EFFECTS OF IMITATION ON LANGUAGE ATTITUDES ASSOCIATED WITH REGIONAL AND STANDARD ACCENTS OF BRITISH ENGLISH

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ABSTRACT

This study investigated whether and how imitation of sentences spoken in Liverpool English (LE) and Standard Southern British English (SSBE), affected attitudes related to these accents. LE has low prestige and low social attractiveness, while SSBE has high prestige and high attractiveness. A previous study showed that imitation positively affects social attractiveness, but not prestige, for an accent with low attractiveness and low prestige. It is unclear how imitation affects attitudes for accents with high attractiveness and high prestige. For both accents, participants repeated or imitated sentences. They gave prestige and attractiveness ratings for either accent at three points: before the experiment (baseline, before participants had heard the accent) and after each repeat/imitation session. A positive effect of imitation on attractiveness was found for LE, but not for SSBE. Also, an effect of audio exposure is reported: ratings were less stereotypical after listening to sentences spoken in the accent.

Keywords: Sociophonetics, accent, imitation, attitudes, perception.

1. INTRODUCTION

Speakers tend to imitate aspects of each other's speech during conversations [1, 2]. Imitation in speech is thought to have two main roles: to streamline conversation by optimising the perceptual process [3, 4] and to increase affiliation and empathy between conversation partners [5]. Adank et al. [6] provided support for the second role by testing whether vocal imitation of accented speech affects social attitudes generally associated with speakers of that accent. They examined the effect of vocal imitation on attitudes held by participants toward speakers of a different regional accent than spoken by the participants themselves. Listening to accented speech automatically invokes social attitudes associated with speakers of that accent [7]. For instance, speakers of standard, high-prestige, accents, such as Standard Southern British English (SSBE), are perceived as more powerful, competent, and having higher social attractiveness than speakers of a regional accent [8, 9]. If vocal imitation

specifically affects listeners' perceived social attractiveness ratings of speakers with a different regional accent, then it was expected that these attitudes would be more positive after participants had imitated sentences spoken in the regional accent. Adank et al. selected Glaswegian English (GE), as it has low prestige and low social attractiveness [9]. In [6], participants performed two tasks, a repeating and an imitating task. In the repeating task, they listened to sentences spoken GE and subsequently repeated them in their own accent, without imitating the accent. Next, they completed a questionnaire probing attitudes related to the GE speaker's perceived characteristics, including social attractiveness and prestige [10]. In the imitating task, participants listened to sentences spoken by a second speaker of GE and repeated the sentence while overtly imitating. Next, they completed a questionnaire for this speaker. The results showed that ratings of the speaker's social attractiveness were more positive after the participants had imitated this speaker. This study aimed to extend Adank et al.'s study by examining the effect of imitation on prestige and social attractiveness attitudes for Liverpool English (LE) and SSBE. LE was selected as it has comparable ratings to GE in [9], that is, 31st out of 34 for prestige and 30th for social attractiveness. The SSBE accent ('Standard English' in [9]) has been rated as the most prestigious accent of the English accents spoken in the United Kingdom [9]. SSBE was ranked highest in terms of its social attractiveness, and second in terms of its prestige (the Queen's English was ranked highest). This study aimed to explore the effect of imitation on accents with higher prestige and social attractiveness than either GE or LE and therefore SSBE was selected as it has higher prestige and social attractiveness than either GE or LE.

2. METHODS

2.1. Participants

Forty-nine participants (37F, 12M) were tested with an average age of 22.6 years (range 19-33 years, standard deviation 3.6 years). All were native speakers from England, with no language impairment or neurological/psychiatric diseases, and with good hearing. Participants had all lived in Greater Manchester for at least one year. All gave

written consent and received course credit, or £5 for participating. The study was approved by the local ethics committee.

2.3. Procedure

Participants were tested in a quiet room. They completed a questionnaire to provide an a-priori, or Baseline, measurement, of their attitudes. They were asked to rate on a 1-6 Likert scale (1: speaker does not at all conform to the trait, 6: speaker conforms very much to the trait) a total of 17 items (description given below) for Received Pronunciation/BBC English, SSBE, Manchester, Liverpool, Birmingham, Newcastle, Glasgow, Edinburgh, Belfast, and Bangor. These accents were included to avoid biasing participants towards LE and SSBE. LE and SSBE results were analysed. The Baseline session was included to establish the attitudes without audio exposure to the accents.

Participants took part in two Repeat and Imitate sessions: one of each for SSBE and one of each for LE, with 48 sentences per session. The order of the Repeat and Imitate sessions, accents, and the order of the speakers per accent were counterbalanced. The same 96 sentences were used for both accents.

Following [6,11], in the Repeat session, participants were instructed to listen to a sentence and then to reproduce it in their own accent. They were explicitly instructed not to mimic the speaker's accent. In the Imitate session, participants were instructed to mimic vocally the precise pronunciation of the sentence. If participants produced the sentence in their own accent without mimicking the accent, they were instructed to attempt to imitate the accent as they heard it spoken. Participants received no feedback other than the experimenter's reminders to keep imitating (in the Imitate sessions) or avoid imitating (in the Repeat sessions) as described above. Prior to the Repeat and Imitate sessions (whichever session came first), participants performed a familiarisation session in which they repeated 10 sentences from a 21 year-old male speaker from Manchester whose recordings were not included in the main experiment.

After each Repeat or Imitate session, participants were asked to rate their impression of the speaker on 17 personality traits, using an attitudes questionnaire, which was adapted from [10] and also used in [6]. [10] developed this questionnaire to examine accent attitudes of New Zealand participants towards different accents of English (New Zealand, Australia and Northern America). The original questionnaire consisted of 22 traits: five were voice quality traits (powerful voice, strong voice, educated voice, pleasant voice, attractive voice), 13 were personality traits (controlling,

authoritative, dominant, assertive, reliable, intelligent, competent, hardworking, ambitious, cheerful, friendly, warm, humorous), and four were status items (occupation, income, social class, education level). The voice quality items and the personality items consisted of Likert-scale questions, asking participants to rate the extent to which the speaker conformed to the trait, while the four status items were set up as open questions. Only the personality and status items were included in the present experiment. The status items were set up as a Likert-scale in analogy with the personality items. The voice items were omitted to make comparison with the Baseline judgments more straightforward. As for the Baseline judgments, participants rated each trait on a scale between 1 and 6. Participants completed this impressions questionnaire five times: once after the Baseline, once after the Repeat session and once after the Imitate session for both accents. They were asked to rate their impressions of each speaker. Post-experiment debriefing ensured that participants were unaware of the experimental aims. The total duration of the experiment was 55 minutes.

3. RESULTS

The average ratings for the 17 individual traits for both accents for the Baseline, Repeat, and Imitate sessions were pooled into the composite ratings Prestige and Social Attractiveness (Figure 1) as follows. Thirteen traits were classified into Prestige (controlling, authoritative, dominant, assertive, reliable, intelligent, competent, hardworking, ambitious, educational level, income, occupation, social class) and four into Social Attractiveness (cheerful, friendly, warm, humorous).

A 2 (Accent: SSBE or LE) × 3 (Task: Baseline, Repeat, Imitate) repeated-measures analysis of variance (ANOVA) was conducted on the average composite ratings for Prestige and Social Attractiveness separately. Results were Huynh-Feldt-corrected for non-sphericity where necessary, and corrections for multiple comparisons were applied [12]. For Prestige, main effects were found for Task (F[1.783,85.575]=8.793 $p<.001$, η^2_{part}=.16), Accent (F[1,48]= 147.810, $p<.001$, η^2_{part}=.76), and the Task×Accent interaction was also significant (F[2,96]=15.944, $p<.001$, η^2_{part}=.25). For Task, planned t-tests verified that Prestige ratings were higher for Baseline than for Repeat and Imitate, while there was no difference between Repeat and Imitate. Planned t-tests for Accent verified that Prestige ratings were higher for SSBE than LE for all tasks.

Next, the ratings were split by accent. For SE, Prestige ratings were higher for Baseline than for

Repeat and for Imitate, but no difference was found between Repeat and Imitate ratings. For LE, no significant differences were found for Prestige across the three tasks. For Social Attractiveness, main effects were found for Accent (F[1,48]=17.990, $p<.001$, $\eta^2_{part}=.27$) and Task × Accent (F[1.734, 83.224]=6.305, $p<.001$, $\eta^2_{part}=.12$), while no effect was found for Task (F[1,48]=1.480, $p=.233$, $\eta^2_{part}=.03$). For Accent, planned t-tests verified that ratings were lower for SSBE than LE for Baseline. Also, there was no difference between Repeat SSBE and LE and Imitate ratings were lower for SSBE than LE. For SSBE, Social Attractiveness ratings were lower for Baseline than Imitate, but no significant differences were found for Baseline and Repeat, and Repeat and Imitate. For LE, ratings were higher for Baseline than Repeat and Imitate, and Social Attractiveness ratings were lower for Repeat than for Imitate.

FIGURE 1: Average ratings for SSBE and LE per task and attitude (error bars represent 1 SE of the mean).
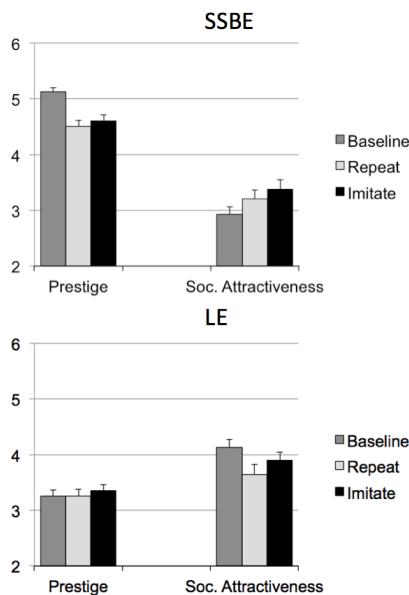
Finally, the ratings were collapsed for the two conditions in which participants received audio exposure: Repeat and Imitate ratings were pooled into the single factor Exposure (Figure 2) and compared to the rating for the Baseline session, in which no sentences were played. A 2 × 2 repeated measures ANOVA with Exposure (Baseline and Exposure) and Attitude (Prestige and Social Attractiveness) as factors was repeated on the average ratings per participant for both accents. For SSBE, significant effects were found for Attitude (F[1,48]=185.284, $p<.001$, $\eta^2_{part}=.79$) and the Exposure × Attitude interaction (F[1, 48]=43.129, $p<.001$, $\eta^2_{part}=.47$), while no effect was found for

Exposure (F[1,48]=2.154, p=.149, $\eta^2_{part}=.04$). Planned t-tests verified that Prestige ratings were lower after exposure to SSBE, while Social Attractiveness ratings were higher for Exposure. For LE, effects were found for Attitude (F[1,48]=20.717, $p<.001$, $\eta^2_{part}=.40$) and the Exposure×Attitude interaction (F[1, 48]=7.746, $p=.008$, $\eta^2_{part}=.14$), but no Exposure effect was found (F[1,48]=1.570, $p=.216$, $\eta^2_{part}=.03$). Planned t-tests showed that LE Social Attractiveness ratings decreased after exposure, while no effect on Prestige was found.

FIGURE 2: Average ratings for SSBE and LE before audio exposure (Baseline) and after exposure to the accent (Exposure: Repeat and Imitate).
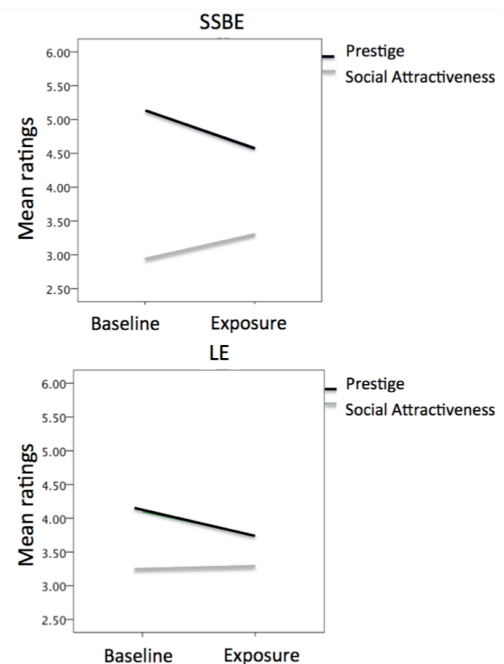
4. CONCLUSION

The results of the experiment replicated those of Adank et al. [6], who found a positive effect of imitation on social attractiveness judgments for GE. Here, participants judged LE speakers as having higher social attractiveness after imitating than after repeating. However, note that this effect appears to be smaller than for GE in [7]. No sentences were presented in Glaswegian in the present experiment, so it is not possible to directly compare attitudes related to the two accents. However, ratings for GE were collected when participants completed the a-priori questionnaire in the Baseline phase of the experiment. A quick survey revealed that composite Prestige ratings for Glasgow were higher than the Liverpool ratings (verified using a series of planned t-tests, all $p<.05$), while there was no difference

between the ratings for Social Attractiveness for LE and GE. No differences were found between ratings for the Imitating and Repeat phases for SSBE. This null result could be due to the possibility that imitating only affects specific attitudes for non-standard, relatively low-prestige, regional accents, such as Glaswegian and Liverpool English [9]. The ratings for the Prestige attitude found to be lower for LE than for GE, while the Social Attractiveness ratings were higher for LE than for SSBE.

The ratings for SSBE may have been affected by the presence of LE. It has been argued that language attitudes result from two sequential cognitive processes: identification and stereotyping [7]. In the identification stage, listeners use speech cues such as a speaker's accent to guess a speakers' social group membership(s), e.g., ethnicity, socioeconomic status. Next, listeners attribute to speaker's stereotypic traits associated with those (inferred) group memberships in the stereotyping stage. [7] also suggest that language attitudes result from a social categorisation process and may thus be affected by contextual aspects such as the presence of other accents. The fact that participants were presented with two accents in the within-subjects design in the present study may thus have affected judgments. Earlier work on language attitudes has shown that prestige ratings become more favourable in studies in which speakers of a standard accent are compared directly with speakers of a non-standard accent [13]. Here, no direct comparisons were made between tokens of recordings of speakers or regional and standard accents in the Repeat and Imitate phases, but participants were presented with regional and standard speakers in the successive Repeat and Imitate phases of the experiment. However, as the experimental design was counterbalanced with respect the order of accents, speakers per accent, and tasks (Repeat or Imitate), only half the speakers will have heard the SSBE speaker after the LE speaker.

The results of the three tasks showed shifts in ratings for both accents after the Repeat and Imitate sessions, during which participants heard sentences spoken in the accent, compared to the Baseline session, during which no audio exposure was provided. For SE, Prestige ratings showed a downward trajectory between Baseline and the Exposure phases. Prestige ratings were lower after Repeat and Imitate phases than after the Baseline phase. The reverse pattern was found for Social Attractiveness: ratings increased after having heard SSBE speech in the Imitate phase. For LE, the pattern is less clear. There was no effect of exposure on Prestige ratings, while Social Attractiveness ratings decreased after exposure. The overall shifts in the pattern (with the exception of the Prestige ratings for LE) can be interpreted as that ratings became less typical of patterns in Prestige and Social Attractiveness associated with standard and regional accents. Prestige ratings decreased and Social Attractiveness ratings increased for SSBE, while the opposite pattern was observed for LE: Social Attractiveness decreased. Overall, the attitudes displayed in the Baseline phase appeared more stereotypical (e.g., higher Prestige judgments for SSBE in the Baseline phase) than those made after exposure to accented speech. In sum, the experiment showed a positive effect of imitation on Social Attractiveness judgments for LE, and demonstrated that attitude ratings obtained without audio exposure appeared more stereotypical than ratings obtained after audio exposure

5. ACKNOWLEDGEMENTS

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