# Know thy neighbor!

# The effect of familiarity with European non-native speaker accents in English on Dutch and French listeners' attitudes

BA Thesis English Language and Culture, Utrecht University



Adriaan Hendrik Ludger Walpot 4142799 a.h.l.walpot@students.uu.nl

Supervisor: Rias van den Doel Second reader: Koen Sebregts

29 November 2016

# Table of contents

Abstract	
Introduction	
Theoretical background	4
Defining ways to judge accents	4
Factors that affect the judgment of accents	6
Research aim	
Method	
Design	
Pilot study	
Participants	
Materials	
Measuring instruments	
Procedure	
Statistical analyses	
Results	
Sex	
Nationality	
Linguistic proximity	
Identification of familiar languages	
Familiarity effect	
Familiarity effect on shared languages	
Incorrect answers	
Open comments	
Discussion	
Introduction	
Hypothesis 1: Familiarity	
Hypothesis 2: Familiarity and shared languages	
Hypothesis 3: Linguistic proximity	
Subsequent hypothesis: English proficiency	
Conclusion	
Limitations and suggestions for improvement	
Recommendations	
References	
Appendix A	

Appendix B	
Appendix C	40
Appendix D	
Appendix E	

# Acknowledgments

I would like to thank the following people:

Rias van den Doel for his guidance, and insightful suggestions to contain the scope of this thesis. Yvette Linders for helping me with the statistics and SPSS. Without her help I would have never understood my results. Erick van den Bercken from the Babel language institute for his expert help in the selection of speech samples for this study. Alice Henderson for helping me reach a lot of French students.

Jelle van der Werff and Emma Wasser for reading the pre-final version of this thesis and saving me from embarrassing grammatical mistakes.

And lastly, again Emma for her love and support, and the willingness to accompany me all those evenings in the UB.

#### Abstract

Due to globalization, English is increasingly used as a lingua franca between European nonnative speakers. As Europeans will increasingly become familiar with each other's accents, it is important to gain an understanding of the effect that familiarity with European non-native speaker accents has on the attitudes of Dutch and French listeners. The research method consisted of a review of literature, coupled with the collection and analysis of empirical data. The latter is based on an online survey that tested participants' attitude towards twelve nonnative speaker accents. The survey was filled in by 112 Dutch and French university students. The findings show that familiarity with an accent does not necessarily affect the authority, intelligence, and pleasantness of a speaker. Furthermore, a listener's attitude towards a nonnative speaker accent varies based on the accent that is rated, and the nationality of the rater. Repetition of this study with different non-native speakers and listeners is needed to advance the understanding of the effects that familiarity has on European non-native accents.

# Keywords

Non-Native English, European English, Linguistic Proximity, Familiarity Effect, Interlanguage Benefit, Attitude

#### Introduction

The linguistic landscape of Europe is very diverse. The European Union alone includes 24 official languages (Eurobarometer, 2012). Due to globalization, Europeans with different linguistic backgrounds increasingly meet in politics or in the international workspace. When situations arise where a common language of communication is needed, English is most often used (Eurobarometer, 2012). The continually increasing amount of contact between the many languages has led scholars to believe that a convergence between the non-native speaker (NNS) English accents of Europeans has emerged (Jenkins, 2001; Seidlhofer, 2001; Melchers & Shaw, 2003; Modiano, 2003; 2009). This idea has influenced researchers to propose a European variety of English. The variety combines the pronunciation features of all European languages, and is created in order to further aid communication between NNSs (Jenkins, 2000). However, the success of European English is disputed (Mollin, 2006; Prodromou, 2006; Van den Doel, 2006), and it has become questionable whether the European non-native English accents are really in a process of convergence (Van den Doel & Quené, 2013).

Instead of convergence between European non-native speakers (EU-NNSs) and their English accents, it was found that NNSs in Europe showed significant differences in their assessment of different NNS accents (Van den Doel & Quené, 2013). Not only did NNSs with different first languages (L1s) show significant differences in their judgment, but the severity of judgment also varied per country that was being assessed. For example, Finnish speakers were rated strictly by Spanish judges and more leniently by Dutch judges, while Greek speakers were rated leniently by Spanish judges and more strictly by Dutch judges. The reason for these differences has not been researched yet, but Van den Doel and Quené (2013) suggest a combination of two possible phenomena: a correlation could exist between a rater's proficiency in English and its strictness in judgment, and familiarity with an accent may affect the rater's judgment either positively or negatively.

For several reasons it is important to gain an understanding of how the differences in judgment of different EU-NNS accents are formed. First, the use of English in international communication will only increase. Secondly, the attainment of a NS (native speaker) accent is unrealistic for most people (Kirkpatrick, 2006), meaning that the majority of people will speak with a NNS accent. Lastly, there are far more NNSs of English than NSs (Crystal, 2003). Therefore, communication in English between speakers with different NNS accents is likely to become even more common in the future, given that NNS accents are not in convergence and no European lingua franca English will arise. In this case it is vital to empower NNSs with knowledge about the effect that their accent has on other NNSs.

The effect that familiarity with NNS accents has on NNS listeners' judgment of NNS accents has not been the subject of much research yet. Research into this subject is important, because a greater understanding of the effect of familiarity will show whether NNSs' attitudes towards NNS accents will be positively, negatively, or not affected when EU-NNSs become more familiar with each other's accent in English.

#### **Theoretical background**

#### Defining ways to judge accents

In order to study the effect that familiarity has on the judgment of NNS accents, it must first become clear how accents can be judged. In many studies, accents are judged by their *understandability* (for example, Munro & Derwing, 1999; Carey, Mannell & Dunn, 2011). This broad term consists of three elements: intelligibility, comprehensibility, and interpretability (Kachru & Smith, 2008). *Intelligibility* is "the recognition of a word or another sentence-level element of an utterance" (Kachru & Smith, 2008). *Comprehensibility* can be defined as the ability to recognize the contextual meaning of a word (Nejjari, Gerritsen, Van der Haagen & Korzilius, 2012). *Interpretability* is recognizing "the intent or purpose of the utterance" (Kachru & Smith, 2008). Although these three elements each cover

a different domain of understandability, Smith and Lindemann argue that intelligibility, comprehensibility, and interpretability do influence each other (as cited in Nejjari et al., 2012). It is for this reason, and because the specific distinction between its elements is often unnecessary, that "intelligibility" is often used as a cover term to describe understandability (Kachru & Smith, 2008). In some other studies (Major, Fitzmaurice, Bunta, & Balasubramania, 2005; Carey et al., 2011; Nejjari et al., 2012), "comprehensibility" is used to refer to understandability. As the current study does not go into the depth of the elements of understandability, it will use intelligibility as a synonym for understandability, just as in Kachru and Smith (2008).

Researchers' varying views on the effect that accents have on listeners have resulted in different approaches towards accents and methods to study them. Munro and Derwing (1999) argue that education should mainly focus on improving intelligibility. They claim that the strength of a speaker's accent is not related to its intelligibility. Improving a speaker's accent should, therefore, be considered only secondarily (Munro & Derwing, 1999). They support their viewpoint with a sociological argument; the many accent reduction programs in the 90s intensified the idea that a foreign accent is "a bad thing" (Munro & Derwing, 1999). Van den Doel (2006) disagrees with their viewpoint towards accents, as he found that pronunciation features of foreign accents still cause irritation and amusement, despite their intelligibility. Withholding helpful information from NNSs to improve their accents would be "irresponsible", according to Van den Doel (2006, p. 246). Moreover, it is argued that attitude and intelligibility influence each other (Major et al., 2005; Smith; Lindemann, as cited in Nejjari et al., 2012). A negative attitude towards an accent influences its understandability in a negative way (Major et al., 2005). Therefore, the inclusion of the measurement of listener's attitude towards an accent seems necessary.

Attitude can be defined by two norms that determine social interaction, according to Brown (1965). The first of the two norms is *status*, which a speaker has when he is found to have authority, be competent, educated, intelligent, and cultured. The second norm is *solidarity*, which is assigned to speakers who are considerate, pleasant, and friendly (Brown, 1965).

# Factors that affect the judgment of accents

In order to investigate the effect of familiarity, other factors that may influence a listener's attitude towards an accent should be taken into account. During the past decades, a wide range of factors has been found to have an effect on accent rating. In the following paragraphs, those factors that are relevant to this study will be discussed. Factors that influence an accent's intelligibility as well as factors that affect a listener's attitude towards an accent will be considered, as intelligibility and attitude are found to influence each other.

A factor that is often credited to have an influence on accent ratings is linguistic proximity of languages. Many studies argue that listeners benefit when the accents in question share similar features (for an overview see Nejjari et al., 2012: 251). It has, for instance, been found that an accent has a higher understandability rating when the listener has the same accent as the speaker (Wilcox; Flowerdew, as cited in Nejjari et al., 2012). Additionally, Wang and Van Heuven (2007) found American NSs to rate Dutch-accented English higher in terms of intelligibility than Mandarin-accented English. They attribute this to the linguistic distance English has to Dutch, in comparison to Mandarin Chinese (Wang & Van Heuven, 2007). Other studies, however, argue that familiarity with an accent, instead of linguistic proximity, makes an accent more intelligible (Tauroza & Luk, as cited in Nejjari et al., 2012; Major et al., 2005). Major et al. (2005) indicate that a shared L1 between speaker and listener does not always result in an advantage in the intelligibility of accents. Major et al. (2002) found that Chinese listeners rated Chinese-accented English as less understandable

than NS accents of English, and that Phiko (as cited in Major et al., 2005) found Finns to rate Received Pronunciation (RP) as more intelligible than Finnish-accented English. Therefore, according to Major et al. (2005), it is a listener's familiarity with its own accent that results in a higher understandability in the cases found by Wilcox and Flowerdew (as cited in Nejjari et al., 2012) instead of linguistic proximity. In order to contribute to this discussion, listeners in the current study are asked to rate accents that have linguistic proximity to their L1, and accents that are etymologically more distant, similar to the comparison Wang and Van Heuven (2007) make between Mandarin speakers of English and Dutch speakers of English, rated by American listeners.

Aside from linguistic proximity, the L1 of a rater may influence the assessment of an accent in another way. Van den Doel and Quené (2013) tested how NNSs judged European NNS accents, in comparison to NS raters. They found significant differences in the strictness of judgment between listeners with different L1s. Greek, Spanish, and Chinese raters were the more lenient judges and showed no significant differences with NS judges. Dutch, Croatian, and Polish raters, on the other hand, were significantly more severe judges than NSs. The data reported here appear to support the assumption that a correlation exists between the level of English proficiency and the strictness of judgment of raters. For instance, as the Dutch are credited to have a high English proficiency and the Spanish to have a much lower English proficiency (Eurobarometer, 2012), it is possible that listeners' judgment increases in severity when their proficiency in English increases. This theory is, however, based on the assumption that the Dutch raters in Van den Doel and Quené (2013) have a high English proficiency and the Spanish raters a low English proficiency. Furthermore, this theory would have to make an exception for NS judges, who are found to be more lenient towards NNS-accented speech than most NNS judges by a considerable body of literature (for an overview see Van den Doel, 2006: 11).

The influence of linguistic proximity and English proficiency on the rating of EU-NNS accents of English can be tested by comparing Dutch and French judges. The influence of linguistic proximity can be tested, because the Dutch and French languages belong to different language groups. Dutch is a Germanic language and French a Romance. The expectation is that the English accents of different speakers of Germanic languages will show more similarities with Dutch than with French. Likewise, the English accents of speakers of Romance languages are expected to have more in common with French than with Dutch.

Furthermore, the inclusion of Dutch and French judges also facilitates testing the effect of English proficiency. According to the Eurobarometer (2012), speakers from these nationalities show a large difference in self-rated proficiency in English. 90% of the Dutch speak English well enough in order to have a conversation, as opposed to 39% of the French (Eurobarometer, 2012). An explanation for this large difference in English proficiency may lie in the amount of exposure to English. In France, many television series are dubbed and there are rules in place that require 40% of the music on French radio to be in French (Berns, de Bot & Hasebrink, 2007). Conversely, in the Netherlands television series are subtitled, and it is suggested that more than 50% of the programs on Dutch TV channels is English (Berns, et al., 2007). Furthermore, English is implemented as working language in higher education. The expectation is that a considerable difference in English proficiency will exist between Dutch and French participants.

Finally, familiarity with an accent or certain features is found to affect a listener in three ways. To begin with, it is likely that familiarity influences the intelligibility of the accent. As previously mentioned, familiarity with an accent is found to improve its intelligibility (Major et al., 2002; Wang & Van Heuven, 2007; Carey et al., 2011). Therefore, a higher level of intelligibility may improve the attitude towards an accent (Major et al., 2005; Smith; Lindemann, as cited in Nejjari et al., 2012).

Subsequently, familiarity with an accent may also affect the attitude towards a speaker directly. The nature of familiarity's influence on the attitude towards an accent is much more speculative in comparison to its influence on intelligibility. This is because it has not been subjected much to research yet. It is, however, generally said that attitudes towards accents are influenced by the recognition of a group and the stereotypes that a listener ascribes to that group. Callan, Gallois and Forbes (1983) state "accented speech is often a readily recognizable cue to group membership, and an important determiner of the personality judgments of ingroup and outgroup members". Furthermore, Brennan and Brennan (1981) found judges with Mexican ancestry to have more feelings of solidarity towards Spanish-accented English than Anglo-American judges. Van den Doel and Quené (2013) found Polish, Greek, and Spanish raters to judge their own accent the most leniently, and Dutch raters to judge their own accent more severely. As in Brennan and Brennan (1981), the data of Van den Doel and Quené (2013) indicate feelings of solidarity, or inverse solidarity for accents of speakers with a shared L1. These results suggest that familiarity with an accent can influence the judgment of a speaker's accent.

Conclusively, the recognition of certain familiar pronunciation features may be enough to affect the attitude towards an accent, even when the listener is unfamiliar with the specific L1 of the speaker, or when he fails to recognize it. This seems to be possible in several cases. For instance, NNS judges rate NNS accents as less "natural" sounding than NS accents (Pihko, as cited in Nejjari et al., 2012). The ability to identify the difference between a NS and a NNS may be enough to rate a NNS accent more negatively than a NS accent. In addition to this, Van den Doel (2006) suggests that features of NNS speech can be associated with stigmatized NS dialects. For example, one common pronunciation error of Dutch speakers is TH-stopping, i.e. the substitution of  $/\theta$ ,  $\delta$ / by /t, d/. American judges rate these mistakes more severely than British raters, because they associate TH-stopping with the

stigmatized African American Vernacular English (Van den Doel, 2006). In this case, familiarity with the Dutch accent is not a necessary requirement for a negative attitude towards the accent. Moreover, the association or confusion of Dutch-accented English with African American Vernacular English may even have resulted in a more negative attitude towards the accent of the speaker. It is possible for listeners to wrongly ascribe group memberships and their personality judgments when an unfamiliar accent has pronunciation features that match a familiar accent.

# **Research aim**

The aim of this study is to advance the understanding of how familiarity with an accent influences NNS listeners' judgment of EU-NNS accents in English. Additionally, this study sets out to advance the understanding of how the competing factors, linguistic proximity, and English proficiency, influence the judgment of the accents. The following hypotheses will be tested in order to achieve the aforementioned aim.

First off, the expectation is that overall familiarity positively influences the attribution of authority, intelligence, and pleasantness, except in shared language situations. This hypothesis is believed to be true, because familiarity is argued to improve an accent's understandability, which in turn positively affects its attitude.

Secondly, the expectation is that in shared language situations (listener and speaker share the same L1) familiarity either positively or negatively influences the attribution of authority, intelligence, and pleasantness. This hypothesis is justifiable, because it is found that in shared language situations solidarity is affected either positively or negatively. Dutch speakers are found to rate a Dutch accent in English more negatively and Spanish, Polish, and Greek listeners are found to rate their own accent in English more positively.

Thirdly, the expectation is that linguistic proximity between a speaker and listener's language does not influence whether the speaker is assigned authority, intelligence, and

pleasantness. This statement is defendable, as the theory that argues that linguistic proximity between the listener and speaker's language increases an accent's understandability and, consecutively, its understandability, is disputed. Many studies believe that it is familiarity, rather than linguistic proximity, that positively affects an accents' understandability.

Lastly, a subsequent hypothesis is that English proficiency negatively influences listeners' attribution of authority, intelligence, and pleasantness towards an accent, regardless of listeners' familiarity with accents or the linguistic proximity between participants' languages. This is an interesting proposition to consider, especially as English proficiency is suggested to conflict with the previously stated hypotheses. However, this theory is based on data that show Dutch raters, who are credited with high proficiency in English, to be more strict in their judgment of EU-NNS accents than Spanish raters, who are credited with low proficiency in English. There is no real evidence of the participants' English proficiency in the study. Therefore, this hypothesis should be approached with some caution.

## Method

#### Design

In order to reach a sufficient number of participants to reliably test the previously stated hypotheses, the current study collected quantitative data through an online survey. The survey is still active and accessible at https://survey2.hum.uu.nl/799254. Differences between the ratings of Dutch and French participants who correctly or incorrectly identified twelve EU-NNS accents in English will show whether familiarity, linguistic proximity, and English proficiency influence non-native listeners' judgment of EU-NNS accents in English.

# Pilot study

A pilot study was conducted among five Dutch participants aged between 20 and 23 in order to test the difficulty of the accent identification, and the time it took to complete the survey. Participants filled in the survey in a quiet room under the supervision of the researcher.

The results of the pilot study showed that all participants noticed that multiple accents per language were included. None of the participants identified all accents correctly. It was often the case that a participant narrowed an accent down to Romance or Germanic languages, but did not know which the speaker's specific language is. Particularly, the difference between Italian and Spanish proved difficult. Strikingly, Russian and Polish were often given as answer. This suggests that Dutch participants do not limit their options to West-European languages. The average completion time was 13 minutes.

# **Participants**

The definitive sample consists of 112 participants. 67 participants are Dutch (22 men and 45 women) and 45 French (12 men and 33 women). The majority of the participants in both groups are aged between 18 and 25 (Dutch 93% and French 82%). Most of the participants are university students or have a university degree (Dutch 87% and French 93%). 13% of the Dutch students indicate they study at, or have a degree of the University of Applied Science. The specific choice for Dutch and French participants was made in order to test the influence of linguistic proximity and English proficiency. The research was limited to university students, because this is the part of society that is most involved in international communication.

#### Materials

As stimuli, speech samples of six different EU-NNS accents in English were used. These accents were Swedish, German, Dutch, Spanish, Italian, and French. For each of the six

accents, two speakers with a comparable slight-accented speech were selected. Both male and female speakers were included.

Originally, 38 speech samples of NNSs from twelve different languages were selected from the *Speech Accent Archive* (Weinberger, 2016). The speech samples were reviewed by language teaching experts at the Babel language institute in Utrecht to ensure the speakers' accents met the criteria of slightly accented and comparable accentedness with the other accents. A total of twenty samples met these criteria, of which the final twelve accents were chosen. These twelve accents consisted of a male and female speaker of each language, except for French, as the experts selected no French male speaker. Therefore, two French female speakers were used instead.

The speakers all read the same passage called "Please Call Stella", in which most of the consonants, vowels, and clusters of English are incorporated.

#### Measuring instruments

The online survey consisted of several components. The survey started with a welcome message that provided instructions, indicated the expected duration of the survey, and reassured the participants' anonymity. Directly afterwards the participants were asked to provide details about their personal background. These details were age, sex, nationality, and level of education. Then, the first speech sample was played, followed by two questions that measured the listeners' familiarity with the accent and the perceived accent, three questions testing the listeners' attitude towards the accent, and an open comment box. This part was repeated until all twelve accents were examined. The identification and evaluation of the accents formed the main body of the survey (for a sample page see Appendix A). The appearance of the accents was randomized to prevent that the same last questions were filled in inaccurately, because of participants' boredom, indifference, etc. The survey ended with a

message that thanked the participants for their efforts, and provided the e-mail address of the researcher in case participants had further questions.

Participants' familiarity with the presented accent was measured by testing whether they answered the open question *Which language do you hear*? correctly. An additional statement, *I am familiar with the speaker's language*, showed the participants' self-rated degree of familiarity on a five-point Likert scale.

Listeners' attitudes towards the accents were measured in three statements with a fivepoint Likert scale, *The speaker has authority, The speaker sounds intelligent*, and *The speaker is pleasant to listen to.* In an earlier version of this study, attitude was measured in eight statements, based on Brown (1965). However, 'competent', 'educated', 'cultured', 'considerate', and 'friendly' were discarded, as these extra statements would extend the expected completion time of the survey by ten minutes. Consequently, this would result in the loss of participants.

The open comment box allowed participants to elaborate on their answers. Participants were asked to provide extra information about why they liked or disliked the accent in question.

# Procedure

Dutch and French participants were reached in several ways. The majority of the Dutch participants were approached through social media. No selection of participants has been taken place, aside from the required Dutch or French nationality. However, the survey was shared on the researcher's personal Facebook page. His connections consist mostly of university students, including a considerable number of students of English. A small part of the Dutch participants (n = 15) filled in the survey during a seminar at the Utrecht University. The French participants made up two groups. A small part of the French participants was,

like the majority of the Dutch, approached through the survey that was shared on the researcher's personal Facebook. This group consists of French students who study in the Netherlands. The other group, the majority of the French participants, consists of English students at universities in Toulouse, Strasbourg, Grenoble, and Chambery. They were approached by university staff through e-mails.

#### Statistical analyses

All analyses were conducted with SPSS 24.0. T-tests were used to analyze whether sex of the listeners (male, female) and listeners' nationality (Dutch, French) have an effect on identification, familiarity, authority, intelligence, and pleasantness. Furthermore, a t-test was used to test the effect of linguistic proximity. This is done by analyzing whether listeners' nationality (Dutch, French) has an influence on the identification, authority, intelligence, and pleasantness of cognate languages (Germanic: Swedish, German, Dutch; Romance: Spanish, Italian, French). Final t-tests were carried out to test whether listeners' familiarity, correct or incorrect identification of the twelve different accents, has influence on authority, intelligence, and pleasantness. Pearson Correlations tests were used to analyze whether a relationship exists between listeners' ability to identify an accent and the degree of familiarity they attribute to an accent.

# Results

# Sex

First of all, the influence of the listeners' sex on the different variables was measured. The results in Table 1 show whether sex is considered to have an effect on identification with a maximum of twelve points. Table 2 shows the effect of sex on how listeners rate the accents on degree of familiarity, authority, intelligence, and pleasantness where the highest possible score was 60 points (five points per accent).

Table 1

Mean, Standard Deviation, and Significance of Overall Identification of the Twelve Accents by Listeners' Sex

	Sex	М	SD	t (df)	р	
Correct	Male	5.24	2.09	-6.32 (111)	.53	
identification	Female	4.94	2.37			

Table 2

Mean, Standard Deviation, and Significance of Overall Attribution of Degree of Familiarity, Authority, Intelligence, and Pleasantness of the Twelve Accents by Listeners' Sex

	Sex	М	SD	t (df)	р
Degree of	Male	38.24	6.58	0.12 (110)	.91
familiarity	Female	38.38	6.01		
Authority	Male Female	33.03 32.26	4.61 5.39	-0.71 (110)	.47
Intelligence	Male Female	39.94 42.54	4.06 7.04	2.46 (101.5)	.02
Pleasantness	Male Female	35.24 35.22	5.15 5.76	-0.02 (110)	.99

It is apparent from Table 1 and Table 2 that very few variables are affected by the sex of listeners. No significant difference is found between male and female listeners in identification, degree of familiarity, authority, and pleasantness. There is no reason, therefore, to assume that sex has influence on the scoring of these variables in the separate accents. In the intelligence variable there is a significant difference between the males and females. This means that overall female listeners rate the accents higher in terms of intelligence than their male counterparts. An analysis of the influence of sex on the intelligence of the individual accents shows that a significant difference in intelligence is only found in two of the twelve accents: the accent of the Spanish male (t = 2.03, df = 110, p = .05) and the German female (t = 2.49, df = 110, p = .01). Furthermore, when the influence of listeners' sex on the overall intelligence ratings is measured separately for Dutch and French participants, it becomes

apparent that, within each separate group, sex does not make a significant difference (Dutch (t = 1.83, df = 57.8, p = .07) and French (t = 1.57, df = 36.3, p = .13)). In further analyses and discussion, sex will be ruled out as a factor. Only in the analyses of the intelligence of the Spanish male and the German female, the influence of the listeners' sex has been taken into account.

## Nationality

Subsequently, the influence of listeners' nationality on the different variables was tested. The results in Table 3 show the number of accents identified correctly, where the highest possible score was twelve. The results in Table 4 show the overall scores for authority, intelligence, and pleasantness with a maximum of 60 points.

## Table 3

Mean, Standard Deviation, and Significance of Overall Identification of the Twelve Accents by Listeners' Nationality

	Nationality	М	SD	t (df)	р
Correct identification	French	3.18	1.71	-9.41 (110)	.001
	Dutch	6.27	1.70		

# Table 4

Mean, Standard Deviation, and Significance of Overall Attribution of Authority, Intelligence, and Pleasantness of the Twelve Accents by Listeners' Nationality

	Nationality	Μ	SD	t (df)	р
Attribution of overall	French	31.38	5.95	-1.89 (110)	.06
authority	Dutch	33.24	4.44		
Attribution of overall	French	42.58	7.89	1.04 (68.67)	.30
intelligence	Dutch	41.19	5.11		
Attribution of overall	French	36.51	6.41	2.04 (110)	.04
pleasantness	Dutch	34.36	4.76		

What stands out the most in Table 3 is the significant difference between the identification scores of Dutch (n = 67) and French (n = 45) listeners. The Dutch listeners' identification

score shows a mean that is almost twice as high as the French. This means that Dutch listeners are considerably better at accent identification than their French counterparts. Table 4 shows that Dutch judges rate *Attribution overall authority* higher than French judges with a difference that approaches significance. This seems to suggest that overall, the Dutch assign more authority to the speakers than the French. On *Overall pleasantness*, French listeners score significantly higher than Dutch listeners. This means that French listeners find the speakers to be more pleasant, compared to Dutch listeners. In the attribution of intelligence, Dutch and French raters score equally highly.

The identification scores of the individual accents were analyzed to provide insight into the large differences in *Correct identification* scores between Dutch and French listeners. The results of this analysis show that Dutch raters score significantly higher than French raters in the identification of ten out of twelve accents (see Appendix B). French listeners outscore Dutch listeners only in the identification of the second French female (Dutch 81 %, French 93%). In the identification of the accent of the Italian female, the scores of Dutch and French raters are equal (Dutch 42%, French 42%).

## Linguistic proximity

The benefit of linguistic proximity was tested by comparing Dutch and French listeners' ratings of the accents of Germanic and Romance language speakers. The identification scores of the Swedish, German, and Dutch accents form *Correct identification of cognate languages (Germanic)* scores. The scores of the Spanish, Italian, and French accents form *Correct identification of cognate languages (Romance)* scores. The results in Table 5 show the number of accents identified correctly of both language groups with a maximum of six points. Table 6 shows the attribution of authority, intelligence, and pleasantness of the language groups with a maximum of 30 points. The results in Table 5 and Table 6 only

include the results of the variables that differ significantly, or approach significance, between

Dutch and French listeners.

#### Table 5

Mean, Standard Deviation, and Significance of Identification of Cognate Languages by Listeners' Nationality

	Language	Nationalit	уМ	SD	t (df)	р
	group					
Correct identification of	Germanic	French	0.78	0.95	-13.77 (110)	.001
cognate languages		Dutch	3.16	0.86		
	Romance	French	2.40	1.25	-2.88 (110)	.004
		Dutch	3.10	1.28		

Table 6

Mean, Standard Deviation, and Significance of Attribution of Authority, Intelligence, and Pleasantness of Cognate Languages by Listeners' Nationality

	Language	Nationality	Μ	SD	t (df)	р
	group					
Attribution of authority of	Romance	French	14.64	3.00	-2.05 (110)	.04
cognate languages		Dutch	15.75	2.63		
Attribution of intelligence	Germanic	French	21.49	3.91	1.84 (110)	.07
of cognate languages		Dutch	20.28	2.99		
Attribution of pleasantness	Germanic	French	18.20	3.69	3.30 (110)	.001
of cognate languages		Dutch	16.18	2.78		

The figures in Table 5 are the most striking. Dutch raters score significantly higher than French raters in the identification of both the Germanic and Romance language groups. This means that Dutch listeners are better at identifying Germanic and Romance languages than their French counterparts. French raters show a large difference in scores between *Correct identification of cognate languages (Germanic)* (M = 0.78) and *Correct identification of cognate languages (Romance)* (M = 2.40). Dutch raters show no noteworthy difference in *Correct identification of cognate languages* scores between Germanic and Romance accents. The results in Table 6 show French listeners to have the highest scores in *Attribution of pleasantness of cognate languages (Germanic)* and *Attribution of intelligence of cognate* 

*languages (Germanic).* Only for *Attribution of pleasantness of cognate languages* (*Germanic*) the scores between French and Dutch listeners differ significantly. However, as the French listeners' attribution of intelligence of the Germanic group approaches significance (p = .07), the variable could be taken into consideration as a tendency. These results indicate that French listeners find Germanic language speakers more pleasant and intelligent, compared to Dutch listeners. Furthermore, the findings in the table show that Dutch judges scored significantly higher than the French in *Attribution of authority of cognate languages (Romance).* This means that Dutch judges find the Romance language speakers to have more authority, compared to their French counterparts. No differences are found between Dutch and French listeners in attribution of intelligence and pleasantness of the Romance group, and attribution of authority of the Germanic group.

# Identification of familiar languages

Afterwards, the correlation between the degree of familiarity with the perceived accent and the identification scores was tested. The results show that a significant positive correlation exists for eight of the twelve accents<sup>1</sup>. In the four other cases, familiarity and identification show no significant correlation<sup>2</sup>. The results of the accent of the Italian male, however, show a tendency towards a negative correlation. This seems to suggest that listeners who identified the Italian male speaker's L1 incorrectly scored the perceived accent higher on degree of familiarity than the judges who identified the accent correctly.

<sup>&</sup>lt;sup>1</sup> Dutch male (r = .64, p = .001), Dutch female (r = .65, p = .001), German male (r = .43, p = .001), first French female (r = .52, p = .001), second French female (r = .56, p = .001), Italian female (r = .26, p = .005), Spanish male (r = .25, p = .008), Spanish female (r = .28, p = .003).

<sup>&</sup>lt;sup>2</sup> Swedish male (r = .04, p = .678), Swedish female (r = .10, p = .314), German female (r = .15, p = .104), Italian male (r = .10, p = .282).

# Familiarity effect

The influence of familiarity was tested by comparing the scores of listeners who identified an accent correctly with the scores of listeners who misidentified an accent. The scores of the assigned authority, intelligence, and pleasantness were analyzed for each of the twelve accents. This was done separately for Dutch and French raters, because the two nationality groups were expected to score differently, and there were more Dutch than French participants.

The two Dutch and the two Swedish accents were excluded from the analysis of the influence of familiarity on Dutch participants' scores. In the cases of the Dutch accents, too few Dutch listeners misidentified the speakers' L1 (Dutch male (n = 5), Dutch female (n = 0)). In the cases of the Swedish accents, too few Dutch listeners succeeded in the correct identification of the Swedish speakers' L1 (Swedish male (n = 4), Swedish female (n = 3)). These numbers were not enough to guarantee reliable results and have, therefore, been excluded from the analyses of the familiarity effect. The remainders of the accents were analyzed and the variables that show significant differences between listeners who identified an accent are presented in Table 7. The *correct* scores show whether listeners identified the accent correctly or incorrectly.

## Table 7

Dutch Listeners' Mean, Standard Deviation, and Significance of German femalepleasantness and German male authority by Correct IdentificationCorrectNMSDt (df)p

	Correct	Ν	М	SD	t (df)	р
German female is pleasant to	No	29	2.93	0.80	2.25 (65)	.03
listen to.	Yes	38	2.50	0.76		
German male has authority.	No	29	2.97	0.87	-2.62 (65)	.01
	Yes	38	3.50	0.80		

As Table 7 shows, the accent of the German female receives significantly lower scores in terms of pleasantness from listeners who identified the accent correctly, compared to listeners who misidentified the accent. This means that Dutch raters find the accent of the German

female less pleasant when they are aware the speaker is German. The accent of the German male is assigned a significantly higher authority score by listeners who recognized the accent, compared to listeners who did not recognize it. This means that Dutch listeners find the accent of the German male to have more authority when they know the speaker is German.

In the analysis of the effect of familiarity on French listeners, five accents were excluded. In the case of the accent of the first French female, too few French raters identified the speakers' L1 incorrectly (n = 3). In the cases of the accents of the Italian male, the Dutch male, and both Swedish speakers, too few French listeners succeeded in the correct identification of the speakers' L1 (Italian male (n = 1), Dutch male (n = 4), Swedish male (n = 0), Swedish female (n = 0)). These numbers were not enough to guarantee reliable results and have, just as in the analyses of Dutch listeners' identification above, been excluded from the analyses. The remainder of the accents was analyzed and the variables that show significant differences, or show a difference that approaches significance, between the scores of raters who identified the accents correctly and incorrectly are presented in Table 8.

Table 8

French Listeners ´Mean, Standard Deviation, and Significance of German female authority and Dutch female authority by Correct Identification

	Correc	et N	M	SD	t (df)	р
Dutch female has authority.	No	38	2.95	0.90	-2.46 (43)	.02
	Yes	7	3.86	0.90		

In Table 8 it can be seen that the accent of the Dutch female receives significantly higher scores from listeners who identified the accent correctly than from listeners who misidentified the accent. This means that French raters find the accent of the Dutch female to have more authority when they identify the accent correctly.

# Familiarity effect on shared languages

Successively, the influence of familiarity on shared languages was analyzed by comparing the scores of listeners who identified an accent correctly with the scores of listeners who identified an accent incorrectly. First the influence of familiarity on Dutch listeners' rating of the Dutch accents was examined and afterwards French listeners' rating of the French accents.

In the analysis of the influence of familiarity on a shared Dutch language, only the accent of the Dutch male was used. This was done, because there were no Dutch raters who misidentified the accent of the Dutch female. Furthermore, the results of the scoring of the accent of the Dutch male, as seen in Table 9, should be viewed as a general tendency only, because there is no well-balanced distribution of listeners who identified the accent correctly (n = 62) and incorrectly (n = 5).

## Table 9

Dutch Listeners' Mean, Standard Deviation, and Significance of the Dutch Male Accent's Authority, Intelligence, and Pleasantness by Correct Identification

	Correct	N	М	SD	t (df)	р
The speaker has authority.	No	5	3.40	0.89	1.46 (65)	.15
	Yes	62	2.76	0.95		
The speaker sounds intelligent.	No	5	4.00	0.71	1.75 (65)	.08
	Yes	62	3.26	0.92		
The speaker is pleasant to listen	No	5	3.60	1.14	2.20 (65)	.03
to.	Yes	62	2.68	0.88		

It is apparent from Table 9 that the Dutch accent is rated lower in terms of authority, intelligence, and pleasantness by listeners who identified the accent correctly, compared to listeners who identified the accent incorrectly. The scores of the Dutch speaker's pleasantness differ significantly, and authority and intelligence approach significance. This seems to indicate a tendency among Dutch listeners to rate the Dutch accent's attitude more negatively when they know the speaker is Dutch.

In the analysis of familiarity on a shared French language only the first French female accent was used. The accent of the second French female was excluded, because only four French listeners identified the accent incorrectly. The results of the analysis of the accent of the first French female can be seen in Table 10.

#### Table 10

	Correct	Ν	М	SD	t (df)	р
The speaker has authority.	No	13	2.15	0.90	-0.67 (43)	.51
	Yes	32	2.31	0.64		
The speaker sounds intelligent.	No	13	3.69	1.03	1.03 (43)	.31
	Yes	32	3.34	1.04		
The speaker is pleasant to listen	No	13	2.62	1.19	0.25 (43)	.81
to.	Yes	32	2.53	0.98		

French Listeners' Mean, Standard Deviation, and Significance of the First French Female accent's Authority, Intelligence, and Pleasantness by Correct Identification

It becomes evident in Table 10 that there are no significant differences in the ratings of the first French female accent between French listeners who identified the accent correctly and French listeners who identified the accent incorrectly. This means that the scoring of the accent of the first French female is not affected by French raters' knowledge of the speaker's L1.

## Incorrect answers

Lastly, the nature of the incorrectly identified answers was analyzed. Aside from the option *I don't know*, listeners assigned a wide range of L1s to the accents' speakers. The different answers given and their frequency are shown for each of the six languages. Some of the answers are grouped together to make the results more accessible. The results of the analysis can be found in Appendix C.

A surprising result is that 22 percent of the listeners thought the Swedish accents to belong to Slavic speakers (Russian, Polish or Romanian). Another striking result is that many raters (17%) assigned the German accents to belong to French speakers. The French accents were much less often confused with German (2%). Lastly, the Dutch accents were occasionally mistaken for native English accents (8%), even though it was explicitly stated in the survey that the questions cover non-native accents.

#### Open comments

Appendix D shows the comments of the participants. A few examples will showcase the kind of comments that participants gave. There were many general remarks about the accents, for example "He has a calm r[h]ythm, it makes [the] sentence sound quiet". Other comments show participants' pre-determined attitude towards specific accents: "As a native Dutch I very much dislike listening to people who speak "stone coal" English, with a very strong accent".

#### Discussion

#### Introduction

The overall aim of the study was to advance the understanding of how familiarity with an accent influences EU-NNS listeners' judgment of EU-NNS accents in English. Furthermore, this study has set out to discover how listeners' judgment of EU-NNS accents is influenced by linguistic proximity. The following hypotheses have been tested in order to achieve the aforementioned aim:

- Familiarity positively influences listeners' attribution of authority, intelligence, and pleasantness, except in shared language situations.
- In shared language situations (the listener and speaker share the same L1), familiarity either positively or negatively influences listeners' attribution of authority, intelligence, and pleasantness.
- Linguistic proximity between a speaker and listener's language does not influence the attribution of authority, intelligence, and pleasantness towards an accent.

Additionally, a subsequent hypothesis has been tested in order to find out whether listeners' judgment of EU-NNS accents is influenced by their English proficiency.

- The level of English proficiency negatively influences the attribution of authority, intelligence, and pleasantness towards an accent.

It is important to bear in mind that this subsequent hypothesis is tested by comparing Dutch and French listeners. In this comparison it is assumed that Dutch listeners have high English proficiency and French listeners low English proficiency. This is speculative, because there is no evidence of participants' English proficiency in this study. Therefore, the results surrounding this statement must be interpreted with caution.

The discussion section will revisit the hypotheses stated above, summarize the results of this research, and offer conclusions based on the results. Furthermore, a reflection on the limitations of the current study, and suggestions for improvement will be provided. Additionally, recommendations for further research will be included.

# Hypothesis 1: Familiarity

The results of the current study show that for the majority of accents, familiarity does not affect the listeners' attitude. The identification of German and Dutch accents improves the authority of the speaker and, in the case of the accent of the German female, negatively influences the attribution of pleasantness. Additionally, the results show that listeners who attribute a high degree of familiarity to a language most often identify an accent correctly.

The finding that familiarity with an accent often has no influence on the attribution of attitude towards it, and the finding that one aspect of attitude can be affected positively, while the other is affected negatively are in contrast with the notion that familiarity increases an accent's intelligibility, and consecutively, positively influences its attitude. A possible explanation for these results may be that an increase in an accent's intelligibility does not necessarily seem to lead to a more positive evaluation of listeners' attitude towards the accent. Another possible explanation may be that EU-NNS listeners' familiarity with EU-NNS accents does not increase the accents' intelligibility. Further research, which takes

listeners' attitude of EU-NNS accents and their intelligibility into account, will be needed to investigate these possible hypotheses.

The finding that a correct identification of an accent correlates with the attribution of a high degree of familiarity suggests that listeners are more able to identify an accent correctly when they are more familiar with the accent.

#### Hypothesis 2: Familiarity and shared languages

The current study shows that in the Dutch shared language situation, familiarity (correct identification of the speaker's L1) negatively affects listeners' attribution of authority, intelligence, and pleasantness. Conversely, the results suggest that in the French shared language situation, attribution of authority, intelligence, and pleasantness is not affected by familiarity.

The finding that Dutch listeners evaluate the Dutch accent's pleasantness negatively is in line with the inverse solidarity principle found in Van den Doel and Quené (2013). Moreover, the results of the current study not only support the inverse solidarity principle, but also suggest that Dutch listeners negatively evaluate the authority of their countrymen's accents. Interestingly, Dutch listeners who are unaware that they are rating a Dutch accent judge the accent positively on all aspects of attitude, and in most cases significantly more positivly than Dutch judges who successfully identified the Dutch accent. This seems to indicate that the Dutch actually have a positive attitude towards a Dutch accent in English, as long as they do not know the speaker is Dutch.

The results in relation to the French shared language situation show that listeners' attitude towards the French accent is not affected by familiarity. Two possible explanations for this may be argued. Either this finding shows that the principles of solidarity and inverse solidarity found in Brennan and Brennan (1981) and Van den Doel and Quené (2013) do not

always apply, or, as the pleasantness of the French accent is evaluated negatively both by listeners who are aware, and by listeners who are unaware of the speaker's L1, these results suggest familiarity is not a requirement for the inverse solidarity principle.

#### *Hypothesis 3: Linguistic proximity*

The results of the current study show that in half of the cases linguistic proximity does not affect listeners' attribution of attitude. Moreover, the cases that show differences in the results receive lower scores from listeners whose language have close linguistic proximity to the speaker's L1. Additionally, the results show that linguistic proximity does not affect Dutch listeners' ability to identify EU-NNS accents. However, French listeners score higher on the identification of accents of Romance languages.

The finding that linguistic proximity either has no effect on the attribution of attitude towards EU-NNS accents, or that it affects the attribution negatively does not seem to support the idea that linguistic proximity increases an accent's intelligibility, and consecutively, positively influences its attitude. Likewise the account of *Hypothesis 1: familiarity*, the inclusion of accents' intelligibility in further studies is needed to interpret the effect of intelligibility on listeners' attitudes towards EU-NNS accents. The results of the current study are insufficient to draw valid conclusions on the nature of the discovered tendency for accents with close linguistic proximity to a speaker's L1 to be evaluated negatively. However, an explanation of the tendency for Dutch listeners to evaluate the Germanic language group more negatively may be found in the inclusion of the Dutch accents in the Germanic group, as the Dutch accents received considerably lower attitude scores from Dutch listeners than from their French counterparts.

Furthermore, it is uncertain whether linguistic proximity between the listener and speaker's L1 positively affects the listener's ability to identify a NNS accent, as the effects differ for Dutch and French listeners.

#### Subsequent hypothesis: English proficiency

The results of this study allow for this hypothesis to be evaluated by comparing Dutch and French listeners' attitude towards EU-NNS accents. This account should be approached with caution, as participants' English proficiency has not been asked in this study. However, the study shows that Dutch listeners are twice as good at the identification of EU-NNS accents as their French counterparts. This suggests a difference in English proficiency between Dutch and French listeners, because the ability to distinguish different accents of English requires a certain amount of command of the language.

The results of the study show that overall Dutch listeners attribute more authority and less pleasantness to the accents than French listeners. This suggests that higher proficiency in English does not result in a lower scoring in all aspects of attitude. More specifically, it seems to show that listeners with a high English proficiency find accents to be less pleasant, but more authoritarian. The attribution of intelligence is not affected by English proficiency. This outcome provides more depth to the hypothesis made in Van den Doel and Quené (2013) that proposed listeners' English proficiency is correlated with the severity of their judgment of NNS accents.

# Conclusion

In conclusion, EU-NNS listeners' familiarity with a EU-NNS accent may influence their attitude towards the accent positively, negatively, or not at all, depending on the nationality of the listener, the accent that is rated, and the aspect of attitude that is assessed (authority, intelligence, pleasantness). However, in the majority of cases, familiarity does not have an

effect. In shared language situations, familiarity's influence differs as well. In the cases of Dutch shared language situations, familiarity has a negative influence on the attribution of attitude, while in the cases of French shared language situations, familiarity has no influence. Linguistic proximity either has no influence on listeners' attribution of attitude to the accents, or affects their attitude negatively. Additionally, linguistic proximity proves to be beneficial for French listeners' ability to identify EU-NNS accents. Lastly, English proficiency affects listeners' attribution of authority positively, and their attribution of pleasantness negatively. Intelligence is not affected.

# Limitations and suggestions for improvement

There are limitations to this study. Some of these limitations are more general problems encountered in the use of online surveys. Other limitations are the result of the choices the researcher had to make due to the limited time appointed to the study, or issues encountered during the analyses. Based on the current study's limitations, suggestions for future research will be made.

First of all, due to the study's time span of ten weeks, the choice was made not to add qualitative research in the form of follow-up interviews with some of the participants. This would have given insight into the reasoning behind participants' scoring. As a compensation for not implementing interviews, an open comments box was added in the current study. Despite its limited control, the comment box provided valuable information about the participants' reasoning's. Nonetheless, the addition of qualitative data collection by means of follow-up interviews in further research will provide more insight into the participants' reasoning.

Secondly, as mentioned in the method section, the number of statements that measure the participants' attitude has been reduced from eight to three to shorten the completion time

of the survey. Eight statements would have provided more reliable information about the participants' assignment of solidarity and status.

Thirdly, the results of the study do not lend themselves for generalizations about the Dutch and French population, and not even for generalizations about Dutch and French university students. This is because the majority of Dutch and French participants were students of English or exchange students. Only generalizations about this group of internationally oriented students in the Netherlands and France can be made. This is valuable, however, because this particular group is a part of society that is likely to be using English as language of communication. Therefore, they profit the most from the results of the current study.

Fourthly, this study uses two speakers per language to draw conclusions on the NNS accent of an entire country. More speakers per accent are needed to compensate for variation between speakers. However, this will increase the number of accents participants have to judge. A smaller selection of languages has to be made, to keep the completion time of the survey at a minimum.

Fifthly, the effects of English proficiency are based on the assumption that Dutch participants have a higher proficiency in English than French participants. Measures to test participants' proficiency in English in online surveys are, however, very limited. The value of questions that ask for the participants' English proficiency is doubtful, as the answers only portray the self-reported English proficiency. Elaborate tests to determine participants' proficiency would ask too much time from participants. Furthermore, the assumption made in the current study seems to be correct, as the huge difference in the identification scores between Dutch and French participants confirms a variation in English proficiency.

Sixthly, the effects of familiarity are based on too few accents. Many accents had to be excluded in the analyses of the *familiarity effect* and the *familiarity effect on shared* 

*languages*, because of an imbalance between the groups of participants who were able to identify the accents, and who were unable to identify them. The criteria for the accents used in this study are a slight accent in English similar to the rest of the accents. It may be beneficial to select more moderate accents in future research, as this will lead to a more evenly balanced division of participants who do or do not identify the accents. This is of particular importance for French listeners, as there were far too few French participants who identified the accents correctly. Furthermore, it is advisable to remove the Swedish accents from future studies, as Dutch and French participants seem to be too unfamiliar with the accent to be able to identify it. Additionally, it is doubtful whether the effects of familiarity of Dutch participants on their own accent can be reliably tested, because it seems that Dutch participants are too familiar with their own accent to provide a large enough number of participants that do not identify the accent.

Lastly, several comments show that participants factor in the speakers' fluency in the assignment of attitude. The removal of pauses and hesitations from the speech samples in future research should provide more reliable results.

#### Recommendations

In the previous section, suggestions for improvements of the current study were given to aid the repetition of this study. In order to advance the understanding of the effects that familiarity has in the European context, it is of importance that further research into Dutch and French listeners' attitudes towards more different EU-NNS accents is carried out, as well as research into the effect of familiarity on the attitude of different European NNS and NS listeners. Additionally, some surprising results appeared during the analyses of the current study's data that are interesting to explore in future research. These will be discussed in the next paragraphs. The results of the identification of Swedish accents strikingly show that 22 percent of the participants mistook the Swedish accents for Slavic (Russian, Polish, or Romanian) (see Appendix C). Further research is needed that includes moderate and strong Swedish NNS accents to further investigate the frequency of the mix-up. An explanation for listeners' confusion may be found in the existence of a prominent shared feature between Swedish and Slavic languages. It might then also be possible that participants are more inclined to expect, for example, a Polish accent rather than a Swedish accent, because participants are familiar with the speech of Polish immigrants living in the Netherlands and France, and are not used to hear Swedish. It is in the interest of Swedish NNSs to find out whether their accent in English is evaluated more negatively when it is perceived as Russian, Polish, or Romanian.

Another interesting observation of listeners' perceived accents is found in the identification of German accents. Unexpectedly, 17 percent of the participants confused the German accent with French (see Appendix C). This includes answers given by French listeners. Participants' comments seem to show that the confusion originates in the uvular trill, which is a common feature in both the French and German language (see Appendix D). Surprisingly, although the German accent is perceived as French, the French accent is not perceived as German. Therefore, it appears that a wide category for the identification of French accents exists, because German and French NNS accents are both identified as being French. Further research that enables EU-NNS listeners from Germany and more other different nationalities to identify French and German NNS accents is needed to confirm this tendency and its implications.

The misidentification of EU-NNS accents seems to be a recurring phenomenon. Furthermore, there seem to be large consistencies in the nature of the misidentifications in the cases of the Swedish and French accents described above. The phenomenon may have serious implications if confirmed. For starters, it must be considered whether recognition of NNS

Walpot 34

accents should be a goal in teaching, as NNSs seem to be incapable of identifying each other's accent correctly. Furthermore, it raises the question whether NNS accents should be considered useful for speakers' identity when this identity may be mistaken. Most importantly, misidentification may have implications on the appreciation of NNS accents. Principles such as the solidarity and inverse solidarity principle do not function properly when accents are misidentified. For example, listeners' attitudes towards a Swedish NNS accent may be considerably more negative when they misidentify the Swede for a Pole. The strong implications misidentification may have make the phenomenon an imperative topic for future research.

#### References

- Berns, M., de Bot, K. & Hasebrink, U. (2007). *In the presence of English: Media and European youth*. New York: Springer.
- Brennan, E., & Brennan, J. (1981). Accent scaling and language attitudes: Reactions to Mexican American English speech. *Language and Speech*, 24, 207-221.

Brown, R. (1965). Social psychology. New York: Macmillan.

- Carey, M. D., Mannell, R. H. & Dunn, P. K. (2011). Does a rater's familiarity with a cadidate's pronunciation affect the rating in oral proficiency interviews? *Language Testing*, 28, 201-19.
- Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge: Cambridge University Press.
- European Commission. (2012). Eurobarometer 386: Europeans and their languages, Februari-March 2012 [Data file]. Retrieved from http://ec.europa.eu/public\_opinion/ archives/ebs/ebs\_386\_en.pdf
- Callan, V. J., Gallois, C., & Forbes, P. A. (1983). "Evaluative reactions to accented English". *Journal of Cross-Cultural Psychology*, 14, 407-426.
- Jenkins, J. (2000). *The phonology of English as an international language: New models, new norms, new goals.* Oxford: Oxford University Press.
- Jenkins, J. (2001). 'Euro-English' accents. English Today, 68, 16-9.
- Kachru, Y. & Smith, L. E. (2008). *Cultures, contexts, and World Englishes*. New York: Routledge.
- Kirkpatrick, A. (2006). Which model of English: Native-speaker, nativized or lingua franca?In R. Rubdy & M. Saraceni (Eds.), *English in the World: Global rules, global roles* (pp. 71-83). London: Continuum.

- Major, R. C., Fitzmaurice, S. M., Bunta, F., & Balasubramania, C. (2002). The effects of nonnative accents on listening comprehension: Implications for ESL assessment. *TESOL Quarterly*, 36, 173-190.
- Major, R. C., Fitzmaurice, S. M., Bunta, F., & Balasubramania, C. (2005). Testing the effects of regional, ethnic, and international dialects of English on listening comprehension. *Language Learning*, 55, 37-69.
- Melchers, G. & Shaw, P. (2003). World Englishes: An introduction. London: Arnold.
- Modiano, M. (2003). Euro-English: a Swedish perspective. English Today, 74, 35-41.
- Modiano, M. (2009). Inclusive / exclusive? English as a lingua franca in the European Union. *World Englishes*, 28, 208-23.
- Munro, M. J. & Derwing, T. M. (1999). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, 45, 73-97.
- Nejjari, W., Gerritsen, M., Van der Haagen, M. & Korzilius, H. (2012). Responses to Dutchaccented English. *World Englishes*, *31*, 248-267.
- Prodromou, L. (2006). Defining the 'Successful Bilingual Speaker' of English. In R. Rubdy & M. Saraceni (Eds.), *English in the World: Global rules, global roles* (pp. 51-70).London: Continuum.
- Seidlhofer, B. (2001). Towards making 'Euro-English' a reality. English Today, 68, 14-6.
- Van den Doel, R. (2006). *How friendly are the natives? An evaluation of native-speaker judgements of British and American English* (diss. Utrecht University). Utrecht: LOT.
- Van den Doel, R., & Quené, H. (2013). The endonormative standards of European English: Emerging or elusive? *English World-Wide*, *34*, 77-98.
- Wang, H. & Van Heuven, V. J. (2007). Quantifying the interlanguage speech intelligibility benefit. In W. J. Barry & J. Trouvain (Eds.), *Proceedings of the 16<sup>th</sup> international*

*congress of phonetic sciences* (pp. 1729-1732). Saarbrücken: Universität des Saarlandes.

Weinberger, S. (2016). *Speech Accent Archive* [Data file]. Retrieved October 2, 2016 from http://accent.gmu.edu.

## Appendix A

A sample page of the main body of the survey.

	rs (3)		Resu	ıme later Exit anı	d clear survey
7%					
L'atom to the second second at the					
Listen to the audio segment, then	continue to the questions abou	ut this accent.			
• 0:00 / 0:26	•)•				
No answer					
What is the speaker's first language	ge?				
<ul><li>If you don't know the answer you</li></ul>	I can leave the comment box en	npty.			
l am familiar with the speaker's la	nguage.				
	l completely disagree	l disagree	l am more or less neutral	l agree	l completely agree
l am familiar with the speaker's language.					
		and the state of the second second	and the second	and a second second	
Por example: you have been on he	oliday in this country, or you ha	ive family living there	, or you watch television shows from	this country, etc.	
		we family living there	, or you watch television shows from	this country, etc.	
<ul> <li>For example: you have been on he</li> <li>* Please answer the following quick</li> </ul>		we family living there	, or you watch television shows from	this country, etc.	
	estions:				Leomoletely ogree
		I disagree	, or you watch television shows from I am more or less neutral	this country, etc.	I completely agree
Please answer the following queen places answer the following queen places and the speaker has authority. The speaker has authority.	estions: I completely disagree	l disagree	I am more or less neutral	l agree	
Please answer the following que the following que the speaker has authority.	estions:		I am more or less neutral		I completely agree
Please answer the following queen the poly of the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen	estions: I completely disagree	l disagree	I am more or less neutral	l agree	
Please answer the following queen the poly of the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen	estions: I completely disagree	l disagree	I am more or less neutral	l agree	
* Please answer the following queen the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	
* Please answer the following queen the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	
* Please answer the following queen the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	
* Please answer the following queen the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	
* Please answer the following queen the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	
* Please answer the following que the speaker has authority. The speaker sounds unintelligent. The speaker is pleasant to listen to.	estions:	l disagree	I am more or less neutral	l agree O	

## Appendix B

Identification of Accents by Listeners' Nationality in Frequency and

Percentage

Accent	Nationality	Correct	N	Percent
Swedish female	French	No	45	100.0
	Dutch	No	63	94.0
		Yes	4	6.0
Swedish male	French	No	45	100.0
	Dutch	No	64	95.5
		Yes	3	4.5
German female	French	No	28	62.2
		Yes	17	37.8
	Dutch	No	29	43.3
		Yes	38	56.7
German male	French	No	38	84.4
		Yes	7	15.6
	Dutch	No	29	43.3
		Yes	38	56.7
Dutch female	French	No	38	84.4
		Yes	7	15.6
	Dutch	Yes	67	100.0
Dutch male	French	No	41	91.1
		Yes	4	8.9
	Dutch	No	5	7.5
		Yes	62	92.5
Spanish female	French	No	38	84.4
		Yes	7	15.6
	Dutch	No	36	53.7
		Yes	31	46.3
Spanish male	French	No	38	84.4
		Yes	7	15.6
	Dutch	No	37	55.2
		Yes	30	44.8
Italian female	French	No	26	57.8
		Yes	19	42.2

	Dutch	No	39	58.2
		Yes	28	41.8
Italian male	French	No	44	97.8
		Yes	1	2.2
	Dutch	No	58	86.6
		Yes	9	13.4
First French female	French	No	13	28.9
		Yes	32	71.1
	Dutch	No	11	16.4
		Yes	56	83.6
Second French female	French	No	3	6.7
		Yes	42	93.3
	Dutch	No	13	19.4
		Yes	54	80.6

## Appendix C

Listeners' Perceived Nationality in Frequency and Percentage

Nationality	Perceived nationality	Frequency	Percent
Swedish	Danish	1	0.4
	Dutch	12	5.4
	English	1	0.4
	Finnish	2	0.9
	French	7	3.1
	German	28	12.5
	I don't know	72	32.1
	Icelandic	3	1.3
	Italian	13	5.8
	Latino	1	0.4
	Latvian	1	0.4
	Lithuanian	1	0.4
	Non-European (Indian, African, Arabic, Vietnamese)	11	4.9
	Norwegian	4	1.8
	Scandinavian	1	0.4
	Slavic (Russian, Polish, Romanian)	49	21.9
	Spanish	10	4.5
	Swedish	7	3.1
German	Austrian	3	1.3
	Chinese	1	0.4
	Croatian	1	0.4

	Danish	1	0.4
	Dutch	10	4.5
	English	7	3.1
	French	38	17.0
	German	101	45.1
	Greek	1	0.4
	I don't know	34	15.2
	Irish	1	0.4
	Italian	2	0.9
	Polish	4	1.8
	Portuguese	1	0.4
	Romanian	1	0.4
	Russian	11	4.9
	Spanish	3	1.3
	Swedish	3	1.3
	Swiss	1	0.4
Dutch	African	1	0.4
	Chinese	1	0.4
	Dutch	140	62.5
	English	18	8.0
	French	8	3.6
	German	5	2.2
	I don't know	43	19.2
	Italian	2	0.9
	Polish	1	0.4
	Polonese	1	0.4
	Portuguese	1	0.4
	Spanish	2	0.9
	Swedish	1	0.4
Italian	African	2	0.9
	American	1	0.4
	Arabic	2	0.9
	Bulgarian	1	0.4
	Croatian	1	0.4
	Czech	1	0.4
	Danish	4	1.8
	Dutch	3	1.3
	English	11	4.9
	French	16	7.1
	German	3	1.3
	Greek	3	1.3
	Hindi	1	0.4
	Hungarian	1	0.4
	-		

	I don't know	50	22.3
	Indian	4	1.8
	Italian	57	25.4
	Japanese	1	0.4
	Polish	7	3.1
	Portuguese	5	2.2
	Russian	7	3.1
	Scandinavian	2	0.9
	Spanish	30	13.4
	Swedish	7	3.1
	Turkish	1	0.4
	Ukrainian	3	1.3
Spanish	African	2	0.9
	Arabic	3	1.3
	Asian (Korean, Japanese, Chinese)	21	9.4
	Chinese	3	1.3
	Croatian	1	0.4
	Dutch	2	0.9
	English	1	0.4
	French	8	3.6
	German	1	0.4
	Ghanian	1	0.4
	Greek	3	1.3
	Hindi	1	0.4
	I don't know	44	19.6
	Icelandic	1	0.4
	Indian	10	4.5
	Italian	29	12.9
	Latino	1	0.4
	Polish	2	0.9
	Portugese	1	0.4
	Portuguese	5	2.2
	Romanian	1	0.4
	Russian	2	0.9
	Spanish	80	35.7
	Turkish	1	0.4
French	Chinese	3	1.3
	Czech	1	0.4
	French	186	83.0
	German	5	2.2
	Hungarian	1	0.4
	I don't know	16	7.1
	Italian	4	1.8

Polish	1	0.4
Russian	1	0.4
Slavic	1	0.4
Spanish	3	1.3
Swiss	1	0.4
 Turkish	1	0.4

# Appendix D

Participants	' Comments by A	Accent, Perceiv	ed Accent and Na	tionality
Accent	Nationality	Perceived	Comment	

Accent	Nationality participant	Perceived accent	Comment
Swedish male	French	Arabic	The pronunciation is mostly correct, he speaks clearly and we understand without any problem what he says
		German	This accent it's quite understandable for french people
		Arabic	I like his accent! It sounds 'exotic' to my French ears!
	Dutch	German	He has a calm rythm, it makes sentence sound quiet.
		Italian	I know someone with great authority with this accent.
German male	French	I don't know	I find that the speaker speak english without any extravagant accent. He seems like a native-speaker to me who just speak slowly
	I don't know	He's very (too?) articulate.	
		French	This accent was comprehensive for me
		Dutch	Round dutch accent, not agressive at all.
German French female	French	French	She has a strong accent, especially when she pronounces the "r" and "th" sounds
		I don't know	The speaker speak slowly and I find is tone platonic.
		German	The language is a little sharp, but we understand what she say. Like the frence accent, the german accent make a speach not very fluent.
		Polish	There isn't any intonation in this speech. It's especially neutral and there is an accent on the "R" prononciation that we find in the polish accent but I'm not sure.
		Russian	This sounds 'hard' and 'cold'. The Rs are pretty hard!
Dutch male	French	English	I really like this accent because he's really clear
		I don't know	The person speaks well English, it's difficult to hear an accent. The speach is fluent, fast with pauses, so it looks like with an English speach.
		I don't know	There is a english accent without problem with his language accent. It's understandable and pleasant to heard.
		German	He sounds a little bored!
		French	He has a pleasant accent.

	Dutch	Dutch	I disagree, because it somehow still makes me cringe a bit when Dutch speakers of English have that accent, although I know this guy's pronunciation is not even really thick-accented, not at all.
		Dutch	Could be worse
Dutch female	French	French	I think this person is french and she often speaks english, so she speaks fast and well.
		I don't know	She sounds pretty close to a native speaker.
		French	It's a little flat, lack of tonality in english
	Dutch	Dutch	As a native Dutch I very much dislike listening to people who speak "stone coal" English, with a very strong accent.
		Dutch	And yet, this Dutch accent is less cringing to hear - I think that that's got to do with that she sounds a bit older, she can get away with it. And it's not that obvious either.
		Dutch	I know for sure, could be my neighbour! It's nice to hear your own accent, because you understand the English well.
		Dutch	This is an older speaker of Dutch. Her age gives her authority.
Spanish male	French	I don't know	The speaker make a link between words, so his speach is fluent. His speach is more "English" than others.
		Dutch	This one requires more concentration than the first one. Accent is more pronounced.
		German	Accent a little bit harsh for ears.
	Dutch	I don't know	Monotone
		Spanish	I think he is also a native Spanish speaker, but has learned English realy well. You hardly hear estore instead of store.
Spanish	French	Chinese	This is an older speaker of Dutch. Her age gives her authority.
female		I don't know	She trips on some words, and the intonation is slightly rising at the end of chunks. She doesn't sound confident.
		Spanish	Singing accent.
		Latino	She speak slowly, but not surely
	Dutch	Spanish	I really like about this accent that the spanish are unable to pronounce 'sp' or 'st' without an sonant in front of it. This makes words like espoon, or Estella. I like that, because I know it from my travels through south america. People there are not very comfortable in English, that makes the association with less authority.
		Portuguese	Just like how my mom speaks English and she is Portugese
		Spanish	I think the speaker lacks authority rather because of the pitch and vocals of the girl speaking than because of the accent.
First French	French	French	The speach is a little slow.
female		I don't know	I like this accent. I can't recognize but I better understand compared to the others.
		German	Same remark. Lots of hesitation. Dod speakers have time to rehearse the

discourse bit? Most of them sound like they're deciphering the message as they speak. - German (because of some vowel sounds), but again, I think it's really hard to tell without a choice of options.

	Dutch	French	Lack of authority because of soft voice, not accent.
		French	Non-fluency again is not realy pleasant.
Second French female	French	French	We can hear her French accent quite well and she struggles a bit with some words but we understand what she says
Temate		French	The speach is fluent but it is a little flat. However, I understand what she said, and it's the most important.
		French	I dislike this accent and I know it's mine but we take off all the english accent and we forgot the intonation because our language is o monotonous.
		French	She hesitates a lot. She also sounds like she doesn't trust in her pronunciation (she has the 'smiling voice', like she's making fun of herself).
		French	I'm a french person who tries his best to speak proper UK english, I dislike hearing french people pronouncing everything as if it were french
		French	A really bad french accent.
]	Dutch	French	A french girl accent is always quite nice to listen to, not sure why.
Italian male	French	I don't know	This man has a good American accent, he's very intelligible. I can't hear an accent to help me determine what his native language is
		English	The person has a good english accent, he makes a link between words, and he speaks well.
		I don't know	It's fluent and I can't recognize any accent from another country.
		Scandinavia n	There's little trace of accent. It's very intelligible.
		I don't know	He didn't sound natural during and he made unsuasual stops while talking
	Dutch	I don't know	/bieg/ instead of /bIg/
		Italian	I dislike the accent, because it takes a lot of energy to listen to this person and understand what he's saying.
Italian female	French	Indian	I think it's a little more hard to understand because the speaker's first language is very present. But, I hear the accent because the speaker's language is very different from my first language (french).
		I don't know	Also lots of hesitation, it is a little bit 'painful' to listen to, like we empathize with her!
	Dutch	Italian	Now I know the advantages of having an Italian classmate
		Russian	Not sure if it is south-europe (spain, portugal, italy) or eastern europe (czech, poland or russia)

### Appendix E

### INTELLECTUAL PROPERTY STATEMENT

Utrecht University defines "plagiarism" as follows:

"If, in a thesis or some other paper, data or parts of a text produced by someone else are used without the source being identified, this shall be considered plagiarism. Among other things, plagiarism may entail the following:

cutting and pasting text from digital sources such as encyclopaedias or digital journals, without using quotations marks and references;

cutting and pasting any text from the internet without using quotation marks and references;

copying from printed material such as books, journals or encyclopaedias without using quotations marks and references;

using a translation of the above texts in your own work, without using quotations marks and references;

paraphrasing the above texts without using references. A paraphrase should never consist of merely replacing some words by synonyms;

using pictures, sound recordings, or test materials produced by others without references, such that it appears that this is one's own work;

2 copying work by other students and passing this off as one's own work. If this is done with the other student's consent, the latter shall be an accomplice to the plagiarism;

even in cases where plagiarism is committed by one of the authors collaborating on a paper, the other authors shall be accomplices to plagiarism if they could or ought to have known that the first-mentioned author was committing plagiarism;

submitting papers acquired from a commercial source (such as an internet site offering summaries or complete essays) or written by someone else for payment."

I have read the above definition of plagiarism and certify with my signature on the preceding page that I have not committed plagiarism in the appended essay or paper.

#### Signature\*: Adriaan Hendrik Ludger Walpot

\*signifying you have read & understood the plagiarism declaration above. Typing your name into the electronic document is sufficient – no scanned signature is required.