



Speaker's Accent and Perception of Speech

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Abstract

One of the issues discussed in trans-disciplinary studies of speech perception that is also in the focus of this study is the effect of speaker's accent on the perception of speech. Prior research that has mainly been conducted with participants whose L1 is English focuses on perception of "accented speech", that is, of non-native speakers, defined as the breakthrough of native language phonology into the target language [8]. The findings of these studies suggest that accented speech is often considered as less prestigious than native patterns. Drawing on previous research, this study however aims to explore how subjects whose L1 is other than English perceive and evaluate speech that is delivered by native speakers of English (with standard English pronunciation) and how this compares to the perception of speech delivered by non-native speakers (L2 English accented speech). Participants in the study were 90 first year students, whose L1 is Croatian and who are studying at the University of Zagreb. Participants (all at CEFR-B2 level in English) were randomly divided into three groups, each exposed to the same short text in English. First group was exposed to the pre-recorded text read by an English native speaker (Standard British pronunciation) whereas the other two groups were exposed to the pre-recorded text read by non-native speakers of English with a rather pronounced L2 accent: Croatian in the second group and French in the third group. Listeners' task was to judge qualities of text they have listened to regarding its clarity, appeal, reliability, and interestingness on a five point bipolar Likert-type scale. Listeners were also asked to evaluate how difficult it was for them to follow the text they have heard, as well as to evaluate their own English language proficiency level and satisfaction with own accent. Subjects' evaluations were statistically analysed and compared using ANOVA and t-tests. The obtained results show a significant difference in evaluations between the examined groups regarding all measured variables i.e. listeners evaluated the text read by the native speaker as more clear, and also more appealing, interesting, reliable and easy to follow. Our study also suggests that most participants wished to improve their pronunciation which also corroborates the assumption that L2 speakers often aspire to native-standards of speech.

Key words: *perception of speech, accented speech*

Introduction

Existing research on non-native speech accent is predominantly focused on exploring attitudes towards L2 speakers of English, that being associated with the fact that in the era of globalisation English has become a *lingua franca*, a sort of universal language used between speakers of different linguistic and cultural backgrounds. A number of studies have been performed to investigate how varieties of English are perceived by the native speakers. Results of the studies suggest that communication judgment is frequently being governed by socioeconomic and cultural stereotypes, foreign-accented speech often triggering stereotypical evaluations or prejudices on the part of native speakers of English with L2 accented speech being judged as less prestigious than native one patterns ([9]; [11]; [4]; [6]; [1]). Gluszek & Dovidio [7] provide a review of empirical studies in support of the claim that non-native accent is often subjected to stigma in perception, with FA speakers being judged as less competent, less educated, and even less trustworthy than L1 accent speakers.

Existing research shows that negative evaluations of non-native speakers are not limited to the native speakers' judgments. Fayer and Krasinski [5] found that native Spanish speakers who listened to tapes of Puerto Rican learners of English exhibited more intolerance toward non-native speech than native English speakers.

Cargile, Takai and Rodriguez [2] used verbal-guise technique to explore Japanese students' attitudes towards two US speech varieties: California (standard) English and African-American vernacular English (AAVE). Whereas no significant differences were found between the students' ratings of the speech forms in terms of social attractiveness, California speech was evaluated significantly more positively than AAVE in terms of status and correctness.



McKenzie [10] investigated Japanese university students implicit and explicit attitudes of several native and non-native forms of English speech (UK, US, Japanese, Chinese, Thai Indian). The findings of his studies also indicate unfavourable evaluations of the status of L2 English, including Japanese English. The results of the studies show that Japanese students consider US and UK English the most correct, and therefore their speakers the most prestigious, whereas they express greater levels of solidarity with speakers of Japanese English. These results are in line with the findings of studies by Pantos and Perkins [12] and Sasayama [13] who indicate that both types of attitudes can coexist.

Coupland and Bishop [3] studies of explicit attitudes towards linguistic diversity in the UK also indicate that accent types that are associated with standard speech are strongly favoured in terms of prestige and attractiveness. The effect of region is also addressed, participants favouring their own variety. A large-scale study aimed towards defining underlying reasons of inter-individual variation in attitudes towards the foreign accent has confirmed the effect of specific personality traits (Extraversion, Neuroticism and Tolerance to ambiguity) in interaction with specific linguistic and socio-biographical factors (age, gender and education level, prior and current linguistic practices: multilingualism and growing up in a ethnic diverse environment).

Aim and procedure

The aim of this research was to investigate the effect of speaker's accent (native or non-native) on the perception of the speech itself, its clarity, appeal, reliability and interestingness and easiness to follow. Participants in the study were Croatian students, aged 19-20, studying at the University of Zagreb (N=90), all at CEFR-B2 level of English. Participants were randomly divided into three groups. The experimental design consisted of presenting groups with the same text but in a different variety of English: in first group the pre-recorded text was read by an English native speaker (with Standard British pronunciation) whereas in the other two groups the same text was read by non native speakers: in the second group, the text was read by a Croatian speaker, and in the third group by a French speaker, both having a rather strong native accent.

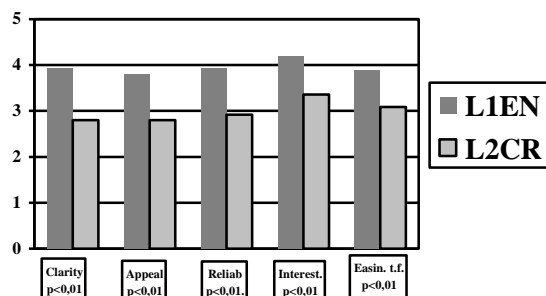
All three readings were done by female speakers aged 20 to 23, each previously selected by 3 listeners as most representative of a distinct speech variety of English. The speech samples were very similar in length, ranging between 1,28 and 1,44 minutes. Prior to listening to the reading the listeners were not informed about the topic of the text. Listeners' task was to evaluate the text regarding its clarity, appeal, reliability, and interestingness. The evaluations were made on a five point bipolar Likert-type scale. Participants were also asked to evaluate how difficult it was for them to follow the text they have heard. Listening comprehension was assessed separately through several comprehension-type questions. Participants were also asked to self-evaluate own English language proficiency and determine level of satisfaction with own accent. These evaluations were also made on five point bipolar Likert-type scales. Evaluations were statistically analysed and compared using ANOVA and t-tests.

Results

Table 1 and figure 1 show the comparison between the results achieved in the group exposed to a native speaker of English (L1E) and the group exposed to a Croatian speaker (L2CR).

Table 1. The effect of reader's accent: L1 English (L1EN) and L2 Croatian (L2CR) on perception of features of the text: its clarity, appeal, reliability, interestingness and easiness to follow.

Variables	Group	N	Mean	St.d.	t	Sig.
Clarity	L1 EN	29	3,93	0,75	5,294	0,000
	L2CR	25	2,80	0,82		
Appeal	L1 EN	29	3,79	0,73	4,451	0,000
	L2CR	25	2,80	0,91		
Reliability	L1 EN	29	3,93	0,84	4,351	0,000
	L2CR	25	2,92	0,86		
Interesting	L1 EN	29	4,21	0,86	3,281	0,002
	L2CR	25	3,36	1,04		
Easiness to follow	L1 EN	29	3,90	0,90	4,115	0,000
	L2CR	25	2,76	1,13		



Tab 1. Comparison of Means: The effect of reader's accent L1EN and L2CR

The results indicate a highly significant effect of the nativeness of speaker's accent for all four examined features: clarity ($p<0,01$), appeal ($p<0,01$), reliability ($p<0,01$) and interestingness ($p<0,01$). In other words, listeners perceived the text read by a native speaker of English to be significantly more clear, appealing, reliable and interesting than the same text read by a Croatian native speaker. They have also considered the text read by the native speaker easier to follow ($p<0,01$).

The same tendency was observed with the group that listened to a French reader (table 2, figure 2). Listeners considered the text read by a native speaker of English to be more clear ($p<0,05$), appealing ($p<0,05$) and reliable ($p<0,01$) as well as more easy to follow than the same text read by a French native speaker.

Table 2. The effect of reader's accent - L1 English (L1EN) and L2 French (L2FR) on perception of features of the text: clarity, appeal, reliability, interestingness, easiness to follow.

Variables	Group	N	Mean	St.d.	t	Sig.
Clarity	L1 EN	24	3,93	0,75	2,044	0,046
	L2 FR	29	3,46	0,93		
Appeal	L1 EN	24	3,79	0,73	2,315	0,025
	L2 FR	29	3,21	1,10		
Reliability	L1 EN	24	3,93	0,84	3,216	0,002
	L2 FR	29	3,21	0,78		
Interesting	L1 EN	24	4,21	0,86	1,707	ns
	L2 FR	29	3,83	0,70		
Easiness to follow	L1 EN	24	3,90	0,90	2,850	0,006
	L2 FR	29	3,08	1,18		

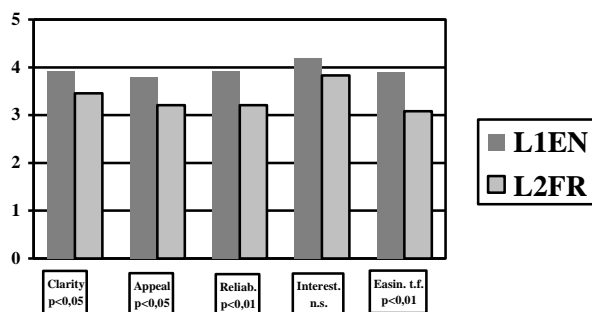


Figure 2. Comparison of Means: The effect of reader's accent L1English (L1EN) and L2 Croatian (L2CR) on perception of features of the text: clarity, appeal, reliability, interestingness, easiness to follow.



Table 3 and Figure 3 show the comparison of the results obtained in the group exposed to the reading performed by a French speaker of English (L2FR) and a Croatian speaker of English (L2CR). No significant differences were found between the two groups regarding the examined features (except for clarity).

Table 3. The effect of reader's accent: L2 French (L2FR) and L2 Croatian (L2CR) on perception of features of the text: its clarity, appeal, reliability, interestingness and easiness to follow.

Variables	Group	N	Mean	St.d.	t	Sig.
Clarity	L2 FR	24	3,46	0,93	2,634	0,011
	L2CR	25	2,80	0,82		
Appeal	L2 FR	24	3,21	1,10	1,415	ns
	L2CR	25	2,80	0,91		
Reliability	L2 FR	24	3,21	0,78	1,227	ns
	L2CR	25	2,92	0,86		
Interesting	L2 FR	24	3,83	0,70	1,864	ns
	L2CR	25	3,36	1,04		
Easiness to follow	L2 FR	24	3,08	1,18	0,982	ns
	L2CR	25	2,76	1,13		

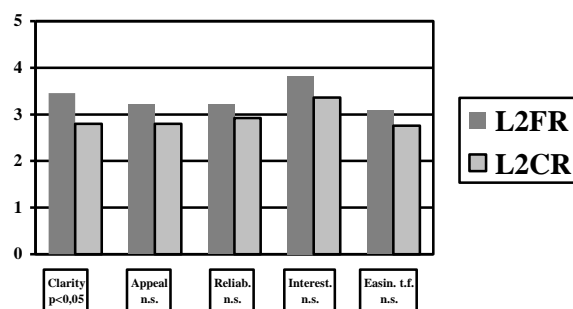


Figure 3. Comparison of Means: The effect of reader's accent L2FR and L2CR

Questions referring to self-evaluation of L2 competence and understanding of the text in question show no significant differences between the three examined groups. The results of the study also show that the students are generally satisfied with their pronunciation but also show interest in improving it.

Conclusion

The present study is, to our knowledge, first to have explored and established a link between the accent of a person who is delivering the text (native or foreign English accent) and the perception of the text itself among the population of L2 learners of English.

The results of the study show a significant difference in evaluations of the qualities of the text: its clarity, appeal, reliability and interestingness relative to the accent of the speaker (native and non-native English). Listeners evaluated the text read by the native speaker as more clear, more appealing, interesting, reliable and easy to follow.

Our study also suggests that majority of participants in spite of generally being satisfied with own pronunciation, wished to improve it. This finding corroborates the assumption that L2 speakers often aspire to native-standards of speech as found in existing research.

Further investigation is planned to study the effect of accent on perception of speech with the participants of different L1 and L2 languages.



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