

Creole Sound Change as Loanword Adaptation: Making the Perceptual Connection

Loanword adaptation (LA) is the process whereby a phonological string from a source language (LS) comes to conform to the patterns of a borrowing language (LB), and is traditionally attributed to either knowledge of LS phonological structure or LB perceptual biases. This work investigates creole formation as an LA-type process, supporting a perceptual account and arguing that knowledge of lexifier/LS phonology does not play a significant role. In a first section, similarities between LA and creole formation are discussed and exemplified with data concerning rhotic labialization and erasure in Haitian, as in (1), and schwa epenthesis in Negerhollands, as in (2). The parallels between creole formation and LA, as well as their effects on surface structure are also illustrated.

- (1) *wout* [wut] < (Fr.) *route* [ʁut] ‘route, road’
twò [twɔ] < (Fr.) *trop* [tʁɔ] ‘too much’
gade [gade] < (Fr.) *regarder* [ʁæɡaʁde] ‘look at’
pôt [pɔt] < (Fr.) *porte* [pɔʁt] ‘door’
- (2) *fegete* [fɛgətə] or *vekkete* [vɛkətə] < (Du.) *vechten* [vɛxtən] ‘fight’
bederreg [bədərɛk] < (Du.) *bedriegen* [bədriɛŋ] ‘deceive’
hellep [hɛləp] < (Du.) *help* [hɛlp], (ZDu.) [hɛləp] or [ɛləpə] ‘help’

The effect of perception on creole formation, distinguishing granular auditory signals (i.e. LS/lexifier output) from discrete perceptual units (i.e. LB/creole input), is formalized in an Optimality Theoretic (Prince & Smolensky 1993) model in a second section. Constraints active in the perception grammar refer to the parsing of input auditory information and the categorization of acoustic features as underlying structure, as in (3).

- (3) PARSE(LAB): acoustic features of labial articulations appear in the output
 PARSE(DOR): acoustic features of dorsal articulations appear in the output
 *CATEG(\mathfrak{B}^w , \mathfrak{B}): the acoustic features corresponding to [+lab, DOR] should not be categorized as corresponding to an output specified [DOR]
 *CATEG(\mathfrak{B}^w , w): the acoustic features corresponding to [+lab, DOR] should not be categorized as corresponding to an output specified [+lab]

Perceptual evaluation leads to the selection of filtered phonological representations, as exemplified in (4), mirroring the Phonetic Decoding Module of Best (1995 et seq.).

(4)

[\mathfrak{B}^w ut]	PARSE(LAB)	*CATEG(\mathfrak{B}^w , \mathfrak{B})	PARSE(DOR)	*CATEG(\mathfrak{B}^w , w)
\mathfrak{B}^w ut		*!		*
\mathfrak{B} ut	*!	*		
\mathfrak{B}^w ut			*	*
ut	*!		*	

The output of perceptual constraint interaction successfully predicts attested creole outcomes. According to this analysis, the initial constraint ranking reflects that of the LB/substrate, formalizing perceptual bias in the environment of an emerging creole. It is further noted that the perception grammar may change due to increased exposure to the LS/lexifier, leading to distinct output forms. Such outcomes are predicted only in contexts of increased LS/lexifier interaction, such as decreolization, in which constraint reranking can be motivated. A final section highlights the advantages of the proposed analysis, focusing on the treatment of nonnative token perception, as well as the parallels between these and other instances of language contact.