

## Responses to Dutch-accented English

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**ABSTRACT:** This paper reports on a study into the reactions of ‘native’ speakers of British English to Dutch-English pronunciations in the onset of a telephone sales talk. In an experiment 144 highly educated British professionals who were either familiar or not familiar with Dutch-accented English responded to a slight Dutch English accent, a moderate Dutch English accent or a ‘Standard British English accent’ (BrE). These accents were rated on the personality traits status and affect, on their intelligibility (orthographic transcription), comprehensibility (identification of key words), and interpretability (paraphrasing the purpose of the message). Although British English was more intelligible and comprehensible than both Dutch English accents, all three accents were equally interpretable. The results indicated that a British English pronunciation evoked more status than both Dutch English accents, and both British English and the slight Dutch English accent commanded more affect than the moderate Dutch English accent.

### INTRODUCTION

In 2005, more than one third of the citizens of the European Union who do not have English as a first language claimed that they know English well enough to hold a conversation in English, and in the Netherlands as many as 87 per cent of the respondents made this claim (European Commission 2006). This high percentage provides insight into the important role English plays in the daily lives of Dutch people. For example, English is a compulsory language in Dutch education, and is taught in the later years of primary school and all through secondary school. A growing number of secondary school pupils receive up to 50 per cent of their education in English, and more and more university students receive their education almost completely in English. In general, the variety of English that is taught is ‘Standard British English’, which is based on grammatical criteria determined in Departments of English at Dutch universities. Furthermore, English (especially American English) is heard on TV in sitcoms, soap operas, drama series, movies and music videos every day, and it is also increasingly used in advertisements, especially in those targeted at young people and children (Gerritsen, Korzilius, Van Meurs and Gijsbers 2000; Gerritsen, Nickerson, Van den Brandt, Crijns, Dominguez and Van Meurs 2007). Dutch companies with stock market quotations all publish their annual reports in English, and a third of these organizations do not even publish a Dutch version (De Groot 2008). In short, the use of English in the daily lives of Dutch people is omnipresent (cf. Gerritsen and Nickerson 2004).

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Since a 'native' accent is notoriously difficult to learn because of transfer from the mother tongue (Vermeulen and Kellerman 1998), the Dutch have their own pronunciation of English, consisting of Dutch phonological features with a combination of British and American features. Gussenhoven and Broeders (1997), Van der Haagen (1998) and Van den Doel (2006) give extensive overviews of features of Dutch-accented English, the most salient features being r-colouring, devoicing of all final obstruents, Th-stopping, and the lack of an /e ~ æ/ contrast.

Traditionally, 'non-native' speakers of English who use English as an international language are encouraged to learn and use one of the standardized forms of 'native' English, because a standardized 'native' form is supposed to help communication in international contexts. In this context 'native' English refers to the English spoken in countries where it is the mother tongue of the majority of speakers (e.g. Britain, the United States, Australia). Yet despite the significant influence this view has had on education systems all over the world (including the Dutch education system), many authors currently advocate more tolerance towards 'non-native' varieties or new varieties of English (e.g. Kachru 1983; Phillipson 1992; Pennycook 1998; Alexander 1999; Van Oostendorp 2002; Jenkins 2006; Seidelhofer, Breiteneder and Pitzl 2006). These new Englishes should be accepted because 'it is now more important to be able to talk "to" native speakers of English, and not "as" native speakers of English' (Alexander 1999: 27). Alexander proposes a 'core area of intelligibility' or understandability for 'non-native' speakers, and urges listeners to adopt a more flexible attitude towards 'non-native' varieties of English. However, in reality 'native' speakers may not have such a flexible attitude towards L2 and FL speakers of English, and some 'non-native' varieties of English are often felt to be less intelligible, comprehensible and interpretable than L1 varieties.

### *Attitudes toward 'non-native' Englishes*

Many have observed that having an accent has an effect on the attitudes listeners have towards speakers of 'native' and 'non-native' varieties of languages. Cargile and Giles (1997) show that a speaker's accent influences 'native' listeners' attitudes towards that speaker; listeners report more feelings of pleasure (affect) and feel more positive when listening to an L1 speaker than when listening to an L2 or an FL speaker. Their study further shows that it is the speakers' accent *per se*, and not the strength of their accent that influences listeners' reported feelings of pleasure. Other studies, too (see Munro and Derwing 1995a; 1995b for an overview), show that L1 speakers transfer negative attitudes towards a foreign accent into negative attitudes towards speakers of the accent. Kalin, Rayko and Love (1980) demonstrate, for example, that a negative attitude towards a speaker's accent influences the judgment of the status of that speaker with respect to the perceived suitability for higher end job positions. L1 speakers are judged to be more suitable for those job positions than L2 and FL speakers. Lindemann (2002) shows that a negative attitude also has an impact on the communication strategies used by 'native' speakers, in that they tend to interrupt L2 and FL speakers more often than fellow L1 speakers, and frequently pretend not to understand L2 and FL speakers. Finally, Pihko (1997) shows that learners of English, too, have negative attitudes towards 'non-native' English. These learners considered national standardized varieties of English as being 'real English' and 'non-native' varieties as being 'strange English'.

### *Intelligibility, comprehensibility and interpretability*

Successful communication between 'native' and 'non-native' speakers of English greatly depends on the mutual understandability of one another's speech. Kachru and Smith (2008) describe the ability to understand language as consisting of three elements: intelligibility, comprehensibility, and interpretability.

Kachru and Smith (2008: 61) define *intelligibility* as the ability to recognize 'a word or another sentence-level element of an utterance'. A 'non-native' pronunciation of these words or sentence-elements can greatly influence the overall intelligibility, as is demonstrated in the decision by the Indian call centre First Source, stationed in Mumbai, to open a branch in Belfast, Northern Ireland, employing only Northern Irish call-operators. They did this, because they had discovered that British customers found the Indian accent of their Indian employees unintelligible and sometimes became rather frustrated (De Volkskrant 2006). However, experiments by Derwing and Munro (1997) in which 'native' speakers of English were asked to orthographically transcribe Cantonese, Japanese, Polish and Spanish-accented English phrases showed that a strong L2 accent does not necessarily disrupt full intelligibility in terms of word and utterance recognition.

The second aspect in understanding communication is *comprehensibility*. This involves the ability to recognize both the meaning of words expressed and the intentions expressed by the speaker in the proper context, or as Kachru and Smith (2008: 62) explain, 'the contextual meaning of the word in a socio-cultural setting as well as the illocutionary force of an utterance'. They suggest that comprehensibility can be measured by having an utterance paraphrased or by asking questions about its content. A common 'non-native' speaker's misunderstanding of an English phrase is interpreting 'how are you' as an opportunity to discuss a person's well-being in great detail instead of as a simple greeting whose paraphrase would be 'hello'. Fayer and Krasinski (1987) have shown that accentedness does affect comprehensibility in that L1 speakers believe FL speech is more difficult to understand than L1 speech.

The third element of the understandability of communication involves understanding the *purpose* of a communicative act, or the *interpretability* (Kachru and Smith 2008). According to Kachru and Smith, interpretability involves cultural competencies and the ability to understand the discourse strategies people use. A phrase like 'it was nice meeting you' is successfully interpreted if the listener knows this as a signal of the end of a conversation, and not as a genuine remark. An example Kachru and Smith give is how communication breakdowns between Japanese and American business partners can be attributed to the differences in information structures used in Japanese and American culture. A Japanese person answering a question will often give an explanation of the answer before giving the actual answer, and in an interaction with a Japanese person it is very important to listen carefully to what is *not* being said. This can confuse Americans who are perhaps not familiar with this discourse strategy, even though both parties are quite fluent in the language they communicate in.

### *Familiarity*

One of the factors that may influence the attitudes toward an accent, its intelligibility, comprehensibility and interpretability is familiarity with a variety or more specifically with an accent. Several studies have shown that familiarity with an accent, that is, knowing that accent and having been exposed to it for some considerable time, aids intelligibility,

comprehension and interpretability (Varonis and Gass 1982; Fayer and Krasinski 1987; Major, Fitzmaurice, Bunta and Balasubramanian 2005; Smith and Nelson 2006; Wang 2007). Major et al. (2005) show that a sizable number of studies demonstrate that unfamiliar accents, both 'native' and 'non-native' alike, are more difficult to comprehend than familiar accents, but that this unfamiliarity disadvantage is not clearly related to the degree to which languages differ from each other or the 'linguistic distance' between the varieties in question. This suggests that it is the exposure to the variety and not necessarily the individual characteristics of the variety that creates the advantage for the listener. However, other studies have shown that varieties that share similar features are better comprehended (e.g. Wilcox 1978; Smith and Bisazza 1982; Flowerdew 1994; Bent and Bradlow 2003; Major et al. 2005; Wang and Van Heuven 2007). Furthermore, Smith has shown that familiarity can aid interpretability (as cited in Kachru 2008), and more recently Wang (2007), too, has observed that familiarity with an accent facilitates intelligibility. Moreover, there are indications that attitude, intelligibility, comprehensibility and interpretability influence each other (Smith 1992; Lindemann 2002), and that a positive attitude towards an accent, irrespective of familiarity, increases intelligibility and hence comprehensibility (Fayer and Krasinski 1987).

The studies mentioned above clearly show that L1 speakers' attitudes tend to be more negative towards L2 and FL speakers of English than towards fellow L1 speakers. Whether FL and L2 English is really less intelligible, comprehensible and interpretable than L1 English has not yet been fully established due to the limited number of studies and conflicting results. These conflicting results may, among other things, be due to differences in methodology and definitions used to measure intelligibility, comprehensibility and interpretability. For example, some methods test perceived comprehensibility (defined as the estimation of the respondents to indicate the extent to which the message is understood), while other methods use real-life interactions between L1 and FL speakers of English and include an evaluation of the success of the interaction (Lindemann 2002). Moreover, respondents reporting their own assessment of comprehensibility and intelligibility may not necessarily reflect reality. Finally, only a small number of varieties of FL and L2 English have been studied, and it is plausible that other varieties from other sociolinguistic contexts will evoke different responses.

As we have shown in the beginning of this introduction, English is taught to almost all citizens of the Netherlands and is used widely, especially in professional contexts. In order to improve the intercultural encounters in English between speakers of Dutch English and speakers of other varieties of English it is important to gain insight into the effect of Dutch English on other speakers of English and to find out whether improving the Dutch English accent improves the intercultural communication.

## RESEARCH QUESTIONS

The main purpose of this study is to investigate the reactions to Dutch-accented English pronunciations compared to a 'Standard British English pronunciation', and more specifically, to see whether different degrees of Dutch accentedness have different effects on the attitudes of 'native' speakers towards these accents, and on the intelligibility, comprehensibility and interpretability of these accents, and whether familiarity with Dutch-accented English plays a role in all of this. Research into the effect of Dutch-accented English on 'native' speakers of English is not entirely new. Koster and Koet (1993) and Koet (2007)

investigated whether 'native' speakers of English and Dutch teachers of English had different responses to Dutch speakers speaking English, in terms of their pronunciation, and on how beautiful, monotonous, cultured and pleasant they found the accents. They found, rather unexpectedly, that the 'native' speakers of English were more tolerant than the Dutch teachers. Van den Doel (2006) researched which features of a Dutch accent bothered speakers of British and American English most. He came to a hierarchy of mistakes, with problems with word-stress on top, and which for the rest turned out to be different for 'Standard British English' speakers and for speakers of 'General American' (Van den Doel 2006: 292). He suggests that these pronunciation features be given priority in education, and urges teachers to focus on the most problematic areas.

The present study is different from the studies just discussed, in that we are not only interested in the attitudes of British speakers to Dutch-accented speech, but that we compare these with their attitudes towards 'Standard British English'. Furthermore we will not only look at the attitudes toward the accents (Dutch and 'Standard British English'), but also at the intelligibility, comprehensibility, and interpretability of these accents. We will study the responses of 'native' speakers of British English to two levels of educated Dutch-accented English pronunciations: a moderate accent (Educated speakers) and a slight accent (trained International Business Communication students; for details, see the Method section). We selected these Dutch speaker groups, because they represent the speaker groups most likely to use English in a professional context. We will focus on the following three research questions.

**RQ1:** To what extent do 'native' speakers of British English respond differently to a 'Standard British English accent', a slight Dutch accent and a moderate Dutch accent in terms of:

- 1A. The attitudes towards the speakers;
- 1B. The degree of intelligibility;
- 1C. The degree of comprehensibility;
- 1D. The degree of interpretability?

**RQ2:** What is the relationship between the attitude towards an accent, the degree of intelligibility, the degree of comprehensibility, and the degree of interpretability?

**RQ3:** To what extent does familiarity with Dutch-accented English have an effect on the attitude of 'native' speakers of British English towards these accents and on the rate of intelligibility, comprehensibility, and interpretability?

## METHOD

### *Respondents*

The respondents were 72 'native' speakers of British English living in England in the London area, and 72 'native' speakers of British English who had been living in the Netherlands for ten years or longer. The latter were, of course, extremely familiar with Dutch-accented English, in the sense that they had been exposed to it for a considerable amount of time, while the former were not very familiar with Dutch-accented English. All respondents were highly educated British citizens and successful international professionals; 30 per cent of the respondents were male and 70 per cent female, and 71 per cent was aged 35 or older. According to the interviewer, who interviewed two-thirds of the respondents in a face-to-face situation and spoke to the others over the telephone (cf. Procedure) all were speakers of 'Standard British English' — though not necessarily

Received Pronunciation (RP) – according to grammatical criteria used for the determination of ‘Standard British English’ in Departments of English at Dutch universities.

### *Materials*

As stimulus we used the onset of a telephone conversation, so that there were no non-verbal cues that might affect attitude, intelligibility, comprehensibility and interpretability (cf. Rubin 1992). The message was an imitation of a telephone sales talk for a Dutch asset management business that wanted to expand their market in the United Kingdom (Appendix 1). There were six stimuli produced by six women. Two speakers were ‘native’ Standard BrE near-RP speakers, two were (phonetically) highly trained MA students in the English stream of the International Business Communication programme at the Radboud University Nijmegen (IBC English, slightly accented). This level of English represents one of the highest levels of English Dutch people can obtain in the Netherlands and the degree programme aims at preparing students for an international business career. The two other Dutch-accented speakers were linguistically naïve university students from Nijmegen whose English was representative of Dutch people with the highest level of English one can acquire in Dutch secondary schools (moderately accented English). Thus the samples represented three degrees of accentedness: (1) British English; (2) slightly Dutch-accented; and (3) moderately Dutch-accented.

The samples were judged by a trained phonetician experienced in teaching English pronunciation to Dutch learners, and by an applied linguist who is a ‘native’ speaker of English and who is accustomed to degrees of Dutch-accentedness. In addition, 50 undergraduate students of English Language and Culture evaluated the samples. Both expert and non-expert judges confirmed that all samples were representative of their levels of accentedness and possess the typical pronunciation characteristics of Dutch-accented English and ‘Standard British English’ (Gussenhoven and Broeders 1997; Van den Doel 2006). In order to see if we could simply take the means for the two speakers in each of the groups as representative for the three degrees of accentedness, we performed a number of statistical tests. One-way ANOVAs were performed on variables of interval level, and when the variables were of a nominal or ordinal level, cross table analyses were done using Chi-square tests. One-way analysis of variants (ANOVAs) and Chi-square tests revealed that there were no statistically significant differences between the two speakers within each speaker group on any of the dependent variables studied. Due to the large quantity of statistical information (Ms and SDs and contingency tables) results for the three speaker groups are withheld.

### *Design*

The design of the study was a  $3 \times 2$  between subject factorial design (Table 1), where each of the 144 respondents was randomly but evenly assigned one of the six speech samples, and was asked to perform four tasks that measured:

1. the attitude towards the speaker;
2. the intelligibility of the speech sample;
3. the comprehensibility of the speech sample;
4. the interpretability of the speech sample.



Table 1. Design experiment

Listeners Speakers	Listeners familiar with Dutch- accented English (N = 72)	Listeners not familiar with Dutch- accented English (N = 72)
Standard BrE Accent	24	24
Slightly Accented	24	24
Moderately Accented	24	24

Note: N = 144.

Thus, each sample was judged by 24 listeners. A power analysis reveals that with these numbers, we expect to find large differences between the groups (a large effect size,  $f = 0.40$ ) with the statistical tests used at an alpha level of 0.05 for 99 per cent of the cases (statistical power = 0.99) (see Cohen 1988).

### Measuring instruments

For the attitude task (RQ1A), each respondent listened to the speech sample of one speaker and rated that speaker on eight five-point semantic differentials based on previous studies (Van der Haagen 1998; Gerritsen et al. 2000): *competent-incompetent*, *irritating-pleasant*, *educated-uneducated*, *aggressive-considerate*, *intelligent-stupid*, *inferior position-having authority*, *cultured-not cultured* and *unfriendly-friendly*. The answers were, where necessary, recoded so that all the scales ranged from 1 as the most negative rating and 5 as the most positive rating. A factor analysis, using a principal axis factoring extraction method with an Eigenvalue > 1 criterion for factor extraction, followed by a varimax rotation, on the ratings of these semantic differentials showed a resolution into two factors.

In language attitude research we frequently find that there are two or three dimensions operative in evaluations. Brown (1965) claims there are two norms that determine social interaction, namely the STATUS norm and the SOLIDARITY norm, and many researchers have since used these terms to label the factors that play a role in evaluating accents (e.g. Giles and Powesland 1975; Ryan and Giles 1992). However, most attitude research has been done on L1 speakers rating accents or dialects from that same L1, and in that case it makes sense to speak about the 'solidarity' a listener feels with the (accent of) the speaker. In our case, where L1 listeners rate L2 speakers, and where the listeners were highly educated business professionals and the speakers young university students, solidarity would not be a sentiment one would expect the listener to feel. For this reason we have decided to follow Van der Haagen (1998), and label the second dimension AFFECT.

Table 2 shows the factor loadings, that is, the correlation coefficients, of the items with these two factors. The items are grouped such that the first five correlate highest with factor one and the next three correlate highest with factor two. The scales contributing to Factor 1 are *competent*, *educated*, *having authority*, *intelligent* and *cultured*, which suggests that this factor is a measure of the STATUS the subjects attributed to the speakers; the scales contributing to Factor 2 are *considerate*, *pleasant* and *friendly*, so that this factor can be seen as a measure of (personal) AFFECT the subjects have for the speakers. The reliability, in terms of Cronbach's alpha, of both factors was adequate (>0.70). For each

Table 2. Rotated Factor Matrix: factor loadings of the scores on nine scales with two factors. Only loadings  $>.30$  have been printed

	Factor 1	Factor 2
Competent	0.83	
Educated	0.80	
Having authority	0.78	
Intelligent	0.77	
Cultured	0.72	
Considerate		0.86
Pleasant	0.48	0.62
Friendly		0.76
% variance explained	39	23
Reliability Cronbach's $\alpha$	0.85	0.74

factor composite scores were calculated by taking the mean of the ratings on the scales contributing to that factor.

For the *intelligibility* task (RQ1B), the respondents were asked to listen to the first two sentences from the sample again (see Appendix 1), and like in the study by Munro, Derwing and Morton (2006) and by Kachru and Smith (2008) respondents were asked to transcribe these two sentences orthographically. The respondents were allowed to listen to these two sentences no more than two times. Intelligibility was measured by counting the number of wrongly transcribed words, a method described by Munro et al. (2006). A speaker was considered completely intelligible if all the thirty-three words were transcribed correctly. Each word that was either misspelled or replaced by another word was counted as one error. The only error in the transcription that was not counted was *SNG* instead of *SMG*, because of the extreme similarities between the nasal consonants /n/ and /m/ (Gussenhoven and Broeders 1997).

In order to measure *comprehensibility* (RQ1C) and *interpretability* (RQ1D), we used Kachru and Smith's (2008) definitions of these variables. For *comprehensibility* we asked the respondents to paraphrase the first two sentences of the sales pitch (see Appendix 1). We decided that the key words, for these sentences were (1) *Dutch*, (2) *asset*, (3) *management*, (4) *expand*, (5) *market* and (6) *Great Britain*, and we counted for each respondent how many keywords they had written down. In order to measure *interpretability* we asked the respondents to write down the purpose of the message of the first two sentences of the sample (see Appendix 1). The following three answers to the question about the purpose of the recorded text were considered correct: (1) 'a business pitch'; (2) 'an attempt to sell a product/service'; or (3) 'a cold call to attract potential clients/business partners'. A message was considered interpreted incorrectly if a respondent did not write that the sample was either a business pitch, an attempt to sell a product/service, or a cold call to attract potential clients/business partners.

### Procedure

Two-thirds of the respondents performed the tasks in a one-on-one situation with the first author, either face-to-face or over the telephone, and one-third did them on their



own via the Internet. The speech samples were equally distributed among the three test situations. An independent *t*-test showed that the correlation between the test condition and the attitudes, intelligibility, comprehensibility was not significant ( $ps > 0.05$ ). A Chi-square test showed that there were no significant correlations between the test condition and interpretability ( $p > 0.05$ ).

### *Statistical analyses*

All analyses were conducted with SPSS 15.0. For the attitude scales where Cronbach's  $\alpha$  was at least adequate (0.70 or higher) we calculated composite means of the items, which was the case for all scales. Several one-way ANOVAs were performed with the independent variables accentedness (British English, slightly Dutch-accented English, moderately Dutch-accented English) and familiarity with Dutch-accented English (familiar, not familiar), and using attitudes (status, affect), intelligibility, comprehensibility, and interpretability as dependent variables. If the differences were significant, a post hoc Bonferroni procedure was used when variances were equal, and a post hoc Games-Howell when variances were unequal (tested with Levene's test for equality of variances). To measure the differences between the speaker groups in the identification of the key words for the comprehensibility task, a Mann-Whitney was calculated. A Mann-Whitney test is the non-parametric alternative of the *t*-test for independent samples and looks at differences in the ranked positions of ordinal dependent variables in two independent groups. Mann-Whitney gives the probability that the outcome is a chance result testing the null-hypothesis that the two groups are equivalent in rank positions. Since the dependent variable interpretability was nominal, a Chi-square test was performed to measure the differences for interpretability between the speaker groups. The effects of familiarity with Dutch-accented English for the two Dutch accents (slightly and moderately Dutch-accented) on the dependent variables attitudes, intelligibility and comprehensibility were studied by means of two-way and one-way ANOVAs. For the effects of familiarity on the interpretability of the accents, a Chi-square test was used. The relationship between all four dependent variables was investigated using Pearson Correlations tests.

## RESULTS

### *Attitudes towards Dutch-accented English (RQ1A)*

This section will present the results for STATUS and AFFECT for the three speaker groups for all the listeners together (familiar and not familiar). The results for both the factors STATUS and AFFECT are presented in Table 3, where we see the mean ratings and standard deviations for the three accents, and the results from one-way ANOVAs with the significant differences between the accents according to post hoc contrasts.

#### *Status*

The results for STATUS are shown in Table 3 and Figure 1. A one-way ANOVA revealed that the differences in perceived STATUS for the three accents were significant ( $F(2, 141) = 34.74, p < 0.001; \eta^2 = 0.18$ ). Post hoc Bonferroni tests showed that the British English speakers were considered to have significantly more STATUS than both the slightly

Table 3. Mean STATUS and AFFECT per accent for all listeners

	M	SD	Differences between speaker groups
STATUS			
British English	4.44	0.48	BrE vs Slight***and BrE vs Moderate***
Slight	3.65	0.62	
Moderate)	3.50	0.62	
AFFECT			
British English	3.75	0.83	Slight vs Moderate*** and BrE vs Moderate***
Slight	3.90	0.74	
Moderate	3.15	0.52	

Notes: Mean scores (M), standard deviations (SD), \*\*\*  $p < .001$ ; 1 = negative, 5 = positive; N = 48 per accent; N = 144 all listeners.

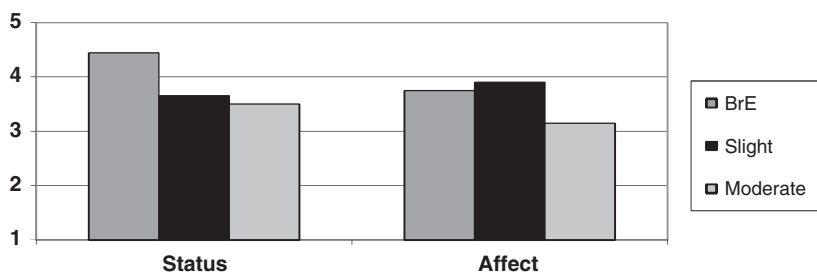


Figure 1. Mean scores STATUS and AFFECT per accent for all listeners

Notes: 1 = negative, 5 = positive; N = 48 per accent; N = 144 all listeners.

Table 4. Mean Intelligibility per accent for all listeners

	M	SD	Differences between speaker groups
British English (N = 48)	32.67	0.60	BrE vs Slight** and BrE vs Moderate**
Slight (N = 48)	29.92	3.71	
Moderate (N = 47)	30.40	3.23	

Notes: Mean scores (M), standard deviations (SD); \*\*  $p < .01$ ; min = 0 words, max = 33 words; N = 144 all listeners.

accented Dutch English speakers and the moderately accented Dutch English speakers ( $ps < 0.001$ ).

### *Affect*

Table 3 and Figure 1 show the results for AFFECT. A One-way ANOVA revealed that the differences in AFFECT for the three accents were significant ( $F(2, 141) = 15.12, p < 0.001$ ;  $\eta^2 = 0.33$ ). A post hoc Games-Howell test showed that the British English speakers and the slightly accented speakers did not differ significantly from each other in this respect and that both groups commanded significantly more AFFECT than the moderately accented speakers ( $ps < 0.001$ ).

Table 5. Mean *Comprehensibility* per accent for all listeners

	M	SD	Differences between speaker groups
British English	5.94	0.25	
Slight	5.17	1.12	BrE vs Slight ** and BrE vs Moderate**
Moderate	5.00	1.22	

Notes: Mean scores (M), standard deviations (SD); \*\*  $p < 0.01$ ; min = 0, max = 6; N = 48 per accent; N = 144 all listeners.

Table 6. Frequencies identified key words per accent for comprehensibility for all listeners (N = 144)

	Dutch	Asset	Management	Expand	Market	Great Britain
BrE	48	47	48	48	46	48
Slight	41	42	40	45	33	46
Moderate	42	32	36	46	40	46

Notes: N = 48 per accent; N = 144 all listeners.

### *Intelligibility of Dutch-accented English (RQ1B)*

The results for *intelligibility* are presented in Table 4, where we see the mean ratings and standard deviations for the three accents and the results from a one-way ANOVA with the significant differences between the accents according to post hoc contrasts. In general, the intelligibility of all speaker groups was high; all respondents correctly transcribed at least 29 out of 33 words. The British English speakers turned out to be the most intelligible speakers, followed by the moderately accented speakers and the slightly accented speakers. However, as is shown in Table 4, the standard deviations suggest that the transcriptions for the British English accent were more homogeneous than for the other two accents. The differences in the intelligibility of the three speaker groups were significant ( $F(2,140) = 12.65$ ,  $p < 0.001$ ;  $\eta^2 = 0.15$ ). A post hoc Games-Howell test revealed that both Dutch accented groups were less intelligible than the British English speaker group ( $ps < 0.01$ ).

### *Comprehensibility of Dutch-accented English (RQ1C)*

In order to investigate the extent to which British 'native' speakers responded differently to a 'Standard British English accent', a slight Dutch accent and a moderate Dutch accent in terms of the degree of comprehensibility, a one-way ANOVA and a Mann-Whitney were executed. All respondents were able to identify at least five out of the six key words (See Tables 5 and 6). The British English speaker group was most comprehensible ( $M = 5.94$ ), followed by the slightly accented speaker group ( $M = 5.17$ ) and the moderately accented speaker group ( $M = 5$ ). A one-way ANOVA showed that there was a significant difference between the speaker groups in the degree of comprehensibility ( $F(2,141) = 12.88$ ,  $p < 0.001$ ;  $\eta^2 = 0.15$ ). Post hoc Games-Howell tests revealed that both Dutch accented groups were judged less comprehensible than the British English speakers ( $ps < 0.01$ ).

The identification of the key words for the comprehensibility tasks showed interesting patterns since certain words were identified more often for specific speaker groups than others. Table 6 shows the number of respondents identifying the six key words per speaker group. We see that for almost all groups the words 'expand' and 'Great Britain' were mentioned, but that for the other four words there is variability between the speaker

Table 7. Interpretability per accent for all listeners (N = 144)

	Correctly Interpreted	
	N	%
BrE	42	87.5
Slight	44	91.7
Moderate	44	91.7

Notes: N = 48 per accent; N = 144 all listeners.

Table 8. Pearson correlations for STATUS and AFFECT, intelligibility, comprehensibility, and interpretability for all listeners

	STATUS	AFFECT	Intelligibility	Comprehensibility	Interpretability
STATUS	1				
AFFECT	0.37***	1			
Intelligibility	0.18*	0.11	1		
Comprehensibility	0.22*	0.17*	0.84***	1	
Interpretability	0.09	0.16	-0.15	-0.16	1

Notes: \*  $p < 0.05$ ; \*\*\*  $p < 0.001$ .

groups. These differences were calculated by means of a Mann-Whitney test. For the British English speakers the following words were identified significantly more often than for the slightly accented speakers: 'Dutch' ( $Z = 2.73$ ;  $p < 0.01$ ), 'management' ( $Z = 2.94$ ;  $p < 0.01$ ) and 'market' ( $Z = 3.46$ ;  $p < 0.01$ ).

For the British English speakers the following words were identified more often than for the moderately accented speakers: 'Dutch' ( $Z = 2.52$ ;  $p < 0.01$ ) 'asset' ( $Z = 3.99$ ;  $p < 0.001$ ), 'management' ( $Z = 3.68$ ;  $p < 0.001$ ), and 'market' ( $Z = 1.99$ ;  $p < 0.05$ ). For the slightly accented group the word 'asset' was significantly more often identified than for the moderately accented group ( $Z = 2.42$ ;  $p < 0.01$ ). Furthermore, the word 'asset' was identified as 'acid' nine times for the moderately accented group.

#### *Pearson Interpretability of Dutch-accented English (RQ1D)*

Table 7 shows for each accent how many listeners correctly interpreted the business pitch. A Chi-square test showed there were no significant differences in the intelligibility of the three accents ( $\chi^2(2) = 0.63$ ,  $p = 0.73$ ).

#### *Relationship between attitudes, intelligibility, comprehensibility and interpretability (RQ2)*

Pearson correlations (Table 8) showed that there was a significant positive correlation between the factors STATUS and AFFECT, STATUS and *intelligibility*, STATUS and *comprehensibility*, and AFFECT and *comprehensibility*, and *intelligibility* and *comprehensibility*. We realize that the scores for the factors attitude (status, affect), intelligibility and comprehensibility are scales, while those for interpretability are dichotomous, so that we should not treat their correlations uniformly. However, Point Biserial and Spearman tests yielded virtually identical results.

Table 9. Familiarity per Dutch-accented English accent for attitude (1 = negative, 5 = positive), intelligibility (Min = 0, Max = 33), comprehensibility (Min = 0, Max = 6) for the 96 listeners who listened to a Dutch-accented English fragment

			Number of listeners	M	SD
<b>Status</b>					
Both Dutch English accents	Familiar		48	3.54	0.56
	Not familiar		48	3.86	0.65
Slight	Familiar		24	3.63	0.56
	Not familiar		24	3.69	0.68
Moderate	Familiar		24	3.23	0.46
	Not familiar		24	3.76	0.65
<b>Affect</b>					
Both Dutch English accents	Familiar		48	3.42	0.77
	Not familiar		48	3.62	0.71
Slight	Familiar		24	3.90	0.66
	Not familiar		24	3.89	0.83
Moderate	Familiar		24	2.94	0.54
	Not familiar		24	3.35	0.43
<b>Intelligibility</b>					
Both Dutch English accents	Familiar		48	31.08	2.67
	Not familiar		48	29.25	3.90
Slight	Familiar		24	31.13	2.31
	Not familiar		24	28.71	4.44
Moderate	Familiar		24	31.04	3.04
	Not familiar		24	29.79	3.28
<b>Comprehensibility</b>					
Both Dutch English accents	Familiar		48	5.27	1.14
	Not familiar		48	4.90	1.17
Slight	Familiar		24	5.33	1.01
	Not familiar		24	5.00	1.22
Moderate	Familiar		24	5.21	1.29
	Not familiar		24	4.79	1.14

Notes: Mean scores (M); standard deviations (SD).

*Familiarity with Dutch-accented English and attitude, intelligibility, comprehensibility and interpretability (RQ3).*

To investigate the effects of familiarity with Dutch-accented English (familiar, not familiar) on the attitudes towards both Dutch English accents and on the intelligibility and comprehensibility of Dutch English pronunciations, two-way and one-way ANOVAs were conducted with the factors familiarity, accentedness, attitude, intelligibility and comprehensibility. The effect of familiarity with Dutch-accented English on the interpretability of Dutch English was measured using a Chi-square test.

Table 9 shows the mean ratings and the standard deviations of the listener groups familiar and not familiar with Dutch-accented English for the slight and moderate Dutch accents for attitude (STATUS, AFFECT), intelligibility and comprehensibility. A two-way ANOVA showed no main effects for the two listener groups (familiar, not familiar) and accentedness (slight, moderate) with respect to the evoked STATUS ( $F(1, 96) = 2.30$ ,

Table 10. Familiarity per Dutch English accent and Interpretability for the 96 listeners who listened to a Dutch English fragment.

	Correctly interpreted	
	N	%
<i>Familiar</i> (N = 48)	43	90
Slight (N = 24)	21	88
Moderate (N = 24)	22	92
<i>Not familiar</i> (N = 48)	45	94
Slight (N = 24)	23	96
Moderate (N = 24)	22	92

$p > 0.05$ ,  $\eta^2 = 0.07$ ) and AFFECT ( $F(1, 96) = 2.61$ ,  $p > 0.05$ ,  $\eta^2 = 0.02$ ). Furthermore, a two-way ANOVA also showed no main effects for the two listener groups (familiar, not familiar) and accentedness (slight, moderate) for the intelligibility ( $F(1, 96) = 0.73$ ,  $p > 0.05$ ,  $\eta^2 = 0.05$ ) and comprehensibility ( $F(1, 96) = 0.31$ ,  $p > 0.05$ ,  $\eta^2 = 0.11$ ).

A One-way ANOVA with the factor familiarity showed no significant differences between the listener groups for AFFECT ( $F(1, 94) = 1.66$ ,  $p > 0.05$ ,  $\eta^2 = 0.02$ ) and comprehensibility ( $F(1, 94) = 2.52$ ,  $p > 0.05$ ,  $\eta^2 = 0.03$ ). Listeners familiar with Dutch-accented English, however, assigned to both the speakers of the moderate and the slight Dutch accent significantly less STATUS ( $M = 3.54$ ) compared with the listeners not familiar with Dutch-accented English ( $M = 3.86$ ) ( $F(1, 94) = 6.64$ ,  $p > 0.05$ ,  $\eta^2 = 0.07$ ), and found them more intelligible ( $M = 31.08$ ) in comparison with listeners not familiar with Dutch-accented English ( $M = 29.25$ ) ( $F(1, 94) = 7.22$ ,  $p < 0.01$ ,  $\eta^2 = 0.07$ ).

As is shown in Table 10, for *interpretability*, the listener groups familiar with Dutch-accented English correctly interpreted the intentions of the speaker in 90 per cent of all cases, and the listeners not familiar with Dutch-accented English correctly interpreted the speaker's intentions in 94 per cent of all cases. The difference in percentages for the two listener groups is not statistically significant. The two listener groups also interpreted the messages with the slight accent equally well as the ones with the moderate accent.

## CONCLUSION

Our first research question investigated the extent to which British 'native' speakers respond differently to a 'Standard British English accent', a slight Dutch accent and a moderate Dutch accent in terms of (RQ1A) attitudes towards the speakers (RQ1B) the degree of intelligibility; (RQ1C) the degree of comprehensibility, and (RQ1D) the degree of interpretability of the three accents.

### Attitudes

For attitudes (RQ1A), the finding that all listeners attributed a higher STATUS to the British English speakers than to both groups of Dutch-accented speakers are in line with Munro and Derwing (1995a; 1995b). There, too, L1 speakers were attributed more STATUS than FL speakers. These results are also in line with a recent study by Coupland and Bishop (2007: 79) in which the attitudes towards different 'native' and 'non-native' English accents

were measured. They showed that in the UK 'Standard English' evokes the highest social attractiveness and the second most prestige. Overall, the respondents felt equal AFFECT for the British English speakers and the slightly accented Dutch speakers, and they felt less AFFECT for the moderately accented Dutch speakers. This suggests that listeners not only respond to accentedness itself, but also to degrees of accentedness. Interestingly, the slightly accented speakers command as much AFFECT as the 'Standard British English' speakers. Our findings suggest that for L1 listeners the accent should not be too strong either, since the moderately accented speakers command significantly less AFFECT than the slightly accented speaker.

### *Intelligibility*

To test the intelligibility of the three accents (RQ1B), the listeners were asked to transcribe two sentences. The 'Standard British English' speakers were judged to be more intelligible than the slightly accented and the moderately accented Dutch speakers. Similar to findings by Derwing and Munro (1997), we found that the 'non-native' accents were at least reasonably intelligible. However, these results are not in line with their implicit assumption (shared by Varonis and Gass 1982) that a stronger accent would have a negative influence on the intelligibility, since both Dutch accents were equally intelligible. It appears that in the case of the Dutch English accents studied, the foreign accent itself, rather than the degree of accentedness is judged to decrease intelligibility.

### *Comprehensibility and interpretability*

To test differences and similarities between the comprehensibility and interpretability of the three accents (RQ1C, 1D), the listeners were asked to write down what they thought the purpose of the message was. The 'Standard British English accent' was more comprehensible than slightly and moderately Dutch-accented English. This result is similar to Fayer and Krasinski (1987), who claim that accent does affect comprehensibility in that L1 speakers understand messages less well when uttered by FL speakers. The identification of the key words for the comprehensibility task shows an interesting pattern in that British English listeners were able to observe the two degrees of accentedness for the word 'asset', which was in nine cases identified for the moderate Dutch English accent as 'acid'. This confusion is understandable, since most naïve Dutch speakers of English are not aware of the phenomenon of pre-fortis clipping (Gussenhoven and Broeders 1997), that is, the shortening of vowels before fortis obstruents. This means that they make the second vowel in 'asset' too long, which in its turn makes the word sound like 'acid' to British ears. So in this case the additional pronunciation training, business communication students, the speakers of the slight Dutch English accent, 'receive' seems to have resulted in a higher comprehension for the slight accent.

Finally, the results for interpretability show that L1 speakers understand the intentions of L1 and FL speakers equally well (Table 6). It needs to be noted, however, that all respondents were international professionals and would be familiar with the sales tactics used in this experiment, namely, cold calling potential clients or business partners and pitching products and/or services. The respondents' possible familiarity with specific business tactics, the cultural barrier that might not be as large as the example of American and Japanese culture given by Kachru and Smith (2008), and the high interpretability of the



business pitch seem to confirm Smith's assertion that familiarity can aid interpretability (Kachru 2008). However, that familiarity need not be with the language or accent of the FL speaker., but rather with the situational and social context.

*Relationship between attitudes (STATUS, AFFECT), intelligibility, comprehensibility and interpretability*

The second research question investigated the possible relationship between the attitudes towards an accent, its degree of intelligibility, comprehensibility and interpretability. The five positive correlations suggest that it is worth the effort for a speaker of FLE to use a variety that is associated with a higher status, since our study shows that a high status is related to more affect towards a speaker and a higher intelligibility and comprehensibility. In addition, using an intelligible variety of English will aid comprehensibility, which in turn leads to more affect towards a speaker. The correlation between STATUS and intelligibility is consistent with similar findings by Fayer and Krasinski (1987), and Smith (1992).

*Familiarity*

The third research question asked whether familiarity with Dutch-accented English might have an effect on the attitudes of 'native' speakers of British English towards these accents and on the intelligibility, comprehensibility and interpretability of the two Dutch accents. Our results show that listeners familiar with Dutch-accented English consistently rated the Dutch speakers significantly lower on STATUS than the listeners who were relatively unfamiliar with the Dutch accent, and that those familiar also rated them lower on AFFECT, albeit not significantly. Familiarity with Dutch-accented English resulting in a lower perceived status may be due to the fact that a stronger accent suggests a poorer fluency in English and is perhaps associated with a lower educational level and therefore with a lower social status. Another possible explanation could be that the listeners living in the Netherlands have much more contact with the Dutch and may have some negative feelings towards some of them. In any case, they *knew* they were rating Dutch FL speakers, whereas the listeners not familiar with a Dutch accent were rating 'just a non-native accent', although of course the word Dutch was mentioned in the stimulus materials. Similar results have been found in a large scale project started in New Zealand and copied in many countries world-wide (Bayard, Weatherall, Gallois and Pittam 2001; Bayard et al. 2003). All in all, our conclusion is that as far as attitudes are concerned, it does not help from a speaker point of view if the interlocutor is familiar with an accent, because (s)he will assign a speaker less STATUS and AFFECT.

On the other hand, our results also show that those familiar with a Dutch accent find the Dutch speakers significantly more intelligible and not significantly but consistently more comprehensible and interpretable. If we take this, along with earlier findings (e.g. Fayer and Krasinski 1987; Major et al. 2005; Varonis and Gass 1982; Bent and Bradlow 2003; Wang and Van Heuven 2007; Wang 2007) it seems we have to concur that it helps to avoid communication breakdowns if an interlocutor is familiar with an accent.

It would be interesting to see whether British expats living in other countries and Britons in the UK have similar attitudes towards other 'non-native' English accents compared to 'Standard British English' or other 'native' varieties of English. In short, the inclusion of

the factor familiarity with a Dutch accent in this study of language attitudes has shown different responses to varieties of English pronunciations ('native' and 'non-native'), and seems to be an interesting topic for further investigation.

### *Dutch English as an international business communication variety*

The main purpose of our investigation was to see if the effects of FL English on 'native' speakers described in the literature would also apply to Dutch-accented English, and if so, whether there would be different effects depending on the degree of accentedness. Our results show that indeed the use of 'Standard British English' leads mostly to more positive attitudes and is judged to be more intelligible and comprehensible, but it is not easier to interpret than both Dutch accents. However, both degrees of Dutch accentedness actually are evaluated positively and are well-understood; for the factors STATUS and AFFECT the scores are never lower than 3 (where 1 is most negative, 3 is neutral, and 5 most positive), at least 91 per cent of the speech is intelligible and at least 83 per cent is comprehended. In short, the reception of Dutch-accented English is, in a telephone setting, not unfavourable. The question then arises whether we need to improve the English pronunciation of Dutch speakers.

If we look at the interpretability of both levels of Dutch-accented English we see that the speakers' intentions are as well understood as the British English speaker's intentions. If the aim of teaching English is only to make students become interpretable, improvement of the pronunciation of Dutch learners is unnecessary since their intentions are understood, even if some of the words are not intelligible or comprehensible. Apparently listeners do not need to hear every single word to understand a text and our research shows that Alexander (1999) is right; 'native' speakers will try to understand the message a FL speaker is trying to convey, and they often succeed in doing so. However, for successful communication not only the message itself, but also the impression a speaker makes on the listener plays a role, and in this respect the 'native' speakers turn out not to be as flexible as Alexander assumes, since they attribute significantly less STATUS to both levels of Dutch English than to British English.

This suggests that it might be worth the Dutch learners' while to try to approximate to a 'Standard British English accent'. Furthermore, aiming for an accent that carries STATUS can perhaps pay off, since STATUS is positively correlated with intelligibility, (and intelligibility in its turn is positively correlated with comprehensibility) and with AFFECT. Improving one's pronunciation will thus kill a number of positive birds with one stone. One of the most remarkable results from our investigation is that the only differences between the two levels of Dutch-accentedness can be found in the attitudes of the listeners. For AFFECT, speakers with a slight accent score better than speakers with a moderate accent. The question arises whether for speakers with a slight Dutch English accent it is worth the effort to get to the level of accentedness they achieve if reaching that level only pays off in evoking more favourable attitudes. In our view, it is worth the effort because the attitude towards a speaker can influence the listeners' behaviour.

### *Suggestions for further research*

By using the onset of a telephone conversation as our setting rather than a face-to-face situation, we have eliminated all extra-linguistic cues that can play a role in communication

and have measured responses to the accent *per se*. This has allowed us to gain insight into the responses of British 'native' speakers to two degrees of Dutch-accented English, but we do realize that in communication in a different setting various other cues, such as non-verbal communication, grammar, lexis etc., obviously also play a role and should be investigated.

We have tried to gain insight into the intelligibility of Dutch English by having the listeners transcribe two sentences. Although this is one of the methods frequently used in this type of research, we feel the need for a more thoroughly tested approach to measuring intelligibility. Wang's (2007) transcription test using grammatically correct but semantically nonsensical sentences seems promising in that it really tests intelligibility only, and leaves out certain factors that might aid intelligibility such as relying on the context of the message; yet this method needs further testing in other contexts and using more elaborate tasks and materials.

To test the comprehensibility and interpretability, we had the listeners summarize the meaning of the message they had heard. We chose this approach because it seems to us that just asking participants how well they understood the message, without having any means of knowing whether they really understood as much (or as little) as they claim will not produce the most reliable results. Yet, in order to measure comprehensibility and interpretability, a more thoroughly tested definition of both aspects and alternative methodology (e.g. multiple-choice questions) and more complex texts or a combination of textual types could produce alternative results. As far as Dutch speakers are concerned, it remains to be seen whether a lower level of English and hence a heavier accent would lead to the same results. The moderate accent we used is only obtained by less than a quarter of the Dutch population (Sociaal en Cultureel Planbureau 2005). Although 87 per cent of the Dutch population claim to be able to hold a conversation in English (European Commission 2006), the majority will have a lower level of English proficiency than the speakers we used (cf. Van Onna and Jansen 2006).

In the case of speakers with other mother tongues, such as French, Spanish or Chinese Mandarin, future studies of the effect of their Englishes might reveal interesting results. Coupland and Bishop (2007) show for example that French English evoked more positive attitudes than Spanish English, and Spanish English evoked more positive attitudes than German English. As far as the listeners in this study are concerned, we only investigated effects on British listeners, but it would be worthwhile to see if our results can be extrapolated to other groups of listeners: L1 speakers (e.g. Americans; Australians); L2 speakers (e.g. Indians); and FL speakers (e.g. Danes; Germans; French). It might well be the case that for these listeners the results would be different, either because they are less familiar with different varieties of FL English, or because their first language may be similar or different to Dutch.

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### APPENDIX: THE TEXT OF THE STIMULUS

Good afternoon, this is Jane Smith of SMG Incorporated speaking. We are one of the best known Dutch asset management businesses and we are looking to expand our market

in Great Britain. For this reason we would like to discuss a possible partnership with your organization. Would you perhaps be interested in what SMG could mean for your organization? If this is the case, I can tell you more about our company, or we could make an appointment to discuss it in more detail.

Phrases used for the intelligibility, comprehensibility and interpretability task:

1. *Good afternoon, this is Jane Smith of SMG Incorporated speaking.*
2. *We are one of the best known Dutch asset management businesses and we are looking to expand our market in Great Britain.*

Intelligibility task: Please transcribe the sentences orthographically.

Comprehensibility task: Please paraphrase the message.

Interpretability task: Please indicate the purpose of the message.

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