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DUTCH-GERMAN CONTACT IN AND AROUND BENTHEIM

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1. Introduction

Up to the middle of the 20th century, for people on both sides of the Dutch-German border, the border was no impediment for understanding each other. The Low Saxon dialects on both sides of the border formed a smooth continuum. Until the second world war the use of the Dutch and German standard languages was restricted almost to school, the church and government circles. Especially since the second world war, the use of standard languages has increased and in particular in everyday communication, while the use of the dialect has increasingly been restricted to the private sphere. Furthermore, the dialects in Eastern Netherlands were getting more Dutch while the dialects in North West Germany were getting more German (cf. Auer and Hinskens 1996: 15-18 for the influence of political borders in Europa). On the one hand a lot of objects were no longer used, so words which were in both the Dutch and the German Low Saxon dialects disappeared. On the other hand, when new objects are introduced, the name is often borrowed from the standard language. However, existing words were also replaced by words which are the same or more similar to ones in the standard languages. So the result is that the significance of the political border as dialect border is increasing (Kremer 1984, 1990, Niebaum 1990). The present paper examines the contemporary situation in order to find out whether the border continues to drive the dialects apart and to examine the effect of the standard languages. Remarkably, the effects are noticeable over a period of two to three generations.

Part 14 of the Reeks Nederlands(ch)e Dialectatlassen (RND) was compiled by H. Entjes and contains transcriptions of dialects in South Drenthe and North Overijssel (Entjes 1982). The transcriptions were made in 1974-1975. Besides Dutch dialects this part also contains eight dialects in the county Bentheim. Entjes justified his choice by referring to the dissertation of Arnold Rakers: “Die Mundarten der alten Grafschaft Bentheim und ihrer reichsdeutschen und niederländischen Umgebung”, Oldenburg, 1944 (cf. also Rakers 1993). The dissertation mentions that the *Gildehäuser Schulchronik* reported that the first grade of the elementary school used Dutch as a language of instruction for the

last time in April, 1902. In 1925 Laar was the last reformed church which sang psalms in Dutch in services. National Socialism completely pushed away the use of Dutch language only in 1933. But Dutch sacred writings and the Dutch *Statenbijbel* were still used for a long time.

In this paper we investigate the (changes in the) relation between the eight variants in Bentheim, and nine Dutch dialects which form a ring around Bentheim (see Figure 1). We research the influence of political borders and language standardisation. For this purpose we use Levenshtein distance for measuring the phonetic distances between dialects. The distance measure is explained in Kruskal (1983) and was first applied to dialect data by Kessler (1995). Using Levenshtein distances two strings (two dialectal pronunciations of the same word) are compared by calculating the cost of (the least costly set of) operations mapping one phonetic transcription to another. The basic costs are those of insertions, deletions and substitutions. The basic procedures are made more sensitive by using bundles of features and weighting operation costs by phonetic similarity (realised in feature overlap).

On the basis of the Levenshtein distances the dialects are classified by clustering (Jain and Dubes 1988) or multidimensional scaling (Kruskal and Wish 1984). The final result of clustering is a dendrogram which is a hierarchically structured tree in which the dialects are the leafs. The result of multidimensional scaling is a map, where the geographic distance between kindred dialects is small, and between different dialects great. Nerbonne et al. (1996), Nerbonne and Heeringa (1998) and Nerbonne et al. (1999) show the application of the comparison and classification methods on Dutch dialects.

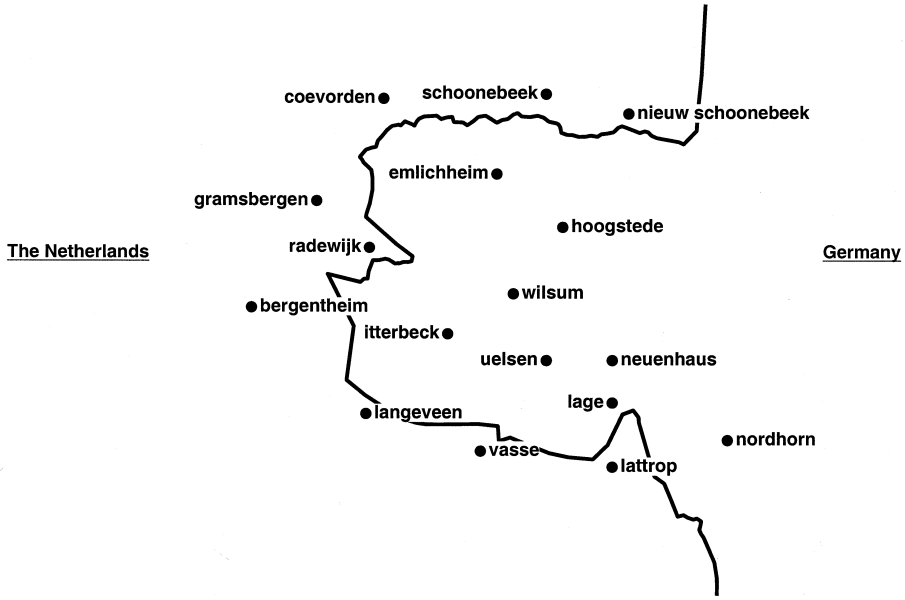

Figure 1. The locations of the Dutch and German dialects.

2. Data

2.1 Dialects

To examine changes in time we need comparable sources from different times. As mentioned, as the older one we used transcriptions in the RND, made in 1974-1975. We selected 9 Dutch and 8 German variants, so we get a total of 17 variants. The average age of the informants of these variants is 58. Per site, two informants were interviewed, except for Nieuw Schoonebeek and Wilsum, where three informants were interviewed. Entjes interviewed the informants mostly on the basis of a Dutch questionnaire. When this resulted in problems in connection with the German locations, he could almost always solve the problem by using his own dialect (dialect of Vroomshoop). In some cases, he could only solve the problem by using standard German.

A newer source was not available, so in 1999 we conducted new interviews and made transcriptions of the same dialects. To maximise the time span, we interviewed younger informants. Their average age is 39. Per site we interviewed one informant, except for Lattrop and Vasse where we interviewed two informants. For the Dutch dialects we used the questionnaire as given in part 14 of the RND. For the German dialects we made a German translation of the Dutch questionnaire and used that one. The present inhabitants of Bentheim understand Dutch more poorly than the inhabitants in the past, so using a Dutch questionnaire would have resulted in a translation with a lot of echo forms.

When making transcriptions of the recordings, we took the old RND transcriptions as a basis, and made changes in it where we heard differences. We chose this procedure to guarantee maximal consistency of the new transcriptions with the old ones.

The complete RND questionnaire consists of 141 sentences. For our research, from these sentences we chose 100 words, which we think are representative for the range of sounds in the varieties. When making new recordings, we only recorded the sentences which contains one or more of the 100 words.

2.2 Standard languages

To examine the influence of the standard languages we need transcriptions of standard Dutch and standard German which are consistent with the dialect transcriptions.

2.2.1 Standard Dutch

For the Dutch transcription we took the *Tekstboekje* of Blancquaert (1939) as a basis. The phonetic system used in it is the same as in the RND, with the exception of some extensions we will mention below. Using this “textbook” we

obtain a consistent word list because Blancquaert edited a great many parts of the RND, while other editors learned transcription from Blancquaert or worked with his outlines.

Transcriptions were taken from this textbook whenever the context was not significantly different from the RND questionnaire context. For words which could not be found there, transcriptions were made which are analogous to similar words in the source.

In the textbook, Blancquaert uses only [r], no [ʀ]. However, in the RND the [ʀ] is used. Because in Dutch both realisations are allowed, in the word list for each word containing one or more <r>'s, we also note a variant in which the <r>'s are pronounced as [ʀ]. Further, Blancquaert transcribed both the labiodental and the bilabial <w> as [w]. In the RND a distinction is made between them. In our word list, at each place where a <w> appears at the beginning of a syllable, we note it as [ʋ]. If a <w> appears at the end of a syllable or after <u> (for example: <nieuwe>, <duwen>, <brouwer>), we note it as [w]. The [ɤ] is noted at the beginning of a syllable, the [x] at the end of a syllable. Blancquaert notes <tj> as [tj], for example: <tuintjes> is [tœ.ʸntjəs], <kindje> is [kɪntjə]. This is like the notation of the RND, with the exception of part 16 (Groningen and Noord-Drenthe) where <tj> is noted as [c]. If a word ends on the syllable <en> (for example: <komen>, <rozen>, <open>), Blancquaert always notes that syllable as <ən>. However, we always omit the final n (for example: [ko.mə], [ro:zə], [o.pə]). This is in accordance with the pronunciation given in CELEX and Paardekooper (1998). Blancquaert did not note which syllable is stressed. We also did not. Note that in both the textbook and the RND, the [ɔ] preceding the [m], [n] or [ŋ] is noted as [ʊ] (for example in: <bom>, <lont>, <honger>).

In the texts of Blancquaert, a distinction is made between [v] and [f], for example: <vier> is [vi.r] and <fier> is [fi:r]. It seems that both in the textbook and in the RND a [v] is transcribed if a <v> is noted and a [f] is transcribed if a <f> is noted. In the newer transcriptions we made, for most dialects only the [f] was heard and noted, even where in spelling a <v> would be spelled. But for present-day standard Dutch the same applies: both, the <v> and the <f> are pronounced as [f]. So we made a 1974 version of standard Dutch with distinction between [v] and [f], and a 1999 version of standard Dutch in which only the [f] is used. This will also avoid that the results unfairly show that the 1999 dialects diverged from standard Dutch.

In the RND the [ç] is never used, although one should expect this sound in the transcriptions of Brabant and Limburg dialects. Instead of it the [x] was used. To keep the material consistent, we did the same for the new transcriptions, although sometimes the [ç] was heard in the recordings of the German dialects.

2.2.2 Standard German

For making a Standard German word list, we used the *Wörterbuch der deutschen Aussprache* (1969). Using this dictionary, one should be aware of the fact that IPA [ɑ] is noted as [a], while IPA [a] is noted as [ɑ]. The IPA [ʊ] is noted as [v]. Because the RND [ʊ] is not the same as the [ʊ] used in this dictionary, for German we used [u] instead of it.

In the dictionary the <r> is always noted as [r], never as [ʀ]. However, in the RND the [ʀ] is used. Because in German both realisations are allowed, in the word list for each word containing one or more <r>'s, we also note a variant in which the <r>'s are pronounced as [ʀ].

As in the Blancquaert/RND notation, the [ɔ] preceding the [m], [n] or [ŋ] is noted as [ʊ]. The [x] was noted where the [ç] was given in the dictionary, and this procedure was carried over to the transcriptions of the 1999 varieties.

The dictionary uses only the [f]. The [v] represents the bilabial voiced sound which is usually noted as [ʊ] in Dutch transcriptions. Furthermore, only the [x] is used, the [ɤ] never appears.

In the dictionary, three diphthongs are mentioned: <au> transcribed as [ao], <eu> or <äu> transcribed as [ɔø], and <ei> or <ai> transcribed as [ae]. Below the two elements, an arch is noted. However, the notation of the diphthongs is not consistent with the RND notation. According to the dictionary the <ou> in Dutch <Gouda>, <Oosterhout> and <brouwer> is equal to the German <au>. Therefore we use the Blancquaert/RND notation for the German <au>: [ɔ.^{u}]. Some people have the opinion that the German <au> is more open than the Dutch <ou> or <au>. The German <eu> or <äu> is equal to the Dutch <oi> as in <spoiler>. We note it as [ɔ.^{i}]. The German <ei> or <ai> is equal to the Dutch <ai> as in <mais>. We note it as [ɑ.^{i}].

According to Koenraads (1967), who uses the same notation as in the *Wörterbuch der deutschen Aussprache*, German diphthongs are falling diphthongs. The first component is stressed more strongly than the second component. In Blancquaert and in the RND this is indicated by noting the first element half long and the second element smaller or in superscript. For reasons of consistency, we applied this notation to the German diphthongs as well.

In the dictionary it is mentioned that in words ending in <en> or the [ə] may be omitted after [f], [ʊ], [s], [z], [ʃ], [ʒ], [ç], [x], [pf] and [ts] in some situations (at fast rates of speech, in some phonological environments). However, in the diminutive ending <chen> the [ə] is always pronounced. In our transcription, after [f], [ʊ], [s], [z], [ʃ], [ʒ], [ç], [x], [pf] or [ts] we give a second variant in which [ən] is replaced by [n̩].

In words ending in <en> the [ə] may be omitted after [p], [b], [t], [d], [k] and [g]. This is not allowed in the endings <igen> and . In final syllable accumulations (for example <rettenden>) only the [ə] in the first <en> may be

omitted. In our transcription, after [t] or [d] we give a second variant in which [ən] is replaced by [n̩], after [p] or [b] by [m̩], and after [k] or [g] by [ŋ̩].

In words ending in <el> (for example <Knüppel>) the [ə] may be omitted, except after a vowel or after [g], [l] or [r]. In our transcription we give a second variant in which [əl] is replaced by [l̩].

In words ending in <er> (for example <Lehrer>) the <er> should be pronounced as a mid vowel. We transcribe the syllable as [ɐ̯]. In words ending on <r> where the <r> is preceded by a long vowel (for example <vier>), the <r> should be pronounced as a dark mid vowel. We transcribe the <r> as [ə]. In words with one of the preliminarily syllables <er>, <her>, <ver> or <zer> (for example <Versuch>) the <r> should be pronounced as a dark mid vowel. We would transcribe the <r> as [ə], but in our word list such words do not occur.

3. Convergence and divergence with respect to standard languages

We calculated the mutual Levenshtein distances between the old variants, the mutual distances between the new dialects, and the distances between the old and the new variants. The correlation between the old phonetic distances and the geographic distances turned out to be equal to 0.6056, while the correlation between the new phonetic distances and the geographic distances is equal to 0.5228. This reduced value already points to a more abrupt phonetic map due to the effects of the border. Furthermore the correlation between the old and the new distances is equal to 0.8394. All correlation coefficients mentioned here are significant.

3.1 Dutch or German?

Goossens tries to answer the question: What are Dutch dialects? (1977: 11-30). Among other things he discusses the definition which recognizes a Dutch dialect as a variant which shows more characteristics of Dutch than of any other standard language. Goossens objection against this definition is that applying it is not feasible. One has to know the complete vocabulary of all speakers of the dialect you want to research, and besides, the vocabulary of a speaker can change any time.

However, ignoring this objection, and assuming that the informants are representative of the dialects, and that the word list is representative of the vocabulary of the informants, we can determine if dialects are Dutch or German using Levenshtein distance. Applying this definition all dialects in 1974-1975 were Dutch, including those on German territory. In 1999, the dialects in the Netherlands are still Dutch, as are the Bentheim dialects of Lage and Wilsum, while the other Bentheim dialects were German.

3.2 Examining classification results

Clustering on the basis of the 1974-1975 dialects results in a main division consisting on the one hand of a group containing both standard languages and, on the other a group containing all dialects (see Figure 2a). We find that the southern Dutch variants (Langeveen, Lattrop and Vasse) are more similar to the German variants than to the rest of the Dutch dialects. Clustering the 1999 dialects we get a sharp division in Dutch variants (including standard Dutch) and German variants (including standard German) (see Figure 2b). Now the southern Dutch variants are grouped among the other Dutch variants, while the standard languages are grouped among the varieties of the countries they correspond with. Comparing the old and the new dendrograms shows that dialects have grown to be more similar to their corresponding standard languages.

Having 17 old dialects, 17 new dialects, 2 old standard languages and 2 new standard languages, we get a total of 38 variants. With multidimensional scaling we calculated on the basis of the mutual distances, 2 dimensional coordinates, one for each variant (see Figure 3). The result shows clearly that for each variant, the newer one is more closely located to its corresponding standard language than the older one.

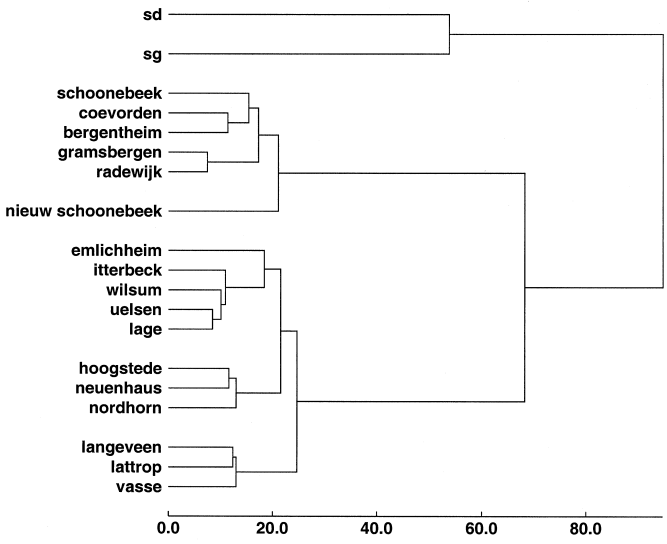

Figure 2a. The dendrogram on the basis of the 1974-1975 distances; “sd” is the older standard Dutch, while “sg” is standard German.

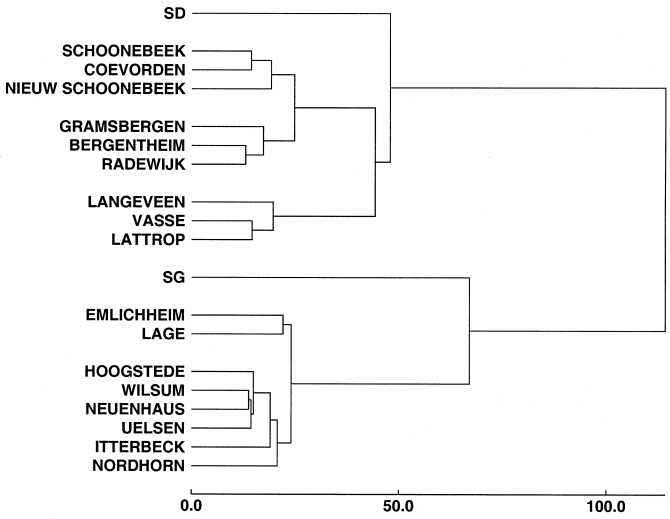

Figure 2b. The dendrogram on the basis of the 1999 distances; "SD" is the newer standard Dutch, while "SG" is standard German.

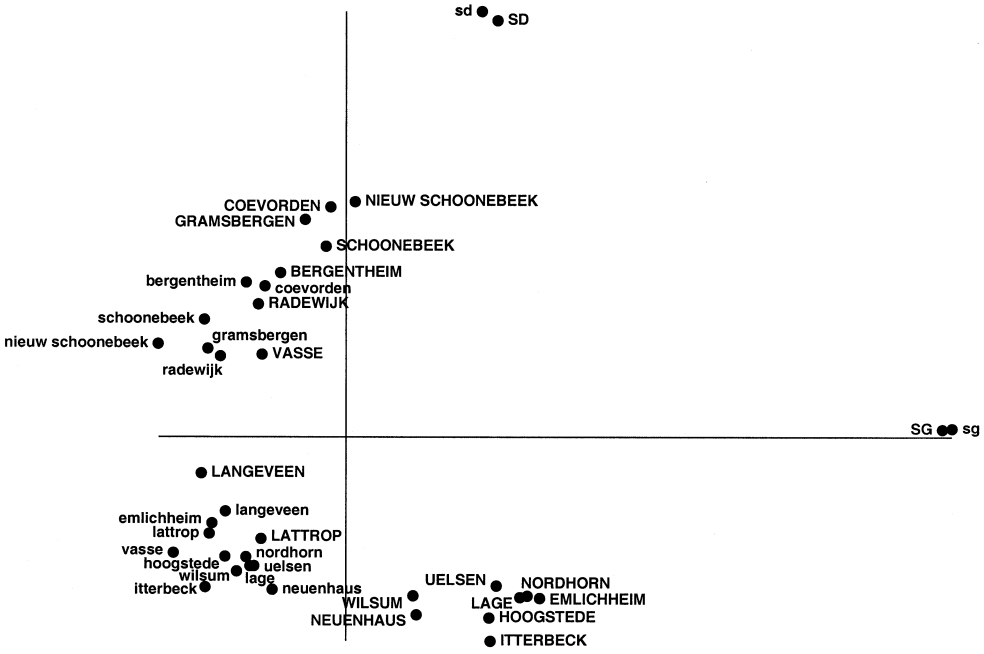

Figure 3. The multidimensional scaling plot on the basis of 38 variants, containing 17 old dialects, 17 new dialects, 2 old standard languages and 2 new standard languages. Note the similarities to the geographic map.

3.3 Convergence and divergence

By subtracting the old distances from the new distances, we get negative and positive values. Negative values correspond with convergence, while positive values corresponds with divergence.

It turned out that all Dutch dialects converged to standard Dutch, while all German dialects diverged from standard Dutch. All German dialects converged to standard German. The Dutch dialects of Nieuw Schoonebeek, Schoonebeek, Coevorden, Gramsbergen, Vasse and Lattrop also showed some convergence toward standard German, while Radewijk, Bergentheim and Langeveen diverged from it.

Figure 4 give an idea of the extent to which dialects converged (a) or diverged (b) to their standard languages. Nieuw Schoonebeek, Schoonebeek and Vasse very strongly converged to standard Dutch, just as all German dialects converged to standard German. The extent to which other dialects converged or diverged is much smaller.

4. Conclusions

In the context of a book devoted to languages in contact, we should note the following. In the characterisation of Thomason and Kaufmann (1988), the situation we examine is clearly one of language *maintenance*: we have interviewed dialect speakers who have maintained local varieties in the face of encroaching standard languages. Although Thomason and Kaufmann caution that dialect contact situations are likely to be too complex to analyse neatly, they make the prediction that structured change may not occur without lexical borrowings from the standard languages, in accordance with the predictions of language contact theory.

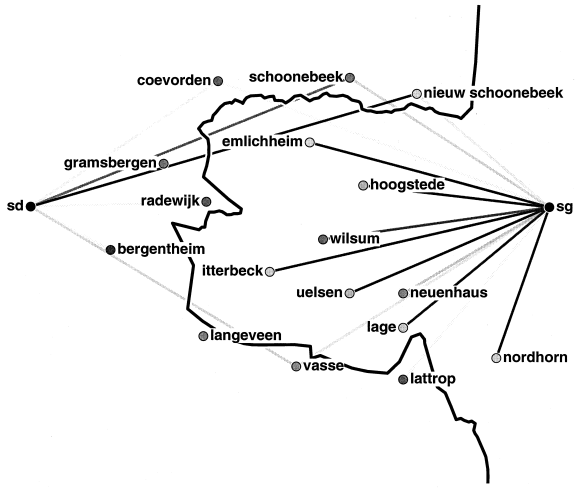

Figure 4a. The picture shows convergence. Darker lines show stronger convergence. The grey values of the dots represent distances between the old and the new variant. Whiter dots indicate greater distances.

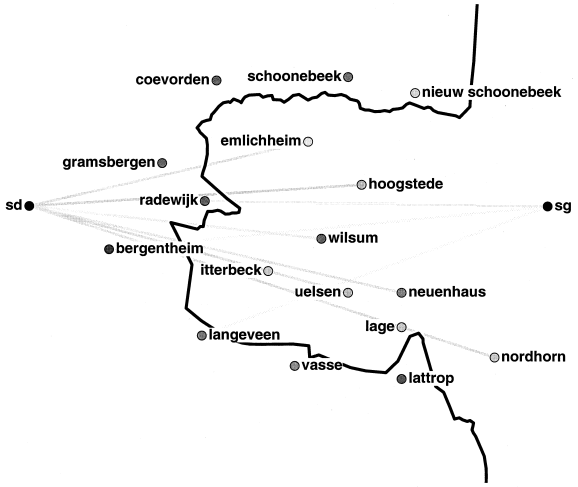

Figure 4b. The picture shows divergence. Darker lines show stronger divergence. The grey values of the dots represent distances between the old and the new variant. Whiter dots indicate greater distances.

More importantly the research shows that some dialects in the German part of our area of interest, which could previously be regarded as Dutch Low Saxon dialects, are now German dialects. On the other hand, Dutch dialects which were previously grouped among German Low Saxon dialects, are now grouped among the other Dutch dialects. All Dutch dialects shifted towards standard Dutch while all German dialects shifted towards standard German. Some Dutch dialects strongly converged toward standard Dutch, just like all German dialects converged toward standard German. From these facts we may conclude that the political border has a significant influence on the graduallity of the dialect continuum, acting as a separator between Dutch and German dialects.

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