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Review article

Rena Torres Cacoulllos & Catherine E. Travis. 2018. *Bilingualism in the community. Code-switching and grammars in contact*. Cambridge: Cambridge University Press, 240 p.

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1. Background

Linguists are increasingly paying attention to the ways bilinguals may alternate between two languages in one setting and with a single interlocutor, a phenomenon referred to as *code-switching*. Research in contact linguistics has shed light on the effects of code-switching on the linguistic structures of each of the two languages in the long run. It has been shown, for example, that in some extreme cases code-switching may lead to radical changes through the creation of mixed languages (see McConvell & Meakins 2005; O'Shannessy 2012). Torres Cacoulllos and Travis (2018) present strong evidence situated on the other end of the spectrum, supporting the view that despite frequent code-switching the two grammars remain intact. These novel data are of particular interest in the context of the most recent investigations on the cognitive effects of bilingualism (see Jarvis & Pavlenko 2008; Kroll, Dussias, Bice & Perroti 2015; and Schmid & Köpke 2017 for an overview). More specifically, current research highlights the fact that transfer is a dynamic and bidirectional process, constantly taking place at the level of the individual speaker. Even though it starts as an online, transient process, it can eventually modify underlying representations in a more permanent manner and lead to change.

The focus in *Bilingualism in the community. Code-switching and grammars in contact* is on the relatively homogenous bilingual networks comprising Spanish-English speakers who reside in various traditionally bilingual communities of New Mexico in the United States of America, both in

rural areas and in cities such as Albuquerque, Santa Fe, Los Lunas, Taos, and Las Vegas. As the authors argue, the New Mexican communities differ from recent migrant communities in that the use of the two languages for several generations is maintained whereas among migrants shift to the dominant language is rapidly taking place within just a few generations (Poplack 1980; Silva-Corvalán 1986; Backus 1992). Although shift to English is also widespread among the New Mexican populations under study, New Mexicans were most likely bilinguals in English and in Spanish over the past 150 years, long enough for contact-induced changes to occur at the level of the community.

From a methodological point of view, the present study is based on the quantitative analysis of an original spoken corpus. Although corpus-driven research has become a very dynamic paradigm in contact linguistics with the development of computerized corpora, Torres Cacoullos and Travis (henceforth TC & T) follow the long established corpus-driven methods of the variationist framework, pioneered among others by Labov (e.g., 1971, 1984). More generally, linguists interested in bilingualism and its short- and long-term effects have often compiled or relied on existing spoken corpora in order to document the most ordinary way of speaking (see Poplack 1980; Myers-Scotton 1993; Silva-Corvalán 1994; Gardner-Chloros 2009; Herring et al. 2010). TC & T argue that the analysis of natural, ecologically-valid data offers the best possible evidence to understand bilingualism, while pointing to the shortcomings of other methods, such as lab-based research using experimental data, intuitive judgments, introspection or anecdotal evidence collected in the field.

TC & T are prominent researchers in the field of variationist linguistics. In this perspective, patterns in language use are examined by paying close attention to factors such as frequency and priming (Poplack 1980; Poplack & Dion 2012; Torres Cacoullos & Travis 2016). In addition, TC & T take into consideration the social factors that might be shaping code-switching and language change (also see Stell & Yakpo 2015). Variationist as well as usage-based approaches contrast with top-down approaches that aim to test the validity of theoretical models, such as the Matrix Language Frame (MLF) model (Myers-Scotton & Jake 2017) or the Minimalist approach to code-switching (MacSwan 2016).

In section 2, I start by presenting the outline of the book. In section 3, I discuss methodological issues and, in Section 4, I focus on the main topic of the book, convergence or absence of it, in language contact.

2. Outline of the book

Bilingualism in the community. Code-switching and grammars in contact is organized into 11 chapters. In addition, it includes a list of figures and tables, two appendices, bibliographical references and an index.

Chapter 1 is the introductory chapter, entitled “Language contact through the lens of variation” (pp. 1-12). TC & T challenge previous research in which “convergence has often been hastily diagnosed on the basis of perceived departures from an idealized monolingual norm” (p. 3). Against this shortcoming, TC & T propose that linguists should always base their claim about contact-induced change following comparison between the bilingual speech and the monolingual equivalents (see section 1.1, “Benchmarks and comparisons”). The present study relies on an original bilingual corpus of 29 hours of transcribed recordings, or approximately 300,000 words. The authors then systematically compare the bilingual productions with various monolingual benchmarks. In addition, they remind their readers that variation does not always lead to language change, but is an inherent feature of both bilingual and monolingual speech. In section 1.2, TC & T invoke the importance of probabilistic, quantitative methods and criticize research that relies solely on overall rates, even when such rates reach statistical significance.

Chapter 2, “The community basis of bilingual phenomena” (pp. 13-34), starts with a presentation of the contact site, New Mexico, where Spanish-speaking populations were settled as early as the sixteenth century, and of the Spanish contact variety, which is close to Mexican Spanish. Following this introduction, TC & T explain how they constituted “a principled speaker sample” (pp. 24-26), comprising 40 participants, most of them being over 60 and residing in rural localities, with a variety of occupations. They conclude that this is the

most appropriate sample to examine the outcomes of language contact, which is “not afforded by studies of immigrant communities or studies without community footing, such as those based on assorted university students” (p. 34). One notes nonetheless that this is not a representative sample of a single “community”, but of speakers from different communities.

Chapter 3, “Good data: capturing language use” (pp. 35-56) focuses on the quality of the dataset, which according to TC & T needs to rely on spontaneous speech recorded among individuals who reside in communities with similar profiles. It is argued that “bilingual patterns cannot be detected with speaker samples consisting of university students at hand nor with corpora amalgamating texts culled from a range of dialects and contact sites” (p. 39). Following the variationist methodological principles, in-group community members who were all students at the University of New Mexico recorded the data through sociolinguistic interviews. Transcription methods are presented in section 3.3, opting for an orthographic transcription. Community members provide the first draft that the team verifies through a minimum of five rounds of revisions. Access to the data is restricted to researchers “familiar with the speech community” (p. 48). In sections 3.4, 3.5, and 3.6, authors motivate the use of a prosodically-based transcription into intonation units (based on the annotator’s perception using the software ELAN) and stress its significance for the study of code-switching and syntax. Interestingly, a first analysis of the data shows that the effect of alignment to the interlocutor’s language choice is not borne out in the New Mexican corpus, that is, speakers do not switch from one language to the other following their interlocutor’s switching. Put differently, language choice does not take place at the level of turn taking, but at the level of the conversation.

In Chapter 4, entitled “Characterizing the bilingual speaker” (pp. 57-73), TC & T use three types of data: self-reports based on a questionnaire, content analysis of the sociolinguistic interviews, and production data. Particularly informative is the comparison that shows absence of a correlation between scores of preferred language and self-rating (collected through questionnaires) with rates of subject pronouns in production. In Section 4.3, the authors consider that

it is “misleading to transpose into the setting of the bilingual community constructs that are applied to university students learning a second language or individual nuclear families moving to a new country” (p. 63). They claim, in particular, that dichotomies such as L1 vs. L2, simultaneous vs. sequential bilingualism, early vs. late do not account for the complex reality of bilingualism as apparent in the New Mexican data. In my view, the authors correctly draw attention to methodological difficulties and the increased attention required in complex bilingual settings. However, I think that, quite on the contrary, the above-mentioned dichotomies are most relevant as they allow for distinguishing between speaker profiles that differ maximally, for example, New Mexicans with two L1s, acquired early and simultaneously, and bilinguals who acquired an L2 later in life, for example in the classroom or following migration at some point in their lives. In section 4.4, TC & T present the results of an analysis of the corpus based on the language of the verb. This analysis reveals an even distribution of the clauses between the two languages, which leads TC & T to conclude that code-switching in New Mexico is a discourse mode, a type of “intra-situational code-switching” (p. 68), which is not locally motivated by the change of the interlocutor, situation, or topic as code-switching is. Though TC & T do not use this term, I suggest that this discourse mode is a good example of “code-mixing” in the continuum proposed by Auer (1998). This would allow us to understand the differences between the New Mexican (code-mixing) data and other classic code-switching data reported in the literature where one of the two languages may be numerically dominant, as well as differences with other more advanced outcomes on the continuum, such as “fused-lects”. In section 4.5, TC & T test a novel method to establish language dominance for individual speakers as an alternative to experimental psycholinguistic measures by exploiting the rates of use of Spanish and English clauses in their corpus (i.e., coding of the language of the clause based on the language of the finite verb). Results indicate that the frequency of use of the finite verb in English or Spanish does not correlate with self-report of language preference or self-rating of language ability, two measures that TC & T criticize for providing “a superficial view of linguistic experience for members of this bilingual community” (p. 71).

TC & T then choose to focus on subject pronoun expression for detailed examination. A variety of reasons motivates this choice. On the one hand, this choice is particularly relevant for the languages under study: subject pronoun expression is a well-investigated topic in both English and Spanish and is a potential candidate for grammatical convergence as the two languages exhibit an “overlap in their person-number categories and deictic meaning” (p. 111). On the other hand, this choice is driven by the contradictory theoretical claims that can be found in the literature (p. 136). For Heine and Kuteva (2005), for example, contact-induced grammatical change is instantiated through differences in rates, in particular, with the extension of a minor pattern into a major pattern. For Sorace and Serratrice (2009), overextension of subject pronouns is a default strategy among bilinguals independent of the languages they speak. For Silva-Corvalán (1994), simplification is likely to occur among bilinguals through loss of pragmatic functions, leading to the reduction of subject pronoun use. Beyond these predictions about rates, most authors predict that Spanish bilinguals will become less sensitive to the constraints of subject pronoun use due to their intensive contact with a non-null-subject language such as English. Turning to the more recent literature though, I would like to add the possibility that transfer will most likely be bidirectional. Though not explicitly stated, in practice, bidirectionality is tested in the various analyses conducted by TC & T. Finally, against the “convergence” scenario, where the two languages grow similar, TC & T consider the possibility that no change will take place in either of the languages.

Chapter 5, “Subject pronoun expression: reconsidering the constraints” (pp. 74-110), introduces variable subject expression in Spanish. The focus is on the most well established constraints in the literature: contrast and emphasis (section 5.1), ambiguity resolution (section 5.2), accessibility as subject continuity (section 5.3), coreferential subject priming (section 5.4), clause type (section 5.5), tense-aspect and temporal sequencing (section 5.6), verb class (sections 5.7 and 5.8), and grammatical person differences (section 5.10).

Chapter 6 is entitled “Cross-language comparisons: Reconsidering language types” (pp. 111-135). In this chapter, TC & T propose a variationist

typology based on structure of variability (section 6.2) with the goal to compare null subject languages, like Spanish, and non-null subject languages, like English (section 6.1). Their approach goes beyond any “theory-internal convictions” (p. 115) and relies strongly on the analysis of empirical, conversational data. For the monolingual benchmark varieties, they draw on existing English and Spanish monolingual spoken corpora (section 6.3). The English monolingual data are from the Santa Barbara Corpus of Spoken American English with recordings from various locations. The Spanish monolingual data are from the Corpus of Conversational Colombian Spanish (Cali, Colombia). One can object that these corpora are not ideal benchmarks, i.e., an English corpus from speakers of similar socio-economic and educational background from New Mexico would have been more adapted; a corpus of Mexican Spanish would have matched better the Spanish data given the above-mentioned similarity between the two varieties. From a practical viewpoint, however, these two corpora present the advantage of using the same prosodic transcription as the New Mexican bilingual corpus does. Analysis of the two monolingual corpora shows that, when taking into consideration both syntax and prosody, English and Spanish are similar at the level of subject expression in coordination (section 6.4). In particular, the analysis reveals that VP coordination with the conjunction *and* exhibits the highest rate of unexpressed subjects (as opposed to other conjunctions or asyndetic coordination) and that the tighter the prosodic linking (measured through boundaries and contours of prosodic units), the higher the likelihood that subjects will be unexpressed. Analysis of the Spanish monolingual data points to a similar trend, leading TC & T to conclude that English does not differ from Spanish in coordinate clauses. Analysis of the data also shows that a prosodic restriction in subject pronoun expression is characteristic of English: null subjects occur only in prosodic-initial position. In contrast, Spanish null subject pronouns can appear in both prosodic initial and non-initial position. TC & T argue that this is a crucial difference of subject pronoun use between English and Spanish and is a potential “conflict site” for the bilinguals, where the two languages could potentially converge to match one another (section 6.5). They then identify the various constraints that the two languages share, restricted to the contexts within which

the speakers can vary in their use or not of subject pronouns, and measure their strength (section 6.6). The constraints examined are accessibility (measured through the degree of syntactic or prosodic linking to the preceding subject), coreferential subject priming, verb class, and tense-aspect. Logistic regression analyses reveal that the probabilistic constraints are similar for the two languages, i.e., null subject pronouns occur when linked to the preceding coreferential subject, when the previous coreferential subject is unexpressed, and with dynamic verbs. However, analysis also shows that some constraints are stronger than others within each language. For example, in English, accessibility is a stronger constraint than priming and verb class, while this is not the case in Spanish. Moreover, a fine-grained analysis at the level of lexical constructions allows for the identification of more subtle differences between the two languages (section 6.7). First, Spanish speakers disfavor null subject pronouns with cognition verbs, whereas English speakers exhibit more variation at that level. Second, English speakers favor null subjects with the use of a motion verb, such as *go* and *come*, followed by the conjunction *and* and a verb of speech, such as *say* and *tell*. While Spanish speakers follow a similar trend, it is less frequent than in English.

Once TC & T have described subject pronoun use for the monolingual varieties of Spanish and English using the variationist method, they turn to examine subject pronoun use in the bilingual variety of Spanish as observed in the New Mexican data; see chapter 7, “Assessing change and continuity” (pp. 136-159). They first compare the contemporary New Mexican data with earlier stages of the New Mexican variety based on data drawn from a corpus of recordings from the 1990s. These earlier recordings document the speech of the parental generation in relation to the speakers recorded in the contemporary study (section 7.4). Second, TC & T compare the rates of subject pronoun use in the New Mexican data with those reported for two monolingual Spanish varieties, from Mexico City, Mexico and from Madrid, Spain. In addition, they compare the linguistic conditioning of subject pronoun use in the New Mexican data with that reported for the variety of San Juan, Puerto Rico and Madrid, Spain. Note that comparison of the bilingual data with the monolingual benchmark from Colombia

is presented in Chapter 8, but it is not clear why such a comparison is not conducted in this chapter too. The analysis between the old and recent New Mexican data provides evidence for continuity in the constraints of subject pronoun use. In addition, comparison between the bilingual and monolingual datasets shows that the relevant constraints affect subject continuity in the bilingual Spanish productions in the same way they affect subject continuity in the monolingual Spanish productions (i.e., priming, tense, and genre). In sum, the data do not provide any evidence for convergence between the two languages. TC & T relate this finding to the fact that New Mexican speakers have been using their two languages in equal rates, most likely for more than three generations (section 7.6).

Comparison between the English and Spanish bilingual productions of New Mexicans and the English and Spanish monolingual data from the United States of America and Colombia is conducted in Chapter 8, “The most intimate contact: The bilinguals’ two languages” (pp. 160-173). First, authors compare rates of subject pronoun use in bilingual New Mexican English and in monolingual English, and find no differences (“The NMSEB English rate, however, are not higher than the corresponding figures of 2 percent and 5 percent for the monolingual SBCSAE corpus”, p. 161-162). However, at that point, they do not conduct the same comparison to examine how the bilinguals’ Spanish might be influenced by English. This is a gap given that the predictions in the literature are that the Spanish rate of subject pronoun use is affected, not the English rate. TC & T then turn to examine linguistic conditioning in those contexts where variation is possible in the two languages, namely coordinate clauses, where the two languages are similar, and prosodic position, where the two languages differ. Against the convergence scenario, one discovers that New Mexican bilinguals respect the patterns of subject expression following the patterns occurring among monolingual speakers, in English and in Spanish. However, based on visual inspection of the graph on the use of subject pronouns by the bilinguals in both prosodically initial and non-initial position, it seems to me that simplification may be ongoing as Spanish bilinguals use less pronouns when compared to Spanish monolinguals. Transfer from English does not predict

this direction, as the authors correctly observe, since it should have led to the extension of subject pronoun use. In that case, why would Spanish bilinguals use less subject pronouns when compared to Spanish monolinguals? In non-initial intonation units this difference is numerically important, with 20% of expressed pronouns among the bilinguals and 38% among the monolinguals, and possibly also for initial intonation units (the exact rates for each type are difficult to extract from figure 8.3 and are not provided in the text or index either). I think this point deserves some discussion. In section 8.3, TC & T focus on subject expression in relation to the degree of syntactic and prosodic linking comparing the bilingual with the monolingual corpora. Again, they find no evidence for convergence between the two languages. Such results are of great interest, in view of the fact that the bilingual data come from conversations during which speakers alternated between the two languages freely, in a single setting and with the same interlocutor, therefore favoring at least online, transient processes of transfer. Finally, in 8.4, TC & T test the relevance of usage-based accounts that consider specific constructions as the most appropriate point of comparison to examine language change (see Backus 2005). Here, they compare the frequency of use of constructions such *I went and got* in New Mexican English and find similar rates to those in monolingual English (as predicted). In addition, they do not find an increase in such constructions in the Spanish bilingual data. Similarly, they find no differences for constructions in Spanish with cognition verbs. Following usage-based approaches, they conclude that the high frequency of specific constructions leads to their entrenchment, which disfavors change. In accordance, one would like in the future to know more about the results of comparison for less frequent constructions.

In Chapter 9, entitled “Code-switching without convergence” (pp. 174-187), TC & T discuss the role of cognitive costs in code-switching and the ways in which these may lead to contact-induced change. In particular, they review the literature that suggests that convergence of the two grammars could help reduce the cognitive load among the bilinguals, possibly in the context of code-switching. To test this hypothesis, TC & T examine whether the rate of subject pronouns is affected more strongly when English is used in the vicinity. Interestingly, they

find no differences in subject pronoun rates whether English code-switching or single words are present in the proximity or not (section 9.3). In sections 9.4 and 9.5 the same results are obtained when examining the more fine-grained linguistic constraints. The present findings may therefore indicate that the two languages are “on” throughout the entire conversation. This is an interesting contribution to the literature on bilingualism, where evidence from natural conversations is still lacking. In particular, evidence from bilinguals who code-switch frequently as a default mode (code-mixing) is rare. It could illustrate how frequent code-switchers may rely more heavily on the joint activation of the two languages rather than on their language control network as other bilinguals most likely do (Green 2011).

Cross-language structural priming is examined in Chapter 10, “Code-switching and priming” (pp. 188-202), a topic that has mainly been addressed in laboratory research. It is shown, in particular, that coreferential subject priming is affected by code-switching, although there is greater within-language than cross-language priming (section 10.2). It appears that “a previous English pronoun and a previous Spanish pronoun significantly increase the likelihood of a pronominal subject as compared with a previous unexpressed subject” (p. 191). More specifically, the use of Spanish pronouns favors the use of coreferential Spanish pronouns in subsequent clauses, e.g., *yo* primes *yo*, and the use of null Spanish pronouns favors the use of null Spanish pronouns. English pronouns favor the use of Spanish pronouns, though to a lesser extent, e.g., *I* primes *yo*, and English null pronouns, which are very rare, do not prime Spanish null pronouns. In consequence, TC & T suggest that priming is not just a binary phenomenon, but its strength is variable both within and across languages.

Lastly, in Chapter 11, “Bilingualism in its linguistic and social context” (pp. 203-210), TC & T offer a summary of the main arguments put forward in this book. They conclude that the hypothesis of convergence between two languages in contact is not borne out in the New Mexican bilingual data. Although TC & T have illustrated this finding through subject pronoun use, they cite similar results for other phenomena such as SV order or differential object marking in the same population (section 11.1). To account for the counter-examples in the

literature that document convergence between Spanish and English in the United States of America, TC & T suggest that these findings come from different bilingual populations, namely from second-generation immigrants. In particular, they argue that for a linguistic change to take place we need to examine what happens beyond the first two generations of bilinguals, something that is possible in the New Mexican community where speakers are minimally bilinguals for the past three generations (section 11.2). In addition, they stress the importance of relying on a solid methodology, based on the analysis of spontaneous speech, the use of quantitative methods, the analysis of linguistic conditioning and not mere rates, and of course the comparison of bilingual data with monolingual benchmarks (section 11.3). Finally, the hypothesis according to which frequent code-switching may determine convergence is rejected. Rather, they point to the fact that priming, which is a general mechanism in language production, is a better predictor (section 11.4). For example, cross-language priming between English *I* and Spanish *yo* is what might eventually lead to a change in the rates of Spanish subject pronouns. TC & T nonetheless stress that cross-language priming is less strong as within-language priming is and one should treat its effects with caution. In conclusion, TC & T suggest that even when bilinguals use two languages frequently and in the same discourse, and even though online cross-language effects take place, bilinguals ultimately keep their two grammars separate.

3. Discussion of methodology

As discussed in the previous section, one of the strengths of this study is its basis on spoken corpora. Spoken corpora are of special interest to linguists studying language contact as they potentially include a wide range of contact phenomena and may reveal information about the cognitive processes involved in the production and comprehension of bilingual speech. For corpus-driven studies to be valid, corpora need to be “big enough”. This is a well-known challenge regarding spoken bilingual corpora since automated techniques are not available yet and considerable manual coding is still needed. TC & T meet this challenge by building a novel 29-hour-long corpus, from 40 bilingual speakers, targeting on

average an hour of speech per speaker. The size of the New Mexican corpus is comparable to corpora from other classic studies in the field, such as Myers-Scotton's study (1993) with 20 hours of speech for each corpus from more than 100 speakers, Poplack (1980) on Puerto Rican code-switching, with 66 hours and a minimum of two hours of speech per speaker. Poplack & Dion (2012) remains an exception for the study of loanwords among French-English bilinguals in Canada relying on two corpora, each consisting of more than one million words, and a corpus from the nineteenth century with 500,000 words. Unfortunately, what all these studies also have in common is lack of accessibility of the original data, or even parts of the data, to the wider research community (NB: TC & T restrict access to researchers who are familiar with the community).

Access to the corpora is a point that deserves some discussion. It is clear that the dynamism of corpus-driven research is due to a large extent to the fact that it addresses public and political concerns for accountability and replicability in science. Indeed, there is increasing institutional support for FAIR data (Findable, Accessible, Interoperable, and Re-usable data) and one can regret that a contemporary corpus, elaborated with an NSF grant, does not meet these standards. TC & T motivate restricting access to researchers who are familiar with the community in the following way: "researchers unfamiliar with the speech community may unknowingly misunderstand linguistic material" (p. 48). For example, TC & T express their concern that listeners unfamiliar with New Mexican Spanish may not understand that *muchito* means 'kid', following contraction from *muchachito*. Or that naïve listeners may perceive a preterit *dij-imos* 'say-PRET.1PL' ([diximos]) instead of present tense *dec-imos* 'say.PRES.1PL' with aspirated onset /s/ ([deximos] vs. standard [desimos]). However, a variety of materials may supplement raw data (if not directly annotated data with glosses) to prevent other researchers from arriving to the wrong conclusions. In any case, the risks identified by the authors are worth taking when compared to the benefit of open access corpora (see among others Adamou 2016; Guzmán et al. 2016). Of course, providing access to the data raises ethical questions, but TC & T already implement the necessary precautions, e.g.,

respect of the privacy of the speakers through anonymizing the parts of the sound files and transcripts that include personal information.

I would now like to address the claim in this book that although all methods are welcome in contact linguistics, “the ultimate yardstick must be the sociolinguistically constructed corpus” (p. 13). TC & T suggest that experimental data produced in controlled environments are not satisfactory for the study of non-standard bilingual varieties as “test situations and lab-based activities are associated with institutions that have excluded these varieties” (p. 39). However, recent studies have successfully adapted experimental and, more specifically, psycholinguistic methods in the field (see O’Shannessy & Meakins 2012; Lipski 2016; Adamou & Shen 2017). In addition, several authors regard corpus and experimental data as complementary: for example, Adamou and Shen (2017) and Johns, Valdés Kroff, and Dussias (2018) showed that language switching costs align with the code-switching habits of the community as documented in corpus studies.

TC & T also suggest that “speaker judgments are unreliable to test hypotheses” (p. 39). Although Labov (1996) has shown that respondents’ opinions regarding their linguistic behavior are not necessarily in agreement with the way they speak, Bresnan (2007) demonstrated that where the corpus predicts low probabilities, respondents also do the same and concludes that intuitive judgments reflect probability rather than grammaticality. Research has also shown that discrepancy between the way one speaks and the way one judges correctness is more pronounced when non-standard varieties are involved and that judgments regarding non-standard varieties are more fluid than judgments of standard varieties (Henry 2005). It is therefore possible to take into consideration sociolinguistic norms in the analysis of judgments. More generally, acceptability judgment tasks are considered a reliable tool in linguistic research (Sprouse, Schütze & Almeida 2013), in particular when researchers work with a large sample of participants (Gibson & Fedorenko 2013).

To conclude, in my view, a variety of approaches are needed to offer insights for understanding language contact and bilingualism, ranging from experimental to naturalistic corpus data and intuitive judgments. In that sense,

the variationist analysis of corpora in this book presents invaluable insights that can fruitfully combine with other methods.

4. Convergence or not?

The main finding in Torres Cacoullos and Travis (2018) is that Spanish-English bilinguals from the bilingual community of New Mexico in the United States of America do not exhibit any contact-related changes in either of their two everyday languages. In particular, quantitative analysis of the speech of New Mexican bilinguals reveals the use of similar amounts of Spanish pronouns, under the same conditions as Spanish monolinguals do. In parallel, New Mexican bilinguals use similar amounts of English pronouns, under the same conditions as English monolinguals do. TC & T argue that these results are due to the specificity of a bilingual community in a long-term contact setting.

However, researchers have identified contact-induced changes in a historical perspective relying on the comparative method, a method that has been solidly established in linguistics. The fact that we sometimes may only have access to the end-result does not affect the validity of the observation, in particular, as we are dealing with categorical changes in the grammatical categories rather than with rates and linguistic constraints as in the book under discussion. In my areas of expertise, for instance, it is uncontroversial that Slavic languages in the Balkans have developed definite articles as opposed to all other Slavic languages outside the Balkans through internal processes of grammaticalization from demonstratives, as attested in written sources, but also through contact with Greek, a language with definite articles (Mladenova 2007). Even more uncontroversial is the fact that, Romani, an Indic language, exhibits several syntactic features that have been shaped through contact with non-Indic languages during the past ten centuries. Romani developed a definite article during the Byzantine times in contact with Greek (Matras 2002): a first contact-induced change. Then, the Romani groups who migrated to countries where the new contact languages did not have grammaticalized definite articles gradually

lost the Romani definite articles: a second uncontroversial contact-induced change. This process is ongoing in some varieties while in others loss of definite articles is completed. See for example Romani spoken in Poland, currently in contact with Polish, Romani spoken in Russia, currently in contact with Russian, and Romani spoken in Finland, currently in contact with Finnish (elicited data accessible at the online Romani Morpho-Syntax Database <http://romani.humanities.manchester.ac.uk/rms/>; more specifically see the samples with the codes PL 003, RUS 005, FIN-002). In contrast, Romani groups that were in contact with languages with definite articles have maintained the use of the Romani definite articles. Another example comes from the Slavic variety of Molise, in Italy, which developed an indefinite article in contact with Italian as opposed to the Croatian variety in the Dalmatian coast, which did not develop an indefinite article (Breu 2011). Moreover, Adamou (2013) shows that Mexican Romani speakers who migrated to Mexico 150 years ago replicated Spanish *estar*, thus creating variation in the domain of attributive clauses, whereas in *all* Romani varieties from Europe a single copula is used and no variation at the level of the copulas can be found or reconstructed.

In sum, although the New Mexican data are valuable, they are not relevant on whether contact-induced change takes place *in general*. Rather these new data document the cases where contact-induced change *does not* take place.

6. Conclusion

To conclude, Torres Cacoullos' and Travis' book is a timely contribution to the fields of bilingualism and language contact. Beyond the interest of the data, one of the major strengths of the book is that it offers a solid methodology based on the variationist framework that the authors present in a comprehensive and sophisticated way. The book will appeal to anyone with an interest in language contact, bilingualism, language change, variationist linguistics, and Spanish in the United States of America. While it is a must-read for well-established researchers in the field, it is also accessible to students as it is written in a clear

and pedagogical way, accompanying the reader gradually as the arguments and the findings unfold.

References

- Adamou, E. 2013. Replicating Spanish *estar* in Mexican Romani. *Linguistics* 51(6): 1075–1105.
- Adamou, E. 2016. *A corpus-driven approach to language contact. Endangered languages in a comparative perspective*. Boston & Berlin: Mouton de Gruyter.
- Adamou, E. & X. R. Shen. 2017. There are no language switching costs when codeswitching is frequent. *International Journal of Bilingualism*. First published on May 14, 2017. doi.org/10.1177/1367006917709094
- Auer, Peter. 1998. From code-switching via language mixing to fused lects: Toward a dynamic typology of bilingual speech. *Interaction and Linguistic Structures* 6 : 1–28.
- Backus, A. 1992. *Patterns of language-mixing. A study in Turkish-Dutch bilingualism*. Wiesbaden: Harrassowitz.
- Backus, A. 2005. Codeswitching and language change: One thing leads to another? *International Journal of Bilingualism* 9(3–4): 307–340.
- Bresnan, J. 2007. Is Syntactic Knowledge Probabilistic? Experiments with the English Dative Alternation. In S. Featherston & W. Sternefeld (eds.), *Roots: Linguistics in search of its evidential base*, 75–96. Berlin & New York: Mouton de Gruyter.
- Breu, W. 2011. Language contact of minority languages in Central and Southern Europe: a comparative approach. In B. Kortmann & J. van der Auwera (eds.), *The Languages and Linguistics of Europe. A Comprehensive Guide*, 429–451. Berlin & New York: Mouton de Gruyter.
- Gardner-Chloros, P. 2009. *Code-switching*. Cambridge: Cambridge University Press.

- Gibson, E. & E. Fedorenko. 2013. The need for quantitative methods in syntax and semantics research. *Language and Cognitive Processes* 28(1-2): 88-124.
- Green, D. 2011. Language control in different contexts: the behavioural ecology of bilingual speakers. *Frontiers in Psychology*, 2. Retrieved from <http://journal.frontiersin.org/article/10.3389/fpsyg.2011.00103/full>
- Guzmán, G., J. Serigos, B. E. Bullock & A. J. Toribio. 2016. Simple tools for exploring variation in code-switching for linguists. *Proceedings of the Second Workshop on Computational Approaches to Code Switching*, pages 12–20, Austin, TX, November 1, 2016. Association for Computational Linguistics.
- Heine, B. & T. Kuteva. 2005. *Language contact and grammatical change*. Cambridge: Cambridge University Press.
- Henry, A. 2005. Non-standard dialects and linguistic data. *Lingua* 115: 1599–1617. 10.1016/j.lingua.2004.07.006
- Herring, J. R., M. Deuchar, M. C. Parafita Couto & M. Moro Quintanilla. 2010. ‘I saw the madre’: evaluating predictions about codeswitched determiner-noun sequences using Spanish-English and Welsh-English data. *International Journal of Bilingual Education and Bilingualism* 13: 553-573.
- Jarvis S. & A. Pavlenko. 2008. *Cross-linguistic influence in language and cognition*. New York & London: Routledge.
- Johns, M. A., J. R. Valdés Kroff & P. E. Dussias. 2018. Mixing things up: How blocking and mixing affect the processing of codemixed sentences. *International Journal of Bilingualism*. First published on February 5, 2018. doi/10.1177/1367006917752570
- Kroll, J., P. E. Dussias, K. Bice & L. Perroti. 2015. Bilingualism, mind, and brain. *Annual Review of Linguistics* 1: 377–394.
- Labov, W. 1971. Some principles of linguistic methodology. *Language in Society* 1: 97–120.
- Labov, W. 1984. Field methods of the project on linguistic change and variation. In J. Baugh & J. Sherzer (eds.), *Language in use: Readings in sociolinguistics*, 28–53. Englewood Cliffs: Prentice Hall.

- Labov, W. 1996. When intuitions fail. In L. McNair, K. Singer, L. Dolbrin & M. Aucon (eds.), *Papers from the Parasession on Theory and Data in Linguistics*, 77–106. Chicago, IL: Chicago Linguistic Society.
- Lipski, J. 2016. Palenquero and Spanish: A first psycholinguistic exploration. *Journal of Pidgin and Creole Languages* 31: 42–81.
- MacSwan, J. 2016. Codeswitching in adulthood. In E. Nicoladis & S. Montanari (eds.), *Lifespan Perspectives on Bilingualism*, 183–200. Berlin: Mouton de Gruyter and Washington, DC: American Psychological Association.
- Matras, Y. 2002. *Romani: A linguistic introduction*. Cambridge: Cambridge University Press.
- McConvell, P., & F. Meakins. 2005. Gurindji Kriol: A mixed language emerges from code-switching. *Australian Journal of Linguistics* 25: 9–30.
- Mladenova, O. 2007. *Definiteness in Bulgarian*. Berlin & New York: Mouton de Gruyter.
- Myers-Scotton, C. 1993. *Duelling Languages: Grammatical Structure in Code-switching*. Oxford: Clarendon press.
- Myers-Scotton, C. & J. Jake. 2017. Revisiting the 4-M model: Codeswitching and morpheme election at the abstract level. *International Journal of Bilingualism* 21(3): 340–366.
- O'Shanessy, C. 2012. The role of codeswitched input to children in the origin of a new mixed language. *Linguistics* 50: 305–340.
- O'Shanessy, C. & F. Meakins. 2012. Comprehension of competing argument marking systems in two Australian mixed languages. *Bilingualism: Language and Cognition* 15: 378–396.
- Poplack, S. 1980. Sometimes I'll start a sentence in Spanish y termino en espanol. *Linguistics* 18(7): 581–618.
- Poplack, S. & N. Dion. 2012. Myths and facts about loanword development. *Language Variation and Change* 24(3): 279–315.
- Schmid, M. S. & B. Köpke. 2017. The relevance of first language attrition to theories of bilingual development. Epistemological keynote paper with commentaries. *Linguistic Approaches to Bilingualism* 7(6): 637–667.

- Sorace, A. & L. Serratrice. 2009. Internal and external interfaces in bilingual language development: Beyond structural overlap. *International Journal of Bilingualism* 13(2): 195–210.
- Silva-Corvalán, C. 1986. Bilingualism and language change: The extension of *estar* in Los Angeles Spanish. *Language* 62(3): 587-608.
- Silva-Corvalán, C. 1994. *Language contact and change: Spanish in Los Angeles*. Oxford: Clarendon Press.
- Sprouse, J., C. T. Schütze & D. Almeida. 2013. A comparison of informal and formal acceptability judgments using a random sample from Linguistic Inquiry 2001-2010. *Lingua* 134: 219–248.
- Stell, G. & K. Yakpo (eds.). 2015. *Code-switching between structural and sociolinguistic perspectives*. Berlin: Mouton de Gruyter.
- Torres Cacoullos, R. & C. Travis. 2016. Two languages, one effect: structural priming in spontaneous code-switching. *Bilingualism: Language and Cognition* 19(4): 733–753.

