Bachelor thesis
The effect of proficiency level of Spanish learners of Dutch on accentedness, intelligibility and status

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Abstract

This investigation is about Spanish accented Dutch, in which the relationship between proficiency level and the variables of intelligibility, accentedness and status was studied by the use of an audio fragment and a questionnaire. Spanish learners of Dutch of different proficiency levels recorded four sentences for the audiotape. Dutch native speakers were asked to listen to one fragment and evaluate the speaker’s intelligibility, accentedness and status. The differences between the proficiency levels in relationship to three variables were measured. Status showed one significant result, the only difference found was that native speakers were rated higher on status than non-native speakers. For the variables of intelligibility and accentedness as well significant differences were found. Although some exceptions were found concerning the relationship between the proficiency level of the Spanish learners of Dutch and intelligibility, we could state that as proficiency levels get higher, the speaker’s intelligibility as well gets higher. For the variable of accentedness we found that as proficiency levels get higher, the speaker’s accentedness gets lower.

Key words

Accentedness, intelligibility, status, proficiency level, Spanish accented Dutch.
Introduction

Globalization is the worldwide movement in which businesses expand their markets beyond borders and create an interconnected and interdependent world. This interconnectedness does not only lead to business-related increase of exchange, but also to cultural exchange arises. Another aspect of globalization is workforce mobility. As a consequence of this workforce mobility, there is an increasing number of non-native speakers in professional working environments. Therefore, there is an increasing interest in and the need for speaking a second language (L2). Although the world is getting more international and communication will often not be performed in a speaker’s mother tongue, it is very difficult as an L2 speaker to obtain a native-like level of speech (Long, 1990; Birdsong & Molis, 2011). This difficult to obtain a native-like level of speech is reflected in the fact that non-native speakers often retain a foreign accent. This foreign accent is mostly caused by the native language (L1) of the speaker and may impede communication (Derwing & Munro, 1997; Burgos, Cucchiarini, van Hout & Strik, 2014a; Mai & Hoffmann, 2014). Further investigation on the origin of foreign accents indicates that the state of development of L1 influences the degree of accentedness in L2 (Piske, Mackay & Flege, 2001). This means that the higher the degree of L1, at the moment when a person starts to learn an L2, the more it will influence the proper speaking of an L2. Pronunciation is one of the main speaking skill components that determines the accentedness in the L2. Other components that influence the degree of accentedness are vocabulary, use of grammar and velocity of speech (Piske, McKay & Flege, 2001). Moreover, the importance of pronunciation aspects, such as vowels and consonants, may differ from language to language (Munro & Derwing, 1995). Accentedness may influence the perception by native speaker of an L2 speaking person in several contexts, both in daily life situations and professional situations (Cargile, 2000).

Accentedness can be defined as the influence of L1 on the level of speech on a foreign language (Piske et al., 2001). Native-like speech is very hard to obtain in a second language, as different factors may hinder fluency and perfect pronunciation. Piske et al. (2001) reviewed different factors, such as age of learning (AOL), gender, length of residence in L2 country (LOR), self-estimated L2 ability and amount of continued speaking of L1 while learning L2. The amount of continued speech of L1 and AOL were found to have an influence on accentedness (Piske et al., 2001). The other factors investigated, such as self-estimated L2
ability and length of residence in L2 country, did not show any significant results. Within accentedness, a distinction can be made between standard and nonstandard accentedness (Cargile, 2000). Nonstandard accentedness refers to a foreign accent, whereas standard accentedness refers to a dialect within the language.

Accented speech is often related to intelligibility. Following Munro and Derwing (1995, p. 76), Derwing and Munro (1997, p. 2) define intelligibility as “the extent to which a listener is able to understand the message sent by the L2-speaker”. The relationship between intelligibility, comprehensibility and accentedness of L2 speakers was examined by Derwing and Munro (1995). They found that, although the strong degree of a foreign accent is correlated to perceived comprehensibility and intelligibility, a strong foreign accent does not necessarily influence communication in a negative way, as the comprehensibility or intelligibility of L2 speech are not always impeded. Moreover, familiarity with a certain accent may improve the intelligibility of accented speech for the native speakers.

Although accented speech does not necessarily impede the perceived comprehensibility of L2 speech by native speakers, accented speech often evokes evaluative judgements of native speakers. These judgements are reported by Brennan and Brennan (1981), in which the relationship between judgements of native English speakers and accentedness in the English of Mexican American speakers was investigated. A correlation between the degree of accentedness and the judgement of status was found, as status was rated lower when there was a higher degree of accentedness. Thus, there is a possible relationship between the degree of accentedness and the judgement on status in general. Because Brennan and Brennan (1981) focused on the accent of the English of Mexican American speakers, this field of research needs more investigation in order to elaborate the conclusions on relationships between the degree of accentedness and the judgement on status for different kinds of accents in different languages.

Further research on the relationship between accentedness and status was conducted by Cargile (2000). According to Cargile (2000), accentedness can be defined as standard or nonstandard. A standard accent of a speaker is related to positive judgements on traits such as competence, intelligence and social status (Cargile, 2000). A speaker with a nonstandard accent however, is more likely to be evaluated as less favourable for the traits of competence, intelligence and social status (Cargile, 2000). Based on earlier research, in which individuals with accented speech were considered to be less suitable for high-status
jobs and more suitable for low-status jobs, Cargile (2000) expected Chinese accented individuals to be considered as more suitable for low-status jobs and less suitable for high-status jobs. However, it appeared that Chinese accented individuals were considered to be equally suitable for high-status jobs as non-accented individuals, the native and standard American-English speakers. This contradicts the earlier findings on which Cargile (2000) based his expectations, as nonstandard accentedness was expected to be evaluated as less suitable for high-status jobs. Therefore, no generalization of the relationship between accented speech and the influence on the perceived suitability for high- and low-status jobs can be made.

A possible explanation of Cargile (2000) for the fact that Chinese accented individuals are found to be suitable for high-status jobs in spite of their accent, could be found in the reputation of Asian people in general. The Asians have achieved some economic and occupational successes in the United States and therefore have the reputation of hard-working, intelligent people. Although the Chinese accented individuals were evaluated as equally suitable for high-status jobs as standard American-English speakers without an accent, one difference did appear in the results. The only difference found was that Chinese accented individuals were considered to be less suitable and less efficient for a job as human resource associate, in comparison to the non-accented, American-English speakers. Thus, as there appear to be differences between ethncial groups in terms of their accentedness and the judgements by native speakers on employability for low- and high-status jobs, it is difficult to make general statements about the relationship between the degree of accentedness and status (Cargile, 2000). Therefore, more research is needed to determine the effect of cultural backgrounds on the relationship between accentedness and status.

The current research will focus on Spanish L1 speakers with Dutch as their L2, in which the relationship between the variables of accentedness, intelligibility and status will be investigated. Earlier research was conducted on the pronunciations of Dutch vowels by Spanish learners of Dutch (Burgos, Jani, Cucchiarini, van Hout and Strik, 2014b). As there is a remarkable difference between the number of vowels in Dutch (15) and Spanish (6), Dutch is a difficult language to learn for Spanish speakers. Furthermore, the Spanish speakers of Dutch do not use the same spectral and durational features as Dutch native speakers for the accurate pronunciation of Dutch vowels (Burgos et al., 2014b). The different characteristics
make it difficult for Spanish learners of Dutch to obtain an native-like pronunciation on the significantly larger variety of Dutch vowels as compared to that of Spanish. One difference in characteristics is for example the size of the languages, as Dutch is a large sized language with its variety of short and long pronounced vowels. Spanish, on the other hand, is considered to be a simple language, as the number of vowels is restricted to 6.

Findings by Burgos et al. (2014) indicate that Spanish learners of Dutch have difficulties with the pronunciation of the different Dutch vowels. The major source of all pronunciation problems is the difference in vowel length in Dutch, compared to Spanish. Although vowel errors occur more often than errors in the pronunciation of consonants, the consonants /h/ and /ʋ/ do not exist in Spanish and will therefore be likely to affect the pronunciation of Dutch in general by Spanish learners of Dutch (Burgos, Sanders, Cucchiarini, van Hout and Strik, 2013). Mostly consonants clusters and single vowels in Dutch are found to be difficult to pronounce for Dutch L2 Spanish native speakers. According to Burgos et al. (2015), the native ear of the crowd, to which is referred to as auris populi, is able to perceive the difference in pronunciation of vowels by Spanish learners of Dutch caused by the accented speech of the learners. As an earlier investigation indicates that Spanish learners of Dutch are likely to have difficulties in pronunciation of Dutch, they are likely have a certain degree of accentedness while speaking Dutch (Burgos et al. 2014a, 2015). For the variable of accentedness, we therefore expect lower proficiency levels of the Spanish learners of Dutch to lead to higher accentedness. These difficulties in pronunciation of Dutch for Spanish learners of Dutch may also influence the perception of status and intelligibility by Dutch native speakers. Therefore, we expect that as proficiency levels of the Spanish learners of Dutch are lower, the intelligibility will be lower as well. We expect the same for status, meaning lower proficiency levels will lead to lower evaluations of status, based on the earlier finding of Cargile (2000).

Although the influence of accentedness of L2 speakers on the evaluative judgements of L1 speakers on the intelligibility and on the status has been investigated (e.g. Brennan & Brennan, 1981), this does not seem be the case for Spanish learners of Dutch. The current investigation has an additional value, because earlier investigations on the relation between accentedness, intelligibility and status have shown a dependence on language and culture (Cargile, 2000; Derwing & Munro, 1995). The relationship between accentedness, intelligibility and status seems not to be identical for different cultures, as different kind of
accents may cause different evaluations of intelligibility and status. The same holds for the relationship between the proficiency levels of L2 speakers and the variables of accentedness, intelligibility and status.

The present study will contribute to the overall investigation to accented speech by investigating the relationship between the variables of accentedness, intelligibility and status and proficiency level of Spanish learners of Dutch. Furthermore, this investigation will contribute in terms of society as well, as it will create a certain awareness for Spanish learners of Dutch of how their accent may influence the perceptions of native Dutch speakers in terms of status and intelligibility. The awareness may stimulate Spanish learners of Dutch to work on reducing their accent in Dutch. Particularly the evaluative judgements on status in combination with accentedness may help to improve business related situations, such as employment interviews (Cargile, 2000). On the other hand, from the perspective of the Dutch native speakers of the accented speech of Spanish learners of Dutch, this investigation may bring along some helpful outcomes as well. Existing prejudices on accented speech may be proven wrong by the outcomes of this investigation. Therefore, we would like to investigate the effect of the proficiency level of Spanish learners of Dutch on the perceived accentedness by Dutch L1 speakers. Therefore, the following research question was formulated:

1. ‘To what extent does the proficiency level of Spanish learners of Dutch affect the perceived accent by Dutch native speakers?’

To investigate the relationship between the proficiency levels and intelligibility, the following question was formulated:

2. ‘To what extent does the proficiency level of Spanish learners of Dutch affect the intelligibility for Dutch native speakers?’

To investigate the effect of the proficiency levels of Spanish learners of Dutch on the perceived evaluation of status by Dutch native speakers, the following question was formulated:

3. ‘To what extent does the proficiency level of Spanish learners of Dutch affect the evaluative judgements on status by native Dutch speakers?’
Method

Materials
To conduct the experiment, eight recordings of Spanish accented speech in Dutch were used. These recordings consisted of audio fragments, recorded by eight Spanish learners of Dutch. To measure the different proficiency levels of Spanish learners of Dutch, the Common European Framework for References of Languages (CEFR) was used. This framework of references is designed to provide assessment upon different proficiency levels and in this way teaching and learning materials can be fine-tune for each of the six CEFR levels. For each of the four CEFR levels used in this experiment (A1 – B2), there was a male and a female speaker. These audio fragments were previously analysed in Burgos et al. (2014b, 2015). All of the speakers recorded the same text, existing of four sentences, which can be found in Appendix 1. A control group, which is referred to as ‘Algemeen Beschaaafd Nederlands (ABN), also made recordings. The control group consisted of two native Dutch speakers, one female and one male from the Randstad area. The control group recorded the same text as the Spanish learners of Dutch.

Participants
A total of 715 participants participated in this experiment. Of these 715 respondents, 399 persons did not complete the questionnaire, which means a total of 316 participants filled in the questionnaire completely. There was a homogeneous distribution in terms of gender, as 156 men (49.3%) and 160 women (50.6%) participated in this experiment. A χ²-test between proficiency level and gender showed that there was no relationship between proficiency level and gender (χ² (9) = 10.23, p = .332). Thus, the distribution of gender over the different proficiency levels in the questionnaire was homogeneous.

There were no statistically significant differences between proficiency level and age as determined by one-way ANOVA (F(39, 276) = 1.33, p = .102). Therefore can be concluded there was a homogeneous distribution of age over the proficiency levels.

All participants are native speakers of Dutch who are born in the Netherlands and are adult speakers, which means they had a minimal age of 18 years old. The average age of the participants was 26 years (SD = 11.49), with a range from 18 to 76 years old.
Procedure
In order to investigate the influence of accented Dutch speech on accentedness, intelligibility and status, the respondents listened to a single recording, as described in materials. The participants were not told that the speakers of the audiotaped fragments were Spanish learners of Dutch, as they were just instructed to listen to Dutch utterances. After listening to this audio fragment, the respondent was asked to rate this fragment on intelligibility, accentedness and status. These ratings were done in Qualtrics, in which a questionnaire was designed for this experiment. The questionnaire will be explained in detail in the section of instrumentation. Respondents were approached individually, in order to know who participated in the experiment. As the respondents were personally approached, only non-linguistically trained participants (i.e. participants should not study or have studied language or something similar) participated in this experiment, which excludes any possible influence from knowledge on the research to accented speech. It took about 5 minutes to fill in the questionnaire.

Instrumentation
The dependent variables intelligibility and accentedness were measured by three questions each. The dependent variable status were measured by eight questions. A 7 point Likert scale was used in this experiment, as Dutch persons tend to not choose the extremes in a 5 point scale. The questionnaire was presented in Dutch, as this is L1 for all of the respondents. For each of the variables, an example of one of the questions included in the questionnaire is shown below. The complete set of questions can be found in Appendix 2.

Rating of accentedness
Accentedness was measured by four questions. All of these questions were answered using a 7 point Likert scale. The reliability of the questions used to measure the relationship between proficiency level and perceived accentedness was very good: $\alpha = 0.93$. An example of one of the questions used to measure accentedness is ‘The speaker has a: 1 = very good pronunciation, 7 = very bad pronunciation’.
Rating of intelligibility
In order to measure the intelligibility, the participants were asked three questions. These questions were answered using a 7 point Likert scale. The reliability of the questions used to rate intelligibility was good: $\alpha = 0.86$. An example of one the questions used in the questionnaire is: ‘It did not take much effort to understand the speaker (1 = completely disagree, 7 = completely agree)’. 

Rating of status
The variable of status was measured by four questions. The reliability of this set of questions was good: $\alpha = 0.89$. The questions concerning status were retrieved from Brennan and Brennan (1981), who used eight questions consisting of bipolar adjectives. In this research, four of these bipolar adjectives were selected and rated on a 7 point Likert scale. An example of one of the questions used to measure status is: ‘I think the speaker has a (1 = low education, 7 = high education)’. 

Besides the questions in which the variables intelligibility, accentedness and status were rated, the questionnaire also contained questions concerning basic information of the respondent, treating native language, gender, age, foreign languages spoken and their proficiency, completed education and profession.

Statistical testing
The variables of this investigation are displayed in the form of an analysis model, as given in Figure 2.

Figure 2: Analysis model with language proficiency as dependent variables and intelligibility, accentedness and status as independent variables
In order to investigate the relationship between the variables of intelligibility, accentedness and status, three Pearson’s correlations were performed.

Three one-way ANOVA tests were used to investigate relationships between language proficiency and the three dependent variables. The one-way ANOVA tests were used to investigate the differences between the mean scores on the variables of intelligibility, accentedness and status and proficiency level as factor. For all three one-way ANOVA’s, Bonferroni was used as post-hoc test.

Results

A Pearson’s correlation coefficient between the accentedness and evaluated status, showed a positive correlation between the two variables ($r (316) = .57$, $p < .001$). Speakers with higher scores on accentedness were shown to be rated higher on status than speakers with low scores on accentedness.

A Pearson’s correlation coefficient between the accentedness and intelligibility, showed a positive correlation between the two variables ($r (316) = .65$, $p < .001$). Speakers with higher scores on accentedness were shown to be rated higher on intelligibility than speakers with low scores on accentedness.

A Pearson’s correlation coefficient between the intelligibility and evaluated status, showed a positive correlation between the two variables ($r (316) = .52$, $p < .001$). Speakers with higher scores on intelligibility were shown to be rated higher on status than speakers with low scores on intelligibility.

In Table 1, the means and standard deviations for each proficiency level (condition) and the explanatory variables of intelligibility, accentedness and status are shown together with a summary of the post-hoc tests.
A one-way ANOVA for accentedness with factor proficiency level showed a significant main effect of proficiency level \((F (9, 306) = 92.23, p < .001)\). The scores of accentedness of both female \((M = 6.13 \ (SD = 1.23))\) and male native speakers \((M = 5.98 \ (SD = 1.90))\) were higher than the accentedness of the speakers of Dutch with proficiency levels of A1 (male: \(M = 1.95 \ (SD = 1.06)\), Bonferroni correction, \(p > .001)\) , A2 (male: \(M = M = 2.16 \ (SD = 1.25)\), Bonferroni correction, \(p > .001)\), female: \(M = 1.93 \ (SD = 0.76)\), Bonferroni correction, \(p > .001)\), B1 (male: \(M = 2.78 \ (SD = 0.97)\) Bonferroni correction, \(p > .001)\), female: \(M = 2.21 \ (SD = 0.69)\), Bonferroni correction, \(p > .001)\) and B2 (male: \(M = 2.59 \ (SD = 1.09)\), Bonferroni correction, \(p > .001)\), female: \(M = 2.05 \ (SD = 0.80)\), Bonferroni correction, \(p > .001)\) in terms of the CEFR proficiency levels.

Furthermore, between the CEFR proficiency levels this one-way ANOVA for accentedness showed that the score of accentedness of the A1 female speaker \((M = 1.62 \ (SD = 0.91)\)
was lower than both the B2 male speaker \((M = 2.59 \; (SD = 1.09)\) Bonferroni correction, \(p = .008\) and the B1 male speaker \((M = 2.78 \; (SD = 0.97)\), Bonferroni correction, \(p > .001\)). No further significant results were found between the CEFR proficiency levels (Bonferroni correction, \(p = .225\)).

A one-way ANOVA for intelligibility with factor proficiency level showed a significant main effect of the proficiency level \((F(9, 306) = 39.34, p < .001)\). The intelligibility of both the native female speaker \((M = 6.08 \; (SD = 0.80))\) and the native male speaker \((M = 5.91 \; (SD = 0.98))\) were higher than the intelligibility of B2 male \((M = 4.63 \; (SD = 1.40))\), B1 female \((M = 4.12 \; (SD = 1.52))\), A1 male \((M = 3.06 \; (SD = 1.49))\), A2 female \((M = 3.59 \; (SD = 1.26))\), B2 female \((M = 3.05 \; (SD = 1.10))\), A1 female \((M = 2.31 \; (SD = 0.83))\). No significant difference was found between the native speakers of Dutch (both male and female) and B1 male (Bonferroni correction, \(p = 1.000\)). The intelligibility of B1 male \((M = 5.42 \; (SD = 1.30))\) was higher than the intelligibility of B1 female \((M = 4.12 \; (SD = 1.52))\), A2 female \((M = 3.59 \; (SD = 1.26))\), A1 male \((M = 3.06 \; (SD = 1.49))\), B2 female \((M = 3.05 \; (SD = 1.10))\), A2 male \((M = 2.87 \; (SD = 1.28))\) and A1 female \((M = 2.31 \; (SD = 0.83))\) (Bonferroni correction, \(p < .002\)). No significant difference was found between the intelligibility of B1 male and A2 male (Bonferroni correction, \(p = .570\)).

The intelligibility of B2 male \((M = 4.63 \; (SD = 1.40))\) was higher than the intelligibility of A2 female \((M = 3.59 \; (SD = 1.26))\), Bonferroni correction, \(p = .043\), A1 male \((M = 3.06 \; (SD = 1.49))\), B2 female \((M = 3.05 \; (SD = 1.10))\), Bonferroni correction, \(p < .001\), A2 male \((M = 2.87 \; (SD = 1.28))\), Bonferroni correction, \(p < .001\) and A1 female \((M = 2.31 \; (SD = 0.83))\), Bonferroni correction, \(p < .001\). No significant difference was found between the intelligibility of B2 male and B1 female (Bonferroni correction, \(p = 1.000\)).

The intelligibility of B1 female \(M = 4.12 \; (SD = 1.52)\) was higher than the intelligibility of A1 male \((M = 3.06 \; (SD = 1.49))\), Bonferroni correction, \(p < .001\), B2 female \((M = 3.05 \; (SD = 1.10))\), Bonferroni correction, \(p = .022\), A2 male \((M = 2.87 \; (SD = 1.28))\), Bonferroni correction, \(p = .003\) and A1 female \((M = 2.31 \; (SD = 0.83))\), Bonferroni correction, \(p = .024\). No significant
difference was found between the intelligibility of B1 female and A2 female (Bonferroni correction, \( p = 1.000 \)).

The intelligibility of A2 female \((M = 3.59 \ (SD = 1.26))\) was higher than the intelligibility of A1 female \((M = 2.31 \ (SD = 0.83))\), Bonferroni correction, \( p = .002 \). No significant differences were found between the intelligibility of A2 female and A1 male, B2 female and A2 male (Bonferroni correction, \( p > .960 \)).

No significant differences were found between the intelligibility of A1 male, B2 female, A2 male and A1 female (Bonferroni correction, \( p > .654 \)).

A one-way ANOVA for status with the factor proficiency level showed a significant main effect of the proficiency level \((F (9, 306) = 15.10, p < .001)\). The status of both native female \((M = 5.19 \ (SD = 0.56))\) and native man \((M = 5.05 \ (SD = 0.96))\) was higher than those of the non-native speakers, which are the speakers of Dutch with proficiency levels of A1 (male: \( M = 3.72 \ (SD = 1.03) \), Bonferroni correction, \( p < .001 \), female: \( M = 3.81 \ (SD = 0.91) \), Bonferroni correction, \( p < .001 \)), A2 (male: \( M = 3.49 \ (SD = 0.95) \), Bonferroni correction, \( p < .001 \), female: \( M = 3.98 \ (SD = 0.74) \), Bonferroni correction, \( p < .001 \)), B1 (male: \( M = 4.01 \ (SD = 0.72) \), Bonferroni correction, \( p < .001 \), female: \( M = 4.05 \ (SD = 0.80) \), Bonferroni correction, \( p < .001 \)) and B2 (male: \( M = 3.93 \ (SD = 0.82) \), Bonferroni correction, \( p < .001 \), female: \( M = 3.77 \ (SD = 0.70) \), Bonferroni correction, \( p < .001 \)) in terms of the CEFR levels. No significant differences were found between the different proficiency levels of the non-native speakers (Bonferroni correction, \( p > .355 \)).

Conclusion and discussion

The first research question of this investigation was: ‘To what extent does the proficiency level of Spanish learners of Dutch affect the perceived accent by Dutch native speakers?’ The results showed that there was a significant difference between the perceived accent of the native speakers and the non-native speakers of Dutch, as the native speakers of Dutch were evaluated to be less accented than the non-native speakers of Dutch. Furthermore, the female A1 speaker of Dutch was evaluated to be more accented than the male B1 speaker and the male B2 speaker of Dutch. Between the other proficiency levels no significant results
were found. Therefore, we can state that there might be a difference between A-level speakers of Dutch and B-level speakers of Dutch. As investigated by Burgos et al. (2015), the *auris populi* is able to note the difference in pronunciation of vowels by Spanish learners of Dutch caused by the accented speech of the learners. Although no significant differences were found between each proficiency level tested in this investigation, the respondents were able to distinguish non-accented speech from accented speech, according to the significant difference found between the non-native and the native speakers of Dutch. Therefore, this investigation confirms the earlier findings of Burgos et al. (2015).

Moreover, Burgos et al. (2014a, 2015) determined that Spanish learners of Dutch are likely to have difficulties in pronunciation of Dutch, which causes a certain degree of accentedness while speaking Dutch, which is confirmed in this investigation as well, as the female A1 speakers scored lower in terms of accentedness than the male B1 speaker and male B2 speaker.

The second research question of this investigation was *To what extent does the proficiency level of Spanish learners of Dutch affect the intelligibility for Dutch native speakers?* Higher levels of L2 proficiency were expected to lead to higher intelligibility. The results showed that the intelligibility of the native speakers of Dutch was higher than all of the proficiency levels, except for the male B1 speaker. Therefore, the native speakers scored higher on intelligibility than the A-proficiency level and the B2-proficiency level Spanish learners of Dutch, which complies with our expectations.

B1 male appeared to score higher on intelligibility than all other levels of proficiency, except for B2 male. Between B1 male and B2 male no significant difference was found. A possible explanation for this contrasting result could be the fact that the Spanish learners of Dutch who audiotaped the fragment determined their level of proficiency by the use of self-assessment. Therefore, the determination of the proficiency levels was not done in a professional way, which could have possibly lead to incorrect self-assessment.

B1 female scored higher than A1 male, A1 female, A2 male, and B2 female. Between B1 female and A2 female no significant difference was found. This result confirms the hypothesis, as B1 female scores higher on intelligibility than most of the lower proficiency levels, except for A2 female.

No significant differences were found between the intelligibility of A1 male, A2 female, A2 male and B2 female. This does not correspond to the hypothesis, as it was
expected that proficiency level B would score higher than proficiency level A. Moreover, A2 female and A2 male were expected to score higher than A1 male.

Furthermore, no significant differences were found between the intelligibility of A1 female, A1 male, A2 male and B2 female. This does not correspond to the hypothesis, as it was expected that B2 female and A2 male would score higher than A1 male and A1 female.

As these results do not fully correspond to the expected outcomes of this investigation, there are some possible explanations for these results. A possible explanation might be like, like mentioned for the results found for B1 male, the use self-assessment in order to determine the proficiency levels of the Spanish learners of Dutch.

Furthermore, the results may be explained by individual variance. For each proficiency level only one male and one female speaker was asked to audiotape a fragment, which is not representative for the proficiency levels, as found differences might be caused by factors caused by the voices or personal utterances of the speakers. Using more speakers per proficiency level will exclude these possible factors of influence.

The last research question was ‘To what extent does the proficiency level of Spanish learners of Dutch affect the evaluative judgements on status by native Dutch speakers?’ This one-way ANOVA test only showed differences between the native speakers of Dutch and the non-native speakers of Dutch. No significant differences were found between the different proficiency levels. Therefore, the hypothesis, in which higher levels of L2 proficiency were expected to lead to higher evaluative judgements on status, cannot not be confirmed neither be declined. Cargile (2000) found that Chinese accented individuals were considered to be less suitable and less efficient for a job as human resource associate, in comparison to the non-accented, American-English speakers. As differences were found between the native and non-native speakers of Dutch, this research confirms the earlier finding of Cargile (2000).

A significant, positive correlation was found between the degree of accentedness and the evaluative judgements on status. This means that status was rated lower when there was a higher degree of accentedness. These results correspond to the conclusion found by Brennan and Brennan (1981), as they found a correlation between the degree of accentedness and the judgement on status as well.
A positive correlation was found between intelligibility and status, which means that speakers with higher scores on accentedness were rated higher on intelligibility than speakers with low scores on accentedness.

Since the results showed a positive correlation between the degree of accentedness and intelligibility, we can conclude that the lower the perceived accentedness of the Spanish learner of Dutch is, the higher the intelligibility is. Derwing and Munro (1995) found that a strong degree of a foreign accent is correlated to perceived intelligibility. Although they did not mention how accentedness and intelligibility are correlated, our result confirms there indeed exists a correlation between those two variables.

The outcomes of this investigation can be useful in different contexts, as it will create a certain awareness for Spanish learners of Dutch of how their accent may influence the perceptions of native Dutch speakers in terms of status and intelligibility.

Mai and Hoffmann (2014) elaborate the area of investigation concerning the effects of accentedness in business settings. As mentioned before, accentedness may impede communication, which may also affect our internationalizing world in terms of business. To explain the effects caused by accent in business context, Mai and Hoffmann (2014) designed the Accents-in-Business-Communication model, also known as the ABC-model, which can be seen in Figure 1. This model, which is viewed from the perspective of the receiver of the message, is designed to see why accents may influence business-related situations. The model proposes three effects caused by accent, which are the social identity effect, activation of stereotypes and processing of speech and message. Awareness of accentedness of an L2 speaker might reduce the proposed effects by Mai and Hoffman (2014), which may improve the evaluations on status and intelligibility of the Spanish learner of Dutch.

Figure 1: Accents in Business Communication model (Mai & Hoffmann, 2014)
The present study will contribute to the overall investigation to accented speech by investigating the relationship between the variables of accentedness, intelligibility and status and proficiency level of Spanish learners of Dutch. Furthermore, this investigation will contribute in terms of society as well, as it will create a certain awareness for Spanish learners of Dutch of how their accent may influence the perceptions of native Dutch speakers in terms of status and intelligibility. The awareness may stimulate Spanish learners of Dutch to work on reducing their accent in Dutch. Particularly the evaluative judgements on status in combination with accentedness may help to improve business related situations, such as employment interviews (Cargile, 2000). On the other hand, from the perspective of the Dutch native speakers of the accented speech of Spanish learners of Dutch, this investigation may bring along some helpful outcomes as well. Existing prejudices on accented speech may be proven wrong by the outcomes of this investigation.

As the results of this investigation did not show differences for all proficiency levels, more research is needed for accented speech and its influence on intelligibility and status. This current study, as stated earlier, may be influenced by personal variation, as self-assessment may not be the best way to determine a person’s proficiency level. Therefore, in future studies in the field of accented speech, it is recommendable to use a different way to determine the proficiency levels of the speakers in the audio fragments, such as pre-testing them for a more accurate determination of proficiency level. Furthermore, using more Spanish learners of Dutch for each proficiency level would as well exclude the possible side effects of personal variance in this study, which may have influenced the results.

To expand the contribution of this study in the field of the effects of accented speech, more proficiency levels could have be included in this research. Level C of the CEFR proficiency levels was not included in this study, which excludes the highest possible proficiency levels. Including this level in supplementary studies may lead to more significant results, as C-level Spanish learners of Dutch should be less accented and have a higher intelligibility according to the hypotheses stated in this current investigation. It is more likely to find differences between the proficiency levels when there are more proficiency levels to investigate, because the differences between level A and level C should be bigger than the differences between level A and level B. Next to this, the difference between level A and B might be smaller, as both of these levels belong to the lower proficiency, which might make it hard for the Spanish learners of Dutch to be aware of their accent. C level speakers are
overall more experienced in speaking the L2, which could make them more aware of trying to speak without an accent.

Furthermore, in further research, intelligibility could be investigated by the use of transcription. Asking the respondents to precisely describe the spoken words of the Spanish learners of Dutch will give a more precise result on the degree of intelligibility, as asking the respondents to rate the intelligibility on 7-point Likert scale may be less representative than the transcription of the spoken words in the audio fragment. Unfortunately, due to the lack of time that was available to conduct this current investigation, it was not possible to measure intelligibility by the use of transcription, although Burgos et al. (2015) and Munro and Derwing (1995) have proved this is a good way of measuring intelligibility.

Further research could also investigate the influence on familiarity with the Spanish language, as an influence on the evaluative judgements on status on the Spanish learners of Dutch by Dutch native speakers. Familiarity with a certain accent may influence the intelligibility of accented speech for the native speakers, therefore this may cause some interesting outcomes (Derwing & Munro, 1995). Moreover, the difference in evaluation on intelligibility, accentedness and status between men and women could be investigated in further research. As the traditional stereotypes, which are the traditional beliefs about differences between men and women, still apply in daily life, this may have an effect on the evaluation on status of men and women (Eagly & Steffen, 1984). Therefore, this may be taken into account in further research.
References


Appendix 1: Text of recordings
The recordings of the following sentences were used in this experiment:
Het wordt druk op de arbeidsmarkt.
Eén op de tien jongeren zit nu al werkloos thuis, blijkt uit de laatste cijfers van het Centraal Bureau voor de Statistiek.
Ook onder mensen van dertig jaar en ouder en onder vijftigplussers wordt de werkloosheid een steeds groter probleem.
Tegelijkertijd moeten mensen die nu rustig thuis zitten en helemaal geen werk zoeken, de arbeidsmarkt op.

Appendix 2: Questionnaire
Beste deelnemer,
Voor onze bachelor scriptie voor de studie Communicatie- en Informatiewetenschappen aan de Radboud Universiteit Nijmegen voeren wij een onderzoek uit. Wij willen u vragen deel te nemen aan dit onderzoek door deze vragenlijst in te vullen. Het invullen van de vragenlijst zal 5 tot 10 minuten in beslag nemen. Tijdens het eerste deel beluistert u een fragment waarover een aantal vragen gesteld zullen worden. In het tweede deel zullen er vragen gesteld worden over uw achtergrond. Ga bij het beantwoorden van de vragen af op uw eerste ingeving; er zijn geen fouten antwoorden mogelijk. Uw antwoorden zullen zorgvuldig worden geanalyseerd en niet worden gebruikt voor andere doeleinden dan dit onderzoek. Bij voorbaat dank voor het invullen!

Q2 U bent een...

☒ man (1)
☒ vrouw (2)

Q3 Wat is uw leeftijd?

Q4 Wat is uw nationaliteit?

Q5 Wat is uw moedertaal?

Q6 Wat is uw hoogst afgeronde opleiding?

☒ Basisonderwijs (1)
☒ Middelbaar onderwijs (2)
☒ MBO (3)
☒ HBO (4)
☒ WO (5)

Q7 In het volgende deel van de vragenlijst krijgt u een fragment te horen. Wij vragen u om zorgvuldig te luisteren naar het fragment.

Q23 Luister naar het volgende fragment:
Q8 Nu volgt een aantal stellingen over de spreker die u net hebt gehoord. U kunt telkens aangeven in hoeverre u het oneens of eens bent met de stelling door op het bolletje van uw keuze te klikken.

Q9 Ik vind de spreker verstaanbaar.

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Q10 Ik heb moeite de spreker te verstaan.

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Q11 Ik zou precies op kunnen schrijven wat de spreker heeft gezegd.

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Q12 De spreker heeft...

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Q13 De spreker komt op mij over als...

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Q14 De spreker lijkt me lui.

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Q15 De spreker lijkt me gezellig.

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Q16 De spreker lijkt me gedreven.

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Q17 De spreker lijkt me saai.

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Q18 Ten slotte willen wij u vragen enkele vragen te beantwoorden over uw talenkennis.
Q19 Ik beheers de volgende talen:

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<tr>
<th>Talen</th>
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<th>Enigzins (3)</th>
<th>Voldoende (4)</th>
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Q21 Kent u mensen die Nederlands spreken met een Spaans accent?

- Ja (1)
- Nee (2)