EVALUATING THE ROLE OF SELF-DESCRIPTION IN DEMARCATING ACCENTS

Amanda Cole[1] and Patrycja Strycharczuk[2]

[1]University of Essex, [2]University of Manchester
amanda.cole@essex.ac.uk, patrycja.strycharczuk@manchester.ac.uk

ABSTRACT

This study tests if speakers' self-description of accent, using both pre-selected labels and free-classification, is predictive of their linguistic productions. Based on the production of diphthongs in a sample of 186 speakers from Southeast England, we identify three clusters of speakers, representing Standard Southern British English, Estuary English and Multicultural London English. We explore participants' self-description of accent guided by pre-selected accent labels, such as 'London' or 'Queen's English', and their unguided, self-description of accent in their own terms. The former corresponded to the clusters of vowel features in 62% of cases. Unguided descriptions revealed some patterns, but typically speakers favoured geographical terms such as 'British' or 'London'. We conclude that self-description is a relatively poor predictor of accent, especially in a complex sociolinguistic context.

Keywords: accent variation; Southern British English; self-description; linguistic identity; vowels

1. INTRODUCTION

A central tenet of sociophonetics is that the rates of production of phonetic features vary systematically by social factors (e.g., class, age, gender) and/or regional factors (where a person is from) for many speech communities. However, sociophonetics is not only interested in the parameters of linguistic variation in speech production, but also how this variation is perceived, categorised and evaluated by speakers.

We know that the perceptual linguistic categories held by non-linguists do not always align with objective patterns of linguistic variation, for instance, meaning that the regional dialect of some speaker groups can be identified by listeners more frequently than others [1]. This becomes all the more evident when listeners are asked to identify speakers' regional dialect in a free classification task rather than choosing between fixed choice categories [2]. However, we do not currently know how reliably speakers self-define their own accent. Reliability is interpreted here as speakers of the same accent - in terms of similarities in linguistic content – demonstrating a shared understandings in how they label and describe their own accent. How reliably speakers self-define their own accent has important implications for linguistic research which uses self-description as a tool for identifying authentic speakers of a variety

This study builds on our previous work in which we delineated three accents spoken in Southeast England based on patterns of linguistic co-variation using a cluster analysis [3]. This new study investigates how speakers' definition of their own accent maps onto their linguistic productions i.e., their cluster membership. As a baseline for comparison, we also test whether a combination of the speakers' social and regional information is predictive of cluster membership. Our research questions are:

1. How reliably do speakers of the same accent - based on similarities in linguistic production - use the same labels to describe their accent?
2. Are speakers of some accents more likely to converge in how they define their accent compared to speakers of other accents?
3. To what extent are demographic factors, comprising social and regional information, predictive of cluster membership?

1.1. THE ACCENTS OF SOUTHEAST ENGLAND

Many different accents have been documented in Southeast England, most notably: Received Pronunciation (RP), Standard Southern British English (SSBE), Estuary English (EE), Cockney and Multicultural London English (MLE). RP is a standard accent spoken by the higher classes, linked to the fee-paying school system [4]. Over recent decades, RP has experienced language change towards vernacular productions, provoking debates about whether it is still spoken in Britain [5, 6]. Some linguists have instead begun to use the term "SSBE" to describe the more contemporaneous, upper-middle class accent evolved from RP [7].

Similar to SSBE, EE is an accent often described imprecisely as falling somewhere between RP and Cockney and being spoken across Southeast England [8]. Cockney is a working-class dialect of East London which includes a shifted diphthong system: /ʊ/- and /ɪ/-diphthongs are rotated clockwise and anti-clockwise respectively. Cockney is no longer prevalent among young East Londoners, particularly those from ethnic minority backgrounds, who instead speak MLE. This new variety includes innovative features, particularly in the diphthong system, influenced by other dialects of English and other languages [9].

In sum, there are not clear, widely shared or empirically determined boundaries between the accents spoken in Southeast England in terms of linguistic content or group membership, and there is little consensus on whether these accents are contemporaneous. Our previous research has addressed this issue by analysing the production of diphthong vowels in a sample of 193 speakers from Southeast England, using a bottom-up exploratory analysis, a combination of functional Principal Component Analysis and Gaussian Mixture Modelling. This unsupervised approach identified three clusters of speakers. Diphthongs were chosen as they are the most notable locus of variation in the Southeast. Mean formant values for diphthong vowels in each cluster are illustrated in Figure 1. These vowel sub-systems align closely with previous descriptions of variants attested in the southeast of England, specifically Multicultural London English (MLE, cluster 1), Standard Southern British English (SSBE, cluster 2) and Estuary English (EE, cluster 3).
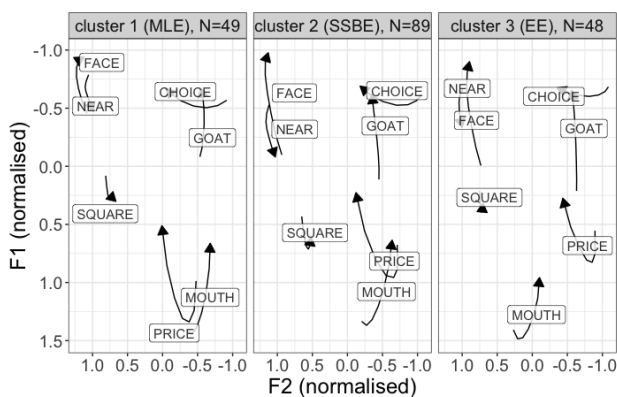

Figure 1: The three clusters based on diphthong productions for 193 speakers from Southeast England from [3].

The clusters emerged from the data through a bottom-up analysis, corresponding to previous descriptions of accent features in the Southeast. This confirms that there is structured phonetic variation on the data. The current study investigates whether this structured variation corresponds to how speakers describe their own accent.

2. METHOD

We analysed responses from 186 speakers. Seven speakers were excluded from the original sample of 193 because they did not answer all the questions. The speakers were all aged 18-33 years and they had lived in Southeast England for at least half of the years between the ages of three and 18. Out of the 186, based on the previous cluster analysis, 49 were classed as speakers of MLE, 89 were classed as speakers of SSBE, and 48 were speakers of EE.

We tested to what extent speakers' demographic information and self-description of accent predicted cluster membership (MLE, SSBE or EE) in a series of random forest models, fitted as described below.

In order to obtain a baseline level of accuracy, we built a model predicting cluster membership using only phonetic predictors, which were principal component scores capturing the main aspects of dynamic variation in the F1 and F2 of the following vowels: FACE, PRICE, CHOICE, MOUTH, GOAT, NEAR and SQUARE. This was done in order to quantify the separability of the three clusters from the phonetic point of view, given that some aspects of vowel variation were continuous. The model was trained on 75% of the data and tested on the remaining 25%. We repeated this procedure on 1000 bootstrapped samples with a 75% training set – 25% test set split. At each iteration, we extracted the overall accuracy, defined as the percentage of correct classification relative to the size of the test set. We also extracted the two most important predictor variables in each model.

We applied the same procedure to explore the role of demographic predictors (regional and social ones) in predicting cluster membership. Understanding the structure of social and regional variation within and between our clusters broadens our understanding of why speakers within each cluster may use certain terms to define their accent. The demographic predictors that we included were ethnicity, gender, age, social class, whether or not the participant attended a boarding school, and the participant's geographic county. A choice of response categories was not given, and participants provided the demographic information in their own terms. We collapsed the responses to the following response categories: ethnicity: Asian British, Black British or White British; gender: female or male; social class: middle-class or working class; whether or not the participant attended a boarding school: yes or no; speaker's county: London vs. other locations.

Further, we tested how well speakers' self-description of accent predicted cluster membership. Speakers indicated on numerical, sliding scales (from 0-100) whether they felt their accent could be described as 'typical of where they live', 'Southeast', 'Queen's English', 'Estuary', 'Cockney' or 'London'. These labels were judged to be potentially familiar to lay participants, as opposed to terms such as SSBE, or MLE, which are linguistic terms, but which do not often feature in public discourse. We used the speakers' responses to the pre-selected accent labels to predict cluster membership (MLE, SSBE or EE) in a series of random forest models, following the same approach as previously used with phonetic and demographic predictors. In addition, speakers described their accent in their own words in a free-classification task in response to the question "How would you define your accent?". We extracted the most frequent words from the speaker's free-classification, which we then analysed in relation to cluster membership to explore which labels were used most for each cluster.

3. RESULTS

3.1. Phonetic predictors

The mean accuracy of models predicting cluster membership using only phonetic predictors was 86%. Our interpretation is that the phonetically informed models performed well, but not perfectly because there is some overlap between different accents. In essence, we find a continuum of variation between MLE and SSBE on the one hand, and between SSBE and EE on the other hand. The prototypical pronunciations in each cluster, as illustrated in Figure 1, are indisputably different, but the more peripheral productions may span a boundary with a neighbouring cluster. The two features consistently ranked as highest ranking were the principal components relating to the MOUTH and PRICE vowels. This finding is consistent with varying degrees of PRICE-MOUTH cross-over we find when comparing the three clusters. MOUTH is fronted and lowered in EE, retracted in MLE, and somewhat raised in SSBE. PRICE is retracted and raised in MLE, fronted and lowered in MLE, while the SBE realisation is intermediate between the two.

3.2. Demographic predictors

The models informed by only demographic predictors performed considerably worse, with a mean success rate of 54%. Given three possible response categories, this is better than random, however, the error rate is considerable. In terms of variable importance, ethnicity and gender were consistently selected as the

most important. Broadly, Asian British and Black British speakers were more likely to be classed as MLE. White British males were more likely to have EE features, whereas the prototypical SSBE speakers were White British females. However, these were only tendencies, and we found representatives of each gender and ethnicity in each cluster.

3.3. Guided accent ratings for pre-selected labels

The models based on guided accent ratings had a mean accuracy of 64%. This is more accurate compared to the models based on demographic predictors, however, the overall accuracy is still relatively low. The two most highly ranked variables in terms of importance were "London" and "Queen's English". MLE speakers had a higher mean rating for their own accent as London: 72 as opposed to 38.7 in SSBE speakers, and 48.9 in EE speakers. SSBE speakers had a higher mean rating in the Queen's English category, compared to the two other groups (45.7 for SSBE, 30 for MLE, 39 for EE). However, given the 100-point scale, speakers typically did not see their own accent as 'Queen's English', regardless of their cluster membership.

3.4. Unguided, free classification of own accent

Table 1 lists the words that appeared most frequently in the descriptions produced by the participants, depending on accent cluster.

Cluster	Term	Frequency
MLE	*London*	17
	British	10
	Nigerian	3
	English	3
SSBE	*London*	17
	posh	13
	Essex	13
	South	11
	British	11
EE	*London*	13
	Essex	8
	Southern	5
	common	5
	British	5

Table 1: The terms used most frequently in the descriptions of own accent by members of each cluster

As we can see from the table, most participants across all three clusters, used the term 'London'. The participants also tended to use geographical terms such as 'British' or 'Essex'. The only terms that

suggest an attitudinal distinction were 'posh', used frequently by SSBE speakers, and 'common', which appears in the descriptions of EE speakers. These terms are evocative of social class stereotypes associated with SSBE (middle-class) and EE (working class). Note, however, that while these terms signal a difference between the aggregated responses, most individuals did not use them.

4. DISCUSSION

This study tested if speakers' self-description of accent, using both pre-selected labels and unguided, free classification, is predictive of their accent. The relationship between demographic predictors and cluster membership is broadly as expected. The MLE cluster is most common in Asian British and Black British speakers, the SSBE cluster is most common in White British females, and most White British males are in the EE cluster. However, the mean accuracy of the demographic predictors was relatively low at 54%, and the predictors do not fully separate the data. This result is perhaps to be expected as the relationship between rates of linguistic features and demographic factors in any speech community is only ever a trend and not categorical.

What is interesting, speakers' ratings of their own accent according to pre-selected labels, predict cluster membership better than demographic factors (64 % vs. 54%). The two accent labels consistently ranked as most important were "London" and "Queen's English". Though speakers in all clusters identified with the "London" label to some extent, MLE speakers had the highest mean rating for this label, followed by EE speakers and then SSBE speakers. Further, as expected, SSBE speakers were those who most identified with the "Queen's English" label. However, even the SSBE speakers did not identify strongly with the "Queen's English" label, suggesting that this term does not capture the accent identity for most south-eastern speakers.

In general, most labels received relatively low mean ratings. It may be that some other labels would have been a better expression of how speakers perceive their own accent. However, it is not clear what those labels might be when we consider the outcome of the unguided self-descriptions. Two possibilities are the terms "posh", which SSBE speakers used in the free-classification task, and "common" which was used by some EE speakers. However, these are morally-loaded labels which may reinforce stereotypes about the value of different speech patterns. In addition, these terms occurred alongside many other responses which overlapped between groups or were not helpful delimiters of the

accents. For instance, speakers in both the SSBE and EE clusters, but not the MLE cluster, define their accent as "southern", and speakers from all clusters use the term "British". The level of precision is also an important consideration in how reliably speakers' label accents – whether categorising their own accent or that of others. "British" is too broad to meaningfully delineate any of our clusters.

Results of the unguided, free-classification task also indicated some expected trends between groups, but again these did not reliably separate the clusters. Much like for the guided task, "London" was the most prolific term used by speakers in all three clusters. This is likely because all three clusters include speakers from London. Furthermore, as a large, and culturally and linguistically heterogeneous city, "London" likely holds ambiguous designations. This result coincides with previous research which has found much variability on language attitude scales when participants are presented conceptually with a "London" accent [10, 11].

A further geographic label which SSBE and EE speakers commonly used in the free-classification task was "Essex", a county bordering East London where accents have been heavily influenced by Cockney [12]. "Essex" occurred frequently but no other county was explicitly mentioned. A person in the EE cluster might define their accent as "London" or "Essex" if they are from these places, but if they are not, they are more likely use more generic terms like "Southern" or "common". "Essex", like "London", has become a salient and socially-meaningful label in how linguistic variation is categorised in the Southeast. Our findings highlight that the importance of place in defining accent varies considerably depending on the sociolinguistic salience of particular varieties and the cultural prominence [13] of the location.

5. CONCLUSIONS

Though much research has looked at how speakers categorise and label the speech of others, this paper tested how reliably speakers self-define their own accent. In both the guided task in response to pre-selected labels and the unguided, free-classification task, patterns have emerged which broadly align with expectations for the SSBE, EE and MLE speakers. However, self-description is a relatively poor predictor of actual linguistic production in the sense that it does not entirely separate the speakers with different patterns of vowel production. These results have important implications for linguistic research that uses self-description as a tool for identifying authentic speakers of a variety.

6. REFERENCES

[1] Leach, H., Watson, K., Gnevsheva, K. 2016. Perceptual dialectology in northern England: Accent recognition, geographical proximity and cultural prominence. *Journal of Sociolinguistics* 20(2), 192-211.

[2] McKenzie, R. M. 2015. The sociolinguistics of variety identification and categorisation: Free classification of varieties of spoken English amongst non-linguist listeners. *Language Awareness* 24(2), 150-168.

[3] Cole, A., Strycharczuk, P. Accepted. The search for linguistically coherent accents: Unsupervised clustering of diphthong variation in Southeast England. *English World-Wide*

[4] Agha, A. 2003. The social life of cultural value. *Language & Communication* 23(3-4), 231-273.

[5] Milroy, J. 2001. Received pronunciation: Who "receives" it and how long will it be "received"? *Studia Anglica Posnaniensia* 36, 15–33.

[6] Fabricius, A. 2002. Ongoing change in modern RP: Evidence for the disappearing stigma of t-glottalling. *English World-Wide* 23(1), 115-136.

[7] Lindsey, G. 2019. *English after RP: Standard British pronunciation today.* Palgrave Macmillan.

[8] Altendorf, U. 2003. Estuary English: levelling at the interface of RP and South-Eastern British English. Gunter Narr Verlag Tübingen

[9] Cheshire, J., Kerswill, P., Fox, S., Torgersen, E. 2011. Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguistics* 15(2), 151-196.

[10] Bishop, H., Coupland, N., Garrett, P. 2005. Conceptual accent evaluation: Thirty years of accent prejudice in the UK. *Acta Linguistica Hafniensia: International Journal of Linguistics* 37(1), 131–54.

[11] Cole, A. 2021. Disambiguating language attitudes held towards sociodemographic groups and geographic areas in South East England. *Journal of Linguistic Geography* 9(1), 13–27.

[12] Cole, A. 2022. Cockney moved East: the dialect of the first generation of East Londoners raised in Essex. *Dialectologia et Geolinguistica* 30(1), 91-114.

[13] Montgomery, C. 2012. The effect of proximity in perceptual dialectology. *Journal of Sociolinguistics* 16(5), 638-668.