The individual vs. the community: Phonetic integration as a metric for classifying other-language material in bilingual discourse

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Recent research has shown that as bilinguals borrow words from a donor language (L_D) they almost always integrate them into the morphology and syntax of the recipient language (L_R), while retaining L_D grammar when code-switching. But the *phonetic* treatment of such material is often variable, raising the question of whether speakers marshal phonetic integration as a strategy to *distinguish* language contact phenomena in the same way as morphosyntactic integration. The general (if unproven) expectation is that code-switches (CS) will retain their original (L_D) form, and attested loanwords (ATT LWD) will be integrated into L_R. The fate of nonce borrowings (NB) is controversial and theory-dependent.

In this study we systematically investigate the use of phonetic integration as a metric for identifying bilingual behaviours, incorporating several methodological innovations. First, to tap into the *on-line* process of language mixing, speakers are limited to the 25 French-English bilinguals from a larger sample who spontaneously engaged in the most NB *and* CS. To ensure that phonetic integration was a choice rather than a necessity, we further privileged those with demonstrated ability to produce both L_D (English) *and* L_R (French) phonetic forms. Four diagnostics capturing measurable (and salient) differences between L_D and L_R were identified: the acoustic realizations of the segments represented orthographically as TH, H, and R, and VOT in the voiceless plosives PTK, illustrated in (1). In each case, the L_D realization is illicit in L_R, and should therefore, according to received wisdom, be "repaired" (integrated). Realizations of these segments were extracted from each speaker's CSs, NBs, and ATT LWDs (N=1359), coded as L_D or L_R, and compared.

(1) a. J'aime pas des ***TH****ieves*. J'ai jamais été voleuse. (041.807)
b. Puis [city name] commence à être bien ***P****olluted*. (041.833)
c. Non, mais ils te gardent sur ***H****old* pas mal longtemps. (037.1152)
d. C'est assez *dep****R****essing*. (037.1910)

Results show that none of the manifestations of language contact behave according to expectation. Although participants are capable of producing the target segments, in the aggregate, they are about as likely to integrate ATT LWDs as not (57%), contra the longstanding belief that loanwords adopt all L_R characteristics. NBs tend *not* to be integrated (29%). Even CSs, unambiguously L_D material predicted to retain L_D characteristics, are not only occasionally "integrated" into L_R, but do so at a rate which exceeds that of NBs (39%), again contra received wisdom. Moreover, breakdowns by individual reveal vastly disparate integration profiles. This cannot be explained by recourse to standard extra-linguistic predictors. Further analyses also reveal *intra*-speaker inconsistency: a single high integrator of NBs may be a low integrator of ATT LWDs, and may even "integrate" her English! Multiple analyses fail to turn up any common phonetic strategy, in striking contrast to the community-wide strategy that applies to borrowed words – NBs *and* ATT LWDs – at the morphosyntactic level. These findings point to the highly individual – and variable! – nature of phonetic integration, confirm that bilinguals do not resort to it to distinguish language contact manifestations, and suggest that analysts who do so risk misidentifying them.