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**Methodology in Accent Perception Studies: A
Review**

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Abstract

Research in the field of Language Attitudes and Social Perceptions have proven associations between a speaker's accent, and listener's perceptions of various aspects of their identity – intelligence, socio-economic background, race, region of origin, friendliness, etc. This paper seeks to critically analyze the methodology and theories in the field of accent perception through a review of existing research literature across various disciplines that have studied it. After reviewing Social Identity Theory, Prototype theory, and theories regarding Ethnolinguistic identity, it points out various knowledge gaps and limitations of methodologies previously used. It then studies the implications for future research, in various domains, proposing a new theoretical paradigm using mixed methods studies.

Keywords: accent, social perception, multicultural environments, verbal communication, social cognition, interdisciplinary studies

Introduction

Interpersonal interactions and evaluations in social settings depend on a multitude of factors – socio-economic status, friendliness, education level, race, even individual history and background. The perceptions of these characteristics occur through various ways, a major marker for which is often verbal communication. Research shows that it takes only 10-15 seconds of speech for a listener to assess and build an entire profile for any given speaker (Entwistle 1970). Within language itself, there are multiple variables that affect the processing of speech, which have contributed to the vast amount of experimental research on the factors influencing perceptions, and information perceived. Accent is the most studied of these language behaviours, as it is generally considered the most socially significant (Cargile 2000). The disciplines of Sociolinguistics, Social Psychology, Linguistic Anthropology, Social Cognition, and Culture Studies have proven associations between a speaker's accent, and a listener's perceptions of various aspects of their identity. This process of 'profiling' has additionally been studied to result in discrimination, in various social contexts where verbal communication is of great importance, such as education environments, during recruitment, political speech perception, over-the phone-based occupations (e.g. call centres), etc.

Background

In Sociolinguistics, an accent is defined as a loose bundle of prosodic and segmental features distributed over geographic and/or social space (Lippi-Green 1997). Accents are different forms

of a language spoken by sub-groups that can be differentiated by phonological features – such as rhythm, pitch, prosody, etc. (Holmes 1992). There are different kinds of accents based on their origin – native (an accent in one’s first language) or non-native (features of L1 that appear on the second language) speech. These are further divided into regional, social class, or ethnic, based on the source of the variations, and deviations from other spoken forms.

A non-native accent is a salient characteristics of people from other countries who come to live, work, or study in a host country that identifies the concerned person as non-native born (Derwing and Munro 2009; Moyer 2004), serving as a cue that one is a non-native speaker of the language (Kinzler, Dupoux and Spelke 2007) and, by extension, lacks fluency regardless of actual competence (Lindemann 2002). Although there is no exact figure of immigrants in the world speaking with non-native accents, it is likely that a substantial number does. Furthermore, globalization also increases the frequency of contact between those who speak a language natively and those who do not, in business, academic, and leisure settings (Cheng 1999).

The concept of “Standard accents” within a given country, are decided based on consensus of those in power and majority in academic spaces. (Lippi-Green 1997) Usually, accents of the educated upper classes are perceived as more desirable, prestigious, and pleasant than nonstandard, lower-class, or ethnic accents (Cargile et al. 1994; Edwards 1999; Lippi-Green 1997), which can be linked to various anthropological theories – such as that of the ‘habitus’ and the constant restructuring of social structures owing to various power dynamics that are at play, with reference to the possession of social and cultural capital (Foucault 1980) (Bourdieu 1979). An accent is a metonym for a larger cultural group, and the characteristics associated with it.

Review of Theories and Corresponding Methodology

In the study of accents, the incitement to discourse (Foucault 1980) was in the form of observed incidences of prejudice – through racism and classism, sparked by interactions in multicultural populations. In the early 1960s, Labov’s proposed theoretical paradigm of variational sociolinguistics, proved for the first time in a systematic and empirical way, that linguistic variation may be socially significant. (Kristiansen 2001). Labov was able to demonstrate that linguistic variation is socially stratified such that the use of pronunciation features correlates with social class, ethnicity, etc. in regular patterns. Following Labov, many scholars conducted experiments in various communities, and interpreted their findings in terms of social groups using linguistic variants as markers of social identity.

In non-laboratory settings, methods such as phone interviews for recruitment (Kalin and Rayko 1978; Matsuda 1991; Nguyen 1993) or housing applications, (Zhao, Ondrich and Yinger 2006) and content analysis of advertisements and articles, and legal proceedings (Kalin and Rayko 1978; Matsuda 1991; Nguyen 199; Frumkin 2007; Lippi-Green 1994) were used to identify social perceptions of specific accents. These studies found that non-natively accented speakers were more likely to be assigned by potential employers to lower status positions than those with standard accents (Bradac and Wisegarver 1984; Kalin and Rayko 1978). Davila, Bohara and Saenz (1993) found that in the United States Mexican employees with a non-English accent received lower earnings, independently of language proficiency. In a recent survey across 26 European Union countries (excluding Cyprus; European Commission 2008), 34% of a representative sample of respondents believed that a job candidate’s “way of speaking,

his or her accent” (26) would put him or her at disadvantage compared to an equally qualified, standard accented candidate.

Formulated by social psychologists Tajfel and Turner in 1970-80, social identity theory introduced identity as a way to explain intergroup behaviour. The central hypothesis is that group members of an in-group seek to find negative aspects of an out-group, thus enhancing their self-image. They proposed three mental processes involved in evaluation as “us” or “them”. 1: Categorization – classification of environment for understanding and identification, to define appropriate behaviour in different situations and contexts. Stephen Tylor’s Cognitive Anthropology paradigm discusses these categories as ‘schemas’ (1962). 2: Social identification, where “the part of an individual’s self-concept which derives knowledge of social group membership with the emotional significance attached to that membership” is established. The final stage, social comparison, refers to the tendency to compare groups, once categorization and identification with a group occurs. To maintain self-esteem, the group needs to compare favourably with other groups. An accent is a linguistic indicator of group membership, and a person’s response is representative of their feelings towards both their own and the speaker’s groups. Then, prototype theory was conceptualized, alongside an emphasis on stereotypes by the 1990s. Stereotypes are popular, but imprecise characterizations of speech as used by groups - a single characteristic being perceived as representative of a larger group and its characteristics. Linguistic stereotypes, then, were linguistically imprecise perceptions, but useful for laymen; if structured and reduced bundles of markers are associated with particular social groups, suggesting the foundations of ethnolinguistic identity (Kristiansen 2001). Additionally, cognitive psychology shows that interactions ‘use up’ cognitive resources. Studies that have investigated the veracity of a resource depletion account of the impairment of inhibitory task performance after interracial contact have found that self-regulatory demands lead to resource depletion, which becomes the likely mechanism underlying the impairment of cognitive functioning after interracial dyadic interactions. (Richeson and Trawalter 2005), implying activation of availability heuristics, enhancing stereotyping.

The findings of practical-context experiments were followed by laboratory experiments, where variables could be manipulated. Wallace Lambert’s Matched-Guise technique, involving a single speaker recording all versions of a message used in an experimental design, was used for decades to come. This ensured the two versions of speech would only differ in the accent or dialect, and variations in speaker-related factors (speech rate, pitch, rhythm, etc) were controlled for. Language attitude studies conducted in Western Nations (Cargile, et al. 1994; Cargile and Bradac 2001) indicate that speakers’ accents and regional dialects are associated with variations in listeners’ evaluations of speakers on (a) status, and (b) solidarity dimensions. Overall, research indicates that the accent or dialect of a dominant group in a society is evaluated more positively on the status dimension but less positively on the solidarity dimension than the accent or dialect of less dominant groups (e.g., Nesdale and Rooney 1990; Cargile, et al. 1994; Cargile and Bradac 2001). In addition to listeners’ evaluative reactions on the two above-noted dimensions, Ryan (1979) suggests that language attitudes might include specific situation-dependent aspects as well. Several researchers (e.g., Cargile and Bradac 2001) agree that listeners’ reactions to language reflect not only on the language stimulus but also on the perceived social attributes of a speaker, e.g., sex, ethnicity, or nationality.

The matched guise technique gradually lost favour amongst researchers, owing to a preference for authentic audio samples. Although the alternative, the “verbal guise” technique

has been criticized for a potential lack of control over the variations in paralinguistic features, e.g., pitch, tone, and voice quality, across speakers, it had the important advantage of employing natural rather than feigned accents which might only represent the speaker's stereotypes (e.g., Gallois and Callan 1981; Nesdale and Rooney 1990; Podberesky, et al. 1990).

Eagly, Ashmore, Makhijani, and Longo (1991) asserted that individuals' evaluative beliefs about others are made with respect to at least six major evaluative dimensions: (a) Social Competence, (b) Intellectual Competence, (c) Concern for Others, (d) Integrity and honesty; (e) Adjustment, and (f) Potency. When tested in laboratory experiments in the United States, it was seen that groups identified as non-stigmatized (e.g. Lippi-Green 1997) were rated positively (e.g. France, Germany), at least on correctness; groups described as stigmatized (Mexico, Japan, China, India) were rated as less correct. In general, it is observed that countries whose non-native English was most familiar, that rated positively have had comparatively favourable relationships with the US during the respondents' lifetimes, and do not have large populations of recent immigrants in the US. Although a given country tended to have similar average scores for correct, friendly, and pleasant, there are a few cases where there is a clear differences. Ratings for Russian and German English on pleasant and friendly are markedly lower than their ratings for correct. (Lindemann 2005) The split was highest for Germany, which rated fairly high on correct and below the median on pleasant and friendly; in contrast, all were low for Russia. While the high correctness rating for German English is consistent with the generally non-stigmatized status of Western Europeans' English, the lower ratings on pleasant and friendly are consistent with some stereotypes of Germans, especially those associated with War films. (Lippi-Green 1997) Overall, participants favoured speakers who shared their accent (in-group bias) or were 'non-accented'.

Theorists were able to link these results with socio-political context as the cause for stereotype activation. (Lindemann 2005, 2003), with the lowest-rated cluster including Asian countries, Eastern Europe and the Middle East. As with Alfaraz's (2002) findings for Miami Cubans' ratings of pre-Revolution and post-Revolution Cuban Spanish, political factors clearly play a role in these ratings, as many countries in this group are easily classified in terms of political relationships with the US than in terms of recent immigrant groups. Several have had poor relations with the US within the respondents' lifetimes, including former communist bloc countries, Iran, Iraq, North Korea, Vietnam, and Afghanistan. Egypt also fared slightly better than other Middle Eastern countries that are well known to US students as fundamentalist (Iran, Afghanistan, Saudi Arabia) or long out of favour with the US (Iraq).

In fact, experimental studies demonstrated that often it is the perception of an accent, not the accent per se, that leads to negative evaluations of accented speakers. (Rubin 1992; Rubin and Smith 1990). For example, in Rubin's (1992) study participants listened to the same lecture but saw a photo of either an Asian or a Caucasian instructor. Those who saw an Asian instructor believed that they had heard an accented speech and performed worse on a lecture comprehension task, supporting the hypothesis that prejudice rather accent was responsible for issues with comprehensibility (Munro and Derwing 1995; Rubin 1992).

Finally, it was discovered that it is possible to be aware of a stereotype – and stereotype threat, which leads to modification of behaviour to avoid conforming to expectations is a prime example of this (Shih, Pittinsky and Geoffrey 2011). On these social psychology-based tasks, a participant could answer differently from how they actually felt, which throws the validity of the entire experiment design into question. With advances in the fields of Anthropology,

Sociology and Cognitive Neuropsychology, there have been shift in ideologies associated with validity and reliability of experimental design. Over the last decade, research has evolved to include different methods of studying cognitive processes, specifically through the measurement of observable behaviours rather than surveys/opinion rating by participants. The field of social cognition has taken this approach, through various studies on accent-related behaviour in interactive situations.

Some studies have begun to focus on affective reactions as well as cognitive reactions, including Mood indicator questionnaires along with the cognitive assessments. (Hosoda 2007). These studies found a high correlation between affective and cognitive responses in the perception and judgment of any accent group. Lindemann's 2002 attitude-interaction studies on Korean and American undergraduate students take this further, using mixed methods to assess attitudes (combined cognitive and affective responses) towards an accented speaker – and consequently, their ability to complete a collaborative task with a member of the accent group, after which participants evaluated the success of their performance. It was found that those assessed as having negative attitudes toward Koreans used strategies that problematized their partners' utterances, or avoidant strategies during the task. All participants were successful except where the native English speaker used avoidance strategies, suggesting that the relationship between attitude and comprehension is mediated by the native speaker's choice of strategies. (Lindemann 2002).

The Kinzler lab at UChicago and Cornell University is an example of a completely empirical, non-opinion-based methodology. The lab studies children rather than adults, providing insight into the development of social attitudes, through testing a limited range of behaviours using a forced choice design. Their studies generally involve an infant being presented with a choice between two accented-speaker options in any scenario. The speaker options were generally racially ambiguous with familiar or foreign accents. These studies provide evidence that children evaluate others based on both their accent and their actions, proving that children view accent as an important marker of identity, providing the impetus for future research on children's reasoning about nationality. Research with adults and older children suggest that people become attuned to linguistic status and cultural stereotypes about the meaning of different accents (Giles and Billings 2004). Kinzler notes that studies of how and whether children's age and exposure to diverse social experiences guide their beliefs about nationality will be interesting areas for future inquiry (2007).

Knowledge Gap:

With a growing need for interdisciplinary approaches to phenomena in social spaces, mixed-methods research is gaining momentum. It is impossible to study accent perception without analysing the social status and history of both parties, as well as their group membership.

Rivers' study on Japanese students in 2011 began with a study of the conception of the self, culture and nationhood in Japan – explaining that it is closely linked to language and linguistic prestige, given the country's historical relationships with other nations. (Miller 1977; Aso and Amano 1978). The study assessed the attitudinal responses of a group of Japanese university freshmen towards accented English speech across nine evaluative criteria, to study language appraisals of English speakers of Western, Japanese and other Asian nationalities respectively. Rivers contends that the native English speech samples were afforded a kind of quasi-ingroup status among the Japanese students, while the non-native Asian speech samples

were positioned firmly within a distant outgroup category, and contextualizes this result to intercultural relationships and exposure to foreigners in light of English Language Teaching in Japan. (River 2011)

Susan Boyd, in the other hand took up a different approach in her study of perceptions of non-native teachers in Swedish schools. She aimed to study the covariance of perceived degree of foreign accents with attitudes towards a speaker's language skill in general, and towards their professional skill, as has been found in other studies (Lippi-Green 1994, 1997), She first describes the Swedish job market for teachers, and then moves on to conducting teaching competency evaluations with school administrators (principals, etc.) and pupils (who will directly interact with the teachers, and are dependent on their competency for academic success.) The student group was also informally interviewed regarding their answers. It was concluded that judgments of accentedness and of language proficiency play an important role in the exclusion of foreigners from qualified employment, as noted in studies in the US as well. (Lippi-Green 1994, 1997; Sato 1991). Despite this, however, it was found that pupils were more open-minded and empathetic in their judgments, which Boyd attributes to their greater exposure to a multicultural world, given Sweden's history. The use of the Swedish language expands studies on English accents to other languages, indicating a universal psychological mechanism.

One of the key concerns noted in these studies is the problematic task of attempting to define linguistic nativity (Kachru 1982, 1986; Paikeday 1985; Rampton 1990; Davies 1991; Cook 1999). For example, Yano (2001) suggests that many fluent English speakers of English variants such as Singaporean, Philippine and Nigerian English often believe themselves to be native-English speakers, albeit outside the Western English speaking world. More integrative perspectives have promoted 'English as an International Language' (EIL) (e.g. Graddol 1996; McKay 2002; Bolton 2004), which assigns an equal status to all Englishes regardless of where they originate, while others have focused on 'English as a Global Language' (Gnutzmann 1999; Crystal 2003), 'World English' (Brutt-Griffler 2002), and 'English as a medium of Intercultural Communication' (Meierkord 1996). Perhaps the most significant development during the past decade has been the attention given to 'English as Lingua Franca' (ELF) (e.g. Seidlhofer 2004; Jenkins 2006, 2007), proposed as a means of referring to communication in English between speakers "who share neither a common native tongue nor a common (national) culture, and for whom English is the chosen foreign language of communication" (Firth 1996: 240).

A good example of this would be in countries with a history of colonialism. In India, for instance, there are not only a myriad of distinct regional languages and corresponding accents, but it is also a region where British colonialism lasted for nearly two centuries, and involved many social, legal and educational reforms that still persist today. In a country like Japan, retention of native language has been studied to be closely linked with identity and nationalism (Amano 1978), however, this is not the case in India, where access to education in English is linked with socio-economic status, and the perceptions of non-english, or 'vernacular' speakers is not necessarily favourable – a trait often associated with the idea of a 'colonial hangover'. Can individuals who have learnt English right from their birth be classified as native speakers? If so, do the various regional accents on English have the same status and regional American or regional British accents? Is it possible to even have a single standardized Indian accent? These remain to be answered, as the existing theoretical paradigms are independently inadequate to study such a case. They therefore must be modified and upgraded to account for the various

factors affecting any region today, especially given the effects of globalization and glocalization – such as those proposed by the World Culture Theory, convergence and divergence. (Boli Ramirez, 1981)

Implications for future research

This paper has aimed to summarize and review the various methods and theories that have been conceptualized until now. Having evaluated the validity of these methods in a present day context, it is possible to identify some of key techniques required to adequately study any accent, or perceptions of it, through a combination of methods from Anthropology, Psychology and Linguistics.

The ideal exploratory study would first have to isolate an area of interest, in terms of region, specific accents, participant background, and context in which the interaction between the speaker and listener must occur. The process of choosing the accents should be supported by an ethnographic study of the socio-cultural scenario of the group to which the participants and speakers belong to respectively, along with an understanding of the historical relationship between the two groups. The purpose of this ethnography would be to identify the general perceptions and attitudes held by each group towards the other. (e.g the South of India may not have a specific opinion about the North East, but most certainly has one about the Northern regions).

After this, the context of the interaction would have to be established, which would in turn determine the parameters of evaluation. In case of an educational setting, a teacher's intelligibility and affability is important, whereas for the recruitment of candidates for an administrative job, other personality traits are far more relevant. Once the position to be filled is identified, objective measures of competency in this context may be identified.

A social cognition-based experiment would be designed based on these parameters, that enable measurement of observable behaviours so as to accurately estimate the corresponding cognitive process. The voice samples recorded should account for variations in sex, rate and fluency, and would have to be verified by a linguist, to confirm that the deviations from a standard pronunciation, and the degree of this deviation is maintained to be constant. Statistical models would be used to establish correlations and regression models between the variables studied.

Additionally, an individual linguistic profile will need to be constructed for each participant, to identify specific background for their responses. This would be based on education, language and class/or equivalent social marker. This would be done through interviews, using semi-structured questionnaires and detailed descriptions of the participants' responses and behaviour during the discussion.

The combined analysis of ethnographic, experimental and interview data would be used to prove or disprove hypotheses, or rather, identify the attitudes to various accents, as well as the reason for these attitudes. By contextualising the participants' previous exposure to the accent and the group it comes from, their specific perceptions can be put into further context.

The findings from these studies can then be used to shape policies that aim at countering prejudice and reducing animosity between cultural groups – through the development of legal processes, and cultural sensitization programs, which will aid the processes of globalization and glocalization in a smoother fashion - which is the need of the hour in today's world as it exists,

driven by technology and constantly in cultural flux.

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