

## Bilingual speech planning as an explanatory framework for contact effects: Guaraní grammatical borrowings, calques and other mixing outcomes in Paraguayan Spanish

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Investigations of types of code-mixing rarely if ever take full advantage of psycholinguistic models for bilingual planning in language production. In this presentation, we show how different mixing outcomes, such as borrowings, calques, replicas, and doublings, can be explained by examining the different stages at which selected meanings and forms compete and collaborate in bilingual language conceptualization and formulation.

Calques and replications from Guaraní into Spanish are well documented. In (1), we find the emphatic use of Sp. *luego* ‘then’ (reduced to *lío*) as a calque of the Gu. emphatic enclitic =*voi*, and the prospective use of Sp. *para* ‘for’ as replication of Gu. prospective affix -*rã* (2). Likewise, the borrowing of Guaraní grammatical morphemes with their original meanings is also well-known. We find, for example, the Guaraní veridical second-position clitic =*niko* (3) and the interrogative second-position clitic =*pa* (4; rising intonation on stressed syllable).

1. *¡Qué rico **lío** es mi sánguche!*  
qué rico **lío** es mi sánguche  
what tasty then is my sandwich  
‘How tasty is my sandwich!’ [From the film *Siete Cajas* ‘Seven Boxes’]
2. *vamos a comprar **para** mi ropa en el mercado*  
vamos a comprar **para** mi ropa en el mercado  
let’s.go to buy **for** my clothes in the market  
‘let’s go buy me clothes at the market’ [From ABC digital, abc.com.py, 10 Dec 2018]
3. *Aquí **niko** yo nací y no voy a salí(r).*  
aquí=**niko** yo nací y no voy a salir  
here=VERIDICAL I was.born and no I.go to exit  
‘I was born here and I will not leave.’ [From the novel *Ramona Quebranto*]
4. *¿Entendiste **pa**?*  
entendiste=**pa**  
you.understood=QUESTION  
‘Did you understand?’ [From the film *Siete Cajas* ‘Seven Boxes’]

Such phenomena are often conceptualized as essentially different. Recent models exist that attempt to integrate different outcomes into a coherent single framework (e.g., Gast & Auwera 2012, Matras & Sakel 2007), but they remain at the level of the language system and do not take into account a speaker’s psycholinguistic planning. We advance the hypothesis that these contact phenomena respond to diverse influences of a cognitively dominant language on the planning of an utterance in a different target language. This allows us to explain how categorial and form equivalences (Gast & Auwera’s “interlingual identification”) actually emerge in the course of bilingual planning for production. Here, we focus specifically on how contact-influenced individual innovations occur that can eventually yield community-level conventionalizations.

For the sake of expository simplicity, we assume Bock & Levelt’s (2002) production model including a CONCEPTUALIZER (selecting concepts to create a preverbal message with content-to-be-conveyed), a FORMULATOR (encoding lexically, grammatically, and phonologically the preverbal message), and an ARTICULATOR (executing the phonetic plan). We also assume that in

bilingual situations the interactional expectations determine a *target language*, whereas the speaker's mental status may determine a different *cognitively dominant language* (the language to which more cognitive resources are allocated; cf. Matras' (1998) *pragmatic dominance*). Thus, for contextual reasons the language to be spoken in (1–4) is Spanish, but mixing occurs if Guarani is cognitively dominant (often because the speaker has overall Guarani-dominant competence). Different surface outcomes are determined by the influence of Guarani processing at different stages of the planning chain and the competition between staying in monolingual mode and avoiding changes in the form-function mapping of morphemes, as we will see next.

Thus, in (1) the preverbal message composed by the conceptualizer includes the meaning-to-be-conveyed EMPHATIC of Gu. *voi* (cf. Jarvis' (2011) *conceptual transfer*). No grammaticalized category exists for this in Spanish, creating a clash between conceptualization and formulation that is resolved by coercing Sp. *luego* (that has "bridge" quasi-emphatic uses in Spanish) to serve that function, allowing the utterance to remain on the surface in the target expected language (i.e., a kind of *pattern replication*; Matras & Sakel (2007)). Contrastingly, the selection of the meaning VERIDICAL (3) is resolved by borrowing the Guarani morphemes (i.e., *matter replication*), violating the expectation that the target language is Spanish, but avoiding coercing a Spanish form to adopt new usage patterns. In (2), the influence of Guarani is not seen at the conceptualization stage, since both languages conceptualize the speaker's possession of the clothes as PROSPECTIVE (after purchase), but rather at the formulator level, because overtly marking this type of effected object as prospective is obligatory in Guarani. Since *para* has prospective uses in Spanish, it can be coerced to serve this function, without switching away from the target language. Finally, in (4) the effect is again at the formulation stage: both languages conceptualize the speech act as a question, but Guarani uses the second-position clitic =*pa*, while Spanish uses intonation. These are both encoded by the formulator at grammatical and phonological selection, and since they are compatible they are both used together. We hypothesize that this is a modern conventionalized pattern, and that, at the initial stages of contact, heavily Guarani-dominant speakers would only have used the clitic =*pa* and no special intonation, but once this use spread in the community, more balanced or even Spanish-dominant speakers would have kept Spanish intonation as well, giving rise to a kind of "doubling" pattern.

The finer granularity of our approach, therefore, complements existing approaches that model contact phenomena at the language system level. Extending our planning-oriented model promises therefore to successfully integrate psycholinguistic concepts like *competition*, *coercion*, *entrenchment*, *suppression/activation*, with systemic concepts like *equivalence*, *grammaticalization*, *replication*, *interlingual identification*, into a coherent, single framework.

## References

- Ayala de Michelagnoli, M. 1989. *Ramona Quebranto*. Asunción, Paraguay: Editorial Arandurã.
- Bock, K., & Levelt, W. 2002. Language production: Grammatical encoding. In G. Altmann (Ed.), *Psycholinguistics: Critical Concepts in Psychology*, 405–452. London: Routledge.
- Gast, V. & J. van der Auwera. 2012. What is "contact-induced grammaticalization"? Examples from Mesoamerican languages. In B. Wiemer, B. Wälchli, & B. Hansen (eds.): *Grammatical replication and borrowability in language contact*, 381–426. Berlin/Boston: De Gruyter.
- Jarvis, S. 2011. Conceptual transfer: Crosslinguistic effects in categorization and construal. *Bilingualism: Language and Cognition* 14(1). 1–8.
- Maneglia, J. C. & T. Schembri. 2014. *7 Boxes [7 Cajas]*. Film: Action, Thriller.
- Matras, Y. 1998. Utterance modifiers and universals of grammatical borrowing. *Linguistics* 36 (2): 281–331.
- Matras, Y. & J. Sakel. 2007. Investigating the mechanisms of pattern replication in language convergence. *Studies in Language* 31:4. 829–865.

