

Mood variation among Spanish-English bilinguals in Southern Arizona: cross-dialectal continuities and methodological considerations

Variación modal entre los bilingües de español-inglés en el sur de Arizona: continuidades dialectales y consideraciones metodológicas

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Original recibido: 11/10/21

Dictamen enviado: 02/03/22

Acceptado: 15/05/22

Abstract

The understanding, study and teaching of mood selection in Spanish has been traditionally shaped by prescriptivist accounts. This paper explores mood selection in Spanish spoken in Southern Arizona from a different perspective, one that considers obligatory contexts as variable. Results point to an intergenerational transmission of a variable grammar in which indicative enters U.S. Spanish mainly through the repertoire of third-generation bilinguals and linguistic contexts such as temporal clauses. Cross-dialectal comparisons indicate a similar variable behavior in both varieties of Spanish spoken in Southern Arizona and Los Angeles, pointing to a continuity across U.S. Southwest Spanish. The current study also identifies methodological gaps in the study of mood selection and discusses considerations that are crucial for a research agenda on this variable, especially in what concerns U.S. Spanish.

Keywords: indicative, linguistic and extralinguistic conditioning, methodological considerations, subjunctive, U.S. Spanish.

Resumen

La comprensión, el estudio y la enseñanza de selección modal en español se han visto tradicionalmente marcados por propuestas prescriptivas. Este artículo explora la selección modal en el español hablado en el sur de Arizona desde una perspectiva diferente, que considera los contextos obligatorios como variables. Los resultados apuntan a una transmisión intergeneracional de una gramática variable en la que el indicativo ingresa al español de los Estados Unidos principalmente a través del repertorio de bilingües de tercera generación y de contextos lingüísticos como las oraciones temporales.

*Las comparaciones dialectales indican un comportamiento variable similar en las variedades de español del sur de Arizona y Los Ángeles, lo que apunta a una continuidad en el español del suroeste de EE. UU. Este trabajo también identifica lagunas metodológicas en el estudio de selección modal y discute consideraciones cruciales para una agenda de investigación, especialmente en lo que concierne al español de EE.UU. **Palabras clave:** condicionamiento lingüístico y extralingüístico, consideraciones metodológicas, español de Estados Unidos, indicativo, subjuntivo.*

Introduction

Mood selection has been a topic of great interest within the field of Hispanic linguistics. Several studies have been dedicated to understanding how Spanish speakers behave in terms of the maintenance or loss of subjunctive in both monolingual and bilingual settings. Following a variationist framework, in this paper language is understood to be inherently variable, as is mood selection in Spanish, a linguistic variable that presents two main variants: subjunctive and indicative. These variants can be observed in the examples in (1), collected from the *Corpus del Español en el Sur de Arizona* (CESA) (Carvalho, 2012-).

- (1) a. Quieren que te **olvides**_[SBJV] de tu cultura. (CESA024¹)
'They want you to forget your culture.'
b. No quiero que se **olvida**_[IND] eso. (CESA024)
'I don't want him to forget that.'

Prescriptivism, however, has held much weight in the understanding, study, and teaching of mood selection in Spanish. Over time, traditional grammars (e.g., Gili Gaya, 1964; Real Academia Española, 2009) have addressed the use of subjunctive and indicative through rules and lists of contexts that require one specific mood or allow for variability based on meaning differences. This approach often results in an understanding that mood selection is not that variable, and that any use that deviates from the so-called obligatory subjunctive selection is considered to be wrong, inappropriate, or non-standard. Therefore, in the Spanish classroom, a lot of effort has been put into teaching the subjunctive as categorical in these contexts, as the “proper” use of mood in Spanish (Waltermire, 2014). Nevertheless, variationist studies have emphasized the inherent

¹ “CESA024” makes reference to the number of the interview available in the *Corpus del Español en el Sur de Arizona* (CESA) (Carvalho, 2012-).

variability of mood selection and have identified several morphosyntactic factors that condition this variable and reveal its systematicity. Regarding U.S. Spanish, a major topic of interest has been the extent to which contact with English causes linguistic changes, which could result in a variable grammar that differs significantly from mood choice among Spanish monolinguals.

The goal of this study is twofold: first, it aims at examining for the first time mood selection in Spanish spoken in Southern Arizona –more specifically in contexts traditionally considered to categorically trigger subjunctive–. Secondly, it compares these results with the ones found in the pioneering work of Silva-Corvalán (1994b) in Los Angeles Spanish. The purpose of this comparison is to investigate whether mood choice in Arizona presents the same patterns of variation across immigration generations found in Los Angeles, which would point to a similar variable behavior across U.S. Southwest Spanish. Finally, because these analyses presented methodological gaps that are recurrent in research on mood choice selection, this paper also discusses methodological considerations for future studies, thus contributing towards a research agenda for continuing investigation of this variable, especially concerning U.S. Spanish.

Mood selection in Spanish

Mood has traditionally been described as a grammatical resource used to express modality, which can be broadly defined as a linguistic category that refers to the status of the proposition present in an utterance (Palmer, 2001).² In Spanish, mood selection features mainly the opposition between indicative and subjunctive. This opposition has been approached through two types of mood selection: one that is referred to as obligatory (2a) and another that is variable (2b), as shown in the following examples from Pérez Saldanya (1999, p. 3313) and Ridruejo (1999, p. 3220).

- (2) a. Mando que {**venga**<sub>[SBJV]}/***viene**<sub>[IND]}.
 ‘I order him/her to come.’</sub></sub>
- b. Cuando nos {**habla**<sub>[IND]}/**hable**<sub>[SBJV]} así, le damos un cachete.
 ‘When he/she talks to us like that, we slap him/her.’
 ‘When he/she talks to us like that, we will slap him/her.’</sub></sub>

² Research on modality has worked on the classification of different modality types, such as epistemic, epistemological, deontic, for example (for more details, see Chung & Timberlake, 1985; Palmer, 2001; Timberlake, 2007; among others).

With these two types of mood selection in mind, a great amount of work has been done towards identifying (1) triggers that induce one type of mood selection or the other, and (2) triggers that allow for both indicative and subjunctive in the so-called variable cases (e.g., Pérez Saldanya, 1999; Ridruejo, 1999).³ Some contexts are believed to trigger subjunctive categorically –according to their governor and the values it entails, such as in (2a)–. *Mandar* ‘to order’, as a verb of command, is considered to be a normatively subjunctive governor, that is, a verb that according to the prescriptive grammar requires the use of subjunctive in the embedded clause. Therefore, the use of subjunctive *venga* is considered grammatical, while *viene*, the indicative form, would be ungrammatical. On the other hand, other contexts can allow for both indicative and subjunctive, depending on the meaning to be expressed⁴, such as in (2b). This example illustrates a construction in which mood selection is considered to be variable and the use of indicative or subjunctive gives rise to meaning differences. In this case, indicative leads to an interpretation of a habitual situation while subjunctive implies a future event that may happen or not, similar to a condition.

Prescriptive accounts such as this have contributed to the spread of a series of misconceptions related to language and the perpetuation of the standard language ideology, which sees language “as correct or incorrect, appropriate or inappropriate, standard or non-standard” (Valdés & Parra, 2018, p. 305). This conceptualization of language becomes even more problematic in situations of bilingualism, where bilingual speakers’ language use is viewed as unstable and not as pure and complete as monolinguals’ legitimized use of language (Bessett & Carvalho, 2022). Otheguy (2016) adds that while monolinguals are often seen as speakers that “follow a normal trajectory, culminating in a fully and successfully developed grammar”, bilinguals are mistakenly perceived to follow “a deviant course leading to an unsuccessful outcome” (p. 302). To counteract these misconceptions, Torres Cacoullos and Berry (2018) argue for turning our

³ As noted by an anonymous reviewer, it is important to acknowledge that while this paper refers mainly to traditional grammars as opposed to sociolinguistic approaches to mood selection, the literature on mood selection includes studies from other traditions. Addressing these studies is outside the scope of this paper; for more work discussing mood selection and its nuances outside the field of sociolinguistics, see Bosque, 1990, 2012; Fábregas, 2014; Kempchinsky, 2009; Laca, 2010; Quer, 2001, 2006).

⁴ In contrast with indicative, the meaning of subjunctive has been approached through values such as *subjectiveness*, *irrealis*, *uncertainty*, and *non-assertiveness*. However, as argued by Fábregas (2014), counterexamples to these approaches problematize the existence of a single value to cover all the contexts in which subjunctive is used. This discussion goes beyond the scope of this paper, but Fábregas’ 2014 work discusses some alternatives for this issue.

attention to community-based studies to uncover sociolinguistic patterns of language variation that would better portray language use in U.S. Spanish. An accurate analysis of mood choice is fundamental for a better understanding of bilingual behavior, which could inform material and curriculum development in Spanish programs catered to heritage speakers in the country.

Given that morphosyntactic variation is scarce in naturalistic data due to its low token frequency (Silva-Corvalán & Enrique-Arias, 2017), extensive work has productively engaged with experimental data to explore different questions on subjunctive mood selection in monolingual and bilingual settings. Among other topics, these studies have explored: (1) the effect of cognitive development in subjunctive use by Spanish-speaking children and how they acquire adultlike mood selection (Blake, 1983; Dracos, Requena & Miller, 2019; Pérez-Leroux, 1998; 2001); (2) the role of type of mood selection on heritage speakers' subjunctive use (Lustres, García-Tejada & Cuza, 2020; Perez-Cortes, 2021); (3) the effect of morphological regularity and lexical frequency on monolingual and bilingual speakers (Giancaspro, 2020; Giancaspro, Perez-Cortes & Higdon, 2022; Gudmestad, 2012; Perez-Cortes, 2022); (4) geographical differences in the variable behavior and linguistic constraints found in monolingual varieties (Gudmestad, 2021).

While experimental research has been able to successfully collect well-controlled and abundant data to investigate different issues in mood selection, it is important to acknowledge that this type of research tends to rely on unfamiliar tasks and some studies under this tradition still associate responses to these tasks with “right or wrong” answers” or, in other words, with what is expected/native-like or not (Nagy, 2015, p. 324). On the other hand, naturalistic data from open-ended conversation have allowed variationist studies to highlight that in Spanish, as well as in other Romance languages, mood selection is inherently variable (Poplack, Torres Cacoullous, Dion, Berlinck, Digesto, Lacasse & Steuck, 2018; Torres Cacoullous, LaCasse, Johns & De la Rosa Yacomelo, 2017). As argued by Poplack, Lealess and Dion (2013) in their study of subjunctive in Quebec French, there tends to be very little overlap between prescription and praxis; there is a plethora of prescriptions and no convergence between what is prescribed and what is used. Poplack *et al.* (2018), investigating the advancing grammaticalization of subjunctive in Romance languages, show that Spanish subjunctive is very grammaticalized in comparison to an idealized Latin benchmark in which mood opposition is consistently and categorically meaningful.

Although the inherent variability of mood selection is usually not addressed in the language classroom and is absent from the traditional grammars, Potowski

and Shin's (2019) usage-based Spanish grammar emphasizes the variable nature of the language. In their discussion of mood choice, the authors point out that although Spanish speakers in the U.S. may use the indicative in contexts that one would expect the subjunctive, mood choice is also variable in monolingual varieties of Spanish, a fact often ignored by prescriptivists and language teachers. Occasionally, linguistic variability is perceived as a behavior that typifies heritage language grammars while standard varieties are often perceived as categorical. Variationist research shows that this is not the case, given that variability is part of bilingual and monolingual dialects as well (Bessett & Carvalho, 2022; Carvalho, 2016; Nagy, 2015).

The disproportionate status of Spanish as a minoritized language and English as the dominant prestigious one has led to assumptions about the influence of English on bilinguals' Spanish use, often leading to a premature connection between language contact and language change (Bessett & Carvalho, 2022; Otheguy, 2016; Torres Cacoullos & Travis, 2018;). In the case of mood selection, the lack of productivity of subjunctive in English contributes to the assumption that bilinguals' use of subjunctive in Spanish is simplified –differing from what is assumed for the idealized monolingual standards–. The variable behavior of bilinguals using subjunctive tends to be interpreted as a result of contact and convergence.

In fact, in her study of Spanish in contact with English in Los Angeles, Silva-Corvalán (1994b) finds a gradual loss of mood opposition towards the indicative across immigrant generations. She analyzes mood selection in Los Angeles Spanish in terms of syntactic/semantic contexts, degree of freedom of choice and adequacy of the form chosen. Her key findings indicate that second- and third-generation bilinguals tend to retain the subjunctive in the same syntactic/semantic contexts (e.g., volitional and purpose clauses) that are also strong predictors of subjunctive use in monolingual Spanish. In terms of degree of choice, second- and third-generation bilinguals, just like monolinguals or first-generation migrants, also retain the subjunctive in the so-called obligatory contexts. As far as adequacy of form is concerned, the author finds that the second- and third-generation speakers use more “inadequate” choices than first-generation speakers. Altogether, her results lead her to conclude that although all U.S. immigrant generations present the same variable grammar (i.e., factors conditioning mood choice), the gradual increase of “inadequate” forms (i.e., indicative in contexts where subjunctive was expected) across generations points to an acceleration of mood simplification due to convergence.

These results lead to what is referred to in the field as the acceleration hypothesis, according to which processes of language change already in progress

in monolingual Spanish are accelerated in U.S. Spanish due to contact with English. Given it is the dominant language, English has been claimed to have an indirect influence on Spanish by affecting its use in the community. The presence of English as the dominant language in the U.S. implies a reduced exposure to and use of Spanish and, consequently, of the opposition between indicative and subjunctive. Indicative, then, would be expanded to a larger number of contexts since it is the more frequently used variant –reducing bilinguals’ cognitive load, as proposed by Silva-Corvalán (1994b)–. The author concludes that from the first to the third generation the contact between Spanish and English is more intense –leading to less proficient Spanish speakers–, which triggers a decrease in the use of subjunctive. In addition, the acceleration hypothesis has been supported by the analysis of other morphosyntactic phenomena in Los Angeles Spanish as well, such as the change from synthetic to periphrastic constructions and the extension of *estar* (Silva-Corvalán, 1994a).

In the case of extension of *estar*, Silva-Corvalán (1994a) finds a higher rate of its innovative use in Los Angeles compared to a monolingual community (Morelia, Michoacán, México) investigated by Gutierrez (1989). Extension of *estar* is more advanced in the U.S. because of higher overall rates and an increase in the linguistic contexts that allow for the innovative use. As in mood selection, Silva-Corvalán (1994a) points out that this change is already a trend in Spanish and other Romance languages. In Los Angeles, there is more innovative use of *estar* among first-generation speakers than in Morelia (Gutierrez, 1989), and even more among second- and third-generation speakers. Silva-Corvalán (1994a) claims that this change is accelerated as result of a process of convergence that reduces the cognitive load needed for the alternation between *ser* and *estar*.

Contrary to Silva-Corvalán’s (1994a) results that indicate an accelerated use of *estar* among bilinguals, Bessett (2015) points out that in the Arizona-Sonora border both the overall rates of extension of *estar* and the constraint rankings are similar between monolingual and bilingual speakers. Based on the similarities he finds between monolinguals in Sonora and bilinguals in Arizona, Bessett (2015) claims that both varieties constitute “a larger, unified, cross-border linguistic community, the *Sonoran dialect*” (p. 438). By examining mood selection among bilinguals in Southern Arizona, the present study tests whether the assumed increasing contact with English among second- and third-generation speakers points to acceleration of indicative extension to so-called obligatory subjunctive contexts, as seen among Los Angeles speakers, or if these speakers show no acceleration but a behavior that is similar to first-generation speakers, as in Bessett’s (2015) findings.

Methodology

Participants

The present study on mood selection in Spanish was carried out with spontaneous speech data taken from the *Corpus del Español en el Sur de Arizona* (CESA) (Carvalho, 2012-). CESA is an on-going corpus which currently consists of 78 sociolinguistic interviews with local bilingual speakers. The local community has a large Latinx population, reaching 43.6 % in Tucson, Arizona (United States Census Bureau, 2019). The interviews are conducted by undergraduate and graduate students enrolled in sociolinguistics courses in the Department of Spanish and Portuguese at the University of Arizona. With the purpose of documenting Spanish spoken in Arizona, CESA provides information about the speakers and their parents, and also a bilingual profile for each interviewee.

A total of 51 interviews were analyzed in the study. The selection of these interviews was based on the classification of participants in three immigrant generational groups. Following Silva-Corvalán's (1994b) approach to generation, in the current study I refer to the concept of immigrant generation, which is classified according to the speaker's and their parents' places of birth. 17 interviews for each group were selected in an attempt to replicate the three generational groups considered in her study of Los Angeles Spanish: G1 (17 speakers born in Mexico), G2 (17 speakers born in the U.S. whose parents were born in Mexico) and G3 (17 speakers born in the U.S. who have at least one parent born in the U.S.).

The envelope of variation

Three linguistic contexts were selected as the envelope of variation for the study: volitional clauses, purpose clauses and temporal clauses introduced by *antes (de) que* 'before'. Of the two types of mood selection previously referred to (i.e., obligatory vs. variable), this paper is centered on the so-called obligatory mood selection, more specifically the subjunctive contexts. The three contexts selected have been also examined by Silva-Corvalán (1994b); however, different from her study,⁵ under temporal clauses, I considered only clauses introduced by *antes (de) que*, which, according to prescriptive accounts, always require subjunctive use. The selection of these contexts allows for making the results comparable with Silva-Corvalán's

⁵ Silva-Corvalán (1994b) examined temporal clauses introduced by *cuando* (p. 265), which according to prescriptive accounts fits under constructions that allow for variable mood selection –that is, mood selection that depends on the meaning to be entailed (Ridruejo, 1999).

(1994b) while also examining three contexts assumed to have a categorical nature in terms of subjunctive use in the traditional grammar.

Despite being considered to have the same behavior in terms of mood selection (i.e., obligatory subjunctive use), it is important to acknowledge that these contexts do not necessarily share the same syntactic/semantic complexity. From an acquisitional viewpoint, several studies (Blake, 1983; Dracos, Requena & Miller, 2019; Pérez-Leroux, 1998, 2001) have shown that Spanish subjunctive is acquired in a series of stages. The knowledge of mood opposition is achieved progressively as the child acquires the language – contexts that express deontic modality are the first acquired, while the developmental path culminates in the acquisition of subjunctive contexts that express epistemological modality.⁶ Having this in mind, Perez-Cortes (2021) investigates subjunctive use in obligatory and variable contexts that express the same modality. While previous research claims variable contexts to be more susceptible to indicative entry, Perez-Cortes' (2021) study controls for modality and shows that the type of mood selection does not affect subjunctive use. In fact, she argues that the overestimation of variable contexts being more vulnerable to subjunctive attrition or loss among Spanish heritage speakers has been based on a confound since these studies have compared obligatory and variable contexts without controlling for modality. Following the commonly used classification of modalities as epistemic, epistemological and deontic (Chung & Timberlake, 1985), volitional and purpose clauses express deontic modality, and *antes (de) que* temporal clauses express epistemic modality.

In terms of what prescriptive accounts have to say about the contexts selected for analysis, it is prescribed that in complement clauses the use of indicative or subjunctive depends on the semantic class of the governor (Ridruejo, 1999).⁷ In this study, I focus specifically on volitional clauses (all tokens are introduced by *querer* 'to want'), which were exemplified in (1). *Querer* is considered to be a verb that requires a complement clause with subjunctive when there is disjoint reference (i.e., lack of coreferentiality between matrix and subordinate clause subjects).

⁶ It is also argued that, within these modality types, there are different patterns of development according to different contexts, meaning that each broad context may have its own unique path (for more details, see Dracos, Requena & Miller, 2019).

⁷ Indicative is triggered by verbs of perception (e.g., *ver, oír, percibir, darse cuenta*), knowledge (e.g., *saber, conocer, entender, enterarse*) and communication (e.g., *decir, advertir, anunciar, afirmar*), for example. On the other hand, some semantic classes that trigger subjunctive are verbs that express volition (e.g., *querer, desear, aspirar, pretender, procurar*), cause and influence (e.g., *hacer, causar, conseguir, dejar*), and command (e.g., *ordenar, mandar, establecer, intimar*) (Ridruejo, 1999).

Therefore, according to prescriptive accounts, (1b) would be ungrammatical, since *olvidarse* ‘to forget’ is in indicative.

Among the adverbial clauses, there are different types of contexts depending on the circumstance they express. The use of subjunctive is considered to be required in purpose clauses because of their volitional nature. This clause type refers not to a fact but to a goal, related to something that has not happened yet or, if it has, it is alluding to a subsequent event.

- (3) a. Pero sí me encanta mucho la universidad y ojalá que me puedo quedar aquí, un poco más tiempo para que me gradúo _[IND]. (CESA 007)
 ‘But I do really like the university and hopefully I can stay here a little longer so that I graduate.’
- b. Les hablo en inglés para que vean _[SBJV] que hablo inglés. (CESA 045)
 ‘I talk to them in English so that they see that I speak English.’

Examples presented in (3) illustrate purpose clauses, where (3a) would be considered prescriptively ungrammatical given the use of indicative instead of subjunctive.

Concerning adverbial temporal clauses, indicative is normatively prescribed when the temporal clause refers to factual situations in the real world (in the past, present or habitual). On the other hand, subjunctive is selected when a temporal clause refers to situations which occur in the posteriority in relation to the reference point. As previously mentioned, I focus on clauses introduced by *antes (de) que* ‘before’. In this type of temporal clause, subjunctive is considered to be obligatory given the idea of posteriority marked by the conjunction itself. Using *antes (de) que* necessarily implies that whatever is said in the subordinate clause is subsequent to what has been said in the matrix clause.

- (4) a. P: No sé, no, fue antes que, que nació nací _[IND] y
 E: /oh, okey okey, fue antes que nacieras/ sí (CESA 076)
 ‘P: I don’t know, no, it was before, before I was born and
 I: /oh, okay okay it was before you were born/ yes’
- b. Me gusta que todo quede claro antes de que empiece _[SBJV] (CESA 030)
 ‘I like for everything to be clear before starting.’

In (4), there are two examples of temporal clauses introduced by *antes (de) que*; the use of indicative in (4a) would be considered ungrammatical by prescriptive accounts.

In summary, the envelope of variation in this study includes three different clause types: volitional clauses, purpose clauses, and temporal clauses introduced by *antes (de) que* ‘before’. All other contexts are excluded from the analysis. This allows for results comparable to the ones presented by Silva-Corvalán’s (1994b) study in Los Angeles. In addition, these results add to previous evidence that challenges the categorical nature of subjunctive assumed by prescriptive accounts for these linguistic contexts.

Analysis

In this study, I investigate the behavior of mood choice in Spanish spoken in Southern Arizona according to two main factors, one linguistic and one extralinguistic: clause type (volitional, purpose and temporal) and generation (G1, G2 and G3). In order to examine whether these independent variables have statistical power to explain mood variation, I first present a multivariate analysis –a logistic regression with sum contrasts run in R (Picoral, 2020)–. Secondly, I present a descriptive analysis with the frequencies and percentages for mood selection across clause type and generation so that my results can be directly compared with Silva-Corvalán’s (1994b) findings to examine potential continuities between these two Spanish varieties of the Southwest U.S.

Results

A total of 291 tokens were identified and extracted from the 51 interviews. They show an overall use of subjunctive at a rate of 86 % (249/291) and indicative at a rate of 14 % (42/291). The data were submitted to a multivariate logistic regression in R which allowed for the examination of the effect of both generation and clause type on mood selection. The analysis indicates that both factor groups were significant, as shown in Table 1.

Generation is the most relevant factor group in the model. The factor weights presented indicate the probability of subjunctive happening under these contexts (Tagliamonte, 2012). A probability weight higher than 0.5 indicates that the factor favors subjunctive use, while a probability lower than 0.5 means that the factor disfavors it, favoring indicative. The first generation is the group that most favors the use of subjunctive with a factor weight of 0.67, followed by the second generation with a factor weight of 0.63. The third generation has a low factor weight of 0.22, disfavoring subjunctive use. These results indicate unequivocally that as the generation increases, the probability of retaining subjunctive decreases. In terms of linguistic conditioning, mood variation is significantly affected

by clause type. Purpose and volitional clauses favor the use of subjunctive with factor weights of 0.64 and 0.58 respectively. On the other hand, temporal clauses favor the use of indicative, with a factor weight of 0.29. The results in Table 1 confirm that subjunctive use is more retained by first- and second-generation speakers, while third-generation speakers favor the use of indicative, which indicates that the increasing contact with English assumed among the third generation may accelerate the use of indicative in contexts prescribed to categorically trigger subjunctive. In addition, results also confirm a variable behavior among the different clause types: subjunctive is more retained in some contexts (purpose and volitional clauses) while others (temporal clauses) allow for an increasing use of indicative.⁸

TABLE 1. LOGISTIC REGRESSION IN R OF SUBJUNCTIVE CONDITIONING IN SOUTHERN ARIZONA.

FACTOR GROUP	LEVELS	N	PROPORTION	WEIGHT	RANGE
Generation (p < .001)	1	87/93	93.5	0.67	
	2	91/99	91.9	0.63	
	3	38/62	61.3	0.22	46
Clause type (p = .01)	purpose	125/138	90.6	0.64	
	volitional	74/87	85.1	0.58	
	temporal	17/29	58.6	0.29	35

Let us now turn to comparing the results found in Los Angeles (Silva-Corvalán, 1994b) and Southern Arizona. As addressed in section 2, Silva-Corvalán (1994b) analyzed the frequency of subjunctive in 14 syntactic/semantic contexts. Here I focus on the three which were also analyzed in the current study: volitional, purpose and temporal clauses. In order to discuss mood variation in these bilingual communities, Table 2 presents the results for Spanish spoken in Los Angeles and in Southern Arizona. This table displays only raw frequencies and proportions to allow for a more direct comparison with the previous study.

The results presented in Table 2 indicate that in Los Angeles Spanish volitional clauses are the contexts which present the highest frequency of subjunctive use (83.3 %), followed by purpose clauses (76.2 %). In the data set analyzed in the

⁸ Returning to the acquisitional viewpoint discussed in p. 83, it is possible to say that these results are compatible with the claims based on the developmental path of subjunctive. In establishing such a parallel, it can be observed that the early acquired contexts (purpose and volitional clauses –deontic modality–) show less indicative use. On the other hand, an epistemic context such as temporal clauses introduced by *antes (de) que*, acquired later in the development of Spanish, shows to be more susceptible to the entry of indicative.

current study, the clause type that presents the highest frequency of subjunctive use is purpose clauses (90.6 %), followed by volitional clauses, which also present a high subjunctive rate (85.1 %).

TABLE 2. FREQUENCY OF SUBJUNCTIVE BY CLAUSE TYPE IN LOS ANGELES AND SOUTHERN ARIZONA.

Matrix	LOS ANGELES (Silva-Corvalán, 1994b)		SOUTHERN ARIZONA (current study)		Examples
	N	%	N	%	
Volitional	170/204	83.3	74/87	85.1	(...) la teoría es que <u>quiere</u> que sigue todo destruyendo por medio de ese agua que está saliendo ahí por los tubos viejos. (036) Ahora el presidente <u>quiere</u> que los estados decidan si está ilegal o legal (...). (076)
Purpose	80/105	76.2	125/138	90.6	(...) quiero tomar más clases <u>para que</u> no me pierdo cómo hablar español. (027) Si es por un ratito yo creo que está bien, pero nomás <u>para que estén</u> entretenidos o algo así, no. (009)
Temporal	70/252	27.8	17/29	58.6	Me despertaba a las cuatro de la mañana <u>antes que iba</u> a la escuela y veía los partidos de México. (031)* No, pero sí, me siento mal porque cuando se fue y <u>antes de que se fuera</u> me dijo, vente conmigo, podemos ir juntos. (049)

Temporal clauses, on the contrary, have a frequency of 27.8 % of subjunctive in Los Angeles and 58.6 % in Southern Arizona. It must be mentioned again that different types of temporal clauses are being compared here. When discussing results of the Los Angeles analysis, Silva-Corvalán (1994b) provided an example of a temporal clause introduced by *cuando* ‘when’ (*cuando hable* ‘when he/she speaks’, p. 265). We can assume that in her study temporal clauses included at least this type of context, which is considered to be of categorical use of subjunctive only when expressing futurity. When the temporal frame is a past or habitual action, on the other hand, indicative is expected (Pérez Saldanya, 1999). While *cuando* is a trigger expected to allow for variable selection depending on

* As pointed out by an anonymous reviewer, contexts of disjoint reference are expected to categorically trigger subjunctive while contexts of coreferentiality are expected to trigger non-finite constructions. Although the envelope of variation in this study does not include non-finite contexts, the data set presents both non-coreferential and coreferential cases. Coreferentiality was not included in the regression due to the absence of coreferential subjects in volitional clauses, but a preliminary analysis of contexts of coreferentiality in purpose and temporal clauses indicated that these contexts showed variability. Further research with a larger sample should explore the effects of this factor group in mood selection.

the temporal frame, *antes (de) que* clauses –the temporal clause analyzed here–are prescribed to always trigger subjunctive. Despite these differences, in both Los Angeles and Southern Arizona, temporal clauses are the clause type with the lowest frequencies of subjunctive use (27.8 % and 58.6 % respectively). Still, although it is not possible to reach any conclusions on a comparison between these two clauses, this difference in the envelope of variation of the studies may explain the higher subjunctive use in temporal clauses in Arizona. One could hypothesize that in *antes (de) que* clauses subjunctive is more retained because this is considered to be a categorical subjunctive context in the prescriptive grammar while *cuando* clauses are considered to be variable. Another hypothesis is that the difference in the rates of subjunctive use in temporal clauses in both studies could potentially be explained by effects of governor frequency in mood selection since *cuando* tends to be a more frequent temporal governor than *antes (de) que*.

After establishing that the general distribution of mood choice across volitional, purpose and temporal clauses is very similar in these two communities, I now ask whether this variable behavior is generalized across different generations. In Silva-Corvalán's (1994b) study, the distribution of tokens leads to an interpretation of a possible interaction between these linguistic and extralinguistic factors. The present study also shows a distribution of mood selection across generations and clause types that aligns with the patterns found in Los Angeles. These patterns are shown in the cross-tabulation of clause types with U.S. generational groups in both communities in Table 3.

Table 3 shows that in both communities there is a decrease in the use of subjunctive across generations for the three clause types. Overall, in all clause types the highest rate of subjunctive is produced by first-generation speakers, and the lowest rate is produced by speakers of the third generation both in Los Angeles and Southern Arizona. In most cases, there is a decrease from group 1 to group 2, and then to group 3. However, there are a few cases in which first- and second-generation speakers have basically the same percentage of subjunctive use: in temporal clauses in Los Angeles (38.7 % and 38.5 %), in purpose clauses in Southern Arizona (94.8 % and 94.7 %), and to some extent in temporal clauses as well (83.3 % and 77.8 %) especially if compared to third-generation speakers, who present a much lower rate of subjunctive use (35.7 %). This indicates that in specific constructions first- and second-generation speakers may present a more similar behavior compared to the third generation, which shows an even smaller rate of subjunctive use. Similar to Silva-Corvalán (1994b), descriptively, the cross-tabulation of generation and clause type allows for the interpretation that

both factors possibly interact. Further research should consider a larger sample for statistically testing and confirming this interaction.

TABLE 3. FREQUENCY OF SUBJUNCTIVE BY CLAUSE TYPE ACROSS GENERATIONAL GROUPS IN LOS ANGELES (SILVA-CORVALÁN, 1994B) AND SOUTHERN ARIZONA (CURRENT STUDY).

MATRIX	LOS ANGELES (SILVA-CORVALÁN, 1994B)		SOUTHERN ARIZONA (CURRENT STUDY)	
	N	%	N	%
Volitional clause				
Group 1	81/82	98.8	27/29	93.1
Group 2	32/36	88.9	30/33	90.9
Group 3	46/63	73.0	17/25	68.0
Purpose clause				
Group 1	45/45	100	55/58	94.8
Group 2	20/25	80.0	54/57	94.7
Group 3	15/35	42.9	16/23	69.5
Temporal clause				
Group 1	24/62	38.7	5/6	83.3
Group 2	25/65	38.5	7/9	77.8
Group 3	21/125	16.8	5/14	35.7

The results highlight that, like in Los Angeles, third-generation bilinguals in Arizona tend to use significantly more indicative than prior generations, bringing further evidence to the acceleration hypothesis (Silva-Corvalán, 1994b). Differently from Bessett (2015), who counters this hypothesis based on similarities in the innovative use of *estar* between Sonora monolinguals and Arizona bilinguals, the current study points to a gradual displacement of indicative across generational groups, possibly due to more intense contact with English. The results suggest that this gradual displacement does not take place in all syntactic/semantic contexts equally; just like among Los Angeles bilinguals, indicative enters the repertoire of second- and third-generation bilinguals mainly through contexts that are considered to be more variable in general, such as temporal clauses. The comparison of findings in Spanish in Southern Arizona with those in Los Angeles Spanish shows that mood selection patterns are aligned in these bilingual communities both in terms of syntactic/semantic contexts and U.S. generational groups, indicating a possible continuity of U.S. Southwest Spanish as a dialectal variety. In addition, the results for mood variation in both dialects are a clear indication of intergenerational transmission of a variable grammar as pointed out by Otheguy's (2016) work on U.S. Spanish. The output of indicative

is higher in the third generation, but the three generations present the same variable patterns. This brings evidence that counters the frequent misconception that bilinguals' grammar is unstable because of contact with English, revealing that the systematicity behind mood variation is an integral part of the variable grammar acquired by subsequent generations of bilinguals in both communities albeit with frequency differences.

Discussion: methodological considerations for further research

Throughout this study, it was clear that some methodological practices must be reconsidered in future studies. First, it is important to have a larger amount of data not only to include clause type as a factor group in the analysis but also to examine them separately, as different data sets. Clause type has been shown to be the strongest linguistic conditioner of mood choice in U.S. Spanish (see Bessett & Carvalho, 2022 for a review on the structure of U.S. Spanish). Most studies investigate different clause types together, likely because of the amount of tokens that can be collected. However, it is imperative that future research feature larger corpus samples to consider different clause types as separate data sets for running different statistical modeling and then examining which factors condition each of them. Some conditioning may affect complement and adverbial clauses differently, as is likely the case of lexical identity of the governor, explored in the study of complement clauses only (LaCasse, 2018; Poplack *et al.*, 2018; Torres Cacoullos *et al.*, 2017).

Prescriptive accounts consider complement clauses to be of categorical or variable subjunctive use based mainly on the semantic class of the governor. Several studies (e.g., Lynch, 1999; Silva-Corvalán, 1994b; Viner, 2016, 2018) have relied on this categorization by using semantic class as a context for the analysis of mood selection. Nevertheless, recent studies have shown that subjunctive can be lexically routinized, and thus the main predictor of subjunctive use may not be the semantic class of the governor but its lexical identity (LaCasse, 2018; Poplack *et al.*, 2018; Schwenter & Hoff, 2020; Torres Cacoullos *et al.*, 2017). Subjunctive routinization has been analyzed through productivity measures such as count of governor types, proportion of subjunctive by governor frequency, and proportion of subjunctive by governor variability (LaCasse, 2018). Results point to more variation among governors than within; potential governors may highly or rarely trigger subjunctive. In experimental-based research, the effect of lexical items and their frequency has been investigated as well. Overall, these studies (e.g., Giancaspro, 2020; Perez-Cortes, 2022) have shown that less frequent

matrix verbs lead to higher rates of non-target indicative forms while more frequent verbs allow for higher rates of accuracy in mood selection. Through different approaches, research based on both naturalistic and experimental data opens a new avenue of research in mood selection –one that moves from broad semantic classes to the role of specific lexical items and their frequency–. Future work should continue to engage with this linguistic conditioning, especially in naturalistic bilingual data, where it is still underexplored.

Besides lexical identity of the governor, another factor that should be further considered is tense and its possible interaction with clause types, especially temporal ones.

- (5) a. “quiero que hablen un español más formal que lo que yo aprendí y cosas así, que sepan cómo acentuar antes de que vengan_[SBJV] a la escuela.” (CESA060)
 ‘I want them to speak a more formal Spanish than the one I learned and stuff like that, that they know how to use accent marks before coming to school.’
- b. “Los padres de mi abuela se murieron antes que nací_[INDI] yo.” (CESA050)
 ‘My grandmother’s parents passed away before I was born.’

Note the difference in the tense of the subordinate verbs in (5), that presents two instances of temporal clause introduced by *antes (de) que*. As previously pointed out, this type of context implies the idea of posteriority: the action introduced by *antes (de) que* is posterior to the one in the matrix clause. However, we can still use this type of structure in different reference times: the sentence in (5a) is located in the present with the temporal clause referring to an action in the future, while the sentence in (5b) is located in the past, with the temporal clause referring to an action that already occurred, but after the action presented in the matrix clause. Studerus (1995), in an experimental study on the Texas-Mexico border, finds that past temporal reference leads to decreased subjunctive use in comment, dubitative and assertion (converted from dubitative) clauses. This temporal reference may influence mood choice in temporal *antes (de) que* clauses as well. In the current study, the low frequency of temporal clause (only 29 out of 291) did not allow for testing the interaction between clause type and tense. Whether tense affects mood choice and more specifically temporal clauses are important questions that should be considered in future large-scale corpus research.

A still underexplored factor in Spanish that may have an effect on mood choice is the morphological form of the embedded verb. In Quebec French, Poplack

et al. (2013) examine the role of morphological form in mood choice inspired by work on phonic salience and number agreement in Brazilian Portuguese, where it was found that irregular verbs, which tend to be more salient (or noticeable) than regular verbs, triggered more standard agreement than regular ones (Scherre & Naro, 1991). In Poplack *et al.*'s (2013) study, non-salient forms would be the verbs classified as regular (when the subjunctive form comes from the indicative paradigm), while salient forms would be the suppletive verbs (which imply a stem change). They find that subjunctive is favored by salient forms while non-salient forms favor the use of indicative. In fact, Poplack *et al.* (2013) find morphological form not only to be significant in the analysis, but also to be the factor group with the highest increase of range across centuries. In Spanish, experimental research (Giancaspro, Perez-Cortes & Higdon, 2022; Gudmestad, 2012; Perez-Cortes, 2022) has also looked at morphological regularity and, consistent with Poplack *et al.* (2013), has reported that morphological regularity affects subjunctive mood selection –the probability of subjunctive being used and interpreted in the expected way is higher with irregular verbs–. Future research should investigate whether there is an effect of morphological regularity in Spanish with naturalistic data as well. In addition, it is important that future work also further problematize and explore the operationalization of morphological regularity in Spanish. Gudmestad (2012), for example, looks at three levels of regularity: regular (with the same stem as the infinitive form, such as *hablar* vs. *hable* ‘to talk’), irregular (with a vowel change in some forms, such as *dormir* vs. *duerma* ‘to sleep’), and form-specific irregular verbs (with other types of stem change, such as *tener* vs. *tenga* ‘to have’). It is also crucial to examine how different these forms are when comparing indicative and subjunctive forms. The difference between *duerme* in indicative and *duerma* in subjunctive is as salient as the difference between *habla* in indicative and *hable* in subjunctive, for example. The operationalization of a factor group like morphological regularity requires, therefore, a careful examination of the conjugation paradigm of Spanish, comparing how verb forms are affected in different mood, tense and even person.

In terms of extralinguistic conditioning, a challenge that has been emphasized is that social characteristics of speakers tend to not be as well-defined as linguistic categories, even more so in bilingual communities where the language under analysis is minoritized (Torres Cacoullos & Berry, 2018). A possible way of resolving this issue is a principal component analysis, which has been applied in U.S. Spanish, more specifically in New Mexico Spanish, by López-Beltrán (2021) to the study of subjunctive, and by Torres Cacoullos and Berry (2018) to

phonetic variables. This type of analysis takes the linguistic phenomenon itself as a point of departure to cluster speakers. By grouping speakers this way, it allows the researcher to interpret their social characteristics and see which social factors are relevant to variation in the community.

Still regarding the difficulty of operationalizing extralinguistic factors in a bilingual setting, the operationalization and measurement of the intensity of contact with English and, more broadly speaking, bilingualism experiences, is of utmost importance for the study of U.S. Spanish. Contact with English has been frequently operationalized via immigrant generations. In Silva-Corvalán (1994b), for example, this leads to generation being discussed in terms of language proficiency:⁹ first-generation speakers are assumed to be more proficient than second-generation speakers, who would be more proficient than third-generation speakers. Nevertheless, incipient research casts doubt on how valid this connection is by showing that there are not always significant proficiency differences across generations (Beaudrie, 2019). In the current study, generation was chosen as a factor that measures contact, aligned with Silva-Corvalán's (1994b) work. However, one of the main methodological considerations for future research is the need for a careful examination of whether generation can be a proxy for contact with English.

While Silva-Corvalán (1994a, 1994b) looks at immigrant generation, which is based on birthplace, Villa and Rivera-Mills (2009) rethink this classic unidirectional generational model and propose the concept of linguistic generation. Linguistic generation is operationalized based on the Southwest linguistic realities and is calculated according to the distance from the generation of monolingual Spanish speakers that become in contact with English after the age of fifteen. This approach to generation accounts for the circular nature of processes such as maintenance and shift, considering cases of re-acquisition and learned acquisition generations of Spanish, for example. In addition to seeing generation from other perspectives, it is critical to continue to attempt to operationalize the intensity of contact with English and bilingualism experiences beyond generation. Language preference and formal exposure to Spanish, for instance, have been shown to condition mood choice in previous research. Waltermire (2014) finds

⁹ As noted by an anonymous reviewer, proficiency has been pointed to as a conditioner of mood selection in experimental research (e.g., Giancaspro, 2019; Perez-Cortes, 2021), which shows that advanced heritage Spanish speakers produce more target-like subjunctive use. Due to the nature of the current study and of the corpus data analyzed, an expanded discussion of this complex construct is outside the scope of this paper.

that preference for Spanish and exposure to Spanish in the classroom favor the use of subjunctive in New Mexico. He also examines the effect of age, which he argues should be relevant for mood selection given that in New Mexico younger speakers often prefer English to Spanish.

Overall, describing and measuring differences among bilinguals is very complex.¹⁰ As scholars continue to investigate variable patterns in U.S. Spanish that are hypothesized to be impacted by contact with English, it is imperative that we continue to explore alternative ways to measure and operationalize the intensity of contact and, more than that, bilingualism experiences more broadly.

Final considerations

This paper has discussed the patterns of mood selection in Spanish in Southern Arizona. Data extracted from 51 sociolinguistic interviews from CESA (Carvalho, 2012-) confirm that mood selection is variable even in contexts considered to be of obligatory subjunctive use. Despite its variability, subjunctive is still the most frequent variant in the so-called categorical contexts explored in this paper.

The multivariate logistic regression shows that U.S. generational group and clause type are significant factor groups for explaining mood variation. Subjunctive is favored by first- and second-generation bilinguals, while indicative is favored by the third generational group. Considering generation as a measure for contact with English, these results, aligned with the pioneering work of Silva-Corvalán (1994b), show that the increased contact with English assumed for the third generation accelerates the entry of indicative in the linguistic repertoire of the community represented in the data set analyzed. In terms of clause type, the use of subjunctive is favored in purpose and volitional clauses, while temporal clauses favor indicative. Also in line with variationist research in monolingual and bilingual Spanish (e.g., Silva-Corvalán, 1994b, Torres Cacoullos *et al.*, 2017), these results indicate that, although the three contexts analyzed here are considered to be categorical subjunctive contexts, indicative may be used in all of them, to different extents. Results show that indicative enters U.S. Spanish mainly through temporal contexts of the third-generation repertoire.

Overall, these results point to a decrease in subjunctive use from first and second generations to the third in the different clause types in Southern Arizona.

¹⁰ See more in Silva-Corvalán and Treffers-Daller's 2015 volume on measurement and operationalization of language dominance in bilinguals –especially chapters 8 (by Sharon Unsworth) and 12 (by Jeanine Treffers-Daller).

This finding indicates that the data set analyzed in this study is in accordance with the acceleration hypothesis of language change due to contact with English (Silva-Corvalán, 1994a, 1994b). The investigation of clause type and generational group allowed for results of Spanish in Southern Arizona and Los Angeles to be compared. This comparison shows similar patterns for both bilingual varieties in terms of syntactic/semantic contexts and generation, pointing to a continuity across U.S. Southwest Spanish. Additionally, similar to Silva-Corvalán's (1994b) results, mood choice in Arizona points to an intergenerational transmission of a variable grammar (Otheguy, 2016). The same variable patterns are observed across different generations even though indicative rates are higher among third-generation speakers. The comparison between these generations and the syntactic/semantic contexts reveals that the systematicity behind mood variation is an integral part of the variable grammar that subsequent bilingual generations acquire in these communities –bringing evidence that counters the misconception of bilinguals' grammar as unstable due to contact with English and pointing to grammatical integrity across generations.

The preliminary data analysis presented in this paper also sheds light on important methodological considerations that should be taken in further research on mood variation, especially in a bilingual community. In terms of data selection and management, a larger sample is necessary for examining each clause type separately, as different data sets, in terms of distributional patterns and different conditioning factors that may affect mood choice in these contexts. Regarding linguistic conditioning, tense may be relevant in mood selection, especially in temporal clauses due to distinct temporal relations between the matrix and the subordinated verb. In addition, the examination of mood choice should ideally be based on larger corpora so that the lexical identity of the governor and its frequency (Giancaspro, 2020; LaCasse, 2018; Perez-Cortes, 2022; Poplack *et al.* 2018; Torres Cacoullous *et al.*, 2017) could be included among the factor groups examined for the discussion of subjunctive lexical routinization. Finally, different verbal morphemes present different phonic salience, therefore, the morphological form and its regularity could impact the patterns that are acquired by younger generations (Giancaspro, Perez-Cortes & Higdon, 2022; Gudmestad, 2012; Perez-Cortes, 2022; Poplack *et al.*, 2013). Concerning extralinguistic conditioning, an alternative for expanding our understanding of the impact of extralinguistic factors on variable patterns of U.S. Spanish is the use of a principal component analysis, which identifies relevant social characteristics in variation by grouping speakers through the analysis of a set of linguistic phenomena (López-Beltrán,

2021; Torres Cacoullos & Berry, 2018). Ultimately, it is crucial that further work continues to attempt to operationalize intensity of contact with English and, more importantly, bilingualism experiences beyond immigrant generation.

This study has been the first to expand the investigation of mood variation to Spanish in Southern Arizona. It has also provided a comparison of the distribution of mood choice in two varieties of U.S. Southwestern Spanish, which shows that in both communities the same variable patterns are replicated across generations. Finally, it has discussed limitations of current analyses and has identified ways of overcoming them by indicating potential factor groups that may be constraining the use of one variant or the other. Overall, this study contributes both to our current understanding of mood selection in U.S. Spanish and to the advancement of this research agenda.

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