How multilingual are the Dutch really? On proficiency in Dutch, English, French, and German in Dutch organizations*

Bert van Onna and Carel Jansen
Radboud Universiteit Nijmegen

Abstract

The writing, reading and listening skills of 293 staff in Dutch organizations were compared with their self-assessment of these skills. We made use of DIALANG, a language testing system on the World Wide Web that allows users to perform a diagnostic test of their skills in fourteen European languages. Our Dutch subjects systematically proved to have higher assessments of their own language proficiency than test results actually warrant.

I Introduction

The website of the European Commission regularly publishes new data on foreign language proficiency in the various EU member states. Early 2006, this website\(^1\) stated that twenty officially recognized languages were spoken in its 28 member states, already including Turkey in its statistics. Referring to the so-called Eurobarometer surveys\(^2\), the website also mentions percentages of inhabitants who claim they speak a foreign language. Luxemburg headed the list with a considerable lead over the other nations: 85% of the Grand Duchy's population indicated that, besides their native language, they also mastered French, 81% German, and 46% English. The Netherlands was the runner-up on this list. Out of the Dutch population, 75% said they spoke English, 12% French, and 57% German. For Belgium, by comparison, these percentages were 57, 32, and 16, respectively; for Spain: 29, 7, and 1; and for Italy: 28, 18, and 3. Only the Danes and the Swedes outranked the Dutch in claiming mastery of English as a second language – 79% and 76%, respectively, but the Scandinavian figures for French (8% and 7%) and German (48% and 22%) were clearly lower than those of the Dutch.

Is the patent Dutch confidence about their linguistic competence in English, French, and German justified? Some critics have serious misgivings about the Dutch optimism here\(^3\)

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* A report in Dutch on this study can be found in Van Onna and Jansen (2006a).
We thank the anonymous reviewers of this journal for their valuable comments.
2 See, for example, the report Europeans and Languages published in 2001, reporting the results of a study commissioned by the European Commission in the then 15 EU countries among a representative sample of well over 1,000 respondents per country (INRA, 2001).
3 See, for example, statements by the then European Commissioner Bolkestein in the European Year of Languages (2001).
and suggest that the foreign language proficiency situation in the Netherlands might be less rosy than the European Commission figures suggest. The Dutch command of languages might be liable to gross overestimation by themselves. This view was also expressed during a debate on the occasion of the European Day of Languages (September 26, 2004) in Amsterdam, where politicians, academics, policymakers, and journalists debated the question: 'German and French: relevant or redundant?'

Previously, we carried out research into self-assessments of Dutch staff in profit and non-profit organizations on their own proficiency in English, German, French, and their native language (Van Onna and Jansen, 2002). Many respondents themselves proved to be convinced that their proficiency in Dutch and English in particular adequately met their professional communication needs. This begs the question, obviously, in what sort of shape foreign and native language proficiency in professional organizations in the Netherlands actually is. For this purpose, we conducted the research project outlined below. In ten Dutch organizations, the staff's actual language proficiency was measured and compared with their own assessment of their writing, reading, and listening skills in three foreign languages (English, German, and French) and in Dutch.

2 DIALANG

To measure the respondents' writing, reading, and listening skills and their self-assessments of these skills, we used the DIALANG language testing system. DIALANG was developed with European Commission funding in the context of the Socrates programme. In 2003, DIALANG was made available free of charge on the World Wide Web to anyone interested in using it. DIALANG allows users to test their proficiency in fourteen European languages, including the languages that are pertinent to this study: English, French, German, and Dutch. The chief aim of DIALANG is to provide language users with diagnostic information on their proficiency in writing, reading, listening, grammar, and vocabulary. The test is foreign-language oriented but no reservations or caveats are made with respect to the use of DIALANG for measuring aspects of native language proficiency.

DIALANG enables users to position their proficiency level in relation to the proficiency levels (A1-C2) of the Common European Framework of References for Languages (CEFR) (Council of Europe, 2000). These proficiency levels can be represented as follows:

5 On the materialization of DIALANG, which required the collaboration of twenty universities and test institutes (including the Dutch CITO testing and assessment company), see Alderson (2005) and Alderson & Huhta (2005).
6 Although we found no reservations or caveats in the literature with respect to the use of DIALANG for the measurement of language skills in the mother tongue, it might be that the DIALANG items are less suitable for this purpose than they are for measuring L2 proficiency. Future studies in this field would be welcome.
7 More detailed descriptions of the various CEFR level definitions can be found at http://www.coe.int/T/DG4/Portfolio/documents/0521803136txt.pdf (accessed August 30, 2006). Reading skills at level B1, for example: 'I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.' Or reading skills at level C1: 'I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.'
A1 (Breakthrough) Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of a concrete type [...] Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

A2 (Waystage) Can understand sentences and frequently used expressions related to areas of most immediate relevance [...] Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

B1 (Threshold) Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. [...] Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

B2 (Vantage) Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation [...] Can produce clear, detailed text on wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.

C1 (Effective operational proficiency) Can understand a wide range of demanding, longer texts and recognise implicit meaning [...] Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.

C2 (Mastery) Can understand with ease virtually everything heard or read [...] Can express him/herself spontaneously and very fluently and precisely, differentiating finer shades of meaning even in more complex situations.

Anyone wishing to establish the level of their own language proficiency can take one or several of the DIALANG diagnostic tests. When DIALANG has been installed, users need to choose the language in which the instructions for using DIALANG will be given. Then they decide in which language and on which skills they wish to be tested. Subsequently, the system offers a so-called placement test in the language on which users wish to be tested: users are shown a number of words that resemble verbs in the language of their choice, and they must decide which of these words do and which do not really exist in that language (see Figure 1). On the basis of scores obtained by users on this placement test, the system selects the level of the actual language proficiency test. This prevents DIALANG users from being set tests that are way beyond or below their ability level, and enables an accuracy in establishing language proficiency levels that would otherwise be unattainable. After the placement test, language users are presented with several questions pertaining to their own assessment of their proficiency in the skill in which they wish to be tested in a variety of situations (see Figure 2). Then the actual language test in this skill itself commences (see Figure 3), followed, finally, by information on self-assessment scores and test scores in terms of CEFR levels.

8 The software required to do so can be downloaded from http://www.dialang.org (consulted on June 14, 2006).
Ik kan gesproken taal volgen die speciaal voor mij zeer langzaam en zorgvuldig met lange pauzes wordt gesproken.

Ik kan vragen, instructies en korte eenvoudige aanwijzingen begrijpen.

Ik kan genoeg begrijpen om eenvoudige, routinematige conversaties zonder veel moeite te volgen.

Ik kan meestal het onderwerp volgen van een gesprek dat langzaam en duidelijk in mijn omgeving wordt gevoerd.

Ik kan genoeg begrijpen om mijzelf in concrete alledaagse situaties te redden als er langzaam en duidelijk wordt gesproken.

Ik kan eenvoudige zaken afhandelen in een winkel, postkantoor of bank.

Ik kan meestal de hoofdpunten van een langer gesprek in mijn omgeving begrijpen, als er duidelijk en in standaardtaal wordt gesproken.

Figure 1 Example of a DIALANG placement test

Figure 2 Example of self-assessment questions in DIALANG
Alderson and Huhta (2005), the main DIALANG developers, report that five to ten experts assessed all DIALANG items in each language twice by answering yes or no to the question if they felt that someone on CEFR level X should be able to answer the following item correctly. Some results for German are presented in Alderson and Huhta (2005). They found intra-rater reliability scores (test-retest reliabilities) of approximately .80 for all skills; intra-rater reliability scores for listening skills in German were approximately .90. The outcomes for other skills and other languages were comparable, according to Alderson and Huhta (2005).

The degree to which scores on the various skills correlated with scores on grammar tests and vocabulary tests was determined in a total of 5,154 respondents (native speakers of the various DIALANG languages). For English (2,059 respondents from eleven countries), Alderson and Huhta (2005) present rank correlations (see Table 1).

<table>
<thead>
<tr>
<th></th>
<th>writing</th>
<th>Reading</th>
<th>listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>vocabulary</td>
<td>.79</td>
<td></td>
<td>.65</td>
</tr>
<tr>
<td>grammar</td>
<td>.77</td>
<td>.68</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 Rank correlations (Spearman $p$) between DIALANG scores (English) on writing, reading and listening, and scores on grammar tests and vocabulary tests (Alderson and Huhta 2005)
The DIALANG scores on grammar and vocabulary prove to predict the scores for writing, reading and listening to some extent: between circa 40% and 65% of the variance in these scores is explained by scores for grammar and vocabulary.

On the relation between the actual test scores for English in terms of CEFR levels, and the users' self-assessments on their skills in that language, Alderson (2005) presents rank correlations for a total of 1,803 respondents from eleven European countries (see Table 2).

<table>
<thead>
<tr>
<th></th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-assessment on language proficiency</td>
<td>.84</td>
<td>.91</td>
<td>.87</td>
</tr>
</tbody>
</table>

Table 2 Rank correlations (Spearman ρ) between test scores (CEFR levels) and self-assessments (all for English) in DIALANG (Alderson 2005: 106-108)

The rank correlations between the self assessments and the CEFR scores prove to be high: around .85. But that does not automatically imply that the self assessments and the CEFR scores do not diverge. It is possible that the respondents systematically overestimate or underestimate their own skills: that would not influence the correlation figures.

Table 3 presents the respondents' test and self-assessment scores reported in Alderson (2005) for writing in English (645 respondents).

<table>
<thead>
<tr>
<th>self-assessment</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>B2</th>
<th>C1</th>
<th>C2</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>below A1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>A1</td>
<td>1</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>A2</td>
<td>0</td>
<td>27</td>
<td>42</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>69</td>
</tr>
<tr>
<td>B1</td>
<td>0</td>
<td>0</td>
<td>120</td>
<td>207</td>
<td>76</td>
<td>0</td>
<td>403</td>
</tr>
<tr>
<td>B2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>C1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>81</td>
<td>89</td>
</tr>
<tr>
<td>C2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>total</td>
<td>2</td>
<td>43</td>
<td>162</td>
<td>207</td>
<td>116</td>
<td>115</td>
<td>645</td>
</tr>
</tbody>
</table>

$\chi^2 p<.000$; Pearson r = .86; Spearman ρ = .84

Table 3 DIALANG test scores and self-assessments for writing in English (Alderson 2005: 108)
Table 3 shows that a total of 455 out of 645 respondents who were tested on their writing skills in English scored one or two CEFR levels above their own assessment level. Figure 4 visualizes the information in the row and column totals of Table 3; in section 5 (Conclusions and discussion), we will be referring back to Figure 4.

![Figure 4](image)

**Figure 4** Self-assessments and actual test scores in 645 respondents from eleven European countries on writing in English (in percentages) for the six CEFR levels, based on Alderson (2005: 108)

Despite the apparent self-underestimation on writing skills in English, which also held true—though to a lesser degree—for those respondents whose scores were collected for reading in English and listening in English, Alderson (2005: 109) concludes that

[...] there is considerable agreement between test and self-assessment results in terms of CEFR levels, for all skills. Of course, discrepancies may be due to under- or over-estimation on the part of the learners, or to inappropriate cut-offs for the CEFR levels in either tests or self-assessments or both. Only further data collection and analysis will be able to resolve such uncertainties.

The research presented here may be considered as making a contribution to determining any possible discrepancies between DIALANG test and self-assessment scores for native speakers in Dutch organizations. In this study, we attempt to gain greater clarity on this issue. Would they also systematically underestimate their own language skills, or would the Dutch differ from other Europeans in this respect? In this study, we attempt to gain greater clarity on this issue.

3 Research design

3.1 Participants

We selected 509 organizations with over 500 staff (including part-time staff) from the directory of the Chamber of Commerce in the Netherlands, which comprises approximately 1.5 million addresses of businesses, foundations, and associations in the Netherlands. Out of these, we took a sample of ten organizations: a publishing house, an ICT company, a secondment agency, an engineering firm, an insurance company, a management bureau, a sales organization, a cleaning and security company, a building company, and a health care foundation. The personnel or human resource departments of these organizations were...
contacted by telephone and asked if they were prepared to cooperate in a data collection procedure for a language proficiency research project among sixty of their staff during office hours. We told them this would take an estimated two hours per member of staff. None of the organizations consented, their main argument being that the research project would take up too much of the participants' working hours. However, all organizations were prepared to allow us to contact their staff with a request for participation in the research project in their own time. This led to the participation of a total of 293 Dutch-language respondents from ten different organizations, all of whom were tested on one of four languages (see below). Table 4 shows the distribution of the respondents over the test languages. We made sure respondents were only tested on a foreign language if they had received training in that language for two years or more.

<table>
<thead>
<tr>
<th>test language</th>
<th>test language</th>
<th>test language</th>
<th>test language</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>French</td>
<td>German</td>
<td>Dutch</td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>46</td>
<td>37</td>
<td>38</td>
<td>37</td>
</tr>
<tr>
<td>female</td>
<td>33</td>
<td>33</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>30 or below</td>
<td>32</td>
<td>21</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>31-40</td>
<td>19</td>
<td>30</td>
<td>27</td>
<td>14</td>
</tr>
<tr>
<td>41-50</td>
<td>22</td>
<td>10</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>50 or up</td>
<td>6*</td>
<td>7*</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>highest educational attainment level: lower vocational / lower general secondary</td>
<td>13</td>
<td>31</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>highest educational attainment level: intermediate vocational / higher general secondary / pre-university</td>
<td>38</td>
<td>29</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>highest educational attainment level: higher vocational / university</td>
<td>27*</td>
<td>10</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>took finals in one foreign language</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>took finals in two foreign languages</td>
<td>25</td>
<td>10</td>
<td>38</td>
<td>22</td>
</tr>
<tr>
<td>took finals in three or more foreign languages</td>
<td>43</td>
<td>60</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>non-technical profession</td>
<td>41</td>
<td>50</td>
<td>55</td>
<td>37</td>
</tr>
<tr>
<td>technical profession</td>
<td>38</td>
<td>20</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>low-ranking staff</td>
<td>18</td>
<td>15</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>middle management</td>
<td>30</td>
<td>29</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>high-ranking staff</td>
<td>20</td>
<td>19</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>management</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>total</td>
<td>79</td>
<td>70</td>
<td>81</td>
<td>63</td>
</tr>
</tbody>
</table>

* 1 missing value ** 2 missing values

Table 4 Distribution of respondents over test languages

9 There were ten participants whose native language was not Dutch; these were left out of the analyses here.
3.2 Procedure

The participants installed DIALANG at home and went through the programme for their selected language. They completed a questionnaire with their personal particulars, information on the necessity of native and foreign language proficiency in their working environment, the DIALANG scores on their placement test, their self-assessments, and their language tests (each time beginning with listening, followed by writing, and finishing with reading). It took the respondents approximately two hours in all to perform these tasks.

4 Results

Below we present the results for one of the skills (listening, reading, writing) in each of the languages submitted to DIALANG testing and self-assessment. Elsewhere we have reported on all skills investigated in all four languages (Van Onna and Jansen 2006b). Figure 5 shows how actual performance on listening skills in German (79 respondents) relates to the self-assessment of their listening skills in this language. Actual performance on listening skills in German is clearly lower than the respondents' self-assessment of this skill. Though there is a significant and positive correlation between estimated and actual levels (Spearman ρ = .74; p < .001), a non-parametric difference test also shows a significant discrepancy between the test scores and the self-assessments (Wilcoxon Signed Rank Test: Z = -6.01; p < .001). Fifty out of 79 respondents proved to score one or two CEFR levels below their self-assessment levels; 4 respondents scored one level above what their self-assessments indicated.

Figure 5  Self-assessments and actual test scores on listening skills in German (in percentages) for the six CEFR levels (N=79)

<table>
<thead>
<tr>
<th>Level</th>
<th>Test Score</th>
<th>Self-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>A2</td>
<td>34.2</td>
<td>3.8</td>
</tr>
<tr>
<td>B1</td>
<td>24.1</td>
<td>35.4</td>
</tr>
<tr>
<td>B2</td>
<td>22.8</td>
<td>30.4</td>
</tr>
<tr>
<td>C1</td>
<td>13.9</td>
<td>24.1</td>
</tr>
<tr>
<td>C2</td>
<td>2.5</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Figure 6 shows how actual performance on reading skills in French (70 respondents) relates to the self-assessment of their reading skills in this language. For reading skills in French, the actual test scores are also lower than the respondents' self-assessments. Here too, there is a significant and positive correlation between estimated and actual levels (Spearman ρ = .61; p < .001), but here too a non-parametric difference test shows a significant discrepancy between the test scores and the self-assessments (Wilcoxon Signed Rank Test: Z = -6.01; p < .001).

From the group of 81 respondents tested in German, two respondents proved to have received training in German for only one year.
For reading skills in French, 51 out of 70 respondents proved to score one or two CEFR levels below their self-assessment levels, and 13 respondents scored one level above what their self-assessments indicated.

![Figure 6](image)

Figure 6  Self-assessments and actual test scores on reading skills in French (in percentages) for the six CEFR levels (N=70)

Figure 7 shows how actual performance on writing skills in English (79 respondents) relates to the self-assessment of their writing skills in this language.

![Figure 7](image)

Figure 7  Self-assessments and actual test scores on writing skills in English (in percentages) for the six CEFR levels (N=79)

As was the case for listening skills in German and reading skills in French, the actual test scores on writing skills in English are also lower than the respondents' self-assessments. Here too, there is a significant and positive correlation between estimated and actual levels (Spearman $p = .47$; $p < .001$), but, again, a non-parametric difference test shows a significant discrepancy between the test scores and the self-assessments (Wilcoxon Signed Rank Test: Z = -4.97; $p < .001$).
In this case, 48 out of 79 respondents proved to score one or two CEFR levels below their self-assessment levels, and 12 respondents scored one level above what their self-assessments indicated. The test scores of 8 respondents exactly matched their self-assessments.

Figure 8 shows how actual performance on writing skills in Dutch (63 respondents) relates to the self-assessment of their writing skills in this language, which is their native language.

![Figure 8: Self-assessments and actual test scores on writing skills in Dutch (in percentages) for the six CEFR levels (N=63)](image)

The actual test scores on writing skills in Dutch are also lower than the respondents' self-assessments. Here too, there is a significant and positive correlation between estimated and actual levels (Spearman $p = .55; p < .001$), but, once again, a non-parametric difference test shows a significant discrepancy between the test scores and the self-assessments (Wilcoxon Signed Rank Test: $Z = -5.19; p < .001$). In this case, 39 out of 63 respondents proved to score one or two CEFR levels below their self-assessment levels, and 4 respondents scored one level above what their self-assessment indicated.

## 5 Conclusions and discussion

Though the results presented here only relate to one skill (listening, reading, or writing) in any one of the four languages under investigation, a clear picture has materialized that does not essentially diverge from the overall results we found for all skills in all languages (not reported here, but see Van Onna and Jansen, 2006b). The respondents consistently proved to produce higher assessments of their own proficiency than was warranted by their test results. Their actual proficiency levels generally do not exceed CEFR level B1 ("can understand the main points of clear standard communication on familiar matters"), whereas their self-assessment level is typically at B2 or up. Only rarely do respondents show a proficiency level - neither for the foreign languages nor, remarkably enough, for their native language - that one might expect to find in professional organizations, viz., C1 ("can use language flexibly and effectively for social, academic, and professional purposes") or C2 (full command of a language).

A striking feature is the contrast between the results we obtained here, which clearly point to the Dutch respondents' overestimation of their own language proficiency, and,
conversely, Alderson's (2005) data on respondents from eleven European countries, who rather tend to underestimate their own performance. This contrast is illustrated by Figure 7, comparing the Dutch respondents' test scores and self-assessments on writing skills in English, versus Figure 4, making a similar comparison for the respondents from eleven European countries on writing in English in Alderson (2005).

A possible explanation for the discrepancies between the self-assessments and the actual test scores that we found in this study might be that our respondents, all being employees of professional organizations, would have developed a domain specific type of competence that exceeds their general language proficiency. That might explain their 'low' tests scores for general proficiency, in comparison to their 'high' self-assessments, which would then be based on answers referring to domain specific tasks that they are used to carry out as part of their job. However, the type of questions asked in DIALANG to measure self-assessment seems too exclude such an explanation. The so called 'can do' statements that are used for this purpose in DIALANG and that mostly are taken from the CEFR, hardly permit a domain specific interpretation. To give some examples of these 'can do' statements: 'I can understand the answers to questions about where things are in a shop'; 'I can understand basic hotel information'; 'I can understand a simple, factual article'; 'I can write an informal letter to a friend.'

In conclusion: it seems the Dutch take a very optimistic view of their own foreign and native language proficiency. Further research is required to obtain a more precise picture of the situation in the Netherlands and, possibly, that in other European countries. The overall picture emerging from this first study into the relation between actual and estimated language proficiency in Dutch organizations gives little cause for confidence in the present-day linguistic competence of the Dutch.

References


