

Existential Constructions in Bilingual Catalan and Bilingual Spanish: Different Types of Crosslinguistic Influence

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1. Introduction

This study reconsiders and reanalyzes the results of two semi-equivalent experiments reported in Perpiñán & Soto-Corominas (2021) and Perpiñán (2015) with the purpose of comparing data from both languages in a situation of bilingualism, Catalan and Spanish. It focuses on existential constructions in bilingual Catalan and bilingual Spanish, a portion of the results that had been previously published, but never discussed together before. The goal of our investigation is to describe potential outcomes of early bilingualism in adulthood and, in particular, distinct processes of cross-linguistic influence (CLI) as a result of linguistic and extralinguistic factors. CLI refers to cases where one of the bilingual's languages affects the knowledge or use of the other language (Jarvis & Pavlenko, 2008).

Even though we know that the development of two simultaneous or sequential languages early in life generally unfolds as typical monolingual language development (Meisel 2009), bilingualism in early childhood might also result temporarily or permanently in differential outcomes. Some of the described outcomes of early bilingualism are CLI (Müller & Hulk, 2001; Serratrice, 2013), incomplete L1 acquisition (Montrul, 2008), delay and even fossilization of the L2 depending on the onset of acquisition (Meisel, 2009), or L1 attrition (Polinsky, 2011). However, we know very little about these consequences of bilingualism later in life, when the grammars are more stabilized. The purpose of this secondary use and reanalysis of data is to determine how language dominance in very proficient bilinguals modulates bilingualism processes, and whether these processes affect asymmetrically the two languages in a situation of bilingualism.

2. The Linguistic Phenomenon: Locative and Existential Constructions

Catalan and Spanish are two Romance languages that share official status in the region of Catalonia (North-East part of Spain), and similar prestige, but they are not used to the same extent. According to the most recent linguistic census,

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l'Enquesta d'usos lingüístics, (<https://www.idescat.cat/pub/?id=eulp>), IDESCAT 2003-2018, only 31.5% of the population has Catalan as their initial language, whereas Spanish is the initial language of 52.7% of the Catalan population. Only 2.8% of the population reported having both languages as their initial languages. As for uses, these vary significantly according to the geographical area. For instance, in the Metropolitan area of Barcelona, a little less than 20% of people use Catalan at home, whereas in other territories such as the central area of Catalonia, almost 50% of the population use it at home. This information is relevant since our participants come from both of these areas, with the aim of representing the two extremes of a bilingualism continuum. On the whole, over 99% of the population understand and speak Spanish, whereas only 80% of the population reported being able to speak Catalan.

Despite the similarities between these two Romance languages, there are important differences. In this study, we focus on several of these lexical and semantic differences in the locative paradigm. These partial similarities are a locus for potential crosslinguistic interference. Assuming a unified account for locative and existential constructions (Freeze, 1992; Lyons, 1967; Rigau, 1997), we investigate the expression of the (1) predicate locative, and (2) existential structure in both languages. The main difference between the two languages in the locative construction is the selection of the copula verb: whereas Spanish can only use *estar* to locate an object or an individual (1b), Catalan presents optionality between the etymological and normative copula *ser*, and the innovative copula *estar* (1a). The location of events, though, is always performed with *ser* in both languages (1c, 1d).

(1) THEME	COPULA	LOCATIVE	<i>Predicate Locative</i>
a. Les claus	{són/estan}	al calaix.	Catalan: BE-SER/ESTAR
b. Las llaves	están	en el cajón.	Spanish: BE-ESTAR
'The keys are in the drawer.'			
c. La festa	és	a la casa d'en Joan.	Catalan: BE-SER
d. La fiesta	es	en casa de Joan.	Spanish: BE-SER
'The party is at Joan's place.'			

There are several similarities and differences between the two languages with respect to the existential construction, too. Both languages mainly employ the verb HAVE, Catalan with the obligatory locative pronoun *hi* (2a).

(2) Proform/CL.	COPULA	THEME	LOCATIVE	<i>Existential</i>
a. *(Hi)	ha	{unes/les} claus	al calaix.	Catalan: HAVE
b. [e]	Hay	{unas/*las} llaves	en el cajón.	Spanish: HAVE
'There are {some/the} keys in the drawer'				

Catalan does not seem to obey the *definiteness effect* (DE) constraint (Milsark, 1977), which clearly applies in Spanish and regulates the selection of *haber/estar*

in Spanish, and hence, the choice between an existential structure (2b) or a locative one (1b), which are in complementary distribution. This contrast between the two languages is very clear with proper nouns: the Catalan existential structure *haver-hi* can introduce proper nouns (3a), whereas Spanish only allows indefinite NPs (3b). In turn, Catalan also allows for the introduction of proper nouns with *ser-hi* (3c), a structure that in Spanish would require *estar* (3d).

(3) Existential Construction

- | | | | |
|--------------------------|---|--|---------|
| a. En aquella assemblea | hi havia | {la Marta / una dona}. | Catalan |
| b. En aquella assemblea | había | {*Marta / una mujer} | Spanish |
| | In that meeting, | HI _{CAT} HAV-3SG-PAST {(the) Marta / a woman} | |
| | 'In that meeting, {Marta was present / there was a woman}'. | | |
| c. En aquella assemblea | hi era | {el Miquel / *un home}. | Catalan |
| | In that meeting, | HI SER-3SG-PAST {the Miquel / a man} | |
| d. ?En aquella assemblea | estaba | {Miquel / un hombre}. | Spanish |
| | In that meeting, | EST-3SG-PAST {Miquel / a man} | |
| | 'In that meeting, {Miquel was present / there was a man}'. | | |

Interestingly, the DE are neutralized in relative clauses in both Spanish and Catalan. In Catalan, restrictive relative clauses with *haver-hi* (4a) are more frequent than with *ser* (4c), but both are possible (Ramos, 2002). In Spanish, on the other hand, only *haber* can introduce new elements in the discourse (4b, 4d), and *estar* is not allowed here.

(4) Relative Clauses

- | | | | | |
|-------------------|---------------------------------------|---------------------------|-------------------|---------|
| a. Les claus que | hi ha | a casa | són meves. | Catalan |
| b. Las llaves que | hay | en casa | son mías. | Spanish |
| | the keys that | HI _{CAT} HAV-3SG | at home are mine | |
| c. Les claus | que | són | a casa són meves. | Catalan |
| | the keys | that | at home are mine | |
| | | SER-3PL | | |
| d. ??Las llaves | que | están | en casa son mías. | Spanish |
| | the keys | that | at home are mine | |
| | | EST-3PL | | |
| | 'The keys that are at home are mine.' | | | |

Finally, *estar* is not available as an existential predicate in Standard Catalan, particularly if the expression of the location is not overt after the verb. In Spanish, the only possibility here is *estar*, whereas standard Catalan requires *ser-hi*.

(5) Negatives and Partial Existentials

- | | | | |
|------------|------------------------|-----------------------|---------|
| a. El gat | no *(hi) | {és /*està}. | Catalan |
| b. El gato | no | {*es / está}. | Spanish |
| | the cat | neg. HI SER / EST-3SG | |
| | 'The cat isn't there.' | | |

Given the nature of the data described in this study, we need to pay attention also to how locative and existential constructions are referred back in the discourse, a phenomenon we will refer to as ‘second mentions’. As a rule of thumb, second mentions behave as locatives, and *haver-hi/haber* is only available with mass nouns or bare plurals.

To summarize, Spanish existential constructions present three main differences from Catalan existentials: *i*) Spanish strongly obeys the DE and only indefinites and bare plurals can appear with the existential *haber*. Everything else goes with *estar* in Spanish. *ii*) no clitic is lexicalized in Spanish *haber* (in fact, Spanish lacks the locative clitic *hi* altogether), whereas it is obligatory for Catalan *haver-hi*; and *iii*) Modern Catalan alternates between *ser* and *estar* in locative contexts, but when the explicit location is not included, only *ser* is possible as *estar* cannot combine with the locative clitic *hi*. These differences, which are generally regulated by semantic properties (i.e.: definiteness), information structure (existential vs. locative construction), and morphological elements (availability of clitics) are summarized in Table 1.

Table 1: Predicate selection distribution in existential and locative constructions in Catalan and Spanish.

Syntactic Construction	Semantics of THEME	Catalan		Spanish	
		Mention in the Discourse			
		1 st	2 nd	1 st	2 nd
<i>Existential</i> VERB- THEME- (LOC)	Definite nouns	Haver-hi	Ser-hi	Locative Estar	Locative Estar
	Indefinite nouns	Haver-hi	NA	Haber	NA
	Mass nouns / Bare plurals	Haver-hi	Haver-hi + <i>en</i>	Haber	Haber
<i>Negative</i> <i>Existential</i>	Definite nouns	Haver-hi Ser-hi	Ser-hi	Estar	Estar
	Indefinite nouns	Haver-hi	Ser-hi	Haber	Estar
<i>Locative</i> THEME- VERB-LOC	Definite nouns	Ser / Estar	Ser / Estar	Estar	Estar
	Indefinite nouns	NA	Ser-hi Estar + loc.	NA	Estar

Note: Differences across languages appear in bold.

Given these differences and similarities, the research questions of the two studies that we are comparing here (Perpiñán, 2015 in Spanish, and Perpiñán & Soto-Corominas, 2021 in Catalan) were whether bilinguals were able to keep these two systems separated in each language, and whether language dominance predicted this separation. As we describe below, both studies found typical

bilingualism outcomes in the form of functional convergence, L1 transfer, and CLI, with quantitative and qualitative differences among the different types of bilinguals, always regulated by language dominance. Here, by comparing and contrasting the results of these two studies, we investigate whether the bilingualism outcomes we find in one language are commensurate to those we find in the other language. In other words, we are interested in further determining which linguistic and extralinguistic factors regulate these bilingualism processes, and to which extent the processes that we find in each language might be the result of their intrinsic linguistic properties (i.e.: complexity of the system) and/or their sociolinguistic status (majority vs. minority language).

3. The Studies

3.1. Study 1: Spanish (Perpiñán, 2015)

Participants: The group of interest consists of 20 Catalan-Dominant (Cat-Dom) sequential bilinguals with a mean age at the time of testing of 23.6 years ($SD = 4.1$). They reported starting their exposure to Spanish once they entered the school system or later, between 5 - 9 years of age, $M = 7.5$ ($SD = 4.4$, Range = 5-20). Until then, Catalan was their exclusive language of communication, and is still their language of preference and identification. For the most part, these speakers were raised monolingually, and still develop their lives in a monolingual manner, have not lived abroad and continue living where they were born, in Central Catalonia (Bages region). These results were compared to those of 20 monolingually-raised Spanish speakers; at the time of testing, some were still monolingual. They were tested in Spain, the US, and El Salvador.

Instruments:

A. Linguistic Background Questionnaire and Spanish Proficiency Test

Participants completed a questionnaire regarding their language use with family and friends and language preferences. These responses classified them into the two groups: Cat-Dom Bilinguals or Spanish speakers (not bilingual with Catalan). All participants completed a short Spanish proficiency test and both groups had identical results in it: 94% of correct responses.

B. Acceptability Judgment Task (AJT)

A web-based AJT with 110 items targeted locative structures with *ser* and *estar*, with objects and events as subjects (6) and existential sentences with definite and indefinite themes (7), also in relative clauses (8), with five tokens for each condition. These sentences were judged with a slider bar from ‘sounds bad’ (=1) to ‘sounds good’ (=100), aiming for obtaining continuous data. Sentences in the task were counterbalanced for grammaticality.

(6) *Ser / Estar with Objects (a) and Events (b)*

- a. El libro *es / está encima de la mesa.
 the book *SER / ESTAR on-top of the table
 ‘The book is on the table.’
- b. La reunión es / *está en el hotel Majestic.
 the meeting SER / ESTAR in the hotel Majestic
 ‘The meeting is in the hotel Majestic.’

(7) *Haber with definites and indefinites*

- a. Hay *las / unas llaves encima de la mesa.
 HAV the / some keys on-top of the table
 ‘There are the / some keys on the table.’

Estar with definites and ??indefinites

- b. El / ??un libro está encima de la mesa.
 the / ??a book ESTAR on-top of the table
 ‘The / a book is on the table.’

(8) *Relative Clauses: ?Haber / Estar with definite antecedents*

- a. Las llaves que ?hay / están en la puerta son mías.
 the keys that HAV / ESTAR on the door are mine
 ‘The keys that are at the door are mine.’

C. Oral Production Task (OPT)

The OPT consisted of a ‘Spot the Difference Task’, with 5 pairs of almost identical pictures that contained 10 differences. Participants had to verbally identify the differences between the two pictures. The Cat-Dom bilingual group produced a total of 17,221 words, with an average of 861 words per person, whereas the Spanish control group produced noticeably fewer, a total of 11,241 words, with an average of 562 words per speaker. The audio files were transcribed and coded with CLAN, and checked by two Spanish-speaking researchers. All predicates that expressed location or an existential meaning were coded, as well as the information structure (first or second mention), semantics of the theme (definiteness, quantification, negation) and morphology (pronominalized, omitted). This was a very efficient task to produce locatives and existential as 2309 tokens were analyzed, 1440 produced by the Catalan speakers, and 869 by the Spanish speakers. A sample of the task is displayed in Fig. 1.



Figure 1: Sample of the ‘Spot the Difference’ Task (OPT)

Results

In this section, we reanalyze the results from Study 1 in order to make them comparable to those from Study 2.

AJT Results

The relevant results from this task can be summarized in two statements: 1- Catalan-dominant speakers accepted ungrammatical sentences localizing objects with *ser* (Fig. 2); 2 – Catalan-dominant speakers accepted introducing a definite NP with *haber* (Fig. 3), which constitutes a violation of the DE in Spanish. Spanish speakers, on the other hand, categorically rejected these ungrammatical sentences. Both groups behaved similarly with respect to definite NPs when the existential predicate is in a relative clause.

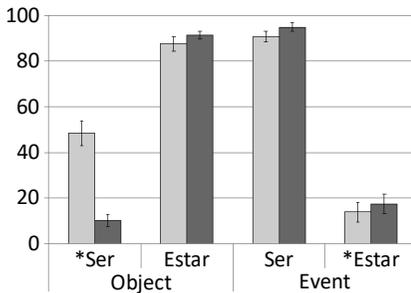


Fig. 2: Mean AJT rates for locatives

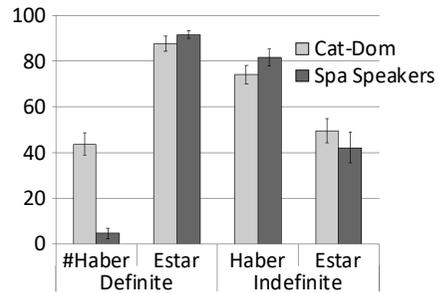


Fig. 3: Mean AJT rates for existentials

These results, following the Functional Convergence Hypothesis (Sánchez, 2003; 2015), were interpreted as instances of a converged grammar in which the two copulas (*ser/estar*) can serve locative purposes in the grammar of Catalan-dominant bilinguals, independently from the semantics of the subject. This was due to the use of locative *ser* in Catalan, which would activate it in the bilingual grammar. This activation, though, was not strong enough to emerge in the production data of these participants, as these trends were only found in the AJT. With respect to the DEs, the interpretation of the results was mostly speculative, as the cause for the lack of DEs in Catalan is still not clear. Thus, Perpiñán (2015) considered several options, such as L1 transfer of pragmatic effects, following

theoretical explanations for this effect by Lumsden (1988). In this sense, Catalan definite DPs in existential sentences could be interpreted as specific rather than definite. Another option would be to consider this difference in syntactic terms, assuming that the existential closure domain of languages that do not obey the DE (Catalan, Italian) is smaller, and it would be this syntactic property that is transferred, and not the semantics or the pragmatic interpretation. We will discuss these results further in the discussion section.

OPT Results

As for the production data, this study focused on verb selection to express the locative paradigm and found significant differences between the overall amount of use of *haber* and *estar* by the two groups. In particular, the Catalan-Dominant bilinguals used significantly more verb *haber* (42% of total production) compared to the Spanish-speaking group (29%). These differences are even bigger if we consider information structure, that is, whether *haber* appeared as a first or second mention, an analysis that Perpiñán (2015) did not perform (Table 2). Thus, it is evident that Spanish speakers seldom used *haber* for second mentions as they usually employed *estar* for these cases, whereas Catalan-Dominant bilinguals continued using *haber* frequently. With respect to *estar*, the results were somewhat the mirror image, as Catalan-Dominant bilinguals used significantly less *estar*, 17% of total production, as compared to a 24.3% by the Spanish-speaking participants. By mention in the discourse, the Catalan-Dominant group hardly used *estar* to introduce a new element in the discourse, and whereas they increased their use of *estar* in 2nd mentions, *haber* remained their predicate of choice. This is not the case with Spanish speakers, who clearly preferred the locative construction (with *estar*) for second mentions. No differences were found in the use of *ser*, as it was not expected in this task.

Table 2: Counts and percentages of verb selection (*haber* and *estar*) in Spanish

Mention	HABER			ESTAR		
	1 st	2 nd	Total	1 st	2 nd	Total
Catalan-Dominant	424 46.3%	174 33.2%	598 41.5%	123 13.4%	128 24.4%	251 17.4%
Spanish speakers	197 34.1%	52 17.9%	249 28.7%	123 21.3%	90 30.9%	213 24.5%

Note: Total percentages are calculated out of the total counts of all locative and existential predicates, including other verbs such as llevar, tener, etc.

We further reanalyzed the data by the semantics of the theme, particularly when combined with *haber*, and we found that Catalan-Dominant bilinguals combined more definite NPs with *haber* ($k = 34$) violating the DE in 9 occasions,

as in (9), whereas Spanish-speakers only used *haber* with definite NPs within relative clauses ($k = 11$), which do not violate the DE; this structure was employed by the Catalan-speakers, as well.

- (9) Encima de la paja antes no habían **los tres troncos**, ahora sí.
 above of the hay before not HAV the three logs, now yes.
 ‘Above the hay there weren’t three logs before, now they are’

Catalan-Dominant #124

Perpiñán (2015) provided two compatible explanations for the distinctive verb selection in locative and existentials in the OPT, particularly for the reduced use of *estar* by the Catalan-Dominant bilingual speakers. One explanation was in terms of developmental L2 stages, as several other studies have found that L2 learners have a delay/underuse in the acquisition of *estar* in L2/bilingual Spanish (Ryan & Laffort, 1992; VanPatten, 2010; Geeslin & Guijarro-Fuentes, 2008). The other explanation was in terms of L1 influence, despite the documented overextension of *estar* in modern Catalan (Solà, 1994). Here, we pursue the interpretation that the distinctive uses of *haber* and *estar* and violations of DE by the Catalan-Dominant bilinguals are instances of direct CLI. We will elaborate on this issue in the discussion section.

3.2. Study 2: Catalan (Perpiñán & Soto-Corominas 2021)

Participants: Fifty-eight Catalan-Spanish bilingual speakers took part in this study. The mean age of all participants was 29.12 ($SD = 4.71$). According to participants’ responses to an exhaustive Language Dominance Questionnaire (LaDoQ), they were divided into three groups: Catalan-dominant bilinguals (CatDom; $N = 21$), who had an equivalent linguistic profile to those participants from the Spanish study; Balanced Bilinguals (BBil; $N = 15$); and Spanish-dominant bilinguals (SpaDom; $N = 22$).

Instruments:

A. The LaDoQ

This language dominance questionnaire took into account the participants’ current and past language use, their language preference, language identification, nativeness of input received, and self-rated proficiency in both languages with regards to different language domains. It served to divide the bilinguals into three discrete groups representative of a bilingualism continuum.

B. Oral Production Task

The same task employed in Perpiñán (2014; 2015) was completed by these bilinguals. We followed the same procedure and coding system as before. The task yielded 2605 existential and locative predicates. We will focus here on the verbs of interest: *haber*, *estar*, *ser-hi*. Their distribution is summarized in Table 3.

Whereas all groups generally used *haver-hi* as the existential predicate, this preference is stronger in the Cat-Dom bilinguals, as it was in the previous study. If we further analyze these data according to the semantics of the theme, Cat-Dom bilinguals employed *haver-hi* with a definite NP outside a relative clause on 12 occasions, as in (10); the other two groups also employed this structure to a lesser extent (4 instances in the Spa-Dom bilinguals, and 6 in the Balanced Bilinguals).

Table 3: Counts and % of verb selection (*haver*, *estar*, and *ser-hi*) in Catalan

Mention	HAVER-HI		ESTAR		SER-HI	
	1 st	2 nd	1 st	2 nd	1 st	2 nd
Cat-Dom	266 54.3%	146 36.7%	2 0.4%	17 4.3%	0 0%	66 16.6%
BBil	178 39.3%	75 25.1%	26 5.7%	15 5.0%	3 0.7%	69 23.1%
Spa-Dom	255 42.6%	110 30.0%	46 7.7%	44 12.0%	11 1.8%	57 15.5%

- (10) Abans hi havia el porquet que anava vestit de color lila.
 before HI HAV the piggy that went dressed of color lilac
 ‘Before there was a pig dressed in lilac.’ CatDom #106

Still, the most interesting finding in this study was the differential use of *estar* by the three groups. The BBil and the SpaDom bilinguals used *estar* in a qualitatively different way from the Cat-Dom bilinguals. Indeed, many of these uses were considered ungrammatical, as *estar* was employed without the explicit expression of the location, as a semi-existential verb, as in (11).

- (11) *Abans hi havia un gos i ara no està.
 before HI HAV a dog and now neg. EST-3SG
 ‘There was a dog before and now it isn’t there.’ SpaDom #58

These ungrammatical uses of *estar* made the authors propose a different type of CLI: *indirect* CLI, when a structure that originally does not present optionality, such as the case of existential constructions in Catalan, accepts multiple solutions in the bilingual variety because a related structure, in this case, the locative one, presents optionality. In the Discussion, we reflect on these two different types of CLI, the commonly accepted one and the indirect one, and we argue why indirect CLI is very unlikely to occur in Spanish.

4. Discussion

By contrasting and comparing two experiments that investigated the same phenomenon in two languages in a bilingual situation, we have been able to

observe distinct bilingualism phenomena in each language that we aim to explain here. Following standard practices in the field (Jarvis & Pavlenko, 2008; Serratrice, 2013), we consider cases of CLI when there is evidence for the effect of one language on the other. Typically, CLI is reported in cases in which language A has a syntactic construction allowing for multiple grammatical analyses, and input from language B reinforces one of those analyses. The most classic approaches to CLI locate it in areas that involve the discourse-syntax interface (Müller & Hulk, 2001; Silva-Corvalán, 1993; Sorace, 2011), implying that the optionality needs to be regulated by pragmatic conditions. Also, these assume certain unidirectionality determined by the structural possibilities of the languages with respect to a particular overlapping linguistic phenomenon: the language that only accepts one syntactic analysis would influence the language that allows for two or more analyses, irrespective of language dominance. However, bidirectionality in CLI effects have been shown (Jarvis & Pavlenko, 2008; Pavlenko & Jarvis, 2002; Zhou et al., 2020), as well as effects outside the discourse-pragmatics interface (Serratrice et al., 2009; Silva-Corvalán & Montanari, 2008).

In the case at hand, in the Spanish study we have observed that Catalan-Dominant bilinguals not only produced significantly more instances of *haber* and fewer instances of *estar* than monolingually raised Spanish speakers, but they also presented violations of definiteness effects in their existential constructions, which are semantically odd. These violations of DE were also found in the results of the AJT, together with a moderate acceptance of *ser* as a locative verb in Spanish for non-eventive nouns, which is also ungrammatical in Spanish. We believe these bilingualism outcomes are of a slightly different nature than those for Catalan. On the one hand, the selection of *haber* vs. *estar* in Spanish is regulated by two main interrelated factors: 1- by information packaging, that is, how the speaker decides to present the new/background information and as such, chooses an existential (*haber*) or a locative (*estar*) construction, and 2- by the semantics of the theme: if it is identified as unique, and as such introduced with a definite article, then *estar* is required, whereas if there is not a presupposition or identification of the referent, the theme can be introduced by an indefinite article, and then *haber* is used. On the other hand, the selection of *estar* vs. *ser* in locative sentences in Spanish does not present any sort of optionality as it is clearly regulated by the semantics of the subject as eventive or not (1b, 1d). In a nutshell, the distribution of *haber* vs. *estar* with indefinites is regulated by pragmatic considerations and would be an instance of CLI as it is classically defined; these cases do not generally cause ungrammaticality. Thus, the increased number of *haber* in the Spanish grammar of Catalan-Dominant bilinguals could be described as instances of ‘classical’ CLI: language A, in this case Spanish, presents certain optionality between *haber* and *estar*, whereas Catalan, as seen in Table 1, allows *haber-hi* in all cases of existential constructions, also with definite NPs, particularly in 1st mention. This omnipresence of *haber-hi* in the Catalan system permeates into the Spanish system of the Catalan-Dominant bilinguals in the form of an increased use of *haber*, which is grammatical, though not completely natural. This is schematized in Fig. 4. We consider Catalan-dominant bilinguals’

instances of DE violations, as well as their acceptance of *ser* to locate non-eventive subjects, as examples of (ungrammatical) L1 transfer, typical of L2 acquisition.

	Language A (Spanish)	Language B (Catalan)
Structure X (Existential)	Haber (Indef) / Estar (Def)	Haver-hi /ser-hi
Structure Y (Locative)	Estar	Ser / (Estar)

Figure 4: ‘Standard’ CLI

With respect to predicate selection in Catalan, we found that Catalan-Dominant bilinguals used *estar* significantly less (in fact, practically not at all) than both Spanish-Dominant and Balanced Bilinguals, with no differences between these two groups. Crucially, we also found a significant amount of use of *estar* as an existential predicate, always in the non-Catalan dominant groups, as Catalan-dominant speakers never used *estar* in this context. This is a robust qualitative difference. On the other hand, the differences between Spanish-Dominant and Balanced bilinguals were quantitative in nature. Thus, for these non-dominant Catalan speakers, *estar* is not only the verb for locative predicates, but also for some existential constructions. We argue that the *estar* extension to locative contexts is possible and fairly accepted in Catalan because these linguistic contexts already presented optionality in Catalan, with subtle different aspectual interpretations (1a). However, existential contexts do not present this optionality, and therefore, the incipient use of *estar* in existential constructions observed in the Catalan study, which is highly marked and considered ungrammatical, cannot be the direct result of an internal extension of *estar* given that *estar* does not alternate with *haver-hi* or *ser-hi* in existential constructions. In other words, the two extensions of *estar* are of different nature: on the one hand, the locative extension (not directly addressed in this study) stems from the fact that etymological Catalan can already employ *estar* for locative predicates. That is, there is already certain overlap of uses between *ser* and *estar* in the locative structure, and thus the perfect condition for CLI to occur since Spanish only provides input for one of these options. This is a process of ‘classical’ CLI, and is schematized in the lower part of Figure 5. However, this optionality between the copulas *ser/estar* does not apply to Catalan existential constructions, neither in first nor in second mention existentials (see Table 1 for easy reference), therefore, CLI is not expected here. But indeed, we found innovative uses of *estar* also in existential constructions, a structure that is conceptually related to the locative structure. Therefore, we argue that *indirect* CLI can also surface in structure X if bilinguals *perceive* that a related structure Y from language A, --in this case the locative construction--, has multiple solutions, and input from language B in that structure Y reinforces only one of those solutions, in such a way that CLI applies comprehensively and culminates in the same outcome across the entire paradigm:

the spread of *estar* in both, locative and existential constructions. Our proposal of indirect CLI is schematized in Figure 5.

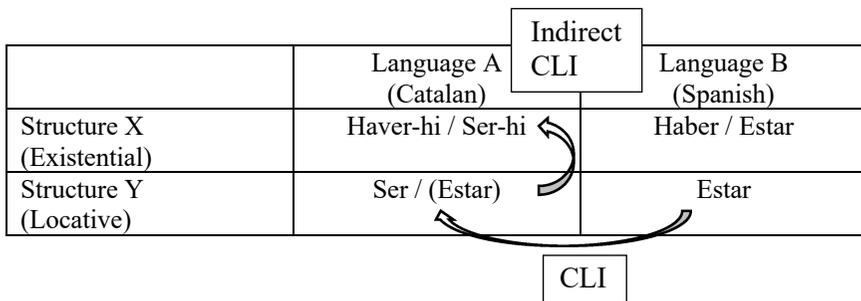


Figure 5: Indirect CLI and ‘Standard’ CLI

Finally, and since we are investigating similar bilingual profiles in the two languages, we question why we find these distinct processes in each of the languages. Clearly, the effects we have observed for both, Spanish and Catalan, are modulated by language dominance. Unfortunately, Perpiñán (2015) did not test other bilingualism profiles in Spanish, only the most extreme one (the least dominant in Spanish); this makes it comparable to the Spanish-dominant group from the Catalan study. Still, the bilingualism phenomena we find in each of these groups are not symmetrical. Both present some sort of CLI in their less dominant language, but only the Spanish-dominant speakers go a step further and restructure their Catalan locative paradigm in a process we have termed Indirect CLI. We would like to speculate that this system restructuring is not only the result of different bilingualism outcomes modulated by language dominance, but also the result of the language status of Catalan, the minority language in this bilingual context. We speculate that these radical changes in a system are only possible when the majority of the speakers of a given language do not share the linguistic representations with dominant speakers of that language. As such, these changes might become the new norm in the bilingual variety. The indirect CLI in Catalan observed in this study may thus be a sign of an emerging contact-induced language change.

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