Effects of language contact in the Michif vowel system

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Michif is a French-Plains Cree contact language spoken today by a few hundred Métis people, living primarily in western Canada. In Michif, the majority of the verbal elements are derived from Plains Cree (a Central Algonquian language), while nominal elements appear to be primarily of French origin. Michif has been described as having a split grammatical system, where historically Cree items pattern along Plains Cree rules and French items pattern along French rules (Bakker, 1997; Bakker & Papen, 1997; Papen, 2003; Rhodes, 1986). Rosen (2006, 2007), and Prichard & Shwayder (2014) however, argue that a synchronic description of the Michif phonological system does not require reference to source languages to accurately describe the underlying phonology.

Michif is an interesting test case for language contact, where two typologically different systems have melded. The synchronic study of the results of this diachronic language contact can yield important insights into the nature of contact-induced language change. Plains Cree is described as a seven-vowel system which makes a length, or quantity distinction between pairs of vowels of similar heights, such as /i: i/ (Wolfart, 1973, 1996; though see Muehlbauer, 2012). Canadian French on the other hand is described as a twelve-vowel system which makes a quality distinction, for example as between the mid vowels /o ɔ/ and /ø œ/ (Santerre, 1974).

This talk focuses on intra-language variation in the vowel system, based on language of origin. Our data comes from ten Michif speakers from Manitoba, Canada, retelling standardized Pear Film stories (Chafe, 1980). The speakers include five women and five men, all from southwestern Manitoba, and born in the 1930s and 1940s. Their speech is transcribed and the F1, F2, F3 and duration for each stressed vowel is measured in Praat using semi-automated scripts. The vowels are then analyzed using a mixed effects model in R. In each case, vowels will be organized based on their original source-language pronunciation, i.e., the 'o' in *lom* 'man', would be considered /ɔ/ and not any variation of /o/, /o:/ or /u/, since its pre-lexified production was that of /ɔ/ in French *homme* /ɔm/ 'eat'.

Results from the statistical models suggest that the Michif vowel system makes use of both Cree and French systems, as indicated by significant differences based on the language of origin and highly overlapping vowel spaces. Michif merges the majority of vowels into the Cree phonological system, while maintaining four distinct French-source vowels, using both quality and quantity distinctions to distinguish vowel pairs from each other. Our results support acoustic analyses of other mixed languages (Jones & Meakins, 2013; Jones, Meakins, & Buchan, 2011; Jones, Meakins, & Mauwiyath, 2012 for Gurindji Kriol; Stewart, 2011; 2012 for Media Lengua), which also suggest that stratification at the segmental level is more complicated than a simple clear-cut division between source languages.

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