Syntactic variation, parameters, and social distribution

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Abstract

This article concerns the interrelation between the theoretical status and the social dimensions of syntactic variation in Heerlen Dutch. I discuss syntactic variation in Heerlen Dutch, which consists of (i) a range of dative constructions that are acceptable in the Heerlen dialect but unacceptable in Standard Dutch and (ii) Standard Dutch variants of the dative constructions that are rare in the Heerlen dialect. The theoretical primitive causing syntactic variation is taken to be the different values or settings of a parameter. Although all local dialect constructions in Heerlen Dutch seem superficially similar because they are construed with a dative NP or the reflexive zich, I argue that these constructions must be attributed to two distinct parameters. The different social distributions of dative constructions in Heerlen Dutch are a confirmation that two distinct parameters are involved.
The syntactic variation we discuss here raises the following question: what is the theoretical status of the syntactic variation, or, in other words, which theoretical primitives cause this syntactic variation? In this article, this question is addressed by analyzing syntactic variation within the framework of generative grammar. Within this framework, syntactic variation is considered as a type of parametric variation, one that is partly the result of the innate principles of Universal Grammar (UG) and partly the result of the triggering experience of exposure to a specific language variety. From this point of view, variation that is language-specific illustrates different "settings" or "values" of a syntactic parameter (see Borer, 1984; Haegeman, 1991:15; Ouhalla, 1991; Roeper & Williams, 1987).

If we consider the interrelation between the theoretical status and the social dimensions of syntactic variation, two intriguing questions arise: (i) how can we bridge the gap between formal syntax and sociolinguistics (see Winford, 1996), and (ii) does the phenomenon of social stratification pose a serious challenge for the domain of the theoretical analysis? Note that Thomason and Kaufman (1988:19) claimed that syntactic primitives alone are not sufficient to predict the results of language contact since "it is the social context, not the structure of the languages involved, that determines the direction and the degree of interference." This article argues that, since both social variables and theoretical primitives influence the amount, type, and extent of language variation, an approach is needed which considers the pattern of social stratification as a clue to the validity of the analysis of the theoretical primitive. More specifically, it is argued that, if the theoretical primitive causing syntactic variation is located in some speaker's or group of speakers' grammar, it is plausible that these speakers would show similar correlations with respect to their external variables (see Labov, 1966, 1972).
PARAMETERS AND SOCIAL DISTRIBUTION

### TABLE 1. Number and origin of inhabitants of Heerlen between 1899 and 1930

<table>
<thead>
<tr>
<th>Year</th>
<th>Population of Heerlen</th>
<th>Born in the Province of Limburg (%)</th>
<th>Born Outside the Province of Limburg (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>6312</td>
<td>87.8</td>
<td>12.1</td>
</tr>
<tr>
<td>1920</td>
<td>33,014</td>
<td>47.8</td>
<td>51.1</td>
</tr>
<tr>
<td>1930</td>
<td>46,917</td>
<td>45.3</td>
<td>54.7*</td>
</tr>
</tbody>
</table>

*22% of whom were born outside the Netherlands

## THE LOCATION OF HEERLEN

With respect to other Dutch dialect areas, Heerlen occupies an exceptional position, since within a span of twenty years the expanding mining industry in the area has attracted numerous workers from elsewhere in the Netherlands and abroad, as illustrated in Table 1. This immigration has altered the linguistic uniformity of Heerlen in two important ways: (i) the native population who spoke the local dialect has become almost a minority (see Table 1), and (ii) a new intermediate variety, or rather a new regional Dutch variety (i.e., Heerlen Dutch), has emerged (see Cornips, 1992, 1994).

Some interesting results of a sociological study by Brassé and Van Schelven (1980) shed light on the rate of this process of language shift. Brassé and Van Schelven examined the process of assimilation of Polish, Slovenian, and Italian immigrants who became inhabitants of Heerlen between 1920 and 1940. Among others, the degree of speaking ability in either Standard Dutch or the local dialect was taken to be an indicator of the extent of assimilation. A subset of these immigrants was questioned about their speaking ability or fluency in the two varieties. Tables 2 and 3 give the immigrants’ opinions. Both tables show that at least since 1920 Heerlen was already a bilingual community (i.e., both Standard Dutch and/or the local dialect were spoken), and that the speaking ability in both Standard Dutch and the local dialect increased tremendously between the first and second generation of immigrants, even though they were all born outside the Netherlands. This is an indication that language shift in Heerlen took place at a very fast rate. Furthermore, Table 2 differs from Table 3 in that all the generations of immigrants believed that their speaking ability in Standard Dutch was better than their command of the local dialect of Heerlen. These opinions indicate that Standard Dutch, rather than the local dialect, was the target language in the process of language shift (see Thomason & Kaufman, 1988).

However, if we carefully examine the varieties of Dutch in Heerlen, it is obvious that the native population and the immigrants as well failed to learn Standard Dutch perfectly. With respect to syntax, what distinguishes Heerlen Dutch from Standard Dutch is that in Heerlen Dutch (i) dative objects appear in a much wider range of constructions, and (ii) the reflexive *zich* has a wider set of uses.
TABLE 2. Foreign immigrants’ self-assessment of speaking ability in Standard Dutch

<table>
<thead>
<tr>
<th>Generation</th>
<th>None or Bad</th>
<th>Moderate</th>
<th>Good</th>
<th>No Answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8 (16%)</td>
<td>25 (50%)</td>
<td>10 (20%)</td>
<td>7 (14%)</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>0 (0%)</td>
<td>3 (2%)</td>
<td>170 (97%)</td>
<td>3 (2%)</td>
<td>176</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>1 (0%)</td>
<td>153 (92%)</td>
<td>12 (7%)</td>
<td>166</td>
</tr>
</tbody>
</table>

*N = 392*

TABLE 3. Foreign immigrants’ self-assessment of speaking ability in the Heerlen dialect

<table>
<thead>
<tr>
<th>Generation</th>
<th>None or Bad</th>
<th>Moderate</th>
<th>Good</th>
<th>No Answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25 (50%)</td>
<td>9 (18%)</td>
<td>5 (10%)</td>
<td>11 (22%)</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>38 (22%)</td>
<td>29 (16%)</td>
<td>84 (48%)</td>
<td>25 (14%)</td>
<td>176</td>
</tr>
<tr>
<td>3</td>
<td>32 (19%)</td>
<td>6 (4%)</td>
<td>90 (54%)</td>
<td>38 (23%)</td>
<td>166</td>
</tr>
</tbody>
</table>

*N = 392*

(see Cornips, 1994). If we adopt the various scenarios discussed by Thomason and Kaufman (1988), Heerlen Dutch may be viewed as the result of imperfect group learning during the very rapid process of language shift due to an insufficient availability (of speakers) of Standard Dutch at the beginning of this century (see Singler, 1988). Such a shift began with the carryover of contrasts and patterns from the shifters’ local dialect into their version of Standard Dutch: that is, with their failure to learn that these patterns did not exist in the target language. Subsequently, these patterns have spread to the target language as a whole (see Thomason & Kaufman, 1988:38, 51). It is relevant to note that by and large the linguistic distance between the local dialect of Heerlen and Standard Dutch is minimal.

Heerlen Dutch still includes a large spectrum of intermediate lects between the local dialect and Standard Dutch. Therefore, it may be argued that the varieties of Heerlen Dutch themselves represent a mesolect in which speakers since the beginning of this century have adjusted their vernacular speech (the basilects) to Standard Dutch (the acrolect) to a certain extent (Bickerton, 1975).

SYNTACTIC VARIATION ATTRIBUTED TO PARAMETERS

First of all, it is important to bear in mind that syntactic variants considered to be instances of parametric variation are no longer treated as different surface manifestations of the same underlying or “deep” syntactic structure, as was once the case in the more classic transformational generative grammar (Borer, 1984; Harris, 1984; Roeper & Williams, 1987; Winford, 1996:180). The parametric approach has the advantage in that a full range of several syntactic variants may be attrib-
uted to one parameter. Thus, the assumption presented above predicts that all syntactic variants attributed to the same parameter will show identical correlations with respect to the social (sub)dimensions of a speech community. On the other hand, this assumption implies that a range of syntactic variants considered to result from two or more parameters will yield different social distributions. It is important to note, however, that the opposite does not necessarily hold: that is, if two or more parameters show a similar social stratification, nothing can be said about the plausibility of the analysis. For instance, both parameters may possess the same lexical properties, or the social distribution of the settings of both parameters may be identical.

In this article, I have to deal with two kinds of difficulties, which are in large part due to problems inherent in syntactic variation: difficulties with respect to (i) a sufficient quantity of tokens and (ii) the full range of variants in a piece of spontaneous discourse (see Kroch, 1989; Milroy, 1989). In the next section, I present a range of syntactic variants in Heerlen Dutch which may be analyzed as resulting from one parameter.

Syntactic variation

The local Heerlen dialect allows dative objects to occur in a much wider range of constructions than does Standard Dutch (see Cornips, 1994). One kind of dative construction that is abundantly used in the eastern dialect varieties of Dutch, though extremely rare in Standard Dutch, is the possessive dative construction, as in (1) (Hdial = Heerlen dialect, SD = Standard Dutch).²

(1) Hdial/?*SD  Ik was Jan$_{dat}$/hem$_{dat}$ de handen.
I wash Jan/him the hands
'I am washing Jan's/his hands.'

The possessive dative construction always expresses an inalienable possession relation. That is, the referent of the dative NP Jan/hem 'Jan/him' can only be interpreted as the person whose hands are being cleaned (see also Guéron, 1985, 1986). In addition, the direct object NP always refers to a body part, and the N referring to the body part is always preceded by a definite determiner if the inalienable body part is obligatorily singular (e.g., stomach, nose, mouth). The possessive dative construction allows an indefinite inalienable argument if the number of the body parts per individual is more than one (e.g., hand, foot, or knee). In that case, we are dealing with a partitive determiner that is interpreted as referring to the fact that for each individual one out of two hands/feet is being washed.

(2) Hdial/SD  a. *Ik was Jan$_{dat}$/hem$_{dat}$ een buik.
I wash Jan/him a stomach
'I am washing Jan's/his stomach.'

Hdial/?*SD  b. Ik was Jan$_{dat}$/hem$_{dat}$ een voet.
I wash Jan/him a foot
'I am washing Jan's/his foot.'
In variants of the construction in (1), the referent of the dative NP can be construed as the possessor of the referent of an underlying object, as in (3a), or a prepositional complement such as de handen 'the hands', as in (3b).

(3) Hdial/?*SD  a. De handen bevriezen Jan_{dat}/hem_{dat}  
    the hands freeze Jan/him
    ‘Jan’s/His hands are freezing.’

   Hdial/?SD  b. Het cadeau valt Jan_{dat}/hem_{dat} uit de handen.  
    the present falls Jan/him out the hands
    ‘The present drops out of Jan’s/his hands.’

Another characteristic of the dative inalienable possession construction is that the external argument of the predicate, the agent, cannot enter into a possessive relation with the direct object (or prepositional complement), not even if the indirect object is absent, as in (4a) (see Broekhuis & Cornips, 1994; Vergnaud & Zubizarreta, 1992). In the local dialect and in Heerlen Dutch, a possessive relation between the subject and the direct object can only be expressed indirectly, namely by inserting a dative NP or a reflexive zich, as in (1) and (4b), respectively.

(4) Hdial/SD  a. *Hij, wast de handen;  

   Hdial/?*SD  b. Hij, wast zich de handen.  
    he washes refl the hands
    ‘He is washing his hands.’

In Standard Dutch, however, the inalienable possession relation must be expressed by means of a possessive pronoun, namely zijn ‘his’, as in (5). In turn, the constructions in (5) are rare in the local dialect of Heerlen (see Cornips, 1994).

(5) SD/?*Hdial  a. Ik was zijn/Jans handen.  
    I wash his/Jan’s hands
    ‘I am washing his/Jan’s hands.’

   SD/?*Hdial  b. Zijn/Jans handen bevriezen.  
    his/Jan’s hands freeze
    ‘His/Jan’s hands are freezing.’

   SD/?*Hdial  c. Het cadeau valt uit zijn handen.  
    the present falls out his hands
    ‘The present drops out of his hands.’

Interestingly, in Heerlen Dutch, with its large spectrum of intermediate varieties, both the Standard Dutch and the local dialect variants coexist (HD = Heerlen Dutch).

(6) HD/?*SD  a. Ik was hem_{dat} de handen.  

   HD/SD  b. Ik was zijn handen.  
    ‘I am washing his hands.’
(7) HD/?*SD a. De handen bevriezen hem\textsubscript{dat} \\
HD/SD b. Zijn handen bevriezen. 
"His hands are freezing."

(8) HD/?*SD a. Het cadeau valt hem\textsubscript{dat} uit de handen. \\
HD/SD b. Het cadeau valt uit zijn handen. 
"The present drops out of his hands."

The constructions in (1), (3), and (4) do not exhaust the full range of the dative inalienable possession constructions in Heerlen Dutch and in the local dialect. These varieties also allow a copular construction with a possessive dative, as in (9). The inalienable possessive constructions in (9a) and (9b) refer to a state of the stomach being dirty and the hair being grey, respectively. Note that in (9) the body parts buik ‘stomach’ and haren ‘hair’ must be preceded by a definite determiner in order to be acceptable.

(9) HD/Hdial/*SD a. De buik is me\textsubscript{dat} vies. 
the stomach is me dirty 
"My stomach is dirty."

HD/Hdial/*SD b. Hem\textsubscript{dat} zijn de haren grijs. 
him are the hairs grey 
"His hair is grey."

The possessive dative copular constructions in (9) are ungrammatical in Standard Dutch. In the standard variety, the only copular constructions in which the inalienable possession relation is expressed by a possessive pronoun arise, as in (10). This construction also appears in Heerlen Dutch, but it is extremely rare in the local dialect.

(10) HD/SD a. Mijn buik is vies. 
my stomach is dirty 
"My stomach is dirty."

HD/SD b. Zijn haar is grijs. 
his hairs are grey 
"His hair is grey."

What is more, the possessive dative copular construction in (9) alternates with the construction in (11) in which the N referring to the body part again combines obligatorily with the definite determiner.

(11) HD/Hdial/*SD a. Ik heb/krijg de buik\textsubscript{i} vies. 
I have/got the stomach dirty 
"My stomach is dirty."

HD/Hdial/*SD b. Hij heeft/krijgt de haren\textsubscript{grijs.} 
he has/gets the hair grey 
"His hair is grey."

In Broekhuis and Cornips (1994), we proposed that in (9) the copular verb zijn ‘be’ is able to assign dative case to the possessor. In (11), however, the semicop-
ulas *hebben* ‘have’ and *krijgen* ‘get’ cannot assign dative case to the possessor, which must therefore receive nominative case. The fact that the external argument of the predicate cannot enter into a possessive relation with the direct object (see (4)) and that the possessive reading is unmistakably present in (11) provides us with a conclusive argument in favor of the claim that we are dealing with the raising of an underlying indirect object to subject position: that is, the possessive dative shows up as the surface subject (see Broekhuis & Cornips, 1994, for an extensive discussion). It is important to note that the inalienable possessive constructions in (9) and (11) refer to a temporary state, whereas the Standard Dutch variant in (10) may refer to either a temporary or a permanent state. Therefore, the subject in the local dialect variant of (9) and the direct object in the case of (11) combine with stage-level predicates, whereas in the Standard Dutch variant the relevant NP may also combine with an individual-level predicate. This accounts for the contrast in (12) and (13).

(12) HD/Hdial a. *De zus is me int*elligent/slim
   the sister is me intelligent/clever
   ‘My sister is intelligent/clever.’

   HD/Hdial b. *Ik heb/krijg de zus int*elligent/slim
   I have/got the sister intelligent/clever
   ‘My sister is intelligent/clever.’

(13) HD/SD Mijn zus is int*elligent/slim.
   my sister is intelligent/clever
   ‘My sister is intelligent/clever.’

So far I have shown that, in Heerlen Dutch constructions expressing inalienable possession between the referent of an (underlying) dative argument of the verbal predicate and the referent of the relevant NP denoting body parts, as in (1), (3), (4b), (9), and (11), there is syntactic interference from the local dialect. Hence, they are acceptable in the local dialect, whereas they are unacceptable in Standard Dutch. On the other hand, Heerlen Dutch also allows constructions in which the “possessor” role is realized as a possessive pronoun, as in (5) and (10). Since these constructions are fully acceptable in Standard Dutch but rare in the local dialect, they may be considered as Standard Dutch variant realizations. From this it is obvious that we are dealing with several kinds of constructions expressing inalienable possession.

First of all, it is clear that the local dialect and the Standard Dutch constructions may be variants involving one and the same sociolinguistic or syntactic variable in Heerlen Dutch. Since the variants are different ways of expressing inalienable possession, they satisfy the requirement of strict semantic equivalence (Cheshire, 1987; Winford, 1996:190). Since the beginning of this century, these variants have been competing forms involved in a process of language shift; or, to be more precise, these variants are due to a different degree of adjustment of the basilects (i.e., the local dialect) to Standard Dutch as the acrolect. From this point of view, the syntactic variation in Heerlen Dutch as a linguistic continuum
itself represents successive stages of a language change by which the various variants are in competition among themselves; that is, in this continuum two grammars interact, those of the local dialect and those of Standard Dutch (see Winford, 1996).

**The functional category DP as parameter**

If we want to attribute the syntactic variation discussed here to one parameter, it must be demonstrated that the local dialect and the Standard Dutch variant realizations in Heerlen Dutch are variants with different "settings" or "values" (see Haegeman, 1991:15, Roeper & Williams, 1987). Vergnaud and Zubizarreta (1992) argued that inalienable constructions in which either a dative object or a possessive pronoun appears differ systematically in a cluster of properties. Interestingly, the following judgments on the Heerlen Dutch/Standard Dutch examples are similar to those given by Vergnaud and Zubizarreta for French. The first distinguishing property is that the dative inalienable possession construction in (14) requires a strictly distributive interpretation. That is, although the inalienable argument *de buik* 'the stomach' is singular in the dative construction, it is nevertheless interpreted as referring to more than one stomach, due to the plural possessor *hun* 'their' and *zij* 'they' in (14) (see Vergnaud & Zubizarreta, 1992:598).

(14) HD/*SD a. Ik was *hun*<sub>dat/3pl</sub> de buik<sub>sg</sub>
    I wash them the stomach
    'I am washing their stomachs.'  
    
    HD/*SD b. De buik<sub>sg</sub> is *hun*<sub>dat/3pl</sub> vies.
    the stomach is them dirty
    'Their stomach's are dirty.'  
    
    HD/*SD c. Zij<sub>3pl</sub> hebben de buik<sub>sg</sub> vies.
    they have the stomach dirty
    'Their stomach's are dirty.'

What distinguishes the dative construction in (15) from the possessive pronoun construction in (16) is that all fingernails are being painted or are dirty in (15), whereas this is not necessarily the case in (16). So it cannot be the case that in (15) one fingernail is painted per individual, nor can the sentence have a vague interpretation (less than ten fingernails are painted), as in (16) (see Vergnaud & Zubizarreta, 1992:600).

(15) HD/*SD a. Ik verf *hun* de vingernagels rood.
    I paint them the fingernails red
    'I am painting their fingernails red.'
    
    HD/*SD b. De vingernagels zijn *hun* vies.
    the fingernails are them dirty
    'Their fingernails are dirty.'
    
    HD/*SD c. Zij hebben de vingernagels vies.
    they have the fingernails dirty
    'Their fingernails are dirty.'
A second distinguishing property is that of grammatical number: certain inalienable body-part nouns are obligatorily singular in the dative construction, whether they have a plural possessor or not, whereas they may be singular or plural in the possessive pronoun construction (see Vergnaud & Zubizarreta, 1992:604), as in (17) and (18). (Compare with (13a) and (13b).)

(17) HD/SD a. *Ik was /iem dat vieze buik I wash him the dirty stomach
'I am washing his dirty stomach.'

HD/SD b. *De vieze buik zijn /iem dat vieze buik
their stomachs are dirty
'Their stomachs are dirty.'

(18) HD/SD a. Ik was hun pl buikenpl
I wash their stomachs
'I am washing their stomachs.'

HD/SD b. Hun pl buikenpl zijn vieze
their stomachs are dirty
'Their stomachs are dirty.'

Finally, the dative construction cannot be modified by just any attributive adjective, whereas there is no such restriction in the possessive pronoun constructions, as in (19).

(19) HD/SD a. *Ik was hem dat de vieze buik
I wash him the dirty stomach
'I am washing his dirty stomach.'

HD/SD b. Ik was zijn vieze buik.
I wash his dirty stomach
'I am washing his dirty stomach.'

The question is, how can the syntactic variation expressing inalienable possession in Heerlen Dutch be understood as the result of parametric variation in which the possessive dative and the possessive pronoun constructions illustrate different "values" of one parameter? According to Vergnaud and Zubizarreta (1992), the variation between the two possessive constructions is linked to the lexical properties of a functional category (see also Ouhalla, 1991). More specifically, they argued that, for French and English, the cluster of properties of the two possessive constructions mentioned can be accounted for by assuming that the definite determiner is part of the functional category D(eterminer), which has the lexical property \([±Agr]\). If D shows \([+Agr]\), inalienable possession can be expressed between the referent of an (underlying) dative argument of the
verbal predicate and the referent of the relevant NP denoting a body part. But if D is \([-\text{Agr}\)], then the “possessor” role must be realized as a possessive pronoun. If we adopt this proposal, we can account for the syntactic variation in Heerlen Dutch by considering the two possessive constructions as parametric variation attributed to the different lexical properties of the functional category D in the local dialect of Heerlen and in Standard Dutch. According to Vergnaud and Zubizarreta, if in a certain language variety the functional category D has the property \([+\text{Agr}]\), the definite determiner in this variety would be morphologically variable. We would then expect the local dialect of Heerlen to differ from Standard Dutch in that the definite determiner would show more agreement: that is, it would vary more with respect to grammatical number, gender, and person in the dialect than would the definite determiner in the standard variety. If we consider the paradigm of the definite determiner in Standard Dutch and the local dialect of Heerlen, this prediction is borne out. In Standard Dutch, nouns can be distinguished on the basis of the article they select. Nonneuter singular nouns take the article \(\text{de} \) ‘the’ and \(\text{een} \) ‘a/an’, while neuter ones take the article \(\text{het} \) and \(\text{een} \). In the plural, the gender distinction is neutralized: the article \(\text{de} \) is used in all cases. In the local dialect of Heerlen, neuter singular nouns take the article \(\text{et} \) and \(\text{ee} \), whereas masculine and feminine ones take the article \(\text{der/inne} \) and \(\text{de/ing} \), respectively (Jongeneel, 1884:39). In the plural, the article \(\text{de} \) is used in all cases, just as in Standard Dutch. Furthermore, in both varieties, the indefinite plural counterpart of \(\text{de} \) is not morphologically realized \((\emptyset)\). Hence, in the local dialect the article varies more with respect to grammatical gender, as in (20).

\[
\begin{array}{ccc}
\text{Heerlen dialect} & \text{Standard Dutch} \\
\text{Singular} & \\
\text{masculine} & \text{der/inne vadder} & \text{masculine} \text{de/een vader} \quad \text{‘father’} \\
\text{feminine} & \text{de/ing mòdder} & \text{feminine} \text{de/een moeder} \quad \text{‘mother’} \\
\text{neuter} & \text{et/ee kink} & \text{neuter} \text{het/een kind} \quad \text{‘child’} \\
\text{Plural, all genders} & \text{de/\emptyset vadders} & \text{Plural, all genders} \text{de/\emptyset vaders} \quad \text{‘fathers’} \\
\end{array}
\]

Although the definite determiner in Heerlen Dutch is identical to the definite determiner in Standard Dutch, I assume that this article in Heerlen Dutch is still a local dialect feature, and that it is specified in an abstract way. It can be argued then that, with respect to the variation expressing inalienable possession, the parametric variation in the varieties of Heerlen Dutch is the result of the availability of the different parameter settings.

In sum, it is argued that the syntactic variants expressing inalienable possession in Heerlen Dutch are brought about by different values of just one parameter. The parameter involves the functional category D, which has the lexical properties \([\pm\text{Agr}]\). If D has the property \([+\text{Agr}]\), a construction that expresses inalienable possession between an (underlying) dative argument of the verbal predicate and the relevant NP denoting a body part is acceptable. On the other hand, the “possessor” role is realized as a possessive pronoun if D has the property \([-\text{Agr}]\).
It is argued that the analysis discussed here is on the right track if the syntactic variants expressing inalienable possession yield identical correlations with respect to the social (sub)dimensions of a speech community. Therefore, let us now turn in more detail to the social dimensions of syntactic variation in Heerlen Dutch.

The sociolinguistic survey

A total of 67 male speakers participated in this survey. The municipal authorities of Heerlen provided a random sample from the city register. Three speaker variables were taken into account in order to investigate the social distribution of the varieties of Dutch spoken in Heerlen: language background, education/occupation, and age.

The speakers were divided into three language groups according to their language background, namely immigrant, dialect, and Heerlen Dutch. Immigrant speakers spoke (Heerlen) Dutch as a first language, and their parents were born outside the province of Limburg. Dialect speakers spoke the local dialect as a first language and (Heerlen) Dutch as a second language. Heerlen Dutch speakers spoke (Heerlen) Dutch as a first language, and their parents spoke the local dialect as a first language. I expected that the immigrant speakers would produce the least number of dative constructions, Heerlen Dutch speakers would produce more, and dialect speakers would produce the most.

The speakers were then subdivided into smaller groups according to their education/occupation and age. The education/occupation variable is based on two values on a high to low scale: middle/high level employees and unskilled/skilled labor. With respect to age, “young” speakers (aged between 20 and 45) were distinguished from “old” speakers (aged over 60). The speaker variables are shown in Table 4. The specification of these variables made it possible to investigate whether the group of speakers show any social stratification. The data consist of 33½ hours of recorded spontaneous speech between two speakers who did not know each other, but belonged to the same cell (in-group conversation). The recordings took place at the speakers’ homes.

Unfortunately, if we examine the type/token distribution of the syntactic variants expressing inalienable possession in the spontaneous speech data corpus of Heerlen Dutch, it becomes obvious that we are confronted with one of the best-known problems of syntactic variability—the low frequency of tokens (see Labov, 1972). This is illustrated for the local dialect variants expressing inalienable possession in Table 5. Table 5 shows that these variants never or hardly ever occur in the Heerlen Dutch corpus. Of course, the low frequency of dative constructions expressing inalienable possession does not imply that these variants are not productive or acceptable in Heerlen Dutch “since nonoccurrence in a corpus may always be due to nongrammatical, contextual factors or even to chance” (Kroch,
Table 4. Number of speakers by speaker variables

<table>
<thead>
<tr>
<th></th>
<th>Low Level of Education</th>
<th>High Level of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Old</td>
</tr>
<tr>
<td>Immigrant</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Dialect</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Heerlen Dutch</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 5. Distribution of the dative inalienable possession construction in Heerlen Dutch

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copula construction with zijn/worden 'be'</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Semi-copula construction with krijgen 'got'</td>
<td>(9)</td>
<td>0</td>
</tr>
<tr>
<td>Semi-copula construction with hebben 'have'</td>
<td>(11)</td>
<td>15</td>
</tr>
<tr>
<td>Possessive dative construction (body part as NP or prepositional complement)</td>
<td>(1), (3)</td>
<td>14</td>
</tr>
</tbody>
</table>

1989:200). From this it is clear that a quantitative analysis of each syntactic variant is not feasible. On the other hand, a quantitative approach does become possible if all occurrences of the syntactic variants are counted up. Table 6 shows that there are 29 dative inalienable possession and 10 possessive pronoun constructions in the spontaneous speech data corpus. In order to assess social stratification, I analyzed these occurrences by means of a chi-square test. Table 6 reveals significant results for the language background variable. More specifically, Table 6 shows that the group of speakers who speak Heerlen Dutch as a first language use the local dialect variant (i.e., the dative inalienable possession construction) significantly more often than the other groups of speakers.

Table 7, which shows the proportions of speakers who use the dative inalienable possession construction, reveals significant results for the language background and age variables. To be more precise, this table shows that the group of speakers who speak Heerlen Dutch as a first language and the group of young speakers use the local dialect variant significantly more often than the other groups of speakers. Taken together, in spontaneous speech, use of the dative and possessive pronoun inalienable construction correlates with the language background and/or age of the speakers. This means that variation brought about by the different settings of one parameter (i.e., the lexical properties of the functional category D) plays an important role in these social dimensions of the bilingual community of Heerlen. We were not able to support the assumption that the
TABLE 6. Distribution of the dative construction with respect to all possible occurrences (dative and pronoun constructions)

<table>
<thead>
<tr>
<th>Language</th>
<th>Low Level of Education</th>
<th>High Level of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Old</td>
<td>Young</td>
</tr>
<tr>
<td>Immigrant</td>
<td>2/5</td>
<td>2/2</td>
<td>0/0</td>
</tr>
<tr>
<td>Dialect</td>
<td>2/5</td>
<td>2/2</td>
<td>4/5</td>
</tr>
<tr>
<td>Heerlen Dutch</td>
<td>4/4</td>
<td>-</td>
<td>8/8</td>
</tr>
<tr>
<td>Total</td>
<td>8/14</td>
<td>4/4</td>
<td>12/13</td>
</tr>
</tbody>
</table>

\[ \chi^2 \text{ (language background)} = 7.00 (2, p < .05) \]

TABLE 7. Proportion of speakers in each cell using the dative inalienable possession construction

<table>
<thead>
<tr>
<th>Language</th>
<th>Low Level of Education</th>
<th>High Level of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Old</td>
<td>Young</td>
</tr>
<tr>
<td>Immigrant</td>
<td>2/3</td>
<td>2/6</td>
<td>0/5</td>
</tr>
<tr>
<td>Dialect</td>
<td>2/5</td>
<td>2/6</td>
<td>4/8</td>
</tr>
<tr>
<td>Heerlen Dutch</td>
<td>4/8</td>
<td>-</td>
<td>8/8</td>
</tr>
<tr>
<td>Total</td>
<td>8/16 (50%)</td>
<td>4/12 (33%)</td>
<td>12/21 (57%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 \text{ (language background)} = 7.47 (2, p < .01) \]
\[ \chi^2 \text{ (age)} = 3.92 (1, p < .05) \]

syntactic variants attributed to the lexical properties of one parameter would show separately identical correlations with respect to the social (sub)dimensions of a speech community. Hence, in order to apply quantitative analysis, all occurrences of the syntactic variants expressing inalienable possession had to be joined together. It is for this reason that we must re-examine a range of syntactic variants which are attributed to a different parameter. In this case, we expect to find different correlations with respect to the social dimension of the speech community in Heerlen.

THE DATIVE BENEFACTIVE CONSTRUCTION IN HEERLEN DUTCH

In addition to the constructions already discussed, several other dative constructions occur in Heerlen Dutch which are acceptable in the local dialect but unacceptable in Standard Dutch, as in (21).
The dative constructions in (21) seem superficially similar to the dative constructions expressing inalienable possession: they all contain a dative NP or the reflexive *zelf. However, since the benefactive constructions do not pattern with the possessive dative constructions, I argue that these dative constructions may not be attributed to the same parameter. First, the benefactive and the possessive dative constructions differ with respect to the restrictions placed on the direct object. In the former, the direct object may be preceded by either a definite or an indefinite NP, as in (21). What is more, unlike the inalienable dative construction, the indefinite NP in the benefactive construction is not a partitive determiner referring to the fact that for each individual one out of a greater number of cars/houses is being washed/painted.

Second, in (21), neither are body parts present nor is the referent of the dative NP necessarily construed as a possessor. Instead, the referent of the dative object can be understood as a beneficiary (see Groen, Pinker, Hollander, & Goldberg, 1989). In Standard Dutch, the counterpart of the dative NP is a *voor *'for'-PP. As we would expect, this PP variant is also acceptable in Heerlen Dutch, as in (22).

Third, although the referent of the dative argument is plural and the direct object *het huis *'the house' is singular, the interpretation of (23) never obligatorily implies the existence of more than one house being painted. Since there is no distributive effect, (23) has the meaning that all the referents of the dative NP *hun *'them' have something to do with a/one house. (Compare with (15).)

Moreover, it is never the case that certain objects are obligatorily singular, as in (24). (Compare with (17).)
Unlike the dative inalienable constructions, the benefactive construction can be modified by all kinds of attributive adjectives (see (19)).

(25) *SD/HD/Hdial  a. Zij wast hem\textsubscript{dat}/zich\textsubscript{dat} de vieze/gele auto.
   she washes him/refl the dirty/yellow car
   'She is washing the dirty/yellow car for him/herself.'

*SD/HD/Hdial  b. Ik verf hem\textsubscript{dat} het oude huis.
   I paint him the old house
   'I am painting the old house for him.'

With respect to the distributive effect and the acceptability of an attributive adjective, the benefactive construction is similar to the Standard Dutch variant. (Compare with (23) and (24).)

(26) SD/HD a. Ik was de auto/auto's voor hun.
   I wash the car/cars for them
   'I am washing the car/cars for them.'

SD/HD b. Ik was de vieze/gele auto voor hun.
   I wash the dirty/yellow car for them
   'I am washing the dirty/yellow car for them.'

Finally, if the dative benefactive constructions in (21) are attributed to the same parameter as the dative inalienable possession constructions, we cannot explain the difference between the two constructions with respect to the occurrence of durational adverbs, such as \textit{een minuut lang} 'for a minute', as in (27).

(27) HD/*SD a. Hij wast haar\textsubscript{dat} \textit{een minuut lang} de handen.
   he washes her for a minute the hands
   'He is washing her hands for a minute.'

HD/SD b. *Hij wast haar\textsubscript{dat} \textit{een minuut lang} de auto.
   he washes her for a minute the car
   'He is washing the car for her for a minute.'

This contrast raises two questions: what kind of construction are we dealing with, and how can the variation between the dative benefactive construction and the \textit{voor} 'for'-PP variant (i.e., the local dialect and Standard Dutch variant in Heerlen Dutch) be accounted for?

Let us examine the dative benefactive constructions more carefully. As in (27b) and (28a), the dative benefactive construction is ill-formed if combined with an adverbial phrase expressing duration, but it is fully grammatical if linked to an adverbial phrase indicating an endpoint of the action expressed by the predicate, as in (28b) (see Hoekstra, 1992; Roberts, 1987; Tenny, 1987). 5

(28) HD/SD a. *Hij wast haar\textsubscript{dat}/zich\textsubscript{dat} \textit{een minuut lang} de auto.
   he washes her/refl for a minute the car
   'He is washing the car for her/himself for a minute.'

HD/*SD b. Hij wast haar\textsubscript{dat}/zich\textsubscript{dat} \textit{binnen vijf minuten} de auto.
   he washes her/refl in five minutes the car
   'He is washing the car for her/himself in five minutes.'
Interestingly, the Standard Dutch voor 'for'-PP variant is fully acceptable with both types of adverbial phrases, as is the case with the corresponding constructions without the dative NP.

(29) HD/SD  a. Hij maait binnen een uur/een uur lang de tuin voor haar.  
He mows in an hour/for an hour the garden for her
‘He is mowing the garden in an hour/for an hour.’

HD/SD  b. Hij wast binnen een uur/een uur lang de auto.  
He washes in an hour/for an hour the car
‘He is washing the car in an hour/for an hour.’

In contrast to the corresponding Standard Dutch constructions, the benefactive construction in (28b) expresses the delimitation of the event, or rather it highlights the fact that the direct object is totally involved in the situation or that the event is completed (Almagro, 1993; Nishida, 1992:442). Van Hout (1996) argued that the category of predicates in (29) yields an atelic–telic event type. These predicates express the notion that the telic event is a dynamic event evolving along a certain temporal scale such that successive and continuous stages of the event are involved (see also Jackendoff, 1996). For *wash*, for instance, the endpoint is reached when the car is completely washed, and, as a result, this category of predicates does not need an external phrase to specify the end state of the telic event. Instead, every sequence of a subevent of washing the car denotes a different point on a time axis, and, as a result, the object (the car) becomes quantitatively delimited. In other words, the object gets more and more involved in the washing event: that is, the object (the car) measures out the washing event. It is relevant to note, however, that the presence of the dative beneficiary or reflexive does not alter the event structure, since the event structure of the verb itself may express either a delimited or nondelimited event, as in (29) (Cornips & Hulk, 1996; Pustejovsky, 1992). Rather, the presence of the dative benefactive or reflexive specifies the state introduced by the event structure of the verb itself. Since it can be argued that the local dialect benefactive variant and the Standard Dutch PP-variant in Heerlen Dutch differ aspectually, I propose that, from a parametric point of view, this variation can be accounted for by assuming the functional category Asp(ect)P as the parameter which has the lexical properties [+perfective] as different values. A benefactive dative construction appears if the functional category AspP shows the lexical property [+perfective], while the voor ‘for’-PP construction occurs if this functional category shows the lexical property [−perfective] (i.e., an aspectual unspecified feature).

**Syntactic variation attributed to the AspP parameter and social distribution**

If we were to assume that the pattern of social stratification of syntactic variation indicates whether the analysis of the parameter is valid, we would expect the benefactive constructions to yield a different social distribution than the inalienable possession constructions. Of course, this would be the case if both parameters did not possess the same lexical properties.
Table 8 shows that there are 68 dative benefactive constructions out of 87 possible occurrences (including the Standard Dutch voor ‘for’-PP) in the corpus. This table reveals significant results for the education/occupation variable. More specifically, Table 8 shows that the group of speakers with a low level of education/occupation use the local dialect variant (the dative benefactive construction) significantly more often than the other speakers. Table 9 shows the proportions of speakers who use the dative benefactive construction. This table reveals no significant results for the speaker variables. We may conclude that in spontaneous speech the use of the dative benefactive and the voor ‘for’-PP construction correlates significantly with the education/occupation of the speakers. This means that variation attributed to another parameter (i.e., the functional category AspP) is only relevant in this social dimension of the bilingual community of Heerlen.

Taken together, it is clear that, although the two kinds of dative constructions, inalienable possession and benefactive, are interferences from the local dialect, and although they all possess an (underlying) dative object, they do not exhibit a similar social stratification. In spontaneous speech, the use of the dative inalienable possession variant is linked to language background and age. By contrast, use of the benefactive construction correlates with education/occupation. Consequently, this variation takes part in another social domain of the community. What is of crucial importance here is that these different correlations confirm the analysis that two distinct theoretical primitives are involved. Without this assumption, the different social stratifications would constitute a puzzling fact, since both kinds of dative constructions are interferences from the local dialect that at first glance seem structurally identical.

**CONCLUDING REMARKS**

In this article, syntactic variation is considered as parametric variation. With respect to the syntactic variation involving dative constructions in Heerlen Dutch, I have shown that this kind of variation must be attributed to two different pa-
PARAMETERS AND SOCIAL DISTRIBUTION

### Table 9. Proportion of speakers in each cell using the benefactive construction

<table>
<thead>
<tr>
<th>Language</th>
<th>Low Level of Education</th>
<th>High Level of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Old</td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>2/3</td>
<td>4/6</td>
<td>10/19 (53%)</td>
</tr>
<tr>
<td>Dialect</td>
<td>3/5</td>
<td>5/6</td>
<td>20/29 (69%)</td>
</tr>
<tr>
<td>Heerlen Dutch</td>
<td>3/8</td>
<td>-</td>
<td>12/19 (63%)</td>
</tr>
<tr>
<td>Total</td>
<td>8/16 (50%)</td>
<td>9/12 (75%)</td>
<td>42/67</td>
</tr>
</tbody>
</table>

Not significant.

rameters. First, I assumed that variation with respect to the possessive dative and possessive pronoun constructions is the result of different values of the lexical properties of the functional category D. If this functional category has the lexical property [+Agr], the possessive dative construction shows up, whereas the possessive pronoun construction arises if this functional category has the property [-Agr].

Second, I discussed the dative benefactive construction in Heerlen Dutch, showing that this kind of construction lacks the properties of the possessive dative construction. Instead, I proposed that the variation with respect to the dative benefactive and the voor 'for'-PP constructions is brought about by the selection of the functional category AspP. Importantly, I argued that the different social distributions of the syntactic variants confirm that two distinct theoretical primitives are involved. I proposed that the two theoretical primitives are the lexical properties of the functional categories D and AspP as two distinct parameters. These parameters do not exhibit a similar social stratification. In spontaneous speech, the variation brought about by the functional category D shows significant correlations with the language background and age of the speakers. By contrast, the variation due to the functional category AspP correlates with education/occupation. Consequently, this variation takes part in another social domain of the community. These different social distributions are taken to be a confirmation of the analysis of two parameters that cause syntactic variation involving dative constructions in Heerlen Dutch.

**Notes**

1. The percentages in 1920 do not add up to 100%; this is because the figures are taken from two different sources (see Cornips, 1994:14).
2. The possessive dative construction cannot be found in Geerts, Haeseryn, de Rooy, and van den Toorn (1984), which is considered to be a guideline for correct Standard Dutch grammar. It must be noted that, for some western Dutch speakers, the possessive dative is to some extent acceptable, although archaic and idiomatic.
3. A more detailed and extensive discussion of how the properties of the two possessive constructions actually follow from the values [±AGR] can be found in Vergnaud and Zubizarreta (1992).
4. With respect to the language background variable, the hypothesis that the dialect speakers should show the greatest number of datives is not confirmed. Although I do not have an explanation for this
social distribution, I would like to propose that this pattern is primarily due to the fact that the Heerlen Dutch speakers are monolingual speakers, as opposed to the dialect speakers who speak both the local dialect and Heerlen Dutch. Unlike the dialect speakers, the Heerlen Dutch speakers are not aware that the dative construction only arises in the local dialect.

5. The aspectual notions “duration” and “endpoint” of the event are related to the alternative notions of activity, atelicity, non-delimited, unbounded, and process and accomplishment, telicity, temporally delimited, and bounded, respectively (Jackendoff, 1996:306).

6. It is relevant to note that generative grammar has not yet developed a fully elaborated theory of aspect. In Cornips and Hulk (1996), it is argued that the aspectual properties of the dative NP and zich can be accounted for by assuming that a functional projection AspP is selected by the verb. This functional projection itself takes a small clause as its complement, and zich is the head. Of course, a functional projection AspP may appear in Standard Dutch as well. Similar to the use of zich in Heerlen Dutch, in Standard Dutch a telic interpretation can be achieved by means of aspectual particles and prefixes that are the heads of a small clause (Mulder, 1992).

REFERENCES


