

WHO SOUNDS BETTER?

Dutch Perceptions of Dutch, British, and French Accents in Spoken English

by

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Abstract

Studies have shown that accents are more than just phonetic variations and can deliver specific social impressions of the speaker to the listener, whether it be conscious or not. This thesis investigates if there is a variation in perception by Dutch native speakers when hearing the Dutch, British, and French accent in English. The assumption is that the Dutch accent should receive the lowest ratings in competence and friendliness, while the British or French accent should be rated the highest depending on whether the quality of English or the prestige of the language will be considered. The participants took part in an online survey and had to rate these accents based on different social properties: competence, status, and friendliness. Furthermore, the participants' age, gender, first two digits of their postcode and self-rated English proficiency were collected. After using a linear mixed-effect model (LMM), the results indicated several statistically significant differences in ratings across accents. While the British accent was rated highest for competence and lowest for friendliness, the Dutch accent had opposite ratings. The French accent remained second across all attributes. The findings agree with previous literature regarding Dutch speakers rating their own accent lowest in terms of competence.

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1. Introduction

It has long been observed how rapidly individuals form social impressions the moment a speaker begins to talk, whether it be based on tone, style or accent (Baus et al., 2019). These impressions frequently depend more on these features than on the content itself. This thesis investigates whether Dutch listeners assign lower prestige to Dutch-accented English through a comparison with British English and French-accented English; leading to the following research question: To what extent does perception of Dutch, British English, and French accents in English influence Dutch listener's perception of the speaker? The French accent was selected for this study as it is a non-dominant language in the Netherlands, unlike English or Dutch, both of which are prevailing languages in the country. Furthermore, French is known for having a certain prestige and it is yet to be seen if listeners will link French accent with higher status or if participants will prioritize the quality of English, in which case British English is expected to receive the highest evaluating rating. To answer this question effectively, several topics should first be examined. Consequently, the introduction is organized into four different sections: first, an analysis of the factors that shape perception of various accents; second, an exploration of the consequences of such perceptions on the speaker; third, a discussion of accents within the Dutch community, focusing on how speakers are perceived both internally and externally; and finally, a small guide identifying phonetic features that differentiates these three different accents in English.

1.1. Accent and perception

Evidence that foreign accents can reflect a negative view on the speaker, whether it be in competence or friendliness. For example, Mauchand and Pell (2021) investigated how French accent cues influence listeners' perceptions of a speaker. Using a questionnaire and a modified Implicit Association Test on Québécois and French participants the authors compared implicit versus explicit results. Results showed that French participants had a French-biased score compared to Québécois participants who did not show any biases. In explicit results, French speakers were rated less warm and more competent than Québécois speakers. The authors concluded that accent familiarity forms the asymmetric implicit bias and that social status and moral norms shape the stereotypes; suggesting that multiple mechanisms form the basis of accent-based intergroup attitudes.

However, accents are not binary but can be classified on a spectrum, and the degree of phonetic variation can influence judgements of a speaker in different ways. Hendriks et al. (2017) investigated how three different degrees of Dutch accentedness affect the listener's

perception of the speaker in English, French, German and Spanish. The results show that listeners distinguish the different accent levels in their L1 but not in English. Strong Dutch accentedness lowered the overall ratings and the speakers were perceived as less friendly. Thus, non-native speakers of English have a higher tolerance for Dutch accents than for their native language.

Furthermore, non-native accent intelligibility, meaning how understandable the language is, plays an important role when attributing qualities to the speaker such as professionalism, intelligence, resourcefulness, empathy, and patience (Fuse et al., 2018). The more intelligible the speech is, the more likely the listener will attribute positive opinion towards the speaker. According to Lev-Ari & Keysar (2010), this is not as much a prejudice towards an accent but rather it is due to cognitive fluency: the extra effort our brain requires to process information from a non-native speaker negatively affects the credibility of the message and the messenger.

While processing difficulties may explain cognitive biases, the perception of accents is also embedded in social structures. The sociologist Pierre Bourdieu (1991) formulated the argument that language can act as a form of social capital. An accent can be more than a phonetic variation: an embodied cultural capital, where specific languages and accents are more valued than others, depending on the social context. For instance, Bresnahan et al. (2002) demonstrated that listeners would have harsher judgements on teachers with accents than friends with accents, due to existing expectations of institutions. Additionally, American English was judged the most prestigious variety, as it was given higher value than other English accents even when the other English accents were clearly understandable.

1.2. The price of an accent: discrimination and identity

These biases, even unconscious, are not without consequence for the listener. Freynet, Collins, and Clément (2020) explore the repercussions of accent discrimination, examining how it predicts psychological misadjustments among French-speaking minorities in Canada. Through online questionnaires completed by undergraduate French speakers, the authors found that discrimination was positively associated with daily language hassles, such as interacting with speakers with different accents, for those who have a weaker francophone identity. These findings emphasize the need of challenging the perceived legitimacy of accent bias for resilience in minority language communities.

These necessities are further enhanced in the work of Mostefa-Boussena (2026), who demonstrates how Algerian students with strong French proficiency have trouble integrating

into Francophone institutions in Montreal. Moreover, the author examines how these inequalities arise from intersectional factors. The paper finds that linguistic features alone don't fully account for social exclusion; cultural misalignment and institutional gaps also play an important role in the integration process. As a result, Algerian students develop coping strategies, such as accent modification, in order to better fit in. The author suggests solutions to these disadvantages such as policies and increased awareness of this phenomenon, to reduce social exclusion. Similarly, Evans and Iverson (2007) also highlighted a mismatch between linguistic similarity and social outcomes. Through their investigation of changes in vowel production and perception among university students in the north of England, the authors found that Northern English speakers altered their speech toward Standard Southern British English to facilitate their integration into the institution's community.

Even though accent discrimination could be seen as just an implicit bias or stereotyping; it has been proven that it is also used as a tool to discriminate a specific group of people. It can be used as a "mask", to hide racism as it appears more professional and less of a personal attack (de Souza et al., 2016). While these prejudices might serve to exclude groups, groups themselves also explicitly make use of them as a marker of belonging.

1.3. Dutch accents and self-perception

Within the Dutch community, accents are fundamental to identity construction and social dynamics. An example of such accents is the Moroccan one, also called Moroccan flavored Dutch (MFD), that has spread among the younger generations regardless of their ethnic backgrounds (Nortier & Dorleijn, 2008).

Interestingly, there is also a discrepancy between how Dutch speakers perceive their own Dutch accent versus how others perceive it. In an experiment by Neijari et al. (2020), German, Spanish, and Singaporean listeners had to rate the Dutch, British, and American English accents. Their findings revealed that they rated the status of Dutch accent higher than the British or American accent, with actually a preference for the Dutch accent. In a following experiment also conducted by Neijari et al. (2021), Dutch participants were asked to rate those same three accents. Their results show that Dutch listeners gave their own Dutch accent a lower status compared to British and American English. This suggest that Dutch people don't consider a Dutch accent to be native English enough, thus are harsher when it comes to rating status. Nevertheless, as these findings were taken from a professional context, the results may be different if taken within an informal setting.

1.4. Differentiating Dutch, French, and British accents in English

Dutch-accented English can be recognized through several phonetic features with one of them being syllable-final obstruent devoicing. Furthermore, the English [ɹ] is often guttural ([ɣ]) or rolled ([r]) when pronounced with a Dutch accent and they can make use more of the sound /w/ instead of /v/, which can make words like [vaɪn] sound like [waɪn] (Collins & Mees, 2003). When it comes to vowels, English has more of them than Dutch which can lead some English vowels to be pronounced as closely related the can be from an existing Dutch vowel. For example, the [æ] sound in English can be pronounced as /a/ or Dutch speakers can make short and long vowels sound too similar (Collins & Mees, 2003). Finally, the phonemes /θ/ and /ð/ get replaced with the sounds [t] or [d] as the Dutch language lacks this sound (Neijari et al, 2012).

Another language that lacks the /θ/ sound is French, but not only can the speakers replace it by the sounds /t, d/ but also by /z, s/ depending on the speaker's regional origin. Additionally, French does not have the sound [h] like English does and [h] will therefore be silenced; for example, [hæpi] will become [æpi]. They will also make use of the French [ɣ]. French is also a syllable-timed language where primary stress falls on the last syllable of a word which when carried out to English, creates a flat word stress (Kehoe, 2022).

Finally, Standard Southern British English can be identified by its non-rhoticity, where the English rhotic /ɹ/ disappears when it is followed by a consonant or is situated at the end of a word; for instance, the word [wɔ:təɹ] can be pronounced [wɔ:tə] (Collins & Mees, 2003). Another feature is the replacement of the sound /t/ by a glottal stop /ʔ/, and overall British English makes a clear distinction between short vowels and long diphthongs (Jones, 2011).

For this thesis, these accents were realized by Dutch native speakers. Even though, the speakers are not native French or British, throughout their education they have learned at least the basics of the French and English language and were able to reproduce them. This matched guise method for (non)-native English accents is supported by the research paper of Neijari et al. (2019), who demonstrated that it is possible to use non-native speakers to mimic native accents convincingly.

2. Methods

2.1. Participants

13 adult participants with no difficulty hearing or understanding speech were recruited online through random sampling. The participants were required to be native speakers of Dutch with, if possible, no background in linguistics. Based on the first two digits of their provided postal codes¹, most of the participants ($n = 7$) were situated in Amsterdam Center/West, followed by 3 participants in Almere, and 1 participant for Amsterdam Surrounding Area, Nijmegen and Emmeloord. Their English proficiency was measured at the beginning of the questionnaire (see [Section 2.3](#)). This self-rating measure has been successfully used and validated in the study by Neijari et al. (2021). Furthermore, listeners needed to have an educational level of undergraduate or higher (bachelor, master, and PhD) as to ensure that the participants did not have a limited language ability to understand the stimuli that were presented to them².

2.2 Stimuli

The stimuli consisted of 27 audio files, each lasting approximately one minute and realized by three different speakers. All stimuli were recorded by male speakers. This control measure was implemented to avoid potential biases related to gender, thus ensuring that the potential differences in perception are more reliable and related to accent. These speakers had to read three different contexts, each in the three different accents, resulting in nine audio files per speaker. The scripts for the audio files describe a certain place or service and all information was gathered on the internet (see Appendix 1 in [Section 7.1](#)). These topics were chosen as they are purely descriptive and do not involve the speaker's opinion, which could have led participants to judge the speaker's beliefs. More details about the context, accents and speaker can be found in **Table 1** below.

¹ In the Netherlands, a postcode identifies a relatively large geographical area. Hence, using postcodes was deemed to strike a reasonable balance between being specific and respecting the participant's anonymity (cf. Pinget and Voeten, 2023)

² <https://www.ef.com/wwen/epi/>

Table 1*Stimuli Variables and Descriptions*

Variable	Label	Description
Context	Context A	Describe the Rijksmuseum to tourists
	Context B	Describe the library in a university
	Context C	Describe the train services in the Netherlands
Accent	Accent 1	Dutch accent
	Accent 2	French accent
	Accent 3	British English
Speaker	Speaker X	Age: 21; language profile: Dutch native speaker, fluent in English (C2) and good French proficiency (B1).
	Speaker Y	Age: 52; language profile: Dutch native speaker, fluent in English (C2) and A1-level French.
	Speaker Z	Age: 21; language profile: Dutch native speaker, fluent in English (C2) and basic French proficiency.

The speakers were asked to record themselves, reading the scripts as written, following several conditions: they had to record in a quiet room so that no background noise could be heard, they couldn't make use of any filled pauses (eg. "ah", "um"...), their rhythm of speech had to be consistent through all sound files along with the volume, and ensured that each file was approximately one minute in length.

2.3 Procedure

The experiment took place online through a questionnaire that was sent to the participants. Before starting the questionnaire, participants had to read the information brochure regarding the experiment and sign a consent form by clicking on a box. Next, they answered the first part of the questionnaire regarding their personal information. They were asked to provide their age, gender, educational level, English fluency, and confirm that they are L1 (first language) Dutch speakers. Their English language skills which consisted of reading, writing, listening, and speaking were self-rated with a 5-point Likert scale (1: very low; 2: low; 3: average; 4: high; 5: like a native speaker). Following Neijari et al. (2020), they had to get a minimum combined average of all four skills of 3/5 for their data to be collected. Furthermore, they were asked to provide the first two digits of their postal code.

The second part of the experiment contained three different 1-minute-long fragments of accented English speech: one with Dutch-accented English, another one with French-accented English, and finally a third one with British English. After each audio recording, the listener had to first identify the speaker's potential country of origin to ensure the accent was correctly recognized. Secondly, they had to rate certain aspects of the audio and the speaker which consisted of the comprehensibility of the speaker and the recording, the status, the competence and the friendliness. Impressions of the speaker were introduced by the statement "In my opinion, this person is/has..." followed by different items. Participants also had to grade the comprehensibility of the speaker and recording. The statements were taken from the study by Hendriks et al. (2017) and were regrouped in the **Table 2**.

Table 2

Items and Statements for the Different Categories

Category	Items/statements
Status	"controlling, authoritative, dominant, a strong voice, assertive"
Competence	"reliable, intelligent, competent, hardworking, an educated voice, ambitious"
Friendliness	"cheerful, friendly, warm, humorous"
Comprehensibility of speaker	"I find this speaker difficult to understand"
Comprehensibility of audio	"I find this recording difficult to understand"

Furthermore, as used in the methodology of the experiment by Hendriks et al. (2017), all statements were rated on a 6-point Likert scale, ranging from 1: totally disagree to 6: totally agree. The complete questionnaire can be found in Appendix 4 (see [Section 7.4](#)). Six different combinations of the three variables, presented in **Table 3**, were randomly assigned to the participants.

Table 3*Assignment of Stimuli Conditions*

Set	Fragment about the Rijksmuseum	Fragment about the library	Fragment about the train services
1	CA, A1, Sp.X	CB, A2, Sp.Y	CC, A3, Sp.Z
2	CA, A1, Sp.Z	CB, A3, Sp.Y	CC, A2, Sp.X
3	CA, A2, Sp.Y	CB, A1, Sp.Z	CC, A3, Sp.X
4	CA, A2, Sp.Z	CB, A3, Sp.X	CC, A1, Sp.Y
5	CA, A3, Sp.X	CB, A1, Sp.Y	CC, A2, Sp.Z
6	CA, A3, Sp.Y	CB, A2, Sp.X	CC, A1, Sp.Z

(Key: C = Context, A = Accent, Sp. = Speaker)

2.4 Data analysis

To evaluate the effect of accent group, the data collected was analyzed using the linear mixed-effects model (LMM) in R Statistical Software (v4.5.1; R Core Team, 2026) via the “lme4” package (Bates et al., 2015). The LMM included the listeners’ rating of each recording in terms of status, competence, and friendliness as the response variable, while the three accents (British, French, and Dutch) were included as categorical predictor variables, along with the response and predictor variables’ interaction. Deviation coding was applied for both predictors, with French and status being omitted from the regression output and coded as -1 . The initial model attempted to include maximal random effects, including random slopes for both subject and items. However, due to model convergence failure, the random effect was simplified and the random slope for the scales removed. Prior to modeling, the data was reshaped from a wide format to a long format and then the files combined by using the “tidyverse” package (Wickham et al., 2019). Degrees of freedom and p -values were obtained through the “lmerTest” package (Kuznetsova et al., 2017) and due to the small sample size the Kenward-Roger approximation via the “pbkrtest” package (Halekoh & Højsgaard, 2014) was used. For the visualization of the data, boxplots were made using the “ggplot2” package (Wickham, 2016).

3. Results

3.1. Descriptive statistics

Table 4 below represents the listeners’ average age, sex, self-reported English fluency and educational level. All listeners had a self-reported English fluency mean of at least 3/5 or higher, so all participants who completed the survey could be included in the data analysis.

Table 4*Mean of Listeners Age, Gender, Self-Reported English Fluency, and Education Level*

Characteristic	Listeners (N = 13)
Mean Age:	36 (Min = 18; Max = 54)
Male: Female:	54% 46%
Mean self-reported English fluency:	3.92
Undergraduate: Bachelor: Master: Doctorate:	46% 31% 23% 0%

The means and standard deviations for the incomprehensibility of recordings are represented in **Table 5**. Overall, the ratings were low (below average), meaning that the recordings were understandable, with British recordings being the easiest to understand and French recordings the hardest. As the sets were randomly assigned and a few participants dropped out, set 2 never received complete responses. Thus, instead of analyzing nine recordings from each speaker, only eight were included in the final analysis, resulting in a dataset of 24 audio files after data collection.

Table 5*Mean Incomprehensibility of Recordings*

Accent	Mean incomprehensibility (SD)
British	1.61 (1.19)
French	2.23 (1.09)
Dutch	1.76 (1.09)

Table 6 represents the means and standard deviation for the incomprehensibility of the speakers. Overall, the ratings were also quite low (below average), meaning that the speakers were easy to comprehend with speaker X being the easiest to understand and Speaker Z the hardest.

Table 6*Mean Incomprehensibility of Speakers*

Speaker	Mean incomprehensibility (SD)
Speaker X	1.84 (1.14)
Speaker Y	2.00 (0.81)
Speaker Z	2.07 (0.95)

Table 7 represents the number of times each accent has been correctly recognized by the listeners, with a total of 28/39 recordings correctly recognized. The British accent has a very low score with only four correct identifications out of thirteen compared to French and Dutch who were only once recognized incorrectly. The British accent was often not recognized or interpreted as a Dutch accent, and even once as a German accent. One respondent thought the French accent was spoken by a person from Belgium. This was also considered correct as it is also one of the official languages of the country³.

Table 7*Total Recordings with Accent Correctly Recognized*

Accent	Correctness
British	4/13
French	12/13
Dutch	12/13

3.2. Regression Analysis

All means and standard deviations for all three accents in all three scales were regrouped in **Table 8** below.

³ <https://www.fedasilinfo.be/en/belgium-has-3-languages>

Table 8*Status, Competence, and Friendliness Mean per Accent*

Accent	Scale	Mean	SD
British	Competence	4.37	0.85
	Friendliness	3.19	0.79
	Status	3.60	1.26
Dutch	Competence	3.56	0.95
	Friendliness	3.63	1.01
	Status	3.34	0.97
French	Competence	3.76	0.90
	Friendliness	3.52	1.00
	Status	3.48	1.15

The means indicate that the British accent received the highest Status ($M = 3.60$), followed by the French accent ($M = 3.48$) and the Dutch accent ($M = 3.34$). The means for Competence also place the British accent as the highest ($M = 4.37$), followed again by the French accent ($M = 3.75$), and then by the Dutch accent ($M = 3.56$). Finally, the means for Friendliness differ from the two other scales. As it can be observed in the table, the Dutch accent has the highest rating ($M = 3.63$), followed by the French accent ($M = 3.51$) and then by the British accent ($M = 3.19$).

To evaluate whether the data and variations across the variables were statistically significant, the data was analyzed through inferential testing. The fixed-effect estimates ($\hat{\beta}$), standard errors (SE), t -values with the degrees of freedom (df) and the p -values from this model are presented in **Table 9**.

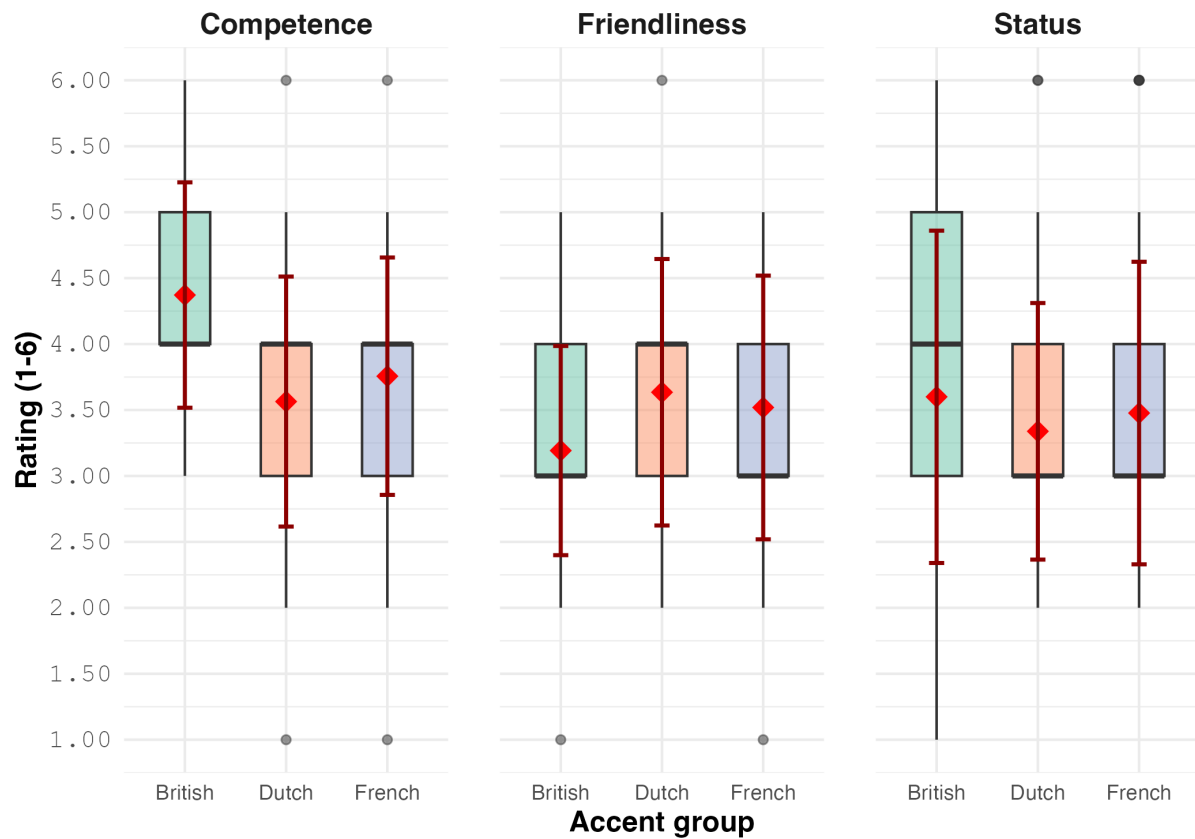
Table 9*Linear Mixed-Effect Model Representing Evaluation Scores*

Predictors	$\hat{\beta}$	SE	<i>df</i>	<i>t</i>	<i>p</i>
Intercept	3.61	0.09	12.11	38.19	< .001
British	0.12	0.09	12.25	1.29	.222
Dutch	-0.09	0.06	12.53	-1.52	.155
Competence	0.29	0.05	540.00	5.57	< .001
Friendliness	-0.16	0.06	540.00	-2.72	.007
British × Competence	0.36	0.07	540.00	4.85	< .001
Dutch × Competence	-0.24	0.07	540.00	-3.24	.001
British × Friendliness	-0.37	0.08	540.00	-4.54	< .001
Dutch × Friendliness	0.28	0.08	540.00	3.42	< .001

The LMM revealed that the overall mean rating across accents and scales was 3.61 (SE = 0.09, $t(12.11) = 38.19$, $p = <.001$). From this baseline, there were no statistically significant main effects for the accents as p -values were above .05; meaning that the scores for British (SE = 0.09, $t(12.25) = 1.29$, $p = .222$) and Dutch (SE = 0.06, $t(12.53) = -1.52$, $p = .155$) did not significantly deviate from the overall mean. In contrast, competence ratings (SE = 0.05, $t(540.00) = 5.57$, $p = <.001$) and friendliness (SE = 0.06, $t(540.00) = -2.72$, $p = .007$) ratings were statistically significant. Furthermore, the interactions between accents and scales were highly significant, revealing a clear difference in how accents were perceived. For British speakers there was a significant positive interaction with competence (SE = 0.07, $t(540.00) = 4.85$, $p = <.001$) and then a significant negative interaction with friendliness (SE = 0.08, $t(540.00) = -4.54$, $p = <.001$). The opposite for Dutch can be seen with a significant positive interaction with friendliness (SE = 0.08, $t(540.00) = 3.42$, $p = <.001$) and a significant negative interaction with competence (SE = 0.07, $t(540.00) = -3.24$, $p = .001$).

Figure 1

Perceived Competence, Friendliness, and Status Across All Three Accents



(Key: Red diamonds = Means; Red error bars = Standard Deviation, Black whiskers = Range)

The boxes represent the interquartile range (IQR), with the thick horizontal lines indicating the median ratings. Red diamonds indicate the group means, and the thick red error bars represent ± 1 standard deviation from the mean. Outliers are plotted as individual grey dots. The visual distribution highlights British accent as being rated the highest in competence and status but lowest on friendliness, while the Dutch accent displays an opposite pattern. The French accent in all three scales is always rated second.

4. Discussion

The main objective of this study was to evaluate how speaker accents influence listeners judgments across different social dimensions. After running the LMM, the results revealed a significant difference on the perception of the British and Dutch accented speech across the competence and friendliness scales.

Specifically, the British accent scored noticeably higher on the competence scale but dropped by more than a point on average on the Friendliness scale. The Dutch accent showed the opposite results, achieving high scores on the friendliness scale and slightly lower scores on the competence scale. For the status scale the British accent got slightly higher ratings than the Dutch accent. As deviation coding was utilized, the French accent along with the status scale were omitted from the regression output. Nonetheless, their effects can still be calculated as the negative sums of the coefficients. Evaluations of the French accent remained stable (second) through the different scales, unlike the British and Dutch accent, it didn't get extreme high or low scores, meaning that its ratings stayed close to the overall average.

4.1. Implications

These findings provide support for the study by Neijari et al. (2021) where Dutch native speakers rated Dutch-accented English in terms of status (which includes competence), lower than British English. Similar patterns can be observed in this research as competence is rated the lowest for the Dutch accent, even though the context was more informal and only descriptive. However, Neijari did not find any main effect for affect (friendliness). In another study by the same authors, Neijari et al. (2020), nonnative Dutch speakers gave significantly higher ratings when it came to friendliness. Together, these findings suggest that while a Dutch accent in English triggers a specific stigma among Dutch native speakers regarding competence and status, the bias does not extend to social attractiveness. It suggests that while non-native English accents can sound warm and approachable, they do not carry the same professional authority as native English accents such as British or American English. These differences in ratings depending on the scale prove that listeners don't just perceive an accent as entirely good or entirely bad. Instead, an accent triggers very specific, independent stereotypes depending on what the listeners are asked to judge. Interestingly, even though the British accent was not correctly recognized by many, it still received a very strong and distinct rating compared to the Dutch and French accents. This suggests that phonetic features, more than cultural aspects of the accents, were rated, and that this evaluation was performed, specifically with the British accent, via an unconscious bias.

The French accent ratings, however, remained constant across all different social impressions. It was rated higher than the Dutch accent for status and competence and higher than the British accent for friendliness. In sociolinguistic research, it has been proven that foreign accents are often penalized (Lev-Ari & Keysar, 2010). In this case, French seems to be an exception, allowing it to maintain a good level of professionalism as well as friendliness. It suggests that unlike the two other accents, the French accent bypasses these differences in ratings, due to cultural prestige. According to Bourdieu (1991), certain accents are viewed as prestigious not because of their linguistic features but because of their cultural capital which includes symbolic power, wealth, and historical influence in areas such as in art or education. Thus, the idea that French-accented English is socially advantageous could be hypothesized, which could explain the results obtained.

The educational system in the Netherlands has always taught French, German and English in secondary schools. Since the 1980s, the English language has become more prominent in society and has been increasingly prioritized over the years over other languages taught in schools (Michel et al., 2021). The changes in the educational system may reflect the study's findings, as the high competence ratings for the British accent could be an indication of the growing prominence of English within the Dutch culture. French and other languages have become optional for students and are therefore less used on a day-to-day basis compared to English, where out-of-school exposure has become enormous.

4.2. Limitations

A primary restriction of this study is the sample size, as the dataset only includes a total of 13 participants. Even though there were statistically significant results, allowing a generalization of the outcomes, it brings into question if it is adequately representing the population. Furthermore, the spoken stimuli presented some flaws. As the study did not employ native speakers to rate and validate each accent, the production of these accents, especially the British one was not entirely successful. Answers from the participants about whether they could correctly guess the origin of the speaker revealed that the mimicry of the British accent was imperfect. The very low rate of correct identification, combined with one participant explicitly writing that the speaker sounded like a native "Dutch with a British accent", reinforces the assumption that the British accent was not accurate enough, allowing participants to identify the speaker's true Dutch origin.

Finally, during data collection a lot of survey submissions were incomplete. I received feedback from a participant mentioning that the platform was an issue, as participants had to wait for 10 to 20 seconds for the survey to load on their browser. Due to these dropouts, set 2 was never successfully completed and due to random assignments of the six different sets, there was an insufficient distribution of set 2. As set 2 was composed of three recordings that were not used in any other sets, only eight recordings from each speaker were evaluated by the participants and included in the analysis, instead of the nine originally planned.

4.3. Future research

Future studies should include larger samples from more diversified geographical locations, to see if any links between regions and ratings can be made and to be able to confirm and generalize the findings made of this study. Additionally, future online experiments could employ strategies to prevent dropouts and ensure an even distribution such as changing the platform used for the creation of the survey or adding a progress bar to it. Moreover, the authenticity of the accents should be pre-validated by native speakers to ensure that the ratings are based on the correct accents (Neijari et al., 2019). In relation to the discovery made with the British accent, unconscious biases is an area that could be further explored in future research. For instance, future studies could manipulate phonetic or intonational features to determine which linguistic cues trigger specific sociological judgments of the speaker, even when the accent is shown to be imperfect. Furthermore, researchers should include both male and female speakers across stimuli to investigate how gender interacts with accent-based stereotyping, as a study by Ghosh et al. (2023), have demonstrated that gender can alter how accents are evaluated.

5. Conclusion

This thesis set out to investigate if Dutch native speakers would perceive speakers with a Dutch, French, and British accent in English differently, through ratings of different social dimensions: competence, status, and friendliness. The findings suggest that there is indeed a discrepancy of perception in terms of competence and friendliness between the British accent and the Dutch accent. It demonstrates that accent variation significantly impacts social evaluations and that non-native and native accents trigger different stereotypes depending on the scale being evaluated.

The study was conducted online, where participants had to listen to three different recordings each consisting of a different speaker, context and accent. Participants were then

asked to rate each recording based on how much they agreed with statements relating to status, competence and friendliness. The linear mixed-effects model (LMM) was used to analyze the relationship between the accents and the scales.

Results showed a statistically significant relationship between both the British accent and the Dutch accent with the competence and friendliness scales. While the British accent was perceived as more competent, it was rated less friendly than the Dutch accent, which was viewed as highly friendly but less competent. The French accent was always rated similarly across all three social attributes, meaning that it was neither the highest nor lowest for any conditions. This phenomenon indicates that certain foreign accents can be exempted from linguistic and social penalties, a trend likely driven by the enduring cultural prestige and symbolic capital attributed to the French language.

The results from this thesis related to competence align with those of Neijari et al. (2021). The British accent was consistently rated higher on competence compared to the Dutch accent, suggesting that the nativeness of the accent is what is most important when looking at competence. In addition, there is reason to believe that these judgments are based more on phonetic cues than cultural aspects linked to the accent. As participants poorly identified the British accent when asked during the survey and yet still rated it higher than the Dutch accent imply that phonetic features must have been at play, and unconscious biases drove to these results.

Furthermore, technical constraints related to the platform used for the survey caused a few dropouts from the participants, resulting in an uneven distribution of the experimental stimulus sets. Future experiments could employ larger, geographically diverse cohorts to validate the findings, as there were only 13 participants. The observation of an imperfect British accent could be a topic of research further investigated. By for instance manipulating audios, it could be found which specific linguistic features trigger implicit social biases.

This research contributes to the field of sociophonetics by addressing which aspects of an accent can create advantages and disadvantages in everyday life. By demonstrating that listeners do not evaluate an accent on a binary scale between good and bad, this study suggest that stereotyping is multidimensional, proving that competence and friendliness operate independently in the listener's mind mainly based on phonetic input. These insights offer an exploration for future research examining how linguistic bias and specific phonetic boundaries can trigger social stereotypes.

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7. Appendices

7.1. Appendix 1: Scripts for Stimuli

Scripts for stimuli

A. Describe the Rijksmuseum to tourists

The Rijksmuseum is the national museum of the Netherlands, located in a Gothic-Renaissance palace in the center of Amsterdam. It is famous for exhibiting some of the most important masterpieces in the world, specifically from the Dutch Golden Age. You will find more than 8,000 works, including pieces by Rembrandt and Vermeer. The building also houses a giant library, which is included in your visit. It is also open to the public for use; however, you must book a workspace through the website to do so. Additionally, the museum has gardens surrounding the building that are free to enter. The museum is open every day of the year from 9:00 AM to 5:00 PM and is free for those aged 18 and under. The full price for adults is 25€, and for students 12€50. Please be aware that the museum is entirely cashless; you can only pay by card for tickets, at the café and in the gift shop. It is recommended to book your tickets online in advance, as it is a highly popular destination.

B. Describe the library in a university

At this university, there is a large, modern library with plenty of study spaces. Even though it is located far away from the main campus, its gardens and architecture make the trip worthwhile. In spring, tables are set up outside, and in winter, stations with warm food are provided. You can access the building with your student card, so it is important to always have it with you. The floors are color-coded, with each representing a subject area; for instance, blue is associated with law. Even though you can access most books online through the library's website, you can access thousands of physical books here. You can also reserve a book and collect it at the front desk. You have the right to keep books for one month before returning them. The library is open Monday to Friday, from 7:00 AM to 8:00 PM. During exam weeks, the opening hours are extended and the library remains closed on public holidays.

C. Describe the train service in the Netherlands

Trains in the Netherlands are operated by NS and are easily recognized by their iconic yellow and blue colors. Passengers can choose between two travel classes: first class and second class. First class compartment allows more legroom and more comfortable seats. Second class is more affordable, but if the trains are crowded you might end up standing and squeezed between other travelers. Inside the train, you will find toilets, bins and folding tables. For cyclists, there are also bike spaces, though bicycles are only permitted during off-peak hours. Off-peak hours are on weekends and during weekdays between 9:00 AM and 4:00 PM, and between 6:30 PM and 6:30 AM. During off-peak hours you can get discounts while traveling. When boarding, be aware of the silence zones where talking or calling are not allowed. Finally, make sure to always have a valid ticket as controllers frequently perform checks, and the fine for traveling without one is 50€ plus the full cost of the train ticket.

7.2. Appendix 2: Information Brochure



UNIVERSITEIT VAN AMSTERDAM

**Information brochure for
the research by student Lilany Roussange
within the Bachelor's Thesis Linguistics course in the BA Linguistics**

Dear participant,

You will be taking part in the study by Lilany Roussange which is performed under the supervision of Dr. Cesko Voeten in the context of the Bachelor's Thesis Linguistics course of the Bachelor Programme in Linguistics at the University of Amsterdam. Before the study can begin, it is important that you read about the procedures we will be applying. Make sure to read this brochure carefully.

Purpose of the research project

The objective of this research is to evaluate how Dutch listeners interpret different variations of English.

Who can take part in this research?

We are inviting adult native speakers of Dutch with no background in linguistics and with a good English proficiency. You can take part in this research project if you have an educational level of undergraduate or higher (bachelor, master and/or PhD).

Instructions and procedure

Before starting the questionnaire, we recommend you put headphones on or find a quiet space. Make sure that the volume of your device is turned up as you will need to hear audio recordings. When you are ready you will first have to fill in a few information about yourself such as your age, gender, region in which you reside and educational level. You will also have to rate your own English proficiency and confirm that you are a native speaker of Dutch. In the second part of the questionnaire, you will hear a first audio and be asked to rate certain aspects of the audio and speaker. You will then do the same with the second and third audio. The experiment is expected to take approximately 15 minutes.

Voluntary participation

You will be participating in this research project on a voluntary basis. This means you are free to stop taking part at any stage. This will not have any personal consequences and you will not be obliged to finish the procedures described above. You can always decide to withdraw your participation later on. If you decide to stop or withdraw your consent prior to the moment the student hands in their research results (on the 31th of May 2026), all the information gathered up until then will be permanently deleted. However, if information has been anonymised, it cannot be deleted because it is not possible to trace back the information to individual participants.

Discomfort, Risks & Insurance

The risks of participating in this research are no greater than in everyday situations at home. Previous experience in similar research has shown that no or hardly any discomfort is to be expected for participants. For all research at the University of Amsterdam, a standard liability insurance applies.

Confidential treatment of your details

The information gathered over the course of this study will be used only by the student Lilany Roussange for the Bachelor's Thesis Linguistics course from April to June 2026. This student may present the anonymized results to their teacher and fellow students. Your personal details will not be used in the report they write, and we guarantee that you will remain anonymous under all circumstances.

The data gathered during the research (i.e. a list of the boxes you clicked on) will be encrypted until anonymization, and stored separately from your personal details. These personal details and the encryption key are accessible only to Lilany Roussange. Anonymized research data are not secret, and may be kept by the student and/or supervisor for any length of time, as they see fit. The non-anonymized data (i.e. your contact details, namely your email address) will only be stored as long as is necessary for the research and will be deleted as soon as possible.

Data subject rights according to the GDPR

Participants can request more information from the researcher at any time about their rights as data subjects under the EU privacy law, the GDPR.

Reimbursement

You will receive no reimbursement for taking part in the research project. If you wish, the student can send you the resulting report.

Further information

For further information on the research project, please contact Lilany Roussange (phone number: +31 613200289; email: lilany.roussange@student.uva.nl) or Dr. Cesko Voeten (email: c.c.voeten@uva.nl; Spuistraat 134, 1012VB Amsterdam, room 6.33).

If you have any complaints regarding this research project, you can contact the secretary of the Ethics Committee of the Faculty of Humanities of the University of Amsterdam, commissie-ethiek-fgw@uva.nl; Binnengasthuisstraat 9, 1012 ZA Amsterdam, The Netherlands.

7.3. Appendix 3: Consent Form

Informed-consent form

'I hereby declare that I have been clearly informed about the research project Bachelor's Thesis Linguistics course experiment of the Bachelor Programme in Linguistics at the University of Amsterdam, conducted by Lilany Roussange under the supervision of Dr. Cesko Voeten as described in the information brochure. My questions have been answered to my satisfaction.

I consent to participate in this research on an entirely voluntary basis. I retain the right to revoke this consent without having to provide any reasons for my decision. I am aware that I am entitled to discontinue the research at any time, and that I can withdraw my consent after the research has ended. If I decide to stop or withdraw my consent, all the information gathered up until then will be permanently deleted.

If my research results are used in student papers or made public in any other way, they will be fully anonymised. My personal information may not be viewed by third parties without my express permission.

If I need any further information on the research, now or in the future, I can contact Lilany Roussange (phone number: +31 613200289; email: lilany.roussange@student.uva.nl) or Dr. Cesko Voeten (email: c.c.voeten@uva.nl; Spuistraat 134, 1012VB Amsterdam, room 6.33).

If I have any complaints regarding this research, I can contact the secretary of the Ethics Committee of the Faculty of Humanities of the University of Amsterdam; email: commissie-ethiek-fgw@uva.nl; Binnengasthuisstraat 9, 1012 ZA Amsterdam, The Netherlands.

I consent to:

- **participate in this research**
- **my personal information to be stored until the end of August 2026**

7.4. Appendix 4: Survey Questions

Part 1 – Personal information of the participant

Q1. What is your age?

Q2. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Non-binary

Q3. What is the highest level of education you have completed?

- ☐ Undergraduate (currently enrolled)
- ☐ Bachelor
- ☐ Master
- ☐ PhD

Q4. Is Dutch your native language?

- ☐ Yes
- ☐ No (you cannot take part in the experiment)

Q5. What are the first **two** digits of your postal code?

How would you rate your English proficiency in the following?

Q6. Reading

Q7. Writing

Q8. Listening

Q9. Speaking

Part 2 – Experiment

Q1. What is the speaker's potential country of origin?

- ☐ _____
- ☐ I cannot identify the origin

Rate your agreement with the following statements:

Q2. "I find this speaker difficult to understand"

Q3. "I find this recording difficult to understand"

- Q4. "In my opinion this person is controlling"
- Q5. "In my opinion this person is authoritative"
- Q6. "In my opinion this person is dominant"
- Q7. "In my opinion this person has a strong voice"
- Q8. "In my opinion this person is assertive"
- Q9. "In my opinion this person is reliable"
- Q10. "In my opinion this person is intelligent"
- Q11. "In my opinion this person is competent"
- Q12. "In my opinion this person is hardworking"
- Q13. "In my opinion this person has an educated voice"
- Q14. "In my opinion this person is ambitious"
- Q15. "In my opinion this person is cheerful"
- Q16. "In my opinion this person is friendly"
- Q17. "In my opinion this person is warm"
- Q18. "In my opinion this person is humorous"

7.5. Appendix 5: R Code for Descriptive Statistics and LMM

```
```{r}
PersonalInfo <- read.csv
("/Users/lilany/Downloads/PersonalInformation.csv", sep=
";")
PersonalInfo$Age <- as.numeric(PersonalInfo$Age)
mean(PersonalInfo$Age)
sd(PersonalInfo$Age)
range(PersonalInfo$Age)
table(PersonalInfo$Gender)
prop.table(table(PersonalInfo$Gender)) * 100
table(PersonalInfo$Highest.level.of.Education)
prop.table(table(PersonalInfo$Highest.level.of.Education
)) * 100
mean(as.matrix(PersonalInfo[, c("Reading.proficiency",
"Writing.proficiency", "Listening.proficiency",
"Speaking.proficiency")]), na.rm = TRUE)
```
```

```
```{r}
CompRecording <- read.csv
("/Users/lilany/Downloads/Experiment
Analysis/ComprehensibilityRecordings.csv", sep= ";")
mean(CompRecording$British_Record)
mean(CompRecording$French_Record)
mean(CompRecording$Dutch_Record)
sd(CompRecording$British_Record)
sd(CompRecording$French_Record)
sd(CompRecording$Dutch_Record)

CompSpeaker <- read.csv
("/Users/lilany/Downloads/Experiment
Analysis/ComprehensibilitySpeakers.csv", sep= ";")
mean(CompSpeaker$SpeakerX)
mean(CompSpeaker$SpeakerY)
```

```

mean(CompSpeaker$SpeakerZ)
sd(CompSpeaker$SpeakerX)
sd(CompSpeaker$SpeakerY)
sd(CompSpeaker$SpeakerZ)
` ``

```

```

` `` {r}
StatusAnalysis <- read.csv
("/Users/lilany/Downloads/Experiment
Analysis/Status.csv", sep= ";")
CompAnalysis <- read.csv
("/Users/lilany/Downloads/Experiment
Analysis/Competence.csv", sep= ";")
FriendAnalysis <- read.csv
("/Users/lilany/Downloads/Experiment
Analysis/Friendliness.csv", sep= ";")

Status2 <- pivot_longer(StatusAnalysis, British:Dutch)
Comp2 <- select(CompAnalysis, ID, British =
British_Comp, French = French_Comp, Dutch =
Dutch_Comp)|>pivot_longer(British:Dutch)
Friend2 <- select(FriendAnalysis, ID, British =
British_Friend, French = French_Friend, Dutch =
Dutch_Friend)|>pivot_longer (British:Dutch)

Status2$variable <- "Status"
Comp2$variable <- "Competence"
Friend2$variable <- "Friendliness"

data <- rbind(Status2, Comp2, Friend2)
print(head(data))

data <- mutate(data, language = factor(name)|>C(sum),
scale = factor(variable)|> C(sum))
print(contrasts (data$language))
print(contrasts(data$scale))
` ``

```

```

```{r}
data %>%
  group_by(language, scale) %>%
  summarise(
    Mean = mean(value, na.rm = TRUE),
    SD = sd(value, na.rm = TRUE)
  )
```

```{r}
library(lmerTest)

status_model <- lmer(value ~ language*scale + (language
| ID), data = data)

print(summary(status_model, ddf="Kenward-Roger"))
```

```{r}
library(ggplot2)
accents_plot <- ggplot(data = data, aes(x = language, y
= value, fill = language)) +
  geom_boxplot(alpha = 0.5, width = 0.5) +

  stat_summary(fun = mean, geom = "point", shape = 18,
size = 4, color = "red") +

  stat_summary(fun.data = function(x)
data.frame(y=mean(x), ymin=mean(x)-sd(x),
ymax=mean(x)+sd(x)),
              geom = "errorbar", width = 0.15, color =
"darkred", linewidth = 0.8) +

  facet_wrap(~ scale) +
  scale_y_continuous(limits = c(1, 6), breaks = seq(1,
6, by = 0.5), labels = function(x) sprintf("%.2f", x)) +

```

```

scale_fill_brewer(palette = "Set2") +

  labs(
    x = "Accent group",
    y = "Rating (1-6)"
  ) +
  theme_minimal() +
  theme(
    plot.title = element_text(hjust = 0.5, size = 14,
face = "bold"),
    axis.title.x = element_text(size = 12, face =
"bold"),
    axis.title.y = element_text(size = 12, face =
"bold"),
    axis.text.y = element_text(size = 11, family =
"mono"),
    legend.position = "none",
    panel.spacing = unit(1.5, "lines"),
    strip.text = element_text(face = "bold", size = 12)
  )

ggsave(file.path(LilanyData,
"Accent_evaluation_boxplots.png"), plot = accents_plot,
width = 7, height = 5, dpi = 300)
` ``

```