

## **Simplification in bilinguals' parallel structures? Spanish and English main-and-complement clauses**

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### **Abstract**

What is simplification, when may it occur in language contact and does it especially affect discourse-pragmatic aspects? In this chapter we assess parallel but differently variable structures across the languages in contact, in a bilingual speech corpus allowing comparisons of both bilinguals' languages. Spanish and English main-and-complement clauses are analogous but the locus of the variation differs across the languages. There is no corresponding variability in the other language when subjunctive is chosen over indicative in Spanish (variable subjunctive selection) or when presence over absence of the complementizer is chosen in English (variable complementizer presence). Overall rate may be an equivocal measure of contact-induced change, here masking productivity of the subjunctive, as shown by the range of subjunctive-licensing main verbs. Instead, comparisons can rely on the linguistic conditioning of variation, including contextual constraints operationalizing discourse-pragmatic factors, such as grammatical polarity for the Spanish subjunctive and subject form for the English complementizer. Bilinguals' Spanish and English each align with their respective monolingual speech benchmarks. Thus, in the northern New Mexico bilingual community, active bilinguals, who regularly use both languages, display continuity, rather than change, independently in each.

**Keywords:** variation, simplification, bilingual speech, Spanish subjunctive, English complementizer.

### **1. Language contact and simplification**

In language contact, change in one language supposedly due to the influence of another is widely taken for granted, so much so that change may be part of the definition of contact itself. Thus, according to one textbook "Language contact occurs when speakers of different languages interact and their languages influence one another" (Matras 2020: viii; see Poplack and Levey 2010: 392-398 for a critical overview). Prominently debated is simplification (e.g., Thomason and Kaufman 1988: 28-32). Simplification is said to result from imperfect language learning in adult language contact (whereas early bilingualism in long-term contact scenarios may give rise to complexification) (e.g., Trudgill 2004: 317). In the growing literature on heritage speakers, incomplete acquisition or language attrition have also been implicated in simplification (e.g., Montrul 2009:241-242). Here we draw on an ongoing contact situation involving active bilinguals, which allows us to probe simplification by considering parallel, but differently variable, structures in the two languages produced by the same speakers.

A prime candidate for simplification and loss is the subjunctive mood in Romance languages in contact with English, as with French in Canada (see Comeau 2020: 22-27 for a review) and Spanish in the United States (e.g., Ocampo 1990). Simplification of the Spanish mood category would be "the expansion of [the indicative] to a larger number of contexts [...] at the expense of [the subjunctive] which is used with increasingly lower frequency" (Silva-Corvalán 1994: 257). A common test, then, for simplification has been *overall rate*, that is, the

frequency of the subjunctive with respect to the indicative. For example, in Los Angeles, comparing first-generation immigrants and their children or grand-children, the second and third generation show lower overall rates of the subjunctive (descending from 42%, to 27%, to 17%) (Silva-Corvalán 1994:265, Table 3).

More vulnerable to simplification, furthermore, would be those contexts where use of a form carries a semantic or discourse-pragmatic meaning (e.g., Montrul 2009:263; cf. Sorace 2004). A speaker's use of the indicative in the complement clause of epistemic main verbs such as *creer* 'think', for example, is said to convey commitment to the truth-value of the complement-clause proposition, while the subjunctive is "neutral" as to speaker commitment (e.g., Pascual y Cabo, Lingwall and Rothman 2012:440 and references therein). In other words, more vulnerable to contact-induced change would be contexts in which choices between variant forms express meaning differences (rather than being determined by local structural or lexical contextual features, such as main verb *querer* 'want', with which a complement-clause subjunctive is automatic).

The methodological translation of the hypothesis of vulnerability of discourse-pragmatic contexts is a distinction between "variable" or "optional" contexts and those viewed as "obligatory". Loss of the subjunctive is reported to be greater in variable than in obligatory contexts (e.g. Lynch 1999:116;179; Silva-Corvalán 1994:267, Table 5; cf. Perez-Cortes 2020:2-4 and references therein). For example in complement clauses, subjunctive rate would be disproportionately lower for "comment", or factive-emotive, main verbs (e.g., *es triste que quieran ir* 'it's sad that...') than volitional, or volitive, main verbs (e.g., *quieres que canten* 'you want that...') (Silva-Corvalán 1994:265, Table 2; Viner 2017:313, 316-Table 4).

As a measure of language change, however, overall rate is equivocal (Torres Cacoullós and Travis 2021:291 and references therein). First, it is susceptible to data distributions, which are affected by topic, genre, elicitation strategies or other situational, extra-linguistic considerations. Second, the threshold for a linguistically (not merely statistically) significant difference in overall rate is unknown. For example, within monolingual Spanish itself, there is a 30 percentage point difference in the subjunctive rate after *no sé si* 'I don't know whether' between Bogotá and Santiago (DeMello 1995:560).

Contextual constraints, or the *linguistic conditioning* of variant linguistic forms, supply more discerning measures of change (cf. Poplack and Torres Cacoullós 2015:268-270). Contextual constraints on the selection of one form over its alternative in discourse are seen in rates *according to features of the context* in which the forms compete. For example, even with a 30 percentage point difference in the subjunctive rate after *no sé si* 'I don't know whether' (between Bogotá and Santiago), the effect of subject coreferentiality is identical (cf. DeMello 1995:561). It is such shared linguistic conditioning—despite overall rate differences—that provides a solid monolingual benchmark against which to compare bilinguals' varieties and determine whether contact-induced change has taken place.

To determine, furthermore, whether a change is one of simplification requires operationalizing linguistic complexity or simplicity on the ground, in speech. Simplification is variously conceived, but may mean loss of morphological distinctions, regularization and leveling, or increase in analytic over synthetic structures. Here we implement measures from contextual constraints on the choice of a form over its discourse alternative (cf. Shin 2014:304-305, Szmrecsanyi 2015:354-356 on "variational complexity").

The Spanish subjunctive and the English complementizer is an ideal pair of linguistic variables to assess simplification because main-and-complement clauses are analogous structures

in the two languages, but with a different locus of variation, as illustrated in (1) and (2). For ease of identification, in the Spanish examples, subscripts indicate mood choice in the complement clause and, in the English examples,  $\emptyset$  indicates absence of the complementizer.<sup>1</sup>

(1) Spanish complement clauses: Subjunctive vs. indicative mood

Ivette	<i>pero,</i> .. <i>se me hace que muchas cosas se --</i> <i>se desaparecieron</i> <sub>[IND],</sub> <i>pueda que todavía tengan</i> <sub>[SUBJ]</sub> <i>algunas cosas.</i>	‘but .. I think that a lot of things disa- -- disappeared <sub>[IND],</sub> it's possible that they still have <sub>[SUBJ]</sub> some things.’ [06 El Túnico, 1:10:01 - 1:10:06]
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(2) English complement clauses: Complementizer presence vs. absence

Trinidad	...(0.6) <i>but it's good <b>that</b> they're both involved.</i> [8 intervening lines] <i>I think <math>\emptyset</math> I know the mother and the father,</i> <i>and yeah,</i> <i>they're both good people.</i>	[21 Demerits, 43:31-43:47]
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In Spanish, speakers have a choice between subjunctive and indicative verb forms in some complement clauses (whereas the subjunctive is no longer an option in English). In English, speakers can select complementizer presence or absence (whereas complementizer absence is no longer an option in Spanish). Thus, each language displays variability where there is (virtually) none in the other. For parallel structures, the absence of equivalent conditioning factors in one language should reasonably be propitious to simplification in the other (cf. Silva-Corvalán 1994:269), whether under the view that the less complex grammar prevails in bilinguals (Sorace 2004: 144) or because bilinguals have fewer opportunities to practice the contextual constraints (Otheguy and Zentella 2012: 167–168).

The prediction following from the simplification hypothesis is shifts in rate toward the other language (lower for the Spanish subjunctive, higher for the English complementizer), with the caveats concerning the interpretability of overall rate (3a). With respect to contextual constraints, predicted is lack of effect of one or more linguistic conditioning factors known to constrain the variability in monolingual varieties. In particular, consistent with the hypothesis of vulnerability of discourse-pragmatic contexts to change, we would expect factors

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<sup>1</sup> Examples are from the New Mexico Spanish-English Bilingual corpus (NMSEB) (Torres Cacoullous and Travis 2018, Chapters 2 and 3). Within brackets is the recording number, name, and time stamp, given in (hour:)minutes:seconds. The transcription is based on the Intonation Unit (IU) (Du Bois, Schuetze-Coburn, Cumming and Paolino 1993:47); see Appendix for transcription conventions. Support from the National Science Foundation (BCS-1019112/1019122, 1624966) is gratefully acknowledged.

operationalizing semantic or discourse-pragmatic meanings (such as to those attributed to the Spanish subjunctive) to no longer display the same direction of effect (3b).

- (3) Predictions of simplification hypothesis:
  - a. Shifting rates toward other language;
  - b. Nullification of direction of effect of contextual constraints, especially for discourse-pragmatic factors.

In the following sections, we first situate the data in their social context, justifying the suitability of sociolinguistically constructed corpora for assessing contact-induced simplification (Section 2). We then present the language-specific variable structures, the Spanish subjunctive and the English complementizer (Section 3). Overall rates are especially misleading for the Spanish subjunctive, turning out to be discordant with measures of productivity in its use (Section 4). Linguistic conditioning of the variability in each of the languages is brought to bear, revealing that the bilinguals' varieties adhere to the patterns of their respective monolingual benchmarks (Sections 5 and 6). The conclusion is that, rather than change, active bilinguals who regularly use both their languages may display continuity, independently in each.

## **2. Data: Speech community and corpus**

The data are extracted from the New Mexico Spanish-English Bilingual corpus (NMSEB) (Torres Cacoullos and Travis 2018, Chapters 2 and 3). Spanish and English have coexisted as the main competing languages for over 150 years in northern New Mexico, located in the Southwest region of the United States (Bills and Vigil 2008:29–47). Northern New Mexico remains today home to the variety spoken by the descendants of the original Spanish-speaking settlers (known as New Mexican Spanish or Traditional Spanish) (Bills and Vigil 2008:7). We may well look for mutual linguistic influence in Northern New Mexico, then, since length of contact is considered a predictor of contact-induced grammatical change (see Poplack and Levey 2010:399 on such predictors).

Mutual influence between languages can be most directly observed synchronically in the speech of bilinguals, who are "the locus of the contact" (Weinreich 1953/1968:1). It must be recognized, however, that bilingualism is threatened in New Mexico. New Mexican Spanish is an endangered dialect, by language shift to English and stigmatization with respect to monolingual varieties in schools and public discourse (Bills and Vigil 2008:313). Spanish language loss among U.S.-born New Mexicans is made abundantly clear by the proportion of those identifying as Hispanic (or Latino) who report speaking only English at home—as seen in the first column of Figure 1, nearly half in the state. Still, resisting the shift to English is the complementary half of Hispanics who also speak Spanish, resulting in a sizable bilingual population. In the northern counties, the proportion of native Hispanics who speak Spanish, and also speak English "very well" is 58%. It is on this population that the NMSEB speaker sample is based.

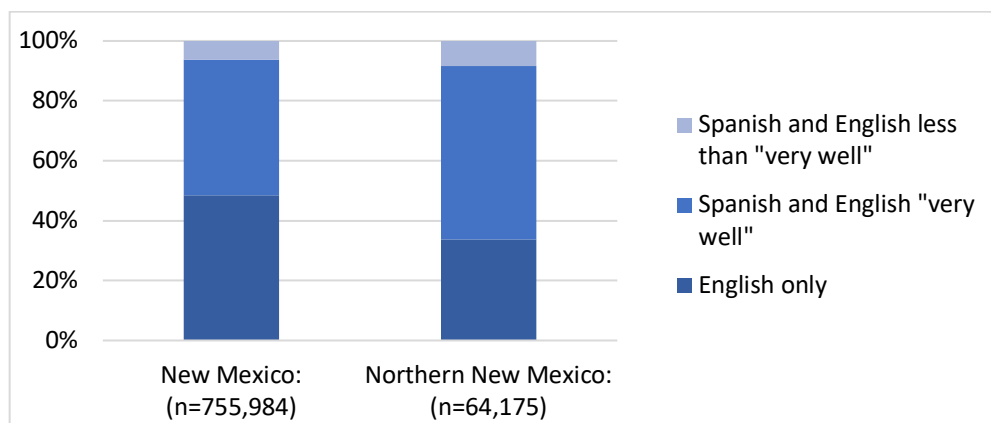


Figure 1. Language shift and bilingualism: Native Hispanic population according to language spoken in the home and level of English in New Mexico (statewide in first column, northern counties in second) (United States Census Bureau 2014) (from Travis and Torres Cacoullós 2015)

*Bilingual speech community* members share common sociolinguistic experiences, the same variety of each of their languages, and unified conventions for combining them (Torres Cacoullós and Travis 2018:25; cf. Labov 2007:347). An example of community norms is the preference to incorporate English-origin verbs into Spanish via light verb *hacer* ‘do’ in northern New Mexico (but not, for example, in Puerto Rico, with the same language pair) (cf. Wilson and Dumont 2015:450–451) (4). Another community norm is the predilection for lone English-origin nouns in Spanish with kin terms, such as *daddy* and *grandma* (Aaron 2015:467) (5).

(4)

Ivette ... *y luego nos dijo la ~Miss Martínez que*  
*hiciéramos switch.*  
do-IPF.SUBJ.1PL

‘... and then ~Miss Martínez told  
us to switch’  
[06 El Túnico, 10:03 - 10:05]

(5)

Cristina .. *luego puede que no se levante la*  
*grandma.*

‘... and then it's possible that  
grandma won't get up’  
[30 Cedar Chest, 12:49 - 12:51]

The NMSEB speaker sample ( $N = 40$ ) was selected to be made up of northern *Nuevomexicano* bilinguals who *use both languages regularly* in their daily interactions. The scores for, and lack of correlation between, language preference, self-rating, and predominance (proportion of clauses produced in each language) give no ground for designating either English or Spanish as the dominant language. These speakers are highly bilingual, as validated in the aggregate by the even amount of English and Spanish clauses in the corpus (Torres Cacoullós and Travis 2018:57–73).

Their speech was recorded through the technique of the sociolinguistic interview, in which participants tell their own life stories (Labov 1984:32-42). The mode of everyday speech, the *vernacular*, provides “the most systematic data for [...] analysis of linguistic structure”

(Labov 1972:208), unlike the confounding evidence of “experimental tasks highly encumbered by Spanish-medium schooling” (Erker and Otheguy 2021:229) (see, e.g., van Osch and Sleeman 2018:516-517 on task type effects).

Identifying other-language influence requires a suitable monolingual point of departure. This cannot be prescriptive injunctions and “imagined-data” linguistic descriptions (Ono and Thompson 2020:315; Poplack, Lealess and Dion 2013:183-189). Rather, we rely on systematic quantitative analysis of corpora of naturalistic speech. For Spanish, the *Corpus Sociolingüístico de la Ciudad de México*, or CSCM (Martín Butragueño and Lastra 2011-2015), serves as the monolingual benchmark against which we may appropriately compare bilinguals’ Spanish. Analyzed here is a sample ( $N = 36$  interviews, or 1/3 of the corpus) (LaCasse 2018). For English, we rely on reports of variable complementizer presence, which has been widely studied, in speech corpora of North American and British English.

### **3. Parallel but differently variable structures: Main-and-complement clauses**

Good candidates for contact-induced change are structures in which the languages in contact have some overlap, which would enable bilinguals’ “interlingual identifications” (Weinreich, 1953/1968:7), but also some differences, which enable the analyst to establish the direction of a change toward one or the other language (Poplack and Levey 2010:400, Torres Cacoullos and Travis 2018:121). In main-and-complement clauses, the Spanish subjunctive and the English complementizer are two such candidates.

#### *3.1 Spanish subjunctive: discourse-pragmatic factors*

Although there are main clause uses of the subjunctive, it occurs mostly within subordinate clauses, with complement clause uses making up approximately 40% of all subjunctive occurrences (Lastra and Martín Butragueño 2012:112). Nevertheless, the rates at which the subjunctive is selected with the most frequent subjunctive-licensing main verbs vary greatly. In the CSCM (see Section 2), for example, subjunctive occurs with *querer* ‘want’ at a rate of 100% ( $N=65/65$ ), but with *creer* ‘think’, at a rate of only 7% ( $N=21/313$ ).

There has been much discussion on motivations for the subjunctive in Spanish, and even Latin, in which it is thought to have possessed meanings such as will and wish (Poplack et al. 2018:222; Digesto 2019:201-227). For modern Spanish, one view is that syntactic motivations are primary. Rather than making an independent semantic contribution, as the subjunctive reaches a late stage of grammaticalization, it becomes “a general concomitant of non-assertive complement clauses” (Bybee, Perkins, and Pagliuca 1994: 222; see LaCasse 2018:83-107). Lexical motivations have also been identified in recent work: “the choice of subjunctive mood in nominal complement clauses in Spanish is mainly lexically determined, i.e. highly restricted to a relatively small set of verbal governors” (Schwenter and Hoff 2020:27). In fact, Poplack, Torres Cacoullos, De Andredre Berlinck, Dion, Digesto, LaCasse, and Steuck (2018) find that lexical routinization is operative in Romance more generally, with French, Portuguese, Italian, and Spanish all displaying marked lexical skewing in subjunctive use to a greater or lesser degree.

Predominant among the many treatments of the subjunctive, nevertheless, is the privileging of semantic or discourse-pragmatic factors. The subjunctive is widely seen as expressing possibility, doubt, non-factuality or other meanings under the label of irrealis (see

Pérez Saldanya 2021 for an overview). The contrast between assertion and non-assertion runs throughout the literature (e.g., Terrell and Hooper 1974). It is posited that speakers use the indicative to assert a statement as fact, or can instead use the subjunctive to comment on a situation, with no stake in its factuality. For example, in not asserting the information (as relevant) via the indicative, speakers may choose the subjunctive to express that the information is presupposed (old) or that it is unreliable (untrue) (e.g. Lunn 1989:691).

In contrast with Spanish, in North American English the subjunctive is not a form used productively. In a 2.8 million word speech corpus, the mandative subjunctive (as in, *it's important that the individual be<sub>[SUBJ]</sub> close to my age range*) occurs very rarely (17 tokens, or 6% of complement clauses of mandative verbs), with few subjunctive-licensing main verbs (only eight of the 240 mandative verbs searched co-occurred with a subjunctive even once), and largely restricted to the expression *I wish I were* (one third of the tokens) (Kastronic and Poplack 2021:114-119). In instances of Spanish-English contact, then, English influence should abet simplification of the Spanish subjunctive.

### 3.2 English complementizer: discourse-pragmatic factors

English main-and-complement clauses are structurally parallel with Spanish ones, but display variability in the presence of the complementizer (*that*), as illustrated earlier in (2).

Complementizer *that* has grammaticalized from its origins as a demonstrative pronoun, and its diachronic trajectory may be one of increasing use (e.g., Shank, Plevoets and Van Bogaert 2016:205, 237). Nevertheless, in present-day English, *that* presence is the minority variant.

Presence of *that* is more likely in certain linguistic contexts than others (e.g., Tagliamonte and Smith 2005; Torres Cacoullós and Walker 2009; Wulff, Gries and Lester 2018). Speakers' choice of *that* presence over absence is favored when there is intervening material—adverbials, clauses, fillers, pauses—between the clauses. The effect of intervening material indicates considerations of syntactic complexity, such that *that* serves to mark the boundary between the two clauses. However, there are also usage-based considerations of processing, evidenced in lexical effects according to main clause verb. Verbs such as *think*, which are frequently used in the main-and-complement clause structure and for which, therefore, a complement clause is predictable, favor *that* absence. In contrast, *know*, which is more frequently used with clauses introduced by *if*, *where*, *what*, favors *that* presence.

Relevant to simplification as evinced in loss of discourse-pragmatic factors is the role of the grammatical person of the main verb. Subject pronoun *I* in the main clause most strongly favors *that* absence. This is in line with the proposal that certain frequent collocations of main clause subjects and verbs such as *I think* and *I guess* are conventional discourse formulas, more akin to epistemic adverbials like *maybe* than main clause propositions (Thompson 2002). Also relevant is the form of the complement clause subject, whereby lexical subjects in the complement clause most strongly favor *that* presence. Lexical noun phrases are a site for introducing new information (Travis and Torres Cacoullós 2018:83 and references therein). This pair of factors points to discourse-pragmatic considerations, such that *that* serves not merely to demarcate two clauses, but to demarcate two clauses both of which have lexical or propositional content.

Whereas English complementizer *that* presence is subject to discourse contextual factors, in present-day spoken Spanish the complementizer is present (virtually) always, as an obligatory

marker of a clause as a complement.<sup>2</sup> Spanish influence should therefore boost the rate of *that* presence. If, in particular, simplification is at work in bilinguals' English, there should be loss of conditioning factors, especially those of main verb grammatical person and complement clause subject form, as discourse-pragmatic constraints.

Before turning to the bilingual data comparisons, the next section brings up a methodological caveat concerning overall rate.

#### 4. The equivocality of the overall rate criterion

Besides the general susceptibility of overall rates to extra-linguistic considerations (see Section 1), interpretation of subjunctive rate across studies is hampered by different universes of data. For studies relying on lists of main verbs, rates will naturally be disparate, depending on how many, and which, verbs are selected. An alternative is to take as the denominator all complement clauses (which yields a subjunctive rate of 33% for  $N=11,373$  complement clauses in the *Base de Datos Sintácticos del Español Actual*) (Pérez Saldanya 2022:Table 27.2).

Here, instead, the denominator is those complement clauses in which the speakers could have selected the subjunctive even if they did not (cf. Labov's (1972:72) principle of accountability). We count "every tensed clause governed by a matrix verb that triggered the subjunctive at least once in a given corpus" (Poplack et al. 2018:229). Thus, rather than abstract prescriptive or intuition-based classes of contexts (such as obligatory vs. variable subjunctive; see Section 1), the universe of data is empirically determined. This yields subjunctive rates of 27% in bilinguals' Spanish and 37% in the monolingual benchmark (Table 1).

Even so, overall rate is still misleading. Consider the subjunctive in French, where almost all subjunctive tokens occur under just three frequent main clause verbs (Poplack, Lealess, Dion 2013). Because the French subjunctive is highly lexically routinized, with just a few main clause verbs that almost always co-occur with it, its overall rate appears high. As shown in Table 1, at 76%, the subjunctive rate in French is double that of the Spanish monolingual benchmark! Based on the overall rate, one may erroneously deduce that Spanish has a simplified subjunctive in comparison with French.

Table 1. Overall subjunctive rates in French and Spanish speech corpora\*

Language variety	% Subjunctive
French	76% (1953/2596)
Monolingual Benchmark Spanish (CSCM)	37% (430/1153)
New Mexican (NM) Bilinguals' Spanish (NMSEB)	27% (148/550)

\* French (Poplack et al. 2018), Spanish monolingual benchmark and Spanish-English bilinguals (LaCasse 2018).

One might also erroneously deduce that, with a 27% rate, bilinguals' Spanish has a simplified subjunctive in comparison with the monolingual benchmark. The equivocality of overall rate is laid bare when we consider two productivity measures. First, Figure 2 shows the percent of the data accounted for by frequent vs. non-frequent main clause verbs, for all data

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<sup>2</sup> While complementizer *que* absence was fairly robust in pre-modern texts (Torres Cacoullous et al. 2017:79-80), it is overwhelmingly limited to formulaic expressions (as with *espero* 'I hope' in Twitter (Rodríguez Ricelli 2018: 323–327)).



(subjunctive plus indicative), in the first column of each pair, and the percent of all subjunctive occurrences, in the second column. Consider the first panel, for French. We see that frequent main clause verbs account for proportionally equivalent amounts both of all data and of all subjunctive. In fact, these frequent verbs account for just about all subjunctive tokens, at 98%. The way to interpret this is that French exhibits a high level of lexical skewing, meaning that a small number of highly frequent main clause verbs supply virtually all of the subjunctive tokens. Indeed, one main verb alone, *falloir* ‘be necessary’, by itself yields about three-quarters of all subjunctive occurrences.

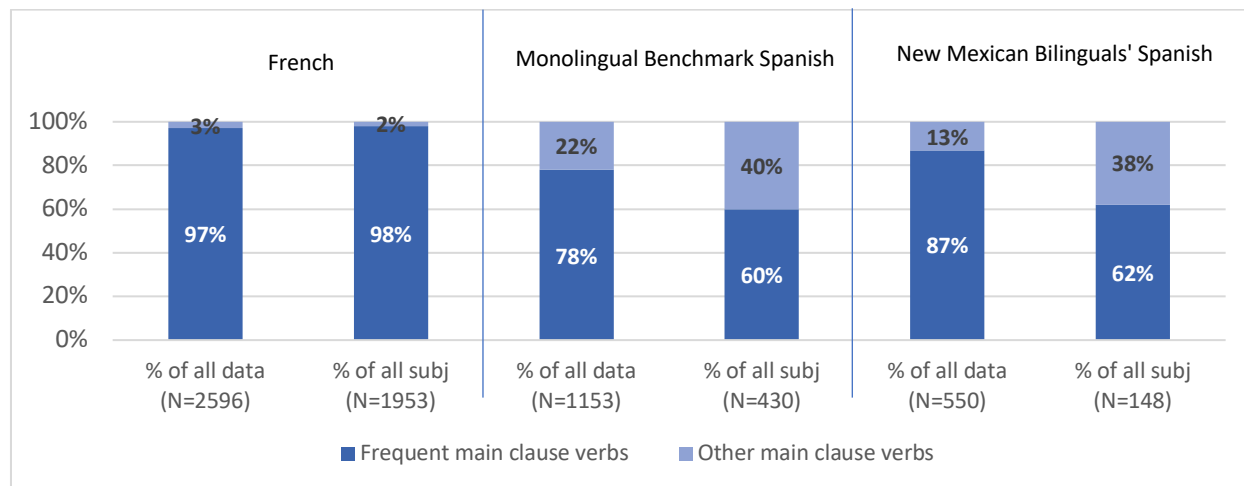


Figure 2. Productivity of subjunctive: Whereas in French nearly all subjunctive occurrences are restricted to a handful of frequent main verbs, in Spanish, subjunctive occurrences are disproportionately due to a variety of infrequent verbs (relative height of light shading in first and second column) (from LaCasse 2018, Poplack et al. 2018:239-242)

When we examine the same distributions in Spanish, a very different pattern emerges. As is natural, frequent main clause verbs account for the majority of all tokens. However, frequent main verbs yield proportionally fewer subjunctive tokens. This points to a lower degree of lexical skewing, as *more* subjunctive tokens are spread across a larger number of less frequent verbs, instead of being restricted to a tiny cohort of highly frequent verbs, as in French. This is as true of the bilingual data as it is of the monolingual benchmark data.

Bilinguals' Spanish fares just as well according to a second measure of subjunctive productivity. Productivity, the likelihood that a structure will apply to a novel items, can be measured in the proportion of lexical types constituted by *hapax legomena* (items that occur only once in a corpus) (cf. Schwenter and Hoff 2020:15;19 and references therein). Figure 3 shows that the proportion of such hapax legomena is identical in the monolingual benchmark and in bilinguals' Spanish (at approximately one-third).



questioning” (Thompson 1998:331) and therefore cannot assert the proposition (see also Bove 2020:47-48). Interrogatives here include yes/no questions, alternative questions (e.g. ‘would you like coffee, or tea?’), and wh- questions. The majority occur with appeal intonation—a high rise in pitch indicated by a question mark at the end of the Intonation Unit, as in (7) (see Appendix for transcription conventions). Likewise, main verbs in conditional statements do not assert, and should also favor subjunctive selection. Declarative main clauses (as in (1), above), on the other hand, are the most semantically (and structurally) neutral context.<sup>3</sup>

- |     |  |  |
|-----|--|--|
| (7) | Rocío    ... <i>no te da miedo que,</i><br>Adriana <i>oh.</i><br>Rocío <i>que,</i><br>.. <i>que algo se te vaya</i> <sub>[SUBJ]</sub> <i>a</i><br><i>aparecer?</i> | ‘... aren't you afraid that,<br>oh.<br>that,<br>.. that something is going <sub>[SUBJ]</sub> to pop<br>up in front of you?’<br>[05 Las Tortillas, 33:13-33:16] |
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A third contextual constraint to consider is the tense-aspect-mood of the main clause verb (Torres Cacoullós et al. 2017:89). A main verb in the future, conditional, imperative or subjunctive itself (8) can contribute to an irrealis reading, which would be consistent with the meaning expressed by the subjunctive in the complement clause. (8).

- |     |  |  |
|-----|--|--|
| (8) | Mariana: <i>yo voy a ver de que mis hijos,</i><br>.. <i>aprendan</i> <sub>[SUBJ]</sub> <i>lo que yo sé.</i><br>Gabriel: .. <i>mhm.</i><br>Mariana: <i>y,</i><br><i>y que sean</i> <sub>[SUBJ]</sub> <i>responsables.</i> | ‘I'm going to see that my kids,<br>.. learn <sub>[SUBJ]</sub> what I know.’<br>.. mhm.<br>‘and,<br>and that they are <sub>[SUBJ]</sub> responsible.’<br>[19 School Bus, 11:08-11:14] |
|-----|--|--|

Table 2 shows the direction of effect of grammatical polarity, sentence type, and tense-aspect-mood of the main clause verb. Bilinguals' Spanish and the monolingual benchmark display the same contextual constraints. Negation, interrogative and conditional sentences, and irrealis verb forms show higher subjunctive rates than affirmatives, declaratives and other tense-aspect-mood forms. That is, elements consistent with non-assertion favor the subjunctive, in both corpora.<sup>4</sup> In contrast, the direction of effect for negation and other co-occurring indicators of irrealis modality is neutralized or reversed in French where the subjunctive is fossilized (despite its higher overall rate), as well as in Portuguese and Italian (Poplack et al. 2018:232-234; Digesto 2019:115-122).

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<sup>3</sup> Set aside are instances where the main verb itself appears in a subordinate clause, unless it is part of an interrogative or conditional; subjunctive rates are higher where the main verb itself is in a subordinate clause (see Torres Cacoullós et al. 2017:91).

<sup>4</sup> While grammatical polarity and sentence type show smaller ranges in bilinguals' Spanish than in the monolingual benchmark, tense-aspect-mood displays the opposite. Differences in magnitude of effect inferable from the range of the percentages should not be overinterpreted given modest token counts.

Table 2. Linguistic conditioning of complement clause subjunctive vs. indicative according to main clause factors: Direction of effect in monolingual and in bilinguals' Spanish.\*

		Monolingual benchmark (CSCM)		NM bilinguals' Spanish (NMSEB)	
		% subj	<i>N</i>	% subj	<i>N</i>
Verb type, most frequent	<i>querer</i> 'want'	100%	65/65	98%	42/43
	<i>dejar</i> 'let'	100%	12/12	100%	9/9
	<i>creer</i> 'think'	7%	21/313	1%	1/72
	<i>se me hace</i> 'think'	n/a	n/a	2%	2/81
	<i>ver</i> 'see'	13%	10/78	31%	5/16
Grammatical polarity	Negative	80%	127/159	43%	15/35
	Affirmative	31%	303/994	26%	134/515
Sentence type	Interrogative, Conditional	64%	48/75	41%	12/29
	Declarative**	32%	275/849	24%	109/456
Tense-Aspect-Mood	Future, Imperative, Conditional, Subjunctive	63%	45/72	51%	18/35
	Other TAM forms	36%	385/1081	24%	121/497

\* In the second column, shaded contexts show higher subjunctive rates than unshaded contexts.

\*\* Excluded from Declarative sentence type are complement-taking verbs themselves in a subordinate clause.

Also similar in bilinguals' and monolingual Spanish is the behavior of the most frequent main verbs.<sup>5</sup> Epistemic *creer* 'think' and *se me hace* 'it seems to me', the New Mexican variant, rarely take the subjunctive, while volitives *querer* 'want' and *dejar* 'let' always do so. Even though there is such lexical skewing, however, the effect of factors operationalizing discourse-pragmatic considerations in subjunctive selection is not a mere reflection of frequent verbs that automatically trigger the subjunctive.

Consider the grammatical polarity constraint. In Table 2 negated main clauses favor the subjunctive, at 43% (vs. 26% with affirmative main clauses,  $p < .05$  by Fisher's exact test). Many of these main clause verbs are invariable, however, either because they occur only with the subjunctive, for example, *esperar* 'hope' or *gustar* 'like', or only once in the corpus ("hapax legomena"), for example, *rezar* 'pray', allowing no room for discourse-pragmatic conditioning. When we look only at variable main clause verbs—those which occur with both subjunctive and indicative complements, as with *sentir* 'feel' in (7)—the effect of negation is stronger, 38% (12/32) vs. 18% (82/463) ( $p < .01$ ), as seen in Figure 4.<sup>6</sup> Thus, the main clause polarity constraint remains operative, with bilingual speakers demonstrating sensitivity to negated main clause verbs in their use of subjunctive.

<sup>5</sup> The most frequent main verb in the variable context is *decir* (33%, 179/550 and 21%, 238/1153 of the data, in NMSEB and CSCM, respectively). With complement-clause subjunctive (at rates of 11%, 20/179 and 19%, 46/238), it has a directive 'to tell, to order' meaning (see example (4)) (vs. assertive 'to say' with indicative, see, e.g., Perez-Cortes 2020:3). Main-clause *hacer* does not appear in NMSEB and is favored by the highest class speakers ("nivel alto") in CSCM (14 of 22 tokens, all with subjunctive).

<sup>6</sup> Corresponding figures with variable verbs in CSCM: 69% (71/103) for negative vs. 12% (95/786) for affirmative.

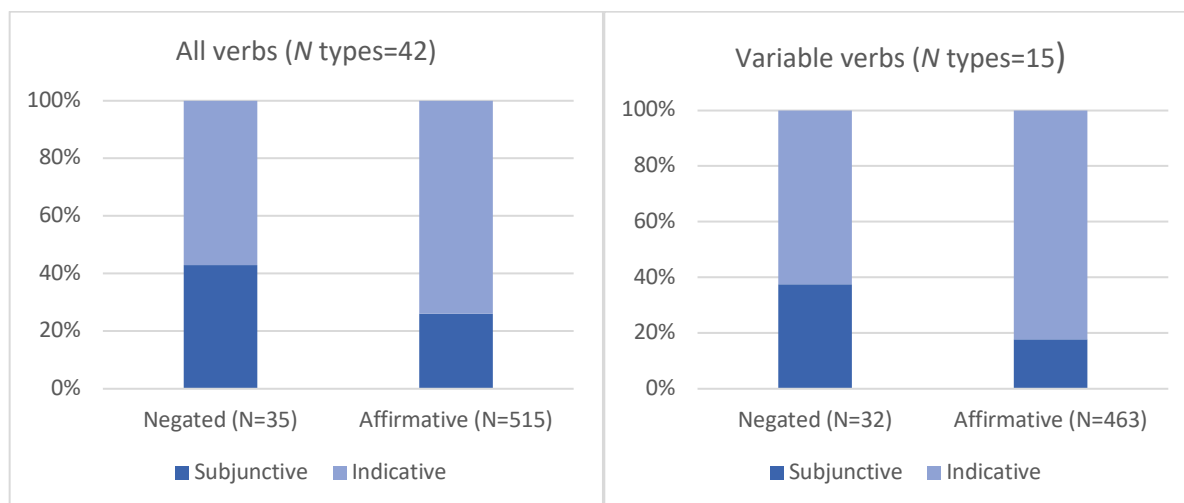


Figure 4: Subjunctive rate in bilinguals' Spanish main-and-complement clauses (NMSEB,  $N=515$ ) according to main clause negation (a) overall, for all main clause verbs (left panel); (b) for variable main clause verbs only (right panel).

## 6. Complementizer presence in New Mexican bilingual's English

The inverse situation to that of the Spanish subjunctive in New Mexico would be influence of the minority language on the majority language, which has been called shift-induced “substratum interference” (Thomason and Kaufman 1988: 38ff). We turn, then, to bilinguals' English complementizer use. Remember that English *that* is the minority variant with respect to complementizer absence (Section 3.2). In contrast, like Spanish speakers elsewhere, northern New Mexicans always use complementizer *que* in their unilingual Spanish main-and-complement clauses (Steuck and Torres Cacoullos 2019:225; Section 3.1). If these bilinguals' Spanish influences their English, then, they should use the English complementizer at an elevated rate, due to their invariable use of the Spanish complementizer.

The availability of a number of corpus-based studies here allows us to situate the overall *that* rate in New Mexican bilinguals' unilingual English, which is of 27%. Figure 5 shows that this is well within the monolingual benchmark range, of approximately 10% to 30% in corpora of spoken English (Steuck and Torres Cacoullos 2019: 225).

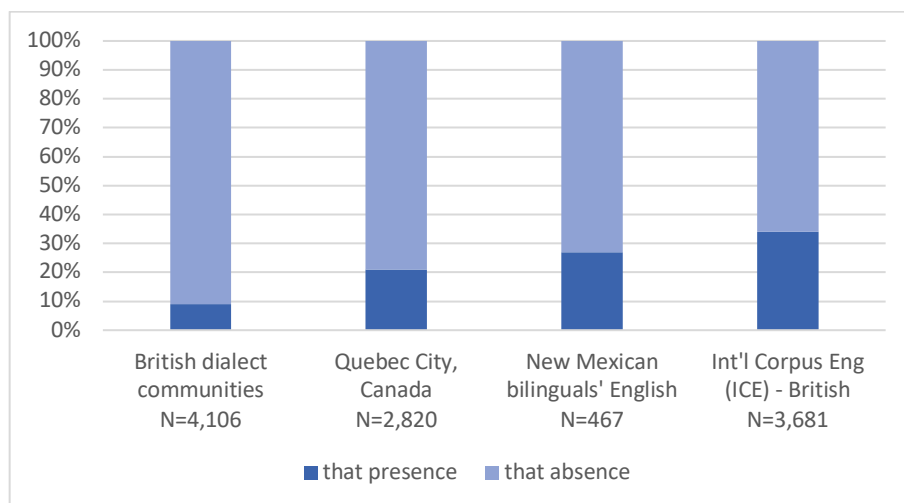


Figure 5. Overall complementizer *that* rates in corpora of spoken English (from left to right, from Tagliamonte and Smith 2005:299-300 (9%,  $N = 4,106$  or 16%,  $N = 2,148$  not counting *I think*); Torres Cacoullos and Walker 2009:20 (21%,  $N = 2,820$ ); Steuck and Torres Cacoullos 2019:224 (27%,  $N = 467$ ); Wulff et al. 2018:105 (34%,  $N = 3,681$ )).

English complement *that* clauses are generally confined to a small number of verbs, for example, compared with *to*-clauses (e.g., Torres Cacoullos and Walker 2009:18-19). Since overall rate may be dictated by lexical idiosyncrasies of a few high frequency verbs (Section 4), it is important to rule out the possibility that the distribution of main clause verb types in bilinguals' English is skewed differently from monolingual English. Figure 6 displays near identical skewing in bilinguals and monolinguals: *think* makes up nearly half the data, *know* and *say* approximately 1/6 to 1/5, and *guess*, *tell* and *remember* another 1/6 to 1/5. In both, these six verbs supply 3/4 to 4/5 of the data.

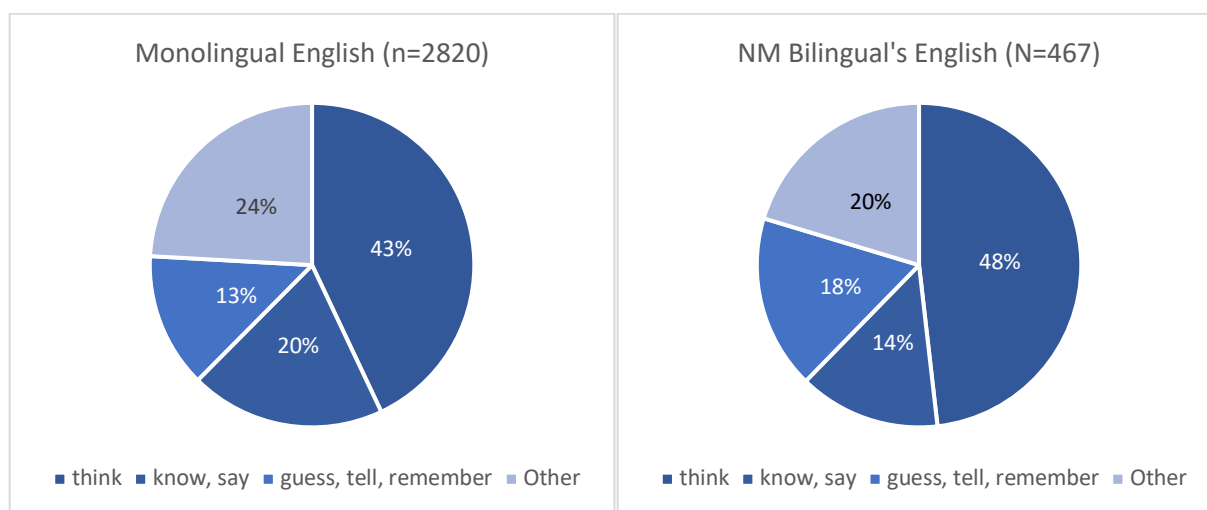


Figure 6. Frequent main clause lexical types in main-and-complement clauses (from Torres Cacoullos and Walker 2009:20, Steuck and Torres Cacoullos 2019:225).

Furthermore, the rates of *that* presence in bilinguals' English for each of the frequent verbs follow the pattern reported for monolingual English, with *know*, *say* and *tell* favoring *that* presence, but *think* and *guess* favoring *that* absence (Table 3, below). It is important to note that, in their Spanish, these same bilinguals maintain two equally frequent complement-taking verbs corresponding to *think*, namely *creer* and the impersonal expression *se me hace* 'it seems to me', and also maintain invariable *que* presence (Steuck and Torres Cacoullós 2019:225; see Section 5).

As with the Spanish subjunctive, grammatical change would be most obvious in the linguistic conditioning of complementizer *that* presence. Table 3 lists the contextual constraints as consistently reported in studies of monolingual varieties, on the left side, and the corresponding tendencies in bilinguals' English, on the right side of the table. Bilinguals' English replicates not only the patterns for frequent main verbs, but also the direction of effect for intervening material (presence of which favors *that*) as well as for the subjects of the clauses.

Table 3. Linguistic conditioning of complementizer *that* presence vs. absence: Direction of effect and contextual distributions in monolingual varieties and in bilinguals' English.\*

	<b>Monolingual English</b> (e.g., Shank et al. 2016: 202-213, Tagliamonte and Smith 2005:299-301, Torres Cacoullós and Walker 2009:19-32)	<b>NM bilinguals' English</b>		
			% <i>that</i>	<i>N</i>
Main clause verb	<i>know, say, tell</i> > <i>guess, think</i>			
	* 5 most frequent main clause verbs; * <i>I think</i> is most frequent subject-verb collocation	<i>know, say, tell</i>	51%	44/86
		<i>think</i>	11%	24/225
		<i>guess</i>	4%	2/46
Intervening material	present > absent			
	*Adverbials, clauses, fillers, pauses between the clauses favor <i>that</i>	Present	54%	43/80
		Absent	21%	83/387
Main clause subject person	non first person singular > <i>I</i>			
	*1sg is most frequent subject	Non 1sg	58%	66/114
		<i>I</i>	17%	60/353
Complement subject form	lexical > all other			
	*Full noun phrase subjects favor <i>that</i> , pronouns disfavor	Lexical	44%	24/55
		Non lexical	25%	102/412

\* In the second column, contexts to the left of > show higher rates of *that* than contexts to the right of >.

The subject factors are pertinent to the hypothesis of vulnerability of discourse-pragmatic contexts to contact-induced change. Main clause subject person captures conventionalized discourse formulas and complement clause subject form operationalizes the role of new information in the discourse (see Section 3.2). These factors are scrutinized in Figure 8. We can readily observe that, as in monolingual varieties, first person singular pronoun *I* (9) in the main clause favors *that* absence ( $p < .0001$ ), while lexical subjects in the complement clause (10) favor *that* presence ( $p < .01$ ).

(9) Leandro: I guess  $\emptyset$  he's just doing random .. business over there,  
[25 El Servicio,1:00:31-1:00:33]

(10) Anita: I learned **that** my grandmother was the one in charge.  
[14 Proper Spanish, 12:43 - 12:46]

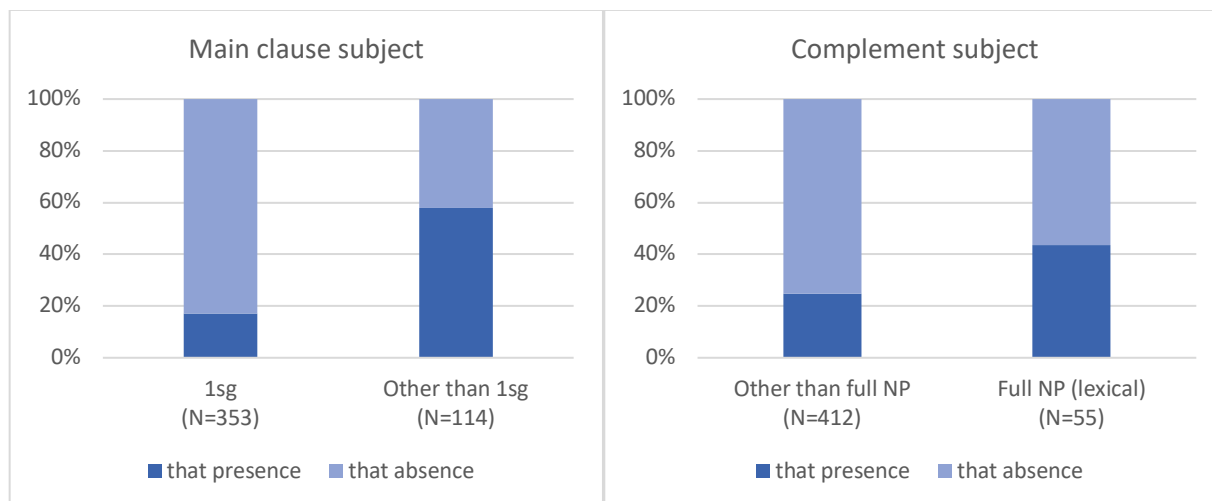


Figure 7: Rate of complementizer *that* in bilinguals' English main-and-complement clauses (NMSEB,  $N= 467$ ), according to (a) main clause subject person: *that* presence is favored by other than first person singular subjects (left panel); (b) complement clause subject form: *that* presence is favored by full NP (lexical) subjects (right panel)

In sum, we observe continuity in discourse-pragmatic contextual constraints on use—by the same bilinguals—of both the Spanish subjunctive and English complementizer *that*.

## 7. Conclusion

We assessed simplification synchronically, by comparing linguistic conditioning of variant choice in spontaneous bilingual speech with appropriate monolingual speech benchmarks. This measure of contextual constraints was applied to a pair of parallel structures in the two languages, the Spanish complement clause subjunctive and the English complementizer, which allowed us to assess whether the absence of corresponding variability in one language is propitious to simplification in the other (cf. Silva-Corvalán 1994:269). Overall subjunctive rate turned out to be equivocal, masking productivity as shown by the range of subjunctive-licensing main verb types. Operationalizing discourse-pragmatic aspects as contextual constraints in the linguistic conditioning of variation, such as grammatical polarity for the Spanish subjunctive (cf. Montrul 2009), we saw that each of the bilinguals' languages displays continuity in direction of effect (for example, subjunctive is favored more by negative than affirmative main clauses, complementizer presence is favored by lexical complement clause subjects), aligning with its respective monolingual benchmark.



Besides the nature of the data and the evaluation metrics, a key difference with many studies concluding in favor of contact-induced change concerns the bilingual community speakers. The NMSEB speakers regularly use both of their languages, as suggested by the very examples in the preceding sections. Active bilingualism of these speakers was attested to by community-member interviewers' observation and verified by the proportions of English and Spanish clauses in their recorded speech (Torres Cacoullós and Travis 2018:67). The equal proportions of English and Spanish include their unilingual main-and-complement clauses (Steuck and Torres Cacoullós 2019:220). Further evidence of regular use of both language is the bidirectionality of multi-word code-switching (11), going nearly equally from Spanish to English and English to Spanish (Steuck and Torres Cacoullós 2019:221). (In this pair of examples, the speakers selected the Spanish subjunctive in proximity to using English.)

(11a) Bidirectional multiword code-switching (Spanish to English)

Rubén: *pero parece que pudieran<sub>¡SUBJ!</sub>* 'but it seems that they could<sub>¡SUBJ!</sub>  
*poner a sign,* put a sign,  
*or something.* or something.'

[29 La Diploma, 39:36 - 39:39]

(11b) Bidirectional multi-word code-switching (English to Spanish)

Pedro: .. *I'm surprised que,* '.. *I'm surprised that,*  
*...(0.9) que dejaron al McCurdy que* ...*(0.9) that they let McCurdy*  
*les ganara<sub>¡SUBJ!</sub>.* beat<sub>¡SUBJ!</sub> them.'

[07 Basketball Teams, 31:09 - 31:12]

Thus, while simplification may characterize situations of transitory language contact, as with rapid language shift over one or two immigrant generations and "reduction of both exposure to and use of a complete variety of a subordinate language" (Silva-Corvalán 1994:269), simplification need not arise in ongoing contact situations with *active bilinguals*. Decisive is everyday, regular *use of both* languages. A widely cited assertion is that "it is the sociolinguistic history of the speakers, and not the structure of their language, that is the primary determinant of the linguistic outcome of language contact" (Thomason and Kaufman 1988:35). Rather, for candidate changes in progress, examined synchronically, it may be the *bilingual community practices* of the speakers that determine the linguistic outcomes of contact (Torres Cacoullós and Travis 2020:261). In the northern New Mexico bilingual community, active bilinguals—who regularly use both languages—display continuity, not change, independently in each.

## Appendix: Transcription Conventions (Du Bois et al. 1993)\*

Carriage return	new Intonation Unit**		
.	final intonation contour	-	truncated word
,	continuing intonation contour	..	short pause (0.2 secs)
?	appeal intonation contour	...	medium pause (0.3-0.6 secs)
--	truncated intonation contour	...( )	timed pause (0.7 secs or longer)
~	pseudonymized proper noun	X	one syllable of unclear speech

\*For the purposes of readability, removed are vocal noises, laughter and vowel lengthening.

\*\* Where the Intonation Unit does not fit on one line, the second line is indented.

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