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Attitudes of native and non-native speakers of English towards speakers of Dutch-accented English

Master Thesis International Business Communication

Roeland Ens
s3048268

Supervisor: U. Nederstigt
Assessor: B. Hendriks

Radboud University

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Abstract

Dutch professionals are increasingly required to orally communicate in English, with both native and non-native speakers of English. Dutch people generally show a high proficiency in English, but even highly proficient speakers can have a strong non-native accent. Therefore, it is important to study the effects of Dutch-accented English speech. The present study examined the attitudes of native and non-native (Dutch) speakers of English towards speakers of Dutch-accented English. In a verbal-guise experiment, native and non-native speakers of English completed a questionnaire measuring their perceived competence, likability, and status towards speakers in a 25-second audio recording. Respondents listened to a speaker of English with a native accent, a speaker of English with a slight Dutch accent, or a speaker of English with a strong Dutch accent. Contrary to various previous studies, results showed that native speakers of English and native speakers of Dutch showed no significant differences in their perceived competence, likability, and status of speakers of different levels of accentedness. Results did show significant differences between the two groups of respondents: all speakers were perceived as more competent and more likable by native speakers of English than by native speakers of Dutch. It is possible that this is due to a higher tolerance of accented English by native speakers, however, this cannot be confirmed. It is concluded that the level of accentedness might not influence attitude towards the speaker as perceived by native speakers of English and native speakers of Dutch. This could be caused by a general tolerance of Dutch-accented English speech by both native and non-native listeners. It is possible that attitudes towards accented speakers are not influenced by accent, as long as the message is comprehensible.

1. Introduction

Over the past decades, the English language has increased in use, influence, and importance in many European countries, including the Netherlands. This has caused many non-native speakers of English to regularly communicate in English. The pronunciation of non-native speakers of English is often influenced by their mother tongue: they speak English with a non-native accent. When people are confronted with speakers of non-native accented English, many effects can occur. The message might be misunderstood because the accent has influenced the speaker's intelligibility, or the accent itself might be a distracting factor and lead to problems in the fluency of a conversation. Furthermore, it is possible listeners' attitudes towards a speaker are less positive because of a (strong) non-native accent. As described in the literature review below, research has shown that these potential effects cannot be generalized for all varieties of accented English speech. The effects that occur when people are confronted with non-native accented English speech, can be influenced by many different variables: the specific variety of the accent, the strength of the accent, and the linguistic background of the listener. While a (strong) non-native accent does not necessarily lead to a negative attitude towards the speaker, there is always a possibility that it can. To Dutch speakers of English, comprising a large and growing part of the Dutch population, it can be very important to know what effects they can expect (strong) Dutch-accented English to have on their perceived attitude. Because English is shown to be of vital importance in the Dutch business setting, research into the effects of Dutch-accented English has an undeniable practical relevance. In order to study the perceived attitudes towards speakers of Dutch-accented English, the present study has compared the perceived attitudes, divided in competence, likability, and status, towards speakers of native-accented English, slightly Dutch-accented English, and strongly Dutch-accented English. In order to expand the research scope of the present study, and because previous research has suggested that Dutch people are more easily influenced by Dutch-accented English than native speakers of English are, the attitudes of native speakers of English and native speakers of Dutch towards speakers of Dutch-accented English were compared as well.

1.1. Literature review

Due to the continuing process of globalization, people are increasingly confronted with situations in which they must communicate with someone with different cultural and linguistic backgrounds (Hendriks, Van Meurs, & De Groot, 2015; Seidlhofer, Breiteneder, & Pitzl, 2006). This often means that communication takes place in a lingua franca, most often English, especially in business

communication within and between various organizations in Europe (Hendriks, Van Meurs, Van Mulken & Van Hoof, 2014; Rogerson-Revell, 2007; Scott, Green, Blaszczynski & Rosewarne, 2007). As is the case for most European countries, the Netherlands is a country in which English has grown rapidly in both use and influence over the past few decades (Edwards, 2010, 2014; Nejjari, Gerritsen, Van Der Haagen, & Korzilius, 2012; Rogerson-Revell, 2007). This is especially the case in multinational organizations operating within and from the Netherlands (Seidlhofer et al., 2006; Hendriks, 2010). Edwards (2014) described that "half of Dutch employees of multinational companies based in the Netherlands reported having to write in English on a daily basis" (p. 50). Furthermore, according to Edwards (2014), it is "not infrequent for business meetings [in the Netherlands] to be held in English even when no foreigners are present" (p. 50). It is striking that this is the case for a country where English is not a primary language. Clearly, it has become extremely important for Dutch professionals to be able to engage in fluent oral English communication.

It is commonly assumed that in order to engage in fluent oral English communication, people need to possess a certain level of language proficiency. When a person's proficiency in English is limited, this person might have trouble finding the right words to express himself, or he might have trouble constructing grammatically correct sentences. Which specific problems arise can depend on the level of English language proficiency. However, there is one aspect of second language acquisition that can be apparent even in speakers of highly proficient English: accent. While research has shown that limited language proficiency in English often entails the presence of a non-native accent (Setter & Jenkins, 2005), there can even be highly proficient speakers of English that still speak English with a strong non-native accent. As stated by Derwing and Munro (2009): "People who are indistinguishable in other ways from native speakers (e.g. grammar, vocabulary, and idiom) can still have accented speech." (p. 478). An example of high proficiency accompanied with a strong non-native accent is found in Dutch prime minister Mark Rutte. Shortly after Rutte had delivered a speech in English in front of world leaders at a 2014 summit in The Hague, many Dutch people showed their disapproval of the prime minister's strong Dutch accent (Engel, 2014). However, the text of the speech does not show any obvious grammatical or linguistic errors (Government of the Netherlands, 2014). Research conducted by EducationFirst has shown that the Netherlands is ranked number 1 in the *English Proficiency Index,* meaning that the average English proficiency of the Dutch is higher than in any other country where English is not a primary language (EducationFirst, 2016). It could therefore be very important for Dutch speakers of English to know what effects Dutch-accented English can summon, because the average Dutch speaker of English shows a high language proficiency, but might still show a strong non-native accent (Derwing & Munro, 2009). Because of

the important role of the English language in Dutch organizations, research into the effects of Dutch-accented English has an undeniable practical relevance.

Two concepts have been centralized in previous research into the effects of accented English speech (see, for example, Kachru & Smith, 2008; Nejjari et al., 2012). The first concept is comprehensibility. Common sense might suggest that non-native pronunciation of English might lead to a speaker's message being misunderstood, or not understood at all (Koster & Koet, 1993). This has led to multiple studies on the effects of non-native pronunciation of English on a speaker's perceived comprehensibility (Derwing & Munro, 1997; Hendriks, Van Meurs, & Hogervorst, 2016; Munro & Derwing, 1995; Nejjari et al., 2012). Comprehensibility and its related features have been key concepts in many studies into the effects of accented English speech. Contrary to popular belief, studies have shown that a non-native accent does not necessarily lead to a decrease in comprehensibility (Derwing & Munro, 2009; Nejjari et al., 2012). An example of this is found in the study by Nejjari et al. (2012). They asked respondents to transcribe and interpret messages recorded by speakers of native British English, slightly Dutch-accented English, and strongly Dutch-accented English. Results showed that "all three accents were equally interpretable." (Nejjari et al., 2012, p. 248). Results as shown by Nejjari et al. (2012) do not stand alone. For example, in a study regarding the effects of Mandarin-accented English, Munro and Derwing (1995, p. 74) concluded: "[…] a strong foreign accent does not necessarily reduce the comprehensibility or intelligibility of L2 speech."

Besides the concept of comprehensibility, there is another concept that has seen attention in previous research into the effects of accented English speech: a listener's attitude towards the speaker. As accentedness can bring prejudice with it (Nelson, Signorella, & Botti, 2016), non-native accented speech could influence listeners' attitudes towards the speaker (Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002; Hendriks et al., 2015). In a professional context, it is possible that one's social and professional judgment of a (potential) colleague or business partner are negatively influenced by a speaker's non-native pronunciation of English (Nelson et al., 2016). An example of negative effects of non-native pronunciation of English was demonstrated by Nelson et al. (2016). In their study, American native speakers of English were asked to judge speakers of English with a Spanish-American accent and speakers of General American (GA) English. The speakers of Spanish-American English were rated as less competent than GA English speakers (Nelson et al., 2016). The authors attributed this effect to the presence of negative bias and stereotypes regarding Latin-Americans in American society. These findings partly explain why it is difficult to generalize the effects of all varieties of accented English speech: because of negative stereotypes surrounding Latin-

Americans in American society, Spanish-accented English could have evoked very different connotations and bias in Americans than any other form of accented English would have (Nelson et al., 2016).

The present study has aimed to depart from the concept of comprehensibility as a key concept, and has centered attitude towards the speaker as its main dependent variable. The reasons for this were twofold. Firstly, the effects of accent on comprehensibility have been thoroughly studied in many previous studies (see, for example, Derwing & Munro, 1997, 2009; Munro & Derwing, 1995; Nejjari et al., 2012; Kachru & Smith, 2008). The main conclusion that can be drawn based on those studies is that the presence of a non-native accent does not necessarily lead to a decrease in comprehensibility, and that the influence of a non-native accent on comprehensibility is smaller than is often thought (Derwing & Munro, 2009). Secondly, as Dutch people generally show a high proficiency in English (EducationFirst, 2016), it can be assumed that most Dutch professionals can produce comprehensible English speech. The question that remains is what effects a Dutch accent could have on the attitudes of listeners. For these reasons, the author has elected to center attitude towards the speaker as the present study's main research focus.

'Attitude' is a very broad term that can encompass many different associations and connotations; the word can be interpreted in many different ways. This can be shown by the sheer number of ways 'attitude towards the speaker' has been operationalized in previous studies. Ahmed, Abdullah, and Heng (2014), for example, used a single variable of 'attitude', which consisted of eight items, in a study regarding the effects of Malaysian-accented English. Nejjari et al. (2012) divided 'attitude towards the speaker' into two dimensions: 'status', which consisted of five items, and 'affect', which consisted of three items. In other studies into the effects of accented English speech, Hendriks et al. (2015) used three dimensions: 'status' (5 items), 'competence' (6 items), and 'affect' (4 items), while Hendriks et al. (2016) used the dimensions of 'competence' (6 items), 'likability' (3 items), and 'dependability' (3 items). Clearly, when conducting research into attitudes towards speakers of accented English speech, a choice has to be made regarding the interpretation of the phrase 'attitude towards the speaker', depending on the research scope and the context of the situation.

The present study has chosen to view the term 'attitude' in the context of a professional setting, because of the previously discussed necessity for many Dutch professionals to be able to communicate in English (Edwards, 2014; Nejjari et al., 2012; Rogerson-Revell, 2007). In the present study, a broad definition of 'attitude' was adopted, and *attitude towards the speaker* was subdivided into three dimensions: competence, likability, and status. These three dimensions have been chosen in order to make the variable of *attitude towards the speaker* measurable, and to make the results of

this study comparable to previous studies, which have used some or all of the same dimensions (Hendriks et al., 2015; Hendriks et al, 2016; Nejjari et al., 2012). The three dimensions were deemed to be important dimensions in any professional setting.

The first dimension is *competence*. In the present study, *competence* can be seen as a term descriptive of a person's general professional and intellectual competencies. This does not include specific competencies that may be required for a certain job, such as certain computer skills or knowledge of specific industry practices. It includes broader competencies that are useful in any professional setting, such as intelligence and reliability. A definition by Mulder (2014, p. 109) illustrates the dimension: "Professional competence is seen as the generic, integrated and internalized capability to deliver sustainable effective performance in a […] professional domain."

The second dimension is *likability*. This dimension is defined in the present study as to what extent someone is perceived as likable, friendly, or, in the context of a professional setting, pleasant to work with, based on one's emotional judgments of a person. "Likability […] represents an individual, subjective expression of valence within a specific relationship." (Schuller et al., 2014, p. 104). This dimension has sometimes been labeled as "affect" in previous studies (Hendriks et al., 2015; Nejjari et al., 2012).

The third dimension is *status*. This dimension is defined in the present study as to what extent someone is perceived to possess qualities such as dominance and assertiveness. It could be seen as the perceived likeliness that the person that is being judged holds a high position in an organization, defined as "the perceived suitability for higher end job positions" by Nejjari et al. (2012, p. 249).

A listener's attitude towards a speaker of non-native accented English can be influenced by many different variables. As discussed, one of these variables is the variety of accent, as each different accent can be accompanied by different preconceived judgments (Nelson et al., 2016). A second variable that could play a role in determining a listener's attitude towards a speaker of non-native accented English is the linguistic background of the listener. In other words, a listener's attitude towards a speaker could not only be influenced by the speaker's (non-)nativeness, but by the listener's (non-)nativeness as well. Researchers studying the effects of accented English speech have therefore not only experimented with several different native and non-native accents, but have also experimented with several different native and non-native groups of listeners.

A study into the attitudes of native listeners towards Dutch-accented English was conducted by Nejjari et al. (2012). They measured British professionals' attitudes towards speakers of British English and Dutch-accented English. The researchers asked respondents to rate speakers of native

British English, slightly Dutch-accented English, and strongly Dutch-accented English on two personality traits: the status they attributed towards the speaker (measured by items such as intelligence and authority), and the affect the respondents felt towards the speaker (measured by items such as friendliness and considerateness). Speakers of British English were found to be attributed a higher status than speakers of English with a slight or strong Dutch accent (Nejjari et al., 2012). Furthermore, respondents showed a higher degree of affect towards speakers of British English and speakers of English with a slight Dutch accent than towards speakers of English with a strong Dutch accent (Nejjari et al., 2012). Clearly, according to Nejjari et al. (2012), British professionals showed a more positive attitude towards speakers of British English than towards speakers of (strongly) Dutch-accented English. The degree of accentedness played a role as well, at least in the case of affect towards the speaker. The findings by Nejjari et al. (2012) would suggest that speakers of (strongly) Dutch-accented English should try to adopt a more native-like accent of English, in order to be attributed a higher status and higher degree of affect by, in this case, British colleagues. The present study has attempted to confirm these findings, but has also made an important expansion. Given that Dutch professionals are increasingly required to speak English, not only to other native speakers of English but also to other native speakers of Dutch (Edwards, 2014), it can be of vital importance to understand the attitudes towards speakers of Dutch-accented English as perceived by native speakers of Dutch. These attitudes have not been extensively studied yet in a business setting, leaving a gap in scientific knowledge.

A study into the attitudes of non-native listeners towards Dutch-accented English was conducted by Hendriks et al. (2015). They measured the attitudes of French, German, and Spanish listeners towards speakers of Dutch-accented English. They did this by playing an audio recording of a speaker of either strongly Dutch-accented English, slightly Dutch-accented English, or native-accented English, after which respondents were asked to rate the speaker's competence, status, and affect, by completing a questionnaire with several items anchored by 6-point Likert scales. The strongest effect was found for perceived competence: all groups of listeners perceived speakers with a strong Dutch accent to be more competent than speakers with a slight Dutch accent and speakers with a native accent. The effects found regarding status were less consistent: only German listeners awarded more status to native-accented speakers than to strongly-Dutch accented speakers. No effect regarding perceived affect was found: the degree of accentedness did not influence listeners' affect towards the speakers of native or Dutch-accented English. Hendriks et al.'s (2015) study could be seen as a good example of many studies towards accented English speech: results usually do not point in one direction, and conclusions have to be cautiously stated. While the study by Hendriks et al. (2015)

found a clear effect regarding the perceived competence of strongly Dutch-accented speakers of English, no effects were found regarding status and only a slight effect was found for affect. The question arises whether the found effect regarding perceived competence is the same for Dutch listeners, given that the average Dutch person's proficiency in English is much higher than the average French, German, or Spanish person's proficiency in English (EducationFirst, 2016).

In a recent study, Hendriks et al. (2016) asked Dutch university students to rate English-speaking lecturers' competence, likability, and dependability. Lecturers with a strong Dutch accent were rated as less competent than lecturers with a slight Dutch or native accent, and as less dependable than lecturers with a slight Dutch accent. The findings by Hendriks et al. (2015) and Hendriks et al. (2016) suggest that speakers of strongly Dutch-accented English are not only evaluated less positively by native speakers of English (Nejjari et al., 2012), but also by native speakers of French, German, Spanish, and even Dutch. However, Hendriks et al. (2016) found that English-speaking lecturers with a slight Dutch accent were rated as more likable by Dutch students than lecturers with a native accent. Hendriks et al. (2016) explained the preference of a slight Dutch accent over a native accent in terms of likability by stating that "individuals are attracted to others if these others are felt to be similar to themselves." (p. 11). This notion would suggest that, besides several negative effects, Dutch-accented English might also yield a positive effect, at least in the case of university lecturers. The question arises whether context could play a role, and whether or not the effects found regarding university lecturers also apply in a more professional setting rather than an educational setting.

It is impossible to generalize the effects of all varieties of accented English speech: different accents seem to be accompanied by different preconceived connotations and judgments, depending on the accent in question and the linguistic background of the listener (Nelson et al., 2016; Scott et al., 2007). Because not all effects of all varieties of accented English speech have been studied yet, it could be argued that there is a gap in scientific knowledge regarding the general effects of accented English speech. In time, as the list of studied varieties of accented English expands, researchers might be able to draw solid conclusions regarding the general effects of accented English. So far, most academic studies into the effects of accented English speech have therefore focused on one or more specific varieties of accented English: i.e. Malaysian-accented English (Ahmed et al., 2014), Spanish-accented English (Carlson & McHenry, 2006; Nelson et al., 2016), Chinese-accented English (Cargile, 1997), and so on. The present study has researched the effects of Dutch-accented English, not only because of the practical relevance for Dutch professionals, but also in order to attempt to contribute to the available scientific knowledge regarding the effects of accented English speech in general, and the effects of Dutch-accented English speech in particular.

Because Dutch professionals often have to communicate in English, knowing the general attitudes of Dutch and native speakers of English regarding Dutch-accented English might be of vital importance. The question arises to what extent it is necessary for Dutch professionals to strive towards acquiring a native-sounding accent when speaking English. Dutch educators seem to have a tendency to view a (near-)native pronunciation of English as something that is desirable in any situation (Koster & Koet, 1993). However, Koster and Koet (1993) found that native speakers of English were far more tolerant than Dutch people themselves towards Dutch-accented English. The researchers asked native speakers of Dutch and native speakers of English to listen to an audio recording of a speaker of Dutch-accented English. Not only did Dutch respondents indicate more pronunciation errors than the native speakers of English did, they also found the accent to be stronger, and evaluated the accent to be less pleasant than the native speakers of English did. Koster and Koet (1993) attributed their findings to what they described as the "undue fastidiousness" (p. 90) of Dutch teachers of English regarding the strive towards a native English accent. Koster and Koet (1993) even stated that a Dutch accent might well be an asset in certain cases, rather than a negative feature (p. 90). The findings by Hendriks et al. (2016) regarding the likability of Dutch-accented English speakers, as described above, support this notion. However, Koster and Koet (1993) did not study the specific attitudes towards speakers of Dutch-accented English, but only the attitudes towards the accent itself. The attitudes towards speakers of Dutch-accented English as perceived by native speakers of Dutch have not been studied yet in a business setting.

The aim of the present study was to not only try to confirm earlier findings regarding the effects of Dutch-accented English, but also to expand the research scope by studying Dutch listeners' attitudes towards speakers of Dutch-accented English in a professional setting. This topic, to the best knowledge of the author, has not yet seen academic attention. Furthermore, the present study has aimed to compare the attitudes of (Dutch) non-native speakers of English and native speakers of English. Previous studies have generally focused on either native or non-native listeners, where the present study has included both. This made it possible to make a comparison of the attitudes of native and non-native listeners towards speakers of Dutch-accented English.

1.2. Research questions

The present study has aimed to shed light on the attitudes of native and non-native listeners towards speakers of Dutch-accented English, by attempting to answer the following research questions:

RQ 1: To what extent does the level of accentedness of a Dutch speaker of English influence the attitude towards the speaker, regarding perceived competence, likability, and status?

RQ 1 was divided into two subquestions:

RQ 1a: To what extent does the level of accentedness of a Dutch speaker of English influence the attitude towards the speaker, regarding perceived competence, likability, and status, as perceived by native speakers of English?

RQ 1b: To what extent does the level of accentedness of a Dutch speaker of English influence the attitude towards the speaker, regarding perceived competence, likability, and status, as perceived by Dutch non-native speakers of English?

The present study has also aimed to compare the attitudes of Dutch non-native speakers of English and native speakers of English towards speakers of Dutch-accented English, by asking the following research question:

RQ 2: To what extent do native speakers of English and native speakers of Dutch differ in their attitudes towards Dutch-accented speakers of English, regarding perceived competence, likability, and status?

2. Method

2.1. Materials

In order to make a comparison between the attitudes towards native-accented and Dutch-accented speakers the author desired to test three levels of accentedness, namely native, slightly accented, and strongly accented. This would make results of the present study comparable to previous studies (Hendriks et al., 2015; Nejjari et al., 2012), which have also used three levels of accentedness. Because the present study had adopted the verbal-guise technique (see appendix A), each level of accentedness had to include two recordings. The author wanted to limit the possibility of a single speaker's speaking characteristics to have a high influence on the perceived attitude towards the speaker. Hence, it was desired to use two speakers per level of accentedness, and average the scores of the two speakers to measure the attitude towards the level of accentedness. The speakers within the same level of accentedness had to show equal levels of accentedness. The section below describes the process of fabrication and selection (pre-testing) of the audio recordings, culminating in the selection of the six audio recordings that were used final experiment.

2.1.1. Pre-test

The pre-test procedures were based on Nejjari et al. (2012) and Hendriks et al. (2015).

2.1.1.1. Materials (pre-test)

The fabrication of audio recordings took place in February 2017. Twenty adult male speakers, all with various degrees of English proficiency, were invited to read the audio message. All but one of the recording sessions took place in a recording studio at the Faculty of Arts of Radboud University Nijmegen. One native speaker of English recorded the message at his home in Canada. All speakers read the following text, inspired by Hendriks (2010), Hendriks et al. (2015), and Nejjari et al. (2012):

> *"I work for an internationally operating insurance agency, which provides various forms of insurance to businesses and other organizations. My job is to make sure all communication, between my company and our clients, runs smoothly. This means I often get to travel to other countries, meet with clients, attend meetings, and give presentations. Generally speaking, I really enjoy my job, although sometimes, it can be quite demanding."*

When heard, the text above was deemed to be suitable to create an image of the speaker as a professional person. The speakers were instructed to try their best to deliver a natural performance, and try not to make the text sound 'read'. However, they were allowed to keep the printed text with

them while recording. They were given ample time to prepare before recording, meaning they were able to read the text multiple times and practice out loud in advance to recording, in order to deliver a credible performance. Each speaker was given the opportunity to record multiple performances. This procedure led to the recording of 47 audio fragments, because most speakers recorded multiple takes.

In order to select the fragments to be used in the final experiment, firstly, all audio fragments which contained any mispronunciations, slips, distracting background noise, or other distracting factors, were eliminated from further analysis. This led to the elimination of 24 recordings. Secondly, the author selected the most natural sounding and understandable recording of each of the 12 remaining speakers, based on personal interpretation of the author and the judgment of a second reviewer. These 12 remaining recordings were included in further pre-testing.

2.1.1.2.   Subjects (pre-test)

107 Dutch respondents took part in the pre-test. 61.7% of respondents was male. The age of respondents ranged from 20 to 60 years old ($M = 29.4$, $SD = 10.5$).

2.1.1.3.   Design (pre-test)

A between-subjects design was used in the pre-test. Each respondent was randomly exposed to two of the twelve recordings tested. The eventual SPSS file was flipped to a between-subjects design (further explanations and reflections on 'flipping' are provided in section 2.3.).

2.1.1.4.   Instruments (pre-test)

The central dependent variable of the pre-test was *accent strength*. After listening to a recording, respondents were first asked to indicate whether they thought to have heard a native, or a non-native speaker of English. Accent strength was measured by asking those respondents that indicated to have heard a non-native speaker of English, how strong they perceived the speaker's accent to be, on a 9-point Likert scale, where 1 meant 'no accent' and 9 meant 'very strong non-native accent'. When respondents indicated that they heard a native speaker of English, a score of 1 was automatically assigned regarding perceived accent strength.

Perceived comprehensibility of the speaker was measured by asking respondents to what extent they were able to understand the speaker on a 9-point Likert scale, where 1 meant 'not at all', and 9 meant 'fully'.

2.1.1.5. Procedure (pre-test)

Respondents were recruited through personal communication. A questionnaire was created using the online program Qualtrics. After an audio check, to test if respondents' audio settings were set correctly, respondents were randomly assigned to one of the 12 audio recordings. After respondents had listened to a recording, they were first asked to indicate whether they heard a native, or non-native speaker of English. Next, respondents were asked to rate the perceived comprehensibility of the speaker. Respondents were also asked to indicate what they thought was the country of origin of the speaker. Finally, respondents were asked to provide (optional) additional remarks regarding the recording. In some cases, these remarks made it clear that a recording showed distracting factors, such as a lisp in the speaker's speech or specific voice characteristics.

The entire process was repeated once: each respondent was exposed to two audio recordings. On average, it took respondents 5.25 minutes to complete the questionnaire.

2.1.1.6. Statistical treatment (pre-test)

A one-way analysis of variance was conducted with *recording* as independent variable and *accent strength* as dependent variable. Another one-way analysis was conducted with *recording* as independent variable and *comprehensibility* as dependent variable.

2.1.1.7. Results (pre-test)

A one-way analysis of variance showed a significant difference in accent strength between several recordings ($F(11, 186) = 19.02$, $p < .001$). Table 1 shows the results of the pre-test, ordered by mean perceived accent strength. The right column shows the significant differences between the recordings.

Table 1. Results of the pre-test, ordered descending by mean perceived accent strength. Recordings in **bold** were included in the final experiment.

Recording[1]	Accent strength (1-9)		Comprehensibility (1-9)		Significant difference in accent strength to other recordings
	M	*SD*	*M*	*SD*	
1 → Str1	**6.83**	**1.47**	8.11	0.81	6 7 8 9 10 11 12
2 → Str2	**6.67**	**1.50**	7.88	1.36	7 8 9 10 11 12
3	5.67	1.72	8.53	0.70	10 11 12
4	5.58	1.71	8.05	1.28	10 11 12
5	5.58	1.62	8.47	0.74	10 11 12
6	4.89	1.75	8.33	0.49	1 10 11 12
7 → Sli1	**4.50**	**1.95**	8.61	0.78	1 2 11 12
8	4.41	1.70	8.12	1.11	1 2 11 12
9 → Sli2	**4.00**	**1.77**	8.82	0.39	1 2 11 12
10	2.89	2.26	8.74	0.56	1 2 3 4 5 6
11 → Nat1	**1.63**	**0.81**	8.69	0.70	1 2 3 4 5 6 7 8 9
12 → Nat2	**1.56**	**0.98**	8.53	0.70	1 2 3 4 5 6 7 8 9

[1] Str1 = strong accent #1, Str2 = strong accent #2, Sli1 = slight accent #1, Sli2 = slight accent #2, Nat1 = native accent #1, Nat2 = native accent #2

Following these results, recordings 1 and 2 were labeled as 'strong Dutch accent' (Str1 and Str2), recordings 7 and 9 were labeled as 'slight Dutch accent' (Sli1 and Sli2), and recordings 11 and 12 were labeled as 'native accent' (Nat1 and Nat2). These recordings were selected because the perceived accent strengths of recordings 1 ($M = 6.83$, $SD = 1.47$) and 2 ($M = 6.67$, $SD = 1.50$) were significantly higher than the perceived accent strengths of recordings 7 ($M = 4.50$, $SD = 1.95$) and 9 ($M = 4.00$, $SD = 1.77$), which, in turn, were significantly higher than the perceived accent strengths of recordings 11 ($M = 1.56$, $SD = 0.98$) and 12 ($M = 1.63$, $SD = 0.81$) (Bonferroni correction, $p < .050$). Recording 8 was also a viable candidate to be included, but multiple respondents indicated to have heard a lisp in the speaker's pronunciation. Therefore, recording 8 was excluded and recording 9 was selected instead. The recordings were all around 25 seconds in duration.

In order to exclude the comprehensibility of the recordings as an influencing factor, a statistical analysis was conducted. A one-way analysis of variance showed a significant main effect of recording on perceived comprehensibility ($F(11, 202) = 2.26$, $p = .013$). However, post-hoc Bonferroni tests showed no significant differences between the recordings regarding perceived comprehensibility. It was therefore assumed that all recordings showed equal levels of perceived comprehensibility, and

comprehensibility of the recordings was excluded as an influencing factor. As table 1 shows, the level of comprehensibility was quite high ($M \geq 7.88$) for all recordings.

The Dutch accented recordings (Sli1, Sli2, Str1 and Str2) were all performed by native speakers of Dutch. Of the native accent recordings, one was performed by a Canadian native speaker of English (Nat1), and the other was performed by a Dutch national who has had extensive training in General American pronunciation of English (Nat2).

This concluded the selection process of the audio recordings, and enabled the researcher to move on to the main experiment.

In order to limit the influence of factors other than accent (such as tone of voice of the speaker) on the perceived attitude towards the speaker, it was desired to create the variable *level of accentedness* by checking whether two recordings of the same level of accentedness could be treated together. This would have been possible if the recordings of the same level of accentedness showed equal values of perceived competence, likability, and status. Analyses were conducted to check if results for recordings Str1 and Str2 could be combined, to check if results for recordings Sli1 and Sli2 could be combined, and to check if results for recordings Nat1 and Nat2 could be combined (see section 3.2.).

2.2. Subjects

170 respondents took part in the experiment, of which 76 were native speakers of Dutch and 94 were native speakers of English. The definition of 'native language' was that the respondent has "learned the language since birth." (Hendriks et al., 2015, p. 6). All native speakers of Dutch were Dutch nationals. Of the 94 native speakers of English, 50 were American, 25 were Canadian, 10 were British, and 9 were of a different nationality. 72.9% of respondents was female. Age of respondents ranged from 18 to 79 years old ($M = 32.7$, $SD = 13.6$). The education level of respondents ranged from secondary school to university, with university (61.8%) as the most frequent level.

In order to check for equal distribution of respondents' gender, age, and education level for the tested recordings (Nat1/Nat2/Sli1/Sli2/Str1/Str2), the following analyses were conducted.

A Chi-square test showed no significant relation between gender and recording for respondents who were native speakers of Dutch ($\chi^2 (5) = .86$, $p = .973$), and no significant relation between gender and recording for respondents who were native speakers of English ($\chi^2 (5) = 6.04$, $p = .302$). It was therefore assumed that gender distributions were equal for all six recordings for both native languages.

A one-way analysis of variance showed no significant effect of recording on the age of respondents who were native speakers of Dutch ($F(5, 146) < 1$), and no significant effect of recording on the age of respondents who were native speakers of English ($F(5, 182) < 1$). It was therefore assumed that the age of respondents could be considered equal for all six recordings for both native languages.

A Chi-square test showed no significant relation between education level and recording for respondents who were native speakers of Dutch ($\chi^2 (15) = 8.98$, $p = .879$), and no significant relation between education level and recording for respondents who were native speakers of English ($\chi^2 (15) = 12.17$, $p = .666$). It was therefore assumed that the distribution of education level was equal for all six recordings for both native languages.

In order to check for equal distribution of respondents' gender, age, and education level across the two groups of native speakers of English and native speakers of Dutch who reviewed the same recording, the SPSS file was split by recording, and several analyses were conducted.

Multiple Chi-square tests showed no significant relation between gender and native language for all recordings. It was therefore assumed that each recording was judged by native speakers of English and native speakers of Dutch with equal gender distributions. Results of the Chi-square tests are shown in table 2.

Table 2. Gender distributions for each group of respondents per recording.

Recording	Native language of respondents	% Male	% Female	χ^2	p
Nat1	Dutch	32.0	68.0	1.48	.223
	English	18.2	81.8		
Nat2	Dutch	37.0	63.0	.30	.582
	English	30.3	69.7		
Sli1	Dutch	34.8	65.2	1.99	.158
	English	18.2	81.8		
Sli2	Dutch	29.6	70.4	.23	.631
	English	35.7	64.3		
Str1	Dutch	29.2	70.8	2.06	.151
	English	13.3	86.7		
Str2	Dutch	26.9	73.1	.01	.924
	English	25.8	74.2		

An independent-samples t-test showed a significant difference between the age of native speakers of Dutch and native speakers of English for two recordings. Results are shown in table 3.

Table 3. Age of each group of respondents per recording.

Recording	Native language of respondents	Age (years) M	SD	t	p
Nat1	Dutch	33.4	15.8	1.97	.058
	English	26.7	7.56		
Nat2	Dutch	40.7	16.70	3.28	.002
	English	28.9	9.12		
Sli1	Dutch	39.57	15.92	2.28	.029
	English	30.82	11.08		
Sli2	Dutch	37.11	16.42	1.67	.101
	English	30.64	11.82		
Str1	Dutch	35.08	16.45	1.73	.093
	English	28.57	9.35		
Str2	Dutch	34.92	14.65	1.24	.221
	English	30.48	12.41		

As table 3 shows, the Dutch respondents that evaluated recording Nat2 ($M = 40.7$, $SD = 16.70$) were older than the native English speaker respondents that evaluated recording Nat2 ($M = 28.9$, $SD = 9.12$). Furthermore, the Dutch respondents that evaluated recording Sli1 ($M = 39.57$, $SD = 15.92$) were older than the native English speaker respondents that evaluated recording Sli1 ($M = 30.82$, $SD = 11.08$). It cannot be ruled out, therefore, that age of respondents has had an influence on main results regarding recordings Nat2 and Sli1.

Multiple Chi-square tests showed significant relations between education level and native language for five of the six recordings. Results are shown in table 4.

Table 4. Education level distributions for each group of respondents per recording.

Recording	Native language of respondents	% SE	% IVE	% UAS	% Uni	χ^2	p
Nat1	Dutch	4.0	8.0	40.0	48.0	11.11	.011
	English	24.2	3.0	9.1	63.3		
Nat2	Dutch	7.4	0.0	37.0	55.6	10.77	.013
	English	24.2	3.0	6.1	66.7		
Sli1	Dutch	0.0	4.3	47.8	47.8	18.94	< .001
	English	18.2	15.2	3.0	63.6		
Sli2	Dutch	7.4	3.7	25.9	63.0	3.66	.300
	English	7.1	3.6	7.1	82.1		
Str1	Dutch	4.2	8.3	41.7	45.8	10.27	.016
	English	16.7	10.0	6.7	66.7		
Str2	Dutch	0.0	7.7	38.5	53.8	10.36	.016
	English	9.7	9.7	6.5	74.2		

The column header above the table reads "Highest level of education[1]".

[1] SE = secondary education, IVE = intermediate vocational education, UAS = university of applied science, Uni = university

As table 4 shows, recording Sli2 was the only recording with equal distributions of education level for the Dutch and native English speaker respondents. All other recordings showed significant differences in education level distribution. For these five recordings, Dutch respondents showed a higher percentage of people with university of applied science as their highest education level, and the native English speaker respondents showed higher percentages of people with secondary education and university as their highest education level. Unfortunately, it cannot be ruled out that his has had an influence on main results.

2.3.   Design

This study has used a between-subjects design. Each respondent was randomly assigned and exposed to two audio recordings.

To make all results suitable for statistical analysis, the eventual SPSS file was flipped, in an attempt to remove all within-subjects factors. In other words, the SPSS file was constructed as if respondents were only exposed to one recording. This way, each respondent was counted twice: once for the first recording they reviewed, and once for the second recording they reviewed. This technique was used in previous research conducted by the author under the supervision of experienced researchers tied to Radboud University Nijmegen. The author was therefore under the impression that 'flipping' was an acceptable technique to be applied in this field of research. Further reflection on this is provided in the discussion section of this article.

2.4.   Instruments

The dependent variable in this experiment was *attitude towards the speaker,* subdivided into three dimensions: *competence, likability,* and *status.*

Past studies that have researched the effects of various varieties of accented English have used many different ways of operationalizing the variable of *attitude towards the speaker* (see, for example, Ahmed et al., 2014; Nejjari et al., 2012; Hendriks et al., 2015; Hendriks et al., 2016). The present study has opted to use the same measuring scale for attitude as used by Hendriks et al. (2015). This scale was selected because, out of all the related studies analyzed by the author, the topic of research in the study by Hendriks et al. (2015) most closely resembled the topic of research of the present study. The scale was used in earlier research into the effects of Dutch-accented English speech. The scale includes three dimensions of attitude, rather than Nejjari et al.'s (2012) scale, which only included two dimensions. This has the advantage that respondents are able to provide a broad description of their attitude towards a speaker. The scale used by Hendriks et al. (2015) was preferred over the scale used by Hendriks et al. (2016), because it showed higher alpha scores for reliability (Hendriks et al. (2016) included the dimension of 'dependability', which showed an insufficient reliability score of $\alpha = .67$ (p. 6)). The three dimensions of competence, likability[1], and status were deemed by the author to be the best available option to generate a broad description of a person's attitude towards a speaker.

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[1] The variable of likability was labeled 'affect' by Hendriks et al. (2015) and Nejjari et al. (2012). The terms 'likability' and 'affect' were considered to be interchangeable. Hendriks et al. (2016) used the term 'likability' as well.

Attitude towards the speaker was measured by 6-point Likert scales. All Likert scales were introduced by the statement "In my opinion, the speaker…", and anchored by "totally disagree – totally agree". *Competence* was measured with six items: "is reliable", "is intelligent", "is competent", "is hardworking", "has an educated voice", and "is ambitious". *Likability* was measured with four items: "is friendly", "is warm", "is humorous", and "is cheerful". *Status* was measured with five items: "is controlling", "is dominant", "has a strong voice", "is authoritative", and "is assertive".

A detailed reliability analysis was conducted per level of accentedness, recording, and native language of the respondents. The reliability of the scale was at least acceptable in all cases. Scores ranged from $\alpha = .77$ to $\alpha = .96$. The results of the detailed scale reliability analyses are provided in appendix B.

As a manipulation check, respondents were asked to indicate the perceived accent strength of the speaker. First, respondents were asked whether they thought to have heard a native, or a non-native speaker of English. Accent strength was measured by asking those respondents that indicated to have heard a non-native speaker of English, how strong they perceived the speaker's accent to be, on a 9-point Likert scale, where 1 meant 'no accent' and 9 meant 'very strong non-native accent'. When respondents indicated that they heard a native speaker of English, a score of 1 was automatically assigned regarding perceived accent strength.

Perceived comprehensibility of the speaker was measured by asking respondents to what extent they were able to understand the speaker on a 9-point Likert scale, where 1 meant 'not at all', and 9 meant 'fully'. This was done to be able to exclude comprehensibility as an influencing factor.

2.5. Procedure

An online questionnaire was constructed using the online program Qualtrics. Respondents were invited to participate through online communication channels Facebook, LinkedIn, and e-mail. Dutch respondents were directed to a Dutch questionnaire, native English speaker respondents were directed to an English questionnaire. The questionnaire was introduced by a welcoming text providing general instructions. The respondents were told that all data would be collected anonymously. Respondents were told that they were about to listen to a person describing the nature of his job. A test developed by market research company MetrixLab was conducted in order to make sure respondents' audio settings were set correctly. If so, a respondent was randomly directed to one of the six audio recordings.

After the recording had been played, respondents were directed to the questionnaire which measured their perceived competence, likability and status of the speaker. This was repeated once: each respondent listened to and answered questions about two audio recordings. When they had completed the questionnaire, they were asked to provide information about their gender, age, highest education level, native language, and country of origin. A chance to win a small prize was offered to respondents who chose to leave their e-mail address: a $20 coupon for Amazon.com was awarded to one native speaker respondent, and a €20 coupon for Bol.com was awarded to one Dutch respondent. On average, respondents took 8 minutes to complete the questionnaire.

2.6.   Statistical treatment

A two-way analysis of variance for competence, likability, and status, with level of accentedness and native language as factors, was conducted to test for main effects.

3. Results

3.1.   Manipulation check results

3.1.1.   Perception as native speaker and perceived accent strength

As a manipulation check, respondents were asked to indicate whether they think they heard a native or a non-native speaker of English. Respondents were also asked to rate the strength of the accent of the speaker they heard. Results of the manipulation check are displayed in table 5. The percentages in table 5 indicate the percentage of respondents exposed to the named recording that indicated they believed to have heard a native speaker of English.

Table 5. Results of manipulation check divided by recording and native language.

Recording (level of accentedness)	Perceived as native speaker		Perceived accent strength[1]			
	By native speakers of English	By native speakers of Dutch	By native speakers of English		By native speakers of Dutch	
			M	*SD*	*M*	*SD*
Nat1 (native)	33%	28%	2.94	2.14	4.72	2.69
Nat2 (native)	39%	26%	3.00	2.36	3.78	2.34
Sli1 (slight Dutch)	27%	22%	3.76	2.73	5.23	2.71
Sli2 (slight Dutch)	14%	30%	4.61	2.53	4.00	2.62
Str1 (strong Dutch)	17%	13%	3.90	1.95	4.25	2.13
Str2 (strong Dutch)	16%	27%	3.94	2.21	3.58	2.25

[1] Accent strength was measured on a scale of 1 (no accent) to 9 (very strong non-native accent).

As table 5 shows, results of the manipulation check are quite different to those of the pre-test (see section 2.1.1.7). The pre-test results showed a clear difference in perceived accent strength of the six recordings. Such a difference was not confirmed by the results displayed above. Apparently, respondents did not perceive the accent strengths of the six speakers to be all that different. The results regarding the percentages of respondents who perceived the speaker they heard to be a native speaker of English are also striking. It appears respondents were quite skeptical towards the stimulus material: as shown, even the two speakers with a native accent (Nat1 and Nat2) were perceived to be native speakers of English by only 33 and 39 percent of the native speakers of English, and by 28 and 26 percent of the native speakers of Dutch. This means a majority of respondents did not perceive the two speakers to be native speakers of English. It cannot be ruled out that this has influenced main results.

3.1.2. Perceived comprehensibility

It was desired to exclude comprehensibility as an influencing factor of perceived competence, likability, and status. In order to check to what extent the recordings were perceived as equally comprehensible, and to check for differences in comprehensibility between native and non-native respondents, analyses were conducted regarding the perceived comprehensibility. A two-way analysis of variance with recording (Nat1/Nat2/Sli1/Sli2/Str1/Str2) and native language (English/Dutch) as factors showed a significant main effect of native language on comprehensibility ($F(1, 328) = 36.81$, $p < .001$). Recording was not found to have a significant main effect on comprehensibility ($F(5, 328) = 2.08$, $p = .068$). The interaction effect between native language and recording was statistically significant ($F(5, 328) = 3.07$, $p = .010$).

In order to find the sources of the statistical differences found between native speakers of English and native speakers of Dutch regarding perceived comprehensibility, the SPSS file was split by recording, and subsequent analyses of variance were conducted. Each recording was analyzed individually to look for statistically significant differences between the comprehensibility of the recording as perceived by native speakers of English and native speakers of Dutch.

A one-way analysis of variance did not show a significant effect of native language on the perceived comprehensibility of recording Nat1 ($F(1, 56) < 1$). Native speakers of English ($M = 7.12$, $SD = 1.81$) perceived recording Nat1 to be equally comprehensible as native speakers of Dutch did ($M = 6.84$, $SD = 1.30$).

A one-way analysis of variance showed a significant effect of native language on the perceived comprehensibility of recording Nat2 ($F(1, 58) = 4.46$, $p = .039$). Native speakers of English ($M = 7.86$, $SD = 1.30$) perceived recording Nat2 to be more comprehensible than native speakers of Dutch did ($M = 7.00$, $SD = 1.86$).

A one-way analysis of variance showed a significant effect of native language on the perceived comprehensibility of recording Sli1 ($F(1, 54) = 26.09$, $p < .001$). Native speakers of English ($M = 7.82$, $SD = 1.29$) perceived recording Sli1 to be more comprehensible than native speakers of Dutch did ($M = 5.87$, $SD = 1.56$).

A one-way analysis of variance did not show a significant effect of native language on the perceived comprehensibility of recording Sli2 ($F(1, 53) < 1$). Native speakers of English ($M = 7.18$, $SD = 1.75$) perceived recording Sli2 to be equally comprehensible as native speakers of Dutch did ($M = 7.06$, $SD = 1.65$).

A one-way analysis of variance showed a significant effect of native language on the perceived comprehensibility of recording Str1 ($F(1, 52) = 13.21$, $p = .001$). Native speakers of English ($M = 8.05$, $SD = 1.55$) perceived recording Str1 to be more comprehensible than native speakers of Dutch did ($M = 6.42$, $SD = 1.75$).

Finally, a one-way analysis of variance showed a significant effect of native language on the perceived comprehensibility of recording Str2 ($F(1, 55) = 11.70$, $p = .001$). Native speakers of English ($M = 7.34$, $SD = 1.76$) perceived recording Str2 to be more comprehensible than native speakers of Dutch did ($M = 5.77$, $SD = 1.68$).

Results regarding perceived comprehensibility of the recordings are displayed in table 6. The results show a significant difference between native speakers of English and native speakers of Dutch in the perceived comprehensibility of four of the six recordings used in the experiment. These four recordings were all perceived to be more comprehensible by native speakers of English than by native speakers of Dutch.

Table 6. Comprehensibility of the recordings as perceived by respondents (1 = not at all comprehensible, 9 = fully comprehensible). Recordings displayed in **bold** showed a significant difference in perceived comprehensibility caused by native language.

| Recording (level of accentedness) | Comprehensibility of the recording | | | | |
| | As perceived by native speakers of English | | As perceived by native speakers of Dutch | | |
	M	*SD*	*M*	*SD*	
Nat1 (native)[4]	7.12	1.81	6.84	1.30	
Nat2 (native)[1]	7.86	1.30	7.00	1.86	
Sli1 (slight Dutch)[2]	7.82	1.29	5.87	1.56	
Sli2 (slight Dutch)[4]	7.18	1.75	7.06	1.65	
Str1 (strong Dutch)[3]	8.05	1.55	6.42	1.75	
Str2 (strong Dutch)[3]	7.34	1.76	5.77	1.68	

[1] Significant effect of native language ($p = .039$).
[2] Significant effect of native language ($p < .001$).
[3] Significant effect of native language ($p = .001$).
[4] No significant effect of native language ($p > .05$).

3.2.   Data preparation

In order to check if the variable *level of accentedness* could be created by combining the results for recordings Str1 and Str2, Sli1 and Sli2, and Nat1 and Nat2, statistical analyses were conducted.

Taking all results into account, a one-way analysis of variance showed no significant effect of recording on perceived competence ($F(5, 334) = 1.46$, $p = .204$), likability ($F(5, 334) = 1.35$, $p = .243$), and status ($F(5, 334) < 1$). Taking only the results of the native speakers of Dutch into account, a one-way analysis of variance showed no significant effect of recording on perceived competence ($F(5, 146) = 1.64$, $p = .153$), likability ($F(5, 146) < 1$), and status ($F(5, 146) = 1.50$, $p = .193$). Taking only the results of the native speakers of English into account, a one-way analysis of variance showed no significant effect of recording on perceived competence ($F(5, 182) = 1.79$, $p = .117$) and status ($F(5, 182) = 1.35$, $p = .247$), but did show a significant effect of recording on perceived likability ($F(5, 182) = 2.79$, $p = .019$). Native speakers of English perceived the speaker in recording Nat1 to be more likable than the speaker in recording Nat2 (mean difference = .80). Because only one significant difference was found between the different recordings, it was decided that means would be calculated in order to create the variable of *level of accentedness*. However, the aforementioned found difference is a limitation of the present study.

3.3.   Main results

3.3.1. Competence

A two-way analysis of variance with level of accentedness and native language as factors showed a significant main effect of native language on perceived competence ($F(1, 334) = 48.76$, $p < .001$). Level of accentedness was not found to have a significant main effect on perceived competence ($F(2, 334) = 1.53$, $p = .218$). The interaction effect between level of accentedness and native language was not statistically significant ($F(2, 334) = 2.10$, $p = .124$).

Speakers of all levels of accentedness were perceived to be more competent by native speakers of English ($M = 4.76$, $SD = .88$) than by native speakers of Dutch ($M = 4.11$, $SD = .85$).

3.3.2. Likability

A two-way analysis of variance with level of accentedness and native language as factors showed a significant main effect of native language on perceived likability ($F(1, 334) = 7.83$, $p = .005$). Level of accentedness was not found to have a significant main effect on perceived likability ($F(2, 334) < 1$). The interaction effect between level of accentedness and native language was not statistically significant ($F(2, 334) = 1.73$, $p = .179$).

Speakers of all levels of accentedness were perceived to be more likable by native speakers of English ($M = 4.08$, $SD = .99$) than by native speakers of Dutch ($M = 3.78$, $SD = .95$).

3.3.3. Status

A two-way analysis of variance with level of accentedness and native language as factors showed no significant main effects of level of accentedness ($F(2, 334) < 1$) and native language ($F(1, 334) < 1$) on perceived status. The interaction effect between level of accentedness and native language was not statistically significant ($F(2, 334) = 2.12$, $p = .122$).

All results regarding perceived competence, likability, and status, are displayed in table 7.

Table 7. Results for competence, likability, and status shown for each level of accentedness as perceived by native speakers of English and native speakers of Dutch.

| | | Native language of the respondents | | | | | |
| | | Native speakers of English | | | Native speakers of Dutch | | |
Dependent variable	Level of accentedness	M	SD	N	M	SD	N
Competence[1]	Native	4.68	0.93	66	4.27	0.89	52
	Slight Dutch	4.66	0.89	61	3.97	0.84	50
	Strong Dutch	4.94	0.79	61	4.07	0.81	50
Likability[2]	Native	4.04	1.08	66	3.80	0.99	52
	Slight Dutch	4.00	1.05	61	3.91	0.88	50
	Strong Dutch	4.20	0.82	61	3.63	0.97	50
Status[3]	Native	3.30	1.01	66	3.56	0.87	52
	Slight Dutch	3.45	0.98	61	3.22	0.97	50
	Strong Dutch	3.47	0.96	61	3.35	0.85	50

[1] Significant main effect for native language ($p < .001$).
[2] Significant main effect for native language ($p = .005$).
[3] No significant main effect for native language ($p = .774$).

4. Conclusion and discussion

The present study has aimed to describe the effects of Dutch-accented English on the attitude towards the speaker. The attitudes of native and non-native speakers of English were measured, and the two were also compared. No significant differences were found which indicate that the level of accentedness has any influence on the attitude towards the speaker.

Firstly, the results of this study show that there were no significant differences found in the perceived competence, likability, and status of speakers of different levels of Dutch-accented English, as perceived by native speakers of English. The level of accentedness of the speakers did not seem to play a role in the judgment of the speakers by native English speaker respondents. The lack of a main effect of level of accentedness is different to the results found by Nejjari et al. (2012). Specifically, Nejjari et al. (2012) found that native British English invoked a higher status than any level of Dutch-accented English., when evaluated by British listeners. The present study was unable to confirm these findings. It is possible that this is due to the variety in nationalities in the present study's respondents. The present study's native English speaker respondents included people with multiple nationalities, while Nejjari et al.'s (2012) study only included British respondents.

An explanation for the lack of an effect found in the present study might be found in the manipulation check results, which showed that the native, slightly Dutch accented, and strongly Dutch accented speakers might not have been viewed as such. Pre-test results showed a clear distinction in perceived accent strength, but the manipulation check results differed greatly from the pre-test results. It is possible that no effects were found regarding differences in attitude caused by accentedness because the respondents simply did not consider the speaker in the recording they heard to be an accented speaker.

Secondly, results show that there were no significant differences found in the perceived competence, likability, and status of speakers of different levels of Dutch-accented English, as perceived by native speakers of Dutch. The level of accentedness of the speakers did not seem to play a role in the attitude towards the speaker, as perceived by native Dutch speaker respondents.

This conclusion is only partially in agreement with previous studies. Based on Hendriks et al. (2015), and Hendriks et al. (2016), a significant effect could have been expected in the perceptions of non-native speakers of English towards speakers of Dutch-accented English. Hendriks et al. (2015) and Hendriks et al. (2016) concluded that French, German, Spanish, and Dutch natives show more positive attitudes towards speakers of native-accented English than towards speakers of strongly

Dutch-accented English. Such an effect was not found in the present study, and neither was the effect found by Hendriks et al. (2016), regarding the higher-rated likability of slightly Dutch-accented speakers. It is possible that the lack of a significant difference in attitude towards the speaker in the present study can be attributed to the difficulty for respondents of forming an image of a speaker within the timeframe of a 25-second audio message, although Hendriks et al. (2015) used recordings of a similar duration. The study by Hendriks et al. (2016), which reported a higher likability of slightly Dutch-accented speakers compared to native speakers, used audio fragments which lasted around 60 seconds. It is possible that this is a more suitable duration for future research.

Again, an explanation for the lack of effects on attitude towards the speaker might lie in the manipulation check results, which showed that the native, slightly Dutch accented, and strongly Dutch accented speakers might not have been viewed as such. It is possible that no effects were found regarding differences in attitude caused by accentedness because the respondents simply did not consider the speaker in the recording they heard to be an accented speaker. Future researchers should therefore consider conducting even more extensive pre-test procedures. It might also be possible to change the design of the study, and measure perceived accent strength and attitude, and look for potential correlations of the two variables.

As stated before, different accents tend to be accompanied by different attitudes and preconceptions (Nelson et al., 2016; Scott et al., 2007). It is possible that the present study's absence of significant differences between different levels of Dutch-accented English signifies that native speakers of Dutch and native speakers of English are generally tolerant towards speakers of Dutch-accented English, especially when the comprehensibility of the message is not influenced by the accent. All audio recordings in the present study were rated to be highly comprehensible by both native speakers of English and native speakers of Dutch. It is quite possible that, as long as someone speaks grammatically correct English in a comprehensible fashion, the accent of this person does not necessarily influence a listener's attitude towards the speaker in a negative way. This notion would contrast to the studies by Nejjari et al. (2012) and Hendriks et al. (2015). However, a study by Hendriks et al. (2014) into the effects of Dutch-accented French and English as perceived by native speakers of French also yielded no significant differences between different levels of accentedness. Further research is required to fully map and understand the full effects of all varieties of accented English speech Scott et al. (2007).

Finally, the attitudes of native speakers of English and native speakers of Dutch towards all levels of accentedness were compared. Regarding perceived competence and perceived likability, all levels of accentedness were judged more positively by native speakers of English than by native speakers of

Dutch. Regarding perceived status, no significant main effect of native language was found. Native speakers of English attributed equal status to the native-accented and Dutch-accented speakers as native speakers of Dutch did.

The results regarding competence and likability show that native speakers of English attributed higher scores for competence and likability than the native speakers of Dutch did, but it is not necessarily so that this was caused by the accent of the speakers in the audio recordings, because no significant interaction effect was found, and no significant main effect was found for level of accentedness. It is possible that native speakers of English attribute higher levels of competence and status to Dutch-accented speakers of English than native speakers of Dutch do, but based on the present study's results, that conclusion cannot be drawn.

The present study was therefore unable to confirm Koster and Koet's (1993) findings regarding their described phenomenon of native speakers of Dutch being less tolerant than native speakers of English towards Dutch-accented English. The present study's results might imply that native speakers of English and native speakers of Dutch are equally tolerant towards speakers of Dutch-accented English.

A possible explanation of the results found regarding the higher scores for competence and likability perceived by native speakers of English might be found outside of the literature discussed. The conclusion that native speakers of English are more tolerant regarding competence and likability than native speakers of Dutch towards all speakers might also be explained by a broader phenomenon. In the present study, the group of respondents who were native speakers of English contained a large percentage of Americans (53%), which are known to employ a more positive survey response style than Dutch respondents (Harzing, 2006). It is possible that (part of) the effects found might be attributed to a tendency of Americans to give acquiescent answers when completing surveys, more so than Dutch respondents. Future research should therefore strive towards a more mixed sample group, proportionately representative of the nationalities of native speakers of English, in order to be able to draw solid conclusions regarding the perceptions of native speakers of English in general. If this is deemed difficult, it might be best to include only one nationality of native speakers of English, as was done by Nejjari et al. (2012). That way, conclusions could be drawn regarding one nationality of native speakers of English.

The differences found between the attitudes of native speakers of English and native speakers of Dutch might be explained by the significant differences found between the age and education level of the two groups of respondents. It cannot be ruled out that this has influenced results. Future

research could prevent such differences by expanding the size of the sample group, thus recruiting more respondents, while actively monitoring the even distribution of respondents regarding their age and education level. Such expansions would require more monetary resources than were available for this study.

The present study contributes to the notion that strongly foreign-accented speech does not necessarily lead to a negative influence on the attitude towards the speaker (Hendriks et al., 2014). Further research is required in order to analyze and map the effects of all forms of accented English speech. However, future researchers should adopt a critical attitude towards the present study's design. As described in section 2.3., the SPSS file was constructed as if respondents were only exposed to one recording. The author was under the impression that this was an acceptable step to take. However, in hindsight, the author is forced to admit that the present study is compromised because of the use of 'flipping'. The within-subjects factors must not simply be discarded this way. It would have been best to avoid this technique, even though that would have doubled the necessary number of respondents. This design flaw can be considered a limitation of the present study and should be avoided in the future.

The present study could be seen as a small step towards completing the full picture regarding the perceived attitudes towards speakers of Dutch-accented English. The role of the English language in the Netherlands has become far more important over the past few decades (Edwards, 2014), and will probably continue to do so for the decades to come. Research into the effects of Dutch-accented English will therefore continue to be both scientifically relevant and practically useful. Future researchers should therefore continue to study the effects of Dutch-accented English.

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Appendix A: Verbal-guise technique vs matched-guise technique

Past research into the effects of accented English speech have used different techniques of creating suitable stimulus materials. Studies that have used audio recordings of different levels of accentedness generally had to choose between the 'matched-guise' technique, in which a single speaker performs all levels of accentedness (Cargile & Giles, 1998), and the 'verbal-guise' technique, in which a genuine native or accented speaker is found for each different recording (Ahmed et al., 2014, Hendriks et al., 2015; Nejjari et al., 2012).

Ideally, this study would have opted to use the 'matched-guise' technique, in which a single speaker performs all three levels of accentedness. The matched-guise technique has been praised for the benefit that it eliminates potentially influencing factors such as speaker volume, intonation, and tone of voice (Cargile & Giles, 1998). However, past research has shown that finding a genuinely multi-accented speaker who was able to deliver a credible performance in multiple levels of accentedness was unfeasible (Ahmed et al., 2014; Hendriks et al., 2015; Nejjari et al., 2012). Multiple studies regarding the effects of accented English have therefore opted to use the 'verbal-guise' technique, which means using a different speaker for each level of accentedness (Ahmed et al., 2014; Hendriks et al., 2015; Nejjari et al., 2012). This technique has the disadvantage that multiple speakers are required, thus not eliminating the possibility that listeners are influenced by factors other than level of accentedness, but has the advantages that all fragments sound more natural, and more credible (Ahmed et al., 2014). In other words, a speaker is not required to mimic an accent that is not his own. In order to ensure feasibility of the present study, the verbal-guise technique was used in the present study.

Appendix B: Scale reliability analyses

Table B1. Results of reliability analysis of the scales used, divided by level of accentedness and native language of the respondents. All numerical values represent Cronbach's α.

		Native language of respondents	
Scale	Level of accentedness	English	Dutch
Competence	Native	.93	.91
	Slight Dutch	.94	.91
	Strong Dutch	.91	.88
Likability	Native	.92	.87
	Slight Dutch	.92	.89
	Strong Dutch	.83	.86
Status	Native	.86	.87
	Slight Dutch	.86	.90
	Strong Dutch	.88	.86

Table B2. Results of reliability analysis of the scales used, divided by recording and native language of the respondents. All numerical values represent Cronbach's α.

		Native language of respondents	
Scale	Recording	English	Dutch
Competence	Nat1	.94	.93
	Nat2	.93	.89
	Sli1	.91	.91
	Sli2	.96	.90
	Str1	.93	.88
	Str2	.88	.88
Likability	Nat1	.90	.90
	Nat2	.90	.85
	Sli1	.86	.89
	Sli2	.94	.88
	Str1	.84	.82
	Str2	.83	.89
Status	Nat1	.86	.89
	Nat2	.87	.86
	Sli1	.77	.90
	Sli2	.90	.90
	Str1	.93	.90
	Str2	.78	.80