

ON PHONOLOGICAL ADAPTATION

JOHN C. WELLS

The pronunciation a person uses tends to reflect, among other things, his regional and social origins. As is well known, such indicators frequently persist in adults who have altered their geographical or social position in life. Yet those who move from their home area to another area where their mother tongue is spoken do nevertheless tend, consciously or otherwise, to adapt their pronunciation under the influence of their new environment, thereby reducing the extent to which their speech marks them as outsiders. This paper considers the nature of such adaptation, based on data collected from my recent survey of the pronunciation used by Jamaicans who had migrated as adolescents or adults to the London area in England.

A 200-item questionnaire was administered orally to 36 respondents and the resulting interviews tape-recorded. Of these 36, there were:

- 10 women as against 26 men;
- 12 in non-manual vs. 24 in manual occupations;
- 16 aged 19 years or under on arrival in the UK vs. 20 aged 20 or over;
- 11 who had been in the UK 10 years or more vs. 25 there 9 years or less;
- 8 from the Western part of Jamaica vs. 28 from the Eastern part.

In Jamaica, the language spoken is English—more precisely, a spectrum ranging from Jamaican Creole at the lower end of the social scale to a form of Standard English at the upper end. Education and occupation are closely linked to proficiency in Standard English, so that—in crude outline—we may assume a JC phonological/phonetic background for the 24 respondents in manual occupations and a JE (Jamaican Educated) background for the 12 in non-manual occupations.

Over forty phonological and phonetic variables were considered in the survey. Here there is time to look at only one or two. First let us consider the /t-θ/ opposition. This opposition is found in British speech and also in JE, where it serves to distinguish pairs such as *tick* vs. *thick*; but it is absent in JC, where *tick* and *thick* are homophones. The questionnaire called for some 20 ‘/θ/ items’ which, like *thick*, contain /θ/ in standard accents; it also called for 50 ‘/t/ items’, like *tick*, containing /t/ in all accents. A phonological score for the /t-θ/ opposition was calculated for each respondent by

expressing as a percentage the proportion of /θ/ items spoken with [θ] minus the proportion of /t/ items spoken with [θ]. Assuming a JC startingpoint and the lack of an original /t-θ/ opposition, this represents the percentage of successful adaptations (corrections) less the percentage of hyperadaptations (hypercorrections). For this variable, the mean score for all respondents was 77%. No significant differences were found when respondents were classified by sex, by age on arrival, by year of arrival, or by regionality; but there was a highly significant difference (p below .001) between the mean score for nonmanual workers (99%) and that for manual workers (67%). Now the scoring system is such that a consistent opposition yields a score of 100%, while a consistent absence of opposition yields a score of zero or approaching zero. Hence we see that the nonmanual respondents had a reliable and firmly-based /t-θ/ opposition, while the manual respondents had an unreliable and incompletely learned one.

One of the characteristics of the manual respondents' pronunciation was the rather high frequency of hyperadaptations such as [θʌŋ] for *tongue*. It is clear how such forms arise: the speaker attempts to adapt his pronunciation by adding a rule:

t → θ / in certain words only

but has to learn for each individual word whether or not the rule is applicable. Although the rule is successful in converting [tɪŋ] to [θɪŋ], it is also likely to change [tʌŋ] to [θʌŋ]. In other words, hyperadaptation results when the environment in which a rule is to operate has been inadequately specified.

Non-manual respondents may be assumed to have had the /t-θ/ opposition in their speech before coming to England; hence their score of virtually the maximum. But the manual respondents, with their JC background, did not have the opposition in Jamaica, and their mean score of 67 shows that they had not succeeded in acquiring it consistently through living in England.

Similar results were found for the opposition /h/ vs. zero: mean scores of 100% were recorded both for non-manual respondents and also for those manual workers who came from the West of Jamaica, scores which differed significantly (p below .01) from the mean scores of 75 for all manual workers and 67 for manual workers from the East. Thus only those who grew up with the opposition, by virtue either of being middle-class or of coming from the West, where the /h-θ/ opposition is preserved, were found to make a consistent opposition.

However, when we turn to a kind of adaptation involving not the acquisition of a new opposition but a modification in the realization of a pre-existing phoneme, the results obtained were quite different. The /e:/ vowel of words such as *place*, *bay* is realized in JC as an opening (downgliding) diphthong [ie], in JE as a long monophthong [e:], but in London speech as a closing (upgliding) diphthong [eɪ, æɪ]. Scoring zero for the first, 1/2 for the second, and 1 for the last, the respondents' overall mean on 16 /e:/ items was 83%. A breakdown into the various classes of respondent shows

that on this variable scores are in no sense linked to social class: non-manual mean 83%, manual mean 82%, difference not significant.

It is clear that low-level adaptation is readily carried out. In this particular instance it involves modification of the realization of /e:/ to make it a closing diphthong; we need a rule rewriting the feature 'high' with n -ary values—

$$\begin{bmatrix} \text{V} \\ - \text{back} \\ - \text{high} \\ - \text{low} \\ + \text{long} \end{bmatrix} \rightarrow [0 \text{ high}] [2 \text{ high}].$$

Phonologically, this is seen as an example of the addition of new low-level realization rules to a speaker's grammar of his language. The successful acquisition of a new opposition, which would involve a revision of lexical representations and/or of higher-level rules, is something relatively few adults achieve.

*Department of Phonetics
University College London*

DISCUSSION

FROMKIN (Los Angeles)

Is there a final cluster reduction in Jamaican Creole? The importance of this phenomenon relates to the differences in such adaptation on phonological rules depending on whether the particular sound segment occurs within a lexical morpheme or whether it is the realization of a grammatical morpheme.

WELLS

The past tense is formed in Jamaican Creole not by a t/d ending but by a particle. But that is an interesting point. Compared with standard dialects, Jamaican Creole exhibits reduction of final consonant clusters similar to that found in Black English in the U.S.A., or for that matter in Newfoundland dialects. For the /t-θ/ opposition, I considered only those words where all relevant dialects agree in having /t/.

BREND (Ann Arbor, Mich.)

With regard to the questionnaire: were the subjects given written items to pronounce?

WELLS

No. Some were illiterate.

GAGE (Washington)

You said you considered Jamaican Creole a variety of English rather than something different. Do you have any guidance for other cases where we have to decide whether

some brand of English or another language is or is not part of the same language as the standard variety?

WELLS

I consider Jamaican Creole to be a dialect of English because the speakers consider it English. They do not expect to find linguistic difficulties when they come to England — unlike, say, to Cuba or Panama — since they consider themselves speakers of English. It is a political or institutional question rather than a purely linguistic one.

KOCOUREK (Halifax, N.S.)

Did you find the false choice of [θ] instead of [t] in other positions than initially?

WELLS

Hypercorrections were found in all positions, including medially, finally, and in clusters. E.g., [θ] in *mortar*, *debt*, and *tree*.