



**Manchester
Metropolitan
University**

Carrie, Erin and McKenzie, RM (2017) *American or British? L2 speakers' recognition and evaluations of accent features in English*. *Journal of Multilingual and Multicultural Development*, 39 (4). pp. 313-328. ISSN 0143-4632

Downloaded from: <http://e-space.mmu.ac.uk/619406/>

Version: Accepted Version

Publisher: Taylor & Francis (Routledge)

DOI: <https://doi.org/10.1080/01434632.2017.1389946>

Please cite the published version

<https://e-space.mmu.ac.uk>

American or British? L2 speakers' recognition and evaluations of accent features in English

To cite this article:

Erin Carrie^a & Robert M. McKenzie^b (early view 2017): American or British? L2 speakers' recognition and evaluations of accent features in English, *Journal of Multilingual and Multicultural Development*

DOI: 10.1080/01434632.2017.1389946

^aDepartment of Languages, Information and Communications, Manchester Metropolitan University, Manchester, UK; e.carrie@mmu.ac.uk

^bEnglish Language and Linguistics, School of Arts and Social Sciences, Northumbria University, Newcastle Upon Tyne, UK; robert.mckenzie@northumbria.ac.uk

ORCID

Erin Carrie <http://orcid.org/0000-0002-7721-9030>

Robert M. McKenzie <http://orcid.org/0000-0002-7212-6724>

To link to this article: <http://dx.doi.org/10.1080/01434632.2017.1389946>

Recent language attitude research has attended to the processes involved in identifying and evaluating spoken language varieties. This article investigates the ability of second-language learners of English in Spain ($N=71$) to identify Received Pronunciation (RP) and General American (GenAm) and their perceptions of linguistic variation between these speech varieties. Data were gathered using a verbal-guise experiment in which respondents identified speakers' places of origin and stated the reasons for their categorisations. Quantitative data analysis demonstrated high recognition rates for RP speakers, more often correctly identified than GenAm speakers. Qualitative data analysis showed that respondents' knowledge of phonological variation informed the identification process and they often stated which linguistic features formed part of their mental representations of RP and GenAm. Additional resources informed accent recognition, including perceived linguistic quality, intelligibility, familiarity, and cultural associations. Patterns of misidentification revealed that, when GenAm was inaccurately identified as RP, it was ascribed high status. The findings provide an insight into the strategies, conceptual frameworks, and linguistic features which inform the accent identification process as performed by English-language learners in Spain. The results also highlight the usefulness of variety recognition items in interpreting attitudinal evaluations, especially with regard to patterns of misidentification.

Keywords: identification; perceptions; attitudes; verbal-guise; Received Pronunciation; General American

Introduction

Language attitude studies have sought to determine the social meanings attributed to speech varieties by listener-judges. Several studies have focused on listener-judges' ability to recognise speech varieties (Preston 1996, 1999; Williams et al. 1999; Niedzielski and Preston 2000; Ladegaard 2001), yet few have explored the link between recognition and the attitudes expressed. Garrett's (2010) 'perception question' highlights the difficulty of interpreting the attitudes expressed by respondents without knowing whether they have perceived the variation in the speech heard and have identified each voice as representing the intended speech community. This kind of variety recognition involves the cognitive mapping of linguistic features on to records of the usage norms of certain speech communities (Garrett et al. 2003). During the mapping process, listener-judges draw upon cognitive-perceptual representations of speech varieties containing social-indexical information (Bent and Holt 2017) to complete the recognition task (McKenzie 2008). Segmental accent features (e.g., rhoticity) form part of these representations and play a key role in the identification process (McKenzie 2015). Variety recognition items can be incorporated into research on speech perception, perceptual dialectology and language attitudes, and can inform our interpretations of accent evaluations.

Studies in speech perception have investigated the ways in which listeners attribute social meaning to spoken linguistic features (e.g., Campbell-Kibler 2010). They typically focus on social, rather than regional, variation and generally use experimental procedures; e.g., matched- and verbal-guise techniques, as well as priming techniques involving speakers portrayed – visually or verbally – as having certain characteristics in order to test whether associated speech styles are perceived (for example, the perception of raised diphthongs based on nationality in Niedzielski 1999). The findings of these studies can offer a greater understanding of how social meanings are constructed through language use by means of indexicality (Silverstein 2003), and enable us to identify which (clusters of) linguistic features communicate certain meanings in certain contexts.

Focusing on geographical variation and using different methods entirely (typically hand-drawn maps), studies in perceptual dialectology have elicited attitudes towards regional speech varieties and ascertained perceptions of the linguistic features employed by speakers in different regions. In terms of social meaning, perceptual dialectology research highlights the dimensions of 'correctness' and 'pleasantness' (Long and Preston 2002), broadly aligned with those termed 'status' and 'solidarity' elsewhere in language attitude research (Garrett 2010).

Most language attitude studies have elicited evaluations from listener-judges when exposed only to voice. These include investigations into L1 English speakers' and, in fewer cases, L2 English speakers' evaluations of spoken varieties of the language. The findings demonstrate that listener-judges typically ascribe higher status to 'standard' accents and express greater solidarity with 'non-standard' accents (Carrie 2017). The results also reveal a tendency to express greater solidarity with speakers of language varieties perceived to be similar to one's own (e.g., Coupland and Bishop 2007; McKenzie 2008), accounting for notions of 'accent loyalty' (Giles 1971), 'local dome of preference' (Gould and White 1986), and the 'radiation effect' (Fought 2002).

Recognition rates amongst L1 English evaluators are generally high, and tend to be above chance for L2 English evaluators (McKenzie 2015). Stephan (1997) noted that recognition rates for standard¹ varieties of British and American speech were particularly high amongst L2 evaluators in Germany, which he attributed to these varieties being used as pronunciation models in language-learning contexts. The key factors that correlate positively with recognition rates include previous exposure to a speech variety (McKenzie 2015) and geographical proximity between the places of origin of the speaker and the listener-judge (Clopper and Pisoni 2006). Of course, proximity can also be psychological, with distant places being brought 'closer' as a result of high levels of cultural prominence (Montgomery 2012). Thus, it may be easier for listener-judges to recognise speech varieties that they are exposed to via television, film, and social media, and with which they have stronger social, cultural, political or other affiliations.

The main method used to gather variety recognition data in previous studies has been the forced-choice recognition task (McKenzie 2008), in which respondents choose between predetermined options when attempting to identify speakers' places of origin. There are, however, advantages to using free-categorisation tasks (McKenzie 2015), including fewer constraints on listeners' categorisations (Clopper and Pisoni 2007) and greater access to respondents' stereotypes and ideological frameworks, regardless of their ability to correctly identify the voice (McKenzie 2010). As such, free-categorisation tasks often provide fuller and more accurate information, and limit the likelihood of guesswork.

In this paper, we investigate the extent to which L2 learners of English in Spain can correctly identify RP and GenAm voices. Beyond simply measuring recognition rates for validation purposes, we also explore *how* learners use their knowledge of linguistic variation to aid the identification process, *which* (clusters of) linguistic features they perceive and map against social-indexical information, and *why* salient features of RP and GenAm index certain social meanings within this context. The study is expected to contribute to language attitude research in two main ways. Firstly, by focusing on L2 English speakers' variety recognition and evaluations. Secondly, by providing rich, qualitative data to complement quantitative findings, resulting in less interpretive work on the part of the researcher as well as a folk linguistic perspective on the processes involved in variety recognition. We posit that the use of a mixed methods approach ensures maximum validity and reliability in studies of this type.

Methodology

Sample

The sample for this study comprised 71 students at the universities of Salamanca ($n=53$) and Valladolid ($n=18$) in north-western Spain. Monolingual speakers residing in one autonomous

¹ There is no general consensus on the definition of 'standard' language (see Bex and Watts 1999). Since it is generally considered by sociolinguists to be an ideological construct, it is more productive to discuss standard language ideologies, defined by Lippi-Green (2012) as bias towards an abstract form of speech modelled on that of the upper middle class - and the written language - and imposed and maintained by dominant institutions.

region - Castile and Leon, where Castilian is the only official language - were recruited, rather than bilingual speakers from regions of Spain with two official languages. Given the standard language ideology surrounding Castilian speech and the potential influence of negative intergroup relations in Spain (Ros et al. 1987) on attitudes towards standard varieties of English, the researchers opted to recruit monolingual speakers from Castile and Leon only.

The age of respondents ranged from 19 to 33, with a mean of 21 years, and there was a high ratio of females ($n=52$) to males ($n=19$). Respondents represented five levels of undergraduate study, and the length of time that they had spent learning English ranged from 2 to 18 years with a mean of 12 years. It was felt that wide-ranging levels of exposure to English would entail a wide range of knowledge of linguistic variation in the language. However, it was beyond the scope of this study to infer quantitative differences regarding *levels* of exposure; instead, the focus was on qualitative differences in *types* of previous exposure to English.

Students reading for degrees in English (language, literature, or translation and interpreting) were eligible to participate and, in most cases, they had previous experience with phonetics and phonology. *English Phonetics and Phonology (Fonética y Fonología Inglesas)* was a core module for first-year students in Salamanca and an optional module for third- and fourth-year students in Valladolid. In both institutions, the module covered phonological variation in English and described the sound systems of RP and GenAm. Other modules focused on – and juxtaposed – American and British literary and cultural products, arguably creating a ready-made dichotomy for English-language learners in this context.

Speech Samples

The variety recognition task was part of a verbal-guise experiment that elicited attitudes towards RP and GenAm speech (Carrie 2014). A verbal-guise design employs different speakers, albeit with similar profiles, to represent each speech variety under investigation. This was chosen over a matched-guise design - in which each speech variety is produced by the same speaker - to avoid the effects of mimicking authenticity (Garrett 2010). Finding a ‘native’ speaker of RP *and* GenAm was unlikely, given their regional and linguistic distinctness, and attempts to mimic a ‘non-native’ accent may have led to inaccuracies or been perceived as odd (Preston 1996). Since the use of four speakers inevitably resulted in some paralinguistic variation, voice quality, intonation, and speech rate were controlled for auditorily as far as possible. Each of the speakers was given the text shown in Appendix 1 and asked to rehearse it in order to be able to reproduce it as naturally as possible and to minimise the effects of style (Labov 1972; Garrett 2010).

The text was purposely designed to include tokens of four phonological features that vary between RP and GenAm: intervocalic /t/ ([ɾ] and [t]), postvocalic /r/ ([ɹ] and [Ø]), the LOT vowel (i.e., the open back vowels [ɑ] and [ɒ]), and post-consonantal /u/ (i.e., the close back vowel [u:] and its occurrence with the palatal approximant [ju:]), with the former representing the GenAm variant and the latter the RP variant in each case. The text includes seven tokens

of intervocalic /t/, eleven tokens of postvocalic /r/, seven tokens of the LOT vowel and ten tokens of post-consonantal /u/. That the content is repeated across speakers inevitably renders these segmental features more salient to listeners than they would be outside of the experimental environment (Garrett 2010). Nevertheless, this study sought to test the extent to which listeners perceived these features and used them to identify speakers' places of origin. Although the aim was to produce typical samples of RP and GenAm speech, there were some instances of within-speaker variation: the female RP speaker producing [r], the male RP speaker producing [ɹ] and creating a non-intervocalic context for /t/ by saying 'it's' rather than 'it is', and both RP speakers coalescing /j/ in words such as 'iTunes', 'YouTube' and 'Tuesdays'. Beyond the four variables of interest, the only instances of variants in complementary distribution within the text occurred in the following contexts: /ɔ:/ and /ʊ/ in 'your'; /əʊ/ and /oo/ in 'though' and 'local'; /ɪə/ and /ɪ/ in 'appeared'; and /eə/ and /e/ in 'where' and 'they're', with the former representing RP and the latter GenAm in each case.

Speaker Profiles

The speech samples were recorded in St Andrews, UK, in 2011. The authenticity of the samples was verified by four L1 speakers of English: two from Bristol, UK, one from Washington, DC, and one from Parma, OH. Although there has been a general tendency amongst researchers to record speakers of one or the other sex (McKenzie 2010), both male and female voices were employed in the present study in an attempt to account for possible differences in respondents' recognition and evaluation of stimuli based on speaker sex. Specific information on the speakers and their recordings is provided in Appendix 2. Speakers' self-reports were used to inform their selection and to aid interpretation of respondents' recognition and evaluation of the voices during the variety recognition task.

Data Collection and Analysis

Respondents listened to the recordings in a randomised order to control for the possibility of enhanced positive attitudes to the first speaker (Dalton-Puffer et al. 1997). They were asked to complete a free-categorisation variety recognition task, containing no information regarding which varieties they should expect to hear. The task comprised of the following two open-ended questions:

Where do you think Speaker [X] is from?

What are your reasons for coming to that conclusion?

Responses were gathered in written format and are reproduced faithfully in the results and discussion section below. The questionnaire was administered online, which posed a number

of potential methodological issues: respondents' anonymity, leading to greater uncertainty regarding their eligibility; the possibility of multiple submissions by the same respondent; the possibility of respondents listening to speech samples multiple times during the task; the lack of control measures preventing respondents from referring to online or class materials during the task. The first two issues were mitigated by subsequently conducting interviews with respondents, allowing for verification of their identities and submissions. The second two issues were considered to be minor when balanced against the potential benefits of an online questionnaire - greater accessibility, less respondent fatigue, and easier data management.

A mixed methods approach was employed when analysing the data. Responses to both questions were coded into 'nodes' using the qualitative data analysis software NVivo. For perceived place of origin, the primary aim was to ascertain frequencies and percentages of responses. As for the reasons respondents gave for their categorisations, these required pre-coding to identify emergent themes prior to the main stage of coding.

Responses to the first question were coded using four predetermined nodes: identification, misidentification, unknown, and additional labels. Child nodes were used to specify degree of identification: for the RP speakers, categories included city, region, England, Great Britain, and United Kingdom; for the GenAm speakers, categories included city, inner-state region, state, national region, and United States of America. In variety recognition studies, the classification of responses as correct or incorrect can be highly problematic and it is important not to impose an unrealistically narrow interpretation of responses, especially when working with L2 speakers (McKenzie 2010). Where respondents seemed unsure about a speaker's place of origin but hazarded a guess, their response was coded using the 'identification' rather than the 'unknown' node.

Responses to the second question were coded by perceived place of origin, so that qualitative comments could be interpreted accordingly. The same data were then coded using the themes that had emerged during the pre-coding process: linguistic features, linguistic quality, intelligibility, familiarity, and cultural associations. These themes were then analysed to gain greater insight into the processes driving the (mis)identification of the voices.

Results and Discussion

Patterns of Identification

Although the questions were open-ended, recognition rates were consistently high (see Table 1). This is striking, since we could reasonably assume that responses would be random if respondents had no familiarity with RP and GenAm (Williams et al. 1999). The RP speakers were most often correctly identified and the GenAm speakers least often correctly identified, with female speakers receiving the highest and lowest recognition rates, respectively. Below, we outline the findings for each speaker and examine why they occurred. Speaker sex will not be dealt with here, as no clear patterns emerged (see Bayard 1991, McKenzie 2010, and Carrie 2017 for further discussion of speaker sex as a potentially confounding variable).

Table 1. Percentages (frequencies) of correct and incorrect identifications of speaker origin ($N=71$)

Recognition	Speaker			
	Female RP	Male RP	Female GenAm	Male GenAm
Correct	76.1 (54)	69.0 (49)	64.8 (46)	66.2 (47)
Incorrect	14.1 (10)	22.5 (16)	29.6 (21)	25.4 (18)
Unknown	9.8 (7)	8.5 (6)	5.6 (4)	8.4 (6)
Total	100 (71)	100 (71)	100 (71)	100 (71)

Table 2. Percentages (and frequencies) of identified *female RP speaker* place of origin ($N=54$)

Speaker Place of Origin	Percentage (Frequency)
City	3.7 (2)
Region	3.7 (2)
England	13.0 (7)
Great Britain	61.1 (33)
United Kingdom	18.5 (10)
Total	100 (54)

Female RP speaker

Table 2 outlines the percentages and frequencies with which the female RP speaker's place of origin was correctly identified, from more specific to more general identifications. This speaker was often correctly identified to be from Great Britain or the United Kingdom, with some respondents stating that she came from England or a particular region or city; the south of the UK and London. Thus, many respondents were acutely aware of this voice representing speech from South East England and the UK's capital city. This is not surprising, since previous studies have also found high recognition rates and high degrees of specificity for RP (see, for example, Jarvella et al. 2001 and Ladegaard 1998).

Respondents who correctly identified this speaker's place of origin ($n=54$) specified several linguistic features that aided their categorisations. These included her non-rhotic accent (22.2%), use of the alveolar stop [t] (14.8%) and other 'strong' stops such as [p] and [b] (1.9%), yod preceding post-consonantal /u/ (3.7%), long vowels (3.7%), and diphthongs (e.g., [ðəʊ]; (3.7%)). It is notable that three of these linguistic features were controlled for in the design of the study.

The 'Ts' are strong, without tap, she scarcely pronounces the 'Rs' [...] and also because of the way she pronounces Youtube (tju:b instead of tu:be) (R13)

Segmental features were often contrasted between British and American speech varieties:

She pronounces certain words with different vowel sounds than an American speaker would use, like ‘knew’ [nju:] which would be something like [nu:] in American. She also emphasizes the ‘t’ sound in words such as ‘attitude’ or ‘responsibility’ and does not pronounce such a strong final ‘r’ sound as Americans do. (R18)

The comments above demonstrate that intervocalic /t/ is a salient linguistic feature for these Spanish respondents, possibly because it exhibits wide variation in English – with [t], [ɾ] and [ʔ] variants – and requires specialised teaching in the language classroom. It is also possible that Spanish-speaking respondents carefully attend to the /t/ variable so as to avoid confusing different sounds (and spellings), given that the alveolar tap is an allophone of /t/ in English and an allophone of /r/ in Spanish.

There were also specific phonetic features that seemed to aid the identification of this speaker as British. The first of these is the /s/ phoneme, commented upon by one respondent:

The pronunciation of /s/ for me is quite clear [...] they are longer and more deeply pronounce than in the other cases. I am not sure if is called sibilant /s/... (R56)

This respondent appears to have perceived the use of high frequency sibilant /s/, typical of female speech (Stuart-Smith, Timmins and Tweedie 2007; Rácz and Shepácz 2013), and associates it with ‘clear’ British English speech. The second feature was referred to as the ‘excessive aspiration’ of /h/ by one respondent (R23) who may have been aware of the regional and social variation of /h/ across the UK, with aspirated /h/ often indexing both southern English speech and higher social status (Milroy 2001).

In terms of linguistic quality, this speaker was frequently described as having a ‘close’ pronunciation when compared to speakers of American English (3.7%). This is interpreted as these respondents perceiving slight differences in vowel height; some vowels, such as LOT (as reported in Rindal 2010), typically have a lower F1 frequency in RP than in GenAm. Her speech was also described as ‘smooth’ and ‘rounded’ (1.9%) and her pronunciation as ‘clean’ (1.9%) and ‘clear’ (7.4%). Other qualitative labels included ‘standard’ and ‘neutral’, albeit each mentioned only once, with the latter term used as exclusion criteria for being American. These labels clearly go beyond mere descriptions of the linguistic qualities of the speech; rather, they constitute judgements of the social status of RP. Learners of English in this Spanish context ascribe high status to RP and, in line with previous research (Mompeán González 2004), perceive the variety to be unmarked (i.e., the default pronunciation model) when compared to GenAm.

The female RP speaker was generally perceived to have an intelligible (1.9%) and familiar (13.0%) accent, as the excerpts below illustrate:

I can understand her perfectly (R03)

[her] accent and pronunciation are familiar to me by my teachers used in class (R08)

Respondents tended to contextualise their familiarity with this accent within an educational setting (6.0%); as such, providing further evidence of previous exposure to RP within the Spanish higher education context (see, also, Mompeán-González 2004). Although, in one case, a lack of exposure to RP in educational contexts helped the listener to correctly identify the speaker's place of origin:

I think so because I was taught in American, and the speaker's voice does not sound like if she were from USA. (R67)

In other cases, respondents reported that they correctly identified the speaker's place of origin based on familiarity gained beyond an educational context. For one respondent, such familiarity was gained via cultural products (in this case, films), as exemplified below:

It's going to sound weird, but she speaks like 'Bridget Jones' (Renée Zellweger in that movie), at least to me, the way she pronounces everything. (R22)

For another, the speech resembled that spoken by L1 speakers from the UK with whom he was familiar. It is interesting to note that this respondent reported having contact exclusively with L1 speakers from the UK, most likely an outcome of the geographical proximity between the UK and Spain. Overall, it is clear that previous exposure to this speech variety was gained by respondents in the language-learning classroom, via cultural products, and through contact with L1 speakers.

Male RP Speaker

Table 3 outlines the percentages and frequencies of correct identifications of the male RP speaker's place of origin, from more specific to more general identifications. In terms of intra-speaker recognition rates, this speaker was most often correctly identified to be from Great Britain or the United Kingdom. Some respondents identified his place of origin as London or England, but there was no general agreement on which region he was from: the 'centre' of Great Britain and the 'north' and 'south' of England were mentioned. Respondents were less

precise in their identifications of this speaker compared to the female RP speaker, indicating that they found his accent more difficult to identify.

Table 3. Percentages (and frequencies) of identified *male RP speaker* place of origin ($N=49$)

Speaker Place of Origin	Percentage (Frequency)
City	2.0 (1)
Region	8.2 (4)
England	4.1 (2)
Great Britain	65.3 (32)
United Kingdom	20.4 (10)
Total	100 (49)

Respondents who correctly identified this speaker's place of origin ($n=49$) specified the following linguistic features as having aided their categorisations: a lack of rhoticity (28.6%), use of yod in post-consonantal /u/ contexts (2.0%), long vowels (2.0%), 'strong' stops like /p/ and /b/ (2.0%), and use of the alveolar stop rather than the alveolar tap (14.3%). Three of these segmental features were controlled for in the design of the study, and all five were also used as resources for identifying the female RP speaker. Together, they allow a clear picture to emerge of respondents' mental representations of RP.

Once again, there was a tendency for respondents to contrast the linguistic variants of American and British English speech, and intervocalic /t/ was often the most salient linguistic feature mentioned when doing so.

in the word attitude the 't' is pronounced, so it cannot be American English (R54)

Interestingly, the /s/ phoneme was commented upon by two respondents (4.1%). However, they perceived it to be marked in some way rather than prototypical of 'clear' British English speech, as was the case for the female RP speaker.

I think he has a British accent but there is something in the pronunciation of some letter like the 's' that lead me to think he might be from a different part of Great Britain apart from England. (R12)

Comments regarding the linguistic qualities of this speech sample provide further insight:

his accent is really strong and he pronounces some words in a very special way (R32)

[he] seems to have some kind of personal feature in his way of speaking (R56)

it is closer to British English but I find it strange (R34)

His pronunciation is strange [...]. He talks [...] with an strange English [...] it sounded to me more British than American. (R33)

He doesn't sound natural [...] much more exaggerated than American English (R53)

he makes a kind of 'effort' in pronunciation, like he wants to be understood (R16)

[he] sounds British, but also a little Irish (R04)

Perceptions of accent strength are often defined in the language attitude literature as 'the degree to which the listener believes an utterance differs phonetically from native-speaker utterances' (Munro & Derwing, 2001: 454, cited from Gluszek et al. 2011). However, in the present study, it is more likely that R32 is referring to the degree to which he perceives the speech to differ phonetically from the ideological standard of British English (i.e., RP). This, along with references to the speaker's 'special', 'personal', and 'strange' accent imply that the speech sample does not fully map on to these respondents' mental representations of RP. Perceptions of the speaker sounding unnatural and making an effort to be understood may be due to the style implications of reading aloud (Labov 1972). Given the speaker's upbringing far from the RP heartland of South East England and his overt awareness of how 'English' and 'southerly' he sounds, it is also possible that he was self-conscious when providing an RP guise and/or attempting to conceal any Scottish features in his speech. Clearly, respondent R04 perceived one or more linguistic features that indexed non-Anglo speech.

Similarly to the female RP speaker, some respondents considered this speaker to have more 'close' speech than American speakers (10.2%) and to speak 'a lot with his throat' (R19). These comments are interpreted as folk linguistic ways of describing the perception of RP vowels with relatively low F1 frequency and greater pharyngeal constriction, such as LOT. Comments were also made by one respondent regarding the perceived status of the speech:

He is speaking a kind of Standard English maybe quite pure English (R55)

Despite comments about its perceived oddness, the speech of the male RP speaker is also associated with a standard language ideology. This indicates that a sufficient number of linguistic features were produced and perceived in accordance with respondents' mental representations of RP speech. The mention of 'pure English' here is reminiscent of Mompeán González's (2004) findings regarding historical authenticity; specifically, that Spaniards

commonly believe the English pronunciation from England to be the purest, given that the language originated in England.

There was disagreement regarding the intelligibility of the male RP speaker, where 4.1% perceived the speech to be easy to understand and 2.0% perceived it to be difficult to understand. Nevertheless, respondents agreed that his accent sounded familiar (8.2%):

he reminds me a friend of mine from England (R11)

I saw some films of Great Britain and actors talks like that (R57)

Differing slightly from the findings for the female RP speaker, this familiarity appears to have been gained through previous exposure beyond educational contexts; through personal contact with L1 speakers from the UK or through British cultural products. As such, both the geographical and psychological proximity between Spain and the UK are likely to have played a role in aiding respondents' correct identifications of this speech sample.

Male GenAm Speaker

Table 4 outlines the percentages and frequencies with which the male GenAm speaker's place of origin was correctly identified. Whilst this speaker was frequently identified as coming from the United States of America, respondents were unable to specify regions or cities. This is likely to signify lower levels of familiarity with GenAm compared to RP.

Table 4. Percentages (and frequencies) of identified *male GenAm* speaker place of origin ($N=47$)

Speaker Place of Origin	Percentage (Frequency)
City	0 (0)
Region	0 (0)
United States of America	100 (47)
Total	100 (47)

Respondents who correctly identified the speaker's place of origin ($n=47$) specified a number of linguistic features that aided their classifications. These included the rhotic accent (34.0%), use of the alveolar tap (23.4%), the vowel sound in 'hand' ([ɛ], rather than [æ]; 2.1%), and yod-dropping in words like 'new' (i.e., [nu:]; 2.1%). Again, three of these linguistic features were purposely controlled for in the research design and exist in complementary distribution with RP variants. Respondents generally exhibited substantial knowledge of linguistic features and linguistic terminology, with post-vocalic /r/ and intervocalic /t/ once again the most frequently mentioned variables.

he pronounces a soft intervocalic ‘t’ [...] in words such as ‘responsibility’ (R18)

his pronunciation of some of the letters such as the ‘t’, that sounds as a /d/, something that is characteristic from American English (R43)

In terms of linguistic qualities, respondents commented that this speaker exhibited a comparatively rapid speech rate (15.0%) and that there was a nasal quality to his speech (2.1%). Nasality has long been considered to be characteristic of American English speech. As Stevens (1972: 78) explains, ‘in American pronunciation, the duration of the nasalised portion of a vowel following a nasal consonant is slightly longer than in British pronunciations’ (cited from Kövecses 2000).

This speaker was perceived, by some respondents, to have a ‘clean’ pronunciation (R03) and a ‘relaxed’ (R36) way of speaking. ‘Relaxed’ could be interpreted as a description of the linguistic quality of the speech itself, or as a trait pertaining to solidarity and social attractiveness (Levin et al. 1994, cited from Velupillai 2015). We interpret it as primarily the latter, since its use by respondents implied that they found it relaxing to listen to the speaker.

Despite perceptions of the male GenAm speaker as socially attractive to some extent, respondents did not appear to ascribe high status to his speech. This is particularly evident in one response regarding the degree of markedness of GenAm:

I do not identify this variety as neutral. This is a kind of language that sounds ‘different’ to me. (R31)

This comment suggests that the speech sample is not considered to represent an ideological standard of English pronunciation. Perhaps owing to its deviance from the perceived norm, no respondents commented upon their levels of familiarity with this speech variety through previous exposure, and two respondents disagreed on its intelligibility. Although it is likely that the geographical distance between Spain and the USA limits levels of exposure to GenAm somewhat, the fact that familiarity and intelligibility have not been gained through psychological proximity (i.e., consumption of American cultural products) is perplexing.

Female GenAm Speaker

Table 5 outlines the percentages and frequencies of correct identifications for the female GenAm speaker’s place of origin, from more specific to more general categorisations. In terms of intra-speaker recognition rates, this speaker was most often correctly identified to be from

the United States of America. Only two respondents attempted to be more specific, incorrectly identifying the speaker to be from the west coast of the USA and New York. The general lack of ability to correctly and specifically identify the speaker's place of origin suggests lower levels of familiarity with GenAm speech compared to RP speech, overall.

Respondents who correctly identified the female GenAm speaker's place of origin ($n=46$) also specified the following linguistic features as having aided their categorisations: the rhotic accent (32.6%), use of the alveolar tap (37%), the vowel sound in 'hand' ([ɛ], rather than [æ]; 2.2%), and the use of short vowels (2.2%). Respondents demonstrated particularly good awareness of variation in intervocalic /t/:

I think so because of the alveolar tap in the pronunciation of /t/ [...] I know that it may be perfectly a British feature, but if I am not wrong is more spread in the States and I think too that in British English it may be a feature of colloquial speech. (R56)

The two most frequently mentioned segmental features - intervocalic /t/ and postvocalic /r/ - were controlled for in the design of the study and three of the features were also identified by respondents as resources used for the accurate identification of the male GenAm speaker. Together, they offer a clear picture of respondents' mental representations of GenAm.

As regards linguistic quality, respondents mentioned the speaker having an 'open' pronunciation (4.3%), with one stating more specifically that the 'vowels are slightly open' (R30). This comment is interpreted as respondents perceiving higher F1 frequencies and less of a pharyngeal constriction in GenAm variants of vowels such as LOT, contrasting with perceptions of the RP variants produced in the study. Similar to the male GenAm speaker, one respondent commented on the speech having a nasal quality (R42), which is typical of speech from the American Midwest (Kövecses 2000: 240). Her accent was considered to be 'not [...] strong' (2.2%) and there was mention of her talking 'quickly' (8.7%) but in a 'relaxed' (6.5%), 'calm' (2.2%), and 'clear' (2.2%) manner. Whilst these labels may be used to describe the linguistic quality of the speech, 'relaxed' is interpreted as a solidarity trait (Levin et al. 1994, cited in Velupillai 2015) and 'calm' as a personality trait pertaining to emotional stability (Ajzen 2005: 19). The use of these two labels by respondents seems to indicate positive emotional and affiliative responses to this GenAm speaker.

Table 5 Percentages (and frequencies) of identified *female GenAm* speaker place of origin ($N=46$)

Speaker Place of Origin	Percentage (Frequency)
City	2.2 (1)
Region	2.2 (1)
United States of America	95.6 (44)
Total	100 (46)

One respondent commented on the speaker's intelligibility as a resource for categorisation and, in another case, a respondent linked intelligibility to familiarity:

I understood it absolutely fine. I tend to understand better American English than British English so that it is my reason to say that it is American English. (R33)

I have understood her but maybe is because I am used to listening this speech (R03)

Some respondents (6.5%) commented on their familiarity with American English speech, gained through previous exposure in specific contexts or through specific channels:

she sounds definitely as the GenAmerican accent we've studied at the University (R14)

She speaks as most of the TV series I watch, and those are from United States (R14)

What is clear from the above is that these respondents' familiarity with GenAm was gained primarily through previous exposure in educational contexts and via cultural products. When comparing respondents' self-reported familiarity across all four voices, it becomes clear that the choice of pronunciation model within their educational environment and their preference for cultural products emanating from the UK or the USA can vary somewhat.

Patterns of Misidentification

Table 6 shows the range, percentage, and frequency of incorrect categorisations for the four speakers. As previously outlined, GenAm speakers were more commonly misidentified than RP speakers. The analyses revealed that, in most cases of incorrect identification, speakers were perceived to use the alternative model variety of English speech; i.e., GenAm speakers were often misidentified as RP speakers, and vice versa. This is most likely because RP and GenAm are the most widely promoted speech varieties in educational contexts worldwide; as such, it would not be surprising were they to exist in a dichotomous relationship in the minds of language learners.

RP speakers were most frequently misidentified as GenAm speakers when they were perceived to have produced either a 'softer' pronunciation of /t/ (i.e., an alveolar tap; 10.5%, $n=19$) or a rhotic variant of /r/ (10.5%, $n=19$). The female RP speaker was also misidentified as a GenAm speaker by a respondent who thought she sounded 'relaxed' (R16), suggesting a conceptual link between this solidarity trait and GenAm speech.

Table 6. Range, percentages, (and frequencies) of incorrect identifications of speaker origin

Place of Origin	Speaker			
	Female RP	Male RP	Female GenAm	Male GenAm
United States of America	90 (9)	62.5 (10)	-	-
United Kingdom	-	-	76.19 (16)	83.33 (15)
Scotland	10 (1)	6.25 (1)	4.76 (1)	-
Ireland	-	12.5 (2)	4.76 (1)	5.56 (1)
Wales	-	6.25 (1)	-	-
Spain	-	6.25 (1)	14.29 (3)	11.11 (2)
France	-	6.25 (1)	-	-
Total	100 (10)	100 (16)	100 (21)	100 (18)

GenAm speakers were frequently misidentified as British by those respondents who perceived them to speak with a ‘close’ (12.9%, $n=31$) or ‘dark’ (3.2%, $n=31$) pronunciation and, in the case of the male GenAm speaker, ‘with his throat’ (3.2%, $n=31$). This provides further evidence to suggest that perceived lower F1 frequencies and greater pharyngeal constriction are more strongly associated with RP speech. Since both GenAm speakers resided in the UK at the time of recording the speech samples, it is possible that they had acquired a more close production of vowels such as LOT and that this was perceived and commented upon by respondents. Whilst fine-grained acoustic analysis would be required in order to determine any differences in vowel articulation, auditory analysis did not reveal any features in these speech samples that would have cued such responses.

Perceived intelligibility and familiarity often guided respondents’ misidentifications but their mental representations of RP and GenAm did not map successfully against social-indexical information in these instances. However, it is worth noting that the speech samples associated with language classrooms were typically categorised as RP.

It sounds more familiar to what I have been studying at school and university. (R28)

I think that he is from England because he has the accent that our teachers teach us. I could be in the wrong way... but his accent seems to be like the accent that teachers teach. (R26)

its pronunciation is similar to the one I've heard in other listenings I've done in class (R08)

I think he's from Great Britain because his accent reminds me to the accent of the singer of an English group from London. (R27)

Interestingly, two comments indicated that the female GenAm speaker was perceived more favourably in terms of status when misidentified as an RP speaker:

[she] pronounces correctly all the words (R16)

I think that [the speaker] is from England because the speaker pronounce well. (R41)

These excerpts echo the comments made with regard to both RP speakers – when correctly identified as such – and provide evidence of a standard language ideology existing in this language-learning context, with RP perceived to be the unmarked, high-status variety.

Lack of Identification

Those respondents who were unable to identify speakers' places of origin ($n=23$) frequently provided comments that suggested that the identification process had been attempted and various strategies deployed. For example, one respondent commented 'I'm not sure wheater she is British or American' (R15); once more, this is evidently based on the assumption that these two varieties exist in a dichotomous relationship and that the voice heard must represent one or the other. Another respondent commented that 'He is not from GB or the States or Ireland, but I have no idea' (R49), suggesting the use of a process-of-elimination strategy.

He pronounces 't' as 'r', but I can't say where he's from. (R22)

Rhotic accent pronouncing 'popular' (R52)

I can hear a rhotic accent but I am not sure if the speaker is from the US or maybe from Ireland or Scotland. (R29)

As shown in the above excerpts, some respondents acknowledged the presence of salient segmental features – such as intervocalic /t/ and postvocalic /r/ – but lacked the social-indexical awareness necessary for successful completion of the variety recognition task.

Conclusions

Recognition rates for RP and GenAm were generally high; as such, the variety recognition process was successfully completed in the majority of cases. Learners clearly used detailed knowledge of linguistic variation in English, gained through academic language study, to aid this process. They generally drew upon the phonological variables that had been made salient by the researchers when designing the text used for creating the speech samples, especially postvocalic /r/ and intervocalic /t/. Other phonemes were also used as resources for identifying RP (e.g., /s/) and GenAm (e.g., /ε/), albeit with lesser frequency, highlighting variables that

could be incorporated into the design of follow-up studies. There was a tendency for respondents to conceptualise RP and GenAm as distinct speech varieties with mutually exclusive sets of linguistic features, as succinctly expressed by the respondent who stated that the alveolar tap was used ‘at the USA, and not at Great Britain’ (R50). This is, perhaps, an outcome of the juxtaposition of the UK and the USA in the language, literary and cultural studies of these particular respondents.

Qualitative labels attached to RP were generally more loaded with social meaning regarding status, revolving around notions of ‘standard’, ‘neutral’, and ‘pure’ speech. These are not particularly novel findings, given that previous language attitude research in other European contexts has also shown RP to be the prestige variety amongst learners (Ladegaard 1998; Janicka et al. 2008; Rindal 2010) and teachers (Walker 1999; Mompeán González 2004). What is novel is that these labels persisted even in cases of misidentification; for example, even in those cases where the female GenAm speaker was misidentified as an RP speaker, she was often described as pronouncing ‘well’ and ‘correctly’. Qualitative labels attached to GenAm in this study generally related to solidarity, with both speakers described as ‘relaxed’ and the same label used to describe the female RP speaker when misidentified as a GenAm speaker. Overall, these findings reveal an interesting attitudinal paradigm amongst L2 learners in this context, similar to that shown in the status and solidarity ratings of ‘standard’ and ‘non-standard’ speech amongst L1 English speakers. RP is categorised as the unmarked variety, and is indexical of high status, and GenAm is perceived as the marked variety which indexes solidarity (see Carrie 2017 for further discussion and supporting findings). Undoubtedly, these ideologies both stem from and contribute to the English-language education system in Spain, and give a clear indication of which model of English speech continues to be promoted in this context.

Whilst specific segmental features undeniably aided the variety identification process, respondents also commented upon other features of spoken language. Respondents frequently assessed the degree of openness/closeness and constriction when speakers produced vowel sounds. However, further investigation would be required to determine which vowels were specifically responsible for triggering these categorisations and whether they included the LOT vowel which was made salient by the researchers in the design of the study. Variation in suprasegmental features is also likely to exert an influence on recognition and evaluations; for example, respondents accurately identified segmental features characteristic of RP in the speech of the male RP speaker, yet still perceived his speech to be ‘strange’ somehow. Hence, features such as speech rate and nasality could be investigated in greater depth in future studies.

Previous exposure to RP and GenAm, or lack thereof, informed respondents’ categorisations. This finding is broadly compatible with the results of McKenzie (2015), who found evidence of the influence of prior exposure on levels of accurate identifications, albeit amongst UK-born listeners. Analyses of the qualitative data in this study suggest that prior exposure was largely gained through education (i.e., via teachers) and in personal contexts (i.e., via media, film, and, in some cases, direct contact with L1 English speakers).

Similar to the results obtained by Clopper and Pisoni (2006) in a speech perception study conducted in the USA, the findings of the present study also suggest a link between

recognition rates and geographical proximity, with RP more often correctly identified and its associated region situated more closely to Spain. However, it is difficult to distinguish the influence of geographical proximity per se from RP's influence as the most widely promoted speech variety by educators and policymakers throughout Europe; i.e., the role of RP has been established and sustained by the proximity of the UK to mainland Europe. Recognition rates for GenAm speakers were relatively high, likely owing to the cultural prominence of the USA. Future studies should investigate previous exposure and geographical proximity as influential factors in variety recognition more fully, and could explore the role of psychological proximity in identifying and evaluating accents in greater depth.

The inclusion of variety recognition items in future language attitude research will allow investigators to ascertain the extent to which listeners perceive variation in the voices presented for evaluation and identify each voice as representative of the intended speech community. By employing a mixed methods approach, researchers in the field are better able to quantify the extent to which respondents successfully complete the variety recognition task and to qualify the manner in which they do so, which specific linguistic features they attend to and the reasons for certain conceptual links existing within researchers' chosen contexts of investigation. Even in cases where variation is not perceived or voices are misidentified, it often remains possible to ascertain links between mental representations of spoken language varieties (including segmental linguistic features) and their social meanings, and to highlight the strategies employed by listeners when attempting the process of mapping accents to regional and social information.

References

- Ajzen, Icek. 2005. *Attitudes, Personality and Behavior*. Open University Press.
- Bayard, D. 1991. "A Taste of Kiwi: Attitudes to Accent, Speaker Gender and Perceived Ethnicity across the Tasman." *Australian Journal of Linguistics* 11 (1): 1–38.
- Bent, T., and R. F. Holt. 2017. "Representation of Speech Variability." *WIREs Cogn Sci* doi: 10.1002/wcs.1434
- Bex, T., and R. J. Watts. 1999. *Standard English: The Widening Debate*. Oxon: Routledge.
- Campbell-Kibler, K. 2010. "Sociolinguistics and perception." *Language and Linguistics Compass* 4 (6): 377–389 doi:10.1111/j.1749-818X.2010.00201.x
- Carrie, E. 2014. "A Social-Psychological Study of Foreign Learners' Attitudes and Behaviours towards Model Varieties of English Speech." PhD diss., University of St Andrews.
- Carrie, E. 2017. "'British is Professional, American is Urban': Attitudes towards English Reference Accents in Spain". *International Journal of Applied Linguistics* 27 (2): 427–447 doi: 10.1111/ijal.12139

- Clopper, C., and D. B. Pisoni. 2006. "Effects of Region of Origin and Geographical Ability on Perceptual Dialect Categorization." *Language Variation and Change* 18 (2): 193–221 doi:10.1017/S0954394506060091
- Clopper, C., and D. B. Pisoni. 2007. "Perception of Dialect Variation." In *The Handbook of Speech Perception*, edited by D. B. Pisoni and R. E. Remez, 313–337. Oxford: Blackwell.
- Coupland, N., and H. Bishop. 2007. "Ideologised Values for British Accents." *Journal of Sociolinguistics* 11 (1): 74–93.
- Dalton-Puffer, C., G. Kaltenboeck, and U. Smit. 1997. "Learner Attitudes and L2 Pronunciation in Austria." *World Englishes* 16 (1): 115–128.
- Fought, C. 2002. "California Students' Perceptions of, You Know, Regions and Dialects?" In *Handbook of Perceptual Dialectology, Volume II*, edited by D. Long and D. R. Preston, 113–134. Amsterdam: John Benjamins.
- Garrett, P. 2010. *Attitudes to Language*. Cambridge: Cambridge University Press.
- Garrett, P., N. Coupland, and A. Williams. 2003. *Investigating Language Attitudes: Social Meanings of Dialect, Ethnicity, and Performance*. Cardiff: University of Wales Press.
- Giles, H. 1971. "Patterns of Evaluation to R.P., South Welsh and Somerset Accented Speech." *British Journal of Social and Clinical Psychology* 10: 280–281.
- Gluszek, A., A. Newheiser, and J. F. Dovidio. 2011. "Social Psychological Orientations and Accent Strength." *Journal of Language and Social Psychology* 30 (1): 28–45.
- Gould, P., and R. White. 1986. *Mental Maps*. 2nd ed. London: Routledge.
- Janicka, K., M. Kul, and J. Weckwerth. 2008. "Polish Students' Attitudes to Native English Accents as Models for EFL Pronunciation." In *English Pronunciation Models: A Changing Scene*, edited by K. Dziubalska-Kolaczyk and J. Przedlacka. Peter Lang.
- Jarvella, R. J., E. Bang, A. L. Jakobsen, and I. M. Mees. 2001. "Of Mouths and Men: Non-Native Listeners' Identification and Evaluation of Varieties of English." *International Journal of Applied Linguistics* 11 (1): 37–56.
- Kövecses, Z. 2000. *American English: An Introduction*. Hertfordshire: Broadview Press.
- Labov, W. 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Ladegaard, H. J. 1998. "National Stereotypes and Language Attitudes: The Perception of British, American and Australian Language and Culture in Denmark." *Language and Communication* 18 (4): 251–274.
- Ladegaard, H. J. 2001. "Popular Perceptions of Standard Language: Attitudes to 'Regional Standards' in Denmark." *Language Awareness* 10 (1): 25–40.

- Levin, H., H. Giles, and P. Garrett. 1994. "The Effects of Lexical Formality and Accent on Trait Attributions." *Language and Communication* 14: 265–74.
- Lippi-Green, R. 2012. *English with an Accent: Language, Ideology and Discrimination in the United States*. Oxon: Routledge.
- Long, D., and D. R. Preston, eds. 2002. *Handbook of Perceptual Dialectology, Volume II*. Amsterdam: John Benjamins.
- McKenzie, R. M. 2008. "The Role of Variety Identification in Japanese University Students' Attitudes towards English Speech Varieties." *Journal of Multilingual and Multicultural Development* 29 (2): 139–153.
- McKenzie, R. M. 2010. *Social Psychology of English as a Global Language*. Dordrecht/New York: Springer.
- 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.
- Milroy, J. 2001. "Received Pronunciation: Who 'Receives' It and How Long Will It Be 'Received'?" *Studia Anglica Posnaniensia* 36: 16–33.
- Mompeán González, J. A. 2004. "Options and Criteria for the Choice of an English Pronunciation Model in Spain." In *Linguistic Perspectives from the Classroom: Language Teaching in a Multicultural Europe*, edited by J. Anderson, J. M. Oro, and J. Varela Zapata, 243–259. Universidade de Santiago de Compostela.
- Montgomery, C. 2012. "The Effect of Proximity in Perceptual Dialectology." *Journal of Sociolinguistics* 16 (5): 638–668 doi:10.1111/josl.12003
- Munro, M. J., and Derwing, T. M. 2001. "Modeling Perceptions of the Accentedness and Comprehensibility of L2 Speech: The Role of Speaking Rate." *Studies in Second Language Acquisition* 23, 451-468.
- Niedzielski, N. 1999. "The Effect of Social Information on the Perception of Sociolinguistic Variables." *Journal of Language and Social Psychology* 18 (1): 62–85.
- Niedzielski, N., and D. R. Preston. 2000. *Folk Linguistics*. New York: Mouton de Gruyter.
- Preston, D. 1996. "Whaddayaknow? The Modes of Folk Linguistic Awareness." *Language Awareness* 5 (1): 40–74.
- Preston, D. 1999. *Handbook of Perceptual Dialectology*. Amsterdam: John Benjamins.
- Rącz, P., and Shepáč, A. 2013. "The Perception of High Frequency Sibilants in Hungarian Male Speech." *Acta Linguistica Hungarica* 60 (4): 457–468 doi: <http://dx.doi.org/10.1556/ALing.60.2013.4.3>

- Rindal, U. 2010. "Constructing Identity with L2: Pronunciation and Attitudes among Norwegian Learners of English." *Journal of Sociolinguistics* 14 (2): 240–261.
- Ros, M., J. Ignacio Cano, and C. Huici. 1987. "Language and Intergroup Perception in Spain." *Journal of Language and Social Psychology* 6 (3-4): 243–259.
- Silverstein, M. 2003. "Indexical Order and the Dialectics of Sociolinguistic Life." *Language and Communication* 23: 193–229.
- Stephan, C. 1997. "The Unknown Englishes? Testing German Students' Ability to Identify Varieties of English." In *English around the World 1*, edited by E.W. Schneider, 93–108. Amsterdam: John Benjamins.
- Stevens, P. 1972. *British and American English*. London: Collier-Macmillan Publishers.
- Stuart-Smith, J., C. Timmins, and F. Tweedie. 2007. "'Talkin' Jockney'? Variation and Change in Glaswegian Accent." *Journal of Sociolinguistics* 11 (2): 221–260.
- Velupillai, V. 2015. *Pidgins, Creoles and Mixed Languages: An Introduction*. Amsterdam: John Benjamins.
- Walker, R. 1999. "Proclaimed and Perceived Wants and Needs among Spanish Teachers of English." *Speak Out!* 24: 25–32.
- Williams, A., P. Garrett, and N. Coupland. 1999. "Dialect Recognition". In *Handbook of Perceptual Dialectology, Volume I*, edited by D. R. Preston, 345–358. Amsterdam: John Benjamins.

Appendices

Appendix 1: Text designed for recordings (phonological variables in bold)

A **lot** of people think it's difficult to study at university. **On** the one hand, it can be difficult to get used to the **new** people and responsibilities in your life **but, on** the other, it can be good for building self-esteem. It all comes down to your **attitude**. It is definitely true, though, that **students** will have fun on **iTunes** and **YouTube** instead of handing in assignments when they're **due**. In my town, the local bars have **student** nights on **Tuesdays** and **Thursdays**, which are **popular**. One appeared on the **news** for winning a nationwide **competition**. Who **knew** it was **possible**.

Appendix 2: Speakers' background information and descriptions of own speech

RP, female, 19 years old, 30 seconds long

Born in London but, at the time of the recording, resided in Southampton, England. She describes her spoken English as resembling the speech of southern England (e.g., Hampshire, Wiltshire, London, etc.). She states that people often evaluate her accent as posh and believes that her private schooling may have influenced her speech.

RP, male, 22 years old, 27 seconds long

Born, raised and, at the time of the recording, resided in Aberdeen, UK. He describes his speech as generically English with a southerly accent, stating that people assume he is English. Although born and raised in Scotland, he emphasises that his parents (born and raised in the south of England) and his peers at secondary school (mainly children of oil workers from England) have influenced his speech.

GenAm, female, 31 years old, 29 seconds long

Born in Akron, Ohio, but lived in other areas of Ohio during her childhood. At the time of the recording, she had lived in the UK for four years but frequently made long-term visits to Ohio. She describes herself as a typical Cleveland-area speaker and her speech as Midwestern. Most of her friends were Midwesterners and she reports not having had significant contact with British people over her time in the UK.

GenAm, male, 19 years old, 27 seconds long

Born in Berwyn and raised in Brookfield, Illinois. At the time of the recording, he resided in Berwyn when not at university. He describes his speech as 'relatively nondescript' Midwestern USA English. He states that he has not travelled much and had never left the United States before going to university aged 17.