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THE SCOPE OF ADDITIVE PARTICLES IN BASIC LEARNER LANGUAGES

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Based on their longitudinal analysis of the acquisition of Dutch, English, French, and German, Klein and Perdue (1997) described a "basic learner variety" as valid cross-linguistically and comprising a limited number of shared syntactic patterns interacting with two types of constraints: (a) semantic—the NP whose referent has highest control comes first, and (b) pragmatic—the focus expression is in final position. These authors hypothesized that "the topic-focus structure also plays an important role in some other respects. . . . Thus, negation and (other) scope particles occur at the topic-focus boundary" (p. 318). This poses the problem of the interaction between the core organizational principles of the basic variety and optional items such as negative particles and scope particles, which semantically affect the whole or part of the utterance in which they occur. In this article, we test the validity of these authors' hypothesis for the acquisition of the additive scope particle *also* (and its translation equivalents). Our analysis is based on the European Science Foundation (ESF) data originally used to define the basic variety, but we also included some more advanced learner data from the same database. In doing so, we refer to the analyses of Dimroth and Klein (1996), which concern the interaction between scope particles and the part of the utterance they affect, and we make a distinction between maximal scope—that which is potentially affected by the particle—and the actual scope of a particle in relation to an utterance in a given discourse context.

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In this paper we present the results of a cross-linguistic study of the role of scope phenomena in untutored second language acquisition—that is, how adult learners in different source and target language settings acquire the means to express which part of an utterance is semantically affected by scope-bearing elements such as scope particles or negation. Instead of looking at the acquisition process from the first occurrence of scope-bearing elements to a more or less targetlike use, we will focus on the development of scope-related rules around one comparable and well-described stage of natural second language acquisition that all learners seem to pass through, irrespective of the source and target languages involved: the so-called basic variety (BV).

Klein and Perdue (1997) defined the BV as a minimal system that is characterized by a small number of syntactic patterns, the use of which is regulated by a semantic principle (the NP whose referent has highest control comes first) and a pragmatic principle (the focus expression is in final position) that is based on information structure and is largely dependent on the type of discourse. Perhaps the most important structural property of the BV is its nonfinite utterance organization. BV utterances lack not only functional verbal inflection but also some of the structuring force of finite verbs. This may have advantages for the study of scope phenomena. To convey meaning, these nonfinite utterances have to rely heavily on a somehow universal display of information structure that is partly hidden by the finite utterance organization of full-fledged languages.

Klein and Perdue (1997, p. 333) explicitly mentioned that "there are some aspects of the basic variety which have not been investigated so far. The most important of these concern scope phenomena." The aim of the present study is to shed light on this specific aspect of the BV, but we will equally point to the influence that a development toward a finite utterance organization beyond the BV level might have on the functioning of scope-bearing elements. Our analysis concentrates on the acquisition of the additive scope particle *also* in French (*aussi*), German (*auch*), and Dutch (*ook*) as target languages. The limitation on a detailed observation of this additive scope particle stems from the following reasons:

1. These particles appear relatively early (in comparison to scalar particles like *even* and its equivalents).
2. These particles are relatively frequent (in comparison to restrictive particles like *only* and its equivalents).
3. The form-function relation is relatively simple and comparable in the target languages considered here. There is one basic form in the spoken varieties of French (*aussi*), Dutch (*ook*), and German (*auch*), and this basic form is the only one attested at or near the BV level.[1]

In view of the presence of elements such as quantifiers, negation particles, or scope particles,[2] Klein and Perdue (1997) put forth the following hypothesis:

> Among the few closed-class items of the BV, we normally find some element to express negation, some quantifiers, and some focus particles

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> (such as *also, only,* and their equivalents). Preliminary studies . . . indicate that they tend to precede the part of the utterance over which they have scope. But these are very first observations, and the problem awaits further investigation. (p. 333)

Klein and Perdue (p. 318) further observed that "negation and other scope particles occur at the topic-focus boundary." Summing up these observations, we consider the following statement as the initial hypothesis for our study of the functioning of additive scope particles at or near the BV level: The placement of these particles depends to a certain extent on the topic-focus structure of the utterances and on the position of the element(s) over which they have scope. In more concrete terms, with respect to the position of scope particles, this hypothesis predicts that scope particles are to be located between topic and focus; that is, they are most likely to occur at the interior of utterances or in an initial position, given that topical elements often tend to be left implicit.[3] With respect to the scope of these elements, the initial hypothesis predicts that scope is to the right and affects the adjacent part of the utterance. Thus, position indicates which part of the utterance is to be affected by the particle, and its scope can be described as "adjacent and to the right."

In what follows we will test this hypothesis. To do so, we examine the behavior of additive scope particles in a set of data from the ESF project (cf. Perdue, 1993) containing the data originally used to define the BV[4] and some data that show traces of the transition to a more advanced post-BV level.

This paper is organized as follows: We first present our database and frame of analysis for scope phenomena and then show the main results of our analysis. After a short summary, we discuss the impact of our findings for the initial hypothesis and conclude with some more general reflections concerning the functioning of scope particles and other scope-bearing elements in the BV and beyond.

DATA

Our database consists of narrative discourses by native speakers of Spanish (3 subjects) and Arabic (3) acquiring French, native speakers of Arabic (4) and Turkish (3) acquiring Dutch, and native speakers of Turkish (1) and Italian (3) acquiring German.[5] The fact that the variants of the English additive particle (*also, too, as well*) are nearly absent from the data[6] forced us to disregard the English part of the ESF corpus. We will, however, refer to remarks regarding these particles in other studies (e.g., Benazzo, 1999). The structure of the chosen part of the corpus is shown in Figure 1.

With the aim of providing a cross-linguistic picture of additive scope particles around the BV level, we have restricted ourselves to the analysis of one comparable type of discourse—the oral retelling of the movie *Charlie Chaplin: Modern Times*. This type of data has several advantages for our study: The narrative and monologic character of this type of discourse forces speakers to use particles in more complete and situation-independent utterances (in

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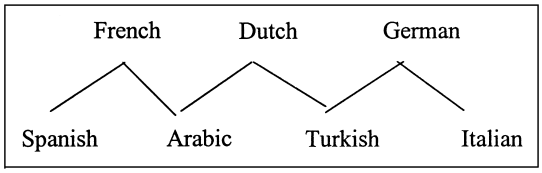


Figure 1. Structure of the corpus. The available data for the acquisition of German by native speakers of Turkish in the ESF database consist of relatively advanced learners. We included only the most basic learner; his variety allows not only cross-linguistic comparisons with the other learners, but also some remarks concerning development beyond the BV level.

Table 1. Recordings and occurrences of scope particles taken into account for each source and target language pair

	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ
Recordings	7	8	7	4	3	7	35
Occurrences	6	13	22	26	25*	12	104

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.
*In order to represent more clearly the basic stage of acquisition in this somehow more advanced Turkish learner of German, we decided to consider all occurrences of *auch* in the first cycle of recordings. Three of the 25 occurrences do not stem from film retellings.

comparison to elliptic structures like *me too* that are frequently attested in dialogue interactions). In our data, scope particles thus usually occur in coherent contexts instead of isolated utterances and, because we are dealing with film retellings, it is clear what the relevant discourse referents and situations are—a prerequisite for the analysis of information structure that is crucial to our approach.

With the exception of the learners of Dutch (only two recordings), all learners performed the same type of film retelling three times in three cycles of data collection. We included the number of recordings and occurrences of the scope particles *aussi, auch,* and *ook* shown in Table 1.

FRAME OF ANALYSIS FOR SCOPE PHENOMENA

Although the more theoretical literature reveals the current debate on scope-related questions,[7] it seems to be generally accepted that in order to explain the functioning of scope particles one must at least distinguish the following points:

1. The *basic meaning* of scope particles: This meaning can be spelled out in terms of the special relation that their application creates between the ele-

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ments of a set of alternatives. This can be seen in (1), where the meaning contribution of the additive particle *too* lies in the additive relation between the elements of the relevant set of alternatives[8] {Peter, Paul, Mary}.

(1) Peter and Paul live in Paris.
[Mary] lives in Paris, too.

2. The *domain of application:*[9] This refers to the part of the utterance directly affected by the basic meaning of the scope particle, thus [Mary] in (1). With the application of an additive scope particle, an additive relation between its referent and other elements of a set of alternatives is established. The shape of the domain of application and the set of alternatives depends to a certain extent on the information structure of the utterance in context.

3. The structural relation between the domain of application and the position of the particle: It is this relation that we will call *scope*.[10] Scope is thus a relational term defined with respect to two criteria: direction (right, left[11]) and distance (distance vs. adjacency). In (1) the particle is situated in a distant position with respect to its domain of application and its scope extends to the left.

4. The potential or maximal scope that hinges on certain positions of scope particles: This is understood as a syntactic phenomenon in the target languages (thus the term *syntactic domain*[12]), but one must speak with caution about the syntactic domain in learner languages. Identifying the maximal scope of a scope particle in a certain syntactic position requires empirical analysis. The results of this study, rather than providing an a priori definable criterion for analysis, will allow us to define the potential or maximal scope going along with some of the structural positions (we will return to this issue in our conclusion).

Our analysis of scope phenomena around the BV level consists of two independent steps that are taken together to define the relation called *scope*. We will first determine the positions of scope particles attested in the relatively simple phrasal patterns found in the learner data and then establish the domain of application with the help of a detailed context analysis alone. This context analysis aims to establish the relevant set of alternatives between the elements of which an additive relation holds. The particle's domain of application is thus determined without regard for the implications that the particle's position could eventually have, because it is all too easy to take target language implications to be valid in learner varieties. Once the syntactic position of the particle and its domain of application are established without relying on the former to determine the latter, the scope relation between the two can be described in terms of direction and distance.

RESULTS

In what follows, we will present the basic findings of our analysis in five interrelated categories (organized by section): basic phrasal patterns, positions of particles with respect to topic-focus structure, domains of application, scope

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Figure 2. Maximal basic phrasal pattern of the BV utterances.



Figure 3. Positions of additive scope particles *A*–*E* in the basic phrasal pattern.

relations, and structural scope markers. This will be followed by a short summary.

Basic Phrasal Patterns

For all source and target language combinations, the maximal basic phrasal pattern underlying the resulting BV utterances containing scope particles consists of the entities in Figure 2. In the majority of utterances, the elements marked by curly brackets (initial adverbials, initial or final prepositional phrases) are optional. Thus the core structure of the basic phrasal patterns attested in the data is NP1-V-NP2, where NP1 can be a noun or a pronoun, V is a nonfinite verb,[13] and NP2 contains a full noun. But even parts of this core structure can be absent (mostly NP1 or NP2, although in the Dutch and the German data even the omission of V is rather frequent, a point to which we will return shortly).

As mentioned before, in some of the recordings included in our sample, verbs begin to be marked for finiteness. Because there is no clear-cut limit between nonfinite and finite utterance organization, we will discuss the possible impact of this development where it occurs. Furthermore, in the data of the more advanced learner of German we sometimes find final verbal elements at the position behind NP2. The relevant utterances mainly contain a modal verb in the core part of the phrasal pattern and a lexical verb in final position. Particles occurring after such final verbal elements are not attested.

Positions of Particles and Topic-Focus Structure

In the basic phrasal pattern introduced in the preceding section, additive scope particles occur in the positions classified as *A*–*E* in Figure 3. *A* is defined as the position before NP1, regardless of the existence of an initial adverbial or prepositional phrase. *B* follows NP1, *C* follows V, *D* follows NP2, and *E* follows a final prepositional phrase, if one is present. Examples (2)–(6)[14] illus-

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trate the positions *A–E;* the part that corresponds to the particle's domain of application in these examples is underlined.[15] (In the examples, L1 and L2 of the learners is indicated by L1 > L2; IT = Italian, GE = German, TU = Turkish, DU = Dutch, AR = Arabic, FR = French; *cycle* refers to three successive cycles of data collection in which most of the tasks [including the film retellings] were repeated [see also note 5].)

(2) Angelina, IT > GE, cycle 1, position *A*:
und de mädch sage in de mann
and the girl say in the man
auch ich habe eine haus sehr schön
also I have a house very nice
"And the girl says to the man I also have a very nice house."

(3) Mahmut, TU > DU, cycle 3, position *B*:
die meisje daar grond (. . .) zitten
the girl there ground sit
politie ook bijkomen
police also arrive
"The girl sits there on the ground, the police also arrive."

(4) Ilhami, TU > GE, cycle 3, position *C*:
und kommte zwei jungen (. . .)
and came two boys
und die sagten
and they said
wir brauchen auch was
we need also something
"And two boys came and they said, 'We also need something.'"

(5) Hassan, AR > DU, cycle 2, position *D*:
hij bint auto (. . .) binnen
he was car in
die politie pakt die meisje ook
the police grab the girl also
"He was in the car, the police grabbed the girl also."

(6) Abdelssamad, AR > FR, cycle 1, position *E*:
/i rātrɛ/ *dans le bureau tabac* /i domāde/ *cigarettes chocolat tout*
he enter the kiosk he ask-for cigarettes chocolate everything
/jāna/ *deux, deux petits là-bas aussi*
there-be two two small (boys) down-there also
"He enters the kiosk, he asks for cigarettes, chocolate, everything. There are two small boys there also."

To test the validity of the position part of our initial hypothesis, Table 2 presents the overall frequency of additive scope particles in the different positions. At first glance, the frequency of initial (*A*) and utterance-interior positions (at least *B* and the majority of *C*[16]) seems to confirm the position part of the hypothesis proposed by Klein and Perdue (1997, p. 318) because we felt that their claim "focus particles occur at the topic-focus boundary" would predict initial or utterance-interior positions. But a closer look at the information

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Table 2. Frequency of occurrences in positions *A–E* for each source and target language pair

	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ
A	0	0	5	0	0	4	9
B	1	7	11	20	3	2	44
C	1	3	1	1	13	6	25
D	2	1	4	4	9	0	20
E	2	2	1	1	0	0	6
Σ	6	13	22	26	25	12	104

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.

structure shows that, although they are predominantly situated at the predicted positions, these scope particles do not necessarily find themselves between the topic and focus components of the relevant utterances.

Our analysis of the topic-focus structure has been carried out on the basis of the "quaestio model" (Klein & von Stutterheim, 1991), an adaptation of the well-known question test designed to capture the characteristics of the information structure of a whole discourse. In the case of a narrative, the quaestio answered by the discourse is generally assumed to be "What happens next?," which leads to reference to time in the topic component and reference to entities and events in the focus component of the answering utterances. A variant applies for narratives with predefined protagonists in which the quaestio can be formulated as "What happens next to *P*?" and reference to time and protagonists is put in the topic component, whereas the focus component consists of reference to events only. For the film retellings that constitute the database for the present study, both variants of the quaestio seem to be relevant. There are some characters with a clear protagonist status, namely Charlie Chaplin and a young girl, first going through separate adventures and then experiencing things together. But there are several other people, too.

The distribution of information mentioned before is of course only found in utterances that directly answer the discourse quaestio (i.e., the main structure of the text). Utterances that do not provide a direct answer to the quaestio, and thus do not push forward the main story line, belong to the side structure, and their information structure has to be analyzed by means of an individual reconstruction of the question they answer. Before giving an overview of the results, we will illustrate this with some main-structure examples from the different source and target language settings in (7)–(11).

(7) Alfonso, SP > FR, cycle 3, (implicit) topic-focus-particle:
/il vole/ *encore* (. . .) *cigarette*
he steal also cigarette
y *après* /pasen/ *dos* *enfants*
and after pass two children
$[\varnothing]_T$ [*y* *le* /donen/ *de,* *des* *gâteaux*]$_F$ *aussi*
and them give some some cookies also

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"He (Charlie) also steals a cigarette, and after, two children pass and he gives them some cookies also."

(8) Ilhami, TU > GE, cycle 3, topic-focus component (including particle):
sagte die frau der vom geschäftmann bescheid (. . .)
told the woman the from shop man
und kommt der mann raus
and come the man out
[*dann*]$_T$ [*laufen die zwei auch mit*]$_F$
then run the two also with
"The woman called the shop owner and he comes out, then the two of them start running, too."

(9) Hassan, AR > DU, cycle 3, particle-topic-focus:
hij van die deur binnen was tegen die hout
he of the door inside was against the wood
de deur open
the door open
en dan op de tafel
and then on the table
ook [*de tafel*]$_T$ [*kapot*]$_F$
also the table broken
"When he was passing the door, he was hit by a piece of wood, then he opens the door (?) and approaches the table, but the table is broken, too."

(10) Abdelssamad, AR > FR, cycle 3, topic-particle-focus:
/i rogarde/ *une manifestation*
he watch a demonstration
[*Charlot*]$_T$ *aussi* [/le prã/ *une drapeau devant la manifestation*]$_F$
Charlie also it take a flag in-front-of the demonstration
"He (Charlie) watches a demonstration. Charlie also takes a flag in front of the demonstration."

(11) Osman, TU > DU, cycle 2, topic-particle:
politie is nied dood (. . .)
police be not dead
bewusteloos ja
unconscious yes
en [*meisje*]$_T$ *ook*
and girl also
"The policeman is not dead, but unconscious, and the girl, too."

The results of this information-structure-based analysis for the different source and target language pairs are displayed in Table 3. In the occurrences displayed in the rows "(T)-P-F" and "T-P," the particles are placed between the topic and focus components of the utterances. In "(T)-P-F" we included utterances with an implicit topic component (the particle is then situated in initial position). We equally took structures of the type "T-P" (only attested with contrastive topics as in example [11]) to confirm the Klein and Perdue (1997) hypothesis. Even without considering the TU > GE data that is partly beyond the BV level, 56% of all occurrences fail to support the part of the initial hypothesis that refers to the position of scope particles with respect to the topic-focus structure of the utterances. We admit that this result has to be interpreted with caution, given that additive scope particles tend to occur in utterances that be-

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Table 3. Positions of particles (P) with respect to topic (T)* and focus (F) for each source and target language pair

	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ
(T)-F-P	5	5	3	3	1	0	17
(T)-[F-P]†	0	3	7	10	22	7	49
P-T-F	0	0	1	0	0	1	2
(T)-P-F	1	3	8	11	2	4	29
T-P	0	2	3	2	0	0	7
Σ	6	13	22	26	25	12	104

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.
*Where T (= topic) is in parentheses (T), structures with implicit topic components are included.
†In these cases, the particle is contained in the focus expression.

long to the side structure of narrative discourse. This implies an utterance-wise reconstruction of the underlying information structure that might be considered less reliable than the quaestio-based analysis for main structure utterances.

The fact that the information-structure-related part of the initial hypothesis could not be confirmed does not mean that functioning of scope-bearing elements should be regarded as completely independent from topic-focus structure—it is only the position part of the initial hypothesis with respect to topic-focus structure that is disconfirmed by the behavior of additive particles in the type of narrative discourse considered here. The domain of application (and that is in fact what is probably meant by the Klein & Perdue [1997] hypothesis) might still be the focus of the utterance in some cases; the fact is simply that we do not need this concept in the first place to analyze these particles. The role of topic-focus structure comes into play once we have identified the domain of application of additive particles by establishing an additive relation to some part of the context information. At this point (see the following section) we will demonstrate that there are certain differences between topics and (parts of the) focus when functioning as a domain of application, these differences lying mainly in the shape of the set of alternatives (open set vs. closed list) and in the possibility of establishing discourse coherence via both of these options.

Because neither the additive particle's position nor the topic-focus structure of the utterance containing it permits a cross-linguistically valid prediction concerning the domain of application of the relevant particles (see Watorek & Perdue, 1999), we will demonstrate in what follows how context analyses enabled us to detect the part of the utterance that is affected by the particle's additive meaning.

Domains of Application

Because the aim of this study is to discover what learners do to indicate which part of an utterance constitutes the domain of application of additive

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scope particles, the next step was to determine, with the help of a context analysis, which part was in an additive relationship with the elements of an underlying set of alternatives, and what this set looked like. It is only after studying the context that we looked again at the position of the particle. This was to avoid being influenced by the meaning that a certain position would express in the target language as long as we were not sure about the position's impact on the learner variety in question. Without knowledge of the context, it would be impossible to decide if the domain of application of *ook* in the last utterance of (12) is *hij* "he" in addition to other people, or *zo huis* "such a house" in addition to other things.

(12) Abdullah, TU > DU, cycle 2:
daar gaat familie
there go family
komt buiten
come outside
maar die huis heel groot heel duur
but the house very big very expensive
hij wil ook zo huis
he (Charlie) want also such house
"There is a family coming out of their house, the house is very big, very expensive. He (Charlie) also wants such a house."

Context tells us that the set of alternatives in (12) consists of (potential) house owners, the *family* and *Charlie* in more concrete terms. Because the family owns a house, whereas Charlie would simply like to own one, this example shows, furthermore, that the additive relation between the elements of the underlying set of alternatives does not necessarily hold with respect to exactly the same background assumption.

As in example (13), it can also be the context following the occurrence of the scope particle that indicates what the relevant set of alternatives looks like. In (13), contrastive information in the context indicates that the set of alternatives contains reasons for the demonstration, a necessary prerequisite for a reliable delimitation of the domain of application of *aussi*.

(13) Abdelssamad, AR > FR, cycle 1:
alors /jāna/ *manifestation* (. . .) *pour la vie aussi*
so there-be demonstration for the life also
pour /jāna/ *pas travail* /ja/ *rien alors*
for there-be no work there-be nothing so
/i fe/ *manifestation pour la vie, pour le travail, pour tout*
he do demonstration for the life for the work for everything
"So there is a demonstration for life also, for there is no work, nothing, so he demonstrates for life, for work, for everything."

As a result of an overall analysis of additive particles in the three target languages considered here, it turned out that, in the great majority of occurrences, it was one of the NPs that constituted the domain of application of

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Table 4. Frequency of the predominant domains of application for each source and target language pair

	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ
NP1	4	9	15	22	18	8	76
NP2	1	2	4	4	6	4	21
Other	1	2	3	0	1	0	7
Σ	6	13	22	26	25	12	104

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.

the additive particles. This tendency was confirmed by Giacomi, Stoffel, and Véronique (1994), a study on the acquisition of additive particles in L2 French that is based not only on narrative but also on conversational data. The authors found " . . . une relation fréquente entre un noyau nominal et l'unité porteuse de champ *aussi*" [a frequent relation between a nominal domain of application and the scope-bearing element *aussi* "also"] (p. 8).

As shown in Table 4, in our case, the NP functioning as the domain of application for the additive particles under consideration turned out to be predominantly NP1. In spite of the fact that in narrative discourse one would expect the focus part that refers to the event of (main structure) utterances to be a more salient component for the interaction with scope particles, Table 4 shows a clear preference for NP1 as the component of the utterance that constitutes the domain of application of additive particles. These NP1 components most often express referents with a topic status. In the case of a contrastive topic, they seem to be an ideal domain of application for additive particles. Example (14) is a typical case in that both topic protagonists, *Charlie* and *the girl,* are first referred to together, then something is said about *the girl* only and it is stated that this (or, once more, nearly the same thing) does equally hold for *Charlie*.

(14) llhami, TU > GE, cycle 3:
dann gehen die zwei beide hin
then go the two both there
und geht die mädchen rein
and go the girl in
und der Charlie Chaplin wollte auch reingehen
and the Charlie Chaplin wanted also to-go-in
"And then the two both go there and the girl goes in and Charlie Chaplin also wanted to go in."

Even though it is not necessary to know the topic-focus structure of an utterance in order to determine the domain of application of additive scope particles, the fact that the entities referred to in such a domain of application belong either to the topic or to the focus part can reveal something about the type of set of alternatives involved in the interpretation of the additive relation. The sets of alternatives going along with the focus function of utterances

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Table 5. Acquisition of French by native speakers of Spanish

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
B	L	A	1
C	L	D	1
D	L	A	2
E	L	D	2

tend to be relatively open—that is, some of its elements are often known via context—but it is generally difficult to tell if these are all relevant elements. In the case of contrastive topics, on the other hand, it is mostly a question of informationally defined closed lists and the effect of the application of *also* (and its equivalents) is often not a clear addition, but rather the continuation of an enumeration that would otherwise seem to be incomplete. The learners analyzed in the present study use additive scope particles in constructions with both types of elements from early on, but even when the different target languages do so, they do not always formally distinguish between them.

Scope Relations in the Different Source and Target Language Pairs

In the section on our frame of analysis, scope was defined as a structural relation between the position of the particle and its domain of application. In this section we compare the scope behavior of additive particles at different positions in all of the source and target language pairs in our sample. The results for each source and target language pair are presented in Tables 5–10 and then discussed and compared to others.

Spanish > ***French.*** As seen in Table 5, our data from native speakers of Spanish acquiring French show a general preference for scope to the left.

With respect to adjacency, on the contrary, there is a considerable amount of variation in this group of learners. Both of these observations are due to a tendency that seems to be specific to Spanish learners of French; independent of the intended domain of application, these learners place additive particles at the end of the utterance. Note that not only the occurrences in position *E,* but also all the occurrences in the positions *C* and *D,* displayed in Table 5, are in fact utterance final—they occur in utterances where the structural positions for the constituents NP2 or PP, or both, have not been filled. Although the preference for scope to the left follows immediately from the choice of an utterance-final position for the particle, the impact of this position on the distance-versus-adjacency criterion is less clear. There is distance whenever NP1 is the domain of application and adjacency in all other cases.

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(15) Paquita, SP > FR, cycle 3, position *C,* distance:
après /ʒe krwa ke/ *il* / dɔrm/ *en un petit maison de chien*
after I think that he sleep in a little house of dog
/ʒe krwa kil dɔrme/ *aussi*
I think that-he sleep also
"After I think that he sleeps in a little doghouse. I think that he (referring to the girl) sleeps, too."

(16) Alfonso, SP > FR, cycle 3, position *D,* adjacency:
après /pasen/ *dos enfants*
after pass two children
y /le *donen/ des gâteaux aussi*
and them give some cookies also
"Then two children pass, and he gives them some cookies also."

The only nonfinal occurrence of an additive particle in this group of learners is the one in position *B:*

(17) Alfonso, SP > FR, cycle 1:
la fille /no se pa ke/ *dans la voiture*
the girl no know not that in the car
y elle aussi /no se pa keski se pase/
and he also no know not what happened
"The girl doesn't know that he is in the car and he also doesn't know what happened."

This exception might be explained by the fact that, in this case, a final position would mean that domain of application and particle are separated by a sort of pseudo-subordinate clause. A final position within the main clause, on the contrary, would eventually lead to a conflict between the scope of the particle and the scope of negation.

Because they place additive particles as a rule at a fixed position at the end of utterances, Spanish learners of French cannot use the particle's position to mark the intended domain of application. The question of whether these learners use other possible devices to mark the intended scope of these particles is addressed in the section on structural scope markers. For the moment, we can conclude that Spanish learners of French have to rely heavily on information structure when constructing utterances containing the additive scope particle *aussi*.

A study by Benazzo (1999), based on the complete ESF data set of Spanish learners of French, confirms the tendency to put *aussi* in final position for all types of discourse. Benazzo linked this to a general tendency to choose a fixed position, preferably in the initial or final position of utterances, for scope-bearing elements. She explained this phenomenon as dependent on the perception of the input, the two positions at either end of the utterance being the most salient. Given that *aussi* in final position is common in spoken French, one might speak of a target language influence that manifests itself clearly in Spanish learners of French. To determine whether this tendency is shared by other

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Table 6. Acquisition of French by native speakers of Moroccan Arabic

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
B	L	A	7
C	L	D	1
	Inclusion	A	1
D	L	D	1
		A	1
E	L	D	1
		A	1

learners of French as an L2, we will now look at the acquisition of *aussi* by native speakers of Arabic.

Arabic > ***French.*** Table 6 shows that, exactly as the Spanish learners of French, Arabic learners of French seem to prefer scope to the left,[17] but unlike the French learners, there is a clear preference for adjacency (10 out of 13).[18] This scope behavior is, among other things, a consequence of the predominance of position *B* (7 out of 13). As with all other groups of learners, this position is only attested with adjacent scope to the left, as in (18).

(18) Abdelssamad, AR > FR, cycle 3, position *B:*
/i rogarde/ *une manifestation*
he watch a demonstration
Charlot aussi /le prã/ *une drapeau devant la manifestation*
Charlie also it take a flag in-front-of the demonstration
"He (Charlie) watches a demonstration. Charlie also takes a flag in front of the demonstration."

The same scope restriction (adjacent and to the left) characterizes position *D,* as in (19).

(19) Abdelmalek, AR > FR, cycle 2:
Voilà /jãna/ *déjà les femmes*
there there-be already the women
/jãna/ *les voitures aussi*
there-be the cars also
"There, there are already women. There are cars, too."

As we have already shown in the discussion of the Spanish learners of French, the scope of additive particles in position *E* is to the left by definition, but this position allows in principle a choice with respect to the adjacency-versus-distance criterion. Whereas only distance was attested with the Spanish learn-

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Table 7. Acquisition of Dutch by native speakers of Moroccan Arabic

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
A	R	A	5
B	L	A	11
C	L	D	1
D	L	A	4
E	L	D	1

ers, the Arabic learners of French use position *E* with adjacency as well, as example (20) shows.

(20) Abdelssamad, AR > FR, cycle 1:
alors /jāna/ *manifestation (. . .) pour la vie aussi*
so there-be demonstration for the life also
pour /jāna/ *pas travail* /ja/ *rien alors*
for there-be no work there-be nothing so
/i fe/ *manifestation pour la vie pour le travail pour tout*
he do demonstration for the life for the work for everything
"So there is a demonstration for life also, for there is no work, nothing, so he demonstrates for life, for work, for everything."

Our comparison of these two groups of learners (Spanish and Arabic learners of French) can be summarized as follows: Irrespective of the position of the domain of application, the Spanish learners prefer to place *aussi* in a fixed position, which corresponds to the end of the utterance. This gives them scope to the left in nearly all of the cases, whereas the choice of adjacency versus distance varies considerably. In this case, position does not really contribute to the identification of the domain of application. The Arabic learners of French, on the contrary, tend to put *aussi* in a position where it has adjacent scope to the left.[19] That is, with a few exceptions to which we will return in the section on structural scope markers, the position of additive particles as used by this group of learners helps to clearly indicate their domain of application. We will now compare these results to those of native speakers of Arabic acquiring Dutch.

Arabic* > *Dutch. In the data from this group of learners, shown in Table 7, it can be observed once again that scope to the left is predominant (17 out of 22) with additive scope particles. In fact, with the exception of the utterance-initial position *A,* which was completely absent from the French data,[20] and instances in which scope is to the right by definition, these learners' scope is unambiguously to the left with all other positions. An example is provided in

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(21). (Parts of an utterance that were provided by the native interlocutor are marked with parentheses.)

(21) Fatima, AR > DU, cycle 2, position *A*:
naar ander winkel van sigaret
to other shop of cigarette
(kocht) sigaret
buy cigarette
ook twee kinder heeft misschien drop
also two children have perhaps sweet
"(Charlie goes) to another kiosk, buys cigarettes, and he also gives sweets or something like that to two children."

Adjacency is clearly predominant as well (20 out of 22), appearing to be even more important than scope direction.

Position *B* (with scope adjacent to the left), which is absent from the target language,[21] is very frequent. Position *C* (with scope to the left and distance), which is very frequent in the target language, is nearly absent at the BV level. Example (22) contains the only occurrence of position *C* in this group of learners and the choice of this position may be due to the use of a modal (*wil*) and a full verb (*hebt*). The fact that both of these verbs, though not yet in their target position, become separated by the scope particle can be interpreted as a first step to a post-BV-like utterance organization. In the utterance that follows, this learner prefers once again position *B*.

(22) Fatima, AR > DU, cycle 3:
die mens woont daar
the people live there
vrouw met man
woman with man
zij wil ook [C] hebt huis zelf
they[22] want also have house themselves(?)
(en dan tien dagen later . . .)
and then ten days later
nou zij ook [B] heeft huis
now they also have house
"A man and a woman are living there, they (Charlie and the girl) would also like to have a house of their own, and then 10 days later they also have a house."

Our comparison of the acquisition of two target languages by learners of one source language shows that native speakers of Arabic seem to follow a particular strategy when acquiring French and Dutch. They choose a position for the particle that is adjacent with respect to the domain of application and has scope to the left. On the other hand, native speakers of Arabic learning French show a tendency that is absent from the variety of Arabic learners of Dutch, but shared by Spanish learners of French—that of keeping the particle at the end of an utterance irrespective of the position of the domain of application. Both of these tendencies need not exclude each other, of course, as can be seen in example (23):

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Table 8. Acquisition of Dutch by native speakers of Turkish

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
B	L	A	20
C	L	D	1
D	L	A	4
E	L	D	1

(23) Abdelmalek, AR > FR, cycle 2:
voilà /jãna/ *déjà les femmes*
there there-be already the women
/jãna/ *les voitures aussi*
there-be the cars also
"There, there are already women. There are cars, too."

Up to this point, the rules for the use of additive scope particles by the different groups of learners can be summarized as follows: There seems to be a clear picture with respect to scope direction because scope to the right was exclusively attested with position *A,* whereas there was a clear preference for scope to the left with all other positions. Concerning the adjacency-versus-distance criterion, there was more variation. Although adjacency seemed to be the generally preferred pattern, we found several instances of distance going along with the positions *E* and *C*. With *E* it is due to the tendency to put scope particles at the end of the utterance, independent of the location of their domain of application. This is above all found in learners of French, but learners of Dutch equally show some occurrences of the final position *E* with distant scope. Some occurrences of position *C* with distant scope to the left are attested for all groups of learners. They seem to go hand in hand with the occurrence of some traces of a slightly more advanced level and, as we will show later with the German data, there is a growing frequency of this structural position over time. This general picture is confirmed as we now look at the data from native speakers of Turkish acquiring Dutch.

Turkish > ***Dutch.*** Table 8 shows that these learners share a clear preference for scope to the left (100% of cases) and adjacency seems equally to be a general principle (23 out of 25). As mentioned before, only particles in positions *C* and *E* allow for distant scope. The predominance of position *B* attested in the data of Arabic learners of Dutch is even clearer in Turkish learners of Dutch (20 out of 25). As in all other groups of learners, there is a clear scope restriction for this position: Scope is always adjacent to the left. An example is given in (24).

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Table 9. Acquisition of German by native speakers of Turkish

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
B	L	A	3
C	L	D	13
D	L	A	8
		D	1

(24) Mahmut, TU > DU, cycle 2, position *B*:
meisje en man denken
girl and man think
ik ook zo thuis kopen
I also such at-home buy
"The girl and the man (Charlie) think, 'We should also buy such a house.'"

One of the rare distant cases (in position *C*) is once again found in combination with the use of a modal (*wil*) and could be a first trace of obedience to the target language verb-second (V2) rule, and thus of a slightly more advanced level; see (25).

(25) Abdullah, TU > DU, cycle 2, position *C*:
maar de huis heel groot, heel duur
but the house very big very expensive
hij wil ook zo huis
he want also such house
"But the house is very big, very expensive. He also wants such a house."

At this point in our comparison one could wonder why Turkish learners of Dutch (unlike Arabic learners of Dutch) do not stick to position *A* when they want to express that NP1 is affected by the meaning of the additive particles. Other than the preferred position *B, A* conforms to the target language. Our comparison to native speakers of Turkish learning German shows that this group does not use position *A* either.

Turkish* > *German. As Table 9 shows, the overall picture of the scope rules relevant for additive particles in this learner is very similar to that of the Turkish learners of Dutch discussed in the previous section: Position *A* does not occur and scope is always to the left. The difference lies in the reversed frequency of occurrences in the positions *B* and *C,* an issue to which we will return in a moment. The occurrences of *B* are either: (a) without a verb and thus not violating the emerging V2 rule of German, as in (26); or (b) with object topicalization, as in (27), where the targetlike use of a particle in postverbal position would demand even more distance than just skipping the finite

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part of the verb (cf. *und der geschäftsfrau guckt er auch nach* "and he also looks at the cashier").

(26) Ilhami, TU > GE, cycle 1:
der mann auch glücklich
the man also happy

(27) Ilhami, TU > GE, cycle 3:
und gibt er den zettel an
and give he the note to
und guck der polizistin
and look the police
und de geschäftsfrauen auch guckt (er) nach
and the cashier also look (he) at
"And he gives the note to (?) and looks at the police, and he also looks at the cashier."

When comparing this more advanced learner with the more basic learners of the structural-related target language Dutch, one can see a development with respect to the distance-versus-adjacency criterion. Whereas scope to the left seems to remain predominant, there is a growing frequency of distance due to the increase of particles in position *C* in the advanced learner's data that begins to replace position *B,* very frequent in the data of the less advanced learners of Dutch, keeping scope to the left but accepting a distance with respect to the domain of application (mostly NP1), as in (28). This development is related to the growing acceptance of the V2 rule, one of the most basic syntactic rules for declarative sentences in both target languages and temporally linked to the emergence of finiteness marking.

(28) Ilhami, TU > GE, cycle 2:
und sein frau hat seinem mann gesagt
and his wife have her husband told
tschüß
bye
und macht etwas spielen
and do something play
und der Charlie macht auch selbe spiel
and the Charlie do also same play
"And his wife told her husband good-bye, and plays something, and Charlie plays the same thing."

This comparison between learners of Dutch and German at different levels of proficiency thus permits us to point at some longitudinal variation. Whereas positions *B* (for NP1) and *D* (for NP2) with adjacent scope to the left do still exist, *C* with distant scope to the left comes to replace *B* (for NP1). The use or non-use of position *A* (for NP1), on the contrary, seems to be independent of longitudinal development. Most groups of learners do not use this position, but those who do (Arabic learners of Dutch and, as we will show, Italian learners of German) already use it at the very beginning.

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Table 10. Acquisition of German by native speakers of Italian

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Σ
A	R	A	4
B	L	A	2
C	R	A	4
	L	D	2

Italian > German. Compared to the other groups, this group presents a clear difference, as Table 10 indicates: Scope is far more often to the right (8 out of 12). Scope to the right is always correlated to adjacency (this also holds for AR > DU learners, who equally allow scope to the right while restricting it to cases of adjacency). Distance is only possible with scope to the left.

That scope goes to the right is true by definition for the frequently used position *A,* as in (29).

(29) Marcello, IT > GE, cycle 2:
der tisch Charlie so gemacht
the table Charlie so done
und tisch kaputt
and table broken
und auch die tür ist kaputt
and also the door be broken
"Charlie did something with the table, then the table was broken and the door is also broken."

But scope to the right does also show up with position *C,* a case that conforms to the target language but has not been attested with any of the other groups of learners. An example is given in (30).

(30) Tino, IT > GE, cycle 2:
kleine camion
small van
und Charlie Chaplin geht für die gefängnis
and Charlie Chaplin go for the prison
aber in diese moment kommt auch die mädchen
but in this moment come also the girl
"There is a small van that brings Charlie Chaplin to prison, but in that moment the girl also comes."

In this case, the referent of the particle's domain of application is clearly part of the focus information of the relevant utterance. Having recounted a long passage of Charlie Chaplin's story without mentioning the second protagonist (the girl), the girl is now reintroduced. Her arrival in the small van is referred

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to as something that happens from the perspective of Charlie (cf. the verb *come*). In the data of more advanced Italian learners of German, disregarded for the frequency counts of the present study, we find several instances of particles in position *C* with scope to the right referring to exactly this event, as in (31).

(31) Marcello, IT > GE, cycle 3:
Charlie Chaplin und poliziste sind auf dem wagen
Charlie Chaplin and policeman be in the car
so nach diese moment kommt auch die mädchen
so after this moment come also the girl
"Charlie Chaplin and the policeman are in the car. So after this moment the girl also comes."

With comparable frequency, other advanced learners follow another strategy when retelling the same part of the movie. They split the reintroduction of the girl and the information about her being put into the police van into two utterances. The referent of the NP *the girl* in its role as domain of application of an additive particle does thus already belong to the topic information—a setting in which position *C* does occur with scope to the left, as in (32) and (33).

(32) Ilhami, TU > GE, cycle 3:
dann der geht nei
then he enter
die fahren
they drive
und auf der weg dann steht der wagen auf eine straße
and on the way then stand the car on a street
dann geht die andere mädchen (. . .)
then go the other girl
die mädchen kommte auch nei
the girl entered also
"The he enters (the car) and they drive. And on the way the car stops at a street. Then the other girl also comes in."

(33) Ayse, TU > GE, cycle 1, not included in original study:
dann er nimmt Charlie Chaplin ein wagen (. . .)
then he take Charlie Chaplin a car
dann sie haben diese mädchen gefunden
then they have this girl found
dann sie kommt auch in diese auto
then she come also in this car
"Then Charlie Chaplin takes a car, then they found this girl, then she also comes in this car."

Even if it is difficult to figure out why most of the learners seem to avoid the targetlike scope relation *adjacent and to the right* with position *C* (in the case discussed above by means of a rather complicated discourse structure), what can be seen here is that scope direction in advanced learners who use target-

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like wide-scope positions like *C* (both scope directions conform to the target language) crucially depends on topic-focus structure. It is at this point that topic-focus structure, which had been proven to be an invalid predictor of the domain of application's position and extension (see section entitled "Positions of Particles and Topic-Focus Structure"), comes into play again.

Structural Scope Markers

As shown in the preceding sections, the position of an additive scope particle can systematically be used to mark its scope. This is true for maximal scope in many of the target languages analyzed here, but it is also true for actual scope in some of the learner varieties. Native speakers of Arabic learning Dutch and French and native speakers of Turkish learning Dutch show a tendency to put additive particles to the right of the element (usually an NP) over which it has scope. Thus, position contributes to the identification of the domain of application. This is not always the case, however, as one can see in the production of learners of French for whom a fixed position—utterance final—is clearly predominant. The question is, then, do these learners use other structural indices? Or do they rely on context alone? The French data show two types of additional indices used to mark the domain of application by learners who place scope particles in the final position, disregarding the part of the utterance over which they have scope. These indices are:

1. The reduction of arguments: Because NPs seem to be by far the most probable candidates to be affected by the particle, scope assignment is relatively clear if the syntactic frame contains only one such NP argument.
2. Emphasis on the NP in the domain of application: This NP is a full noun or a noun plus a pronominal, as in (34a–b):[23]

(34) a. Alfonso:
la fille la
the girl her
b. Abdelmalek:
Charlie Chaplin /swila/
Charlie Chaplin that-one
c. Abdelssamad:
l'autre fille il
the-other girl she

The acquisition of the structurally related target languages Dutch and German shows further possibilities of structural scope marking.[24] Twenty percent of the learner utterances in Dutch and German do not contain verbal elements. This allows for the maintenance of scope adjacency (apparently the most prominent means of structural scope marking the learners use) without violating the emerging V2 rule at a more advanced stage. This rule excludes position *B* and would thus force particles affecting NP1 to appear in positions *A*

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Table 11. Scope relations attested for the positions *A–E*

Position	Scope direction (R, L)	Distance (D) versus adjacency (A)	Domain of application
A	R	A	SN1 Whole utterance
B	L	A	NP1
*C**	L	D	NP1
	R	A	NP2
D	L	A	NP2
E	L	A	PP
		D	NP1 NP2

*There is one case where a particle in position *C* is included in its domain of application (V-NP2).

(possible in these target languages, but native speakers of Turkish [and to a lesser extent Arabic] do not seem to prefer this scope direction for additive particles) or *C* (possible in these target languages, but even beyond the BV level learners tend to prefer scope adjacency). The more the V2 rule is respected, the more often the frequent solution *B* (combining the preferred scope direction with the advantage of adjacency) goes along with an omission of the verb, as in (35).

(35) Mahmut, TU > DU, cycle 3:
even bij die tafel staan
just at the table stay
en tafel ook kapot
and table also broken
"He (Charlie) was just approaching the table, and the table also was broken."

Because the verb is omitted, solution *B* is no longer distinguishable from (the targetlike) solution *C,* as (36) shows.

(36) *B*: *en tafel ook* (∅V) *kapot*
and table also broken
C: *en tafel* (∅V) *ook kapot*
and table also broken
"And the table also was broken."

Summary

In this section we will begin by providing a general picture of the domains of application and the scope relations (including all occurrences in all source and target language pairs analyzed) that correspond to the positions *A–E* (see Table 11). There are positions that correspond to one type of scope relation

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Table 12. Adjacency versus distance with respect to the domain of application

Scope	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ	%
Adjacency	3	10	20	24	11	10	78	75
Distance	3	3	2	2	14	2	26	25
Σ	6	13	22	26	25	12	104	100

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.

only and thus unambiguously identify the location of their domain of application. Additive particles in positions *B* and *D,* for example, seem to allow only for scope adjacent to the left. Whereas the particles in our data in position *B* always affect NP1, position *D* clearly corresponds to NP2. The other positions show some variation. Particles in position *A* have a uniform scope relation (adjacent to the right) but show some variation with respect to the extension of the domain of application. Particles in position *E* do of course only allow for scope to the left, but both adjacency and distance are attested. Position *C* is clearly the most ambiguous one in that scope can extend to the right or to the left, and adjacency and distance are both possible; the particles can refer to domains of application of different size and location. The somewhat confusing scope behavior of position *C* can be partly explained when taking into account the longitudinal perspective of our study; the preferences going along with this position seem to change over time. It is above all the case in which additive particles have scope to the left and affect a distant domain of application that occurs only occasionally at the BV level and becomes more frequent when finite utterance organization comes into play.

DISCUSSION

In this section we will first reexamine our initial hypothesis—which predicted adjacent scope to the right—in light of our findings, and then make a closer examination of the way in which the maximal scope associated with certain positions helps the learners to mark scope relations.

Our initial hypothesis was the Klein and Perdue (1997) prediction that, in the initial stage of acquisition (BV), scope particles are placed in a position adjacent to their domain of application, and scope direction is to the right. The results of our cross-linguistic study, which are summarized in Tables 12 and 13, show that additive particles in narrative discourse follow a general principle—adjacency and scope to the left. With a significant amount of counterevidence (87.5% scope left), the scope direction part of the initial hypothesis is clearly falsified. The prediction of adjacency, on the other hand, is confirmed by at least 75% of the cases.

The overall preference of adjacency can easily be related to one of Slobin's (1973) principles of language processing (formulated for first language acquisi-

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Table 13. Scope direction

Scope	SP > FR	AR > FR	AR > DU	TU > DU	TU > GE	IT > GE	Σ	%
Scope right	0	0	5	0	0	8	13	12.5
Scope left	6	13	17	26	25	4	91	87.5
Σ	6	13	22	26	25	12	104	100.0

Note. L1 > L2; SP = Spanish, FR = French, AR = Arabic, DU = Dutch, TU = Turkish, GE = German, IT = Italian.

tion). It follows from the "pressure to preserve the internal or underlying structure of linguistic units in their surface manifestations" (p. 199). Concerning the interplay of language-specific syntactic rules and processing universals, this principle predicts a universal progression from adjacency to distance that is confirmed by the results of the present study. As was discussed in the section on Turkish > German data, most of the distant cases we found in the data can be seen as instances of a development beyond the BV level. In some of the target languages considered here, distance comes automatically into play when finite utterance organization arises. With respect to the distance-versus-adjacency criterion, we can thus conclude that (a) our initial hypothesis is confirmed for the BV level, and (b) beyond this level there is some developmental variability, the causes of which are independent from the functioning of scope particles.

As mentioned earlier, the scope direction part of our hypothesis is clearly falsified. In light of our results, one could be inclined to replace the scope-to-the-right prediction of Klein and Perdue (1997) with a scope-to-the-left generalization for these particles. However, we found numerous counterexamples to this in other studies, above all in studies that also included scope particles like *only* or *even* and their equivalents. But even in our sample, native speakers of Italian acquiring German showed a preference for scope to the right, a result that is confirmed by the more exhaustive analysis of the acquisition of German by Italian speakers reported by Becker and Dietrich (1996). Dimroth (1998b) found that Polish learners of German prefer scope to the right in the first stage of acquisition, Giacomi et al. (1994) attested scope to the right for *même* "even" in the varieties of Arabic learners of French, and Silberstein (1998) spoke of an early "scope-right-rule" with respect to the acquisition of negation in L2 English, as does Bernini (this volume) for L2 Italian.

Thus, a scope-to-the-left generalization does not hold either and a certain amount of variation must be admitted at this point. That this might be due to some influence of the different source or target languages involved in our sample is, of course, an idea that suggests itself. Within the scope of the present paper, it was not possible to give an account of the systems of the seven languages involved. But the cross-comparisons that were possible due to the different source and target language combinations could at least partly compensate for that. As was shown in Figure 1, most of the source languages were considered as L1 for different target languages; similarly, the acquisition

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of most of the target languages was studied for learners with different source languages. In reporting the data, these different combinations were worked out separately and then systematically compared with each other so that the general regularities that emerge (principle of adjacency, scope going with certain positions) can be taken as independent principles.

The before-mentioned amount of variation attested furthermore confirms our idea that it is important to enlarge this type of analysis in order to cover the functions of different scope particles in different types of discourse. With respect to the predominance of scope to the left, we mentioned at least one specificity in the information structure of the type of narrative text analyzed in the present study: the application of additive scope particles to so-called contrastive topics (see also the discussion of the impact of topic-focus structure in the section on Italian > German).

We cannot answer the question of how far the frequency of additive particles applied to contrastive topics is due to the type of narrative analyzed. All we can state is that there is not just one scope principle for the BV. On the other hand, there are some clear scope regularities (displayed in Table 11) associated with the different positions.

CONCLUSIONS

Even when restricting the analysis to one type of particle (namely additive) in one type of discourse (namely narrative), there is not just one scope principle at the BV level. Whereas the tendency to give up the predominant principle of adjacency is clearly related to a development toward finite and thus post-BV utterance organization, variation in the domain of scope direction seems to be due at least partly to discourse specificities, such as interaction with contrastive topics to which learners prove to be sensible from very early on.

However, even though the idea of a unique scope principle had to be given up, the picture of scopal properties that emerges for the different positions *A–E* is relatively clear. Independent of the source and target languages involved, some positions have narrow scope with a clearly defined scope relation, whereas others have structurally wide scope that permits different choices with respect to the domain of application.

In a full-fledged language one normally considers (at least) three levels of analysis to be necessary for the explanation of scope phenomena:

1. A syntactic level concerned with the position of the particle in the given syntactic structure: The particle's position permits a prediction of its syntactic domain or maximal scope.
2. A semantic level concerned with the basic meaning of the particle defined in terms of the relation that holds between the elements of a set of alternatives.
3. An informational level concerned with the flow of information in discourse (maintenance vs. change of information in the different referential domains) that is important for the determination of a particle's domain of application.

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To discover the rules underlying the functioning of additive scope particles in basic learner varieties, we could only rely on the semantic and the informational levels of analysis. With the help of these levels it was possible to discover the syntactic domain or maximal scope of these particles for most of their structural positions and thus, we hope, to also contribute to the description of the syntactic development of learner varieties.

NOTES

1. This simple form-function relation for additive particles does not hold for spoken English, in which *too, also,* and *as well* coexist. This might be one of the reasons why the English part of the corpus we looked at is so poor in additive scope particles that we had to exclude it. For a general discussion of the impact that a such mismatch between form and function might have on the acquisition process, see Skiba and Dittmar (1992).

2. Note that we use the more neutral term *scope particle* instead of *focus particle* as proposed by Klein and Perdue (1997) because our results show that the interrelation of these elements with the focused part of an utterance is less than clear.

3. In the type of narrative discourse analyzed here, it is often reference to time that constitutes the topic part of the relevant utterances. It is frequently left implicit because speakers can rely on the principle of natural order.

4. See Klein and Perdue (1992, pp. 7–11).

5. We considered the narrative discourse data (film retellings) from the learners and cycles of recording shown below:

IT > GE	TU > GE	TU > DU	AR > DU	AR > FR	SP > FR
Marcello	Ilhami	Osman	HassanM	Abdelmalek	Alfonso
I, II	I, II, III	II	II	I, II, III	I, II, III
Angelina		Abdullah	Hassan	Zahra	Berta
I, II, III		II	II, III	II, III	II, III
Tino		Mahmut	Mohamed	Abdelssamad	Paquita
I, II		II, III	II, III	I, II, III	II, III
			Fatima		
			II, III		

6. Though altogether only four occurrences of *too* and *as well* are attested in the English part of the ESF database (with one occurrence of *as well* in one of the film retellings), *also* is completely absent.

7. Compare Bayer (1996), Drubig (1994), König (1991), Dimroth and Klein (1996), Dimroth (1998a), Krifka (1999), Reis and Rosengren (1997), and Watorek and Perdue (1999).

8. The elements of the relevant set of alternatives are not necessarily explicitly mentioned in the context.

9. This is often called *focus* as, for instance, by König (1991). For reasons already mentioned in note 3, we do not adopt this terminology.

10. For an overview of the diverse use of the term *scope* in the literature on scope particles, see Dimroth (1998a).

11. In principle, inclusion of scope particles in their domain of application is also possible. However, because we found only one case of inclusion, we do not consider it as a basic scope category around the BV level.

12. Syntactic domain is often identified as the domain that is c-commanded by the particle. See, for instance, Bayer (1996).

13. *Nonfinite* does not necessarily mean "uninflected" but rather "without functional morphology."

14. Slanted brackets, as in /i rogarde/, are used to mark phonetic transcription for French verbs when their actual form is phonetically ambiguous (the traditional square brackets are not used in order to avoid confusion with the syntactic bracketing used in some examples); (. . .) marks the

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omission of repetitions, false starts, inaudible or incomprehensible material, or utterances of the native interlocutors.

15. Note that this does not mean that scope particles in the different positions go systematically with the type of domain of application exemplified in (2)–(6).

16. Depending on the possible omission of elements, *C* is sometimes and *D* is mostly final.

17. There is only one exception where *aussi* is between V and NP2 and both of these constituents are in the scope of the particle. In this case, the scope relation is adjacent and inclusive (instead of to the left alone).

18. Giacomi et al. (1994, p. 4), in a study on the acquisition of additive scope particles in French by native speakers of Moroccan Arabic, reported a development from adjacent to distant or more extended scope beyond the BV level: "En d'autres termes, le mouvement de l'appropriation consisterait à étendre la portée de l'unité d'un noyau qui se trouve dans une relation de stricte connexité, à des unités en plus grand nombre et plus éloignées" [In other words, the development to a more appropriate use consists of extending the scope of the particle from an adjacent domain of application to domains that consist of more elements and are located at some distance]. We will come back to this point in the discussion of our results.

19. In nearly half of all cases, owing to the omission of elements, this position is equally final, but these learners do not show the same systematicity in choosing a final position.

20. In fact, occurrences of additive scope particles in position *A* are only attested in two source and target language groups: Arabic > Dutch and Italian > German.

21. It does actually occur in elliptic structures (*ik ook* "me too"), but never with a following verb.

22. The pronoun *they* refers to the protagonists, not the people mentioned in the preceding utterance.

23. The examples in (34) include two of the three cases in which Arabic learners of French do not obey the adjacent-to-the-left rule that has been shown to be generally guiding their use of additive scope particles. For a broader discussion of so-called topic-promoting devices, see Hendriks (this volume).

24. We disregard scope marking with the help of intonation here.

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