Phonetic degrees of freedom: an argument for native speakers in LADO

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In recent years there has been a debate between members of the International Association for Forensic Phonetics and Acoustics (IAFPA) and some linguists concerned with Language Analysis for the Determination of Origin (LADO). Specifically, the phoneticians questioned the view expressed in clause 7 of the ‘Guidelines’ formulated by the ‘Language and National Origin Group’ published as LNOG (2004) (emphasis mine):

7 The expertise of native speakers is not the same as the expertise of linguists. There are a number of reasons why people without training and expertise in linguistic analysis should not be asked for such expertise, even if they are native speakers of the language, with expertise in translation and interpreting. Just as a person may be a highly accomplished tennis player without being able to analyze the particular muscle and joint movements involved, so too, skill in speaking a language is not the same as the ability to analyze a language and compare it to neighboring language varieties.

Although the intention was, I am assured, to exclude untrained native speakers being the primary or sole source of origin judgments, some phoneticians felt that the clause could be construed as undervaluing – even discouraging – native speaker involvement in the process. The present paper sets out a phonetic case for native speaker involvement.

The argument is based on the multiplicity of parameters controlled in the physical act of speaking, and draws on existing quantitative evidence of the distinct gradient values chosen by speakers of different languages which are traditionally regarded as exemplifying the same IPA category, such as ‘retroflex stop’ or ‘implosive’. Linguists’ descriptions are not, therefore, equivalent to an analysis of the tennis player’s muscle and joint movements, but to a commentator’s description in terms of categories such as ‘serve’ and ‘backhand’; yet a significant element of what a speaker has acquired from his or her ambient speech community will consist in the subcategorical dynamics of articulation. Throughout human history, making the judgment ‘(not) one of us’ from speech has been a central skill – and indeed has been argued to underlie the rapid diversification of languages (Nettle 1999). Whilst it has not been demonstrated yet how far the ‘one of us’ judgment relies on gradient dynamics, the default assumption (until disproven) must be, it is argued, that appropriate native speakers can add delicacy of discrimination beyond that achieved in existing grammars and other linguistic descriptions.
