Annika Herrmann (2013): *Modal and Focus Particles in Sign Languages: A Cross-Linguistic Study.* Nijmegen: Ishara Press.

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In spoken languages, subtle meaning nuances can be expressed by prosodic and lexical means. For instance, the following frequently cited example: "Do you want an apple or banana cake?" – has two interpretations: either it is the choice between a fruit and a cake, or between two different types of cake. These interpretations are distinguished by intonation only. As an example of a lexical means of expressing meaning nuances, (1) is a request in Dutch, with the particle *even* making the request as more polite and less urgent.

(1) Doe de radio even uit
do the radio part out
'Switch off the radio!'

In the last 50 years it has been demonstrated that sign languages are full-fledged natural languages. One would therefore expect them to have similar prosodic and lexical means of expressing meaning nuances. The book by Annika Herrmann is one of the first attempts to describe such means for three unrelated sign languages.

The book "Modal and Focus Particles in Sign Languages: A Cross-Linguistic Study" is unique in many respects. First, it is one of the few studies which directly compares several sign languages (in this case, German Sign Language – DGS, Sign Language of the Netherlands – NGT, and Irish Sign Language – ISL) to each other using the same methods. In addition, it presents one of the first studies on modality and focus particles in sign languages, and it is the most detailed study of these grammatical phenomena in any sign language so far. Finally, the book also pays a lot of attention to the comparison of spoken and signed languages, in order to identify so-called modality effects[1] and to separate the universal properties of human languages from the 'surface' properties caused by the channel of communication. This quest for modality effects is one of the main objectives of sign language research in general (Sandler & Lillo-Martin 2006, Meier 2012), but the comparison of several sign languages (and several spoken languages used in the same countries) allows Herrmann to make a substantial contribution to the debate.

The book consists of an introduction followed by nine chapters grouped into three parts. The introduction very briefly discusses the research questions, methodology, theoretical framework, and the results of the research, and it outlines the structure of the book. The first part of the book called "Typological, theoretical, and methodological background" contains chapters on sign language typology (also including a discussion of selected linguistic proper-

[1] Modality can mean two different things: a grammatical category which expresses the attitudes of the speaker (as in *modal particles*), and the channel of communication (*visual vs. auditory modality*).

modal meaning, contains chapters on linguistic modality in spoken languages, and on linguistic modality in the three sign languages in question. Finally, the last part "Focus particles" contains chapters on focus particles in spoken languages, a chapter on focus particles in DGS, NGT and ISL, and a chapter concluding the book.

As explained above, the two main empirical domains of the book are modal meaning and focus particles. The reader should be aware that the title of the book is somewhat misleading, as Herrmann argues, based on the data she collected, that none of the three sign languages has modal particles. Instead, she shows that the sign languages employ other means to express modal meanings, which in languages such as Dutch or German are expressed by modal particles. On the other hand, focus particles are present in all these languages, and they are discussed in detail in the corresponding chapter. We proceed by addressing these two domains separately, and then we provide a general evaluation of the book. However, before we turn to the results, a note on the methodology is in order.

Methodology

The approach taken in this book is a comparative one; in particular, three sign languages are compared to each other (intra-modal variation), and to the surrounding spoken languages (inter-modal variation); in addition, the results are put into typological perspective. All these types of comparison are crucial when sign languages are studied. First, it has been claimed that the grammars of sign languages resemble each other more closely than those of spoken languages (the *variation hypothesis*), but to date a direct cross-linguistic intra-modal comparison has rarely been done. Second, sign languages exist in contact with spoken languages used in the same countries. The comparison of DGS, NGT, and ISL offers an opportunity to address both these issues. These three sign languages are probably not related; hence if they are found to resemble each other considerably in the domains under investigation, this could be an argument in favor of the variation hypothesis. On the other hand, DGS and NGT are in contact with German and Dutch, respectively, and these two spoken languages are closely related and typologically similar; ISL is in contact with English, which is also related to German and Dutch, but less closely, and thus more grammatical differences can be found. In particular, German and Dutch both use modal particles, while English does not. Therefore, a comparison between DGS and NGT on the one hand and ISL on the other hand allows determining contact phenomena in the grammar of these languages.

One of the goals of this study was to offer an analysis of modal and focus particles in DGS, NGT, and ISL within a theoretical model, the Minimalist Program (Chomsky 1995). This decision also had an effect on the methods of data collection and elicitation, since in order to conduct an investigation within a formal framework, it is necessary to collect structured data, including grammaticality judgments.

Chapter 4 details the methods used in this study, explaining in particular that a combination of a corpus search and experimental data elicitation was used. As the later chapters reveal, corpus searches did not yield much useful information about modality marking or focus particles, so the main method of this study was elicitation. Various elicitation methods were used: pictures (i.e. tasks involving a picture and a question about the picture), picture stories (several pictures representing one story that had to be retold), and translation tasks (which involved the translation of a sentence, usually with an extended context provided). The data pertaining to modal meanings was elicited through the translation task, and to a large extent, the data pertaining to focus particles comes from this task as well. In addition, grammaticality judgments were elicited to supplement the collected data. 8 DGS signers, 3 NGT signers, and 5 ISL signers took part in the research.

stance, not possible to extract modal meanings from corpora, as they do not have manual expression in these languages. Also, it is not easy to find all the possible usages of focus particle within the limited data set of a corpus. She also acknowledges the potential pitfalls of using translations, such as the possible influence of the spoken languages (see van Herreweghe and Vermeerbergen 2012 for more detail). However, she concludes that the data from DGS, NGT, and ISL were not influenced by the corresponding spoken languages, because at the level of word order, at least, the elicited data showed patterns clearly different from German, Dutch, or English.

In addition, it is worth noting that not all participants of the experimental data collection were native signers. Herrmann argues that all of the signers were highly proficient in the respective sign languages, and confident about their production and grammaticality judgments.

Nevertheless, it seems advisable to test the results discussed in this book on the basis of corpus data in future. In particular, large corpora of NGT and DGS are being created and annotated at the moment, so extensive data sets are available. It would, for instance, be interesting to check whether word order generalizations concerning focus particles (chapter 8) are confirmed by naturalistic data, and also whether the non-manual patterns identified for modal meanings appear systematically in the corpus data as well.

Modal meanings

Chapter 5 contains an overview of the research on modality based on spoken languages. According to Herrmann, modality is "a semantic category that conveys the attitude of a speaker towards the validity of the content of a proposition" (p. 78). Herrmann also defines a narrower notion of modal meaning, namely "the meaning of an utterance that does not contribute to the truth-conditional meaning of an utterance and is componentially added on a separate level of meaning in order to convey different degrees and shades of probability, speaker's attitudes, and implicit discourse functional updates to the common ground" (p. 81).

Modal meaning is a universal category, but different languages use different linguistic devices to express it, such as prosody and intonation, adverbs, interjections, tag questions, collocations, and, finally, modal particles. In the remainder of the chapter, Herrmann summarizes previous research on semantic and syntactic properties of modal particles, primarily focusing on German and Dutch data. Based on the meanings typically expressed by particles in these languages, she creates contexts to study the same meanings in DGS, NGT, and ISL. As chapter 6 explains, the data suggest that these sign languages do not in fact have modal particles; instead these modal meanings are expressed through non-manual markers. The question remains, though, whether other modal meanings which are not expressed by modal particles in German or Dutch might also be expressed non-manually in DGS, NGT, and ISL. In other words, the discussion is restricted to the modal meanings which are expressed by particles in German and Dutch, but this might have led to overlooking other modal meanings in these sign languages.

In chapter 6, Herrmann summarizes previous research on modality in sign languages. Actually, only few studies have addressed this issue, and they are mostly concerned with modal verbs and adverbs. Modal particles have not been studied before. In order to elicit possible modal particles, Herrmann asked the participants to translate sentences, both without a context (neutral situation), and within a context designed to elicit modal meanings. She created stimuli of three sentence types (interrogatives, declaratives, and imperatives), and of six modal meaning types: reference to common knowledge, reference to evident knowledge, uncertainty, unexpectedness, strengthening the utterance, and softening the utterance. For instance, the sentence "We have been to this park before" was elicited without a context, to get the neutral modal meaning, and then in the following context: "Last year Anna and Peter visited the park

ber?". In this situation, the signer was expected to produce a sentence marked with reference to evident knowledge.

Herrmann found out that none of the sign languages uses modal particles in these contexts. Instead, non-manual markers (and some manual prosodic markers) are used to express these modal meanings. Interestingly, these markers are very similar in the three sign languages. In particular, in all three languages, reference to common and evident knowledge is expressed through squints, uncertainty is expressed through head nods (and, in DGS and NGT, frowns), unexpectedness is expressed through wide eyes, strengthening is expressed through tenser articulation and forward head tilt, while weakening is expressed through head nods. Herrmann argues that these similarities can probably be explained by the fact that these non-manuals have a gestural/emotional origin: for instance, unexpectedness, or surprise, is expressed by wide eyes by hearing population as well. However, Herrmann also found some differences in individual features between the three languages (see table 17 on page 164 for details).

One of the most important claims in this chapter is that non-manuals are grammatical markers, not emotional expressions. Herrmann provides three arguments in favor of this claim, namely that these non-manuals are used systematically by different signers, that they are neatly aligned with the syntactic structure (typically, non-manuals were spread across the whole sentence), and that they have clear on- and off-sets. It would nevertheless be interesting to compare these non-manual markers with the gestural non-manuals of hearing controls producing the same sentences. Recent research has shown that gestures also commonly align with prosodic units in spoken languages, so this criterion might have to be reconsidered (Kendon 2004). In addition, such a direct comparison of non-manual signals between hearing and deaf participants could also provide further evidence for the idea that these markers have grammaticalized from emotional facial expressions. Finally, in future larger groups of NGT and ISL signer should be studied to check whether there is indeed little variation across different signers.

Another important finding of this chapter is that different non-manuals have distinct meaning and can be simultaneously combined with each other to express more complex meanings compositionally. For instance, as Herrmann argues in section 6.4.5, wide eyes expressing unexpectedness may either combine with raised eyebrows to indicate surprise or with frown to indicate skepticism. Similar compositional accounts of non-manuals have been suggested previously for other sign languages (Dachkovsky & Sandler 2009).

Finally, Herrmann discusses the debate between syntactic and prosodic accounts of non-manuals. Some researchers (Wilbur & Patschke 1999) have argued that non-manuals should be analyzed as the overt realization of formal features, and that they spread across a c-command domain. According to the alternative theory (Sandler & Lillo-Martin 2006), non-manuals are prosodic markers and as such spread across prosodic domains, such as an intonational phrase, or an utterance. Spreading across prosodic domains which are non-isomorphic to syntactic constituents can be an argument in favor of such an account. In addition, regular semantics of non-manuals has been used as evidence of their prosodic nature as well (Dachkovsky & Sandler 2009). Herrmann shows that modal non-manuals usually spread across the whole sentence, which is also an utterance at the prosodic level, which implies that both a syntactic and a prosodic account can capture their spreading behavior. However, she is inclined toward the prosodic account, based on the clear semantic contribution and compositional combinations of different non-manuals.

To sum up, Herrmann shows in detail how certain modal meanings are expressed in three sign languages. She argues that these meanings are expressed by grammatical non-manual

One question that arises when looking at the examples in chapter 6 is whether the palm-up gesture could not be considered a modal particle in these languages. In all three languages, this manual element is used a lot in contexts of reference to common knowledge, reference to evident knowledge, uncertainty, and unexpectedness. Herrmann mentions this function of the gesture, but does not consider it a modal particle. She does not provide direct arguments for this decision, except for the fact that modal meaning is always expressed non-manually, while this gesture is optional. However, modal particles in German and Dutch are also always optional. Another possible complication lies in the fact that this marker is analyzed as a gesture; however, it is not clear why it cannot be analyzed as a grammaticalized sign. In fact, for several sign languages, including NGT, such grammaticalization has been proposed (van Loon 2012, McKee & Wallingford 2011). In particular, van Loon (2012) has shown that in NGT, the palm-up sign expresses several modal meanings, such as evaluative stance and epistemic stance. To sum up, the palm-up gesture/sign seems a very likely candidate for a modal particle in DGS, NGT, and ISL, and in other sign languages as well.

Focus particles

The second major part of this study concerns focus particles, that is, particles expressing meanings such as English *only, also,* and *even*. In chapter 7, Herrmann describes the semantic/pragmatic analyses of these particles, alongside with different syntactic analyses developed for German and English. Pragmatically speaking, these particles are associated with focus, that is, they express a semantic relation (such as restriction, addition, and/or a scalar meaning) in relation to the focused part of the sentence. Focus is a universal pragmatic notion, and the meanings expressed by focus particles are expected to be universal as well.

As for the semantics of these particles, *only* picks one specific element out of a set of alternatives; *also* adds at least one element of the set of alternatives to the meaning of the sentence; finally, *even* also adds one element to the set of alternatives, and the included element is an unlikely candidate. Even from this imprecise characterization of the meaning of these particles, it is clear that *also* and *even* share a meaning of inclusion of an element in the set of alternatives – the additive meaning. In addition, *even* has a scalar meaning: that the included element is unlikely. *Only* is restrictive, but it can be used as a scalar particle as well, namely when the specific element that is being picked is characterized as belonging to a lower end of a scale ("Tim is only a postman" meaning 'Tim is a postman, and this profession is ranked low on a scale'). Some researchers even argued that there are two lexical *onlys*: a restrictive and a scalar one (Horn 1969).

As for the syntactic analyses of focus particles, Herrmann discusses adverbial and head analysis of these particles. According to the adverbial analysis, focus particles are adverbs, and they adjoin at different levels of the syntactic structure, such as VP and IP (Jacobs 1983). According to the head analysis, focus particles are heads, and they attach to their focus associate (the part of the sentence they are semantically connected to) via a Spec-head relation (Bayer 1996). As Herrmann argues, there are good arguments for and against both theories; she comes to the conclusion that different languages may have different syntactic types of focus particles, which makes this issue relevant for DGS, NGT, and ISL, too.

In chapter 8, both semantic and syntactic properties of focus particles in these languages are discussed. Although a small corpus search has been conducted, the main method used to study focus particles was elicitation, again based on pictures, picture stories, and a translation task. It is worth noting that the picture story task was designed specifically to elicit different types of *only* (restrictive vs. scalar uses), and, judging by the results, it worked well. This task does not involve spoken language, which is another advantage. Hopefully, it can be used in the future by researchers studying other sign languages.

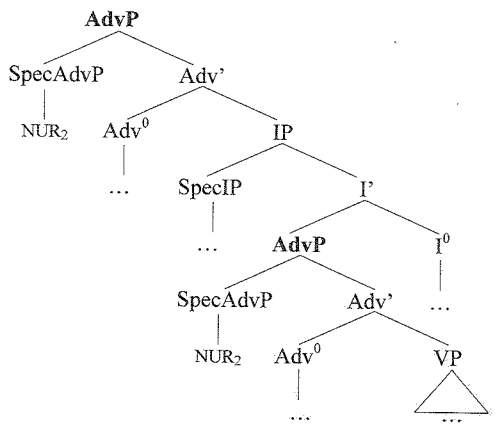
particle *even*[2]. Instead, this meaning is usually expressed through a combination of the manual particle ALSO and a non-manual marker (raised eyebrows, wide eyes, head tilted forward, and/or head nods). The additive particle is optional, so the non-manual marker can express the additive meaning on its own. Herrmann also conducted an on-line survey of focus particles in other sign languages and came to the conclusion that in many sign languages (American, Australian, Italian, and Israeli Sign Languages), manual focus particles meaning *only* and *also* are present, while the meaning of *even* is expressed by the combination of *also* and non-manual markers. Therefore, this surprising finding is valid cross-linguistically, and might constitute a modality effect.

Another very interesting result concerned the scalar use of ONLY. It turned out that the scalar meaning was generally expressed non-manually. In addition, the manual focus particle ONLY was sometimes used, but less often than in the purely restrictive contexts. This fact can be important for the debate on the status of scalar uses of *only* in spoken languages as well.

As is the case with modal marking, non-manuals expressing the meaning of *even*, and also the scalar meanings associated with *only*, look similar across the three languages. However, the lexical signs for *only* and *also* are different (and have different sources of grammaticalization), and the syntactic properties show some cross-linguistic variation.

Concerning the syntactic properties, most particles occur adjacent to their focus associate and precede it in all three languages. However, the restrictive particles NUR_1 in DGS and COMPLETION in ISL occur clause-finally. Herrmann offers an adverbial analysis for the particles adjacent to their focus associates. In particular, she argues that these particles are introduced in an adverbial projection adjoined to VP or IP. The particle itself is the specifier of this projection; the structure in (2) illustrates the different possible positions for the DGS restrictive particle NUR_2 (Herrmann 2013:303).

(2)

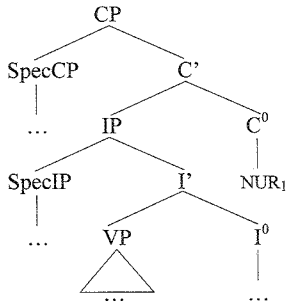


However, for the clause-final particles in DGS and ISL, a different analysis is proposed. Herrmann argues that these particles have a head status; in particular, they occur in C^0, which in these languages (and in some other sign languages) is on the right (3). She provides several

[2] The DGS sign PF is a possible candidate for the role of a scalar focus particle. It is used in sentences with the scalar meaning of *even* and is always accompanied by the appropriate non-manual markers. Herrmann, however, does not explicitly call it a particle, but also does not provide arguments against such an analysis. Nevertheless, the most common way of expressing this meaning in DGS are non-manual markers, sometimes in combination with the sign AUCH 'also'.

in DGS, the combination of this particle with another C^0 element, such as a wh-word, leads to ungrammaticality (4) (Herrmann 2013:307).

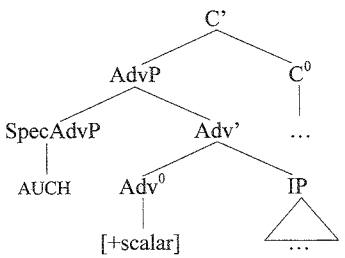
(3)



(4) * WER THEMA MODALITÄT LERN WER NUR_1
who topic modality study who only
'Who only studies the topic of modality?' (DGS, Herrmann 2013:308)

Finally, Herrmann proposes a syntactic analysis for the non-manual scalar marker, which expresses the meaning of even in combination with the additive focus particles. The non-manual marker always accompanies the focus particle and spreads across the focus associate, and sometimes across the whole sentence. Therefore, Herrmann suggests that it is an expression of the feature [+scalar], which is the head of the AdvP, the specifier of which is occupied by the (optional) focus particle (5) (Herrmann 2013: 324). The non-manual marker can spread over its c-command domain, which implies that, unlike the markers for modal meanings, this marker is analyzed syntactically, not prosodically.

(5)



General evaluation

As we argued in the beginning of this review, this book is an important contribution, both to the field of sign linguistics and to the theory of modal meanings and focus particles in general. In the last part of the review, we want to highlight some important aspects of this study.

Before discussing the most important findings, a short note on methodology is necessary. While Herrmann's findings are certainly significant and are likely to stimulate further research in this area, it is also clear that her study on modal meaning and focus particles is exploratory in nature. It is clear that at the first stage of research on modal meanings and focus particles, it was difficult to use realistic corpus data, and a translation task had to be used. However, given the small number of signers and the fact that not all of them were native, it is still advisable to

scalar uses of *only*, should be designed, in order to exclude possible interference from spoken languages.

Turning to the contributions, first, this study is an excellent example of the importance of comparing data from different sign languages. Quite often it is simply assumed that sign languages look similar to each other. This study shows that modal meanings are indeed expressed in strikingly similar ways in DGS, NGT, and ISL, and that there are non-trivial similarities in the domain of focus particles as well. However, differences have been identified in all these domains, too. This research thus makes it possible to discuss possible modality effects with a solid empirical basis.

Second, this study contributes to the debate on the status of non-manuals. Although Herrmann acknowledges that there is no conclusive evidence in favor of one of the competing theories, she provides some arguments for analyzing modal non-manuals prosodically, while scalar non-manuals related to focus particles are better accounted for syntactically.

Third, this study has uncovered some really unexpected and exciting patterns in the domain of focus particles. In particular, the fact that scalar meaning, which in many spoken languages is expressed by focus particles, such as *even*, is expressed by a combination of an additive particle and a non-manual marker is important. On the one hand, it reveals a modality-specific feature of sign languages, Herrmann argues. These languages have more potential for the simultaneous expression of information, which allows them to separate the additive and the scalar meanings. On the other hand, this pattern confirms the semantic analysis proposed for spoken languages, in which *also* and *even* share the additive meaning, but *even* also has a scalar component. In DGS, NGT, and ISL, these components are clearly expressed by different articulators. The same holds for scalar uses of *only*, where the scalar meaning is introduced separately by a non-manual marker, while the restrictive meaning is expressed manually.

The book is quite easy to read; it provides a lot of background both in the domain of sign linguistics, and concerning the topics of modal and focus particles. The argumentation is clear and sound. The list of references is extensive and includes the major works related to the topic. Some minor issues concern examples: not all of them are accompanied by a translation or a detailed comment, so it can sometimes be challenging to understand them exactly; in addition, some typos and inconsistent cross-referencing can be found. However, these issues generally do not negatively influence the readability of the book.

To sum up, the book by Annika Herrmann makes for an exciting reading, not only for scholars interested in DGS, NGT, and ISL, but also for people interested in sign language typology, the theory of modality and focus particles, and differences between signed and spoken languages.

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