among bilinguals who speak the same languages.

In terms of the model in connection with resting activation levels, in a separationist model, resting activation levels would also be independent of each other for “competing” entries. That is, if the grammar of Spanish is completely separate from the grammar of Basque, v and $v_{[D]}$ would be in separate lexicons and their resting activations would not be in relation with each other. Similarly, α would only be in the Spanish lexicon. Therefore, the addition of resting activation levels for the contact structures under study would not work in a separationist model.

6.3. Final remarks and future directions

In this dissertation, I have proposed analyses for two phenomena in Spanish/Basque contact linguistics in a framework of bilingualism. While morphosyntactic analyses have been proposed for the phenomena before, these were not framed within a bilingual model, and they did not consider transfer or contact effects. Sociolinguistic studies, however, have argued that these phenomena are the result of language contact. Therefore, I aimed to fill that gap by considering what material is being borrowed, or codeswitched for, when DOM is used in Basque and when null objects are used in Spanish.

Secondly, I have presented judgments from four different bilingual profiles that have allowed to conclude that the contact phenomena are affected by intense contact between the languages. That is, continued and balanced societal bilingualism is necessary for the contact phenomena to be developed and maintained. The judgments presented and discussed in this dissertation came from a formally designed task, and they are a valuable contribution to the preexisting body of data coming from naturalistic conversations and informal judgments.

Finally, by proposing that probabilistic weights or word activation levels may regulate some aspects of bilinguals' codeswitching, I made a contribution to López's (2020) 1Lex model of bilingual grammar, and to models of bilingual grammar in general. While codeswitching is regulated by feature-matching between the switches, word probability may be another factor that influences it. However, more research is needed to determine how word frequency may affect codeswitching.

As a next step in the experimental domain, a comprehensive study would require data collection from the lesser common profile of Basque-dominant bilingual speakers from the Bilbao area. The results from this group would allow to determine if language dominance in a low-contact context can have effects on the contact phenomena. It would also be interesting to collect judgments on Basque DOM and French referential null objects from French/Basque bilinguals. If the expectations were born out that null objects are the result of Basque contact, it would be important to see if referential null objects in French are rated highly by Basque/French bilinguals. There is a growing body of literature showing that French, which had been described as a non-null-object language, allows referential null objects in certain, still not fully defined contexts (Cummins & Roberge 2004, 2005, Grüter 2009). Presumably, Basque/French bilinguals would rate null objects more highly than monolingual French speakers. Additionally, by collecting judgments on Basque DOM from the same group to complement previous naturalistic data (Rodríguez-Ordóñez 2016), the argument that DOM comes from Spanish influence could also be reinforced, since French is a non-DOM language.

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APPENDIX A. NULL OBJECTS ACCEPTABILITY JUDGMENT TASK

Target token sets

		NULL	OVERT
1	Inanimate	¿Los niños siguen las normas? ¡Sí, claro que siguen!	¿Los niños siguen las normas? ¡Sí, claro que las siguen!
	Animate	¿Los niños siguen a las andereños? ¡Sí, claro que siguen!	¿Los niños siguen a las andereños? ¡Sí, claro que les siguen!
2	Inanimate	¿Ya has visto la peli? No, todavía no he visto.	¿Ya has visto la peli? No, todavía no la he visto.
	Animate	¿Ya has visto a la camarera? No, todavía no he visto.	¿Ya has visto a la camarera? No, todavía no le he visto.
3	Inanimate	¿Has dejau la casa sola? Si pero ha cuidado mi hermano.	¿Has dejado la casa sola? Si pero la ha cuidado mi hermano.
	Animate	¿Has dejado a la ama sola? Si pero ha cuidado mi hermano.	¿Has dejado a la ama sola? Si pero le ha cuidado mi hermano.
4	Inanimate	Oye, ¿cuándo nos enseñas tu coche nuevo? Mañana traigo.	Oye ¿cuándo nos enseñas tu coche nuevo? Mañana lo traigo.
	Animate	Oye, ¿cuándo nos enseñas a tu nuevo churri? Mañana traigo.	Oye, ¿cuándo nos enseñas a tu nuevo churri? Mañana le traigo.
5	Inanimate	¿Has escuchado el ruido? Que va, no he oído.	¿Has escuchado el ruido? Que va, no lo he oído.
	Animate	¿Has escuchado al profesor? Que va, no he oído.	¿Has escuchado al profesor? Que va, no le he oído.
6	Inanimate	¿Has oído el jarrón? Sí, alguien ha tirado al suelo.	¿Has oído el jarrón? Sí, alguien lo ha tirado al suelo.
	Animate	¿Has oído al abuelo? Sí, alguien ha tirado al suelo.	¿Has oído al abuelo? Sí, alguien le ha tirado al suelo.

7	Inanimate	Necesitaban el balón para el partido. ¿Y has llevado?	Necesitaban el balón para el partido. ¿Y lo has llevado?
	Animate	Necesitaban al niño para el partido. ¿Y has llevado?	Necesitaban al niño para el partido. ¿Y le has llevado?

8	Inanimate	He visto el cuarto desordenado. Ahora recojo.	He visto el cuarto desordenado. Ahora lo recojo.
	Animate	He visto al estudiante esperando. Ahora recojo.	He visto al estudiante esperando. Ahora le recojo.

9	Inanimate	¿Conoces esta ciudad? No, no conozco.	¿Conoces esta ciudad? No, no la conozco.
	Animate	¿Conoces a esa mujer? No, no conozco.	¿Conoces a esa mujer? No, no le conozco.

10	Inanimate	No está el ordenador aquí. A ver si encuentro en mi cuarto.	No está el ordenador aquí. A ver si lo encuentro en mi cuarto.
	Animate	No está tu hermano aquí. A ver si encuentro en mi cuarto.	No está tu hermano aquí. A ver si le encuentro en mi cuarto.

11	Inanimate	¿Como se ha caído el carrito? Ha empujau María	¿Como se ha caído el carrito? Lo ha empujau María
	Animate	¿Como se ha caído el abuelo? Ha empujau María	¿Como se ha caído el abuelo? Le ha empujau María

12	Inanimate	¿No encuentras la cartera? No he buscau todavía	¿No encuentras la cartera? No la he buscau todavía
	Animate	¿No encuentras a Nerea? No he buscau todavía	¿No encuentras a Nerea? No le he buscau todavía

13	Inanimate	Este año no has visitado el pueblo. Ya, echo mucho de menos.	Este año no has visitado el pueblo. Ya, lo echo mucho de menos.
	Animate	Este año no has visitado a tu primo. Ya, echo mucho de menos.	Este año no has visitado a tu primo. Ya, le echo mucho de menos.

14	Inanimate	Dónde está tu chaqueta? He dejau en casa.	Dónde está tu chaqueta? La he dejau en casa.
	Animate	Dónde está tu abuela? He dejau en casa.	Dónde está tu abuela? Le he dejau en casa.

15	Inanimate	Has escuchado la charla? Sí, pero no he entendido.	Has escuchado la charla? Sí, pero no la he entendido.
	Animate	Has escuchado a la médica? Sí pero no he entendido.	Has escuchado a la médica? Sí pero no le he entendido.

16	Inanimate	¿Cómo ha llegado la caja aquí? He arrastrau yo.	¿Cómo ha llegado la caja aquí? la he arrastrau yo.
	Animate	¿Cómo así ha venido Elena aquí? He arrastrau yo.	¿Cómo así ha venido Elena aquí? Le he arrastrau yo.

17	Inanimate	Has tirado tú el papel al suelo? No, ni he tocau.	Has tirado tú el papel al suelo? No, ni lo he tocau.
	Animate	Has tirado tú a Jon al suelo? No, ni he tocau.	Has tirado tú a Jon al suelo? No, ni le he tocau.

18	Inanimate	Has roto el cuaderno? Sí, ya no quiero.	Has roto el cuaderno? Sí, ya no lo quiero.
	Animate	Has roto con Aitor? Sí, ya no quiero.	Has roto con Aitor? Sí, ya no le quiero.

19	Inanimate	Y tu teléfono? He perdido en las txosnas.	Y tu teléfono? Lo he perdido en las txosnas.
	Animate	Y Josu? He perdido en las txosnas.	Y Josu? Le he perdido en las txosnas.

20	Inanimate	Traigo la carpeta? No, ya no necesito.	Traigo la carpeta? No, ya no la necesito.
	Animate	Traigo a la directora? No, ya no necesito.	Traigo a la directora? No, ya no le necesito.

21	Inanimate	¿Cómo ha llegado el cuadro ahí arriba? He levantado yo.	¿Cómo ha llegado el cuadro ahí arriba? Lo he levantado yo.
	Animate	¿Cómo ha llegau iker ahí arriba? He levantado yo.	¿Cómo ha llegau iker ahí arriba? Le he levantado yo.

22	Inanimate	No puedo encontrar la navaja. Es que he escondido muy bien	No puedo encontrar la navaja. Es que la he escondido muy bien
	Animate	No puedo encontrar a Amaia. Es que he escondido muy bien	No puedo encontrar a Amaia. Es que le he escondido muy bien.

23	Inanimate	Habéis visto la ciudad? No, luego visitamos	Habéis visto la ciudad? No, luego la visitamos
	Animate	Habéis visto a la abuela? No, luego visitamos	Habéis visto a la abuela? No, luego le visitamos

24	Inanimate	¿Dónde está tu móvil? Tengo en casa estropeau.	¿Dónde está tu móvil? Lo tengo en casa estropeau.
	Animate	¿Dónde está tu ama? Tengo en casa enferma.	¿Dónde está tu ama? Le tengo en casa enferma.

Filler tokens

LESS ACCEPTABLE

MORE ACCEPTABLE

Marta no está invitada. Ya la diré que venga.	Marta va a venir a ayudar. Pero si le dije que no.
Que has comprado para Susana? La voy a regalar un jersey	Ayer fue el cumple de Susana. Ya, yo le regalé un libro.
¿cómo va a entrar Amanda? La daré una llave	Vaya favor que te hizo Amanda. Sí, le tengo que dar las gracias.
¿Cómo vas a hablar con Olaya? La escribiré un email.	Al final ayudaste a Olaya. Siiii ¡le escribí todo el trabajo.!
¿Hablaste con la abuela estas vacaciones? No pero la mandé una postal.	¿Felicitaste a la abuela? Si, y también le mandé unas flores.
Rosa necesita llamar a casa. La puedo dejar mi teléfono	Rosa no tiene chaqueta. Le puedo dejar una mía.
Puedes llevar a Ana a casa? Sí, puedo hacerla el favor.	¿Qué cenó Ana? Le hice una tortilla.
Lucía ya anda en bici? Sí, la enseñé yo.	Lucía ha visto la casa? Sí, ya le he enseñado todo
¿La niña necesita algo? No creo, ya la he cambiado el pañal	La niña ya está vestida? Sí, le he cambiado la ropa.
¿Sabes si Pilar va a venir? No, pregúntala después.	¿Cuándo llega Pilar? Le pregunté pero no sabe.
Laura durmió toda la noche. Es que la leí un cuento.	¿Laura sabe jugar a este juego? Yo solo le leí las normas.
¿Qué le llevaste a Marina? La compré una botella de vino.	¿Llevaste algo a Marina? No, no le compré nada.

APPENDIX B. BILINGUAL LANGUAGE PROFILE

Below is the Spanish PDF version of the Spanish/Basque BLP questionnaire. Participants saw half of the questionnaire (sections I and II) in either Basque or Spanish and the other half (sections III-V) in the other language. The Basque version of the questionnaire is available on the Bilinguals Language Profile website (Birdsong, Gertken, & Amengual, online).

Bilingual Language Profile: Spanish-Basque

Nos gustaría pedir su ayuda para contestar a las siguientes preguntas sobre su historial lingüístico, uso, actitudes y competencia. Esta encuesta ha sido creada con el apoyo del 'Center for Open Educational Resources and Language Learning' de la Universidad de Texas en Austin para poder tener un mayor conocimiento sobre los perfiles de hablantes bilingües independientemente de sus diversos orígenes y en diferentes contextos. La encuesta contiene 19 preguntas y le llevará menos de 10 minutos para completar. Esto no es una prueba, por tanto no hay respuestas correctas ni incorrectas. Por favor conteste cada pregunta y responda con sinceridad, ya que solamente así se podrá garantizar el éxito de esta investigación. Muchas gracias por su ayuda.

I. Información biográfica

Nombre _____ Fecha de hoy ____ / ____ / ____

Edad _____ Hombre / Mujer Lugar de residencia actual: ciudad _____ País _____

Nivel más alto de formación académica:

- | | |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> Inferior la escuela secundaria | <input type="checkbox"/> Escuela secundaria |
| <input type="checkbox"/> Parte de estudios universitarios | <input type="checkbox"/> Estudios universitarios (diplomatura, licenciatura, grado) |
| <input type="checkbox"/> Parte de estudios de postgrado | <input type="checkbox"/> Master |
| <input type="checkbox"/> Doctorado | <input type="checkbox"/> Otro _____ |

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II. Historial lingüístico

En esta sección, nos gustaría que contestara algunas preguntas sobre su historial lingüístico marcando la casilla correspondiente.

1. ¿A qué edad **empezó a aprender** las siguientes lenguas?

Castellano

Desde el nacimiento 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Euskara

Desde el nacimiento 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

2. ¿A qué edad **empezó a sentirse cómodo** usando las siguientes lenguas?

Castellano

Tan pronto como recuerdo 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+ aún no

Euskara

Tan pronto como recuerdo 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+ aún no

3. ¿Cuántos años de **clases (gramática, historia, matemáticas, etc.)** ha tenido en las siguientes lenguas (desde la escuela primaria hasta la universidad)?

Castellano

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Euskara

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

4. ¿Cuántos años ha pasado en un **país/región** donde se hablan las siguientes lenguas?

Castellano

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Euskara

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

5. ¿Cuántos años ha pasado en **familia** hablando las siguientes lenguas?

Castellano

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Euskara

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

6. ¿Cuántos años ha pasado en un **ambiente de trabajo** donde se hablan las siguientes lenguas?

Castellano

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Euskara

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

III. Uso de lenguas

En esta sección, nos gustaría que contestara algunas preguntas sobre su uso de lenguas marcando la casilla correspondiente. El uso total de todas las lenguas en cada pregunta debe llegar al 100%.

7. En una semana normal, ¿qué porcentaje del tiempo usa las siguientes lenguas con **sus amigos**?

Castellano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Euskara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Otras lenguas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

8. En una semana normal, ¿qué porcentaje del tiempo usa las siguientes lenguas con **su familia**?

Castellano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Euskara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Otras lenguas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

9. En una semana normal, ¿qué porcentaje del tiempo usa las siguientes lenguas en **la escuela/el trabajo**?

Castellano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Euskara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Otras lenguas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

10. Cuando se habla a usted mismo, ¿con qué frecuencia **se habla a sí mismo** en las siguientes lenguas?

Castellano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Euskara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Otras lenguas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

11. Cuando hace cálculos contando, ¿con qué frecuencia **cuenta** en las siguientes lenguas?

Castellano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Euskara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Otras lenguas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

IV. Competencia

En esta sección, nos gustaría que considerara su competencia de lengua marcando las casillas entre 0 y 6.

	0=no muy bien						6=muy bien							
12. a. ¿Cómo habla en Castellano ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
b. ¿Cómo habla en Euskara ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
13. a. ¿Cómo entiende en Castellano ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
b. ¿Cómo entiende en Euskara ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
14. a. ¿Cómo lee en Castellano ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
b. ¿Cómo lee en Euskara ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
15. a. ¿Cómo escribe en Castellano ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6
b. ¿Cómo escribe en Euskara ?	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6

V. Actitudes

En esta sección, nos gustaría que contestara a las siguientes afirmaciones sobre actitudes lingüísticas marcando las casillas entre 0 y 6.

- | | 0=no estoy de acuerdo | | | 6=estoy de acuerdo | | | |
|------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 16. a. Me siento "yo mismo" cuando hablo en Castellano . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| b. Me siento "yo mismo" cuando hablo en Euskara . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| 17. a. Me identifico con una cultura Hispanohablante . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| b. Me identifico con una cultura Vasca . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| 18. a. Es importante para mi usar (o llegar a usar) Castellano como un hablante nativo. | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| b. Es importante para mi usar (o llegar a usar) Euskara como un hablante nativo | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| 19. a. Quiero que los demás piensen que soy un hablante nativo de Castellano . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| b. Quiero que los demás piensen que soy un hablante nativo de Euskara . | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |

APPENDIX C. LANGUAGE QUESTIONNAIRE FOR THE CONTROL GROUP

Edad: _____

Sexo: Hombre

Mujer

Otro

Ciudad de residencia actual: _____

Nivel más alto de formación académica:

Inferior a la escuela secundaria

Escuela secundaria

Parte de estudios universitarios

Estudios universitarios (diplomatura, licenciatura, grado)

Parte de estudios de postgrado

Máster

Doctorado

Otro (especificar): _____

Historial lingüístico

En esta sección, nos gustaría que contestara algunas preguntas sobre su historial lingüístico seleccionando la respuesta correspondiente.

Lengua(s) materna(s)

Español

Español y otra(s). Especifique: _____

Otra(s). Especifique: _____

Lengua(s) materna(s) de su padre

Español

Español y otra(s). Especifique: _____

Otra(s). Especifique: _____

Lengua(s) materna(s) de su madre

- Español
- Español y otra(s). Especifique: _____
- Otra(s). Especifique: _____

¿A qué edad empezó a aprender usted español? ____

¿A qué edad empezó a aprender usted inglés? ____

Indique qué porcentaje del tiempo al día pasa utilizando español.

- 0 10 20 30 40 50 60 70 80 90 100

Si la respuesta a la pregunta anterior no es 100%, ¿qué otra(s) lengua(s) utiliza en un día normal y con qué porcentaje cada una? _____

¿Ha estudiado usted alguna vez en una escuela bilingüe donde tanto el español como el inglés eran las lenguas de instrucción?

- Sí No

Si respondió "Sí" arriba, especifique (a qué edad, por cuánto tiempo)

¿Ha vivido usted en el extranjero?

- Sí No

Si respondió "Sí" arriba, especifique (¿dónde?, ¿a qué edad?, ¿por cuánto tiempo?)

¿Ha aprendido lenguas además de español e inglés?

- Sí No

Si respondió "Sí" arriba, especifique con más detalle (¿qué lengua? ¿por cuánto tiempo?)

Comente abajo si hay algo más que quiera añadir sobre su experiencia de aprendizaje de lenguas.

APPENDIX D. BASQUE PROFICIENCY TEST

1. Jaiki ohetik, seme, bazkaltzeko ordua da!

- Itxaron, ama, oso berandu sartu naiz ohean.
- Itxaron, ama, oso berandu sartuko naiz ohean.
- Itxaron, ama, oso berandu sartzen naiz ohean.

2. Egia al da Gorbea mendia erre dela?

- Bai, ezer entzun dut.
- Bai, zer entzun dut.
- Bai, zerbait entzun dut.

3. Zer esan dizu medikuak?

- Kirola egiteko.
- Kirola egitea.
- Kirola egiten.

4. Bai, ni lehenengo etxebizitzan bizi naiz, eta anaia goiko etxebizitzan.

- Beraz, zure anaia bian bizi da.
- Beraz, zure anaia bigarren bizi da.
- Beraz, zure anaia bigarrenean bizi da.

5. Zein multzotan dago hitz bat tokiz kanpo?

- gaur, atzo, bihar, etzi, etzidamu.
- gona, galtzerdiak, soinekoa, izterra.
- kopeta, belarria, lepoa, sudurra, begia.

6. Gustatu zait Menchu Gal artistaren erakusketa.

- Nolako koloreak erabiltzen dituen!
- Nolako koloreak erabiltzen dituela!
- Nolako koloreak erabiltzen ditu!

7. Ados nago

- bileran esandakoa.
- bileran esandakoak.
- bileran esandakoarekin.

8. guraso eta seme-alaben artean ondo moldatzea!

- Hau zaila
- Zein zaila da
- Zein zaila den

9. Bihar ezin dut, baina

- beste egun batean gera gaitzke.
- beste egun bat gera gaitzke.
- beste egunean gera gaitzke.

10. Ba, nire andregaiari ez asko gustatu pelikula hori.

- zait
- zion
- zitzaion

11. Gidabaimena ateratzea hain erraza , ez hainbeste lagunek huts egingo.

- bada / du
- balitz / luke
- balitz / zen

12. Interes zientifikoa , interes publikoa ere badute ikerketa-lanek.

- baino
- ezik
- ez ezik

13. Eraman fotokopia hauek Andoniri, zain dago eta!

- diezazkiozun
- iezazkiozu
- itzazu

14. Ziri galanta sartu digu denoi! Hots:

- Animuak eman dizkigula.
- Damutu egin zaigula.
- Engainatu egin gaituela.

15. Emango pozik, zuk zeureak utziko

- nizun / bazenizkidan
- dizkizut / bazenizkit
- nizkizuke / bazenizkit

16. Ikustekoa zen diskotekako giroa: batzuk saltoka besteak edanda kantuan, !

- han ziren han izatekoak
- hala zeuden han
- denak zeuden hala

17. Zein dago zuzen?

- Film hori lau bider ikusi egin dut.
- Neuk hogeit hamar liburu irakurri egin ditut.
- Uda honetan Joxe argaldu egin da.

18. Joxek ez du erraz amore ematen. Hau da:

- Joxek nekez zabaltzen du bihotza.
- Joxek ez du erraz etsitzen.
- Joxe oso bihozbera da.

19. Zer darabilzu esku artean?

- Ezer ere ez. Ez daukat ezer.
- Ezer ere ez. Ez daukat ezer ere ez.
- Ezer. Ez daukat ezer.

20. Ba daki horrek zer esaten duen!

- ahal
- omen
- ote

APPENDIX E. DOM ACCEPTABILITY JUDGMENT TASK

Standard Basque – target token sets

SET 1

		ABSOLUTE	DOM
BQ verb	2	Ni ez naiz festa horretara joango. Baina gonbidatu zaituzte, ezta?	Ni ez naiz festa horretara joango. Baina gonbidatu dizute, ezta?
	3	Jon ez da festa horretara joango. Baina gonbidatu dute, ezta?	Jon ez da festa horretara joango. Baina gonbidatu diote, ezta?
SP verb	2	Ni ez naiz kontzertu horretara joango. Baina inbitatu zaituzte, ezta?	Ni ez naiz kontzertu horretara joango. Baina inbitatu dizute, ezta?
	3	Jon ez da kontzertu horretara joango. Baina inbitatu dute, ezta?	Jon ez da kontzertu horretara joango. Baina inbitatu diote, ezta?

SET 2

		ABSOLUTE	DOM
BQ verb	1	Oso adiskidetasun handia daukazu Amaiarekin, ezta? Bai, gutxienez berak ulertzen nau	Oso adiskidetasun handia daukazu Amaiarekin, ezta? Bai, gutxienez berak ulertzen dit
	3	Oso adiskidetasun handia dauka Mirenek Amaiarekin ezta? Bai, gutxienez berak ulertzen du	Oso adiskidetasun handia dauka Mirenek Amaiarekin ezta? Bai, gutxienez berak ulertzen dio
SP verb	1	Oso erlazio ona daukazu Alaitzekin ezta? Bai, gainera berak konprenitzen nau	Oso erlazio ona daukazu Alaitzekin ezta? Bai, gainera berak konprenitzen dit
	3	Oso erlazio ona dauka Kermanek Alaitzekin ezta? Bai, gainera berak konprenitzen du	Oso erlazio ona dauka Kermanek Alaitzekin ezta? Bai, gainera berak konprenitzen dio

SET 3

		ABSOLUTE	DOM
BQ verb	2	Lanik gabe geratuko naizela esan du!? Bai, (horrekin) mehatxatu zaitu	Lanik gabe geratuko naizela esan du!? Bai, horrekin mehatxatu dizu
	3	Lanik gabe geratuko dela esan dio!? Bai, horrekin mehatxatu du	Lanik gabe geratuko dela esan dio!? Bai, horrekin mehatxatu dio
SP verb	2	Telebisorik gabe geratuko naizela esan du!? Bai, horrekin amenazatu zaitu	Telebisorik gabe geratuko naizela esan du!? Bai, horrekin amenazatu dizu
	3	Telebisorik gabe geratuko dela esan dio!? Bai, horrekin amenazatu du	Telebisorik gabe geratuko dela esan dio!? Bai, horrekin amenazatu dio

SET 4

		ABSOLUTIVE	DOM
BQ verb	2	Zelako iskanbila sortu dudan! Bai, Amak zigortuko zaitu	Zelako iskanbila sortu dudan! Bai, Amak zigortuko dizu
	3	Zelako iskanbila sortu duen! Bai, Amak zigortuko du	Zelako iskanbila sortu duen! Bai, Amak zigortuko dio
SP verb	2	Zelako notak atera ditudan! Ba, Aitak kastigatuko zaitu	Zelako notak atera ditudan! Ba, Aitak kastigatuko dizu
	3	Zelako notak atera dituen! Ba, Aitak kastigatuko du	Zelako notak atera dituen! Ba, Aitak kastigatuko dio

SET 5

		ABSOLUTIVE	DOM
BQ verb	1	Hemen bizi zara orain? Bai, amak etxetik bota nau.	Hemen bizi zara orain? Bai, amak etxetik bota dit.
	3	Hemen bizi da orain? Bai, amak etxetik bota du.	Hemen bizi da orain? Bai, amak etxetik bota dio.
SP verb	1	Zergatik zaude pasilloan? Irakasleak klasetik expulsatu nau.	Zergatik zaude pasilloan? Irakasleak klasetik expulsatu dit.
	3	Zergatik dago pasilloan? Irakasleak klasetik expulsatu du.	Zergatik dago pasilloan? Irakasleak klasetik expulsatu dio.

SET 6

		ABSOLUTIVE	DOM
BQ verb	1	Klaseko ordezkaria zara orain? Bai, klasekideek aukeratu naute	Klaseko ordezkaria zara orain? Bai, klasekideek aukeratu didate
	3	Klaseko ordezkaria da Itxaso orain? Bai, klasekideek aukeratu dute	Klaseko ordezkaria da Itxaso orain? Bai, klasekideek aukeratu diote
SP verb	1	Taldeko kapitaina zara orain? Bai, entrenatzaileek elejidu naute	Taldeko kapitaina zara orain? Bai, entrenatzaileek elejidu didate
	3	Taldeko kapitaina da Itxaso orain? Bai, entrenatzaileek elejidu dute	Taldeko kapitaina da Itxaso orain? Bai, entrenatzaileek elejidu diote

SET 7

		ABSOLUTIVE	DOM
BQ verb	1	Zertan zabiltza hemen kanpoan? Poliziak gelditu nau.	Zertan zabiltza hemen kanpoan? Poliziak gelditu dit.
	3	Zertan dabil han kanpoan? Poliziak gelditu du.	Zertan dabil han kanpoan? Poliziak gelditu dio.

SP verb	1	Zertan zabilta hemen kanpoan? Poliziak paratu nau.	Zertan zabilta hemen kanpoan? Poliziak paratu dit.
	3	Zertan dabil han kanpoan? Poliziak paratu du.	Zertan dabil han kanpoan? Poliziak paratu dio.

SET 8

		ABSOLUTE	DOM
BQ verb	1	Arantxa poztu egin da zure opariarekin? Bai, poztasunez besarkatu nau	Arantxa poztu egin da zure opariarekin? Bai, poztasunez besarkatu dit
	3	Arantxa poztu egin da Markelen opariarekin? Bai, poztasunez besarkatu du	Arantxa poztu egin da Markelen opariarekin? Bai, poztasunez besarkatu dio
SP verb	1	Arantxa poztu egin da zure notiziarekin? Bai, poztasunez abrazatu nau	Arantxa poztu egin da zure notiziarekin? Bai abrazatu dit
	3	Arantxa poztu egin da Markelen notiziarekin? Bai, poztasunez abrazatu du	Arantxa poztu egin da Markelen notiziarekin? Bai, poztasunez abrazatu dio

SET 9

		ABSOLUTE	DOM
BQ verb	2	Datorren hastean hasiko naiz klaseak ematen. Beraz, lanean hartu zaituzte!?	Datorren hastean hasiko naiz klaseak ematen. Beraz, lanean hartu dizute!?
	3	Datorren hastean hasiko da klaseak ematen. Beraz, lanean hartu dute!?	Datorren hastean hasiko da klaseak ematen. Beraz, lanean hartu diote!?
SP verb	2	Datorren hastean hasiko naiz dendan lan egiten. Beraz, kontratatu zaituzte!?	Datorren hastean hasiko naiz dendan lan egiten. Beraz, kontratatu dizute!?
	3	Datorren hastean hasiko da dendan lan egiten. Beraz, kontratatu dute!?	Datorren hastean hasiko da dendan lan egiten. Beraz, kontratatu diote!?

SET 10

		ABSOLUTE	DOM
BQ verb	2	Gaurko manifestaziora joango naiz. Kontuz, bestela atxilotuko zaituzte	Gaurko manifestaziora joango naiz. Kontuz, bestela atxilotuko dizute
	3	Ander gaurko manifestaziora joango da. Kontuz, bestela atxilotuko dute	Ander gaurko manifestaziora joango da. Kontuz, bestela atxilotuko diote
SP verb	2	Gaurko manifestaziora joango naiz. Kontuz, bestela deteniduko zaituzte	Gaurko manifestaziora joango naiz. Kontuz, bestela deteniduko dizute
	3	Ander gaurko manifestaziora joango da. Kontuz, bestela deteniduko dute	Ander gaurko manifestaziora joango da. Kontuz, bestela deteniduko diote

SET 11

		ABSOLUTIVE	DOM
BQ verb	1	Bakarrik zeundela uste nuen. Bai, baina Anek aurkitu nau!	Bakarrik zeundela uste nuen. Bai, baina Anek aurkitu dit!
	3	Eneko bakarrik zegoela uste nuen. Bai, baina Anek aurkitu du!	Eneko bakarrik zegoela uste nuen. Bai, baina Anek aurkitu dio!
SP verb	1	Izkutatuta zeudela uste nuen. Bai, baina Maitanek topatu nau!	Izkutatuta zeudela uste nuen. Bai, baina Maitanek topatu dit!
	3	Eneko izkutatuta zegoela uste nuen. Bai, baina Maitanek topatu du!	Eneko izkutatuta zegoela uste nuen. Bai, baina Maitanek topatu dio!

SET 12

		ABSOLUTIVE	DOM
BQ verb	1	Nola pasatu zara beste aldera? Ikerrek altxatu nau	Nola pasatu zara beste aldera? Ikerrek altxatu dit
	3	Nola pasatu da Nerea beste aldera? Ikerrek altxatu du	Nola pasatu da Nerea beste aldera? Ikerrek altxatu dio
SP verb	1	Nola igo zara zuhaitzera? Aitorrek aupatu nau	Nola igo zara zuhaitzera? Aitorrek aupatu dit
	3	Nola igo da Nerea zuhaitzera? Aitorrek aupatu du	Nola igo da Nerea zuhaitzera? Aitorrek aupatu dio

Standard Basque – filler tokens

LESS ACCEPTABLE

MORE ACCEPTABLE

Nola dakizu hori? Jon kontatu dit.	Nola dakizu hori? Jonek kontatu dit.
Nola konturatu da? Miren kontatu dio.	Nola konturatu da? Mirenek kontatu dio.
Zelako alkandora polita duzun! Bai, ama ekarri dit	Zelako alkandora polita duzun! Bai, amak ekarri dit
Zelako kuadro polita duen! Bai, Arantxa ekarri dio	Zelako kuadro polita duen! Bai, Arantxak ekarri dio
Taldeko kapitaina zara orain! Bai, entrenaitzailea esan dit.	Taldeko kapitaina zara orain! Bai, entrenaitzaileak esan dit.
Klaseko ordezkaria da orain! Bai, irakaslea esan dio.	Klaseko ordezkaria da orain! Bai, irakasleak esan dio.
Argazkia ikusi duzu? Bai, Ane erakutsi dit	Argazkia ikusi duzu? Bai, Anek erakutsi dit
Filmea ikusi du? Bai, Amaia erakutsi dio	Filmea ikusi du? Bai, Amaiak erakutsi dio
Boligrafoa galdu dut. Ez, Joseba hartu dizu.	Boligrafoa galdu dut. Ez, Josebak hartu dizu.
Telefonoa galdu du. Ez, Amaia hartu dio	Telefonoa galdu du. Ez, Amaiak hartu dio
Erloju hori niretzat da? Bai, aita oparitu dizu	Erloju hori niretzat da? Bai, aitak oparitu dizu
Poltsa hori harentzat da? Bai, Irati oparitu dio	Poltsa hori harentzat da? Bai, Iratik oparitu dio

Non daude zure txankletak? Etxean ahaztu dut.	Non daude zure txankletak? Etxean ahaztu ditut.
Non daude bere errotulkiak? Klasean utzi du	Non daude bere errotulkiak? Klasean utzi ditu
Betaurrekoak galdu ditut. Ez, tabernan utzi duzu	Betaurrekoak galdu ditut. Ez, tabernan utzi dituzu
Belarritakoak galdu ditu. Ez, aldagelan utzi du	Belarritakoak galdu ditu. Ez, aldagelan utzi ditu
Ez zara garrasiekin ikaratu? Ez dut entzun.	Ez zara garrasiekin ikaratu? Ez ditut entzun.
Ez da zaratekin ikaratu? Ez du entzun.	Ez da zaratekin ikaratu? Ez ditu entzun.
Eta lore hau? Dendan erosi ditut	Eta lore hau? Dendan erosi dut
Eta tarta hau? Lehen erosi ditugu	Eta tarta hau? Lehen erosi dugu
Bartzelona gustatzen zaio? Ez ditu ezagutzen.	Bartzelona gustatzen zaio? Ez du ezagutzen.
Paris gustatzen zaizu? Ez ditut ezagutzen.	Paris gustatzen zaizu? Ez dut ezagutzen.
Non dago nire txaketa? Logelan ikusi ditut.	Non dago nire txaketa? Logelan ikusi dut.
Non dago nire garagardoa? Mahaian ikusi ditugu.	Non dago nire garagardoa? Mahaian ikusi dugu.

Gernika Basque – target token sets

SET 1

		ABSOLUTIVE	DOM
BQ verb	2	Ni ez naz festa horretara jungo. Baia gonbidatu zaitzue, ezta?	Ni ez naz festa horretara jungo. Baia gonbidatu dotzue, ezta?
	3	Jon ez da festa horretara jungo. Baia gonbidatu dabe, ezta?	Jon ez da festa horretara jungo. Baia gonbidatu dotzie, ezta?
SP verb	2	Ni ez naz kontzertu horretara jungo. Baia inbitatu zaitzue, ezta?	Ni ez naz kontzertu horretara jungo. Baia inbitatu dotzue, ezta?
	3	Jon ez da kontzertu horretara jungo. Baia inbitatu dabe, ezta?	Jon ez da kontzertu horretara jungo. Baia inbitatu dotzie, ezta?

SET 2

		ABSOLUTIVE	DOM
BQ verb	1	Laguntasun handixe dekozu Amaia gaz, ezta? Bai, behintzet berak ulertzen nau	Laguntasun handixe dekozu Amaia gaz, ezta? Bai, behintzet berak ulertzen dozt(e)
	3	Laguntasun handixe deko Mirenek Amaia gaz, ezta? Bai, behintzet berak ulertzen dau	Laguntasun handixe deko Mirenek Amaia gaz, ezta? Bai, behintzet berak ulertzen dotzo
SP verb	1	Oso erlazino ona dekozu Alaitzegaz, ezta? Bai, gainera berak konprendiduten nau	Oso erlazino ona dekozu Alaitzegaz, ezta? Bai, gainera berak konprendiduten dozt(e)

	3	Oso erlazio ona deko Kermanek Alaitzegaz, ezta? Bai, ganera berak konprendiduten dau	Oso erlazio ona deko Kermanek Alaitzegaz, ezta? Bai, ganera berak konprendiduten dotzo
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SET 3

		ABSOLUTIVE	DOM
BQ verb	2	Lan barik geratuko nazela esan deu!? Bai, horregaz mehatxatu zaitzu	Lan barik geratuko nazela esan deu!? Bai, horregaz mehatxatu dotzu
	3	Lanik barik geratuko dala esan dotzo!? Bai, horregaz mehatxatu dau	Lanik barik geratuko dala esan dotzo!? Bai, horregaz mehatxatu dotzo
SP verb	2	Telebista barik geratuko nazela esan deu? Bai, horregaz amenazeu zaitzu	Telebista barik geratuko nazela esan deu? Bai, horregaz amenazeu dotzu
	3	Telebista barik geratuko dala esan dotzo!? Bai, horregaz amenazau dau	Telebista barik geratuko dala esan dotzo!? Bai, horregaz amenazau dotzo

SET 4

		ABSOLUTIVE	DOM
BQ verb	2	Zelako lioa monte u doten! Bai, Amak zigortuko zaitzu	Zelako lioa monte u doten! Bai, Amak zigortuko zaitzu
	3	Zelako lioa monte u dauen! Bai, Amak zigortuko dau	Zelako lioa monte u dauen! Bai, Amak zigortuko dotzo
SP verb	2	Zelako notak atara dotezen! Ba, Aitxek kastigatuko zatzu	Zelako notak atara dotezen! Ba, Aitxek kastigatuko dotzu
	3	Zelako notak atara dabezen! Ba, Aitxek kastigeko deu!	Zelako notak atara dabezen! Ba, Aitxek kastigeko dotzo

SET 5

		ABSOLUTIVE	DOM
BQ verb	1	Hamen bizi zara oin? Bai, amak etxetik bota nau.	Hamen bizi zara oin? Bai, amak etxetik bota dozt(e).
	3	Hamen bizi da oin? Bai, amak etxetik bota deu.	Hamen bizi da oin? Bai, amak etxetik bota dotzo.
SP verb	1	Zegaitzik zauz pasilloan? Andereinoak klasetik expulsatu nau.	Zeba zauz pasilloan? Andereinoak klasetik expulsatu dozt(e).
	3	Zegaitzik dau pasilloan? Andereinoak klasetik expulsatu dau.	Zegaitzik dau pasilloan? Andereinoak klasetik expulsatu dotzo.

SET 6

		ABSOLUTIVE	DOM
BQ verb	1	Klaseko ordezkarixe zara oin? Bai, klasekoak aukeratu nabe	Klaseko ordezkarixe zara oin? Bai, klasekoak aukeratu doztie
	3	Klaseko ordezkarixe da Itxaso oin? Bai, klasekoak aukeratu dabe	Klaseko ordezkarixe da Itxaso oin? Bai, klasekoak aukeratu dotzie
SP verb	1	Taldeko kapitana zara oin? Bai, entrenadorak elejidu nabe	Taldeko kapitana zara oin? Bai, entrenadoriek elejido doztie
	3	Taldeko kapitana da Itxaso oin? Bai, entrenadorak elejidu dabe	Taldeko kapitana da Itxaso oin? Bai, entrenadorak elejidu dotzie

SET 7

		ABSOLUTIVE	DOM
BQ verb	1	Zertan zabiz hemen kanpoan? Polizixek gelditxu nau.	Zertan zabiz hemen kanpoan? Polizixek gelditxu dozt(e).
	3	Zertan dabil hor kanpoan? Polizixek gelditu deu.	Zertan dabil hor kanpoan? Polizixek gelditu dotzo.
SP verb	1	Zertan zabiz hemen kanpoan? Polizixek pare nau.	Zertan zabiz hemen kanpoan? Polizixek pare dozt(e).
	3	Zertan dabil hor kanpoan? Polizixek pareu deu.	Zertan dabil hor kanpoan? Polizixek pareu dotzo.

SET 8

		ABSOLUTIVE	DOM
BQ verb	2	Arantxa poztu ein de zure oparixegaz? Bai, poztasunez besarkatu nau	Arantxa poztu ein de zure oparixegaz? Bai, poztasunez besarkatu dozt(e).
	3	Arantxa poztu ein de Markelen oparixegaz? Bai, poztasunez besarkatu deu	Arantxa poztu ein de Markelen oparixegaz? Bai, poztasunez besarkatu dotzo
SP verb	2	Arantxa poztu ein de zure notizixegaz? Bai, poztasunez abrazau nau	Arantxa poztu ein de zure notizixegaz? Bai, poztasunez abrazau dozt(e).
	3	Arantxa poztu ein de Markelen oparixegaz? Bai, poztasunez abrazau deu	Arantxa poztu ein de Markelen oparixegaz? Bai, poztasunez abrazau dotzo

SET 9

		ABSOLUTIVE	DOM
BQ verb	2	Datorren hastien hasiko naz klasiak emoten. Orduen, lanean hartu zaitzue!?	Datorren hastien hasiko naz klasiak emoten. Orduen, lanean hartu dotzue!?
	3	Datorren hastienn hasiko da klasiak emoten. Orduen, lanean hartu dabe!?	Datorren hastienn hasiko da klasiak emoten. Orduen, lanean hartu dotzie!?

SP verb	2	Datorren hastien hasiko naz dendan lan eitzen. Orduen, kontrateu zaitzue!?	Datorren hastien hasiko naz dendan lan eitzen. Orduen, kontrateu dotzue!?
	3	Datorren hastien hasiko da dendan lan eitzen. Orduen, kontrateu dabe!?	Datorren hastien hasiko da dendan lan eitzen. Orduen, kontrateu dotzie!?

SET 10

		ABSOLUTIVE	DOM
BQ verb	2	Geurko manifestazinora jungo naz. Kontuz, ze bestela atxilotu eingo zaitzue	Geurko manifestazinora jungo naz. Kontuz, ze bestela atxilotuko dotzue
	3	Ander gaurko manifestazinora jungo da. Kontuz, ze bestela atxilotu eingo dabe	Ander gaurko manifestazinora jungo da. Kontuz, ze bestela atxilotu eingo dotzie
SP verb	2	Geurko manifestazinora jungo naz. Kontuz, ze bestela detenidu eingo zaitzue	Geurko manifestazinora jungo naz. Kontuz, ze bestela detenidu eingo dotzue
	3	Ander gaurko manifestazinora jungo da. Kontuz, ze bestela detenidu eingo dabe	Ander gaurko manifestazinora jungo da. Kontuz, ze bestela detenidu eingo dotzie

SET 11

		ABSOLUTIVE	DOM
BQ verb	1	Bakarrik egogno zinela uste naben. Bai, baia Anek aurkitu nau!	Bakarrik egogno zinela uste naben. Bai, baina Anek aurkitu dozt(e)!
	3	Eneko bakarrik egongo zala uste nuen. Bai, baia Anek aurkitu deu!	Eneko bakarrik egongo zala uste nuen. Bai, baia Anek aurkitu dotzo!
SP verb	1	Ezcuteta egongo zinela uste neuen. Bai, baina Maitanek topatu nau!	Ezcuteta egongo zinela uste neuen. Bai, baina Maitanek topatu dozt(e)!
	3	Eneko ezcuteta egongo zala uste bena. Bai, baia Maitanek topau deu!	Eneko ezcuteta egongo zala uste bena. Bai, baia Maitanek topau deu!

SET 12

		ABSOLUTIVE	DOM
BQ verb	1	Zelanik pasaeu zara beste aldera? Ikerrek altxatu nau	Zelanik pasaeu zara beste aldera? Ikerrek altxatu dozt(e).
	3	Zelanik paseu da Nerea beste aldera? Ikerrek altxatu deu	Zelanik paseu da Nerea beste aldera? Ikerrek altxatu dotzo
SP verb	1	Zelanik igo zara arbolara? Aitorrek aupatu nau	Zelanik igo zara arbolara? Aitorrek aupatu dozt(e).
	3	Zelanik igo da Nerea arbolara? Aitorrek aupatu deu	Zelanik igo da Nerea arbolara? Aitorrek aupatu dotzo

Gernika Basque – filler tokens

LESS ACCEPTABLE	MORE ACCEPTABLE
Zelan dakizu hori? Jon konte dozte.	Zelan dakizu hori? Jonek konte dozte.
Zelan konturetu da? Miren konte dotzo.	Zelan konturetu da? Mirenek konte dotzo.
Zelako alkondara politxe dekozun! Bai, ama ekarri dozte.	Zelako alkondara politxe dekozun! Bai, amak ekarri dozte.
Zelako kuadro politxe dekon! Bai, Arantxa ekarri dotzo.	Zelako kuadro politxe dekon! Bai, Arantxak ekarri dotzo.
Taldeko kapitana zara oin! Bai, entrenadora esan dozte.	Taldeko kapitana zara oin! Bai, entrenadorak esan dozte.
Klaseko ordezkarixe da oin! Bai, irakaslea esan dotzo.	Klaseko ordezkarixe da oin! Bai, irakaslea esan dotzo.
Argazkixe ikusi dozu? Bai, Ane erakutsi dozte.	Argazkixe ikusi dozu? Bai, Anek erakutsi dozte.
Pelikulie ikusi deu? Bai, Amaia erakutsi dotzo.	Pelikulie ikusi deu? Bai, Amaiak erakutsi dotzo.
Boligrafoa galdu dot. Ez, Joseba hartu dotzu.	Boligrafoa galdu dot. Ez, Josebak hartu dotzu.
Telefonoa galdu deu. Ez, Amaia hartu dotzo.	Telefonoa galdu deu. Ez, Amaia hartu dotzo.
Erloju hori nitzako da? Bai, aita oparitu dotzu.	Erloju hori nitzako da? Bai, aitxek oparitu dotzu.
Poltsa hori berantzako da? Bai, Irati oparitu dotzo	Poltsa hori berantzako da? Bai, Irati oparitu dotzo.
Non dauz zure txankletak? Etxien ahaztu dot.	Non dauz zure txankletak? Etxien ahaztu dotez.
Non dauz beran errotulkixek? Klasien itzi deu.	Non dauz beran errotulkixek? Klasien itzi deu.
Betaurrekoak galdu dotez. Ez, tabernan itzi dozu.	Betaurrekoak galdu dotez. Ez, tabernan itzi dozuz.
Belarritakoak galdu ditu. Ez, aldagelan utzi du.	Belarritakoak galdu ditu. Ez, aldagelan utzi ditu.
Ez zara garrasiekin ikaratu? Ez dut entzun.	Ez zara garrasiekin ikaratu? Ez ditut entzun.
Ez da zaratekin ikaratu? Ez du entzun.	Ez da zaratekin ikaratu? Ez ditu entzun.
Eta lore hau? Dendan erosi dotez.	Eta lore hau? Dendan erosi dot.
Eta tarta hau? Okindegian erosi doguz.	Eta tarta hau? Okindegian erosi dogu.
Bartzelona gustatzen jako? Ez deuz ezagututen.	Bartzelona gustatzen jako? Ez deu ezagututen.
Paris gustatzen jatzu? Ez dotez ezagututen.	Paris gustatzen jatzu? Ez dot ezagututen.
Non dau nire jakie? Logelan ikusi dotez	Non dau nire jakie? Logelan ikusi dot.
Non dau nire garagardoa? Mahaxen ikusi dotez.	Non dau nire garagardoa? Mahaxen ikusi dot.