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The Role of the Auxiliary *Hebben* in Dutch  
as a Second Language

*0. Introduction*

The aim of this paper is to investigate the role of the auxiliary *hebben* (to have) in Dutch as a second language. More specifically, it seeks to answer the question of whether there is a relation between learners' first productions of *hebben*, on the one hand, and their acquisition of topicalization and negation, on the other.

The idea of such a relationship is not new but originates from a number of studies on the acquisition of finiteness in Germanic languages. In a corpus study on learners' development from non-finite towards finite learner varieties, Jordens (2004, see also Jordens, this issue), found that L2-learners of Dutch start out with learner systems that do not contain topicalizations with the finite verb in second position. More importantly, the data show that learners started to produce topicalizations right or shortly after they had produced their first instances of the auxiliary verb *hebben*. Similar observations on the crucial role of non-modal auxiliaries have been made for the acquisition of negation. Becker (2005) found, for instance, that learners initially used pre-verbal negation with lexical verbs and started to use post-verbal negation with these verbs only after they had acquired to produce non-modal auxiliaries.

One characteristic of the above studies is that data are typically taken from (naturalistic) learner corpora. Hence, the possible relationship between the acquisition of *hebben* and the acquisition of topicalization or negation has not yet been tested against controlled, experimental data. The present paper aims at filling part of this gap by investigating data that were collected in an experiment containing two production tasks and an imitation task.

The paper is organized as follows: section 1 addresses the general background of the study with a brief comment on the notion of finiteness (section 1.1) and a discussion of a stage-model that describes the development of finiteness in L2-learners of Dutch (section 1.2). Section 2 concentrates on learners' transition from the second to the third stage within this model, and addresses previous accounts in the literature of the acquisition of topicalization (section 2.1) and negation (section 2.2). In the subsequent section, section 3, the precise research questions of the paper are formulated. Section 4 is concerned with methodology and describes the tasks that were carried out as well as the results of the experiment. Finally, section 5 contains a discussion of the findings and a conclusion in which the main results of the experiment are summarized and evaluated.

## 1. Finiteness and L2 Acquisition

### 1.1 The concept of finiteness

The concept of finiteness has traditionally been defined in terms of morpho-syntactic markings of the categories person and tense. In the present paper, however, an alternative approach to the concept of finiteness is taken.

Following Klein (1998, see also Klein, this issue), finiteness is considered a semantic concept that may manifest itself in morpho-syntax as well as in the lexical or pragmatic domain. According to Klein, semantic finiteness is the result of two pragmatic operations: ›anchoring‹ and ›linking‹. Anchoring refers to the embedding of a sentence into a certain topic place and time, while linking expresses the validation of the sentence for the spatio-temporal anchorpoint. To illustrate these two functions, Klein (1998, p. 226) gives the following example:

- (1) The book *was* on the table

When contrastive stress is put on the copula in (1), both a tense contrast (as opposed to ›the book *is* on the table‹) and a contrast regarding the claim (as opposed to ›the book *was not* on the table‹) can be observed. As the copula does not bear any lexical meaning, stressing ›was‹ in the above example clearly illustrates the semantic components of finiteness.

The idea of finiteness as a semantic concept that can be expressed by semantic-pragmatic as well as morpho-syntactic means turned out to have clear reflections in language acquisition. Previous research showed that both child and adult learners first use pragmatic or lexical means to express finiteness and only later pass on to morphological and syntactic means to distinguish between finite and non-finite utterances. Jordens/Dimroth (2005) presented a detailed account of the developmental path along which learners of Germanic languages acquire expressions of finiteness. The next section addresses the main findings of these authors.

### 1.2 Finiteness in L2 Dutch: a stage model

Jordens/Dimroth (2005), following Klein's semantic concept of finiteness, propose a three stage-model in order to account for learners' acquisition of finiteness in Germanic languages. Based on results from a study of Dutch and German corpus data, the authors distinguish three stages that learners pass through in acquiring to express the functions of anchoring and linking.

At the Holistic Stage (HS), learners express the linking function by mere juxtaposition of topic and predicate. As is illustrated in the below example, the topic always appears in initial position

- (2) poessie      jassie bijte  
kitty          coat bite

At the next stage, the so-called Conceptual Ordering Stage (COS), utterances show a similar organization, consisting of a topic in first position and a predicate appearing in final position. In contrast to the Holistic stage, where topic and predicate occurred in juxtaposition, learners now start to insert so-called ›linking elements‹ between topic and predicate. These linking elements are closed-class elements (such as modals, light-verbs, and particles) that enable learners to explicitly validate the relation between the predicate and the topic. By virtue of these linking elements, learners at the COS are able to express positive or negative assertion as well as various illocutionary roles such as volition, ability, and obligation. In the default case – non-contrastive positive assertion – this slot can also be empty. In (3) the linking element *wel* expresses contrastive positive assertion:

- |     |    |        |             |
|-----|----|--------|-------------|
| (3) | ik | wel    | hard rijden |
|     | I  | indeed | fast drive  |

It is important to note that these elements, though often being verbal elements in the target language, do not yet have a verbal status at the COS. The same holds for verbs occurring in the predicate slot, which tend to appear in a fixed, unanalyzed form. Furthermore, it is relevant to indicate here that the topic slot is not restricted to one element, but may be filled by several elements all bearing the information-structural status of topic. It is assumed that the topic position at the COS does not correspond to a target-like topicalization position since this ›would presuppose that one, and only one, constituent occurs in a specified pre-finite position‹ (Dimroth et al. 2003, p. 79).

The system dramatically changes when learners enter the so-called Finite Linking Stage (FLS), where validation is no longer established through lexical means, but grammatical marking comes into play. At this stage, the linking element between topic and predicate consists of a finite verb that is marked for agreement with the external argument. Jordens/Dimroth show that the non-modal auxiliaries *hebben/haben* and *zijn/sein* are the first verbs to appear as grammatical linking elements. These non-modal auxiliaries lack lexical meaning, but mark the agreement relation between the auxiliary and the external argument. Due to their lexically empty status, *hebben/haben* and *zijn/sein* lead to the reanalysis of the lexical linking elements that occurred at the COS as being grammatical elements. Consequently, the unanalyzed illocutionary phrases that functioned as linking elements at the COS cease to be used at the FLS and utterances containing a finite auxiliary or lexical verb become increasingly frequent.

The transition from COS to FLS involves a rather dramatic restructuring from a grammatically infinite towards a grammatically finite system. It is not surprising, then, that learners at the FLS continue to make use of COS-structures in which the topic is underspecified or the verb is non-finite or absent. As for the verb-second phenomenon, Jordens/Dimroth argue that it takes learners another step to realize that only one element may occur before the finite verb. The acquisition of verb-second will be taken up in the next sections when the

possible relationship between the emergence of *hebben* and topicalization will be discussed.

## 2. The acquisition of topicalization and negation

As became evident in the previous section, the development from semantic-pragmatic means towards morpho-syntactic means for the expression of finiteness in L2 Dutch involves a number of steps. There are good reasons to believe that the acquisition of the auxiliary *hebben* is one of the most important steps and may in fact be considered to mark a ›turning point‹ in the acquisition of finiteness. As was shown in the stage-model, learners at the holistic and conceptual ordering stage are heavily dependent on information-structure to build their utterances. It is only with the acquisition of *hebben* that learners are able to abandon their strict reliance on information structure and use structures that overrule principles based on information structure alone. This section addresses previous accounts in the literature of the acquisition of two such structural principles, i.e., topicalization and negation.

### 2.1 Topicalization

Jordens (2005, this volume) offers a causal explanation for the co-emergence of *hebben* and topicalization in learner data. Based on an analysis of data from untutored second language learners of Dutch (the ESF-data, see Perdue 1993), Jordens proposes that it is not the auxiliary *hebben* as an isolate form that causes restructuring in the learner system, but rather the combination of this auxiliary with a subject pronoun. It is argued that learners take over expressions such as *heb-ik* ›have-I‹, *heb-je* ›have-you‹ and *heeft-ie* ›has-he‹ that function as topicalization devices in the target language. These auxiliary-pronoun combinations allow learners to place objects or adverbials denoting time and place in topic position.

### 2.2 Negation

Becker (2005)<sup>1</sup> offers an account of the acquisition of negation that takes the concept of semantic finiteness as its starting point. According to Becker the acquisition of negation in L2 German proceeds in three stages.

At the first stage, structures are organized as follows: ›topic – negator – predicate‹. The negator serves as a link between the topic and the predicate, and as the topic is often left implicit, many utterances merely consist of a negator

<sup>1</sup> See Parodi (2000) for similar results on the acquisition of negation.

followed by a predicate. As a result of the information-structure based ordering, the negator appears to the left of the lexical verb that is part of the predicate. However, in utterances containing a copula the negator appears to the right of the copula, the copula being an explicit carrier of tense (semantic finiteness) and falling out of the scope of negation.

At the second stage, non-modal auxiliaries start to appear and negated utterances with these auxiliaries bear the following structure: ›topic – aux – negator – predicate‹. As the negator still precedes the predicate and thereby separates the finite and non-finite parts of the utterance, the information-structure based order is maintained from the previous stage. At the same time, however, the auxiliaries establish an agreement-relation between the auxiliary and the external argument, on the one hand and a head-complement relation between the auxiliary and the lexical verb, on the other.

The final stage consists in the extension of morpho-syntactic finiteness marking from auxiliaries to lexical verbs. For this final step, the earlier utterance structure has to be abandoned: finite and non-finite information can no longer be kept separate but is fused within one verb. This finite lexical verb is raised and the negator remains in the position it has occupied from the beginning, i.e. it precedes the nonfinite part of the predicate.

In sum, in the acquisition of post-verbal negation the emergence of the auxiliary entails a structural reorganization of the learner system. The transition from COS to FLS enables the learner to overrule the ›topic – predicate‹ order by a new structural principle, i.e., verb raising.

### *3. The role of hebben in L2 Dutch: Research questions*

Although there have been thorough investigations on the acquisition of finiteness in different target languages by learners at different stages of development, there has not been much research on the topic that is experimental in nature. The purpose of this paper is to experimentally investigate the role of *hebben* in the acquisition of Dutch.<sup>2</sup> I will thereby focus on issues that cannot easily be solved on the basis of the available corpus data.

A large group of learners will be considered in order to find out whether the auxiliary-related ›turning point‹ that is found in corpus studies can be shown to be generally relevant. It could well be that only some learners obey to the observed pattern and others do not, and such individual differences are of course more likely to be revealed when a large group of learners is considered. Furthermore, by using controlled tasks, I will try to distinguish between what learners

<sup>2</sup> Although the non-modal auxiliary *zijn* ›to be‹ is also used in Dutch, the focus of the study is on the role of *hebben*. Previous analyses of the ESF-data showed that *zijn* is produced by a few learners only and its use turned out to be close to zero.

cannot do and what they can do but avoid to do. Elicitation tasks were constructed in order to assess if a learner is able or unable to use a certain construction in a given context. Finally, data can be obtained that provide insights into the type of knowledge that has been acquired by learners, but is not directly reflected by these learners' productive skills. It is a well-known fact that learners' receptive knowledge is often ahead of their production, but hitherto, it has not been investigated, if and to what extent, this gap between reception and production is true for the acquisition of properties related to finiteness. The following two research questions can be formulated:

1. Do elicited production data from Turkish and Moroccan learners of Dutch support the earlier finding that the acquisition of auxiliary *hebben* constitutes a turning point, in that:
  - a) learners, who do not (yet) produce *hebben*, never produce topicalizations, while learners, who produce *hebben*, do?
  - b) learners, who do not (yet) produce *hebben*, use pre-verbal negation with lexical verbs, while learners, who produce *hebben*, use post-verbal-negation with these verbs?
2. Do imitation data on topicalization and negation from these learners follow the patterns found in the production data? If not, where do they diverge?

In order to answer these questions, two production tasks and an imitation task were carried out among Turkish and Moroccan learners of Dutch. In the next section these tasks are described and the results are outlined.

#### 4. The study

##### 4.1 Subjects

The subjects who took part in the experiment were 36 Moroccan learners of Dutch and 16 Turkish learners of Dutch. All subjects were recruited at a Dutch language school that offers language courses for so-called ›newcomers‹. The term ›newcomers‹ refers to people who have immigrated to the Netherlands to join their families or spouses. All subjects had a relatively low level of schooling. Some of them had finished secondary school, while others had only been at primary school for a few years. The average age of the participants was 27 years, the length of their residence in the Netherlands was between 1:3 and 6:10 years and they had followed Dutch classes for a duration of 1 to 23 months.

The fact that subjects had only been staying in the Netherlands for a few years, did not speak Dutch at home and had a relatively low level of education makes them comparable to the Dutch ESF-learners, who had a similar kind of learner profile. One major difference between both groups of learners, however, concerns the fact that the subjects of the present study received formal training, whereas the ESF-learners were untutored learners of Dutch.

#### 4.2 Materials and procedure

The tasks that were presented to the subjects involved (i) film retelling, (ii) picture story telling, and (iii) sentence imitation. Details about test material and procedure are given below for each task separately.

##### *(i) Film retelling: Modern Times*

This task was also used in the ESF-project and involved the retelling of an edited version of Charlie Chaplin's *Modern Times*. The fragment shown to the subjects was shorter than the fragment used in the ESF-project, because it was felt that the entire fragment in combination with the other tasks would make the experiment undesirably long.<sup>3</sup>

The procedure differed slightly from the procedure used in the ESF-project. While the ESF-learners were shown pictures of so-called steady shots as they were retelling the film, the subjects in the present study were asked to retell the fragment without any visual support. Furthermore, the present subjects did not watch the entire fragment at once, as did the ESF-learners, but had to retell the movie event by event. The aim of cutting the movie into three smaller events was to reduce memory problems and to elicit better comparable retellings.<sup>4</sup>

##### *(ii) Picture story telling*

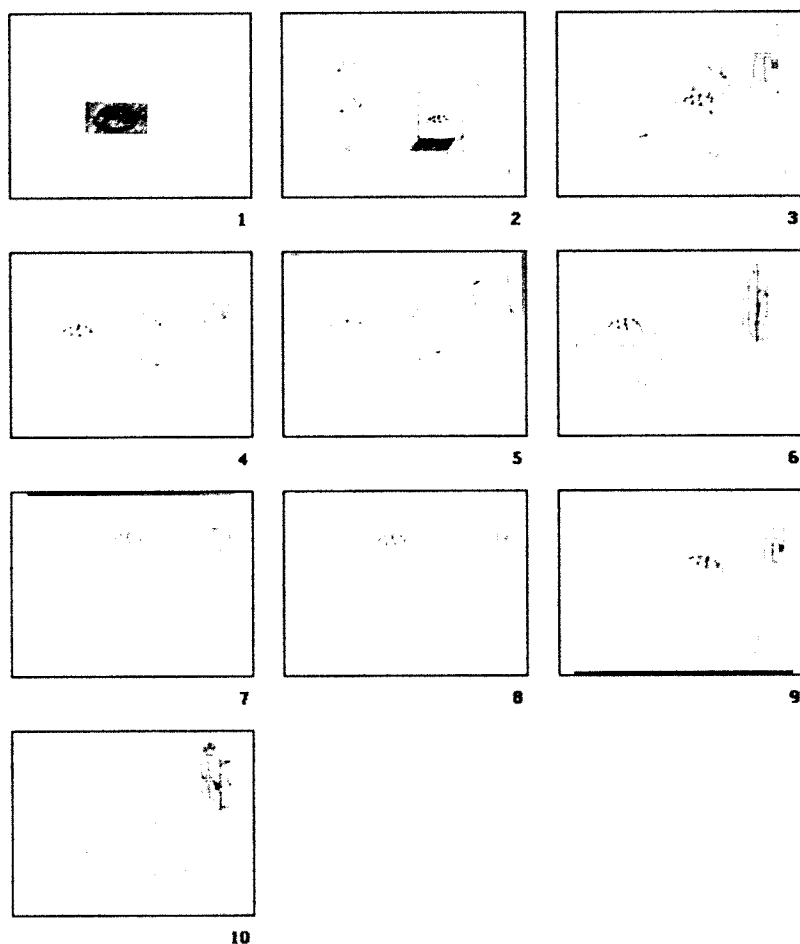
Two picture stories that were designed for the purpose of eliciting the auxiliary *hebben* were presented to the subjects. One of them is shown below.

Note that the last two pictures suggest that the dog has eaten the cake without actually showing an eating dog. The description of the resultative state (an explanation of the fat dog on the last picture) asks for the use of a non-modal auxiliary in the target language. Piloting results suggested that the stories were helpful tools in discriminating between learners using the auxiliary *hebben* and learners who did not use it.

The stories were shown to the subjects in two phases. In the first phase the subject was shown all pictures one by one on a computer screen and he or she was asked to not to speak until the entire story was over. Immediately afterwards, the pictures were shown a second time and now subjects were asked to tell what happened. There are two reasons why the pictures were presented twice. First, the purpose of the first presentation was to make subjects aware of the fact that the pictures together formed a series of events, instead of each picture representing a single, isolated event. It was hoped that this would bring subjects in a

<sup>3</sup> Apart from the tasks reported here, some additional tasks were carried out in the experiment, including a sentence matching task and another film retelling test. These tasks are not discussed any further in the present paper, however.

<sup>4</sup> This fragment was an eight minutes' extract that started when the girl stole a loaf of bread and ended when Charlie Chaplin and the girl had escaped from the police van.



›narrative mood‹, thereby increasing the likelihood of eliciting topicalizations. Second, it was assumed that showing subjects the entire story before they had to actually tell the story would elicit more different types of verbs. An ignorant speaker who has not seen picture 10 before, for example, would be unlikely to use the modal *wil* ›want to‹ to describe picture 8, since he or she does not know what is to come. The dog might just look at the cake or smell it.

(iii) *Sentence imitation*

The sentence imitation task consisted of 36 sentences, which were subdivided into two sessions of 18 sentences each. Importantly, sentences across these ses-



sions only differed with respect to the verb: in one session all sentences contained a *lexical verb*, while in the other session all sentences had a *non-modal auxiliary* and a past participle. All subjects performed a number of other tasks in between the two sessions to distract their attention from the task sentences and give them some time to relax.

The sentences were distributed over two conditions (topicalization and negation), the distribution being the same in both sessions. This means that in both sessions there were six sentences with topicalized temporal adverbials and six sentences with the negator *niet*. The remaining six sentences were fillers.<sup>5</sup> For all sentences there was a grammatical and an ungrammatical version. In the ungrammatical topicalized sentences, the finite verb appeared in third position, i.e., after the adverb and the subject. In the grammatical sentences, the finite verb was placed directly after the temporal adverbial, i.e., in second position. In the negation condition, ungrammatical sentences had pre-verbal negation and grammatical sentences had post-verbal negation. The distribution of test sentences over the various conditions is exemplified below.

temporal adverbials – lexical verbs

- ungrammatical Elke dag de oude meneer rookt een sigaret  
(◁Every day the old man smokes a sigaret▷)  
grammatical Elke dag rookt de oude meneer een sigaret  
(◁Every day smokes the old man a sigaret▷)

temporal adverbials – auxiliary *hebben*

- ungrammatical Elke dag de meneer heeft een sigaret gerookt  
(◁Every day the man has a sigaret smoked▷)  
grammatical Elke dag heeft de meneer een sigaret gerookt  
(◁Every day has the man a sigaret smoked▷)

negation – lexical verbs

- ungrammatical De minister niet praat over het grote probleem  
(◁The minister not speaks about the big problem▷)  
grammatical De minister praat niet over het grote probleem  
(◁The minister speaks not about the big problem▷)

negation – auxiliary *hebben*

- ungrammatical De minister niet heeft over het probleem gepraat  
(◁The minister not has about the problem spoken▷)  
grammatical De minister heeft niet over het probleem gepraat  
(◁The minister has not about the problem spoken▷)

<sup>5</sup> The filler items involved grammatical and ungrammatical sentences with respect to subject-verb agreement in the lexical-verb session and auxiliary choice (*hebben* vs. *zijn*) in the auxiliary sentences.

Due to the demanding nature of the task, only three test sentences per condition were included. Although it may seem that three sentences per condition is too few, Fujiki/Brinton (1983) have shown that as few as three repetitions per structure provide reliable data for each subject.

The design was crossed which means that one subject was presented with a grammatical sentence of a given condition and another subject was presented with its ungrammatical counterpart. Since there was only one grammatical and one ungrammatical sentence for each sentence type, two task versions were constructed. In order to avoid ordering effects, two additional versions were constructed for each version in which the order of presentation of the sentences was varied.<sup>6</sup> It was made sure, however, that all versions started with a filler trial that may be considered as a warm-up trial.

The lexical items that were used to construct sentences were taken from a combined frequency list of Dutch,<sup>7</sup> and it was made sure that only regular verbs were used. Furthermore, all sentences contained either eight or nine words and either twelve or thirteen syllables. In order to keep the number of words and syllables equal across sessions (lexical verbs vs. auxiliaries), the items in the auxiliary session sometimes lacked an adjective or noun that was present in the lexical verb session. Although this was not considered ideal, the alternative of comparing long auxiliary-sentences to shorter lexical-verb sentences would have been even more problematic. Finally, it was made sure that all lexical verbs occurred only once and that the remaining lexical items were not used more than twice.

All sentences were pre-recorded by a female native speaker of Dutch on a DAT-recorder and played to the subjects via earphones. Subjects were instructed to repeat the sentences as soon as they had listened to the entire sentence. If subjects were not able to repeat the sentence, it was played again with a maximum of three repetitions. Half of the subjects first performed the auxiliary session, while the other half of the subjects first carried out the lexical verb session. This was done in order to control for possible effects due to exhaustion or concentration difficulties.

#### 4.3 Analyses

All production and imitation data were recorded on a DAT-recorder and subsequently transcribed. The responses to the imitation task were coded for changes involving the position of the finite verb, the negator, and the absence or substitu-

<sup>6</sup> Version A contained all test sentences in a randomized order, whereas version B presented subjects first with the second half of the sentences in A and then with the first half of the sentences in task A.

<sup>7</sup> This frequency list consisted of the overlapping words in three different frequency lists: Hulstijn/Hazenberg (1996) (2000 words), Basiswoordenboek (2000 words), Corpus Gesproken Nederlands (2000).

tion of verbs. Semantic, morphological and phonological changes were not taken into account.

#### 4.4 Results

The first research question from Section 3 concerned learners' abilities to produce topicalized and negated utterances and it was formulated as follows:

1. Do elicited production data from Turkish and Moroccan learners of Dutch support the earlier finding that the acquisition of auxiliary *hebben* constitutes a turning point, in that:
  - a) learners, who do not (yet) use *hebben*, never produce topicalizations, while learners, who use *hebben*, do?
  - b) learners, who do not (yet) use *hebben*, produce pre-verbal negation with lexical verbs, while learners, who use *hebben*, produce post-verbal-negation with these verbs?

The next subsections present the results for the two production tasks that were carried out. As no differences were found in subjects' utterances in the film retelling task and the picture story task, the data from both tasks are lumped together.

##### 4.4.1 Production

The data from the film retelling and picture story tasks indicated that sixteen out of the 36 Moroccan learners used the auxiliary *hebben*, while none of the sixteen Turkish learners did. Unfortunately, the possible restructuring role of *hebben* can thus only be assessed in the Moroccan group. Furthermore, possible differences concerning learners' mother tongues may be detected in the NO AUX-group, but not in the AUX-group.

Learners in the NO-AUX group did not use a single instance of *hebben*, whereas most learners in the AUX-group showed a frequent use of the auxiliary. Furthermore, all learners in the AUX-group combined the auxiliary with different lexical verbs (past participles) and used two or more forms of the verbal paradigm (*heb*, *hebt*, *heeft*, and *hebben*).

To illustrate the use of *hebben* by the AUX-group, Table 1 provides the number of utterances containing a form of *hebben* out of the total number of utterances for each learner. Moreover, the type/token ratios for each learner indicate with many different lexical verbs *hebben* is combined.

As can be seen in the table, the relative proportion of utterances containing auxiliaries greatly varies from subject to subject. Note, however, that subjects who produce at most two or three auxiliaries still combine the auxiliary with different lexical verbs.

Table 1: Percentages of auxiliary use and type/token ratios for the AUX-group

learner	aux-utterances		type/token ratios (lex verbs)
	aux/total	%	
MO1	22/72	31	14/22
MO2	12/44	27	10/12
MO3	17/74	23	10/17
MO4	16/71	23	11/16
MO5	20/112	18	10/20
MO6	22/103	21	11/22
MO7	12/58	21	7/12
MO8	17/114	15	13/17
MO9	14/141	10	6/14
MO10	6/57	10	4/6
MO11	6/97	6	4/6
MO12	6/122	5	4/6
MO13	5/96	5	4/5
MO14	3/65	5	3/3
MO15	3/79	4	3/3
MO16	2/76	3	2/2

MO = Moroccan

### Topicalization

In order to answer research question 1a on the possible relation between *hebben* and topicalization, all utterances in which the subject followed the verb were extracted from the data.<sup>8</sup> It became immediately clear that all instances of topicalisation had been produced by learners in the AUX-group. Without any exception, utterances in which the subject followed the verb turned out to be uttered by learners who produced *hebben*. Thus, learners in the NO-AUX group did not produce a single utterance in which the subject appeared after the verb.

Consider the following examples that are taken from one learner and are representative of the entire set of utterances with subject verb inversion that were found in the data:

<sup>8</sup> In extracting these utterances, presentational constructions containing the verb *komen* 'to come' were discarded.

- |     |           |        |            |                        |
|-----|-----------|--------|------------|------------------------|
| (4) | Dan       | heeft  | ze         | een stokbrood gestolen |
|     | ›Then     | has    | she        | a bread stolen‹        |
| (5) | En toen   | gaat   | ze         | op de tafel liggen     |
|     | ›And then | goes   | she        | on the table lie‹      |
| (6) | Dan       | kan    | je         | hier zitten            |
|     | ›Then     | can    | she        | here sit‹              |
| (7) | Toen      | hebben |            | de politie hem gepakt  |
|     | ›Then     | have   | the police | him take‹              |
| (8) |           | Heeft  | ze         | een in de oven gehaald |
|     |           | ›has   | she        | one in the oven taken‹ |

These examples contain different types of verbs (lexical verbs, light verbs, modals) and have subject pronouns or noun phrases in post-verbal position. Strikingly, the first position within the utterance is either filled with a connective (*en, toen, dan*) or is left empty. This observation turned out to be true of almost all 90 utterances with subject verb inversion that were found in the data. The following five utterances did not conform to this pattern in that they contain (non-anaphoric) place and time adverbials as in (9) to (12) or an object topic as in (13):

- |      |                       |         |            |                           |
|------|-----------------------|---------|------------|---------------------------|
| (9)  | Bij een sigaretwinkel | bestelt | hij        | een sigaret               |
|      | ›At a drug store      | orders  | he         | a sigaret‹                |
| (10) | En ineens             | wil     | die meisje | weg                       |
|      | ›Suddenly             | wants   | the girl   | gone‹                     |
| (11) | Eerst                 | heeft   | ze         | de taart uit de oven      |
|      | ›First                | has     | she        | the cake out of the oven‹ |
| (12) | Misschien             | heeft   | ie         | geen geld                 |
|      | ›Maybe                | has     | he         | no money‹                 |
| (13) | Die [hond]            | zie     | ik         | met een dik grote buik    |
|      | ›It [dog]             | see     | I          | with a fat big belly‹     |

The last utterance was produced by a learner, who may be regarded as slightly more advanced than the other subjects. Unlike the data from the other learners in the AUX-group, his production data contain a few relative clauses and complement phrases in which the order conformed to that of the target language. Apart from the example in (13), no utterances with topicalized objects and subjects behind the verb were found. In contexts where one would expect such utterances to occur, learners either left the subject implicit as in (14), or placed the subject directly behind the topicalized object, as in (15) and (16):

- |      |                |       |                         |
|------|----------------|-------|-------------------------|
| (14) | Sommige dingen | heeft | aan de kinderen gegeven |
|      | ›Some things   | has   | to the children given‹  |

(15) Die taart	hij	heeft	het allemaal gegeten
›The cake	he	has	everything eaten‹
(16) Dat	hij	heeft	gezegd
›That	he	has	said‹

Cases in which the object was left implicit were not attested. There were only two doubtful cases in which the object was not overtly expressed:

(17) Moet	je	politie zeg
›Must	you	police say‹
(18) Geef	je	alle chocola
›Give	you	all chocolate‹

A closer look at these examples as well as at the other data from this learner suggests, however, that the forms *moetje* ›must-you‹ and *geefje* ›give-you‹ should not be analyzed as a verb plus a second singular pronoun. Rather, these forms seem to constitute fixed forms that also appear in utterances such as *politie moetje betalen* ›police must-you pay‹, where *politie* is the subject. Since the utterances in (17) and (18) are produced in a context where *politie* and *alle chocola* are the objects, it seems that the subject, and not the object, is left implicit in these utterances.

It can be concluded at this point that the vast majority of utterances with the subject following the verb that are produced by the learners in the AUX-group involve structures of the type ›(connective) + verb + subject‹. A handful of utterances contain an adverbial in first position, and only one utterance has a topicalized object in this position.

Although most learners in the AUX-group use utterances in which the subject follows the verb, there are two learners in this group who do not produce such utterances. The remaining fourteen learners in the AUX-groups do so to varying extents. What is crucial, however, is that none of the learners in the NO-AUX group produces utterances with subject verb inversion. In all utterances produced by these learners, the subject precedes the verb or is left implicit. This finding leads to a positive answer to research question 1a, albeit the adding of the word ›may‹: learners, who do not use *hebben*, never produce topicalizations, while learners who produce *hebben*, *may* do so.

Before the production data are discussed from the viewpoint of negation, one remark is noteworthy. It should be pointed out at this point that the distinction between an AUX-group and a NO-AUX group on the basis of the auxiliary *hebben* alone might be too simplistic.

The reason for this is that nineteen out of the 35 learners who did not produce the auxiliary *hebben* used a verbal pattern that looks very much like the ›auxiliary + past participle‹ pattern. Eight learners out of these nineteen were native speakers of Turkish, and eleven learners were native speakers of Moroccan Arabic. These learners produced utterances of the type *de hond is ruikt* ›the

dog is smells< and *hij is niet pakken* >he is not take<. The use of the >*is* + lexical verb< pattern has been reported in the literature (cf. Haberzettl 2003, Jolink this volume, Starren 1996), and different functionalist explanations have been proposed to account for the pattern.

One explanation that has been put forward in the literature is that >*is* + lexical verb< bears a progressive meaning. For Dutch, such a prediction would make perfect sense given the fact that Dutch has a periphrastic construction containing *is* that expresses progressive aspect. (e.g., *hij is aan het spelen* >he is playing<). Nevertheless, the majority of occurrences of >*is* + lexical verb< in the data presented here, do not express progressive aspect. This becomes clear from the following example, where the learner uses >*is*< in direct speech referring to an event in the past:

- (19) Tegen zegt <deze meisje is brood pakken>  
 >To says <this girl is bread take>

An alternative explanation that has been considered in the literature is that >*is* + lexical verb< marks perfect aspect. Again such an account would not be unlikely for learners of Dutch, since the present perfect in Dutch may be formed with *zijn* >to be< + past participle. The data show, however, that although a perfective reading may be conceivable for some utterances, a large number of utterances containing *is* were not used in resultative contexts. The utterance in (20), for example, clearly refers to an on-going event in the context in which it was uttered.

- (20) Die jongens is spelen  
 >The boys is play<

Interestingly, some learners use *is* in combination with modals or light verbs such as *gaan* >going to< and a lexical verb.

- (21) Zij is wil taart eten  
 >She is wants cake eat<
- (22) Politie is gaat rennen met de vrouw  
 >Police is goes run with the woman<

All in all, the data do not seem to point to a clear answer to the question of what function >*is* + lexical verb< has in the learner data. Haberzettl (2003) suggests that the *is*-pattern initially serves no special function but represents pure formal variation. It is only later that learners associate the *is*-pattern with the various analytic verb constructions in the target language.

The fact that the function of the *is*-pattern is not entirely clear at this stage should not entail that the possible restructuring role of this pattern remains unconsidered. The *is*-pattern closely resembles the auxiliary + past participle combination in two respects: both the semantic emptiness of the first element and the relative positioning of the two elements look similar. Therefore, it is not unconceivable that >*is* + lexical verb< serves the same restructuring function in

learners' development towards a finite learner system as is assumed to hold for the auxiliary *hebben*.

It was argued above that all utterances, in which the subject followed the verb were produced by learners who made use of the auxiliary *hebben*. A look at the data shows that none of the sixteen learners who use *hebben* produce utterances that conform to the *is*-pattern, except for one learner who uses this structure once. Moreover, this learner shows self-corrections of the following type:

(23) De meisje he...heef +// meisje is s...s.. stolen +//gestoold  
 ›The girl ha..has +//girl is s..stolen‹

(24) Hij is +//hij h.. hebt de taart +//alle taart gegeten  
 ›He is +// he h..has the cake +//all cake eaten‹

(25) Hij gaat alle eten g..+// alle alle eten +//hij hebt alle eten gegeten  
 ›He goes all food g..+//all all food +// he has all food eaten‹

The impression one gets from these self-corrections is that different verbal candidates (*gaat*, *is*, *hebt*) are competing with each other, and the auxiliary *hebben* may win the competition as in (24) and (25), but need not (as in (23)). On the basis of the above self-corrections it can be concluded that the use of *hebben* by this learners is unstable. Strikingly, then, this learner is one out of the two learners who turned out not to produce utterances with subject verb inversion. The issue of whether this finding might clarify the relation between the use of the ›is‹-pattern, the emergence of *hebben*, and the use of topicalization will be taken up in section 5, where the results of the study are discussed.

### Negation

The prediction that learners initially use pre-verbal negation with lexical verbs and start to use post-verbal negation with these verbs only after they have acquired the auxiliary *hebben*, is largely borne out by the data.

Table 2 presents frequencies for post-verbal and pre-verbal negation in the AUX group and the NO-AUX group. A further distinction between a NO-AUX group and an IS group (using the *is*-pattern) was not made, because there appeared to be no differences among learners in the NO-AUX group, depending on whether or not they used *is*.

Table 2: Pre-verbal negation vs. post-verbal negation in the AUX and NO-AUX groups

	Pre-verbal negation		Post-verbal negation	
	Lexical verbs	Mod, aux, <i>is</i>	Lexical verbs	Mod, aux, <i>is</i>
NO-AUX	56	0	5	33
AUX	0	0	11	31



Although the frequencies are quite low, the pattern that arises from the data confirms earlier findings in the literature. Learners in the NO-AUX group turn out to use pre-verbal negation with lexical verbs in the vast majority of cases. There are however five instances of negation in which *niet* follows the lexical verb. These are:

De jongetje neemt niet de bal	›The boy takes not the ball‹
Maar de bal gaat niet naar de grond	›But the ball goes not to the ground‹
Andere jongen geef niet voetbal	›Other boy give not football‹
Ik pak niet die	›I take not it‹
Hij pakt niet de bal	›He takes not the ball‹

Strikingly, all utterances were produced in relation to the very same picture on which a boy tries to catch a ball but does not succeed in getting it. In other contexts, however, learners in the NO-AUX group used pre-verbal negation with lexical verbs and post-verbal negation with modals, auxiliaries and *is*. This is exemplified by the utterances in (26) and (27), which were produced by the same learner.

(26) Zij	is	niet	doen
›She	is	not	do‹
(27) Zij		niet	doen
›She		not	do‹

Although the frequencies in Table 2 are too low to draw any firm conclusions, research question 1b can be tentatively answered in the affirmative: learners, who do not (yet) use *hebben*, mainly produce pre-verbal negation with lexical verbs, while learners, who use *hebben*, produce post-verbal-negation with these verbs.

#### 4.4.2 Imitation

Thus far, only production data have been considered. In order to obtain more precise information on the possible relation between *hebben*, on the one hand, and topicalization and negation, on the other, an imitation task was conducted. The goal of this imitation task was to find out how learners imitation abilities relate to their productions, or put as in research question 2 from section 3 above:

1. Do imitation data on topicalization and negation follow the same patterns found in the production data, and if not, where do they diverge?

##### Topicalization and negation

All responses to the imitation task were coded using the following labels. Note that the codings refer to changes that participants made to the original sentences. The label >V3 was thus applied when the original sentence had V2 and the subject changed this into V3.

1. > V3 (placement of finite verb in third position in sentences with a fronted temporal adverbial)
2. > V2 (placement of finite verb in second position in sentences with a fronted temporal adverbial)
3. > preNeg (placement of negator in front of the finite verb)
4. > postNeg (placement of negator behind the finite verb)
5. no aux (lacking auxiliary)
6. no lexV (lacking lexical verb)
7. missing (unintelligible or lacking response)
8. no change (no change or change unrelated to verb position or negation)

Table 3 presents the responses given by learners in the NO-AUX group. Since no qualitative or quantitative differences were found between learners using the *is*-pattern and learners not doing so, no distinction was made between these learners.

Table 3: Responses on the imitation task by learners in the NO-AUX group

NO AUX	>V3	>V2	>Pre- Neg	>Post- Neg	no aux	no lexV	missing	no change
<b>Original sentences containing lexical verbs</b>								
MO	7	-	4	1	-	-	4	236
%	11%	-	6%	1%	-	-	2%	94%
TU	7	-	9	1	-	7	2	142
%	17%	-	21%	2%	-	4%	1%	84%
<b>Original sentences containing the auxiliary <i>hebben</i></b>								
MO	5	8	-	26	48	-	2	163
%	8%	13%	-	41%	19%	-	1%	65%
TU	1	1	1	14	92	-	2	57
%	2%	2%	2%	33%	55%	-	1%	34%

MO=Moroccan learners (n=21), TU=Turkish learners (n=14), %= percentage of responses in a given category relative to the total number of items in that category

A few observations can be made from Table 3. First, note that the Moroccan learners do not make changes in which the finite verb is placed in second position in sentences with lexical verbs (>V2), whereas they do show such changes when the finite verb is an auxiliary. Thus, none of the Moroccan learners in the NO-AUX group produce deviating imitations of the type in (28a), while deviat-

ing imitations of the type in (28b) are produced quite frequently, i.e., in 13% of all test sentences of this type.

(28a) Elke dag de meneer *rookt* een sigaret  
> Elke dag *rookt* de meneer een sigaret

(28b) Elke dag de meneer *heeft* een sigaret gerookt  
> Elke dag *heeft* de meneer een sigaret gerookt

Since these >V2 responses are close to zero in the Turkish data, no such pattern was found for the Turkish learners.

A second observation that can be made from Table 3 is that imitations in which the verb has been moved from second to third position (>V3) also show clear frequency differences between sentences with lexical verbs and sentences containing auxiliaries. As can be seen in the table, this kind of erroneous imitations occurs much more frequently for test sentences with lexical verbs than for test sentences with *hebben*. This is especially true for the Turkish learners who changed 17% of the sentences of the type in (29a) and only 8% of the sentences in (29b):

(29a) Elke dag *rookt* de meneer een sigaret  
> Elke dag de meneer *rookt* een sigaret

(29b) Elke dag *heeft* de meneer een sigaret gerookt  
> Elke dag de meneer *heeft* een sigaret gerookt

One of the strongest findings, however, is that both groups of learners changed sentences containing the negator *niet* before the auxiliary in a majority of cases. The Moroccans repeated such sentences 41% of the time as sentences having post-verbal negation and the Turks did so in 33% of the cases. Sentences bearing pre-verbal negation with lexical verbs remained unchanged, however. Both Moroccans and Turkish produced only one repetition in which *niet* was shifted to a position after the lexical verb. Hence, deviant imitations of the (30a)-type were nearly absent, whereas those of the type in (30b) were abundantly produced.

(30a) De minister *niet* praat over het grote probleem  
> De minister praat *niet* over het grote probleem

(30b) De minister *niet* heeft over het probleem gepraat  
> De minister heeft *niet* over het probleem gepraat

For sentences in which the negator followed the finite verb, the reverse pattern was found. Both Turkish and Moroccan subjects changed these into sentences bearing pre-verbal negation in the case of lexical verbs, but did not do so in the case of auxiliaries.<sup>9</sup> In other words, sentences such as (31a) were quite often produced, whereas sentences such as (31b) were not.

<sup>9</sup> With the exception of one occurrence in one Turkish subject.

- (31a) De minister praat *niet* over het grote probleem  
> De minister *niet* praat over het grote probleem
- (31b) De minister heeft *niet* over het probleem gepraat  
> De minister *niet* heeft over het probleem gepraat

The data show, furthermore, that learners massively left out the auxiliary in their imitations. Especially the Turkish learners produced an enormous number of imitations in which the auxiliary was not repeated. Examples of such imitations are the following:

- (32) De vader en moeder *hebben* de nieuwe broek betaald  
> De vader de moeder *0* een nieuwe broek betalen
- (33) De burgemeester niet *heeft* op het kantoor gewerkt  
> De burgemeester niet *0* kantoor gewerkt

The examples show that both *hebben* and *heeft* were omitted and that this auxiliary omission concerned grammatical as well as ungrammatical sentences. Some learners showed lots of such auxiliary omissions: they left out the auxiliary in fifteen or sixteen out of the eighteen items that the task contained, including the filler items.

The global picture that arises from the responses by learners in the NO-AUX group, then, is as follows: learners produce >V3-changes more frequently in sentences with lexical verbs than they do in sentences with auxiliaries. For >V2-changes the reverse pattern holds. Furthermore, learners in the NO-AUX group do not make changes that involve pre-verbal negation with auxiliaries but they do >correct< sentences with post-verbal negation and lexical verbs into pre-verbally negated sentences. Again, the opposite pattern is true of sentences with post-verbal negation.

Table 4 presents the responses for learners in the AUX group. Since this learner group consists of Moroccan learners of Dutch only, no data for Turkish learners can be presented here.

Table 4: Responses on the imitation task by learners in the AUX group

AUX	>V3	>V2	>Pre-Neg	>Post-Neg	no aux	no lexV	missing	no change
<b>Original sentences containing lexical verbs</b>								
Mo	-	7	-	4	-	-	-	169
%	-	16%	-	9%	-	-		94%

AUX	>V3	>V2	>Pre-Neg	>Post-Neg	no aux	no lexV	missing	no change
<b>Original sentences containing the auxiliary <i>hebben</i></b>								
Mo	-	16	-	13	1	-	24	126
%	-	41%	-	33%	1%	-	13%	70%

MO=Moroccan learners (n=15)<sup>10</sup>, %= percentage of responses in a given category relative to the total number of items in that category

A comparison between Table 3 and 4 makes clear that learners in the AUX group made fewer changes than did learners in the NO-AUX group. The lower amount of changes in the AUX group might be explained by learners' higher overall proficiency, but as only accuracy analyses were performed, it is difficult to find out at this stage whether or not these learners reacted to the test sentences in a more subtle way, for example in their response times or articulatory force.

The accuracy data yield some clear patterns, however. As can be seen in the above table, learners appeared to produce some types of changes quite frequently, whereas they did never produce certain other changes. First, learners in the AUX group did not produce imitations that involve the placement of the finite verb in third position (>V3). In contrast to what was found in the NO-AUX group, no repetitions were produced in which the finite verb was put behind the temporal adverb and the subject, irrespective of whether the verb was a lexical verb or an auxiliary. Second, no imitations were found in which the negator was placed in pre-verbal position. In sum, learners in the AUX group did not turn grammatical sentences into ungrammatical ones.

They did, however, correct ungrammatical sentences and thereby again showed sensitivity to verb type. Importantly, learners turned out to change sentences with pre-verbal negation into post-verbal negation more frequently in sentences with auxiliaries than in sentences with lexical verbs. A similar pattern was found for changes of the >V2-type, which turned out to be much more frequent for sentences containing auxiliaries than for sentences containing lexical verbs. In sum, only changes as in (34) and (35) occurred, and (34b) and (35b) were produced more frequently than (34a) and (35a).

(34a) Elke dag de meneer *rookt* een sigaret  
> Elke dag *rookt* de oude meneer *rookt* een sigaret

(34b) Elke dag de meneer *heeft* een sigaret *gerookt*  
> Elke dag *heeft* de meneer een sigaret *gerookt*

<sup>10</sup> The number of learners in the AUX group is fifteen, and not sixteen, here, since the learner who appeared to have a very unstable use of *hebben* (see previous section) was left aside.

- (35a) De minister *niet* praat over het grote probleem  
 > De minister praat *niet* over het grote probleem
- (35b) De minister niet *heeft* over het probleem gepraat  
 > De minister *heeft* niet over het probleem gepraat

All in all, the global picture that emerges from the data by the AUX group can be described as follows. The learners in this group merely produced changes that led to V2 or post-verbal negation. They produced such changes more frequently when the sentences that had to be imitated contained auxiliaries than when these sentences had lexical verbs. Finally, apart from one exception<sup>11</sup>, no responses with omitted auxiliaries were found.

At the beginning of this section, the question was asked: Do imitation data on topicalization and negation follow the same patterns found in the production data, and if not, where do they diverge? The answer to the question seems to be <yes, but...>. Both groups of learners show the same patterns in their imitation data as they did in production. That is, the AUX group only makes changes that result in V2 or post-verbal negation, while the NO-AUX group merely makes changes resulting in V3 and post-verbal negation. This is in line with both the production data for these learners presented in the previous section and data from learners studied elsewhere. Importantly, however, learners in the NO-AUX group showed different preferences when sentences contained the auxiliary *hebben*. In these items, both Turks and Moroccans made a large number of changes that resulted in post-verbal negation and the Moroccans even changed V3-sentences into V2-sentences. Thus, the imitation data showed that these learners were sensitive to the position of the finite verb and the negator in sentences that contained an auxiliary, even though they were not able to produce auxiliaries themselves.

Before concluding this section, it is worth noting that some subjects showed types of imitations that have not been discussed thus far. Since these imitations may provide information about learners' sensitivity to constraints on the position of the finite verb or negation, they are briefly presented here. First, some Turkish learners in the NO-AUX group imitated sentences containing auxiliaries in a special manner. In these imitations the auxiliary was not repeated, but its slot was filled with a lexical verb that also appeared in the past participle-slot at the end of the sentence. Examples of such imitations are given in (36) to (38):

- (36) Die meisjes niet *hebben* op het strand *gelopen*  
 > De meisjes niet *lopen* op straat *gelopen*

<sup>11</sup> This imitation involved the repetition of an ungrammatical sentence with *niet* occurring before the lexical verb. As there is laughing immediately after the response, it seems that the learner was aware of the ungrammaticality of the sentence, and deliberately changed it into a better version.

- (37) Altijd die vrouw *heeft* mooie boeken in de trein *gelezen*  
> Altijd die vrouw *lezen* in de trein *gelezen*
- (38) Elke dag de meneer *heeft* een sigaret *gerookt*  
> Elke dag meneer *roken* de sigaret *gerookt*

These imitations were only produced by Turkish learners, who left out the auxiliary in all or most of the remaining sentences. On some occasions, the Turks also left out the lexical verb in test sentences containing lexical verbs only, which resulted in the following verb-less utterances:

- (39) De mensen *sturen* brieven naar de koningin  
> De mensen *0* brieven naar de koningin
- (40) De man *geeft* een mooi cadeau aan de directeur  
> De man *0* mooi cadeau aan de directeur

Although the Moroccan learners also omitted the auxiliary *hebben* quite frequently, they did not produce imitations with two instances of the same lexical verb or no lexical verb at all. The Moroccan learners in the NO-AUX group produced imitations in which the auxiliary *hebben* or *heeft* was replaced by some light verb, however. This is illustrated by the following imitations that contain a modal, light verb, and *is*, respectively.

- (41) De vader en moeder *hebben* de nieuwe broek betaald  
> De vader en moeder *moet* de broek betaald
- (42) De meisjes *hebben* niet op het strand gelopen  
> Die meisjes *gaan* niet naar de strand geloop
- (43) De mensen *hebben* brieven naar de koning gestuurd  
> Die mensen *is* sturen veel brief in de koning

The fact that both the Turkish and the Moroccan learners frequently left out the auxiliary in their imitations can be partly explained by the fact that this auxiliary does not have a proper lexical meaning. According to Van Patten (2002), there are several principles according to which L2 learners process the input. One of these principles states that ›learners process input for meaning before they process it for form‹. More specifically, the principle holds that ›learners prefer processing lexical items before grammatical items for the same semantic information‹ (VanPatten 2002, p. 757). The result that the learners in the NO-AUX group tend to omit the auxiliary but leave in the lexical verb is in line with this principle.

The above data show however, that the Turks leave out the auxiliary much more often than do the Moroccans. One of the factors that may provide an explanation for this difference is word order in the learners' native languages. Turkish is a rather rigid SOV language, where the verb appears sentence-finally, whereas Moroccan Arabic has either SVO or VSO word order. Various studies

(Van Patten 2003, Ellis 2003, MacWhinney, 2001) have shown that learners rely on native language cues in processing a second language. This reliance on L1-cues might explain, then, why the Turks showed a higher amount of auxiliary omissions than the Moroccans. Using an L1-based strategy, they expected the verb to appear in final position and consequently, they experienced processing difficulties with the auxiliary in second position (or third position in the case of the ungrammatical test sentences). The fact that the Turks sometimes left out the lexical verb in sentences without the auxiliary *hebben* can also be explained along these lines.<sup>12</sup> Because of similar word order patterns in their native language, Moroccans were more tuned into the right position of the finite verb, and had fewer difficulties processing it.

### 5. Conclusion and discussion

The data from the production tasks showed that Moroccan and Turkish learners of Dutch, who did not use the auxiliary *hebben* did not make use of topicalization and mainly produced pre-verbal negation with lexical verbs. Moroccan and Turkish learners, who used the auxiliary *hebben*, on the contrary, turned out to produce topicalization and used post-verbal negation with lexical verbs. The data from the imitation task yielded the same differences between both groups of learners for sentences containing lexical verbs. Interestingly, however, no such differences were found for sentences containing the auxiliary *hebben*. These *hebben*-sentences were changed from V3 into V2 and from pre-verbal negation into post-verbal negation by all learners. Thus, learners who were not able to produce the auxiliary *hebben* in the production tasks did show a certain sensitivity to finiteness-related properties when the verb was an auxiliary.

With respect to production, the data showed that all learners but one in the AUX group produced topicalizations and none of the learners in the NO-AUX group did. The topicalizations that were produced constituted a restricted set of all possible topicalizations, however. Most utterances had a connective in first position or the first position was empty, and some instances of fronted place or time adverbials and a single case of a fronted object were found. The question that may be raised, then, is whether the massive use of connectives and the lack of fronted objects is due to task properties or reflects learners' abilities to produce topicalized structures. It is well conceivable that the high frequency of connectives such as *dan en toen* in the data is inherent to the narrative nature of the production tasks. Nevertheless, it cannot be excluded that utterances

<sup>12</sup> The reason why there are no Turks in the AUX group is that no Turks could be found who produced the auxiliary *hebben*. The finding that this auxiliary is hard to notice for these learners may at least partly explain why it was so difficult to find these learners.



with connectives are among the first constructions in which the subject follows the verb that appear in learner data. In order to find out whether this is true or whether the data in the current experiment are colored by task properties, a look at the ESF-data was taken. All utterances with the subject following the verb in the free conversation data of two Moroccan learners were extracted.

Both learners start out with the constructions that were produced by the learners in the current study. The learners HK and MK start to produce the auxiliary *hebben* in conversation 2.1 and 2.2, respectively. The following utterances with the subject in post-verbal position were found in these transcripts:

- |      |                 |       |     |                   |           |
|------|-----------------|-------|-----|-------------------|-----------|
| (44) |                 | Moet  | je  | wachten zes maand |           |
|      |                 | ›Must | you | wait six month‹   | (MK, 2.2) |
| (45) | Dan             | gaan  | we  | samen             |           |
|      | ›Then           | go    | we  | together‹         | (HK, 2.1) |
| (46) | Maar in marokko | kun   | je  | werk zoeken       | (HK, 2.2) |
|      | ›But in morocco | can   | you | job seek‹         |           |
| (47) | In juli         | heb   | jij | vakantie          | (HK, 2.2) |
|      | ›In juli        | have  | you | holiday‹          |           |

These examples are representative of the other utterances at this stage in that the first position remains empty or is filled with a connective (*maar, toen, dan, or en*), place adverbial or time adverbial. Utterances in which the object is placed in first position and the subject follows appear to be absent at this stage. The first structures with topicalized objects were attested in the conversations 2.8 for HK and 3.2 for MK.

- |      |              |      |     |                    |           |
|------|--------------|------|-----|--------------------|-----------|
| (48) | Die          | heb  | ik  | verteld aan Hassan | (MK, 3.2) |
|      | ›That        | have | I   | told to Hassan‹    |           |
| (49) | Dat arabisch | ken  | je  | niet schrijven     | (HK, 2.8) |
|      | ›That arabic | can  | you | not write‹         |           |

It turns out, then, that MK and HK show a time interval of nine and seven months, respectively, between their first use of topicalizations with connectives and adverbials and their first production of topicalized objects.

The question that can be raised is why learners do not topicalize all possible elements from the start. As was outlined in section 2.1, Jordens (2005, this volume) proposes that *hebben* in combination with a pronoun serves as a topicalization device that enables learners to exploit the first position for (non-subject) topics. Within this view, it does not become entirely clear, however, why learners do not show topicalized objects from the very first instance of *hebben* on.

A slightly different view on the relation between *hebben* and topicalization is implied by Jordens/Dimroth's claim that the acquisition of *hebben* enables the learner to establish an agreement relation between the verb and the subject. That is, by virtue of the agreement marking on the verb, the agent of an action need

no longer occur in first position, as was the case at the conceptual ordering stage (or Basic Variety-stage, cf. Klein/Perdue 1997). Since the agreement marking signals the relation between the agent and the verb, the agent need no longer be marked by its placement in first position, but may occur behind the verb. Hence, the first position becomes available for other material than the agent. According to this view, it is not the combination of *hebben* + pronoun, but rather the mere forms of *heb*, *hebt*, *heeft* and *hebben* that enable the learner to place the agent behind the finite verb. The fact that *hebben* has a suppletive verbal paradigm may contribute to this restructuring process since these verb forms may help drawing the learners' attention to the morphological marking. However, this argument is only true for agents and learners would have to generalize it to verbs other than action verbs. In addition, it does still not explain why the topicalization of objects is relatively late. Hence, the question of why learners initially do not topicalize objects remains unanswered.

Some support for the establishment of an agreement relation between the verb and the subject as the crucial factor can be found, however, and comes from the *is*-pattern described in section 4.4.1. One of the findings outlined in this section was that learners producing the *is*-pattern did not behave differently with respect to topicalization and negation from learners not exhibiting this pattern. Neither of the two groups produced topicalizations or post-verbal negation with lexical verbs, while nearly all learners producing *hebben* did so. Moreover, in the imitation task no differences were found between learners producing the *is*-pattern and learners who did not produce any auxiliary or auxiliary-like elements such as *is*. Although the *is*-pattern closely resembles the *hebben* + past participle construction, there is one major difference between the two constructions, i.e., the form of the first element. Whereas *hebben* appears as *heb*, *hebt*, *heeft* and *hebben* in the learner data, there is just one single form in which *is* occurs. It seems then, that, unlike the different forms of *hebben*, *is* does not help the learner to become aware of the subject-verb agreement relation. The fact that *is* is a fixed form is illustrated by (50) and (51) where *is* is used in utterances with more than one referent:

- |      |              |    |                |
|------|--------------|----|----------------|
| (50) | Twee jongens | is | spelen         |
|      | ›Two boys    | is | play‹          |
| (51) | Zij          | is | samen gaat     |
|      | ›They        | is | together goes‹ |

The finding that *is* does not seem to serve the same restructuring role as *hebben*, suggests that the crucial role of *hebben* is the result of its lexical emptiness as well as the acquisition of its suppletive paradigm. In contrast to the element *is* in the ›*is* + lexical verb‹ construction, *hebben* makes learners aware of the subject-verb agreement relation and thereby, enables them to acquire syntactic correlates of finiteness such as topicalization and post-verbal negation.

The fact that so many learners resort to the use of *is*, leads to the question what exactly *is* contributes. What does it add to the learners' system? Future

research could concentrate on this question by looking into both production and perception. It could also focus on learners' transition from the use of one light verb to the other, and the possible restructurings that hinge on the use of the various light verbs and auxiliaries. A further issue that seems worth investigating is how learners, who do not topicalize objects, behave in comprehension experiments testing their comprehensive knowledge of such structures. Finally, future studies might shed light on a possible fourth stage within the stage-modal by Jordens/Dimroth. One of the questions that might be raised, then, is how and when learners learn to overcome structures in which two elements are placed before the finite verb, such as *dan misschien kan ik dromen* 'then maybe can I dream' (HK, 3.2). The fact that this process can take years shows that the acquisition of *hebben* may be a crucial step but by no means the ultimate step in acquisition.

### *Summary*

#### *The Role of the Auxiliary Hebben in Dutch as a Second Language*

The acquisition of non-modal auxiliaries has been assumed to constitute an important step in the acquisition of finiteness in Germanic languages (cf. Jordens/Dimroth 2005, Jordens 2004, Becker 2005). This paper focuses on the role of the auxiliary *hebben* (›to have‹) in the acquisition of Dutch as a second language. More specifically, it investigates whether learners' production of *hebben* is related to their acquisition of two phenomena commonly associated with finiteness, i.e., topicalization and negation. Data are presented from 16 Turkish and 36 Moroccan learners of Dutch who participated in an experiment involving production and imitation tasks.

The production data suggest that learners use topicalization and post-verbal negation only after they have learned to produce the auxiliary *hebben*. The results from the imitation task indicate, that learners are more sensitive to topicalization and post-verbal negation in sentences with *hebben* than in sentences with lexical verbs. Interestingly this holds also for learners that did not show productive command of *hebben* in the production tasks.

Thus, in general, the results of the experiment provide support for the idea that non-modal auxiliaries are crucial in the acquisition of (certain properties of) finiteness.

### *Zusammenfassung*

#### *Die Rolle des Hilfsverbs ›haben‹ im Niederländischen als Zweitsprache*

In der Literatur zum Erwerb der Finitheit in germanischen Sprachen (vgl. Jordens/Dimroth 2005, Jordens 2004, Becker 2005) wird das Auftreten von Auxiliarverben als ein besonders wichtiger Schritt in Richtung Zielsprache angesehen. Der vorliegende Beitrag konzentriert sich auf die Rolle des Auxiliars *hebben* (›haben‹) im Erwerb des Niederländischen als Zweitsprache. Es wird untersucht, ob der Erwerb von *hebben* mit dem Erwerb zweier Phänomene korreliert, die oft mit Finitheit assoziiert werden: Inversion und Negation. Dazu wurden Daten von 16 türkischen und 36 marokkanischen Lernern

des Niederländischen ausgewertet, die an einem Produktions- und Imitations-Experiment teilnahmen.

Die Ergebnisse des Produktionsexperiments belegen, dass nur solche Lerner Inversion und die zielsprachliche postverbale Stellung der Negation produzieren, die auch das Auxiliär *hebben* erworben haben. Die Ergebnisse des Imitationsexperiments zeigen hingegen, dass alle Lerner, d.h. auch solche, die das Auxiliär noch nicht selbst produzieren, für Inversion und postverbale Negation sensibler sind, wenn sie diese Eigenschaften in Sätzen antreffen, die das Auxiliär *hebben* anstelle eines finiten lexikalischen Verbs enthalten.

Die Ergebnisse deuten darauf hin, dass nicht-modale Auxiliäre bereits eine entscheidende Rolle für den Erwerb von Finitheitseigenschaften spielen, bevor Lerner produktiven Gebrauch von ihnen machen können.

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