Field linguistics meets formal research: how a microcomparative view can deepen our theoretical investigation Part 2 (sentential negation)

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Field linguistics meets formal research: how a microcomparative view can deepen our theoretical investigation Part 2 (sentential negation)

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1. Introduction[1]

This article constitutes the second part of a joint work of reflection on how elicitation techniques and methodologies can change our view on the dialectal variation of specific language phenomena (see Cornips & Poletto 2005). Ultimately, it can influence our theoretical analyses in excluding some a priori logically possible analyses and guiding our research towards more detailed and fine grained hypotheses. We will present two case studies on sentential negation taken from the Syntactic Atlas of the Dutch Dialect (henceforth: SAND) and the Northern Italian Syntactic Dialect (henceforth: ASIS) projects in order to show how the data can drive our research up to a certain point. The overarching aim of this paper is to shed light on the hierarchy of formal properties to find out which are 'more superficial' or peripheral and can be changed by dialectal variation and which are more stable and vary only among different language groups. We will show that the distribution of negative markers displays an unexpected degree of similarity in the variation pattern, although the languages considered are Romance for the ASIS and Germanic for the SAND.

The subgoals of this paper are threefold. In our view, it is crucial to take into consideration in any study of dialectal variation in a large geographical area that:
a) gathering dialectal data is not a flat process, but involves various stages, each of which can exploit different types of tasks (see part I);
b) by means of investigating close enough languages or varieties it is possible to gather a very precise picture on the range of variation of a phenomenon, which can be blurred by interfering factors when examining languages that have a very different grammar;
c) one always have to take very seriously each piece of data, and see whether a single occurrence of a construction in a questionnaire including a large number of potential contexts in which the construction could have been present is due to interference or to external phenomena or whether it

[1] We like to thank Sjef Barbiers for his valuable comments.

is a genuine case indicating a hidden 'iceberg' of phenomena whose surface is manifested in a very small set of data.

The SAND and ASIS case-studies are cases in point. The former reveals how the geographical distribution of a phenomenon can provide interesting clues for its analysis and permits us to distinguish between cases of interference with the stimulus (so-called task-effects, see PART I) from genuine phenomena. It is shown that geographical microvariation also provides us with the possibility of establishing more clearly whether there is a correlation between two phenomena or whether they are independent, a point which is clearly central to any analysis. The latter examines how the problem of investigating structures which are apparently optional, but hide semantically driven choices, can be solved.

By means of this paper, we hope to show that the investigation of a single phenomenon in a small area of inquiry can serve as a magnifying lens to restrict the range of possible analyses guiding our research in a way that is not possible when analysing a single language or a set of related but clearly more 'distant' languages. The general hypothesis leading our investigation conceives dialects as so closely related languages that one can in theory observe the variation range of a single phenomenon so to speak 'in vitru', without any other phenomena interfering in our experiment. In other words, dialectology is the closest way to depurate linguistic data from the interference of independent factors, a necessary condition to the fulfilling of a correct scientific investigation.

Before discussing the methodological problems which constitute the main topic of this article, we would like to briefly point out a couple of interesting theoretical problems, that have emerged from our empirical work in the ASIS and SAND atlas-projects and that are relevant for the way we conceive our dialectological investigations. First of all, investigating microvariation provides us with more refined tools for understanding how languages can minimally vary. Language variation has been extremely important for the development of the notion of universal grammar. Especially, the form in which it has been investigated by typologists, namely implicational universals, has proved extremely fruitful for linguistic research. We believe that, on the one hand, dialectology constitutes the other side of the same problem investigated by typological work, with the advantage that the field of investigation is magnified by the close similarity of the languages under investigation. On the other, microvariation might turn out to be more interesting from a very general perspective considering whether parameters are connected to each other in 'clusters' or are completely independent from one another: the type of dialectal variation found in the two projects we present here, displays an unexpected degree of similarity in

the variation pattern, although the languages considered are Romance for the ASIS and Germanic for the SAND.

Baker (2001) has recently proposed the notion of macro-parameter; that is, fundamental properties that distinguish one language group from another. It is a fact that this type of property is never touched by dialectal variation concentrating on 'smaller' phenomena, which would probably go unnoticed in a typological perspective. Going back to the similarity with the biological study of families of bacteria that we used in the first part of this work, it is clear that within the same family of bacteria causing flue there is variation inside their DNA, so that one person can be immune to one subtype but not the other. However, no bacteria belonging to this family can cause cancer, as other types do. The DNA of the two types must be different in a way that is not found inside the same family. Our work is framed inside this perspective: we are trying to shed light on the hierarchy of parameters and see which are 'more superficial' or peripheral and can be changed by dialectal variation and which are more stable and vary only among different language groups.

The paper is organized as follows. In section 2 and 3 we introduce the methodology used both by the ASIS and SAND projects which has been designed for preparing syntactic atlases and includes the largest possible number of phenomena in various empirical domains (see Cornips and Poletto 2005 for a presentation of the two projects).[1] In section 4 and 5 we examine the phenomenon of discontinuous or embracing negation and the phenomenon of negative concord with negative quantifiers regarding the SAND and ASIS data, respectively. Concluding remarks are presented in section 6 and 7.

2. The layered methodology

One of the first problems a dialectologist is confronted with is the necessity of discovering what could be the phenomena that are subject to dialectal variation. These phenomena are investigated to find descriptive generalizations without which micro-comparative linguistic research is impossible.

In starting both the ASIS and SAND projects, the dialectologists found themselves in a similar situation, because at stage zero of their research there were for both language domains some sparse indications of how the syntax of a certain dialectal area (in our case Northern Italian Dialects (henceforth: NID) and the Dutch dialects in the Netherlands and Belgium/Flanders) could vary but only a couple of phenomena (for instance subject clitics) had been systematically investigated. Therefore, a preliminary survey was necessary; first by means of a literature scanning and then by using general questionnaires that were especially designed for testing a large set of phenomena. The

form of a general questionnaire is determined by the necessity of finding new interesting phenomena, and not by that of describing in a detailed way. Therefore it contains several different types of sentences that can provide new insights more than a consistent set of examples investigating the distribution of single phenomena. When this has been done, the general properties of the area investigated were clear enough to permit a detailed analysis of single phenomena. This gave rise to a layered methodology in order to collect the data; that is, a stepwise procedure starting with a broad survey and progressively narrowing the target, producing a 'cascade' investigation which has the best chances to find something interesting for micro-comparative linguistic research. A first phase of review of the literature and first 'testing' questionnaires is necessary for any syntactic enterprise of this sort. A second phase of further more punctual investigation of single phenomena can, however, lend itself as a launching base for other discoveries, thus feeding a chain reaction of new more detailed studies. Consequently, the first positive effect of the layered methodology is a practical one: given that the area of investigation is large, it is uninteresting to make a long and expensive test to look for a phenomenon that perhaps does not even exist in a given dialect. This is the reason why a preliminary search is in order.

The second positive effect of a layered methodology has to do with the fact that in order to analyze a phenomenon, it is necessary to already know many of the syntactic properties of a language, like, for instance, whether it has verb movement or not, and to what extent, what is the basic order of the arguments and what are the restrictions on its left periphery. However, with respect to the possibilities of conducting a layered methodology, it is important to point out that it is crucially dependent on practical factors. For instance, the SAND-project had a lot of 'manpower' but was very restricted in time: all the data had to be gathered, transcribed, tagged and analyzed in three years time (Barbiers, Cornips & Kunst in press). The ASIS-project, however, has almost no 'manpower' but is in fact a longitudinal investigation of the NIDs. Of course, these practical considerations determine the nature and expansion of a layered methodology.

Notice that every linguistic research could be conceived as a layered enterprise, with a progressive and deepening analysis of the facts under consideration, this is obviously the case if we considered the history of widely discussed phenomena (like anaphors, V2, pro drop or clitics) in the literature. However, what is meant here under the term “layered methodology” is not the ongoing discussion on the analysis of a given topic, but has to do with the way in which new phenomena themselves and relations among phenomena can be discovered and brought to the attention of the linguistic community.

Although the theoretical analysis is always part of the layered procedure, and drives our investigation and the choice of the variable under scrutiny, it can be used in turn as a tool to

discover new phenomena and provide a detailed description of how linguistic systems we have in front of us work and how they are related, the ultimate question always being whether microvariation is qualitatively different from typological variation and whether it can tell us anything on the general problem of clusters of properties that might go together.
In other words, while the analysis of a phenomenon helps us to refine our theory, we can also use our theoretical framework to discover and describe new phenomena, which in turn will have an impact and modify our theoretical view of the linguistic system.
Moreover, behind our work in microvariation there is always the general question of establishing whether microvariation itself is not random but somehow driven by other properties of a given dialect or whether it is somehow limited with respect to typological variation: more specifically whether there are universally forbidden sequences, or sequences that are forbidden only when a language has other formal properties, or whether apparently unrelated phenomena go together or can reveal themselves as effects of one and the same abstract property. In other words, the layered methodology helps us find out whether microvariation can discover clusters of formal properties.
Therefore, the layered methodology is intrinsically necessary not only for theoretical analysis but also when our aim is a precise description of new phenomena. In other words we are not dealing here with the analysis of a phenomenon, but with the discovery procedure of new phenomena themselves.
How much a layered methodology can be used to refine more and more our description of variation is also a question of time span and aims. A project might have a shorter time span and therefore concentrate on phenomena that are already known in the literature to occur in a give area, while it could also be the case that the time span is not important and new phenomena and new relations among phenomena can be sought in a progression of theoretical research and field work.

2.1 The ASIS-project

Regarding the ASIS project, the existence of many phenomena has been discovered simply by consulting descriptive grammars, or the AIS atlas (Atlas Italiens und Südschweiz). This atlas was primarily conceived as a lexical enterprise but contains syntactic data to a large extent, although it is not syntactically ordered. The limit of this bibliographical investigation was precisely that, hence, there was no systematic syntactic investigation on their properties although a lot of phenomena were registered for many dialects. The literature could thus be exploited for gaining a first general view of new phenomena to investigate, or could in the best case show some tendencies (see for instance Benincà (1992) who first noted on the basis of AIS charts that only those languages that have preverbal negation use a suppletive form for negative imperatives), but due to the lack of

systematic ungrammatical data, it was hard to formulate any empirical generalizations and draw solid conclusions. In constructing our first survey questionnaire, our research was lead by a single phenomenon (subject clitics) which was one of the few syntactic properties that had been previously systematically investigated (see Benincà 1983, Renzi and Vanelli 1983). The first questionnaire was conceived primarily as a test for this and for other connected phenomena. So, it tried to determine whether subject clitics can occur in interrogative and relative clauses or whether they can co-occur with quantified or definite subjects, whether there are special clitics for auxiliaries or they interact with negation. Consequently, a large amount of data concerning clause types, quantifiers, auxiliaries and negation has been gathered in a rather systematic way. Once this was done, a number of different phenomena has been discovered, whose exact range of variation was still unknown. The following step in the research was the creation of a number of 'specialized' questionnaires for the single phenomena that had been found in the different dialects. The term 'specialized' has to be interpreted in two ways: specialized in the sense that this type of questionnaires is used only in those dialects that display the phenomenon (as revealed by the first inquiry), and 'specialized' in the sense that they are primarily concerned with a single phenomenon but in a rather systematic way. Notice that also for this more restricted type of investigation there is a certain amount of discovery. Even more, a stepwise procedure in collecting the data has the advantage of bringing in new data which do not always concern the phenomenon studied. For instance, investigating subject clitics in interrogative clauses led to the discovery of *wh*-in-situ in an area (and with properties) where this had never been registered, namely Eastern Lombardy. The specialized questionnaire that was created to analyse the properties of *wh*-in-situ in Eastern Lombardy has been designed primarily in the areas where the phenomenon of *wh*-in-situ had been found. In turn, this led to a number of new discoveries, for instance, in two Eastern Lombard dialects *wh*-in-situ co-occurs with what looks like the Romance counterpart of English 'do-support' (see Benincà & Poletto 2004 for a detailed analysis of this phenomenon). Moreover, although the first questionnaires did not test ungrammatical data, this has been done in the second phase when single phenomena have been described and analysed.

2.2 The SAND-project

Regarding the SAND-project, a layered methodology actually consisted of four phases (Cornips & Jongenburger 2001, Barbiers et. al in press). The first phase was a comprehensive literature study of the four empirical domains examined in the SAND-project, namely negation and quantification, left periphery, right periphery and pronominal reference. All publications, i.e. articles, monographs and

books and some former atlases (both lexical and syntactic) that appeared on Dutch dialect syntax were traced and all titles were fed into a database on the internet.

Such a preliminary survey of the existing literature in both the ASIS and SAND-project spots the areas where postverbal negation is found in the NIDs or preverbal negation is found in Dutch dialects. Subsequently, it eliminates unnecessary field inquiry for those dialects that do not display the phenomenon under investigation (see above section 2). On the basis of the syntactic phenomena already described in the literature, together with recent generative syntactic insights, a written questionnaire was prepared with respect to the four empirical domains containing 424 questions (including sub-questions and remarks to be made by the informants). This questionnaire was sent out and filled in by 368 subjects. The goal of the written questionnaire was threefold. First, the responses on the questionnaire provide insight in the geographic distribution of the syntactic variation investigated. Secondly, the responses show which part(s) of the Dutch-speaking area were of interest with respect to the four research topics. Finally, the results of the written questionnaire were needed as input for the next phase: the oral fieldwork. The oral fieldwork included 267 different dialects in the Netherlands and in the Dutch speaking part of Belgium and France. Also in this phase, test sentences were offered to the informants. The spoken data of these interviews involved 425 hours of speech in total. The methodology of the oral fieldwork partially differs from the ASIS one in having regionalized and multi-stage questions. More specifically, in all the oral interviews 'paths' were designed for every phenomenon to test. More concretely, the interviewer checks 'on the spot' whether a given dialect has a certain phenomenon, in which case he takes the 'path' concerning that phenomenon and controls the properties and possible range of variation of it. For instance, the sentence containing preverbal negation and a negative quantifier in (1) was only administered in a very restricted area since it is known from the literature that preverbal negation only occurs in the Dutch speaking part of Belgium and immediate surroundings:

(1) Jan *en* heeft *niet* veel geld *meer*
Jan not has not a lot money more
'Jan has not a lot of money'

Thus, a positive effect of the layered methodology is a practical one given that the area of investigation is large. This is one of the reasons why a preliminary search is in order. Further, sentences as in (2) were tested on the spot in order to get an insight whether they allow a double negation or a negative concord interpretation:

(2)	Er	wil	*niemand*	*niet*	dansen
	it	wants	noone	not	dance

Only in the case of the latter, the sentence below was administered in order to get more insight whether these dialects also allow for sentential negation with a modified postverbal *nie* (Barbiers 2000):

(3)	Els	wil	*niet*	dansen,	en	ze	wil	*niet*	zingen	*ook*	*niet*
	Els	wants	not	dance	and	she	wants	not	sing	also	not

The final phase in the SAND-project concerning data-collection involved telephonic interviews. The motivation to conduct these interviews, that is to say, to collect additional questions were that (i) the subjects had not produced a complete answer to some of the original questions in the oral interviews, (ii) they were considered decisive for a certain analysis, (iii) they replaced earlier unsuccessful questions and (iv) they checked the results of questions in the oral interviews.

What we would like to discuss in this paper is the utility of a layered methodology on the basis of two distinct inquiries on sentential negation in the Dutch and Northern Italian dialects. We will show that a flat method would have lead to wrong conclusions in the case of the interaction between sentence internal negation and negative quantifiers in Dutch dialects. Moreover, without a layered methodology it would have been impossible to discover a number of subtler meaning distinctions in the usage of postverbal negation in some northern Italian dialects.

3. Refining the methodology

The second major problem a dialectologist is confronted with has to do with the reliability of the data. In general, in the generative framework not much attention is devoted to the question how data are obtained (cf. Gervain & Zemplén 2005). The researcher is often a mother tongue speaker of the language he/she analyses and relies on his/her own judgments or generally checks with a (usually not defined) number of speakers who are other linguists or people he knows. Even in those articles where the author is not a native speaker of the language(s) investigated usually no information on the elicitation techniques is provided.

However, when extensive micro-comparative work is performed, the problem of having as much comparable data as possible becomes unavoidable. The linguist is confronted with two main

questions: one concerns the issue of homogeneity of the data across speakers. First, homogeneity of the data can be promoted by selecting speakers who share the same sociolinguistic variables such as age, gender, level of education and occupation. Subsequently, this will ensure that when heterogeneous data emerges, this is rather due to geographical factors than social ones. Further, as stated in PART 1, acceptability judgments can be influenced by a number of external factors. For instance, if we are testing the grammaticality of a given structure, we have to make sure that all the speakers judging the structure have in mind exactly the same interpretation of the sentence. Very often, syntactic phenomena are semantically driven, and the judgment can vary according to whether the native speaker is able to imagine an appropriate context for the sentence or not. As we will see, providing a context is one of the ways to circumvent this problem. Eliciting ungrammatical judgments is also problematic because we have to make sure that the speaker really has in mind our notion of (un)grammaticality and that the sentence is not excluded because of external factors (lexicon, intonation, phonology, pragmatic appropriateness etc.). By all means, although a questionnaire has a number of drawbacks (already examined in PART 1), it is a necessary, forced choice for the formal linguist who needs comparable data (and often exactly the same sentence, in order to have a minimal pair) across languages.

Moreover, the findings can vary according to the expectations of the inquirer: the fact that the data are gathered through a questionnaire drives the results, this is in fact a justification for the layered methodology. A stepwise procedure is needed to focus on the variables since questionnaires are always prepared without knowing exactly the variables involved in a phenomenon. This means that we have to go back to the same phenomenon, which has been discovered in the first questionnaire and narrow down the picture by trying to determine the exact range of variation of the phenomenon. At this second stage, it is necessary to select the variables according to which the phenomenon under investigation varies to create the specific questionnaire according to a first hypothesis, which in the end might turn out to be incorrect; there is evidently a lot of guessing in this procedure, nevertheless it is worth pointing out that we already know a lot from the research coming from other fields. If we take the example of negation the variables selected obviously have to be a list similar to the following (see also Van der Auwera & Neuckermans 2003):

a. position of the negative marker with respect to the verb (in V2 languages both main and embedded clauses have to be inserted, because the position of the verb varies);
b. position of the negative marker with respect to other elements located in the same area (low negation will have to be serialized with respect to lower aspectual adverbs, high negation with respect to higher adverbs, clitics, subject and the complementizer)

c. negative concord with negative quantifiers of different types (bare or phrasal ones);
d. changes of the negative marker with respect to sentence type (for instance imperatives or interrogative clauses), modality, presence of auxiliaries

Hence, the special questionnaire can be designed by constructing sentences that have one of this variables each. Sometimes, variables can also be combined in the same sentence to render the questionnaire less heavy but only if there are other examples that contains the two variables dissociated. The reason why it is better to dissociate variables is obviously that in a sentence containing two variables we do not know on which variable variation depends.

With these premises, we intend to examine the phenomenon of discontinuous negation investigated by the two projects (ASIS and SAND) and show how dialectal data can be decisive to discard some possible lines of research from the very beginning. Moreover, we will show that the distribution of clausal negation is better understood by adopting a layered methodology.

We are interested in three types of negation i.e. preverbal, embracing and postverbal negation. The discoveries of 'optional' negative markers are particularly interesting because it could lead us to a better understanding of the 'Jespersen cycle', namely that diachronic processes according to which a language having only a preverbal negative marker develops an 'optional' postverbal negative marker 'reinforcing' the preverbal negative element, which in turn becomes weaker and in the end disappears.[2] Note that terms like “reinforce” or “weak” are not precise enough and we would like to gain a more detailed picture of how the cycle works. Dialectal variation is often said to be the synchronic counterpart of diachronic variation, and can thus be exploited in order to clarify syntactic processes we do not have access to anymore. Several authors (see among others Vai 1999) note that the diachronic cycle proceeds by progressively enlarging the contexts in which postverbal negation is tolerated (though not obligatory) and lead to a system that has both obligatory pre- and postverbal negation. The question arises of which precisely these contexts are, whether they can be put into a scale from the first to the last to occur with discontinuous negation and whether the scale is always the same in all languages going through the cycle. In other words, one might be interested in determining which factors allow the occurrence of the 'optional' postverbal negative marker, whether they are syntactic or semantic or both.

3.1 The ASIS-project

It is well known from the literature that the position of negation varies in the NIDs: North-Western Italian dialects have only postverbal negation, while North Eastern ones have only preverbal negation. The first ASIS questionnaire contained a number of negative sentences, which were originally introduced to test the order between the preverbal negative marker and subject clitics. Nevertheless, these data can be exploited to gather a general picture of the distribution of sentential negation across the NIDs. The picture gathered confirms what was already present in the literature: western NIDs only have postverbal negation, Central NIDs (Emilian) have discontinuous negation of the 'French' type and preverbal negation is present in the East, as presented in (4a), (4b) and (4c), respectively:[3]

(4)	a	On	dì	*mia*	isé			*Bassa Val Camonica* (Bg)
		it	says	not	so			
	b	A	*n'*	as	dis	*brisa*	acsì	*Bondeno* (Fe)
		it	not	it	says	not	so	
	c	*No*	se	dize	cussì			*Venezia*
		not	it	says	so			
		'We do not say so'						

Interestingly, those dialects that can have exclusively preverbal negation (see (4c)) optionally admit a postverbal negative marker *miga* in some contexts. Importantly, the occurrence of *miga* in (4a) is unexpected or comes for 'free' since it has not been offered in the questionnaire:[4]

(5)	*No*	se	dize	(*miga*)	cussì	*Venezia*
	not	it	says	not	so	
	'We do not say so'					

In the first questionnaire, the postverbal element (*miga*) is only sporadically present as it occurs in the same area only in some negative sentences, thus, not in all and only some speakers use it. From this picture we can derive the following conclusions:

(i) the fact that it does not occur in all sentences in a given questionnaire leads us to conclude that a postverbal negative marker is possible, though not obligatory in the dialect where it is found (at least one instance in one questionnaire);

(ii) the reason why it is found only in some questionnaires and not in others might be due to the following factors: either there is a diachronic change going on, so that some speakers use the

postverbal negative markers, while others do not; or some speakers are simply better than others at imagining contexts.[5] Thus, postverbal negation may be sensitive to a special context which, however, does not immediately come to the mind of some speakers;

(iii) the variation could just be random.

Thus, the picture provided by a first questionnaire is 'unfocussed' so to speak; that is, we know there is a postverbal negative marker but apparently it is subject to unknown restrictions yet. Notice however, that we take the data seriously in the sense that we do not discard the postverbal negative marker as a 'performance error' just because it does not occur in a systematic way. If we did, we would overlook a large number of interesting phenomena. Hence, it is quite hard to think that adding a second negative marker can be conceived as a performance error. However, there are other cases (especially when the order of some elements is concerned) that might be performance errors. Nevertheless, it is always useful to further investigate each single discrepancy in the data because it very often conceals interesting variation. Recall, however, that we should not expect from a first questionnaire that it provides all the features necessary to describe a phenomenon. Hence, a first questionnaire is not designed for that but only to detect new phenomena. Once the phenomenon has been discovered it is necessary to narrow down the field of inquiry and to create a more fine-grained questionnaire aiming to discover the range of variation of the phenomenon in question, in our case the distribution of non–obligatory postverbal negation in Veneto dialects. It is worth emphasizing that standard colloquial Italian spoken in the North also has a postverbal negative marker which has been analysed by Cinque (1977). We will see that it constitutes only one of the possible systems of postverbal negation. Vai (1999) notes that in Old Milanese V2 contexts a postverbal negative marker is more frequent. Subsequently, there seems to be both syntactic and semantic factors involved. A layered methodology is necessary in order to get more insight into these syntactic and semantic factors.

3.2 The SAND-project

In the SAND-project, the empirical domain of investigation includes negative particles, negative concord, scope and negative quantifiers.[6] As in the ASIS project, the starting point was a general overview of the literature on this topic made by Barbiers (2000) on Dutch dialects spoken in the Netherlands and in Belgium. It is reported that Dutch dialects have preverbal negation as in (6) (Ryckeboer 1986/98, Van Craenenbroeck 2004),

(6) K’ *en* doen *West-Flemish* (Haegeman 1995:160)
I en do
‘ I don’t’

and embracing negation including a mixed system in which the preverbal or postverbal negation marker may be dropped but not always. With respect to (7), we use indifferently the terms discontinuous (coming from the French tradition) and embracing negation. Both terms refer to the presence of two negative markers in a negative clause, that is, one is located in preverbal position and the other is located after the inflected verb:

(7) Valère (*en*-) eet *nie* ‘s avonds *West-Flemish* (Haegeman 1995:124)
Valère *en* eats not evening’s
' Valère doesn't eat in the evening'

and postverbal negation as is the case in standard Dutch. Postverbal negation in our terminology is not a descriptive term meaning that *niet* always follows the verb, but a theoretical one meaning that *niet* ‘not’ is low in the structure of IP (cf. Barbiers 2000):

(8) Hij werkt *niet*
he works not
'He doesn't work'

More options are that a negative constituent such as *niemand* 'noone' may replace *nie,* and that some dialects may have a sentence-final *nie* that closes negative sentences:[7]

(9) a. da Valère ier *niemand* (*en*) kent
that Valère here no one neg. knows
b. Hij wil *geen* soep *niet* meer eten *nie* *Aarschot*
he wants no soup not more eat not
‘He doesn’t want to eat any soup anymore’

The test sentences in the first written questionnaire were designed to reveal the geographical distribution of the different types of negative markers e.g. preverbal, embracing, postverbal and

sentence final. This is clearly a preliminary requisite for any analysis, because it is well known that the syntactic properties of preverbal and postverbal negation are rather different (see Zanuttini (1997) among others). The different negative markers are illustrated in (10), respectively:

(10) a Hij *en* werkt
he *en* works
'He does not work'

b Wij *en* wisten *niet* dat hij thuis was
we *en* knew not that he at home was
'We did not know that he was at home'

c Els denkt dat ‘t *niet* gemakkelijk is
Els thinks that it not easy is

d Niemand wil *niet* werken *niet*
no-one wants not work not

Moreover, special test sentences were designed to investigate which factors rule the (co-)occurrence of the different types of negation also in combination with negative quantifiers (Barbiers 2000). The first survey revealed a situation which is strikingly similar to the Northern Italian one.
In the next sections we will show that the occurrence of negative markers is sensitive to (i) the presence and the position of negative quantifiers in Dutch dialects and (ii) to the type of presuppositional value associated with the sentence in Italian dialects. In both cases, these further refinements concerning the occurrence of negative markers would not have been discovered if a 'flat' methodology had been adopted.

4. The SAND phenomena: negative markers and negative quantifiers

In general, the use of a single questionnaire necessarily has the consequences that not all the data that are required for an analysis are present in the sample, because the design of the questionnaire precedes the analysis. However, the use of questionnaires may bring about interesting data that are unknown to the researcher or in the literature, thus data may emerge that are not expected according to the design of the questionnaire but important for the resultant analysis. In this respect, the role of 'fillers' is important: fillers are generally sentences introduced in the questionnaire in order to avoid a long sequence of very similar sentences one after the other that would induce the well known

saturation effect by the speaker, when he is confronted with a long set of very similar stimuli. Often, sentences designed to test different phenomena can work like fillers for one another and can be used as a break to avoid the saturation effect. Anyhow, each sentence in a questionnaire, although it has been inserted to test a specific phenomenon, brings new data concerning other properties and can be used to find new phenomena. We can say that no questionnaire is ever complete, as no analysis is ever complete but there is always a certain amount of data that comes for free with each test. Finally, investigating such large areas as in the ASIS- and SAND-projects also has the effect of multiplying the data, which are not easy to handle, especially when it comes to a systematization of the data in a data base (cf. Barbiers et. al. in press). Let us turn now to the distribution of the different negative markers and their co-occurrences in the two projects.

As we will also show for both the SAND and ASIS phenomena, the advantage of examining a large number of closely related areas with a layered methodology is that it sheds light on connections among phenomena that would remain hidden otherwise. In what follows, it will be shown that the presence of a negative quantifier can influence the presence of a negative marker and that this is related to the positions of the negative marker and the negative quantifier in the clause (see below section 4.2.1). Once the possible types of negative markers occurring in the Dutch dialects have been established, the second step for the SAND was to test whether there is a connection between the occurrence of negative quantifiers and the occurrence of different types of negative markers in the sentence structure. Moreover, more sentence types were designed to determine whether the descriptive generalizations concerning the co-occurrence of negative markers and negative quantifiers known from other language domains are confirmed and to further investigate whether there is a connection between the type and the position of negative quantifiers and the type of negative marker.[8] Such a detailed analysis also provides a template for the positions of different types of negative elements (see below). We will first consider the three distinct negative markers that are known to occur in Dutch dialects from the literature and describe their distribution in connection to negative quantifiers as well. (Barbiers 2000 and references cited there, 2002, Van Cranenbroeck, Neuckermans & Zeijlstra 2003, Zeijlstra 2004:104-120): (i) preverbal *en*, (ii) sentence internal *niet* and (iii) sentence final *niet*. As stated above, we have selected these phenomena because they are those for which the questionnaires have been designed. They are also the same tested in the Italian domain, and this permits us a parallel between the two areas.

*4.1 The type of sentential negative markers - preverbal **en***

There are very good reasons to claim that preverbal negation as in (11) never occurs alone (cf. Barbiers & Vandenwyngaerd 2001) (However, notice that cases such as in specific constructions presented in (6) above still exists, see Van Craenenbroeck 2004 for a thorough analysis). In the written questionnaire there are only two answers (out of 368) showing preverbal negation, as exemplified in (11):

(11)	a.	Hij *en* werkt	*Hapert, Netherlands*
	b.	Hai *en* waark	*Bellingwolde, Netherlands*
		he neg works	

These answers are brought about by task-effects (see Part 1). The informant in Hapert in (11a) always copies the preverbal negation in his translation when it is in the stimulus but never when the stimulus involves a negative sentence without preverbal negation. The informant in Bellingwolde in (11b) uses preverbal negation only once. Moreover, he speaks a dialect that is situated in the north of The Netherlands and this area is far away from the core multiple negation area (see § Map 2 and 3 below). Consequently, both informants clearly show a repetition-effect. It is for this reason that preverbal negation was not offered in the oral fieldwork. Subsequently, preverbal *en* needs another negative marker such as sentence internal *niet* (§4.2) or a negative quantifier in order to be grammatical.[9] The SAND data show that Dutch dialects have evolved loosing preverbal negation of the Italian type (as we discuss more extensively later) and only have a clitic one similar to the French type i.e. they have undergone a diachronic process such that they no longer have a preverbal negative marker alone but only combined with a postverbal negative marker.

Let us first examine the nature of the optionality of the preverbal marker to get more insight which contexts are the first in which the preverbal marker disappears (or remains the longest). However, the interplay between task-effects and linguistic conditions is very complex when it concerns optional phenomena, as the following geographical distributions will reveal.

First, Map 1 reveals the geographical distribution of the preverbal marker *en* combined with the negative quantifier *geen N meer* 'no N more' on the basis of the following stimulus sentence in the written questionnaire:

(12)	Jan	*en*	heeft	*geen*	boek	*meer*
	Jan	en	has	no	book	more

Map 1: *The geographical distribution of embracing negation in the written questionnaire;* ***en*** *is offered in the stimulus*

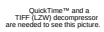
Map 1 reveals a large geographical area in Dutch speaking Belgium i.e. West-Flanders, East-Flanders and Brabant. However, it is certain that the size of the area is influenced by a task-effect, i.e. the mode of elicitation (written questionnaire) combined with the presence of the preverbal negation marker *en* in the stimulus.[10] Therefore, let us first keep constant the mode of elicitation in order to find out what the effect is of having the preverbal marker in the stimulus or not. Map 2 reveals that the preverbal marker in combination with a negative quantifier is much harder to elicit when it is not provided in the stimulus. Map 2 involves the locations in West- and East-Flanders with respect to all negative sentences (including negative quantifier *niemand* noone, see also later Map 3) in the written questionnaire where the subjects spontaneously insert preverbal *en* (squares) and where they copy *en* that is presented in the input (dots):

Map 2: *The geographical distribution of the preverbal negation marker* ***en*** *in the written questionnaire for subjects who write* ***en*** *spontaneously in their translation and subjects who only copy* ***en*** *in the input*

The geographical distribution, as revealed by Map 2, is severely restricted when the preverbal marker is not in the stimulus i.e. only 8 answers mainly located in East-Flanders. Second, let us now focus on the difference between written and oral elicitation. In contrast to Map 1 and Map 2, Map 3 displays the locations where the subjects spontaneously produce the negation particle *en* combined with the negative quantifier *niemand* 'none' in oral elicitation. The stimulus is presented in (13):

(13)	Er	wil	*niemand*	*niet*	dansen
	it	wants	noone	not	dance

Map 3: *The geographical distribution of embracing negation in oral elicitation;* ***en*** *is not present in the stimulus*



The distribution in Map 3 differs considerably from Map 1 and Map 2 in that in the former (i) the geographical distribution of the preverbal marker (combined with the negative quantifier) is also concentrated in West- Flanders and in French-Flanders but no occurrences in Brabant and (ii) there are no instances in the Netherlands. The maps above show how complex the relationship is between task-effects such as repetition effects and the mode of elicitation e.g. written versus oral and the linguistic contexts (dis)favoring embracing negation. It is clear that oral elicitation favors the presence of a preverbal negative marker and that East-Flanders is the core area. Importantly, West-Flanders, and to a lesser extent Brabant, are the areas where the preverbal marker in addition to a negative quantifier is optional in the sense that it is provided and absent when it is or is not present in the stimulus, respectively. This raises the interesting question about the relationship between acceptability/introspective judgments and competence and especially why these do not (always) converge (Cornips and Corrigan 2005a,b, Cornips in press). So, it might be the case that West-Flanders and Brabant are to some extent transitional zones where they share intuitions about the presence of a preverbal marker as a potential grammatical structure. An individual speaker thus has a passive knowledge of more possible syntactic alternatives than he actually uses due to the fact that these possible alternatives can be heard in his neightbouring surroundings.

Importantly, what distinguishes these speakers from the other in, for example, the Netherlands is that in the case of the latter, these speakers never allow a preverbal marker when judging the stimulus, even when it is present. Further, the different geographical patterns as revealed by the

Maps above show the utility of a layered methodology; that is, without it, it would have been impossible to discover areas where the preverbal marker is optional.[11]
In the following sections we provide an insight of how dialectal variation can restrict the way in which we analyze a phenomenon, it is clearly too much to expect our empirical findings to drive our theoretical assumptions completely, data always have to be interpreted, but we will try to show that given what is already known about negation and the theoretical analyses already provided to account for multiple negative elements yielding negative concord, the data coming from dialectal research obtained through a layered methodology can exclude a number of possible analyses thus narrowing the possibilities we have to test and discard.

From the above, it appears that preverbal negation never occurs alone. Let us consider now the position of preverbal negation in those dialects.

*4.1.1 The position of preverbal **en***

When in main clauses preverbal negation co-occurs with a postverbal negative marker, the former arises in front of the inflected verb which has moved to C° because of V2. Preverbal negation was not in the stimulus, but it has spontaneously been provided in (14a,b),

(14)	a.	Z-	*en*	weet	*ni*	da	Marie	gisteren	gestorve	is
		she	en	knows	not	that	Mary	yesterday	died	is
										Lummen
	b.	'k	*'n*	e	*nie*	gewerkt				
		I	en	have	not	worked				

Further, in embedded clauses where the verb does not move to C°, the position of *en* seems to be immediately before the inflected verb such as *kunt* 'can' and *zou* 'shall' in (15a) and (15b), respectively and *zijn* 'are' in (15c) and (15d). What's more, *niet* appears before the adjectival part of the verb such as *gemakkelijk* 'easy is' and *kwaad* angry are', as illustrated in (15c) and (15d), respectively:

(15)	a.	Oz	e	echt	*nie*	*en*	kunt	wachten,	kom	tuuns	
		if	you	really	not	en	can	wait	come	on	
										Oosterzele	
	b.	aus	'k	da	geweten		au,	'k	*en*	zou	't *nie*

	if	I	that	known	had	I	en	would	it	not
	gedaan	ein							*Oosterzele*	
	done	have								
	'I wouldn't have done it if I had known'									
c.	Els	peist	da	't	*nie*	gemakkelijk	*en*	is	*Bevere*	
	Els	thinks	that	it	not	easy	en	is		
d.	Piet	peis	da	Jan en Marie	ip	*niemannie*		kwaad	*en*	zijn
	Piet	thinks	that	John and Mary	at	noone not		angry	en	are
										Kortrijk

In (16) below, *en* again appears immediately before the inflected verb, while *niet* arises before the particle *mee* 'with':

(16)	As	hem	*niet*	mee	*en*	pak,	bein	'k	kaad	*Oosterzele*
	if	him	not	with	not	take away	am	I	angry	
	'I am angry when they don't take him with them'									

This in the behavior of the negative element *en*, which has the properties of a clitic in requiring an independent host, in this case the inflected verb, confirms the standard idea, as already proposed by Pollock (1989) and Haegeman (1995), that discontinuous negation is an instance of clitic doubling. Second, the preverbal negative marker *en* always comes as a doublet of a negative XP, that is to say, if there is no other sentential marker such as *niet '*not', it needs a negative quantifier such as *niets* 'nothing' in order to be grammatical, as illustrated in (17). In (17b), preverbal *en* is spontaneously provided. Probably, this indicates that the negative concord is necessary in those dialects that have X° high negation, as in Romance. Very often, features that are spontaneously provided, thus not a repition of the stimulus are obligatory (see Part I):

Sentence to translate (written):

(17)	a	Ik	geef	*niets*	aan	een	ander	*niet*

Translation by subject in Oosterzele:

b.	'k	*en*	geve	*niets*	aan	nen anderen
	I	en	give	nothing	to	another

However, a generalization is that *en* never occurs with a negative quantifier in isolation as answer to a question, as in (18). If *en* is a functional head located in the sentence structure on a par with its Romance counterpart, this is expected:

(18) a Wie eetr dn auto meegepakt?
who has the car taken
b **en* niemand
en noone

What's more, preverbal negation *en* never arises in the translations of (19) involving the two negative quantifiers *nooit* 'never' and *niemand* 'noone':

(19) Wim denkt dat we *nooit* *niemand* een prijs geven
Wim thinks that we never nobody an award give

Interestingly, preverbal negation *en* combines with modified postverbal *ook niet* 'also not', as illustrated in (20b) but it does not when this modified postverbal *ook niet* is combined with sentence internal *niet*, as exemplified in (20c). The stimulus in (20a) is the only sentence in the written questionnaire that involves a modified postverbal *niet*:

Stimulus:

(20) a. Ik wist het *niet* *ook* *niet*
I knew it not also not

Translations by subjects: response either:

b. Œk *en* wist et *ook* *nie* *Gent*
I en knew it also not

or

c. Ik wist et *nie* *oek* *nie* *Merksem*
I knew it not also not

but never:

d *I *en* knew it *not* also *not*

Note, however, that only five subjects translate the stimulus in (20a) with a preverbal marker as in (20b) (in contrast to the larger number of subjects in the oral fieldwork regarding modified postverbal *nie* combined with an infinitive, see Map 4 in §4.2.2).

The data in (20b,c) show that there cannot be three sentential negative markers of the types considered above in a single sentence, thus suggesting that *en* can combine either with *nie* or *ook nie*. Moreover, it also reveals that the co-occurrence of *nie* and *ook nie* should be analyzed as starting out from a single complex negative XP.

In sum, the data are compatible with the following set of hypotheses:

(i) as the negative marker *en* never occurs alone, it is probably a clitic element;

(ii) the combination of the two negative markers *en* and *niet* shows that they can be conceived as a clitic doubling instance. Under an analysis of clitic doubling starting out as a complex constituent, as the one widely assumed since Uriagereka (1991) *en* and *niet* can also be analyzed as a single complex XP located in the spec position of the sentential projection NegP;

(iii) the negative marker *en* cannot combine both with the negative marker *niet* and the modified postverbal *ook niet*; the combination of *niet* and *ook niet* probably also starts out as a single complex negative XP.

*4.1.2 Hierarchy of context with respect to optional preverbal **en***

The following hierarchy of sentences emerges when we examine the written translations in which the preverbal marker *en* spontaneously occurs. In this hierarchy only those sentences are included where three or more subjects (up to 8 in the core area, see Map 2) provide the translation with *en*.

			number of spontaneous translations with preverbal *en* by eight subjects
(21) a.	Ik wist het *niet ook niet*		7
	I knew it not also not		
	translation: Westvleteren		
	ik *en* wist *oek nie*		
	I EN knew also not		
b.	Ik geef *niets* aan een ander *niet*		5
	I give nothing to another not		
	translation: Oosterzele		

'k *en* geve *niets* aan nen anderen

I EN give nothing to another

c. Ik wil *niemand* *niet* kwetsen *niet* 5

I want noone not hurt not

translation: Westvleteren

ik *en* wile *niemant* *nie* kwetsen

I EN want noone not hurt

d. *Had* *ik* *dat* *geweten* dan had ik het niet gedaan 5

had I that known then had I it not done

translation: Aalst

ad ek et geweten 'k *en* ad et *nie*

had I it known I EN had it not

gedoon

done

e. *Als* *jullie* *hem* *niet* *meenemen* (...) 5

If you him not take away

translation: Oosterzele

as hem *niet* mee *en* pak

if him not part EN take

f. *Boeken* heeft Jan *geen* 5

books has Jan not

translation: Oosterzele

Jan *en* ee *geen* boeken

Jan EN has no books

g. *Niet* heb ik gewerkt 5

not have I worked

translation: Kortrijk

'k *en* he *nie* gewerkt

I EN has not worked

h. *Niemand* zegt (dat ....) 3

noone says that

translation: Oosterzele

't *en* zegt *niemand* (dat ...)

it EN says noone that

i. *Niet* had hij het verteld (of ...) 3
not had he it told (or..)
translation: Oosterzele
ei *en* oot nog maor zuust gezeid (of ...)
he EN has part part just told or

j. Magda weet *niet* wie (...) 3
Magda knows not who
translation: Oosterzele
Magda *en* weet *nie* wien (...)
Magda EN knows not who

It is important to point out that the different contexts in (21) trigger a translation with preverbal *en* and that the subjects in doing so further alter the stimulus sentence. First, the hierarchy shows that the main clauses (21a,b,c) involving more than one negative element trigger a translation with preverbal *en* but without sentence-final *niet* (§4.3). Further, conditional clauses favour the occurrence of *en* (21d,e) and those sentences in which topicalisation of the negative element has taken place (g, h, i) or with stranding of the negative element with a split topic as in (f). Although these contexts favour the spontaneous occurrence of preverbal *en*, the translations without it show that topicalisation and stranding of the negative element is not grammatical in those dialects.

*4.2 Sentence internal **niet***

The negative marker *niet* in the stimulus of the written questionnaire corresponds to the one of standard Dutch in terms of position:

(22) a Magda weet *niet* dat wij willen bellen
Magda knows not that we want call
'Magda doesn't know that we would like to make a phonecall'

b Weet je *niet* dat hij gevallen is
know you not that he fallen is
'Don't you know that he has fallen?'

This negative marker can be combined both with preverbal negative markers and with negative quantifiers. First, as already described above (§4.1) a restricted geographical area reveals embracing

negation similar to standard French. Further, sentence internal *nie* is located in the same position whether it occurs alone or co-occurs with preverbal *en*:

(23)	a.	Ei	*'n*	werkt	*nie*				*Oosterzele*
		he	not	works	not				
	b.	Jan	*en*	e	*ni*	vele	gelt	me	*Westvleteren*
		John	not	has	not	much	money	more	

As mentioned earlier, the embracing negation in (23) provides a confirmation for Jespersen's cycle in the domain of Germanic languages i.e. the postverbal negative marker 'reinforcing' the preverbal negative element is no longer optional.

Second, sentence internal *niet* can also co-occur in some dialects with a negative quantifier yielding a double negation or a negative concord interpretation. Only in a very restricted area (Flanders and two locations in the Netherlands), a combination of the negative quantifier with sentence internal *niet*, as exemplified by (24), is present:

(24)	a.	'k	wee	da	de	golder	op	*niemand*	*nie*	kwaad	zijn
		I	know	that	you		at	noone	not	angry	are
										Oosterzele	
	b.	Piet	peis	da	Jan en Marie		ip	*niemannie*	kwaad	*en*	zijn
		Piet	thins	that	John and Mary		at	noone not	angry	en	are
										Kortrijk	

Cases like (24), where negative concord between a negative quantifier and sentence internal *niet* is possible, could in principle be analysed as instances of a spec-head relation similarly to what has been proposed for Romance negative concord by Haegeman and Zanuttini (1996) and Zanuttini (1997) with *niet* sitting in the head and the QP in the specifier of a negative projection.

Apparently, sentence internal *niet* always maintains the same properties; that is, it is compatible with a negative quantifier whether it co-occurs with preverbal *en* or not and it is located after a negative N-word as *op niemand* 'with no one', as illustrated in (24b) (see (15d) in 4.1.1). This is a strong indication that the negative marker *niet* occurring in the doubling structures with *en* and the one occurring alone has to be analyzed in the same way.

*4.2.1 The position of sentence internal **niet** and its co-occurrence with negative quantifiers*

With respect to the co-occurrence of the sentence internal *niet* with the negative quantifier *niemand* 'noone', as in (24) above and (25) below, according to Haegeman (1995) (see also Barbiers 2000), all the negative constituents such as *nooit* 'never' and *niemand* 'noone' must scramble across *niet* 'not' to Spec, NegP or an extended projection thereof to express negative concord. Indeed, in all possible cases in the written and oral questionnaires (total of 87) the negative quantifier *niemand* is scrambled across *niet*.[12] The same holds for the sentence in (25) in which the negative quantifier *niemand* is always in front of sentence internal *niet*:

(25)	kwil	*niemant*	*ni*	kwetse		(40 tokens)
	I want	noone	not	harm		

Thus, it is extremely rare to find more than one negative quantifier that precedes the negative marker *niet,* which apparently lends support to Haegeman's theory that a negative quantifier has to scramble to SpecNeg.

However, the translations of (26a) in the written questionnaires reveal that if there is more than one negative quantifier, *niet* is quite easily found (27 out of 51 possible answers) when the two negative quantifiers are to its right, as illustrated in (26b):

(26)	a	Jan	*en*	heeft	*niet*	veel	geld	*niet*	*meer*	
		Jan	en	has	not	much	money	no	more	
	b	Jan	e	*nie*	vele	*geen*	geld	*nie*	me	*Gistel*
		John	has	not	much	no	money	no	more	

Given that the negative marker precedes the quantifier, cases like (26b) cannot be instances of spec-head agreement, at least not at the level of overt syntax. Even if these cases were analysed as LF-movement, it would be necessary to admit multiple specifiers, as more than one negative quantifier should be moved to the left of negation (at least at LF). If the niet preceding veel geld is analyzed as constituent internal negation, there are other Germanic dialects that show that more than one negative element can be found in front of the negative marker, this showing that a spec-head account is not the right one (see Brugger and Poletto (1995) on Bavarian) What's more, in the oral tasks, in some cases the informants only produce instances as in (26) the second time. In our view, this means that when a speaker is performing an oral task he/she is involved in judging the sentence at the same time (see Schutze (1996) and discussion in the first part of this work already published

here), a process which evidently does not always occur in the written task. This, in turn, indicates that a layered methodology is more than advisable if we want to go deep enough and find more subtle phenomena than what is usually done when large geographical areas are investigated.

In conclusion, if there is more than one negative quantifier, *niet* is always found after the negative quantifiers *nooit* 'never' and *niemand* 'noone', but before *geen X* 'no X' and *niet meer* 'no more'. Putting all these data together, we obtain a template like the following:

(27)	*nooit*	*niemand*	*niet*	*geen* X	*niet meer*
	never	noone	niet	no X	no more

Importantly, this template is confirmed by the fact that even when *niet* is not present, the ordering of the negative quantifiers is:

(28)	*nooit*	*niemand*	*geen* prijs	
	never	noone	no reward	(only 1 instance of the opposite out of 134 tokens)

As the elements inside the template are in a rigid order, probably the spec-head agreement idea, which clearly contains the important intuition that negative quantifiers have to move to positions where they can check their negative feature by means of the negative head, could be modified by postulating not a single SpecNeg, but a whole 'negative field' where a number of negative projections can host different types of negative quantifiers and the negative marker itself (see again Brugger and Poletto (1995)). This also explains why the negative quantifiers have the same order in the absence of a negative marker. As we will discuss more extensively later (§5.1), the type of dialectal variation found in the respective Dutch dialects i.e. the dialects displaying such a negative field converges with the variation pattern in the NIDs.

Up to now no tests have been done in order to further control all possible variables that might interfere: the form of the negative quantifier (QP versus Q NP) the syntactic function (subject versus object) and the animate versus inanimate status of the quantifier. This will be a possible next step in the layered method. For the moment we can only state that in the template an animate subject QP is found to the left of an inanimate object Q-NP.

The elicitation results show that there is an implicational hierarchy in the negative concord cases, in particular:

(i) sentence internal *nie* is located in the same position when it co-occurs with preverbal *en*;

(ii) the most widespread type of negative concord is the one between two quantifiers;
(iii) then there is negative concord between one QP and the sentence internal negative marker *niet*;
(iv) then there is the negative concord with two quantifiers and the sentence internal *niet*;
(v) all the dialects that have the *en* morpheme also have negative concord with quantifiers (see also Zeijlstra 2004:120)

This hierarchy confirms once again the fact that, if we analyze the negative marker *en* as a high negative head on a par with Romance preverbal negation of the *non* type (as we will discuss more extensively later), negative concord is obligatory for high negative heads while it is not for the lower negative marker *niet*. The status as head or specifier might play a role in the possibility of negative concord.

*4.3 Sentence final **niet***

According to the literature, sentence final *niet*, as illustrated in (29) is expected to be found in Aarschot in Belgium, just northwest of Brussels in Brabant Belgium (Pauwels 1958):[13]

(29)	Niemand	wil	niet	werken	*niet*
	noone	wants	not	work	not

Sentence final *niet*, however, is not attested both in the written and in the oral fieldwork, also not in the surrounding areas of Aarschot. Although, sentence final *niet* is also reported in the literature to co-occur with preverbal *en*, there are no instances in the oral or written questionnaires. Further, sentence final *niet* combined with sentence internal *niet* as (29) above, is hardly attested in the translations (Barbiers & Vandenwyngaerd 2001, Zeijlstra & Neuckermans 2003). In the SAND sample there are only two written spontaneous examples. (although 5 test sentences were administered in oral and written elicitation).[14] However, they are suspicious because they come from a geographical area in the Netherlands where no sentence final negation is reported.

By the same token, there is no sentence final *niet* when there is an extraposed PP in the majority of the dialects:

(30)	a.	Er	mag	niemend	spreke	*nie*	over	dees	probleem
		It	may	noone	speak	not	about	this	problem

b.	Hi-j	mag	met	niemand	praote	*niet*	aover	dit	probleem
	he	may	with	noone	talk	not	about	this	problem

Only in 3 out of 87 possible cases involving sentence final *niet* and a negative quantifier *niemand*, there is sentence final *niet* before the extraposed PP in Aalst (East-Flanders), Heeswijk (Dutch Brabant) and Stokkem (Dutch Gelderland). Again, these locations are far away from the core geographical area and these translations must be considered as test effects (see Part 1 for a detailed discussion on task effects). Further, a sentence final *niet* never occurs after extraposed PP's. No cases like the following are found both in the written and in the oral questionnaires (only 3 cases due to task-effects):

(31)	Er	mag	niemend	spreke	over	dees	probleem	*nie*
	It	may	noone	speak	about	this	problem	not

We only detect the co-occurrence of sentence internal *niet* with a modified postverbal *ook niet* in a negative concord interpretation, as illustrated in (32):

(32)	Els	wil	*niet*	dansen,	en	ze	wil	*niet*	zingen	*ook*	*niet*
	Els	wants	not	dance	and	she	wants	not	sing	also	not

Map 4 reveals that this co-occurrence is judged acceptable in the provinces East-Flanders, Antwerp, Brabant with two occurrences in surrounding Belgium. The two dots in the Netherlands have to be considered as task-effects due to the fact that sentential negation with a modified postverbal *niet* is not acceptable elsewhere in the Netherlands:

Map 4: Sentential negation with modified postverbal *niet*; *niet...ook niet* 'not...also not'

In conclusion, only the dialects in Belgium with the exception of West-Flanders and Limburg allow for sentential negation with a modified postverbal *nie*. However, sentence final *niet* without modification may (no longer) be considered to be grammatical in the Dutch dialects due to (i) the sparse number of occurrences in the data base and (ii) these sparse occurrences are located in areas where sentence final negation is not reported in (older) dialect monographs. These two factors cast doubts on the real existence of sentence final *niet*. It is important to point out that such a result is much stronger than it would be if the language considered would only be one or two. Crucially, having at our disposal data coming from a large number of dialects strengthens our conclusions that a given structure is excluded on the basis of UG, and not simply by a language-specific rule.

4.4 Concluding remarks

In sum, we can conclude that the data coming from 267 different dialects throughout Flanders and The Netherlands did not support completely the observations made in the literature. First, the negative marker *en* never occurs alone and also a sentence final *niet* can not be attested. With respect to the former, *en* is analyzed as a high negative head needing obligatorily negative concord. Second, the combination of the two negative markers *en* and *niet* shows that *en* and *niet* are merged as a single complex XP located in the sentential projection NegP; also the combination of sentence internal *niet* and modified postverbal *ook niet* starts out as a single complex negative XP. Further, the positions of sentence internal *niet* co-occurring with negative quantifiers reveal a rigid order,

subsequently, a 'negative field' is assumed where a number of negative projections can host different types of negative quantifiers and the negative marker itself.

5. The ASIS phenomena: postverbal negation in some Veneto dialects

5.1 A synopsis of negation in the NIDS

As described earlier (see § 3.1), the NIDs present a wide variety of negative markers described by Zanuttini (1997). The ASIS data of the general questionnaire combined with Zanuttini insightful work permit us an interesting survey of the property of the different types of postverbal negative markers. Here we briefly outline some of her basic observations and discuss further data from the ASIS data base that show how intricate the domain is. Zanuttini shows that the preverbal negative markers are in general X° categories, because they block head movement of the inflected verb to C° in interrogative contexts:

(33) a Vienlo? *Paduan*
gloss (3x)
b **No* vienlo?
c *No*l vien?

She proposes that negation can itself move to the CP domain and satisfy the requirement of the null operator in yes/no questions by entering a Spec-head relation with it. However the precise analysis of these facts turns out to be, it is clear that the presence of preverbal negation has consequences on verb movement. Another well known case of this type is the one of negative imperatives, where preverbal negation is incompatible with the form morphologically marked for the imperative mood, which has to be substituted by a suppletive form. This is generally an infinitive in standard Italian while it can be a subjunctive or a gerund in other languages:

(34) a Magna! *Venetian*
eat+imp!
b **No* magna!
not eat+imp
c *No* magnare!

not eat+inf

Although preverbal negative markers are in general heads, they are not all the same; that is, in some dialects they have developed into clitics, as they can be inserted inside the clitic cluster (see for instance Ligurian dialects where negation is located after object clitics of first and second person but before third person object clitics (see Zanuttini 1997: 5-6)):

(35) a U mi-*n* sent *nent*
Scl me-neg hears neg
b U *n*-i sent *nent*
Scl not-them hears neg

In other dialects they are independent heads (like in standard Italian) as they can bear contrastive focus (cf. Zanuttini (1997):???).

Postverbal negative markers are generally considered XPs located in the Spec position of an FP (generally NegP) which can be found at different levels of the sentence structure and do not block verb movement, they can be found preverbally only when they are moved to the CP domain (usually followed by a complementizer):

(36) a. Par *nen* ch'a se stufieissa *Piedmontese* (Zanuttini 1997)
for not that cl gets tired
b. *Miga* che el sia stupido, ... *Venetian*
not that he be stupid,…

While the etymology of preverbal negative markers is generally always the same, the etymology of postverbal negative markers is varied and interestingly connected to their syntactic properties: some derive from a negative QP corresponding to 'nothing' like Piedmontese *nen*, Rhaetoromance *nia* etc. (for the sake of conciseness we will call them type I) ; others are homophonous with the pro-sentence form 'no', as Milanese and more generally Lombard *no* (type II). Those of the third type originally indicated a very small quantity like Veneto *miga*, Lombard *minga*, Emilian *brisa*, Alpine Lombard *buca*, and French *pa*. Moreover, those of the third type can be combined with both type I or type II:

(37) a A fa *pa* *nen* lu lì *Piedmontese* (Zanuttini (1997))

	scl	does	not	not	that	there	
b	A	l'è	*minga*	vignù	*no*		*Milanese*
	scl	is	not	come	not		

However, ASIS data never show a co-occurrence between postverbal negation of type II and type III. Zanuttini shows on the basis of the distribution of adverbs located in the Spec positions of FPs in the low portion of the sentence that each type of postverbal negative marker has a distinct position and proposes the following structure:

(38) [$_{NegP1}$ non [$_{TP2}$ [$_{NegP2}$ pa [$_{TP2}$ already [$_{NegP3}$ nen [$_{Asp\ perf}$ anymore. [$_{Asp\ gen/progr}$.always [$_{NegP4}$ no]]]]]]]]

By and large in the structure (38) NegP1 is the position for preverbal negation, NegP 2 the one for presuppositional negation, originally deriving from 'small quantity' items (which probably became weak NPIs before becoming real negative markers). NegP3 contains elements of the 'nothing' type, and NegP4 contains elements of the pro-sentence 'no' type (which is also the type found in sentence final position in Trentino of the Val di Cembra).[15] This structure does not explain why the only impossible combination is the one between the two lowest NegP projections, while all other possibilities are attested. Hence, a survey of the ASIS data on co-occurrences among negative markers pushes us to assume that, although Zanuttini's data concerning the ordering of negative markers and adverbials clearly show that there are three types of postverbal negative markers, the relation between NegP3 and NegP4 must be of a different type with respect to the relation between all other pairs of negative markers, as NegP3 and NegP4 are the only ones which never co-occur.[16] One could assume that between NegP3 and NegP4 there must be a derivational connection, namely the element located in NegP3 at the end of the derivation is probably merged inside NegP4 (or even lower in the position of object quantifiers and passes through NegP4) before moving to the higher NegP3.[17] This is in our view a clear example of how an extensive survey of dialectal data can improve theoretical research: it renders some connections immediately visible, which would remain hidden otherwise.

If the co-occurrence among negative elements is considered, a major distinction between preverbal and postverbal negation has to do with negative concord. Elements located in NegP1 always requires negative concord: in all dialects when the QP is postverbal, in some dialects even when the quantifier is preverbal (as in Rumanian).

(39)	a.	*No*	vien	*nisun*				*Paduan* and *Venetian*
		not	comes	nobody				
	b.	*Nisun*		*no*	vien			*Venetian*
		nobody		not	comes			

Postverbal negation does not generally display negative concord: however some dialects tolerate the co-occurrence of a negative QP and the negative marker,[18] this depends on:

(i) the type of negative element (postverbal negation of type I never tolerates negative concord, while type II and III can if some conditions are met, as mentioned below);

(ii) the position of negation (while elements located in NegP3 marginally admit the co-occurrence with a postverbal negative quantifier, elements located in NegP4 never do;

(iii) the adjacency between the negative marker and the negative QP[19] As we have discussed earlier on the basis of the SAND-data, this is not only connected to the position of the negative marker but also to its head versus phrasal status, as low negative markers are compatible with negative quantifiers. This is also the case in the Dutch dialects (see §. 4.2).

Taken together, we have shown how the ASIS data of the general survey have proved useful in order to identify further possible refinements inside a well motivated theory as the one proposed by Zanuttini (1997).

5.2 More on postverbal negation of type I

In this section we show how a more detailed inquiry of one type of postverbal negative marker can lead us to a refinement in the analysis. As mentioned above (see (5) in §3.1), the first survey questionnaire shows that Veneto dialects have an apparently optional postverbal negative element corresponding to the standard Italian 'mica' because of its morphology and of its location between the auxiliary and the past participle. Illasi is the Veneto dialect that is located at the Western extreme of the region and close to Lombardy, while Carmignano di Brenta is the dialect located in the central part of the region whereas Mestre is located on the Eastern coast:[20]

(40)	a	*No*	so	(*mia*)	chi	che	lavarà	i piati	*Carmignano di Brenta*
		not	know	(neg)	who	that	will-wash	the dishes	

b	*No*	so	(*mia*)	ci	lavarà		i piati		*Illasi*
	not	know	(neg)	who	will-wash		the dishes		
c	*No*	so	(*miga*)	chi	che	lavarà	i piati		*Mestre*
	not	know	(neg)	who	that	will-wash	the dishes		
	'I do not know who will wash the dishes'								

The data of the first written questionnaires show that postverbal negation is not obligatory but possible in the three dialects chosen. Cinque (1977) shows that *mica* in standard Italian does not occur in a variety of non-presuppositional contexts (as embedded clauses of various types). If his analysis of standard Italian *mica* as a presuppositional negation can be applied to these dialects as well, we expect not to find this optional negative marker in non presuppositional contexts as the following[21]. This would confirm the idea that Veneto dialects are like standard Italian:

(41)	a	Se	*no*	piove,	vignio	da	noaltri?		*Carmignano di Brenta*
		if	not	rains,	come-you	to	us		
		'If it won't rain, would you come to us?'							
	b	Se	*no*	pio(v)e,	vegnio	da	noantri?		*Illasi*
		if	not	rains,	come-you	to	us		
	c	Se	*no*	piove	vegnì	da	nialtri?		*Mestre*
		if	not	rains,	come	to	us		

Some sentences in the questionnaire led, however, to conclude that the situation is not so simple. Illasi, for instance, displays postverbal negation in some non presuppositional contexts, like the embedded clause of a cleft sentence which would be ungrammatical in standard Italian:

(42)	L'e	Piero	che	*no*	vol	*mia*	nar	ia
	it is	Piero	that	not	wants	not	go	away

In the Carmignano dialect there are no cases of non presuppositional postverbal negation, but postverbal negation can also occur alone in the sentence, which is impossible in standard Italian:[22]

(43)	So	mia	chi	che	lavarà	i piati	(broa su)
	(I) know	not	who	that	will wash	the dishes	

The study of apparently optional cases is important because it helps to reconstruct the diachronic path of evolution of the Jespersen's cycle, i.e. how a construction with postverbal negation is progressively enlarged and in which contexts that are subject to the extension of the construction are ordered. However, optional cases can pose problems to descriptive generalizations because in some cases dialects seems to present a number of apparent exceptions to well established generalizations, as in (42) and (43). We think this is a very typical situation when one is confronted with a large set of data. The problem is: what should we do when we encounter that a given descriptive generalization holds for the vast majority of the dialects but one or two seem to disconfirm it, as presented above. Should we simply ignore those data or consider the generalization as wrong? Obviously, these 'counterexamples' are not enough to draw any conclusion, but show that there might be something more at stake here than a simple case of convergence between the Veneto dialects and the standard language.

A flat methodology would not permit us to go any further, but if we adopt a layered system, and prepare specialized questionnaires, designed to test whether postverbal negation in all dialects is similar to Italian, we get interesting results. A first inquiry has been conducted on three speakers, one for each of the dialects mentioned above, and then extended to other speakers of the neighboring areas. On the basis of Cinque's analysis (1977), who shows that *mica* in standard Italian does not occur in a variety of non-presuppositional contexts, a questionnaire has been created to test exactly those non-presuppositional contexts where *mica* is excluded in standard Italian. Subsequently, the speakers were asked to insert the postverbal negative marker in the non-presuppositional contexts and judge whether the sentence is still grammatical. It turned out that the three dialects differ in allowing postverbal negation in non-presuppositional contexts, but there is an implicational scale that coincides with the geographical position of the dialect. As mentioned above, Western Northern Italian dialects like the Lombard ones have generalized postverbal negation (and lost the preverbal negative marker tout court), among the three Veneto dialects the Western one admits postverbal negation in a wider number of contexts, while the one in the central part is more restrictive whereas the most restrictive dialect is the one located on the Estearn coast. The three dialects are, however, all more liberal than standard Italian in using postverbal negation (see (40). By using the same contexts that are considered ungrammatical in standard Italian by Cinque (1977), we obtain an implicational scale of the following type. The following sentences, where the postverbal negative marker occurs in non presuppositional contexts, though judged as ungrammatical in standard Italian are possible in the three dialects:

(44) a. Chi no pol *miga* vegner?

	who	not	can	not	come?				
b.	Chi	no	pol	*mica*	ndarghe?				
	who	not	can	not	go-there?				
c.	Non	ndando		*miga*	fora,	ti	deventarà	mato	
	not	going		not	out,	you	will get	mad	
d.	So	contento		che	Marco	no	sia	*miga*	rivà par ultimo
	am	glad		that	Marco	not	is	not	arrived for last

The following sentence are possible in Illasi and Carmignano but impossible in the dialect of Mestre:

(45)	a.	El me ga regalà quei libri che				nol	lezeva	*mia*	da	tanti ani
		he me has given those books that				not-he	read	not	since	many years
	b.	Non	ze	posibile	che	nol	te	riguarda	*mia*	
		not	is	possibile	that	not-it	you	concerns	not	
	c.	La	ze	*mia*	alta,	la	Loren			
		she	is	not	tall,	the	Loren			
	d.	Quela	ze	la toza	che	no	vole	*mia*	essare invitada a balare	
		that	is	the girl	that	not	wants	not	be invited to dance	

The following sentences are impossible in Mestre and Carmignano but still possible in Illasi:

(45)	a.	Par	no	farlo	*mia*	rabiare		
		for	not	do-him	not	get-angry		
	b.	No	ndando	mia	fora	da	tre	anni…
		not	going	not	out	since	three	years
	c.	Go	fato	finta	de	no	essare	*mia* stufo
		have	pretended	of		not	being	not tired

Cases like the following are out in the three dialects, showing that postverbal negation is not generally admitted for unmarked sentential negation as it is in Lombard dialects:

(46)	*Vago	via	se	nol	riva	*mia*	tra	sinque	minuti
	go	away	if	not-he	comes	not	in	five	minutes

In addition to this distinctions, there are a number of factors which interfere with the judgments enlarging the number of contexts in which postverbal negation is possible. The first one is Focus: when the predicate is focalized in the clause, *mica* becomes grammatical also in contexts where it is generally not allowed.
For instance, the following cases are acceptable for all dialects, but require Focus in Mestre, while in the other two dialects the intonation can also be neuter:[23]

(47) a. Te digo che nol pol miga vegner
(I) you tell that not-he can not come

b. Te comando de no ndar *miga* fora
(I) you order of not go not out

The following example is impossible in all dialects, but becomes grammatical when Focus on the predicate is present:

(48) El lo ga costreto a non ndar *mia* FORA, seto
he him has forced to not go not OUT, you-know

The second context are interrogative clauses, in which postverbal negation is generally admitted in the three dialects (see (44a,b), above).

The data above show that the successive questionnaire allows us to circumscribe (i) an implicational scale according to which *mica* is accepted, (ii) some general factors licensing the presence of *mica*. Of course, the problem remains of understanding why the implicational scale is as it is. Before briefly sketching out an analysis, we have to further refine the implicational scale obtained so far. Therefore, other informants of the area investigated have been asked to put the examples already considered above into an ordered list starting with the most natural to the less natural (the people investigated come from Venice-Lido, Padova, Vicenza). Their judgments in their regional Italian provided the following implicational scale, which is provided in (49). Interestingly, they do not all agree on the degree of grammaticality of all the following sentences, those that have an unclear status are marked with the following symbol %. The first sentence is also grammatical in standard Italian, the others are all impossible:

(49) a. Non fa (*mica*) freddo qua dentro!
not does not cold here inside!

b. %Chi non può (*mica*) venire?
who not can not come?

c. %Ti dico che non può (*mica*) venire.
(I) you tell that not can not come

d. Sono contento che Marco non sia (*mica*) arrivato ultimo.
am glad that Marco not is not arrived last

e. Ho fatto finta di non essere (*mica*) stanco.
have pretended of not be not tired

f. %Non è possibile che questo non ti interessi (*mica*).
not is possibile that this not you interests not

g. %Ti ordino di non uscire (*mica*).
(I) you order of not go-out not

h. %Ti chiedo di non accontentarlo (*mica*).
(I) you ask of not give-him.what he wants not

i. Se non esci (*mica*), ti stufi.
if not go-out not, you (will get) tired

j. La storia che io non voglia (*mica*) spendere mi .
the story that I not want not give-out-money me
offende
offends

k. L'ha costretto a non parlare (*mica*).
(he) him forced to not speak not

l. Per non farlo (*mica*) arrabbiare, gli ha detto di sì.
for not get-him not angry, him has told of yes

m. Gli ha detto di sì per non farlo (*mica*)
him has told of you for not get-him not angry

n. Dato che non usciva (mica) da tre anni, era depresso.
Given that not went not out since three years, (he) was
arrabbiare
depressed

o. %Dato che non conosceva (*mica*) il padrone di casa, era preoccupato.
given that not know not the house-owner, (he) was worried

p.	Quella	è	la ragazza	che	non	vuole	(*mica*)	essere	invitataa	ballare
	that	is	the girl	who	not	wants	not	be	invited	to dance
q.	Mi	ha	regalato	i libri		che	non	leggeva	(*mica*)	
	me	has	given	the books		that	not	read	not	
	da almeno		tre	anni.						
	since at least		three	years						
r.	Me ne	vado	se	non	arriva	(*mica*)	tra	cinque	minuti.	
	myself	go	of	not	comes	not	in	five	minutes	

What is interesting is that all the speakers interviewed agree on the implicational scale except for the cases marked with %. Some interesting notes made by the speakers concerning exactly these cases suggest that the interpretation of the unclear cases depends on the intonation used, if there is a focalization of the postverbal negative marker (as for instance in (49)) the sentence becomes much more acceptable. For one speaker there is also another factor playing a role: if the postverbal negative marker is in sentence final position, the sentence is more degraded than a similar one where the postverbal negative marker is followed by some material (for instance the particle of a phrasal verb). Thus, focus conditions play an important role in judging those sentences: one could hypothesize that the postverbal negative marker in the unmarked case is a weak element and has a strong counterpart which can be used in different contexts.[24] Therefore, once the implicational scale has been discovered, a third possible stage of inquiry can be constructed, where the implicational scale is tested and contexts grouped together to see whether they have the same type of operators. This could lead us to a better understanding of the implicational scale as the one represented in (49) and not a different one. Hence, although Cinque (1977) originally proposed that postverbal *mica* is licensed by the presence of a presupposition in the clause, this hypothesis, although adequate to account for the standard Italian data does not seem prima facie to capture the implicational scale that the Veneto dialects display. One might hypothesize the implicational scale discovered must have something to do with the class of operator (cf. Pescarini 2004), whose features have to be taken into account for the definition of the scale.[25] In other words, in all dialects the postverbal negative marker *mica* requires the presence of an operator and variation lies in the type of operator that can work as the licensor: it can be different types of modals, focus, or an interrogative operator.[26]

6. Evaluation

We have taken into account the type of dialectal variation found in two projects the SAND- and the ASIS-project. We have seen that the distribution of negative markers displays an unexpected degree of similarity in the variation pattern, although the languages considered are Romance for the ASIS and Germanic for the SAND. The aim of this paper is twofold; that is, we have tried to shed light on the hierarchy of formal properties to find out which are 'more superficial' or peripheral and can be changed by dialectal variation and which are more stable and vary only among different language groups. For instance, it is clear that sentential negation is subject to doubling processes in dialects of the same group, on the other side, there seems to be an implicational scale among elements that can be doubled by a negative marker, which is probably general and should be tested in other linguistic domains as well.

On the other hand, we have discussed the utility of a layered methodology on the basis of two distinct inquiries on sentential negation in the Dutch and Northern Italian dialects. We hope to have shown that a flat method would have lead to wrong conclusions in the case of the interaction between sentence internal negation and negative quantifiers in Dutch dialects. Moreover, without a layered methodology it would have been impossible to discover a number of subtler meaning distinctions in the usage of postverbal negation in some northern Italian dialects.

The discoveries of 'optional' negative markers presented here are particularly interesting because they could lead us to a better understanding of the 'Jespersen cycle', namely that diachronic processes according to which a language having only a preverbal negative marker develops an 'optional' postverbal negative marker 'reinforcing' the preverbal negative element, which in turn becomes weaker and in the end disappears. Note that terms like reinforce or weak are not precise enough and we would like to gain a more detailed picture of how the cycle works. Dialectal variation is often said to be the synchronic counterpart of diachronic variation, and can thus be exploited in order to clarify syntactic processes we do not have access anymore. Several authors (see among others Vai 1999) note that the diachronic cycle proceeds by progressively enlarging the contexts in which postverbal negation is tolerated (though not obligatory) and lead to a system that has both obligatory pre and postverbal negation. The question arises of which precisely these contexts are, whether they can be put into a scale from the first to the last to occur with discontinuous negation and whether the scale is always the same in all languages going through the cycle. In other words, one might be interesting in determining which factors allow the occurrence of the 'optional' postverbal negative marker, whether they are syntactic or semantic or both. The Dutch (i) preverbal *en*, (ii) sentence internal *niet* and (iii) sentence final *niet* are also the same tested in the

Italian domain, and this permits us a parallel between the two areas. It has been shown that a number of factors drive the presence of optional negative markers, i.e. the presence of other negative elements (like negative QPs) or focus and more generally, other operators.
On the basis of the data provided by the two data bases we have seen that a number of distinct negative elements show a distribution across the IP structure, and that in both domains the higher negative marker is always a head, whereas lower negative markers seem to be either heads or specifiers. Higher negative markers always occur with negative QPs, lower ones only in some cases. The data examined here reveal that the original idea put forth by Haegeman (1995) and Haegeman and Zanuttini (1996) that negative QPs are located in special positions checking their negative features, although not tenable in its initial technical formulation as Spec- head agreement, is correct if we assume the existence of a negative field containing different negative markers and quantifiers.

7. Concluding remarks

From the experiment on postverbal negation in the ASIS-questionnaire and the distribution of the negative markers in the SAND-project, we can conclude that:
a) by means of investigating close enough languages it is possible to gather a very precise picture on the range of variation of a phenomenon, which can be blurred by interfering factors when examining languages that have a very different grammar.
b) one always have to take very seriously each piece of data, and see whether a single occurrence of a construction in a questionnaire including a large number of potential contexts in which the construction could have been present is due to interference or to external phenomena or whether it is a genuine case indicating a hidden 'iceberg' of phenomena whose surface is manifested in a very small set of data.
c) gathering dialectal data is not a flat process, but involves various stages, each of which can exploit different types of tasks. In the first stage, which is essentially devoted to finding new phenomena, translation is often the simplest way of gathering data. In a second (or third) level inquiry other types of tasks are more likely to reveal the exact range of variation of the phenomenon: at this stage grammaticality tests (with all possible disadvantages they might have (see part I)) are unavoidable.

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[1] More information about the ASIS- and the SAND-projects can be found at: http://asis-cnr.unipd.it and http://www.meertens.nl/projecten/sand/sandeng.html, respectively.

[2] In this work we always use the term *optional* in quotation marks because the recent syntactic theory does not admit real optionality in the language. From the perspective of recent syntactic theory, optionality is an illusion due to different mechanisms, among which two competing grammars inside the same speaker, or still unknown semantic/pragmatic distinctions. However, the variationist sociolinguistics model assumes that individual grammars include variability (or optionality) and, consequently, the speaker has a choice in terms of syntactic operations (cf. Henry 2002, see also Cornips in press).

[3] The sentence used here, as an example is sentence number 8 of the first ASIS questionnaire.

[4] As already discussed in Part I, the phenomena which are not present in the (in this case Italian) stimulus sentence but are found in its translations are to be considered as genuine part of the dialectal grammar, because they are clearly not produced by interference with the language of elicitation.

[5] Note that the presence of postverbal negation could be judged as one of the criteria that distinguish a good informant already in the written questionnaire.

[6] It is important to point out that this paper draws on the insights of the linguists involved in the SAND-project such as Barbiers 2000, Barbiers & Vanden Wyngaerd 2001, Neuckermans & Zeijlstra 2003.

[7] Note that sentence final negation is also found in a very limited area in Trentino in Northern Italy (see Zörner 1989) and is attested in languages like Portuguese:

(i)	Luni	*no*	gh'	è	la	fera	*no*
	monday	not	there	is	the	marker	not

[8] Note, however, that the term 'postverbal' has a different meaning in the Romance and Germanic dialects we are considering here. Hence, all Dutch dialects are verb final but verb second languages, while the Romance dialects examined are not V2 but VO with movement of the inflected verb to some IP projection.

[9] However, Zeijlstra (2004:107) notes that although it is not possible to express sentential negation by means of a single preverbal marker, they may still occur in sentences that are negatively connotated e.g. by a semi-negative verb such as *twijfelen* 'doubt' or in the case of particles as in (based on oral elicitation):

(i)	a.	K	*en*	twijfele	*Aalter*
		I	en	doubt	

b.	K	*en*	e	maar	drie	pillen		*Berlare*	
	I	en	have	only	three	pills			

[10] The following sentences are in the input: *n* translations with 'en' in core area (Map 2)

(i)	a.	Jan	*en*	heeft	*geen*	boek	meer					15
		Jan	en	has	no	book	more					
	b.	Wij	*en*	wisten	*niet*	dat	hij	thuis	was			10
		we	en	knew	not	that	he	at home	was			
	c.	Hij	*en*	werkt								8
		he	en	works								
	d.	Jan	*en*	heeft	*niet*	veel	geld	meer				7
		Jan	en	has	no	much	money	more				
	e.	Dat	*niet*	*en*	ga	ik	doen					6
		that	not	en	go	I	do					
	f	't	*En*	was	*maar*	*net*	*goed*	*genoeg*				4
		it	en	was	just		good	enough				
	g	Het	is	jammer		dat	wij	komen	*niet*	*en*	mogen	3
		it	is	a pity		that	we	may	not	en	come	

[11] It is also claimed on the basis of the oral data in the SAND-project that different clause-types favor the occurrence of preverbal negation; that is, it is accepted more in negative embedded clauses than in negative main clauses. In its turn, negative main clauses favor its occurrence more than semi-negative clauses whereas preverbal negation arises less frequent in affirmative contexts (cf. Zeijlstra 2004, Neuckermans & Zeijlstra 2003).

[12] These testsentences are:

(i)	a.	Er	mag	*niemand*	spreken		over	dit	probleem		*niet*
	b.	Er	mag	*niemand*	spreken	*niet*	over	dit	probleem		
		it	may	noone	speak	not	about	this	problem		not
	c.	Hij	mag	met	*niemand*	spreken		over	dit	probleem	*niet*
	d.	Hij	mag	met	*niemand*	spreken	*niet*	over	dit	probleem	
		he	may	with	noone	speak	not	about	this	problem	not

[13] There are, a priori, two possible analyses of sentence final *niet* given the theoretical framework provided by Kayne (1994). If we adopt the standard analysis that VP is the lowest projection in the clause (see Rizzi 2004) on a discussion of the layers of the clause and on the theoretical reasons why thematic projections are necessarily found at the bottom of the structure) we can hypothesize that there is a very low position in the IP area where sentence final *niet* is realized and its position results from the raising of all the elements originally inside the VP outside the VP, either in a whole chunk or separately, with the arguments moving to case-checking positions and the past participle to a low (possibly aspectual) IP head. Alternatively, we could assume that sentence final *niet* is located in the high CP area with the fronting of the whole clause to its specifier position.

[14] The two examples are below and (ii) in endnote 11.:

(i)	ik	hem	*nie*	gewerkt	*nie*	*Lommel*, Belgium-Limburg
	I	have	not	worked	not	

[15] As noted in Benincà and Poletto (2005) the connection between the etymology and the position of each negative marker is not immediate and is probably only an indirect one, as for instance French *pas* should be presuppositional but it is clearly not (or not necessarily so). Benincà and Poletto suggest that in some cases an element is located in a higher position with respect to the one where it should occur given its morphological makeup, because elements can raise from one negative position to a higher one.

[16] Although each dialect selects one type of negative marker as the unmarked sentential negation, many dialects display all types of postverbal negative markers, including the sentence final one.
In some NIDs spoken in the Veneto area, postverbal negation can be of three types, all of which can combine with the preverbal negative marker:

(21) a Nol me piaze NO
Not-it me likes NO
'I do not like it'
b Nol te piaze?
Not-it you like?
'Don't you like it?'

(22) b Nol me piaze gnente
Not-it me likes nothing
c Nol me piaze miga
Not-it me likes not

While unmarked negation is the one which only contains the preverbal negative marker, All of them are used in special contexts: (21a) to focus on negation in contexts in which the utterance contradicts what has been previously asserted or asked by the interlocutor (and is felicitous in the context given in (21b). (22) corresponds to English 'at all' or Italian 'per niente' and also represents some form of focalization of negation, as seen above *gnente* corresponds to 'nothing' but in this dialect it can only be used with psych-verbs or intransitives, while it is ungrammatical with transitive and inaccusative verbs thus showing that it must be something different from a deletion of the preposition *per* 'for' of the Italian *per niente*.[16]

(23)	a	Nol	lavora	gnente			
		Not-he	works	nothing			
	b	Nol	dorme	gnente			
		Not-he	sleeps	nothing			
	c	*Nol	leze	gnente	libri		
		Not-he	reads	nothing	books		
	d	*Nol	magna	gnente	la	roba	dolse
		Not-he	eats	nothing	the	stuff	weet
	e	*Nol	vien	gnente			
		Not-he	comes	nothing			

the unexpected distribution of *gnente* in Venetian could shed light on the first environments in which the postverbal negative markers of the 'nothing' type have developed in dialects like Piedmontese or Rhaetoromance, where they are nowadays used as the unmarked negation. We could hypothesize that at the first stage postverbal negation of this type, being a negative quantifier typically used for the object, can only be used when the position of the object is free: hence the negative quantifier is generated in the empty object position and then raised to Negp3 (probably moving through other positions). Piedmontese and Rhaetoromance, where postverbal negation of this type is the unmarked case, and is obviously compatible also with transitive and inaccusative verbs do not merge the

negative QP in the object position anymore, but directly into a (low) FP. This would reduce the diachronic development of postverbal negation of the 'nothing' type to a well known pattern of grammaticalization, where a lexical element is reanalyzed as a functional one and the position where it was moved before the reanalysis becomes the new merge position, while the lexical one remains empty. Given that a diachronic study of postverbal negation is not the focus of this work, we leave this to future research, and simply point out that the study of apparently

[17] The hypothesis that elements of the 'nothing' type are merged in a special position, which is probably not the same of the object DP's but a position for object quantifiers, could be indirectly confirmed by the fact that French *rien* 'nothing' occupies a position to the left of the past participle, while this is not the case for other negative quantifiers as *personne*.

[18] See above the discussion on the SAND data for a confirmation of this observation.

[19] Zanuttini note that in Piedmontese when the negative quantifier and the negative marker are adjacent, they become incompatible, when the past participle is located between the two, the sentences are acceptable.

[20] We consider here examples of the same three dialects that will be used for the successive investigation.

[21] Following Cinque (1977) we assume that there cannot be any presupposition in an if-clause

[22] In standard Italian *mica* can occur as the only negative marker of the clause, but it is found in preverbal position

[23] Notice that such observations can only be done with already trained informants, and this is one of the reasons why such a detailed inquiry cannot be as extensive as the general survey presented above. About the problem of selecting good informants, see Part I.

[24] A magnitude test (namely a test according to which each sentence is assigned a grammaticality value inside a predefined scale, cf. Bard et. al.) was also prepared and performed by five of the speakers for the same sentences in their dialect, not in the regional variety of Italian. This test lead to partially confusing results: while it was clear that the first sentences were good for all five speakers in all their (Veneto) dialects, and that the last ones were relatively bad for all speakers, the central section from (54e) to (54n) did not give homogeneously degraded results. This test has not been taken into account here, and probably shows that when too many factors are interfering in the judgments it is better to use a test that controls for the context in which the sentence is used than a test which tries to put the sentences into a scale.

[25] Note for instance that interrogative *wh*-items are very high in the implicational scale, while relative wh-items

[26] However, Cinque's idea can be modified in order to account for the variation found. What we need is a sort of flexibility in the licensing conditions of the postverbal negative marker, which on the one hand accounts for the scale, on the other for the variability that we have found. An interesting line of thought is proposed in a recent article by Pescarini (2004), who assumed that the presupposition connected to the postverbal negative marker contains a modal element: informally; if postverbal negation is used, the presupposition is that the opposite should be true. Consider for example, the following sentence:

(i) Mario non è *mica* andato al cinema
Mario not is not gonge to-the cinema
glos

This sentence does not only negate that Mario has gone to the cinema, but also presupposes that he should have. According to Pescarini, the differences in the occurrence of postverbal negation has to do with the type of modal contained in the presupposition associated with postverbal negation (see Cinque (1977)). Different types of modals are allowed in different dialects. On the other hand we noticed that the presence of Focus or (for some speakers) wh-items licenses postverbal negation as well. Therefore, Unifying Pescarini's intuition with the observations above,