REVIEW. Nordic Journal of Linguistics 39(3), 311-317.

REVIEW

Pfau, Roland, Markus Steinbach & Annika Herrmann (eds.), A matter of complexity: Subordination in sign languages. (Sign Language and Deaf Communities 6.) Boston, MA/Berlin & Preston: De Gruyter Mouton & Ishara Press, 2016.
Pp. xiii+262.

doi:10.1017/S0332586516000135

Reviewed by Carl Börstell

Department of Linguistics, Stockholm University, SE 106 91 Stockholm, Sweden. calle@ling.su.se

According to the introductory chapter, most of the chapters in this edited volume were presented at the workshop entitled *Complex Sentences and Beyond in Sign and Spoken Languages*, which was held in October 2011 in Göttingen, Germany. Judging from the program of that workshop, six out of the twelve presentations made it into the volume reviewed here as chapters, along with two additional papers (one of which is the introductory chapter by two of the editors).

As stated in the title of the volume, the collected papers revolve around the topic of subordination in sign languages. Since the volume is published as part of the *Sign Languages and Deaf Communities* series, it is reasonable to assume that it is intended primarily for sign language linguists. However, the volume is arguably relevant for anyone interested in the topic of syntactic complexity from a cross-linguistic/cross-modal perspective. The individual chapters cover different aspects of subordination – in a definition of the term that also subsumes instances of *role shift* (i.e. marking the change of perspective with the signer "embodying" different characters, which is a widespread phenomenon across sign languages) – each having a specific sign language as the focus of investigation.

The question of syntactic complexity in human language has been a hot topic in linguistics with regard to claims about its universality and importance for the very definition of language. However, any claims concerning universality would have to be modality-independent. Sign languages constitute the "other" modality of human language (i.e. *visual-gestural* rather than *auditory-oral* language) but remain an under-studied group of languages, even in typological research for which diversity is a key concept. Thus, any research targeting sign languages is much needed for our understanding of linguistic diversity *across* modalities. Still, remarkably little typological research has dared to take sign languages into consideration, which today – over half a century since the first linguistic analysis of a sign language



(see Stokoe, 1960) – could only partly be explained by a lack of primary research. From this perspective, it is important that sign language data is conveyed to the broader linguistic community in terms of both individual language descriptions and generalizations from comparative, cross-linguistic research. A number of overviews of the field of sign language linguistics have been published in the last decade (e.g., Sandler & Lillo-Martin, 2006; Brentari, 2010; Pfau et al., 2012), and from these it is clear that the topic of subordination and complex sentences has received limited attention in the research, putting the reviewed volume in a unique position of being the first to exclusively address this domain.

Chapter 1 (Complex sentences in sign languages – modality, typology, discourse by Roland Pfau & Markus Steinbach, pp. 1-35) serves as the introduction to the volume. The authors introduce subordination framed by different perspectives, moving from the notion of complexity, in a broad definition, and how it has been a key aspect of early sign language linguistics (in terms of having to "prove", as it were, the linguistic status of sign languages), to cross-linguistic and cross-modal similarities and differences in the structure and grammaticalization of subordination. The authors review an extensive list of previous work on the topic within the field, addressing important findings in terms of the identification and classification of different types of subordinating constructions, pointing out both modality-independent (such as wh-clefting) and modality-specific phenomena (such as non-manual marking of subordinated elements, and simultaneous/overlapping constructions possible due to the use of the two hands). They also motivate the inclusion of role shift as a type of subordination by comparing it to direct/indirect speech constructions. Throughout the chapter, the authors relate the following chapters in the volume to each other and to the previous research.

This introductory chapter situates the volume in a broader research context and manages to cover a wide range of questions dealt with in the previous research and the current volume. Based on the scarcity of general summaries of the topic of subordination in sign language (however, see Tang & Lau, 2012), the chapter should, in its own right, be seen as the go-to reference for anyone looking for an overview of subordination and related phenomena as applied to sign languages.

Chapter 2 (*Preference for clause order in complex sentences with adverbial clauses in American Sign Language* by Ronnie B. Wilbur, pp. 36–64) addresses the issue of adverbial clauses in American Sign Language (ASL) in terms of their syntactic status and distributional properties. After a review of the research on identification criteria for subordination in ASL, Wilbur shows examples of wh-clefts, conditionals, and adverbial clauses all exhibiting a preference for occurring before the main clause in a sentence ("left preference"), although a smaller group of adverbials tend to be obligatorily placed on the right of (i.e. after) the main clause. Interestingly, this preference is shown to be consistent in a translation task, English to ASL, in which the clause order in the source constructions (in English)

are alternated. The participants of this task do not completely dismiss a right-side placing of the adverbial clauses, but note that this is an "Englishy" construction. Wilbur goes on to relate the findings to a number of – mainly formal – analyses from both spoken and sign language research, and arrives at the prediction that obligatory right-side adverbials "pattern with peripheral (discourse-level) adverbials" (p. 55) and suggests that future research should investigate whether there is, as noted for other languages, a distinction between peripheral and central adverbial clauses in ASL.

Chapter 3 (*Observations on clausal complementation in Turkish Sign Language* by Aslı Göksel & Meltem Kelepir, pp. 65–94) provides an ambitious first exploration of clausal complementation in Turkish Sign Language (TİD), using previous and novel criteria for defining subordination as a whole, and subtypes of subordinated constructions. The authors find different types of prosodic markers that accompany constructions with subordination, and argue (in line with previous claims) that simultaneous, prosodic cues help guide the addressee in the identification and processing of complex constructions. They also recognize a distinction between *want*-type verbs and *know*-type verbs, which display different patterns of ordering of the verb and its complement (the verb following the complement in the former case and preceding it in the latter).

As one of only two chapters in the volume to do so, the chapter features photo illustrations of (sequences of) signs. This is very helpful for the reader, as many of the authors' claims rely on prosodic markers, making the line of argumentation clearer than only representing their data with glossed examples. The authors also raise the question of finiteness as a promising topic for future research, which is compelling because finiteness has not been properly defined for any sign language.

Chapter 4 (An in-depth tour into sentential complementation in Italian Sign Language by Carlo Geraci & Valentina Aristodemo, pp. 95-150) is the longest chapter of the volume, dealing with various aspects of sentential complementation in Italian Sign Language (LIS), such as wh-movement and center-embedding. For wh-movement, the authors show examples of movement being allowed inside internal elements, whereas longer movements are disallowed. With regard to centerembedding, they find several ways in which center-embedded complements are allowed, of which some are attributed to modality-specific properties such as role shift and (manual or non-manual) spatial agreement. The chapter reviews several previous studies on LIS and Catalan Sign Language (LSC) and goes on to confirm and expand on the findings from this previous research. Although the authors rely heavily on a framework-based (Minimalist Program) analysis and explanation of their data, they also suggest that some constraints in the grammar of LIS (such as restricted use of center-embedding) can be accounted for in terms of processing costs, and a natural next step would be to test their claims experimentally, similarly to what has been done for spoken/written language (cf. Hofmeister & Sag, 2010).

One point of concern here is the use of a single informant for all the data. The authors themselves acknowledge (note 3) that although previous research on LIS has claimed that SVO is the unmarked order and that several orders are possible, they consider SOV to be the default order based on their single informant. The question that arises here is whether the conclusions reached in the chapter could be accounted for even when taking variation across signers (such as variation in constituent order) into consideration.

Chapter 5 (Embedding polar interrogative clauses in American Sign Language by Katheryn Davidson & Ivano Caponigro, pp. 151-181) starts out similarly to Wilbur's Chapter (ch. 2) by reviewing the previous research on embedded structures in ASL, focusing on tests used to identify subordination (e.g. scope of non-manual marking and subject pronoun copies). They go on to describe the form of matrix wh-interrogatives (consistently exhibiting non-manual marking in the shape of furrowed eyebrows) vs. embedded wh-interrogatives (which fall under the scope of the non-manual marking of the matrix clause). The authors show that non-manual marking is a successful strategy for identifying embedding, in that wh-interrogative clauses that are true embedded structures inherit the non-manual features of the matrix clause, whereas more independent constructions (such as direct quotation wh-interrogatives) exhibit declarative-type non-manual marking. Apart from the non-manual marking, the authors find that the option of doubling wh-words is not available for embedded structures. Furthermore, they complement their findings from grammaticality judgments with corpus data, showing that even in a smallscale corpus, they do identify occurrences of embedded wh-interrogatives. The inclusion of corpus data is much welcomed, as it provides evidence based on a more naturalistic type of data than solely relying on grammaticality judgments, and this is also important because the exact methodology of their grammaticality judgment task (p. 171) is, unfortunately, not described in much detail.

The finding that embedded clauses fall under the non-manual scope of the matrix clause is not new, but the proposed idea about the difference between direct speech/quotation constructions and true embedded constructions is intriguing and could suggest that non-manual marking is a type of finiteness phenomenon for sign languages.

Chapter 6 (*Relativization in Italian Sign Language: the missing link of relativization* by Carlo Cecchetto & Caterina Donati, pp. 182–203) describes two opposing views of relativization in LIS and gives a somewhat theory-heavy account of how the authors' new approach of seeing relativization as an instance of relabeling can unify the previous views. This account involves the (movement of the) sign PE, which is a sign normally appearing in the final position of a relative clause, often accompanied by non-manual marking (of varying scope). Unfortunately, the authors do not provide any illustration of the sign PE in the chapter, even though the sign is discussed and exemplified in glossed examples, and the in-text written description of

the sign is inadequate for the reader to understand its form: "The sign PE is realized with the index finger stretching out and shaken downwards [...]" (p. 183). Although the exact form of the sign is not necessary to show for their line of argumentation, it should be encouraged to provide a sufficiently detailed description, especially as one might suspect this sign to behave like an indexical sign similar to a demonstrative (which is indeed mentioned on the following page).

Chapter 7 (*Reporting with and without role shift: sign language strategies of complementation* by Josep Quer, pp. 204–230) is intriguing, as it categorizes role shift (also labeled *constructed action/dialogue*, among other terms) as a type of complementation. Ample illustrations are provided for different types of non-manual marking of role shift in LSC, which is helpful for the reader, particularly if one is not already familiar with the form and function of role shift in sign languages. Quer describes, in detail, how role shift functions as a type of direct speech construction. However, it does not require any overt manual sign to introduce the quotation, but non-manual marking is sufficient. An important aspect of role shift is the shift in indexical reference, such that pointing to oneself no longer refers to oneself but rather the referent whose perspective is assumed with the role shift construction. However, some indexicals (e.g. the locative indexical HERE) do not shift their reference without explicit marking of a locative shift. Quer argues that role shift as reportative clauses should be seen as embedded because non-manual marking as well as negative/modal scope can be shared by both the matrix and the reportative clause.

It is not obvious that role shift should be categorized as a type of subordination, but in the narrow definition of the term role shift adopted here (basically referring to reported speech and what has been labeled *constructed dialogue*), it does not seem unreasonable to assume such a view. However, it should be noted that the term role shift is often used in a broader sense in the field of sign language linguistics. Researchers working on its incorporation into syntactic structure based on corpus data have argued that it can serve both argument and predicate functions in discourse (cf. Ferrara & Johnston, 2014), and in a broader definition of the term, it is possible that instances of role shift may serve as independent as well as dependent/embedded clauses.

Chapter 8 (*An annotation scheme to investigate the form and function of hand dominance in the Corpus NGT* by Onno Crasborn & Anna Sáfár, pp. 231–251) stands out from the other chapters. Rather than explicitly dealing with syntactic subordination, the authors describe the structure of their detailed annotation conventions regarding hand dominance (i.e. which hand is the more active in terms of articulation) and potential reversal of such dominance within sequences of signing. As noted by the authors, individuating the articulators for distinct purposes involves a type of complexity on the level of discourse, and their development of detailed annotation guidelines is intended to assist further research on this phenomenon. The chapter provides some preliminary results based on corpus data annotated according

to the authors' system and relates these to previous research on the phonological and syntactic/semantic complexity of the use of the two hands. This includes the frequency and distribution of phonological forms, and dominance reversals occurring at clause boundaries. The function of dominance reversal may concern contrast, either within a sentence, such as contrasting an adverbial from the rest of the sentence, or even contrasting whole sentences.

This final chapter is arguably the one furthest apart from the other chapters in the volume, by not dealing primarily with syntactic complexity, and also by not using framework-based explanations or terminology. It raises many questions and ideas about future research that could benefit from the authors' annotation template. However, as part of the volume under review, the chapter relates more directly to the word *complexity* than *subordination* in the volume title.

Overall, it should be emphasized that this volume is unique in the sense of putting subordination at the focus of attention, which has not been done previously for any cross-linguistic sign language research. The volume covers several different sign languages, which is important for our understanding of linguistic diversity. Linguists without any prior (basic) knowledge about sign language structure could potentially encounter some difficulties in identifying and understanding certain constructions and modality-specific properties, but the contributors to the volume have done a terrific job at explaining any field-specific terminology, which is important to make the results available to linguists outside of sign language research. However, given the formal (and framework-based) explanations in several of the chapters, the volume as a whole not only gains from, but more or less requires, a certain familiarity with syntactic theory and specifically generative frameworks (X-bar/Minimalist Program) to be accessible.

What is missing from the volume? There are certain aspects that would have been interesting to read more about with regard to the research topic. First, the editors explicitly bring up emergence of embedding and complexity, and grammaticalization of such structures, in their introductory chapter. This is a question that has received some attention, notably from researchers working on emerging sign languages (e.g. Aronoff et al., 2008; Kastner et al., 2014). Although the editors do refer to some of this work, and some of the other contributors allude to grammaticalization in different ways, this is a question that is central to our understanding of the emergence of structure and complexity in language. Second, an attempt at a typological description of subordination structures across sign languages or a more explicit summary of some aspect of subordination ought to be a fruitful future step. Some typological work has been conducted with regard to interrogative and negative constructions across sign languages (Zeshan, 2006), as well as generalizations on constituent order preferences across sign languages (Napoli & Sutton-Spence, 2014), but considering the lack of research on the topic of subordination, this would require further research on a wider range of sign languages.

REFERENCES

- Aronoff, Mark, Irit Meir, Carol Padden & Wendy Sandler. 2008. The roots of linguistic organization in a new language. *Interaction Studies* 9(1), 133–153. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3311507/.
- Brentari, Diane (ed.). 2010. *Sign Languages: A Cambridge Language Survey*. New York, NY: Cambridge University Press.
- Ferrara, Lindsay & Trevor Johnston. 2014. Elaborating who's what: A study of Constructed Action and clause structure in Auslan (Australian Sign Language). Australian Journal of Linguistics 34(2), 193–215.
- Hofmeister, Philip & Ivan A. Sag. 2010. Cognitive constraints and island effects. *Language* 86(2), 366–415.
- Kastner, Itamar, Irit Meir, Wendy Sandler & Svetlana Dachkovsky. 2014. The emergence of embedded structure: Insights from Kafr Qasem Sign Language. *Frontiers in Psychology* 5(525), 1–15. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4042080/.
- Napoli, Donna Jo & Rachel Sutton-Spence. 2014. Order of the major constituents in sign languages: Implications for all language. *Frontiers in Psychology* 5(376), 1–18. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4026690/.
- Pfau, Roland, Markus Steinbach & Bencie Woll (eds.). 2012. *Sign Language: An International Handbook*. Berlin/Boston, MA: De Gruyter Mouton.
- Sandler, Wendy & Diane Lillo-Martin. 2006. *Sign Language and Linguistic Universals*. Cambridge: Cambridge University Press.
- Stokoe, William C. 1960. Sign language structure: An outline of the visual communication system of the American Deaf. In *Studies in Linguistics: Occasional Papers (No. 8)*, Buffalo, NY: Dept. of Anthropology and Linguistics, University of Buffalo.
- Tang, Gladys & Prudence Lau. 2012. Coordination and subordination. In Roland Pfau, Markus Steinbach & Bencie Woll (eds.), *Sign Language: An International Handbook*, 340–365. Berlin/Boston, MA: De Gruyter Mouton.
- Zeshan, Ulrike (ed.). 2006. Interrogative and Negative Constructions in Sign Languages. Nijmegen: Ishara Press.