LISTENERS' VARIABLE REACTIONS TO THE EXPRESSION "ACCENT"

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— ABSTRACT —

This paper explores listeners' potential bias to the expression, 'accent,' when listeners' were asked to associate names of different variations of English accent with several unrelated psychophysical attributes. In addition, the elevated need for culturally calibrated sensitivity towards nonnative accents in the field of speech-language pathology is discussed. Participants responded to twenty-five questions, where only names of different nonnative varieties of accent and different psychophysical attributes were presented. No audio clips or acoustic cues of different accents were provided. One hundrend and nineteen participants from varying backgrounds, including some from the field of speech-language pathology, participated. The study results indicate participants associated accents with various unrelated psychophysical attributes. Additionally, members from the speech-language pathology community also exhibited similar bias. This study offers a preliminary caution that, despite s relentless focus on multicultural awareness, speech-language pathologists are not immune to accent related bias.

Keywords: Accent; bias; discrimination; perception; speech pathology; stigmatization

Introduction

The word 'accent' is interpreted as, 'the unique way that speech is pronounced by a group of people speaking the same language (ASHA, 2007). Specifically, an 'accent' is the paralinguistic component including the phonological and intonation features of the spoken word' (Giles, 1970). Such paralinguistic differences often encourage variable social perceptions about speakers (Chakraborty, Schwarz, & Vaughan, 2019; Gluszek & Dovidio, 2010a). Socially, due to growing immigration, globalization, and language contacts among speakers of English from various first language (L1) backgrounds, accent-bias is a global phenomenon (Chakraborty et. al., 2018). Thus, a better understanding and appreciation of the potential social consequences of speaking with a nonnative accent can help understand the potential bias related to one's accent.

In this paper, first, an overview of accent bias is offered, with an emphasis on how accent variations can serve as a breeding ground for biased perception. Second, the results of a survey designed to explore whether listeners arbitrarily associated different types of nonnative accents with some unrelated psychophysical attributes are presented. Here, the phrase 'psychophysical attributes' should be interpreted as mental and physical aspects of the speakers; e.g., intelligent, fat, kind, thin. Third, the critical relevance of highlighting nonnative accent bias and its consequences for the field of speech-language pathology, is discussed.

The criticality of accent and potential bias associated with an accent, are numerically alarming in the United States (US). In 1990, 31.8 million out of the 230.4 million people aged 5 years and over (i.e., 13 percent of the population) spoke a language other than English at home (U.S. Census Bureau, 1990). The number increased to 47.0 million in the 2000 census which represented 18% of the 262.4 million US population (U.S. Census Bureau, 2000). Therefore, a 4.1% increase was observed in the 1990s in the number of people speaking a language other than English at home (U.S. Census Bureau, 2000). Thus, contacts among various linguistic communities was promoted. In 2010, out of 291 million people of 5 years of age and above, 21% spoke a language other than English at home (American Community Survey Report, Ryan, 2013). Hence, in the USA, we have speakers from different first language backgrounds with variable proficiency levels in English, eventually leading to presence of variations in accents in English. Consequently, the increases in accent variations have the potential to influence intolerance towards differences in accent leads to biased perception and subsequently results in discriminatory behaviors (Neuliep & Speten-Hansen, 2013). Thus, accent could be a construct that might evoke an irrational and arbitrary association between speakers' accent and listeners' perception of the speakers.

An Overview: Accent variation as a potential breeding ground for biased perception

Bias promotes stigmatization and stereotype formations (Cargile and Giles, 1997; Dixon et al., 2002; Edwards, 1999; Giles and Billings, 2004; Lippi-Green, 1994; Stewart et al., 1985). Even though social science has widely accepted that the primary reason behind bias is an ethnocentric attitude (Neuliep & Speten-Hansen, 2013; Giles, 1970), the field of speech-language pathology has offered only cursory attention to the issue of accent- related bias (Chakraborty, 2015). In the last 50 years, in the field of social psychology, a predominant finding is that speakers' accents influence listeners' perception in constructing different attributes about the speakers (e.g., Giles, 1970; Giles & Johnson, 1987; Gluszek & Dovidio, 2010b). Even though listeners use speakers' nonnative accents to specultate about speakers' social origins, national and/or regional affiliations, ethnic group membership, social class, intelligence, warmth, and loyalty (Kinzler et al. 2009), any inference made just on the basis of accent has the potential of being inaccurate. Simultaneously, a nonnative accent also promotes stigmatization as aliens and linguistically incompetent (e.g., Cargile & Giles, 1997; Dixon et. al., 2002; Edwards, 1999; Giles & Billings, 2004; Lippi-Green, 1994; Stewart et. al., 1985).

Speakers with a nonnative accent are perceived as less intelligent, less loyal, less competent, of lower status, and poor language users, even though their language performance may not deserve such treatment (Gluszek & Dovidio, 2010b). The linguistic distance between two accents influences listeners' attributes of speakers' accents (Heblich, Lameli & Riener, 2015); individuals with the same accent tend to cooperate more when presented with a common task. However, when an individual is paired with someone of a different accent, more competitiveness is revealed. In general, nonnative speakers face both prejudice and stereotypes as a function of their nonnative accent; and such bias is not domain-specific (Gluszek & Dovidio, 2010b; Ng & Bradac, 1999).

Accent and Stereotype

Although listeners' associate accent and form stereotype about specific social or cultural groups (Giles et al., 1995; Milroy & McClenaghan, 1977), sometimes holding such stereotypes might not accurately identify the ethnic or national origin of an accent to make such judgments (Giles et al., 1995; Milroy & McClenaghan, 1977). For example, Yzerbyt, Provost,

and Cornielle (2005) demonstrated stereotype formation by French speakers. Their results indicated that Belgian speakers were perceived as less competent but warmer than French speakers. Similar results were reported when speakers with standard American accents delivering false information were perceived as more trustworthy (e.g., Vornik, 2003). Thus, a significant variation in the perception of accent is observed.

The primary goal of this project was to utilize a survey to examine, if listeners only get to read the names of different accent types, and do not hear any audio samples of those accent variations, would they then also exhibit a bias towards different accent types? The second goal, was to examine the probable nature of potential accent bias. Specifically, do listeners overtly associate different types of accents with some unrelated psychophysical attributes (e.g., obesity, intelligence, honesty, criminal intent, etc.), even when no audio sample of the accent types are presented? The overarching target of the survey is to understand the nature of potential stereotypes associated with the names of different accents.

Method

Participants

Participants were recruited using personal contacts, email, and social media. A wide range of participants were contacted to capture a cross-sectional trend, including members from the field of speech-language pathology. A total of 119 participants completed the survey. The survey participants consisted of U.S. natives, nonnative participants currently living in six different regions of the United States, and participants from several countries outside of the U.S. Of the 119 participants, 106 considered themselves fluent speakers of Standard American English (SAE), 7 participants identified themselves as nonfluent, and 6 participants did not respond. Of the 106 participants (fluent speakers of Standard American English), 60 classified themselves as bilingual, 41 classified themselves as monolingual, and 5 did not respond; there were 32 males and 72 females. Thirty-four acknowledged that they had accents and 64 claimed an absence of accent in their speech. Thirty-three participants were between 18-24 years, 38 were between 25-34 years and 32 were above 35 years. Hence, based on self-identification, participants naturally fell into four distinct categories and then within-category groups were compared based on their responses: Category 1: Bilingual (n = 60) versus Monolingual (n = 41); Category 2: Males (n = 32) versus Females (n = 72); Category 3: self-acknowledgement of accent; Yes (n = 34) versus No (n = 64); Category 4: age groups - 18-24 years (n = 33), 25-34 years (n = 38), 35+ years (n = 32). Finally, 11 participants belonged to the field of speech-language pathology and audiology. The survey was approved by the IRB of Texas State University.

Task and Procedure

Each participant completed a 41-question survey, which averaged 15 minutes to complete. The survey was comprised of 16 questions related to demographic information and 25 questions related to each participant's reaction to written names of various accent types. Accent was defined as being variations of English with different characteristics based on the region of origin and/or other language-influence. For example, "British English" was considered to be the spoken variety of English with a British dialectical influence. The targeted English accents were American, Arabic, Asian Indian, Australian, British, Chinese, French, German, Irish, Italian, Japanese, Russian, Scottish, Spanish, Swedish, Vietnamese, and Welsh. The unrelated psychophysical attributes were, 'smartest,' 'not smartest,' 'hardest working,' 'not hardest working,' 'friendliest,' 'meanest,' 'most serious,' 'most carefree,' 'richest,' 'poorest,' 'happiest,' 'most beautiful,' 'ugliest,' 'fattest,' 'thinnest,' 'funniest,' 'most honest' and 'saddest.' For example, a sample question was, "What accent do you perceive as the most honest?" The complete list of questions is included in appendix A.

Since the goal of this survey was to capture listeners' reactions towards the expression 'accent' of different types, no audio or speech samples of any accent were presented to the participants. We wanted to capture what associations were evoked in listeners' expression when the written names of different accent types were presented in front of them. Bias was operationalized as a listener's arbitrary association of an accent with any unrelated psychophysical attribute. So, participants were given a link to the online research survey using Survey Monkey, which they completed on their own devices. Researchers allowed the survey to remain active for approximately 2 weeks, giving the participants ample time to complete the survey at their convenience. For each survey, the questions were presented in the same order. All survey questions were a combination of multiple-choice and fill-in-the-blank. To allow participants an opportunity to provide additional feedback, a comment/essay box feature was provided with every question. This comment section was included for a non-biased answer. For example, if someone were taking the survey and wanted to answer, "perception of intelligence is not influenced by accent," then they would have an option to write that in the comment-box. Participants also had the option to skip any question. These survey questions were cho-

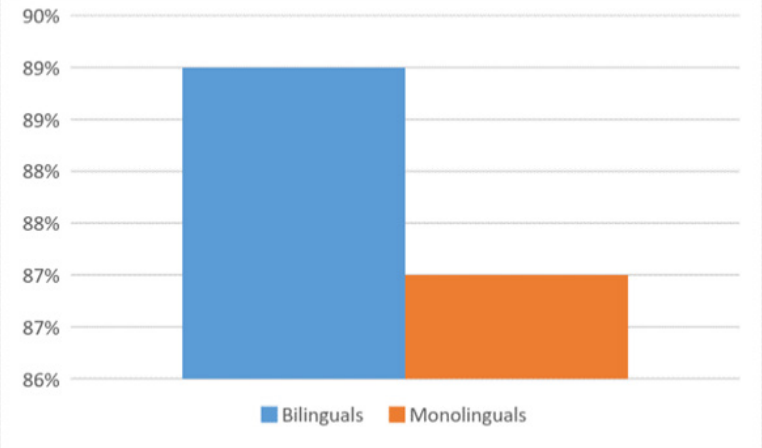

Figure 1: Percentage of bilingual speakers and monolingual speakers exhibiting bias. Blue bar – bilingual speakers, Orange bar – monolingual speakers. Y-axis marking % of biased participants within a specific category. X-axis marking the category of participants.

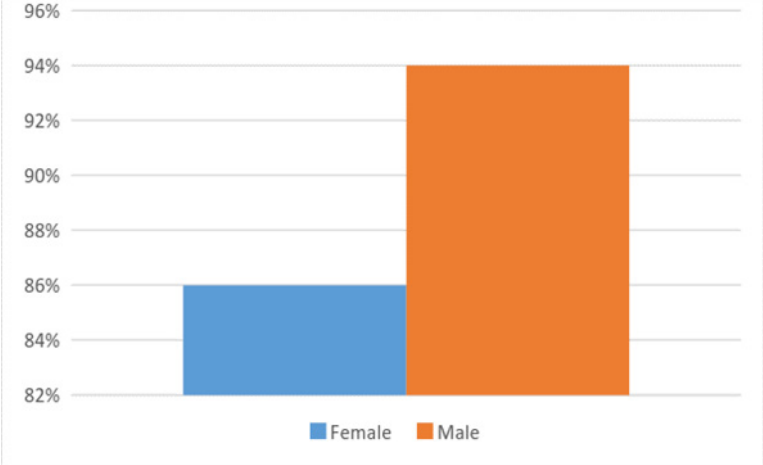

Figure 2: Percentage of male participants (Blue bar) and female participants (Orange bar) exhibiting bias. Y-axis marking % of biased participants within a specific category. X-axis marking the category of participants.

sen based on the common attributes that were easily contrastable. All responses were recorded using Survey Monkey and were organized into data trend charts. The total composite responses were analyzed and grouped into charts showing the general trends of participants' self-reported demographics and their responses to questions probing reactions towards different accents. The research reported in this manuscript adhered to basic ethical considerations regarding the protection of human participants in research and had been approved by Texas State University's Committee on the Use of Human Research Subjects.

Results

Each participant's responses were analyzed to examine whether or not a given grouping of participants demonstrated bias in response to the 25 questions on perception of accents. If for 1 question (out of 25), a participant associated an accent with any unrelated attributes, the participant was considered biased. Selective or domain-specific bias was also considered a form of discrimination with potential consequences. Results indicated, that 89% of the bilinguals (n = 60) and 87% of the monolinguals (n = 41) exhibited bias (Figure 1).

Between two different gender categories, 94% of the males (n = 32) and 86% of the females (n = 72) exhibited bias (Figure 2).

Of the participants who acknowledged that they have an accent (n = 34), 87% of those exhibited bias, and 88% of those who did not feel that they have an accent (n = 64), also exhibited bias (Figure 3).

Figure 3: Percentage of bias of speakers acknowledging that they have an accent (Blue bar) and not acknowledging that they have an accent (Orange bar). Y-axis marking % of biased participants within a specific category. X-axis marking the category of participants.

Across the 3 different age categories, 89% within the age groups 18-24 years (n = 33), 92% within the age group 25-34 years (n = 38) and 84% of the participants who were above 35 years (n = 32) exhibited bias (Figure 4).

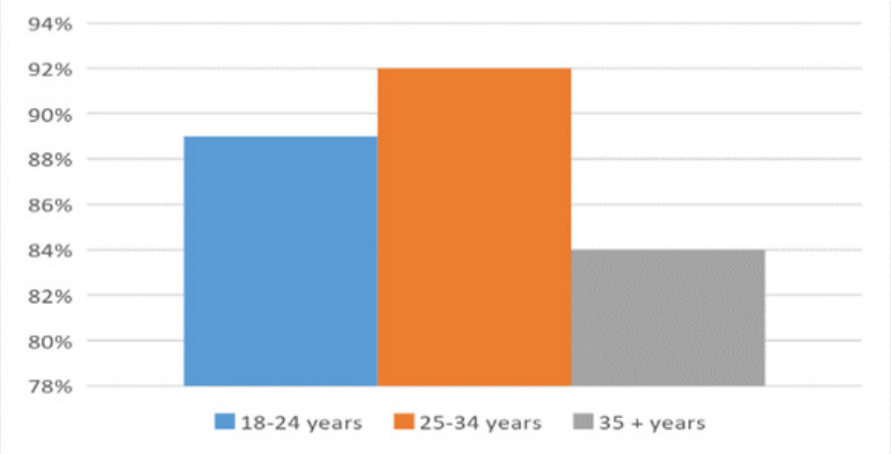

Figure 4: Percentage of speakers of different age groups exhibiting bias. Blue bar – participants between 18 and 24 years, Orange bar – participants between 25 and 34 years, Grey bar - participants 35 years and beyond. Y-axis marking % of biased participants within a specific category. X-axis marking the category of participants.

Hence, overall, most participants, including all participants from the field of speech-language pathology and audiology, associated accent with some unrelated variables.

Also, across the participants, results for each question were tallied and converted into percentages to show which accent type was associated with different psychophysical attributes. British English was associated with three attributes, 'smartest,' 'richest,' and 'most honest.' Australian English was also associated with three attributes, 'most carefree, 'happiest,' and 'funniest.' American English and Spanish English were associated with mixed attributes; 'friendliest,' 'fattest,' and 'not hardworking' for American English and 'not the smartest,' 'most hardworking,' and 'poorest,' for Spanish. Arabic English was considered 'ugliest,' Russian English was considered 'meanest' and 'saddest,' and German English was considered 'most serious.' Chinese English was considered 'thinnest,' French English was considered the 'most beautiful,' and Irish English was considered the 'funniest.' Clearly, analysis of data suggested that there exist bias representing a wider spectrum of psychophysical attributes.

Discussion

This survey examined listeners' reactions to the names of different accents when no audio sample of accent types were presented. The survey also explored if listeners associated variations in accent with unrelated psychophysical attributes. Overall, most participants associated accents with some unrelated variables; thus exhibiting biased perceptions towards accents.

In general, processing differences across different participants might bring us closer to the underlying mechanism for biased perceptions of accent. Evidence exists that suggests some listeners are selective processors while others are comprehensive processors (Nemecek, 1997; Meyers-Levy, 1989). According to Nemecek (1997), people who usually do not engage in comprehensive processing of all information before rendering judgment are engaged in selective processing. On the other hand, some listeners attempt to assimilate all available information before rendering judgment and they are known as comprehensive processors. It is reported that comprehensive processors tend to use less cognitive structuring (CS) than selective processors. Here, the phrase "cognitive structuring" (CS) is defined as "the creation and use of abstract mental representations (e.g., schemata, prototypes, scripts, attitudes, and stereotypes) - representations that are simplified generalizations of previous experience" (Neuberg & Newsom, 1993). People who extensively use CS apply well-demarcated categories, stereotypical thinking, biased cognition, and heavily depend on previously stored information that might be in the form of stereotypes (Fiske & Taylor, 1991; Kruglanski & Webster, 1996; Kruglanski & Ajzen, 1983). So, people who are biased in their world-view and form stereotypical perceptions, engage in CS. People who are biased usually attain certainty most efficiently probably because CS is relatively automatic, effort-free, and faster than piecemeal processing (Brewer, 1988; Shiffrin & Schneider, 1977). For example, Meyers-Levy (1989) hypothesized that women tend to use less cognitive structuring than men and are less biased than men; women use more analytical (less intuitive) information processing than men (Hayes, Allinson & Armstrong, 2004).

Based on the research history, it is probably safe to assume that some degree of bias is omnipresent under some specified conditions (e.g., Heblich, Lameli & Riener, 2015). In the current paper, the presence of biased perception of nonnative accents did not surprise us. For example, in our study, regardless of the category represented by the participants, bias ranged between 84% and 94%. Nevertheless, how one deals with biased perception and how a person can avoid interference of biased perception are critical issues to consider.

In the current study, specific accent types were associated with unrelated psychophysical attributes. The results of this study evoked more questions than the answers it provided. For example, an Arabic English accent was considered the 'ugliest.' Could it be due to the history of tension between the Arabic world and the countries in the western hemisphere, specifically the North American subcontinent? Could such responses be stemmed from the history of religious tension (Gualtier, 2009), post 9-11 perception (Group, 2009), their oil-based economic conflicts (Jones, 2012), or even interpretation of terrorism (Group, 2009)?

Spanish-accented English was considered 'not the smartest,' 'most hardworking, and 'poorest.' Such perception could be driven by the perceived predominance of the Hispanic population in blue-collar jobs, in the construction industries, automobile industries (Duncan, Hotz, & Trejo, 2006), and among immigrants (Cobb, 2019). Could any geo-economic reason or political tension be driving such perception (Domínguez & Fernández, 2001)? Is a Spanish accent in English perceived with similar kinds of bias if the speakers are from Spain versus Mexico or some other Latin American countries?

However, American English was considered the friendliest,' 'fattest,' and 'not hardworking.' Is there any ethnocentric motivation? Is such perception partly an overgeneralization, reflecting the current unemployment condition in the U.S.A.? Interestingly, British English was considered the 'smartest,' 'richest' and 'most honest'; Australian English was considered the 'most carefree,' 'happiest' and 'funniest.' Are there any political, religious, racial, historical, or even lineage-related underlying reasons behind such accent perception? Is ethnocentrism dominating listeners' judgment of accent? Why do listeners attribute different qualifiers to different accents? Are these decisions driven exclusively by personal experience or do listeners take into account other variables, process stimuli critically, question the rationale behind their decisions, and then offer their judgments or verdicts about the accent?

One can always argue that in this study what is actually being measured is stereotypes of each of the groups in the survey instead of respondents' perceptions of their accents. That was exactly the goal of this survey - to capture potential stereotypes. Hence we choose not to offer any acoustic sample of any accent or any speaker with specific accent type. In a follow up study, it would be interesting to ensure that the participants could all accurately differentiate between each of the accents presented on the survey first, and then answer the survey questions, counter balancing the order.

Since, accent perception studies are restricted primarily to the English language accent, it is imperative to explore similar questions incorporating other ethnic groups, languages, methods, and geographical belts. If accent-related bias is a general human trait across the globe with other world languages and is devoid of any protective provisions offered by the law, then we immediately require some legal protection against such bias. Research history can document instances and criticize such bias, but unless legal protection is offered or even discussed to curb such practices, there will be injustice. This issue is especially relevant for any service provider in any industry.

Speech-Language Pathology: A Service Industry

This paper resurfaces the critical relevance of nonnative accent bias and its consequences for the field of speech-language pathology. With increasing linguistic diversity in the USA and elsewhere, there is an increased likelihood that SLPs would be serving clients with an unfamiliar accent and/or clients would be served by a clinician with a nonnative accent. Levy and Crowley (2012) highlighted that only 6% of ASHA members are multilingual or bilingual service providers (ASHA 2010). Hence most clients, requiring services in a language other than English, receive services from SLPs who either do not share their clients' languages or serve clients with nonnative accents. Besides, ASHA's recent drive to promote more clinicians from diverse student populations has increased the number from 11.7% in 2007 to 13.3% in 2010 (ASHA 2011), which creates a context where more native English-speaking clients are being served by clinicians from diverse language backgrounds. Either way, a clinician-client mismatch in language background potentially leads to accent differences, or as increasingly the case, clinicians speak their clients' language with a nonnative accent (Levy & Crowley, 2012).

However, it has been reported that L2 speakers may be perceived as fully intelligible and easy to understand despite having a moderate foreign accent (Behrman & Akhund, 2013; Kennedy & Trofimovich, 2008). Hence, nonnative accent might not always lead to poor speech intelligibility and reduced comprehensibility (Munro & Derwing, 1995), as these measures appear to capture different aspects of nonnative accents (Behrman & Akhund, 2013).

Future directions

Recall, that the procedure of the current study was constructed in a way that probably forced participants to provide some answer, even though there was a comment-section with every question on accents. It

is possible that participants, in reaction to a person or a recording, would have responded differently. But in the current study, participants were using stereotypes to infer something about the names of different accents, even though they always had an option of not responding and/or commenting that they could not establish an association between different types of accents and different psychophysical attributes. But all participants choose to associate accents with some psychophysical attributes; there was some stereotyped formation or preconceived ideas about specific accent type.

Probably, listeners' reactions to words could be consciously controlled and corrected much easier than reactions to people with an accent or at least to recordings of people with different accents. Future studies might attempt to compare listeners' responses to live-recording versus listeners' reactions to the names of different accents. Despite using just the word, 'accent,' variable responses from different listeners have been observed in the current survey. Since, in the current study, listeners' reactions to just the names of different accents evoked biased responses, there are stronger reasons to suspect stereotype formation by the listeners. Simultaneously, we do acknowledge that the participants were very diverse, and one might hypothesize that some demographic variables might have impacted the results.

Conclusion

Potential linguistic tension between the service provider and the clients could be minimized if we could develop strategies to manage customers' emotions and reactions. SLP clinicians and SLP students are also clinical service providers. Aspects of customer service employee attributes are thus critical for SLPs and are of special relevance to countries such as the USA, Canada, the UK, New Zealand, and Australia where immigrants with varying accents are a large part of the service workforce and clientele. Consistently, ASHA has invested significant resources and has taken several initiatives to encourage multicultural sensitivity because it feels alarmingly critical for any field if its members are biased service providers.

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APPENDIX A.

1. Do you have an accent?
2. Do you know anyone who has an accent?
3. Based on someone's accent, I can guess their,
    a. Educational level
    b. Economic level
    c. Intelligence level
    d. Religious preferences
    e. Language proficiency
    f. Family structure
    g. Vocational (work) background
    h. Culture
    i. Dietary preference
    j. Race
    k. Level of alcohol consumption
4. You schedule to meet with someone online. They arrive in-person to your meeting dressed professionally. They begin speaking and have a very thick accent. Does that surprise you?
5. If you were to see one person dressed professionally and another person dressed casually, which would have more or less of an accent?
6. Have you ever seen an image of someone (such as a football player, musician, or college student) then hear them speak in a way you weren't expecting?

For questions 7 through 24, the same answer option "a" to "q" was offered. To minimize redundancy, the answer options are not repeated between Q 8 - 24.

7. What accent do you perceive as the "smartest"?
    a. American English
    b. Arabic English
    c. Asian Indian English
    d. Australian English
    e. British English
    f. Chinese English
    g. French English
    h. German English
    i. Irish English
    j. Italian English
    k. Japanese English
    l. Russian English
    m. Scottish English
    n. Spanish English
    o. Swedish English
    p. Vietnamese English
    q. Welsh English

8. What accent do you perceive as “not the smartest”?
9. What accent do you perceive as the “hardest working”?
10. What accent do you perceive as “not hardest working”?
11. What accent do you perceive as the “friendliest”?
12. What accent do you perceive as the “meanest”?
13. What accent do you perceive as the “most serious”?
14. What accent do you perceive as the “most carefree”?
15. What accent do you perceive as the “richest”?
16. What accent do you perceive as the “poorest”?
17. What accent do you perceive as the “happiest”?
18. What accent do you perceive as the “most beautiful”?
19. What accent do you perceive as the “ugliest”?
20. What accent do you perceive as the fattest?
21. What accent do you perceive as the “thinnest”?
22. What accent do you perceive as the funniest”?
23. What accent do you perceive as the “most honest”?
24. What accent do you perceive as the “saddest”?
25. What accent do you perceive as the “most cruel”?

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