# Syntactic Interference in a Bilingual Community: the use of the reflexive in intransitive variants of causative verbs.\*

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#### Abstract

In this paper I discuss the interference of dialect syntactic features in the spoken regional Standard Dutch of Heerlen. Heerlen is a bilingual community in which the people speak either the local dialect and/or a subvariety of Standard Dutch of the Netherlands. I examine the occurrence of the reflexive 'zich' in causative verbs if these verbs are used intransitively with inanimate subjects. The use of 'zich' is considered as dialect in these constructions and it leads to ungrammaticality in the Standard Dutch of the Netherlands. The occurrence of the dialectic 'zich' is sensitive to language background of the speakers and language background in interaction with the age of the speakers. The factor education is not relevant here. The use of the dialect 'zich' in the Standard Dutch of Heerlen can be motivated linguistically. 'Zich' can be used if the subject itself has the suitable properties to undergo the action of the verb. The reflexive is excluded when this is not the case e.g. the instigator has to be an external one. Interestingly enough, these generalizations are not true for the local dialect of Heerlen.

#### 0. Introduction

In this paper I want to present a sociolinguistic study of syntactic variation. I will discuss the interference of dialect syntactic features in the spoken regional Standard Dutch of Heerlen. Heerlen is a town of 90,000 inhabitants in Limburg, a province in the southeast of the Netherlands, and it is situated near the Belgium and German borders.

I describe briefly why Heerlen is a very appropriate location in which to examine language contact and syntactic interference. In the second part, I describe in what way the data was collected. In the third part, I discuss to what extent dialect syntactic interference into the regional Standard Dutch shows social and linguistic stratification of

the speakers. In the last part, I discuss whether syntactic interference can be motivated linguistically.

#### 1. Heerlen

Heerlen offers a unique opportunity for investigating the linguistic effects of an enormous immigration into a small village. From 1900 to 1930, the expansion of the mining industry attracted thousands of workers to Heerlen from elsewhere in the Netherlands and from abroad. This immigration changed the social, economic, and religious uniformity of the community of Heerlen. Within the span of these thirty years the natives of Heerlen who spoke the local dialect became a minority. This is shown in table 1:

Table 1

| year | inhabitants<br>of Heerlen | born inside<br>Limburg % | born outside<br>Limburg % | % born outside<br>the Netherlands |
|------|---------------------------|--------------------------|---------------------------|-----------------------------------|
| 1899 | 6,332                     | 87.8                     | 12.2                      | *                                 |
| 1920 | 33,014                    | 47.8                     | 51.1                      | *                                 |
| 1930 | 46,917                    | 45.3                     | 54.7                      | 21.9                              |

<sup>\*</sup>no data

Dieteren (1962:47) & Sociogram (1986:87)

Furthermore, Heerlen is a bilingual community. Inhabitants of Heerlen speak either the local dialect as a first language and regional Standard Dutch as a second language, or they speak regional Standard Dutch as a first language. In addition, the local dialect is quite distinct from Standard Dutch in all grammatical aspects: phonological, lexical, and syntactic. Therefore, interference of syntactic features of the local dialect in the spoken regional Standard Dutch of Heerlen may well result in syntactic constructions that are not present in the Standard Dutch of the Netherlands.

#### 2.1 The language test

Special survey methods are required in order to obtain syntactic data. Regional syntactic variation is very hard to obtain. This is particularly so when the constructions are considered to be ungrammatical in Standard Dutch of the Netherlands. Therefore, this survey employs a language test. In this paper I am going to discuss the data derived

from one particular language test. The reason for using a test was to elicit as many instances of syntactic interference as possible. I will not discuss the design of this survey or the methodology I have used to construct the tests.

Let us now turn to a discussion of syntactic dialect constructions. In the local dialect of Heerlen, some causative verbs can have a reflexive if these verbs are used intransitively. The sentences (1), (2), and (3) illustrate this. In the local dialect, the use of a reflexive in these sentences is obliged, but the same sentences are ungrammatical in the Standard Dutch of the Netherlands.

(SD=Standard Dutch of the Netherlands, LD=local dialect)

I also presented a medial construction to the informants. Sentence (4) illustrates this. A medial construction needs a modifying adverb in order to be grammatical. This medial construction is, however, like sentences (1), (2), and (3) acceptable with a reflexive in the local dialect but not present with a reflexive in the Standard Dutch of Netherlands.

The language test is administered in Standard Dutch. In this test, I offered the informants three intransitive verbs, namely *veranderen*, *buigen*, and *krullen*. Besides these three, I presented five other structurally similar causative verbs. In spite of the structural similarities between the eight verbs, the first three are grammatical in the local dialect with the reflexive, the other five are ungrammatical with a reflexive in the local dialect.

There are two main reasons for using a language test. First, it is possible to investigate if and to what extent the informants with different first languages and social qualifications show syntactic interference. The hypothesis is put forward that the oldest informants who speak the local dialect as a first language and have a low education exhibit more dialectic syntactic features. That is, I expect an interaction between social

and linguistic factors. Second, it's possible to examine whether the informants switch between verbs which have the same categorial status. In other words, does the use of the reflexive vary between speakers?

## 2.2. The input and output of the language test

I used a simple repetition with modification test in order to obtain syntactic interference. Although I examined several syntactic constructions, I only refer here to the behavior of the reflexive in the regional Standard Dutch of Heerlen. The instruction of the language test was "put sentences into the negative." Sentences (5) and (6) are examples.

Instruction: "put interrogative sentences into the negative" interrogative (input):

- (5) Zie hoe koren zich in de wind buigt? je het bends' you how t he reflexive in the wind 'see corn
- (6) Denk je dat het eten in de zomer bederft 'believe you that the food in the summer decays'

possible answers (output):

- (5)a Nee, ik zie niet het koren (zich) de wind buigt hoe in I 'no see not how the corn (refl.) in the wind bends'
- (6)a Nee, ik denk niet dat het eten (zich) in de zomer bederft 'no I believe not that the food (refl.) in the summer decays'

The total number of informants in this survey is 66. The total number of verbs where a reflexive is possible is nine, namely eight causative verbs and one medial construction. The 66 informants—divided into two groups of 29 and 37 informants—have two kinds of input. The input consists of verbs with a reflexive like sentence (5) or without a reflexive-like sentence (6). Table 2 on the next page shows in what way the nine verbs are administered.

For each of the two kinds of input, informants have four output options. They may choose between the insertion or deletion of the reflexive or they may simply repeat the two kinds of input.

Table 3 shows the possible outputs as a function of two kinds of input.

Table 3

|        | input<br>+ =verb with a reflexive<br>=feature local dialect | input - =verb without a reflexive - =feature Standard Dutch |
|--------|---|---|
| output | + =repetition   | – =repetition   |
| output | - =deletion of the reflexive                                | + =insertion of the reflexive                               |

#### 2.3. Deletion or insertion of the reflexive

For the moment I am only interested in outputs of the informants that deviate from the input. The deviant score provides strong evidence that the construction—whether a reflexive is inserted or deleted—is in the dialect of the speaker. Tables 3a and b on pages 30 and 31 present all speakers who produced a deviant score. The blank spots represent a repetition of the input. The top of each table shows the eight causative verbs.

What is more, the score shows to what extent the informants deleted or inserted the reflexive in the input. In other words, the informant produces the grammatical construction of the Standard Dutch of the Netherlands or inserts the reflexive of the local dialect. In the first case,

the informant presents no syntactic interference, in the second case he does.

It is obvious from tables 3a and 3b that more informants delete the reflexive than insert it. There are more minus than plus scores. Notice also that tables 3a and 3b do not represent an implicational scale. Therefore, the pattern of the scores is too irregular.

# 3.1. The use of the reflexive with respect to linguistic and social stratification

As I mentioned in the introduction, I am going to examine to what extent syntactic interference shows social and linguistic stratification.

# Table 2

[Image not available online. Contact ICS editor for image use]

# Table 3a

[Image not available online. Contact ICS editor for Image use]

# Table 3b

[Image not available online. Contact ICS editor for Image use]

# Table 3b (continued)

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Therefore, I divided the speakers into three large groups according to their language background. First, language group 1: the informants speak regional Standard Dutch as a first language but their parents are born outside the province of Limburg. Second, language group 2: the informants are bilingual; they speak the local dialect as a first language and regional Standard Dutch as a second language. And third, language group 3: the informants speak regional Standard Dutch as a first language while their parents speak the local dialect as a first language.

Education and age subdivide the speakers into smaller groups. Both education and age have two levels, respectively a high or low education, and ages between 20 and 40 years old or older than 60.

#### 3.2. Linguistic factors

In order to assess a social and/or a linguistic stratification, I analyzed the scores by means of an analysis of variance. Tables 4 and 5 show the results. Tables 4a and b show no stratification with respect to the age of the informants for all verbs. The probability (p) is larger than .05. I do not describe the factor education here because this factor appears not to be relevant.

In contrast to the data presented in table 5a, the data in table 5b do provide evidence for a stratification according to language background. With respect to the verbs, the data in table 5b are different from those in table 5a. Table 5b offers for the larger part the verbs that are grammatical with the reflexive in the local dialect of Heerlen.

Table 5c also shows a stratification for the total amount of verbs and informants. Both the results of table 5b and table 5c demonstrate that language group 2—the speakers who have the local dialect as a first language—produces the less deviant score.

Table 4 a

Analysis of variance for effect age verbs: *bederven, drogen, breken,* and *koken* (perf.)

|                  | mean | s.d. | source 1       | mean squares |
|------------------|------|------|----------------|--------------|
| young $(n = 17)$ | 1.59 | 1.54 | between groups | 5 1.19       |
| old (n = 12)     | 2    | .95  | within groups  | 1.78         |

F = .67, df = 1.27 p > .05

Table 4 b

Analysis of variance for effect age

verbs: slepen, veranderen, krullen, and buigen

|                | mean | s.d. | source         | mean squares |
|----------------|------|------|----------------|--------------|
| young (n = 20) | 1.05 | .89  | between groups | s .84        |
| old (n = 17)   | 1.35 | .86  | within groups  | .77          |
| E 44 16 40     |      |      |                |              |

F = 1.1, df = 1.35 p > .05

Table 5 a

Analysis of variance for effect language

verbs: bederven, drogen, breken, and koken (perf.)

|             | mean | s.d. | source         | mean squares |
|-------------|------|------|----------------|--------------|
| L1 (n = 9)  | 2.22 | 1.39 | between groups | 3.61         |
| L2 (n = 12) | 1.17 | 1.03 | within groups  | 1.62         |
| L3 (n = 8)  | 2.13 | 1.46 |                |              |

F = 2.23, df = 2 p > .05

Table 5 b

Analysis of variance for effect language

verbs: slepen, veranderen, krullen, and buigen

|             | mean | s.d. | source         | mean squares |
|-------------|------|------|----------------|--------------|
| L1 (n = 8)  | 1.88 | .64  | between groups | 3.54         |
| L2 (n = 17) | .76  | .66  | within groups  | .6           |
| L3 (n = 12) | 1.33 | .98  |                | _            |

F = 5.84, df = 2.34 p = .0066

Table 5 c

Analysis of variance for effect language verbs: bederven, drogen, breken, koken (perf.), slepen, veranderen, krullen, and buigen

|             | mean | s.d. | source         | mean squares |
|-------------|------|------|----------------|--------------|
| L1 (n = 17) | 2.06 | 1.09 | between groups | 3 7.45       |
| L2 (n = 29) | .93  | .84  | within groups  | 1.07         |
| L3 (n = 20) | 1.65 | 1.22 |                |              |

F = 6.97, df = 2,63 p = .0018

In contrast to tables 4 where only the factor age is measured, the results of tables 6 demonstrate that if age is examined in interaction with language background, both factors are significant. Table 6a includes all eight verbs.

Table 6 a

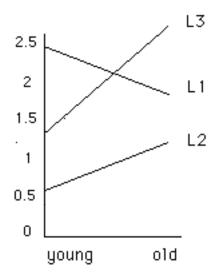
Analysis of variance for effects age and language verbs: bederven, drogen, breken, koken (perf.), slepen, veranderen, krullen, and buigen

|                    | mean square | F    | p    |  |
|--------------------|-------------|------|------|--|
| main effects       |             |      |      |  |
| age                | 2.16        | 2.22 | .14  |  |
| language           | 7.68        | 7.89 | .001 |  |
| 2-way interactions |             |      |      |  |
| age language       | 6.79        | 3.49 | .037 |  |

F = 3.49, df = 2,65 p = .037

Table 6 b

| cell me | ans: age ar | ıd language | 9         |  |
|---------|-------------|-------------|-----------|--|
|         | L1          | L2          | L3        |  |
| young   | 2.5 (6)     | .57 (14)    | 1.47 (17) |  |
| old     | 1.82 (11)   | 1.27 (15)   | 2.67 (3)  |  |



# 3.3. The medial construction

Tables 7a and b give the results of the deviant scores concerning the medial construction.

|               | Table 7a | Table 7b        |     |  |
|---------------|----------|-----------------|-----|--|
|               | verkopen | verkopen        |     |  |
|               | 'sell'   | 'sell'          |     |  |
|               | input -  | input           | t + |  |
| L2/Y Henk     | +        | Ll/Y Berend     | _   |  |
| L2/Y Jan      | +        | L1/0 hr. Vetten | -   |  |
| L2/Y Jelle    | +        | Ll/0 hr. Balk   | _   |  |
| L2/0 hr. Bel  | +        | L3/Y Piet       | -   |  |
| L3/Y Arne     | +        | L3/Y Jeroen     | _   |  |
| L3/Y Ruud     | +        |                 |     |  |
| L3/Y Anton    | +        |                 |     |  |
| L3/0 hr. Ris  | +        |                 |     |  |
| L1/0 hr. Roos | +        |                 |     |  |
| L1/0 hr Menen | +        |                 |     |  |
| L1/0 hr. Mije | +        |                 |     |  |

These are striking results in comparison to the causative verbs. More informants insert than delete the reflexive. Table 7a shows that informants from all three language backgrounds insert the reflexive. They all exhibit syntactic interference from the local dialect. Table 7b, however, shows that no bilinguals, that is, no informants from language group 2 delete the reflexive. On the basis of these facts it is undeniable that this medial construction with the reflexive is not only grammatical in the local dialect but also in the regional Standard Dutch of Heerlen.

## 3.4. The conclusion concerning age and linguistic factors

To sum up, the results of the causative verbs show that syntactic interference can be sensitive to age in interaction with linguistic factors. Although the education factor plays no part in this particular variable, language background does. Whereas the age factor alone shows no influence, it does in interaction with language background. The results demonstrate the following pattern: for language group 1, that is to say the informants with parents outside the province of Limburg, the younger people exhibit less syntactic interference than the older ones. This is what we would expect for all language groups. But for language groups 2 and 3 it is the other way around and the hypothesis is not confirmed. The younger people use more dialect interference than the older ones. In terms of language change we can predict that for these groups of informants, dialect interference is going to increase. This last conclusion is obviously supported by the results of the medial construction.

# 4.1. Towards a linguistic motivation of the deviant scores concerning the causative verbs with an inanimate subject

I now turn to the question of to what extent syntactic interference can be predicted structurally or linguistically. Within generative accounts, all eight verbs have the same categorical status. They are all ergative verbs. In short these verbs have the following characteristics: the subject is not an agentive one but a theme, the subject corresponds to the object in transitive alternations, no impersonal passive is possible, and the verbs select the auxiliary "to be."

So the question is what happens if these verbs occur with the reflexive. In the first place one structural qualification changes: the auxiliary becomes "to have" instead of "to be." Sentences (6)a, b, and c illustrate this.

- (6)a De situatie in de oorlog is veranderd 'the situation in the war is (aux=be) changed'
- (6)b De situatie in de oorlog *heeft zich* veranderd 'the situation in the war *has (aux=have)* refl. changed'

(6)c \*De situatie in de oorlog is zich veranderd 'the situation in the war is 
$$(aux = be)$$
 refl. changed'

Impersonal passive is also excluded by this change. In the second place, and this is important here, the use of the reflexive excludes the occurrence of a person or a thing that takes action in a prepositional phrase. Sentences (7)a and b illustrate this.

In sentence (7b) the addition of a person or thing that causes the action leads to an ungrammatical sentence.

Let us go back to our eight causative verbs that are used as ergatives in the language test. Since all eight verbs have the same structural qualifications, theoretically the informants should treat them the same. <sup>2</sup> But as we have seen in tables 3a and 3b, this is not the case; the scores for each verb are different and the informants show in general a regular pattern for all verbs despite their age and linguistic stratification.

Remember that all the verbs are offered with an inanimate subject. If we keep in mind that the reflexive excludes the addition of a person or thing that causes the action then this means that the instigator of the action of the verb cannot be expressed. The subject is obliged to have semantic properties by which it is possible for the verb to express action without help from outside. On the contrary, if the subject itself does not posses the appropriate semantic properties, then the cause of the action has to be an external one. If that is so, addition of the reflexive is not possible. An explanation for the differences in treatment of the verbs is to what extent the subject has inherent properties or to what extent the cause of the action of the verbs has to be found externally. If this is true, the informants exclude the reflexive if there is an external cause. We can formulate this statement by rules (8)a and b:

The occurrence of the reflexive in intransitive constructions of causative verbs:

- (8)a use the reflective if the subject itself has the specific properties and to undergo the action of the verb;
- (8)b do not use the reflexive when (8)a is not the case, e.g. when the instigator has to be an external one.

If it is possible that (8a) and (8b) overlap, variation in the use of the reflexive is predictable.

Let us now turn to the eight sentences examined in the language test:

- A(9) Hoor je ook hoe het glas *zich* doormidden breekt? 'hear you also how the glass *refl*. in half breaks'
- A(10) Zie je ook hoe Peters haren *zich* in de wind krullen? 'see you also how Peters' hair *refl*. in the wind curl'
- in de wind buigt? A(11) Zie ook het koren zich je hoe 'see you also how the corn refl. in the wind bends'
- B(12) Denk je dat het eten *zich* in de zomer bederft? 'believe you that the food *refl*. in the summer decays'
- B(13) Zie je hoe de bruidsjapon *zich* over de grond sleept? 'see you how the wedding-dress *refl.* across the ground drags'
- B(14) Denk je dat de was *zich* droogt in de winter? 'believe you that the wash *refl*. dries in the winter'
- B(15) Denk ook dat die winkel in de S. traat je in the S. street 'believe the store you also that zich niet verandert? refl. changes' not

We can divide the sentences into two groups. Group A consists of the sentences (9), (10), and (11). These sentences have specific subjects which have the suitable properties to undergo the action expressed by the predicate. In sentence (9) the subject "glass" is able to break, in sentence (10) the subject "hair" has the properties to curl by nature. The same is true for the subject in sentence (11). "Corn" has the properties or is able to bend. The second group, group B, consists of the sentences (12), (13), (14), and (15). The sentences (12), (13), and (15) have in common that they are not capable of expressing the cause within the subject and the verb. The instigator has to be an external one. The semantic properties of the subjects possess too many broad features for the verb to express action. Let us suppose that the subject in sentence (15) is not "store" but a more specific one like "weather." In that case the subject "weather" itself has the specific features to undergo the action expressed by the predicate and for this reason the reflexive can be used easily.

The subject in sentence (14), however, has more specific properties than the subjects in the sentences (13) and (15). But, the prepositional phrase "in the winter" implies that the subject "the wash" is not able "to dry" by itself, e.g. it implies an external factor.

The generalization (8a) predicts for group A a repetition of the reflexive. In contrast to group A, (8b) predicts for group B that the reflexive will disappear.

If we order the verbs numerically the following hierarchy appears:

Table 8

Total number of deletion of the reflexive (tables 3a and 3b)

| В      | *bederven:               | 22 out of 29           |
|--------|--------------------------|------------------------|
| В      | *slepen:                 | 21 out of 37           |
|        |                          |                        |
| В      | *drogen:                 | 13 out of 29           |
| В      | *breken:                 | 10 out of 29           |
| A      | veranderen:              | 10 out of 37           |
|        |                          |                        |
| A      | krullen:                 | 8 out of 37            |
| A      | buigen:                  | 5 out of 37            |
| *=นทฐา | ammatical with a reflexi | ve in the local dialec |

ungrammatical with a reflexive in the local dialect

If we consider the scores of the eight verbs we see that the scores confirm to a certain extent the prediction that is made for group A and B.

#### 4.2. The use of the reflexive in the local dialect of Heerlen and in the regional Standard Dutch of Heerlen

As I have mentioned in section 2.1, the sentences (10), (11), and (15) are grammatical in the local dialect of Heerlen but unacceptable in the Standard Dutch of the Netherlands. In contrast to the generalizations (8)a and b the verbs krullen, buigen and veranderen are always grammatical with the reflexive in the local dialect. The semantic properties of the subjects are not relevant with respect to grammaticality. We can argue that these verbs are lexicalized for the use of the reflexive in the local dialect. All other causative verbs like bederven, slepen, drogen, and breken are ungrammatical with the reflexive "zich" in both language varieties. But as we have seen, the use of the reflexive has spread through the regional Standard Dutch of Heerlen. Not only the sentences (10), (11), and (15) but also all verbs with the same structural similarities can occur with a reflexive in the regional Standard Dutch of Heerlen. In the past Heerlen has offered as a

bilingual community the linguistic conditions to create a generalization out of a lexicalized use of the reflexive.

#### 5. General conclusions

In this paper it is demonstrated that syntactic interference can be sensitive to social and linguistic factors. The use of the reflexive "zich" in intransitive variants of causative verbs shows stratification with respect to age in interaction with the linguistic background of the speakers of Heerlen. The education factor is not relevant here.

What is more, it is obvious that the fact that certain syntactic elements belong to the same structural class or category does not imply that these structural similarities are as real for language users. If that is true, the speakers in this survey would not be able to vary between them. In reality, they do, and at first sight the variation seems to be irregular. However, semantic properties in interaction with syntactic features demonstrate a certain order. We can conclude that the speakers have developed a generalization for the use of the reflexive "zich."

\* I would like to thank Roeland van Hout and Pieter Muysken.

#### **Notes**

- 1. The names of the informants are fictitious.
- 2. In this discussion I exclude the verb *koken* (perf.). I do this for the following reason. Only this verb is offered with the auxiliary "to have." If the informants intend to delete the reflexive, they also have to change the auxiliary "to have" in "to be." So in contrast to the other causative verbs, two linguistic actions have to take place.

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