

A preliminary RRG account of functional positions in American Sign Language¹

Emma Pavey

Canada Institute of Linguistics, Trinity Western University

Introduction

This paper examines a number of functionally-motivated positions in American Sign Language (ASL) from the perspective of Role and Reference Grammar (Van Valin 2005). We will see that ASL has a rigid focus structure (in the sense described by Van Valin 1999) and makes frequent use of core-external positions for pragmatic purposes. While some of these ASL constructions appear to fall neatly into either the precore slot or the left detached position, others present more of a challenge to the framework.

Since I don't know ASL adequately myself the data for this preliminary study comes from secondary sources in the literature.² The vast majority of the literature on signed languages comes from a generative perspective, though contributions such as this one from a cognitive-functional perspectives have been increasing greatly in the last few years (Johnston and Schembri 2007: 282).

Two challenges with this approach are that reported grammaticality judgements vary for some of the key data (noted by Neidle *et al* 2000), and also the data varies in terms of how precisely it reports the marking of non-manual markers, which I will explain (noted by Petronio and Lillo-Martin 1997: 29). In future I'd like to develop my own understanding of ASL to a point where I am able to do my own primary research in this area.

In sign languages, signers use both manual signs and simultaneous non-manual markers to convey meaning. Manual signs vary depending on their shape, orientation, movement and location; non-manual markers include facial expressions and movements of the head and can carry grammatical meaning (Neidle *et al.* 2000: 27, 39).³

So, for example, the difference between the three sentences in (1) may be conveyed largely through facial expression, particularly the position of the eyebrows, and through head movement.⁴

- I. a) MAN HOME
'The man is home.'
_____q
b) MAN HOME
'Is the man home?'
_____neg
c) MAN HOME
'The man is not home.'

¹ Paper presented at the 2009 International Conference on Role and Reference Grammar, UC Berkeley, CA. August 2009.

² I'd like to acknowledge helpful comments on this paper from Kearsy Cormier (UCL); remaining mistakes are my own.

³ The grammatical uses of non-manual markers include marking "topics of various kinds, yes-no questions, *wh*-questions, negation, specificity, and syntactic subject and object agreement in both the clause and the noun phrase" (Neidle 2002: 72). The degree of simultaneity resulting from the spatial dimension of sign language causes interesting complications to discussions of grammatical relations and word order (Hendriks 2008: 64).

⁴ Examples from Valli, Lucas and Mulrooney (2005: 127-30).

These examples also illustrate the current conventions for glossing signs. Signs themselves are usually represented with the closest word in the neighbouring spoken language: in the case of ASL, this means that English words are used. Non-manual markers are represented on a line above the glosses, and the position of the line indicates when the non-manual markers are articulated (their scope). I'll explain other conventions as they come up.

Basic word order in ASL

In terms of its typology, ASL is generally accepted to be SVO and, like many sign languages, “topic-prominent” (Wilbur 1994: 647); in other words, for ASL, either ‘actor-predicate-undergoer’ or ‘single argument-predicate’. Examples are given below in (2) where I have marked the predicates in bold (hn = headnod).⁵

2. a) DOG **CHASE** CAT
 ‘The dog chased the cat.’
- b) PRO.3 **PLAY**
 ‘He is playing.’
- _____ hn
- c) JOHN **DOCTOR**
 ‘John is a doctor.’⁶

Focus structure in ASL

ASL has many constructions that maintain an ‘topic-focus’ information structure in the clause, either through backgrounding certain elements, or placing elements in clause-final focus position, or both: so the order of signs is strongly influenced by discourse factors (Wilbur 1994: 656). Petronio and Lillo-Martin find, for example, that “topicalization is so common that when a declarative sentence is presented in isolation, many people will reject the underlying SVO order” (1997: 46). They illustrate this with the examples in (3) (t = ‘topic marker’, which I’ll discuss further in a little while): they found that many informants preferred (3b) or (3c) to (3a), presumably seeking to avoid a core containing all new information.⁷

3. a) NANCY LIKE ICE-CREAM
 ‘Nancy likes ice-cream.’
- _____ t _____ hn
- b) NANCY, LIKE ICE-CREAM
 ‘As for Nancy, she likes ice-cream.’
- _____ t _____ hn
- c) ICE-CREAM, NANCY LIKE
 ‘As for ice-cream, Nancy likes it.’

In addition, ASL has a number of other structures that reflect the preference for the focus and primary stress (prosodic prominence) to occur in final position in the clause, a pairing that

⁵ (2a) from Liddell (1980: 29), (2b) from Valli, Lucas and Mulrooney (2005: 115), (2c) from Liddell (1980: 37).

⁶ Or ‘John is the doctor’ (Wilbur 1996: 245) with a ‘pragmatic predicate’ (Lambrecht 1994). Liddell states that without the accompanying headnod, (2c) would have the meaning ‘John’s doctor’.

⁷ Zeshan finds a similar situation in Indo-Pakistani Sign Language (2003: 170).

reduces the potential for ambiguity (Wilbur 1994: 653).⁸ These are illustrated in (4), (5), (6) and (7) (PT = point, br = brow raise, letters separated by hyphens indicate a finger-spelled word).⁹

4. MY SISTER DOCTOR SPECIFICATIONAL SENTENCE
 _____hn
 ‘My sister is THE DOCTOR.’
5. a) DOCTOR PT WHO, MY SISTER PSEUDOCLEFT
 _____br
 ‘The doctor is MY SISTER.’
- b) _____br
 D-O-N CUT WHERE, GARAGE
 ‘Where Don cut something/got cut was IN THE GARAGE.’
6. a) MUST GO-WORK MUST ‘DOUBLING’ CONSTRUCTION
 ‘I MUST go to work.’
- b) MY HIGH SCHOOL FIVE DEAF KID FIVE
 ‘My high school had [only] FIVE deaf kids.’
- c) FINISH SELL FINISH
 ‘[They] have already been sold.’
7. a) _____t _____hn TOPICALIZATION
 NANCY, LIKE ICE-CREAM
 ‘As for Nancy, she likes ice-cream.’
- b) _____t _____hn
 CHASE CAT DOG
 ‘As for chasing the cat, the dog did it.’

In addition to a specificational sentence in (4) containing two referring expressions, ASL has a pseudocleft construction, illustrated in (5). In both of these constructions the focused element provides the value for a variable (Wilbur 1996: 226, DeClerck 1988). In pseudocleft constructions, a WH-clause with a clause-final WH word is followed by the focused constituent which may be marked with a headnod.¹⁰

In (6), we have examples of the intriguing ‘doubling’ construction; this serves to “focus or emphasize” the doubled element, which is typically a modal, a quantifier or a verb. Importantly, there is no “significant pause” between the final double and the rest of the clause (Petronio and Lillo-Martin 1997: 30) and the elements that can occur as the focused element within a pseudocleft appear to be in complementary distribution with those that can be ‘doubled’ (Wilbur 1994: 657).

While the constructions may differ in their syntactic patterns, they have similar information structure patterns - there appears to be a ‘information structure template’ with several syntactic expressions.

⁸ Prosodic prominence involves “increased muscle tension, increased peak velocity, and achieving greater displacement” (Sandler and Lillo-Martin 2006: 442, citing Wilbur 1999).

⁹ (4) from Wilbur (1996: 245), (5a) from Wilbur (1996: 245), (5b) from Wilbur (1994: 654), (6a) from Wilbur (1994: 654), (6b-c) from Petronio and Lillo-Martin (1997: 30-31), (7b) from Liddell (1980: 30).

¹⁰ Wilbur suggests either an eye-blink, a headnod, or both, can mark the focused part of a pseudocleft construction in ASL (1994: 650). In older literature, these constructions are mislabeled as rhetorical questions.

Positions outside the core

Now I'll turn to examining positions outside the core in more detail, used for topical and focal elements. In the ASL literature, elements that are signed before the main core are collectively termed 'topicalization'; however, Aarons (1994) shows that there are in fact three different constructions, differentiated by their syntactic behaviour, function and variations in non-manual markings. The different non-manuals and functions are presented in Table 1.

	Non-manual marking	Function
m ¹	raised brows, head tilted slightly back and to the side, eyes widened, head moves down and forward	can be contrastive focus, new information in a limited set
m ²	large movement of head back and to the side, eyes very wide, head moves down and forward	changes discourse topic, introduces new information
m ³	head forward, jerked slightly up and down, mouth open, upper lip raised, eyebrows raised, eyes wide open, fixed gaze, slight rapid head nods	can only be used with known referents, introduces a major new discourse topic

Table 1 Non-manual markings associated with the three extra-core types (Aarons 1994: 156)

Some of Aarons' examples are given in (9), (10) and (11). The differences in the non-manual markings are indicated by 'm¹', 'm²' and 'm³' in the examples, adapted from Aarons' system (IX = index, a pronominal pointing; subscript 'i' indicates cross-reference).

8. JOHN LOVE MARY
'John loves Mary.'
- m¹
9. MARY JOHN LOVE
'MARY John loves.'
- m²
10. JOHN_i IX-3rd_i LOVE MARY
'As for John, he loves Mary'
- m³
11. MARY_i JOHN LOVE IX-3rd_i
'(You know) Mary, John loves her.'

If we look at the function of the first type of 'topicalization', illustrated in (9), we can see that the constituent is more accurately described as in focus rather than topical: this position is used for constituents in contrastive focus, for emphasis and for specifying one of a set (Aarons 1994: 156, 159).

The second and third type of 'topicalization', in (10) and (11) respectively, appear to be more appropriately named. As the examples illustrate, the function of these positions is to change the topic of discourse, introducing either new information as topical (type 2, illustrated in (10)) or known information as topical (type 3, illustrated in (11)) (Aarons 1994: 156). In addition, there is often a pause between the topicalized element and the main clause (Binns-Dray 2004: 175, Aarons 1994:75).¹¹

¹¹ There may also be a pause between type one constituents and the main core (Aarons 1994: 156-7).

Examples (12), (13) and (14) illustrate one aspect of the syntactic behaviour of constituents in these three initial positions. With type one, shown in (12), there is no pronominal copy of the constituent in the main core. With types two and three, on the other hand, there can be a pronominal copy in the main core, as shown in (13) and (14).

12. a) $\frac{\quad}{\quad} m^1$
 MARY JOHN LOVE
 'MARY John loves.'
- b) $\frac{\quad}{\quad} m^1$
 *MARY_i JOHN LOVE IX-3rd_i
 (*MARY John loves her.)
13. a) $\frac{\quad}{\quad} m^2$
 *MARY JOHN LOVE
 (*As for Mary, John loves.)
- b) $\frac{\quad}{\quad} m^2$
 JOHN_i IX-3rd_i LOVE MARY
 'As for John, he loves Mary'
14. a) $\frac{\quad}{\quad} m^3$
 *MARY JOHN LOVE
 (*You know Mary, John loves.)
- b) $\frac{\quad}{\quad} m^3$
 MARY_i JOHN LOVE IX-3rd_i
 '(You know) Mary, John loves her.'

With regard to more complex sentences, we can see that the type one-marked constituent appears at the beginning of the clause it appears in. In (15b), an argument of the non-finite second core can appear at the beginning of the main clause; ie, at the beginning of the sentence, with a contrastive focus interpretation.¹² In (16c), on the other hand, the type one constituent appears at the beginning of the embedded finite clause (Aarons 1994: 168-169).

15. a) TEACHER REQUIRE JOHN LIPREAD MOTHER
 'The teacher requires John to lipread Mother.'
- b) $\frac{\quad}{\quad} m^1$
 MOTHER TEACHER REQUIRE JOHN LIPREAD
 'MOTHER the teacher requires John to lipread.'
16. a) TEACHER REQUIRE JOHN MUST LIPREAD MOTHER
 'The teacher requires that John must lipread Mother.'
- b) $\frac{\quad}{\quad} m^1$
 *MOTHER TEACHER REQUIRE JOHN MUST LIPREAD
 ('MOTHER the teacher requires that John must lipread.')
- c) $\frac{\quad}{\quad} m^1$
 TEACHER REQUIRE MOTHER JOHN MUST LIPREAD
 'The teacher requires that MOTHER John must lipread.'

¹² According to Aarons, sentence (14a) is in fact ambiguous between a tensed and non-tensed interpretation and the non-tensed interpretation is the one intended here (1994: 169).

When more than one type of ‘topicalization’ occurs within one sentence, there are two notable constraints. Firstly, it is not possible for there to be more than one type one position in a sentence, as shown in (17a). However, it is possible for there to be two type two or type three topical constituents in one sentence (Aarons 1994: 177-181), as we see in (17b) and (c).

17. a) $\frac{\quad}{\quad} m^1 \quad \frac{\quad}{\quad} m^1$
 *JOHN MARY LOVE
 (*‘JOHN, MARY [he] loves [her].’)
- b) $\frac{\quad}{\quad} m^2 \quad \frac{\quad}{\quad} m^2$
 JOHN IX_i, MARY IX_j, IX-3rd_i LOVE IX-3rd_j
 ‘John (there), Mary (there), he loves her.’¹³
- c) $\frac{\quad}{\quad} m^3 \quad \frac{\quad}{\quad} m^3$
 JOHN IX_i, MARY IX_j, IX-3rd_i LOVE IX-3rd_j
 ‘You know John, you know Mary, he loves her.’

Secondly, when type one occurs with a type two or type three constituent in the same sentence, the type one constituent has to occur closer to the core than the topical types. This is illustrated in the data in (18) and (19).

18. a) $\frac{\quad}{\quad} m^3 \quad \frac{\quad}{\quad} m^1$
 JOHN_i MARY_j IX-3rd_i LOVE
 ‘You know John, MARY he loves.’
- b) $\frac{\quad}{\quad} m^1 \quad \frac{\quad}{\quad} m^3$
 *MARY_j JOHN_i IX-3rd_i LOVE
 (*‘MARY, you know John, he loves.’)
19. a) $\frac{\quad}{\quad} m^2 \quad \frac{\quad}{\quad} m^1$
 ?? JOHN_i MARY_j IX-3rd_i LOVE
 ‘As for John, MARY he loves.’
- b) $\frac{\quad}{\quad} m^1 \quad \frac{\quad}{\quad} m^2$
 *MARY_j JOHN_i IX-3rd_i LOVE
 (*‘MARY, as for John, he loves.’)

We can also look at the scope of operators, which are often indicated with non-manual markers. In (20), for example, negation is marked non-manually (with furrowed brows and a headshake), and this marking does not spread into the focused type one position. Examples (21a) and (b) show that the polar question non-manual marking (marked ‘y/n’) does not extend over the topical element. (The non-manual marking for polar questions consists of a raised brow, with the head and body forward (Liddell 1980: 20)).¹⁴

20. $\frac{\quad}{\quad} m^1 \quad \frac{\quad}{\quad} \text{neg}$
 MARY, JOHN NOT LOVE
 ‘Mary, John does not love.’
21. a) $\frac{\quad}{\quad} m^2 \quad \frac{\quad}{\quad} \text{y/n}$
 JOHN_i, IX-3rd_i LIKE CHOCOLATE
 ‘As for John, does he like chocolate?’

¹³ Reversing the order of the topicalized constituents in (15b) and (c) does not affect their semantic roles in the sentence: MARY IX_j, JOHN IX_i, IX-3rd_i LOVE IX-3rd_j ‘Mary (there), John (there), he loves her.’ (Aarons 1994: 177).

¹⁴ Examples from Aarons (1994: 76, 80).

- _____ y/n
 _____ t
 b) *JOHN, IX-3RD LIKE CHOCOLATE

In the generative literature on topicalization in ASL, the type one position is considered ‘moved’ while types two and three are ‘base-generated’ (Aarons 1994: 155). In Role and Reference Grammar terms, the syntactic and functional evidence suggests we can interpret type one as filling the pre-core slot, and types two and three as in left-detached position. The RRG constituent representation for example (18a) is given in Figure 1.¹⁵

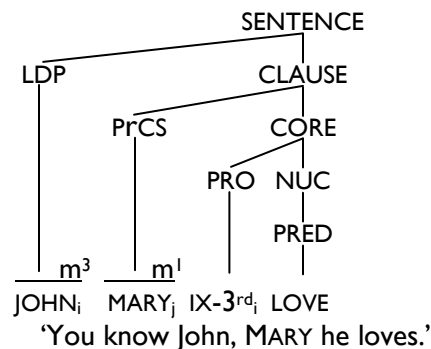


Figure 1 Constituent representation of sentence (18a)

Content questions in ASL

When we integrate WH-words into the analysis, some complications arise that present opportunities for further research. Non-manual marking for content questions involves “furrowed brows, squinted eyes and a slight side-to-side head shake” (Neidle et al. 2000: 111). Often, WH-words occur *in situ* in ASL and the non-manual marker extends over the whole clause, as in the examples in (22). *In situ* WH-word placement is “the default and preferred position” (Binns-Dray 2004: 245).¹⁶

22. a) _____ wh
 WHO BUY CAR
 ‘Who bought the car?’
- b) _____ wh
 ANN BUY WHAT
 ‘What did Ann buy?’
- c) _____ wh
 TEACHER LIPREAD WHO YESTERDAY
 ‘Who did the teacher lipread yesterday?’

However, there are several other possibilities for the placement of WH-words, two of which will be considered briefly in this paper. Firstly, WH-words may appear in clause-final position, as shown in the examples in (23).

_____ wh

¹⁵ Left detached position for topical elements would appear to be a common strategy in sign languages; see, for example, Indo-Pakistani Sign Language (Zeshan 2003: 207-9), Argentine Sign Language (Massone and Curiel (2004: 84), Jordanian Sign Language (Hendriks 2008: 74), Australian Sign Language (Johnston and Schembri 2007: 209).

¹⁶ Examples (20a) and (b) from Binns-Dray 2004: 199), (19c) from Neidle et al. (2000: 111).

23. a) LOVE JOHN WHO
 'Who loves John?'
 _____ wh
- b) LOVE JOHN WHO
 'Who loves John?'
 _____ wh
- c) TEACHER LIPREAD YESTERDAY WHO
 'Who did the teacher lipread yesterday?'

(23a) and (b) illustrate that the non-manual 'wh' marking may occur either only on the WH-word itself or over the whole clause (Neidle *et al.* 2000: 110-113). This suggests some kind of boundary between the WH-word and the rest of the sentence.

Sentences with clause-final WH-words also have different information structure properties from those with *in situ* WH-words. We can illustrate this with a further pair of examples.¹⁷

24. a) WHO ARRIVE
 'Who arrived?'
 _____ wh
- b) ARRIVE WHO
 'Who arrived?'

According to Neidle, sentences with clause-final WH-words like (24b) "presuppose that someone did arrive, while this presupposition is not found with [sentences like (24a) with the WH-word *in situ*]" (2002: 77). In other words, *nobody* would be an appropriate answer to the "more neutral" question in (24a) but not to the question in (24b), which would be more accurately translated as 'Who arrived' in English, with focal stress on the WH word (Neidle and Lee 2008: 105).

Further evidence that clause-final WH-words carry a greater level of focus is given in (25). Focused constituents in the pre-core slot ('type one') can co-occur with clauses with *in situ* WH words but not those with clause-final WH words (Neidle 2002: 83). This may be because (25b) results in two narrowly focused elements in one sentence.

25. a) _____ m! _____ wh
 MOUSE WHO EAT
 'Who will eat THE MOUSE?'
- b) _____ m! _____ wh
 ?*MOUSE EAT WHO
 ('Who will eat THE MOUSE?')

So then, sentences with clause-final WH-words provide the value for a variable, a property they share with the other 'focus-final' constructions we examined in (4)-(6). 'Doubled' constructions (as in (6) also share the furrowed brow non-manual marking on the final focused element (Sandler and Lillo-Martin 2006: 443) that we see on clause-final WH-words.

¹⁷ Examples from Neidle (2002: 76-77).

Given the lack of the presupposition in *in situ* questions like (24a), and given that ASL has a fondness for clause-final focus, it may be that sentences like (24a) do not have narrow focus but rather sentence focus structure. Lambrecht (1996: 285) notes that information (content) questions are possible which “do not evoke a presupposed open proposition”; in this case that someone arrived. With this approach, (24a) would be paraphrased ‘Did anyone arrive, and if so, who?’. This is a question for future research.

Given the structural and functional properties of this construction, one possibility for further research is that sentences with a clause-final WH-word are a type of ‘specificational’ sentence, similar to ‘NP NP’ specificational constructions and pseudocleft constructions, which all end with a focused constituent constituting the ‘pragmatic predicate’ (in the sense of Lambrecht 1996: 231), literally something like *the one that arrived is who?* for (24b). At the very least, they belong in the ASL ‘family’ of constructions that share ‘focus-final’ information structure.¹⁸

Interestingly, given that we have seen evidence of a pre-core slot, the grammaticality of clause-initial WH-words like in (26), is at best “debated” (Binns-Dray 2004: 201) and in much of the literature is considered ungrammatical (e.g. Neidle et al. 2000: 110).

26. $\frac{\text{wh}}{\text{WHO JOHN LOVE}}$
 *?WHO JOHN LOVE
 ‘Who does John love?’

It may be that the type of element that is focused through the pre-core slot, or the type of focus that appears to be carried by that position in ASL, is somehow different from the focus that is carried by the general focus-final position. Certainly the contrastive focus function (X, not Y) of the pre-core slot position is not a function associated with the WH-words.

‘WH topics’

Finally, we will briefly look at another position for WH words in ASL, known as ‘WH topics’; these are quite common in ASL (Neidle et al 2000: 114). These WH-words appear initially, and are ‘copied’ by a second WH word in the main core, often the ‘generic’ WH sign glossed as ‘WH’ in (27a).¹⁹ Interestingly, they can appear further from the core than topical elements, as shown in (27b).²⁰ According to Neidle et al., the ‘topic’ WH-word carries a combination of topic (‘type two’ or ‘type three’) non-manual and WH non-manual marking (2000: 115).

27. a) $\frac{\text{wh}}{\text{WHO, LOVE JOHN 'WH'}}$
 ‘Who loves John?’
- b) $\frac{\text{wh}}{\text{WHO, VEGETABLE, PREFER POTATO WHO}}$ $\frac{\text{m}^2}{\text{PREFER POTATO}}$ $\frac{\text{wh}}{\text{WHO}}$

¹⁸ Bouchard and Dubuisson (1995) argue that in a content question with a clause-final WH-word, it’s plausible that everything but the WH word has been topicalized. See Kegl et al (1996) for a refutation of this proposal.

¹⁹ The discovery and study of this particle and of question particles in sign languages is a current and emerging area in ASL linguistics. See Neidle and Lee (2008) for discussion of the properties and function of the ‘generic’ WH particle. For discussion of question particles in sign languages see Zeshan (2004: 32-4) and Schalber (2006: 147). For a survey of signed languages with single WH sign inventories, see Zeshan (2004: 22).

²⁰ Examples from Neidle et al (2000:116-117).

'Who, as for vegetables, who prefers potatoes?'

These properties are unexpected for 'focal' elements but nonetheless suggests them to be in left detached position. Given the syntactic evidence and current developments in the ASL literature, we it appears that ASL WH signs have a broader range of meaning and function than the English WH-words they are glossed with. This is another avenue for future research.²¹

Conclusion

- American Sign Language has a rigid focus structure with a preference for several types of structure that place the focus in final position, both within the core, and with the use of extra-core positions.
- American Sign Language has a pre-core slot and left-detached position. The latter may contain one of two types of topic constituent. The pre-core slot is frequently associated with contrastive focus.
- WH-words in content questions usually occur in situ or in clause-final position. They may also occur in clause-initial position with a clause-final 'copy'.
- The notion of 'pragmatic predicate' may be useful in drawing together the 'narrow-focus-final' syntactic constructions.

²¹ These 'WH-topic' constructions are argued (with no overwhelming consensus) to be distinct from 'doubled' WH constructions which are generally considered to be of the same type as the 'doubled' constructions illustrated in (6) (see Sandler and Lillo-Martin 2006: 439).

wh

i) WHAT NANCY BUY WHAT
'What did Nancy buy?'

This common content question construction has stirred up vigorous and almost Seuss-ian debate in the generative sign linguistics literature concerning whether the 'WH-movement' is leftward or rightward (see Petronio and Lillo-Martin (1997) for discussion of the two viewpoints). Binns-Dray (2004) offers one analysis from a Role and Reference Grammar viewpoint that, for a sentence such as (i) would propose both a pre-core and post-core slot in the same sentence, though it is not clear to me whether having pre-core and post-core positions in one language is typologically likely, nor whether such a 'postcore' analysis would then also work for the other double constructions in (6). A more extensive discussion of these constructions and comparisons with other sign languages is, sad to say, beyond the space constraints of this paper. What is the case is that these constructions once again display a focus-final information structure.

References

- Aarons, Debra. 1994. *Aspects of the Syntax of American Sign Language*. PhD dissertation. Boston University.
- Binns-Dray, Kathleen. 2004. *Content Questions in American Sign Language: an RRG analysis*. PhD dissertation. State University of New York at Buffalo.
- Bouchard, Denis and Colette Dubuisson. 1995. Grammar, order and position of *wh*-signs in Quebec Sign Language. *Sign Language Studies* 87. 99-139.
- DeClerck, Renaat. 1988 *Studies on Copular Sentences, Clefts and Pseudoclefts*. Dordrecht: Foris.
- Hendriks, Bernadet. 2008 *Jordanian Sign Language: aspects of grammar from a cross-linguistic perspective*. Utrecht: LOT.
- Johnston, Trevor and Adam Schembri. 2007. *Australian Sign Language*. Cambridge University Press.
- Kegl, Judy, Carol Neidle, Dawn MacLaughlin, Jack Hoza and Benjamin Bahan. 1996. The case for grammar, order and position in ASL: a reply to Bouchard and Dubuisson. *Sign Language Studies* 90. 1-23.
- Lambrecht, Knud. 1996. *Information Structure and Sentence Form: topic, focus and the mental representations of discourse referents*. Cambridge University Press.
- Liddell, Scott. 1980. *American Sign Language Syntax*. Berlin: Mouton.
- Massone, María Ignacia and Mónica Curiel 2004. Sign order in Argentine sign language. *Sign Language Studies* 5:1. 63-93.
- Neidle, Carol. 2002. Language Across Modalities: ASL focus and question constructions. *Linguistic Variation Yearbook* 2. John Benjamins. 71-98.
- Neidle, Carol, Judy Kegl, Dawn MacLaughlin, Benjamin Bahan, and Robert Lee. 2000. *The syntax of American Sign Language*. Cambridge, MA: MIT Press.
- Neidle, Carol and Robert Lee. 2008. Well, “What” Is It? Discovery of a New Particle in ASL. In Lindgren, Kristen, Doreen DeLuca, Donna Jo Napoli (eds) *Signs & Voices: Deaf culture, identity, language and arts*. Washington: Gallaudet University Press. 100-116.
- Petronio, Karen and Diane Lillo-Martin. 1997. WH-movement and the position of spec-CP: evidence from American Sign Language. *Language* 73:1. 18-57.
- Sandler, Wendy, and Diane Lillo-Martin. 2006. *Sign Language and Linguistic Universals*. Cambridge University Press.
- Schalber, Katharina. 2006. What is the chin doing? An analysis of interrogatives in Austrian sign language. *Sign Language and Linguistics* 9:1/2. 133-150.
- Valli, Clayton, Ceil Lucas and Kristin Mulrooney. 2005. *Linguistics of American Sign Language*. 4th edition. Washington: Gallaudet University Press.
- Van Valin, Jr., R. 1999. A Typology of the Interaction of Focus Structure and Syntax. In E. Raxilina & J. Testelec (eds.) *Typology and the Theory of Language: From Description to Explanation*. Moscow. Available online at: <http://linguistics.buffalo.edu/people/faculty/vanvalin/rrg.html>
- Van Valin, Jr., R. 2005. *Exploring the Syntax-Semantics Interface*. Cambridge University Press.
- Wilbur, Ronnie. 1994. Foregrounding structures in American Sign Language. *Journal of Pragmatics* 22. 647-672.
- Wilbur, Ronnie. 1996. Evidence for the function and structure of *wh*-clefts in American Sign Language. In Edmondson and Wilbur (eds) *International Review of Sign Linguistics*. Mahwah: Lawrence Erlbaum Associates. 209-256.
- Zeshan, Ulrike. 2003. Indo-Pakistani Sign Language Grammar: a typological outline. *Sign Language Studies* 3:2. 157-212.
- Zeshan, Ulrike. 2004. Interrogative constructions in signed languages: crosslinguistic perspectives. *Language* 80:1. 7-39.