External and Internal Factors in Bilingual and Bidialectal Language Development: Grammatical Gender of the Dutch Definite Determiner

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External and Internal Factors in Bilingual and Bidialectal Language Development:
Grammatical Gender of the Dutch Definite Determiner

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1. Introduction

In many European countries, monolingualism is considered the norm. However, in the last few decades, countries such as the Netherlands have developed into bilingual societies. In this paper, we will focus on two types of bilingual communities, namely a “new” one and an “old” one. The “new” one is the result of population shifts, namely immigrants entering a new country, induced by large-scale technical and economic developments. These immigrants may shift to Dutch without completely taking over the grammatical system that exists in the grammar of native Dutch speakers (Thomason & Kaufman 1989). The “old” one refers to bilingual or bidialectal communities in geographical areas where nonstandard dialects are common. Nowadays, the phenomenon of bilingualism or bidialectalism has increased so much that monolingual speakers of nonstandard dialects have become the exception; that is, children often acquire a local
dialect in addition to the standard language and are therefore raised bilingually, either from birth or from school age onwards.

In earlier work (Hulk & Cornips 2006) we found that bilingual children of the “new” bilingual type show a loss of grammatical gender in Dutch compared to their monolingual peers; that is to say, they “fossilize” with respect to the acquisition of the neuter definite determiner. The loss of grammatical gender is creole-like in the sense that it emerges rapidly in immigrants’ speech and does not disappear in subsequent generations that are born in the Netherlands and acquire Dutch from birth onwards. Subsequently, the bilingual children have a potential role in contact effects as observed in creole and other languages. On the one hand, the loss of grammatical gender is well known in Dutch lexifier contact languages such as Negerhollands (Muysken 2001: 165), Berbice Dutch, Afrikaans (Donaldson 1993; Ponelis 2005), Curaçaos-Dutch (Joubert 2005), Surinamese-Dutch (Cornips 2005), and Indisch-Dutch (De Vries 2005). On the other, the loss of grammatical gender takes place in non ethnic minority communities in other countries too, such as the suburbs of Sweden where immigrants and their children learn Swedish as the target language (Kotsinas 2001: 150).

In comparison to the bilingual children of the new type, we will report new experimental results showing that bilingual children of the “old” type reveal an “accelerated” acquisition of the neuter gender of the Dutch definite determiner. In order to explain these striking differences in societal bilingual contexts, we will carefully disentangle various external and internal factors that play a role in language development. We will argue that the fossilization effect is due to (i) internal factors, and (ii) the quantity and the quality of Dutch in the (parental) input (Sorace 2005) the bilingual
children are exposed to in their sociolinguistic context. We will suggest that the fossilization effect specifically arises in a multigenerational scenario in ethnic minority communities.

This paper is organized as follows. First, we will talk about the gender distinction in Dutch. Second, we will present our experimental results and linguistic factors involved in the (un)succesful acquisition of grammatical gender by bilingual children of ethnic minority and bidialectal communities. Finally, we will discuss similarities and differences between the two types of bilingual communities.

2. **Gender distinction in standard Dutch determiners**

The acquisition of the gender of the Dutch definite determiner involves more than just lexicon and syntax. Definite determiners are obligatory under certain semantic and pragmatic conditions, which we will not discuss here. In the experiments considered (see sections 3.1 and 3.2), the conditions are such that the definite determiner is always obligatory. What interests us here is the morphology of this determiner. The definite determiner in standard Dutch is a prenominal morpheme. Unlike English, Dutch distinguishes between neuter and non-neuter nouns. This gender distinction is morphologically visible on the determiner if it has the features singular and definite: neuter nouns take *het* and non-neuter nouns take *de*, as illustrated in Table 1 and the
examples in (1). In contrast, no gender distinction is reflected the indefinite article in Dutch, which is *een* for both neuter and non-neuter nouns.\(^1\)

Table 1. *The morphology of the definite determiner in Dutch*

<table>
<thead>
<tr>
<th>Definite determiner</th>
<th>Singular</th>
<th>Plural</th>
<th>Indefinite</th>
<th>Diminutive</th>
</tr>
</thead>
<tbody>
<tr>
<td>neuter noun</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>boek</em> ‘book’</td>
<td><em>het</em></td>
<td><em>de</em></td>
<td><em>een</em></td>
<td><em>het</em> <em>boekje</em></td>
</tr>
<tr>
<td>non-neuter noun</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>tafel</em> ‘table’</td>
<td><em>de</em></td>
<td><em>de</em></td>
<td><em>een</em></td>
<td><em>het</em> <em>tafeltje</em></td>
</tr>
</tbody>
</table>

The only salient morphological cues on the noun are the diminutive suffix −(t)je, which always makes the noun neuter, as exemplified in (1a), and the plural suffixes −en or −s, which always require the determiner *de*, as illustrated in (1b) and Table 1 above:

(1)  

a.  

`het`  
`tafeltje`  
`het`  
`boekje`  

the (NEUTER)  
table + DIM  
the (NEUTER)  
book+DIM

b.  

`de`  
`tafels`  
`de`  
`boeken`  

the  
table +PLUR  
the (PLUR)  
book+PLUR

Linguistically speaking, (nominal) gender in Dutch can be analyzed as an [uninterpretable] feature, whose default value is [non-neuter]. The gender feature has to

\(^1\) Not only determiners, but also demonstrative determiners and personal and relative pronouns agree in gender with the accompanying noun in the singular. These elements are outside the scope of this paper, as are attributive adjectives, which also vary morphologically according to the gender of the noun, under certain conditions.
combine with the [+singular] number feature and the [interpretable] [+ definite] feature in order to morphologically realize the specific value [neuter] on the definite determiner.

From a developmental point of view, four stages can be distinguished in the monolingual acquisition of determiners in Dutch (cf. Bol & Kuiken 1988; De Houwer & Gillis 1998; Zonneveld 1992), as shown in Table 2. Crucially, monolingual children do not acquire the target grammar before the age of six (Van de Velde 2004):

Table 2. Stages of determiner acquisition

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>only bare nouns</td>
</tr>
<tr>
<td>Stage 2</td>
<td>schwa-element + noun which can be interpreted as the indefinite article</td>
</tr>
<tr>
<td></td>
<td>* een ‘a(n)’ (before the age of 2)</td>
</tr>
<tr>
<td>Stage 3a</td>
<td>• definite article <em>de</em> with both [non-neuter] and [neuter] nouns</td>
</tr>
<tr>
<td>Stage 3b</td>
<td>• first appearance of <em>het</em>, but massive overgeneralization of the</td>
</tr>
<tr>
<td></td>
<td>non-neuter definite determiner <em>de</em></td>
</tr>
<tr>
<td>Stage 4</td>
<td>target grammar (not before the age of 6)</td>
</tr>
</tbody>
</table>

According to a dictionary-based estimate, roughly 75% of Dutch nouns are non-neuter (*de*-words) and only 25% are neuter (*het*-words). Van Berkum (1996) examined the relative distribution of *de*- and *het*-words in computerized databases and found that in running texts the estimate is roughly 2:1.

2.1 Grammatical gender in the other languages of the bilingual children
The bilingual children of ethnic minority communities are of Moroccan, Turkish, Ghanaian, Surinamese and French descent (see section 3.1). Consequently, the “other” languages of the children involved are Moroccan-Arabic, Berber, Turkish, Akan, Ewe, Sranan, and French. These languages widely vary in the way they express definiteness and grammatical gender. The determiner in standard Dutch is a prenominal morpheme and there is no apparent (structural) overlap with the determiner systems in the above-mentioned languages mentioned above. In addition, although French, Moroccan-Arabic and Berber have a gender distinction in their noun/determiner system, Turkish, Akan/Ewe and Sranan do not. We will discuss the issue of cross-linguistic influence in more detail later (section 3.1).

The language of the bidialectal children involved in our experiment is the local dialect of Heerlen. Heerlen is located in the province of Limburg in the southeastern part of the Netherlands; it is a town of about 90,000 inhabitants near the German and Belgian borders. The dialect of Heerlen is situated in the westernmost dialect-geographical transition zone of the Ripuarian dialects, a subbranch of the Franconian dialect group. From a linguistic point of view, it was heavily influenced by the German city of Cologne for centuries. In the speech repertoire in Heerlen, there is a structural or genetic relationship between standard Dutch and the local dialect. But the Heerlen dialect differs from standard Dutch in all linguistic aspects: lexical, phonological, morphological and syntactic (cf. Cornips 1994). In contrast to standard Dutch, the dialect of Heerlen makes a three-way distinction between masculine, feminine and neuter nouns that is morphologically visible on both the indefinite and definite determiner, as exemplified in Table 3.
Table 3. *Definite and indefinite determiners in the local dialect of Heerlen*

<table>
<thead>
<tr>
<th>DIALECT OF HEERLEN</th>
<th>masculine</th>
<th>feminine</th>
<th>neuter</th>
</tr>
</thead>
<tbody>
<tr>
<td>indefinite</td>
<td><em>inne</em></td>
<td><em>ing</em></td>
<td><em>e</em></td>
</tr>
<tr>
<td>definite</td>
<td><em>d’r</em></td>
<td><em>de</em></td>
<td><em>’t</em></td>
</tr>
</tbody>
</table>

As for language-internal factors that might play a role in the acquisition of Dutch grammatical gender, the determiner system of the Heerlen dialect shows a considerable structural and morphological gender overlap with the Dutch system, in contrast to the other languages of the ethnic minority children (see Table 1). Therefore, we expect cross-linguistic influence to be possible here since the input of the Heerlen dialect and standard Dutch may reinforce each other.

3. The acquisition of grammatical gender, as reflected in the definite determiner, by bilingual subjects

3.1 Children from ethnic minority communities: the results of a sentence completion test

In earlier work (Hulk & Cornips 2005) we replicated an experiment designed by Zuckerman (2001) to elicit production data reflecting the morphosyntax of inflected verbs. Later, in Hulk and Cornips (2006), we analyzed these data with respect to the
production of the gender of the definite article. Zuckerman’s experiment is a sentence completion test involving 40 picture pairs. The experimenter presented first one picture with one conjunct and then a second picture with the second conjunct. Then, the experimenter presented the pictures again via a coordination structure in which the first conjunct was fully produced by the experimenter and the second conjunct was truncated. The children were asked to complete the sentence and to produce a finite verb and an object, hence a DP (see Hulk & Cornips 2006 for more details). In total, the children had to repeat 11 singular neuter nouns requiring *het* and 31 singular non-neuter nouns requiring *de*, as illustrated in (2):

\[
\begin{array}{l}
\textit{Experimenter:} \\
(2) \quad \text{Dit is de man die het brood snijdt en dit is de man die de tomaat snijdt.} \\
\text{Dus deze man snijdt het brood en deze man …}
\end{array}
\]

‘This is the man who cuts the bread and this is the man who cuts the tomato. So, this man cuts the bread and this man …’

\textit{expected answer:} \quad \textit{snijdt de tomaat} ‘cuts the tomato’

The subjects were 20 children (14 bilingual and 6 monolingual controls), divided into three age groups: (i) 8 bilingual and 2 monolingual children between 3;0 and 3;10, (ii) 3 bilingual and 3 monolingual children between 4;11 and 5;2, and (iii) 3 bilinguals and 1 monolingual between 9;3 and 10;5. Thirteen bilinguals were born and raised in the

\[^2\] We added four test sentences to Zuckerman’s (2001) original test.
Netherlands in ethnic minority communities, whereas the sociolinguistic setting of one French-Dutch bilingual child is more similar to the “one-parent, one-language” context (see section 4.1)]. The youngest bilingual children are descendants of French, Ghanaian (Akan/Ewe) and Moroccan families (Moroccan-Arabic, Berber), the middle ones from Ghanaian and Suriname (-Russian) (Sranan) families, and the oldest ones from Moroccan and Turkish families. All the youngest and middle bilingual children attend three different (pre)schools in Amsterdam and the oldest ones attend a school in Utrecht. All schools are located in ethnic minority neighborhoods. The teachers or caregivers at preschool carefully selected these children to participate in the experiment on the basis of their proficiency in Dutch.

The cross-sectional character of the experiment with three age groups gives some insight into the development of the (correct) uses of the definite determiners de and het. If we interpret a statistically significant difference (Fisher Exact Test) between two age groups as indicating a developmental pattern (see Hulk & Cornips 2006), we can summarize the development as follows.

With respect to the correct use of de:

- In both monolingual and bilingual children, we see a clear development in the acquisition of its correct use;
- The bilingual children show a delay with respect to the monolingual children in this development, that is to say, there is still development going on between the middle and oldest age groups that is not visible in the monolingual distribution.

With respect to the correct use of het:
• In the data of the monolingual children, there is a clear development in the acquisition of its correct use;
• In the data of the bilingual children there is no development between the two age-agroups

With respect to overgeneralization of de where het is required:
• There is a clear trend to decreasing overgeneralization of de between the youngest and middle age groups of the monolingual children whereas this is not the case for the bilingual children.

These results can be interpreted as follows. First, the delay or quantitative difference in the bilingual children’s correct use of de is not unexpected. In other studies of bilingual children in general and of these same children in particular (Hulk & Cornips 2006), a delay in comparison to the development of monolingual children is often found. Second, the monolingual children show a developmental pattern in which the overgeneralization of de decreases compared to the bilinguals. Moreover, unlike de, the development of the acquisition of the neuter determiner het is significantly different for monolingual and bilingual children. Thus, the bilingual children appear to be unable to acquire the correct use of het; they are somehow “fossilized” at a developmental stage in which they overgeneralize the non-neuter definite article de. The monolingual children also go through such a stage of overgeneralization (see the results of the youngest age group), but, unlike the bilingual children, the monolinguals pass through this stage. Crucially, it seems that the monolingual and bilingual children reveal a “qualitative difference” in their emerging grammars, in the sense that, for the older bilingual children
but not for the monolingual ones, the acquisition of the target grammar/language is not successful. The non-target-like acquisition of neuter grammatical gender by bilingual children from ethnic minority communities seems to show a “creolization effect,” or a simplification of the gender system. This is a striking and rather unexpected result since these children are exposed to Dutch input from birth onwards.

Hulk and Cornips (2006) identified language internal factors that might have played a role in this creolization effect, namely the fact that the gender of Dutch definite determiners has a default value, non-neuter, and a specific value, neuter. The default value is by far the most frequent in the input and is overgeneralized in the first stages of acquisition by monolingual children until at least age 6. The bilingual children from ethnic minority communities fossilize in this stage. Note that in the Swedish spoken by bilingual children and adults from ethnic minority communities, as well, grammatical gender is lost; that is, the n- and t-forms represent different genders and the most frequent form—n- as in *en boll* ‘a ball’—often replaces the infrequent t-form as in *ett bord* ‘a table’ (Kotsinas 2001: 150). However, there is no evidence that a second potentially important factor, namely whether the “other” language instantiates a gender distinction in its noun/determiner system (French, Moroccan-Arabic, Berber) or not (Turkish, Akan/Ewe, Sranan) is relevant with respect to the fossilization of neuter gender; in other words, we found no evidence of cross-linguistic or substrate influence. Recall that there is no structural (morphological) overlap in the determiner systems in the languages under consideration. We will come back to possible language-external factors after discussing the (new) data from the bidialectal children.
3.2  Children from bidialectal communities: the results of a sentence completion test

3.2.1  Introduction

In this section, we will discuss the results of a sentence completion test concerning grammatical gender of the Dutch definite determiner by bidialectal children in Heerlen who were raised in both standard Dutch and the local dialect of Heerlen. Most speakers of a dialect, especially in the Netherlands, are bilingual in the sense that they can usually use a range of varieties along a continuum from the standard, as a supralocal variety, to a local (nonstandard/dialect) variety, depending on social and discourse context. There is, so to speak, no longer a clear-cut separation between the varieties; that is to say, speakers can change their way of speaking without a clear and abrupt point of transition between standard Dutch and the local dialect. However, the two varieties are clearly perceived as different by their speakers (Cornips in press).

Furthermore, Heerlen occupies an exceptional position with respect to other Dutch dialect areas: as early as 1920, it was already a bilingual community, that is, standard Dutch and the local dialect were spoken. Due to the expansion of the coalmining industry since 1900, Heerlen attracted numerous workers from elsewhere in the Netherlands and abroad. This immigration altered the linguistic setting in Heerlen, where formerly everyone had been a monolingual speaker of the local dialect. The native population of Heerlen became a minority within twenty years, and the emergence of Dutch spoken in the community led to (i) an increase in bidialectal speakers—dialect and
Dutch—and (ii) a reduced use of the local dialect in public domains. Nowadays, Heerlen is still a bilingual community where no monolingual speakers of the local dialect exist any more but Dutch is always acquired in addition to the dialect.

3.2.2 Subjects and methodology

The experiment involved 30 children who were divided into two groups, one group of bilingual speakers (n = 13) who were exposed to both the local dialect of Heerlen (a Limburg dialect) and Dutch, and a group of monolingual children acquiring Dutch (L1, n = 17) as controls (see Table 8 in §4.2). Moreover, the children were distributed in four age groups: (i) between 2;0 and 3;0, (ii) between 3;0 and 4;0, (iii) between 4;0 and 5;0, and (iv) between 5;01 and 7;0. The children were selected from four different (pre)schools in Heerlen. Our experiment is a sentence completion test administering 30 standard Dutch test sentences similar to the one described in section 3.1 except that (i) the children were asked to produce an attributive adjective and (ii) the sentences were all administered in main clause conditions, as illustrated in (3).

(3) Experimenter:

a. Experimenter shows picture of a boy with a green flower

Deze jongen tekent de groene bloem en dit meisje tekent …

this boy draws the green flower and this girl draws

3 It is important to point out that this type of completion test differs from the one discussed in section 3.1 since the children do not repeat a DP introduced by the experimenter. For this reason, the data from the “ethnic minority” children and dialect children and the monolinguals as controls cannot be compared directly since they are the result of two different experiments.
b. Experimenter shows picture of a girl with a yellow boat

*Child:*

... **de** **gele** **boot**

... the yellow boat

The sentences were divided into three conditions on the basis of noun gender in the dialect. To be more specific, ten sentences required the children to complete the sentence with a non-neuter definite determiner although the corresponding noun in the local dialect has [masculine] gender; ten other sentences also required the non-neuter definite determiner in Dutch although the corresponding noun in the local dialect has [feminine] gender; finally, ten more sentences required the [neuter] determiner, as does the corresponding noun in the local dialect. Examples are provided in (4).

(4) Standard test sentence Local dialect of Heerlen

<table>
<thead>
<tr>
<th>required determiner in standard Dutch</th>
<th>local dialect</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>de</em> boot ‘boat’ [non-neuter]</td>
<td><em>de</em> boot [feminine]</td>
</tr>
<tr>
<td><em>de</em> man ‘man’ [non-neuter]</td>
<td><em>d’r</em> maan [masculine]</td>
</tr>
<tr>
<td><em>het</em> mes ‘knife’ [neuter]</td>
<td>’t mets [neuter]</td>
</tr>
</tbody>
</table>

Table 4 presents the results for determiner production when the children had to complete the sentence with a DP which contained a non-neuter noun with the definite article *de.*
Table 4. Correct use of de and bare noun production when non-neuter de is required

<table>
<thead>
<tr>
<th>Age</th>
<th>Correct use of de</th>
<th>Bare noun</th>
<th>Correct use of de</th>
<th>Bare noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>2;0–3;0</td>
<td>n = 4</td>
<td>n = 4</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>5/9</td>
<td>95%</td>
<td>77/99</td>
<td>78%</td>
</tr>
<tr>
<td>3;01–4;0</td>
<td>n = 7</td>
<td>n = 7</td>
<td>n = 3</td>
<td>n = 3</td>
</tr>
<tr>
<td></td>
<td>62/236</td>
<td>26%</td>
<td>114/236</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>71/94</td>
<td>75%</td>
<td>17/94</td>
<td>18%</td>
</tr>
<tr>
<td>4;01–5;0</td>
<td>n = 6</td>
<td>n = 6</td>
<td>n = 4</td>
<td>n = 4</td>
</tr>
<tr>
<td></td>
<td>107/190</td>
<td>56%</td>
<td>56/190</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>94/133</td>
<td>71%</td>
<td>23/133</td>
<td>17%</td>
</tr>
<tr>
<td>5;01–7;0</td>
<td>—</td>
<td>—</td>
<td>n = 6</td>
<td>n = 6</td>
</tr>
<tr>
<td></td>
<td>97/150</td>
<td>65%</td>
<td>22/159</td>
<td>14%</td>
</tr>
</tbody>
</table>

The cross-sectional character of the experiment, with three age groups, allows us to say something about the development of the (correct) use of de. The significant results in Table 4 (Fisher Exact Test p < .01) show that the bilingual children (i) have already achieved a target grammar before the age of 3 regarding the low rate of use of bare nouns whereas the monolingual children are still in a developmental stage in all age groups, and (ii) have already acquired a target-like determiner de before the age of 3 whereas the monolingual children are still in a developmental stage.
Let us now consider the results regarding determiner production when the children had to complete the sentence with a DP which contains a neuter noun preceded by the definite article *het*.

<table>
<thead>
<tr>
<th>Age</th>
<th>Monolingual Dutch</th>
<th>Bilingual Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct use of</td>
<td>Correct use of</td>
</tr>
<tr>
<td></td>
<td><em>het</em></td>
<td><em>het</em></td>
</tr>
<tr>
<td></td>
<td>n = 4</td>
<td>n = 4</td>
</tr>
<tr>
<td>2;0–3;0</td>
<td>2/36 6%</td>
<td>27/36 75%</td>
</tr>
<tr>
<td>3;01–4;0</td>
<td>n = 7</td>
<td>n = 7</td>
</tr>
<tr>
<td></td>
<td>6/91 6%</td>
<td>52/91 57%</td>
</tr>
<tr>
<td>4;01–5;0</td>
<td>n = 6</td>
<td>n = 6</td>
</tr>
<tr>
<td></td>
<td>8/89 10%</td>
<td>30/89 34%</td>
</tr>
<tr>
<td>5;01–7;0</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>43/75 57%</td>
<td>10/75 13%</td>
</tr>
</tbody>
</table>

The significant differences (Fisher Exact Test \( p < .01 \)) can be interpreted as follows. The monolingual children again show a developmental pattern in which they overcome the bare noun stage between 3;0 and 5;0 years of age whereas the bilingual children have already passed this stage by 3 years. Furthermore, the differences reveal a developmental pattern for the bilingual children with respect to the correct use of *het* whereas this is not the case for the monolingual children.
Finally, Table 6 reveals the overgeneralization of de in more detail, that is to say, between 4 and 5 years old the monolinguals show increased overgeneralization of de whereas the bilinguals show a decrease in this pattern. Thus, unlike the monolinguals, the bilinguals reveal a “progressive” reduction in the overgeneralization of de.

Table 6. Overgeneralization of the non-neuter determiner de when completion involves a neuter noun with the definite article het

<table>
<thead>
<tr>
<th>Expected neuter het</th>
<th>Response non-neuter de (completion)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MONOLINGUALS</td>
</tr>
<tr>
<td>2;0–3;0</td>
<td>de 2/36 6%</td>
</tr>
<tr>
<td>3;01–4;0</td>
<td>de 10/91* 11%</td>
</tr>
<tr>
<td>4;01–5;0</td>
<td>de 40/89* 45%</td>
</tr>
<tr>
<td>5;01–7;0</td>
<td>de —</td>
</tr>
</tbody>
</table>

*, **: significant (Fisher Exact Test, p < .01)

3.3 Summary

In Dutch, the gender of the definite determiner has a default value, non-neuter, which is by far the most frequent in the input and which is overgeneralized in the first stages of acquisition by monolingual children. Similarly, the bilingual children from the ethnic minority communities adopt the un(der)specified, default value. As a result, they overgeneralize the definite determiner de and use it incorrectly with het-words too. These
bilingual children do not acquire the specific value [neuter] in a target-like way and do not correctly produce the definite determiner *het*.

In contrast, the bidialectal children have already reached a target grammar between the ages of 2 and 3, whereas the monolingual children are still in a developmental stage where they have to acquire the determiner *de* in a target-like way. The monolingual children show that an increase in the correct use of *de* goes hand in hand with a decrease in the use of bare nouns. Strikingly, the monolingual children show a delay in comparison to their bidialectal peers. This result is completely opposite to what we found for the bilingual children in the ethnic minority communities.

With respect to the correct use of *het*, the monolingual children do not show a developmental pattern, that is, they use target-like *het* in only 10% of all cases when they are 5 years old, whereas the bidialectal children do show a development in the correct use of *het*. Further, the monolingual children show a developmental pattern in which they overcome the bare noun stage when the input is a neuter noun between 3;0 and 5;0 years old whereas the bilingual children have already passed this stage by 3 years old. Again, the monolingual children show a delay in comparison to their bidialectal peers, which is the opposite to what was found in the ethnic minority communities.

It is clear that with respect to the acquisition of grammatical gender in Dutch, the bilingual children from the ethnic minority communities (new type) differ substantially from the bilingual children of a bidialectal community (old type). The non-target-like effect in the new type is not due to cross-linguistic influence (substrate influence), that is to say, regardless of whether the “other” language has a gender distinction in its noun/determiner system (French, Moroccan-Arabic, Berber) or not (Turkish, Akan/Ewe,
Sranan), it does not seem to make any difference. Probably, other internal factors are relevant in accounting for the creole-like effect. The determiner system in standard Dutch has no (structural) overlap with the other languages of the bilingual children from the ethnic minority communities involved. In contrast, if there is a structural, morphological overlap between the determiner systems of the two varieties, as is the case with the Heerlen dialect and standard Dutch, positive cross-linguistic influence occurs. In that situation, the dialect input and the Dutch input reinforce each other.

Let us now discuss the sociolinguistic context of the two types of bilingual communities in more detail and see what the role of this external factor may be.

4. Similarities between new and old bilingual communities

4.1 Language choice in ethnic minority communities

In addition to language-internal factors, we will argue that external factors are also relevant in order to explain the strikingly different findings concerning the bilingual acquisition of grammatical gender in ethnic minority and bidialectal communities. It is important to examine the sociolinguistic context in which the languages of the individual bilingual child are acquired, since this is related to the quality and quantity of the Dutch input. The bilingual children who participated in our experiments—both the ethnic minority and the bidialectal children—differ considerably from those who have generally been examined in generative bilingual first language acquisition (henceforth: 2L1)
research. In general, in 2L1 studies, the bilingual children (i) belong to middle-class families, (ii) have been raised bilingually from birth in an otherwise monolingual community, (iii) have been raised bilingually according to the well-known “one parent, one language” principle, and (iv) have parents who speak their respective varieties as native (L1) speakers. Köppe and Meisel (1995: 283), for instance, describe a 2L1 child growing up in a middle-class family in Hamburg, Germany, where the mother speaks French to the child, and the father German, and the parents speak German to each other. In this family, a very rigid language separation is observed: the parents do not accept being spoken to in the other language. It is obvious that, with respect to linguistic behavior, these families function as small, isolated groups in which the language choice rules are not at all reflected in the surrounding community.

As we mentioned above, the bilingual children from ethnic minority communities, however, (i) belong to lower-class families, (ii) have been raised bilingually in a bilingual community, (iii) have one or both parents who are not native speakers of Dutch, and (iv) have been raised bilingually within a family in which language choice “rules” do not reflect a “one parent, one language” setting at all (see also section 3.1). Instead, according to Auer (1995: 115), in many if not in all “new” bilingual communities that have come into being in Europe as a consequence of work-related migration, language choice is often indecisive. In the classical view of the Language Bioprogram Hypothesis (cf. Bickerton 1981: 298), the first generation of locally born children plays a crucial role in the genesis of a creole, in developing “a vehicle for interethnic communication on the basis of a rudimentary pidgin when no other language would suffice for this purpose”

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(see Veenstra, in press, for an extensive discussion). However, in the sociolinguistic (migrant) settings in The Netherlands, or Europe in general, the conditions under which a creole may arise abruptly do not exist (Lefebvre 2004: 1–6). Migrants never settle in neighborhoods where no more than 20 percent of the inhabitants speak Dutch, with the remaining 80 percent speaking exclusively a variety of other languages (see Veenstra, in press). Moreover, the first generation of locally born children in this setting is bilingual; they acquire both their heritage language and Dutch. There is strong evidence that, nowadays, Moroccan and Turkish families always speak Dutch at home. A recent extensive language survey (cf. Cornips & Jongenburger 1999; Jongenburger & Aarssen 2001) questioned Moroccan (N = 19) and Turkish (N = 15) households—family members living together in one house—in an ethnic minority community about their use of home languages (total households examined amounted to 275). The reported behavior reveals that only in three Moroccan families is Dutch not spoken while all Turkish families use Dutch as a home language. Moreover, Table 7 reveals the patterns of language choice in the home domain of these families investigated. In particular, it shows that language-choice patterns vary in intergenerational communication practices (cf. Milroy & Wei 1995: 138). For the Moroccan and Turkish families, the heritage language is used more with mothers than with fathers and Dutch is used more between siblings. What is more, it appears that the exclusive use of Turkish, Berber and Arabic declines rapidly between older and younger siblings. This decline is most marked in the Berber-speaking families. By the same token, Dutch is also frequently used by the Moroccan families outside the home domain, namely to communicate with friends.

5 A school involved in our experiment (section 3.1) is located in this neighborhood.
4.2 Language choice in bidialectal communities

The bidialectal subjects in our experiment (section 3.2) are in a sociolinguistic learning situation which is both different from and similar to the one ethnic minority children are
in. It is different because the parents of the bidialectal children are not immigrants but are bilinguals themselves, speaking both the local dialect and standard Dutch as native speakers (cf. Cornips 1994). Furthermore, the duration and intensity of the contact situation between Dutch and the local dialect is long (about 100 years) and intensive. And dialect speakers are not necessarily lower-class since the use of dialect in this type of community is not “socially stigmatized”; that is, it is used by speakers at all educational and occupational levels. However, one aspect of this type of community is similar to the ethnic minority communities: the bidialectal children have also been raised bilingually, not only in the family domain, but in a truly bilingual community. To be more specific, there is no “one parent, one language” setting but language choice patterns depend on particular interlocutors within the family domain, as illustrated in Table 8. For instance, Table 8 reveals for the 30 children participating in our experiment that grandparents always address their grandchildren in dialect.⁶

Table 8. Language choice patterns in the participating bidialectal families (n = 30)

<table>
<thead>
<tr>
<th>number of children</th>
<th>n = 2</th>
<th>n = 6</th>
<th>n = 8</th>
<th>n = 1</th>
<th>n = 4</th>
<th>n = 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>child speaks the local dialect</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>mother speaks dialect in home</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>role relations in home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

⁶ We considered the children to be bilinguals when they are exposed to dialect input from birth onwards, namely (i) they are reported to speak the local dialect (n = 4), and/or (ii) their mother addresses them in the dialect (n = 9).
What is important is that in both types of bilingual community, that is, the new and old ones, (i) the family may be seen as an intermediate grouping between the individual and her community (Hazen 2002: 501), and (ii) the total exposure to the standard variety is reduced compared to that of monolingual speakers in standard-speaking communities.

5. Differences between the two types of bilingual communities

As for external factors, we have seen that the bilingual subjects of the “new” type are similar to the “old” ones in that they have been raised (i) bilingually in a bilingual community and (ii) within a family in which language choice “rules” do not reflect a “one parent, one language” setting. Moreover, the family may be seen as an intermediate grouping between the individual and the community. In addition, the total exposure to the standard variety of both types of bilingual children is reduced compared to that of monolingual standard-Dutch-speaking children. Consequently, it cannot be the case that the loss of grammatical gender by ethnic minority children and the progressive development by the dialect children is solely due to the “bilingual community” and/or
“language choice” factor. Societal bilingualism per se cannot be the crucial factor in the loss of grammatical gender.

5.1 Language contact situation

Obviously, bilingual children of the new type differ from the bilinguals of the old type in (i) the duration and intensity of the contact between standard Dutch and their heritage languages, (ii) the fact that one or both of their parents do not speak Dutch as native speakers, and (iii) the fact that, in general, they belong to lower-class families. With respect to (i), the duration and intensity of the contact between standard Dutch and the local dialect of Heerlen is long (about 100 years) and intensive whereas this is not the case for the Moroccans and Turks. However, Turks and Moroccans differ from Surinamese families in this respect. The command of Dutch by the first-generation immigrant Surinamese is much higher as a consequence of the long period of contact with Dutch since colonial times. Furthermore, despite their frequently reported (oral) proficiency in Sranan, Surinamese households in which Sranan is spoken are generally oriented towards Dutch and none of the Surinamese subjects claim to speak Sranan better or to prefer to speak it rather than Dutch (Jongenburger & Aarssen 2001). It is also reported (Appel & Schoonen 2005) that children in Surinamese families often acquire Dutch as their first language, while Sranan—in most cases—is mainly used as a vernacular for in-group interaction.

It is plausible that these differences may account for the fact that the youngest bilingual children belonging to one “ethnic” group differ widely from each other in their
correct use of the neuter definite article *het*, as shown in Table 9. The youngest Surinamese children perform much better than the Moroccan, French and Ghanaian children of the same age, with mean scores of 14% versus 2%, respectively. Moreover, one particular Surinamese child in the middle age group performs much better than the Ghanaian children of his age (38% versus 3%) and even uses *het* correctly as often as the oldest Moroccan and Turkish children. Finally, the Surinamese children show an increase in the correct use of *het* between the youngest and middle age groups (14% versus 38%).

Table 9. Results of the Surinamese versus the other bilingual children with respect to the correct use of the neuter definite determiner

<table>
<thead>
<tr>
<th></th>
<th>Surinamese</th>
<th>French, Moroccan, Ghanaian</th>
</tr>
</thead>
<tbody>
<tr>
<td>YOUNG</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 3</td>
<td>n = 5</td>
</tr>
<tr>
<td></td>
<td>8/56   14%</td>
<td>2/92  2%</td>
</tr>
<tr>
<td>MIDDLE</td>
<td>Surinamese</td>
<td>Ghanaian</td>
</tr>
<tr>
<td></td>
<td>n = 1</td>
<td>n = 2</td>
</tr>
<tr>
<td></td>
<td>6/16  38%</td>
<td>1/30  3%</td>
</tr>
<tr>
<td>OLD</td>
<td>Turk, Moroccan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13/41  32%</td>
<td></td>
</tr>
</tbody>
</table>

5.2 *Adult L2 Dutch in the ethnic minority community*
As mentioned above, the parents and/or grandparents of the ethnic minority children did not acquire Dutch as L1 speakers but as adult L2 speakers in a non-instructed context. This is crucially different from the bidialectal parents and has important consequences for the quality of the input the ethnic minority children are exposed to. Furthermore, in contrast to bidialectal communities, ethnic minority communities consist of closed networks due to chain migration: the family or community may function quite autonomously within mainstream society. Consequently, people in neighborhoods with a high concentration of immigrants and their descendants tend to lack sufficient contact with native Dutch speakers in their neighborhood to acquire target-like Dutch. Thus, there is no routine of daily conversations with native monolingual speakers of Dutch (VROM 2005). This is similar to communities in which pidgins and creoles emerge, that is to say, where speakers of the substratum languages have very little access to the superstratum language (Lefebvre 2004: 8). These closed networks are a consequence of historical demographic patterns of immigration. According to Dabène and Moore (1995: 21), the early migrants encouraged family and village members to travel to the host county and join them in work. Newly arriving migrants often have friends and acquaintances in the closed group of people they already knew, directly or via other people, in their place of origin. Subsequently, specific migratory chains rapidly emerge, leading new arrivals to settle in specific city neighborhoods in the host country, and voluntary clustering and social encapsulation are strengthened. This explains the emergence of ethnic enclaves in cities with large migrant populations. This clustering, reinforced by the arrival of women and children, allows groups to function as a micro-
society or an extended family. These migration patterns explain the over- or under-representations of specific ethnic groups in Dutch cities such as Amsterdam and Utrecht, for example, as shown in Table 10, which reveals that the relative proportions of Moroccans and Turks are roughly the same for both cities whereas Ghanaian and Surinamese immigrants are over-represented in Amsterdam. Moreover, it also shows that this represents a contact setting in which the immigrants form between 30% and 50% of the population.

Table 10. Over- or under-representation of non-indigenous groups in Utrecht and Amsterdam

<table>
<thead>
<tr>
<th></th>
<th>Utrecht</th>
<th>Amsterdam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st + 2nd generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moroccan</td>
<td>22,540 (12%)</td>
<td>60,835 (8%)</td>
</tr>
<tr>
<td>Turk</td>
<td>11,885 (4%)</td>
<td>36,614 (5%)</td>
</tr>
<tr>
<td>Surinamese</td>
<td>6,871 (3%)</td>
<td>71,537 (10%)</td>
</tr>
<tr>
<td>Ghanaian</td>
<td>222 (1%)</td>
<td>9,701 (1%)</td>
</tr>
</tbody>
</table>

% all non-indigenous 30% 47.2%

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The mechanism of chain migration has significant repercussions on the restructuring of the various groups’ social networks, and subsequently on their linguistic
behaviors (Dabène & Moore 1995). In particular, the autonomization of migrant communities, and their recourse to a social structure based on models offered by the home culture, mean that members who do not have to maintain close links with the host society may develop only minimal skills in the majority language. This is especially true of newcomers, whereas their native-born children may differ from their parents and the community. In most immigrant communities, the children who most closely follow the language patterns of their parents are those belonging to families that immigrated more recently (Hazen 2002: 516). As the family becomes more integrated, the effects on older and younger siblings will differ. Whereas an older sibling may be more connected to the family when it has recently immigrated, a younger sibling a few years later may have more opportunity for peer group interaction. The effects on the children may also vary because of age and the relative prestige of the family’s variety versus that of the community. To sum up, we can conclude that ethnic minority communities are still rather isolated within Dutch society and we would expect this to have effects on their acquisition of Dutch.

5.3 Multigenerational scenario

One consequence of the autonomization of migrant communities is that their children are not exposed every day to Dutch spoken by native monolingual speakers; instead, they are exposed to a variety of Dutch spoken by their older family/community members. The question then is, what is the quality and the quantity of the Dutch spoken in such
communities? Let us therefore consider two generations in more detail from a linguistic perspective: the first immigrants (parents or grandparents) and their descendants.

**Generation 1: immigrants as adult second language acquirers**

Let us first focus on grammatical gender in the variety of Dutch spoken by immigrants. Immigrants entering the Netherlands learned Dutch as a second language in a non-instructed context. In a language shift scenario, neuter gender on the noun can be considered a marked feature; it is hard to produce (and perceive) for adult learners of Dutch. According to Muysken (1984) and Snow, Van Eeden and Muysken (1981), the Turkish and Moroccan immigrants entering the Netherlands frequently delete the determiner and/or overgeneralize non-neuter gender; in other words, they use *de* where *het* is required whereas the opposite never happens. (Consider also the results for the acquisition of German nouns found by the Heidelberger Forschungsprojekt “Pidgin-Deutsch,” 1978: 14.) Snow et al. (1981: 90) analyzed foreigner talk conversations in two Amsterdam municipal offices. The existence of foreigner talk reveals that the immigrants are confronted with a reduced version of Dutch as the superstrate language. Moreover, they are confronted with a version that is characterized by an absence of the functional category Determiner since it involves determiner deletion to a high degree (mean determiner deletion = 75%). The existence of foreigner talk is another indication that new immigrants have little access to the superstratum language (Lefebvre 2004: 13).

**Generation 2: locally born children as bilingual (first) language acquirers**
Around the end of the 1990s, a first generation of locally born immigrant children was examined on the basis of a corpus of spontaneous speech by Moroccan, Turkish and Surinamese youngsters who were born around 1980 (Bennis, Extra, Muysken & Nortier 2002). Within their community, they are exposed to the Dutch input of the first-generation immigrants. Sociolinguistic research reveals that these youngsters also overgeneralize the determiner *de* in their Dutch and hardly ever produce the determiner *het*, as illustrated by the following spontaneous speech examples (Cornips 2002):

(5)  

a. zitten we in *de* laatste jaar  
   are we in the final year  
   *[the (NEUTER) year, Cengiz, Turkish ethnicity, Utrecht]*

b. *de* meest serieuze type  
   the most serious type  
   *[the (NEUTER) type, Abdelkhalek, Moroccan ethnicity, Berber, Utrecht]*

c. *de* man met *de* boek  
   the man with the book  
   *[the (NEUTER) book, Anouar, Moroccan ethnicity, Arabic, Utrecht]*

d. Hij had *de* juiste merk aan  
   he wore the right brand  
   *[the (NEUTER) brand, Ronald, Surinamese ethnicity, Rotterdam]*

The children in our experiment were born around 2000. This generation of bilingual first language acquirers is overwhelmingly exposed to a Dutch variety in which
overgeneralization of *de* takes place, as witness the adult L2 Dutch described above and
the output of adolescents in their community, as illustrated in (5).

Thus, the process of overgeneralization of *de* is transmitted (gradually) by two
generations in a multilingual context, namely the immigrants and their native-born
children. In this multigenerational scenario (see also Becker & Veenstra 2003), the
immigrants and their descendants lack the access to monolingual standard Dutch that
native Dutch children have. The insufficient quantity and quality of the input with respect
to grammatical gender may explain why fossilization of grammatical gender happens so
rapidly, as shown in Table 11.

Table 11. *Acquisition of Dutch in immigrant communities*

<table>
<thead>
<tr>
<th>G1 (foreign-born immigrants):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L1</strong> acquisition of heritage language(s)</td>
<td></td>
</tr>
<tr>
<td><strong>adult L2</strong> acquisition of Dutch in a non-instructed context:</td>
<td></td>
</tr>
<tr>
<td>• deletion of determiners to a large extent (spontaneous speech)</td>
<td></td>
</tr>
<tr>
<td>• overgeneralization of <em>de</em> to a large extent (spontaneous speech)</td>
<td></td>
</tr>
<tr>
<td>sociolinguistic context (cf. Muysken 2001):</td>
<td></td>
</tr>
<tr>
<td>• the use of foreigner talk by target language speakers</td>
<td></td>
</tr>
<tr>
<td>• limited acquisition opportunities (close networks)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G2 (native-born children)</th>
<th></th>
</tr>
</thead>
</table>
| **L1** acquisition of heritage language(s) (however, decline in case of youngest
siblings?) |  |
child L2 / 2L1 acquisition of Dutch

- deletion of some determiners (spontaneous speech, Cornips 2002)
- overgeneralization of *de* to a large extent (spontaneous speech, experimental data)

sociolinguistic context:

- grammatical gender a marker/stereotype (Labov 2001)
- candidate for in-group speech, possibly serving as an ethnic marker

Very likely, the sociolinguistic context that favors the loss of grammatical gender is characterized by limited acquisition opportunities for the migrants due to their close networks or the autonomization of their ethnic communities and the use of foreigner talk by native speakers (Muysken 2001). With respect to the locally born bilingual children, an additional factor is whether the loss of grammatical gender is a candidate for in-group speech, possibly serving as an ethnic marker. If the latter is the case, we may conclude that, after all, these bilingual children successfully acquire Dutch—but a different variety.

In contrast, a generational scenario for the bidialectal community in Heerlen shows optimal acquisition conditions for both generations, as illustrated in Table 12.

Table 12. Acquisition of Dutch in bidialectal communities

<table>
<thead>
<tr>
<th>G1 (native-born) and G2 (native-born):</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 or bilingual acquisition of standard Dutch</td>
</tr>
<tr>
<td>- standard Dutch use of determiners</td>
</tr>
</tbody>
</table>

sociolinguistic context:
• optimal acquisition conditions and access to L1 standard Dutch (open networks)
• stable bilingual community

6. Concluding remarks

The aim of this paper was to examine the effects of language-internal and -external factors on the acquisition of the grammatical gender of the Dutch definite determiner. The results of a sentence completion test in two bilingual communities are very different. Bilingual children in an ethnic minority community, compared with their monolingual peers, reveal a delay in acquiring the definite determiner *de* [non-neuter] and a non-target-like acquisition of the definite determiner *het* [neuter]. In this case, their language development shows a “fossilization” effect. This effect is creole-like in the sense that (i) it involves “simplification” of grammatical gender, and (ii) it emerges rapidly in immigrants’ speech and does not disappear in the speech of subsequent generations that are native-born and acquire Dutch from birth onwards. However, bilingual/bidialectal children in a dialect-speaking community show an acceleration compared with their monolingual peers with respect to both *de* [non-neuter] and *het* [neuter]. Thus, taken together, compared with monolinguals, the bilinguals in an ethnic minority community reveal fossilization whereas bilinguals in a dialect community show “progressive” development.
In earlier work, we identified language internal-factors that might have played a role in the fossilization effect, such as the fact that the gender of Dutch definite determiner has a default value, non-neuter, which is by far the most frequently found in the input and which is overgeneralized in the first stages of acquisition by monolingual children. Second, we have discussed the possibility of cross-linguistic influence. The question of whether a gender distinction in the “other” language of the bilingual children facilitates the acquisition of grammatical gender in Dutch must be answered as follows. On the one hand, if there is no structural overlap between the determiner systems in the two languages, as is the case with the bilingual children from the ethnic minority communities, no cross-linguistic influence is expected. On the other hand, if there is a structural, morphological overlap between the determiner systems of the two varieties, as with the Heerlen dialect and standard Dutch, a positive cross-linguistic influence is predicted to occur. In such a case, the input of the dialect and the Dutch input will reinforce each other.

Finally, as for the external factors, we have shown that it is not societal bilingualism per se that is a relevant factor for fossilization. In other words, it is not the amount of Dutch input (which is the same for both types of bilingual communities) but the quality of the Dutch (parental) input that is relevant in explaining this effect. The quality of the parental input is standard-like in the bidialectal community, with optimal acquisition conditions and access to L1 standard Dutch due to open networks. However, it is not standard-like in the ethnic minority community. Another external factor favoring the rapid loss of grammatical gender as transmitted between two generations is the limited acquisition opportunities migrants have due to their close networks. As a result,
the migrants (reinforced by the use of foreigner talk by native speakers) and their
descendants tend not to have daily contact with native speakers of Dutch. With respect to
the native-born bilingual children, a sociolinguistic context favoring the loss of
grammatical gender is that this loss may be a candidate for in-group speech, possibly
even serving as an ethnic marker. If this is the case, we may conclude that these bilingual
children successfully acquire a different variety of Dutch.

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