

Transmission bias, language contact and sound change
Ng E-Ching, Poster presentation at the LSA 2016, 7–11 January.

Using a database of 77 language contact situations and a literature survey, I identify three typological differences between creoles, other language contact (e.g. loanword adaptation, L2 acquisition), and ‘normal’ sound change.

(1) The merger bias: creoles vs. other language contact

As a rule, French /y/ merges with /i/ in all creoles worldwide, e.g. *plume* > /plim/. However, merger with /u/ is also well-attested in other forms of language contact, including francophone West Africa.

(2) The assimilation bias: creoles vs. non-creoles

In creoles the quality of the stressed vowel often spreads to unstressed vowels, e.g. Spanish *dedo* > Papiamentu /dede/ ‘finger’. The opposite sound change is not found in creoles, but is well attested among non-creoles, e.g. German umlaut and Romance metaphony.

(3) The epenthesis bias: contact vs. ‘normal’ change

Word-final consonants are often preserved in language contact by means of vowel insertion (epenthesis), e.g. English *big* > Sranan *bigi*, but in normal language transmission this sound change is said not to occur word-finally.

In principle, there are two possible explanations for these typological asymmetries. One is sample bias: certain sound changes may be rare in certain types of language transmission because the relevant phonetic precursors happen to be lacking in the languages involved. This appears to be responsible for the assimilation bias (2): due to historical accident, the substrate languages involved in creolisation generally had less strongly marked phonetic stress than the lexifiers, encouraging reanalysis of reduced unstressed vowels.

A second possibility is that certain sound changes may be obstructed not by accidental selection, but by the mode of language transmission itself, as stated in (4) below.

(4) The transmission bias hypothesis

The sociohistorical circumstances defining each type of language transmission, e.g. age of learner or nature of input, can produce strong biases which block or disfavour certain linguistic changes.

Transmission bias is indeed the best explanation in two case studies. The merger bias (1): I suggest that when language transmission is more complete, as in child acquisition and creolisation, loss of lip rounding ($y > i$) will be dramatically more frequent than changes in tongue position ($y > u$). The epenthesis bias (3): word-final consonant release is a common phonetic precursor of word-final vowel epenthesis (e.g. Blevins 2004). I propose that such effortful speech arises from hypercorrection in L2 acquisition, hence the resulting epenthesis is characteristic of certain language contact situations.

The transmission bias hypothesis departs from the current literature on language contact by focusing on diachronic differences rather than synchronic simplicity, markedness or perceptual similarity (e.g. McWhorter 2011). By contrasting data from multiple types of transmission that are not usually considered together, these case studies deepen our understanding of language contact and sound changes. It is also possible that this approach may uncover other micro-typologies in future.

Blevins, Juliette (2004). *Evolutionary phonology: The emergence of sound patterns*. Cambridge, UK: Cambridge University Press.

McWhorter, John H. (2011). *Linguistic simplicity and complexity: Why do languages undress?* Boston, MA; Berlin: Mouton de Gruyter.