



Syntactic Structure and Discourse Function:

**An Examination of
Two Constructions in
American Sign Language**

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Preface

It is only relatively recently that the syntax of American Sign Language has begun to be analyzed carefully. There is still a great deal that is not yet understood about the language. The goal of the American Sign Language Linguistic Research Project <<http://web.bu.edu/ASLLRP>> has been to elaborate the basic functional architecture of ASL. Our work to date has focused on clausal structure (specifically, representations of tense, aspect, and agreement, and the syntax of questions).

This volume brings together two papers that address the relation between syntactic structure and discourse function. Each paper analyzes a specific construction in American Sign Language, proposing that the construction in question consists of two separate syntactic units that function together for a specific discourse purpose.

For example, the rhetorical question-answer sequence is used to introduce new information. On the surface, this construction looks like it involves a question to which the signer provides an answer. This is, in fact, the way it had traditionally been described by ASL researchers. According to one recent proposal, however, the question and answer are contained syntactically within a single clause (at least for *wh* rhetorical question-answer sequences). The paper by Hoza, Neidle, MacLaughlin, Kegl, and Bahan argues essentially for a return to the previous notion: that the rhetorical question-answer sequence consists syntactically of a question followed by an answer, despite the fact that this combination is put to use for a specific discourse function. The authors provide a unified analysis for both *yes-no* and *wh* rhetorical question-answer sequences.

Another case where a construction with a particular discourse function has been analyzed in terms of syntactic embedding is the 'role shift' construction, discussed by Lee, Neidle, MacLaughlin, Bahan, and Kegl. In this paper, the authors argue that concatenation of separate clauses is involved in the direct speech construction.

Both papers employ a series of tests to determine syntactic clause boundaries. The authors adduce evidence in favor of the structures proposed (and against alternatives involving embedding) by examination of particular syntactic items that occur clause-finally, such as adverbials, pronominal right dislocations, and rightward-moved *wh*-phrases. By testing the predictions of the various competing proposals, the authors demonstrate that in neither case is there the kind of complex embedding that had been claimed. It is interesting that ASL seems to rely somewhat less on embedding than many languages. While there are clearly embedded structures in the language, neither rhetorical question-answer sequences nor direct speech constructions employ such a structure.

Table of Contents

Preface	i
A Unified Syntactic Account of Rhetorical Questions in American Sign Language	1
<i>Jack Hoza, Carol Neidle, Dawn MacLaughlin, Judy Kegl, and Benjamin Bahan</i>	
1. Syntactic characteristics of the rhetorical question	2
1.1 Structure of rhetorical wh-questions.....	2
1.1.1 Information-seeking wh-questions.....	3
1.1.1.1 Wh-phrases may appear in situ.....	3
1.1.1.2 Wh-phrases may be moved rightward.....	3
1.1.1.3 Two wh-phrases (referring to a single questioned constituent) may appear in a single question.....	4
1.1.1.4 Wh-phrases may also be non-overt in appropriate discourse contexts.....	5
1.1.1.5 Wh-phrases may be extracted from an embedded clause.....	5
1.1.1.6 Non-manual wh-marking.....	5
1.1.2 Structure of rhetorical wh-questions.....	6
1.1.2.1 Wh-phrases may appear in situ.....	7
1.1.2.2 Wh-phrases may be moved rightward.....	7
1.1.2.3 Two wh-phrases may appear in a single question.....	8
1.1.2.4 Wh-phrases may also be non-overt in appropriate discourse contexts.....	8
1.1.2.5 Wh-phrases may be extracted from an embedded clause.....	8
1.1.2.6 Non-manual rhetorical wh-marking.....	8
1.1.3 Conclusion.....	9
1.2 Structure of rhetorical yes-no questions.....	9
1.2.1 Structure of information-seeking yes-no questions.....	9
1.2.2 Structure of rhetorical yes-no questions.....	10
1.2.3 Conclusion.....	10
2. Syntactic characteristics of answers	10
2.1 Answers to information-seeking wh-questions.....	11
2.2 Answers to rhetorical wh-questions.....	11
2.3 Structure of the answer to information-seeking yes-no questions.....	13
2.4 Answers to rhetorical yes-no questions.....	13
2.5 Conclusion.....	14
3. The syntactic analysis of the question-answer combination	14
3.1 Examination of a single syntactic clause analysis.....	14
3.1.1 Previous proposals.....	15
3.1.2 Problems with a single clause analysis.....	15
3.1.3 Purported support for a single clause analysis.....	19
3.1.3.1 Topics.....	19
3.1.3.2 Embedding.....	20
3.1.4 Summary.....	22
3.2 An alternative view.....	23
4. Conclusion	23

Role Shift in ASL: A Syntactic Look at Direct Speech.....	24
<i>Robert G. Lee, Carol Neidle, Dawn MacLaughlin, Benjamin Bahan, and Judy Kegl</i>	
1. Reference in ASL.....	25
1.1 At the sentence level.....	25
1.2 At the discourse level.....	26
1.3 Summary.....	27
2. Background on role shift.....	27
3. The syntactic analysis of direct speech constructions.....	28
3.1 Use of role shift for direct speech.....	28
3.2 Status of the direct speech clause.....	29
3.2.1 IP-final adverbials.....	29
3.2.2 Right dislocation.....	31
3.2.3 Wh-movement.....	33
3.2.4 Summary of evidence about clause structure.....	36
4. An alternative proposal offered by Lillo-Martin.....	37
4.1 Lillo-Martin (1995).....	37
4.2 Evaluating the evidence.....	38
4.2.1 Wh-questions.....	38
4.2.2 Topic constructions.....	39
4.2.3 Reflexives.....	40
4.3 Additional predictions.....	41
4.3.1 Subject of the POV Predicate.....	42
4.3.2 Syntactic operations on the POV clause.....	42
4.4 Summary.....	44
5. Conclusion.....	44
Appendix I Notational conventions.....	46
Appendix II Non-manual marking.....	48
References.....	49
Contributors to this volume	53

A Unified Syntactic Account of Rhetorical Questions in American Sign Language*

Jack Hoza, Carol Neidle, Dawn MacLaughlin, Judy Kegl, and Benjamin Bahan

This paper proposes a syntactic analysis for a construction that has been the subject of some controversy in the recent literature on ASL syntax: the so-called “rhetorical question.” This construction involves the use, for a specific discourse purpose of introducing and drawing attention to new information, of a question to which the signer immediately provides the answer (see, e.g., Baker and Cokely 1980, Valli and Lucas 1992). This is illustrated by the examples in (1)-(3).¹

- | | | |
|-----|-----------------------------|---|
| | <u>rh/wh</u> | |
| (1) | IX _{1p} SEE WHO | JOHN |
| | Who did I see? John. | |
| | | |
| | <u>rh/wh</u> | |
| (2) | DO-DO, IX _i | BIG-HEAD ENTER... |
| | What did s/he do? | S/he had the nerve to barge right in there... |
| | | |
| | <u>rh/y-n</u> | <u>neg</u> |
| (3) | JOHN SHOW-UP | NOT-YET |
| | Has John shown up? Not yet. | |

The term “rhetorical question” is perhaps unfortunate in that it does not distinguish between the question-answer construction illustrated by examples (1)-(3) and true rhetorical questions, to which the speaker/signer neither expects nor provides an answer. For the purpose of clarity, we will refer to the structures illustrated in (1)-(3) as *rhq-answer sequences*.²

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¹ See Appendix I for explanation of glossing conventions. Appendix II describes in more detail some of the non-manual markings associated with the constructions described in this paper. The glosses do not exhaustively convey all manual and non-manual aspects of the signing, but have been reduced, for purposes of expediency, to a display of only those aspects that are relevant to the points under discussion. It is important to note, however, that, for purposes of expediency, the glosses in this article omit many non-manual markings (including non-manual markings of agreement) not relevant to the issues at hand.

² When we use the term, “rhetorical question,” we refer to only the question portion of the question-answer sequence.

Despite the traditional view (see, e.g., Baker and Cokely 1980) that this construction is really what it appears to be, essentially a question-answer sequence, several challenges have been offered in recent articles, and the status of rhetorical questions has been the subject of some controversy. Several ASL linguists have claimed that the question and answer in this construction are actually part of a single syntactic clause (Fischer 1990; Petronio 1991; Wilbur 1994a, 1994b, 1996) while others (Aarons 1994 and Neidle, Kegl, Bahan, Aarons, and MacLaughlin [hereafter, NKBAM] in press) maintain that these constructions are composed of a question followed by an answer.

This paper proposes to explore the structure of this construction in an attempt to determine the proper syntactic analysis. To do so, it is necessary to examine the evidence carefully in order to determine the structure of the question, the characteristics of the answer, and the syntactic status of the question-answer combination. This will be done in sections 1, 2, and 3, respectively.

Section 1 examines the structure of the question in both *wh* and *yes-no rhq*-answer sequences, and concludes that rhetorical questions have essentially the same syntactic structure as information-seeking questions. Section 2 summarizes the kind of answers that are possible, concluding that answers to rhetorical questions can take exactly the same form as answers to information-seeking questions. Namely, the answer can consist of a special answer-type expression (like YES), a single constituent, a clause, or an entire chunk of discourse. Section 3 considers the relation between the question and answer; our findings do not support the claim that the question-answer sequence constitutes a single syntactic unit. We will argue that, although they combine for a particular discourse function, the question and answer do not form a single clause.

Finally, none of the authors who have proposed that a *wh* rhetorical question and its answer constitute a single clause have extended this type of analysis to *yes-no rhq*-answer sequences, which have been treated (explicitly, in some cases, see, e.g., Wilbur 1994a; implicitly, in others) as simple question-answer sequences. Our analysis has the added advantage of providing a unified account of both *wh* and *yes-no rhq*-answer sequences.

1. Syntactic characteristics of the rhetorical question

This section considers the syntactic structure of rhetorical questions. The two types of rhetorical questions (*wh* and *yes-no*) are considered in turn.

1.1 Structure of rhetorical *wh*-questions

Since there has been some controversy about whether the rhetorical question is or is not syntactically the same as the information-seeking *wh*-question (*modulo* the different non-manual marking that signals a rhetorical), we describe first the structure of information-seeking *wh*-questions and then that of rhetorical *wh*-questions.

1.1.1 Information-seeking *wh*-questions

The structure of the *wh*-question construction itself has been a subject of some controversy. In this paper, we adopt the analysis of NKBAM *in press*, which argues that *wh*-phrases either may occur *in situ* or may be moved rightward to a [Spec, CP] position. See NKBAM (*in press*) for arguments against alternative proposals that *wh*-movement is leftward (as has been proposed, for example, by Lillo-Martin 1990 and 1991, Petronio 1993, and Petronio and Lillo-Martin 1995, 1997). The basic conclusions about possible structures for *wh*-questions are summarized below, with examples provided.

1.1.1.1 *Wh*-phrases may appear *in situ*³

- (4)
$$\overline{\text{wh}}$$

$$[[\text{WHO TELL}_j \text{ BILL}_j]_{\text{IP}} \text{ [+wh] }_{\text{C}}]_{\text{CP}}$$
 Who told Bill?

- (5)
$$\overline{\text{wh}}$$

$$[[\text{JOHN BUY "WHAT" YESTERDAY }]_{\text{IP}} \text{ [+wh] }_{\text{C}}]_{\text{CP}}$$
 What did John buy yesterday?

1.1.1.2 *Wh*-phrases may be moved rightward⁴

- (6) a.
$$\overline{\text{wh}}$$

$$[[\text{t}_i \text{ TELL}_j \text{ BILL}_j \text{ YESTERDAY }]_{\text{IP}} \text{ WHO}_i]_{\text{CP}}$$
 Who told Bill yesterday?

- b.
$$\overline{\text{wh}}$$

$$[[\text{t}_i \text{ TELL}_j \text{ BILL}_j \text{ YESTERDAY }]_{\text{IP}} \text{ WHO}_i]_{\text{CP}}$$
 Who told Bill yesterday?

- (7) a.
$$\overline{\text{wh}}$$

$$[[\text{JOHN BUY } \text{t}_j \text{ YESTERDAY }]_{\text{IP}} \text{ "WHAT"}_j]_{\text{CP}}$$
 What did John buy yesterday?

- b.
$$\overline{\text{wh}}$$

$$[[\text{JOHN BUY } \text{t}_j \text{ YESTERDAY }]_{\text{IP}} \text{ "WHAT"}_j]_{\text{CP}}$$
 What did John buy yesterday?

³ In these cases, the *wh*-marking tends to be held for a significant length of time after the final sign, and is most intense in its realization in this position (see Bahan 1996). This is consistent with our view that the *wh*-marking is the non-manual correlate of the +*wh* feature in the C node, which occurs immediately after the IP, but which does not contain any manual material in these cases.

⁴ In these examples where the *wh*-phrase has been moved, the spread of *wh*-marking is optional. For further discussion of the distribution of non-manual *wh*-marking, see NKBAM (*in press*).

NKBAM (in press) have provided extensive argumentation against leftward wh-movement in ASL. The constructions that would necessarily result from such syntactic movement to the left, as shown, for example, in sentence (8), are disfavored relative to the constructions shown in (4)-(7).

_____ wh

(8) ?* “WHAT”_j JOHN BUY t_j

While other researchers have reported such sentences to be grammatical,⁵ our informants do not accept such sentences, unless there is a wh-phrase sentence-finally, as illustrated below in Section 1.1.1.3. It is interesting to note that the final wh-phrase may appear in a highly reduced form (see NKBAM in press and Aarons 1994). The normally two-handed “WHAT” question sign may be produced with only one hand; another possibility is that the question marking may be realized simply by an intense non-manual marking (brow furrow and head shake), in which case the final manual sign is held while the non-manual question marking is articulated. In any event, there is a very strong preference for a final wh-sign in such sentences. (See discussion in NKBAM in press.)

1.1.1.3 Two wh-phrases (referring to a single questioned constituent) may appear in a single question

_____ wh

(9) [WHO [[t_i TELL_j BILL_j]_{IP} “WHAT”_i]_{CP}]_{CP}
Who, who told Bill?

_____ wh

(10) [WHO [JOHN SEE “WHAT”]_{CP}]_{CP}
Who, who did John see?

Note that in these sentences, both wh-phrases are questioning the same argument.⁶ Aarons, Bahan, Kegl, and Neidle [henceforth ABKN] (1992), Aarons (1994), and NKBAM (in press) analyze this construction as involving a wh-phrase in topic position, left-adjoined to CP. The CP in this case consists of an information-seeking wh-question containing a wh-phrase in [Spec, CP]. Note that the wh-phrase in CP may alternately be *in situ*, as in:

⁵ Lillo-Martin (1990) reports this type of sentence to be grammatical. Petronio (1993:99) states “In previous work (Petronio 1991), I reported that some ASL signers accept whOSV in direct questions while others reject it.” Petronio 1991, which presents judgments from both native and non-native signers, notes that while non-native signers report mixed judgments on such sentences, *native* signers usually reject such constructions (although this detail is omitted in Petronio 1993 and Petronio and Lillo-Martin 1997).

⁶ The sign glossed as “WHAT”, articulated with both palms open and facing upward, moving back and forth from side to side, is a general question sign that can be used with the meaning ‘who,’ ‘what,’ etc.. Note in (9) and (10) that it corresponds to the same argument as the initial WHO in the sentence.

- (11)
$$\overline{\text{wh}}$$

$$\left[\text{“WHAT”} \left[\left[\text{JOHN BUY “WHAT” YESTERDAY} \right]_{\text{IP}} \left[+\text{wh} \right]_{\text{C}} \right]_{\text{CP}} \right]_{\text{CP}}$$
 What, what did John buy yesterday?

1.1.1.4 *Wh-phrases may also be non-overt in appropriate discourse contexts*

- (12)
$$\overline{\text{wh}}$$

$$\left[\left[\text{JOHN BUY} \left[e_j \right]_{\text{IP}} \left[+\text{wh} \right]_{\text{C}} \right]_{\text{CP}}$$
 What did John buy?

Such sentences have been called “covert” questions (Lillo-Martin and Fischer 1992) and have been reported to be acceptable when the context allows the missing information to be recovered. Our informants confirm this, but report a preference for such sentences to include a sentence-final “WHAT,” even in a very reduced form (analogous to what is found with the examples like (7)). In cases where there is no manual wh-sign at all, the final manual sign tends to be held and accompanied by an intense non-manual wh-marking. It would be useful to have available the videotaped data that formed the basis for earlier reported claims (e.g., Lillo-Martin and Fischer 1992) to see whether those sentences also include such sentence-final question markings.

1.1.1.5 *Wh-phrases may be extracted from an embedded clause⁷*

- (13)
$$\overline{\text{wh}}$$

$$\left[\left[\left[\text{JOHN SEE} \left[\left[t_i \text{ THROW APPLE} \right]_{\text{IP}_2} t_i \right]_{\text{CP}_2} \right]_{\text{IP}_1} \text{WHO}_i \right]_{\text{CP}_1}$$
 Who did John see throw the apple?

- (14)
$$\overline{\text{wh}}$$

$$\left[\left[\left[\text{JOHN SEE} \left[\left[t_i \text{ THROW APPLE} \right]_{\text{IP}_2} t_i \right]_{\text{CP}_2} \right]_{\text{IP}_1} \text{WHO}_i \right]_{\text{CP}_1}$$
 Who did John see throw the apple?

1.1.1.6 *Non-manual wh-marking*

ABKN (1992), Aarons (1994) and NKBAM (in press) propose a clausal structure for ASL in which [Spec, CP] is to the right of IP. They account for the distribution of wh-marking in terms of the following generalizations about non-manual marking in ASL:

⁷ This is counter to claims by Lillo-Martin (1990).

- Non-manual syntactic marking is frequently associated with syntactic features that occur in the head of functional projections. For *wh*-questions, the associated feature is +*wh*, which occurs in the head of CP.
- Non-manual syntactic marking optionally spreads over the *c*-command domain of the node with which it is associated.
- There is a strong preference for non-manual syntactic marking to be borne by manual material. So, spread essentially becomes obligatory in cases where no manual material is otherwise available.⁸ This predicts that in cases where the *wh*-phrase has moved rightward out of IP, the marking optionally spreads over the *c*-command domain of C—namely, IP.⁹ However, in the absence of manual material in [Spec, CP], as in the case of *in situ* questions or questions lacking an overt *wh*-phrase entirely, the spread over IP is obligatory.

These generalizations account for the distribution of the non-manual marking associated with the *wh*-constructions in the examples above.

1.1.2 Structure of rhetorical *wh*-questions

The word orders in rhetorical *wh*-questions are essentially the same as those that have just been described for information-seeking *wh*-questions. Examples of grammatical *wh* rhq-answer sequences are listed below.

⁸ Note that there are cases where non-manual marking occurs without manual material. For example, the affirmative headnod identified by Liddell (1980) can appear without manual material, as a tag (see further discussion in ABKN 1992 and ABKN 1995). In such cases, the spread of the non-manual marking over its *c*-command domain applies vacuously; since there is no manual material within that domain, the non-manual marking is articulated independently.

⁹ More precisely, lexical material in the Spec, CP, as found with moved *wh*-phrases, suffices to satisfy the requirement that the non-manual marking be borne over manual material.

1.1.2.1 *Wh-phrases may appear in situ*¹⁰

(15) $\overline{\text{rh/wh}}$
 [[WHO TELL_j BILL_j]_{IP} [+wh]_C]_{CP} MARY
 Who told Bill? Mary.

(16) $\overline{\text{rh/wh}}$
 [[JOHN BUY “WHAT” YESTERDAY]_{IP} [+wh]_C]_{CP} THREE BOOK
 What did John buy yesterday? Three books.

1.1.2.2 *Wh-phrases may be moved rightward*

(17) a. $\overline{\text{rh/wh}}$
 [[t_i TELL_j BILL_j YESTERDAY]_{IP} WHO_i]_{CP} MARY
 Who told Bill yesterday? Mary.

b. $\overline{\text{rh/wh}}$
 [[t_i TELL_j BILL_j YESTERDAY]_{IP} WHO_i]_{CP} MARY
 Who told Bill yesterday? Mary.

(18) a. $\overline{\text{rh/wh}}$
 [[JOHN BUY t_j YESTERDAY]_{IP} “WHAT”_j]_{CP} BOOK
 What did John buy yesterday? A book.

b. $\overline{\text{rh/wh}}$
 [[JOHN BUY t_j YESTERDAY]_{IP} “WHAT”_j]_{CP} BOOK
 What did John buy yesterday? A book.

¹⁰ Petronio (1991) reports different grammaticality judgments for these sentences. If we leave aside the judgments she reports for “signers who came from hearing families,” and focus on her reports of signers “who came from Deaf families where their parents used ASL,” Petronio claims that sentences such as (15), with a subject *wh*-phrase occurring sentence-initially, are only marginally acceptable. She does not discuss sentences like (16). Note that in this paper, as in all of our work, judgments we give are those reported by native signers.

Wilbur also appears to disagree with respect to the judgments for sentences like (15) and (16). According to Wilbur (1994a): “our subjects have strong, and in some cases, absolute, preference for the *wh*-sign as the last sign in the rhetorical question part of the pseudocleft [*rhq*-answer sequences, in our terms]; in the pseudocleft, the *wh*-sign never occurs first or both first and last, which are possible in regular *wh*-questions.” However, in Wilbur (1996), she again says: “the *wh*-sign is uniformly preferred on the right of the *Wh*-clause,” but a page later modifies this: “One situation where the preference for the *Wh*-sign on the right of the *Wh*-clause may be overridden is when the *Wh*-word appears to occur in situ in the *Wh*-clause.” Given these contradictory statements, it is not surprising that there can be some confusion about exactly what Wilbur is claiming. Wilbur (1994b:651, fn. 4) points out that Aarons seems to have misinterpreted her claim in this regard. “Aarons (1994) mistakenly interprets my observation that the *wh*-sign occurs on the right in the *wh* clause of pseudoclefts as suggesting that *wh*-signs cannot occur in situ.”

1.1.2.3 Two *wh*-phrases may appear in a single question¹¹

- (19) $\overline{\text{rh/wh}}$
 [WHO [[t_i TELL_j BILL_j]_{IP} “WHAT”_i]_{CP}]_{CP} MARY
 Who, who told Bill? Mary.

- (20) $\overline{\text{rh/wh}}$
 [WHO [JOHN SEE “WHAT”]_{CP}]_{CP} MARY
 Who, who did John see? Mary.

1.1.2.4 *Wh*-phrases may also be non-overt in appropriate discourse contexts¹²

- (21) $\overline{\text{rh/wh}}$
 [[JOHN BUY [e]_j]_{IP} [+wh]_C]_{CP} BOOK
 What did John buy? A book.

1.1.2.5 *Wh*-phrases may be extracted from an embedded clause¹³

- (22) $\overline{\text{rh/wh}}$
 [[JOHN SEE [[t_i THROW APPLE]_{IP₂} t_i]_{CP₂}]_{IP₁} WHO_i]_{CP₁} MARY
 Who did John see throw the apple? Mary.

- (23) $\overline{\text{rh/wh}}$
 [[JOHN SEE [[t_i THROW APPLE]_{IP₂} t_i]_{CP₂}]_{IP₁} WHO_i]_{CP₁} MARY
 Who did John see throw the apple? Mary.

As these examples have shown, *wh*-phrases in rhetorical *wh*-questions may appear *in situ* or may move rightward. As with information-seeking *wh*-questions, *wh*-phrases may be extracted out of an embedded clause in rhetorical *wh*-questions, as we have previously noted (ABKN 1992; Aarons 1994; NKBAM in press).

1.1.2.6 Non-manual rhetorical *wh*-marking

Rhetorical *wh*-questions are accompanied by a specific kind of non-manual marking, which includes raised eyebrows (see Appendix II for greater detail). In addition, the same head shake that frequently cooccurs with information seeking *wh*-questions is

¹¹ Wilbur (1994a, 1994b, 1996) claims that rhetorical questions cannot contain *wh*-phrases both sentence-initially and finally (see previous footnote). Our informants, however, stated that these sentences were acceptable in contexts in which the initial *wh*-phrase was the topic.

¹² These covert rhetorical *wh*-structures behave similarly to the corresponding information-seeking *wh*-structures. See discussion of covert *wh*-questions in section 1.1.1.4.

¹³ Note: Wilbur (1994b:652) reports that sentences such as (22) are ungrammatical. (She further states—inaccurately—that “Aarons (1994) reports similar findings” about the spread of *wh*-marking.)

found with rhetorical *wh*-questions as well. Except for the specific positioning of the brows (raised or lowered), these non-manual features of information-seeking *wh*-questions are like those of rhetorical *wh*-questions.

As shown by the above examples, the distribution of the non-manual *rh/wh* marking shows exactly the same pattern as the non-manual *wh*-marking found in information-seeking questions.¹⁴ Although the marking itself varies slightly, the distribution of non-manual marking in both cases can be accounted for by NKBAM's (in press) proposal that the non-manual question marking is associated with question features in the head *C* of *CP*, and that it may spread optionally over the *c*-command domain, namely *IP*, although this spread is obligatory if there is no other manual material in [*Spec, CP*] to bear the non-manual marking.

1.1.3 Conclusion

All the evidence suggests that rhetorical *wh*-questions have the same structure as information-seeking *wh*-questions. This conclusion contradicts previous claims in the literature that information-seeking *wh*-questions and rhetorical *wh*-questions are different in kind and, therefore, must be accounted for separately. The facts presented here strongly suggest that they are of the same syntactic structure, even though they differ in their discourse function.

1.2 Structure of rhetorical *yes-no* questions

This section first describes the structure of information-seeking *yes-no* questions and then the structure of rhetorical *yes-no* questions. As has been shown with information-seeking and rhetorical *wh*-questions, the syntactic structure and the distribution of non-manual marking are shown to be the same for both information-seeking and rhetorical *yes-no* questions.

1.2.1 Structure of information-seeking *yes-no* questions

Yes-no questions in ASL are not distinguished from statements by word order (Baker and Cokely 1980; Valli and Lucas 1992). Rather, *yes-no* questions are signaled by a particular non-manual syntactic marking described in Appendix II. Compare (24) and (25).

¹⁴ Petronio (1991:213) also reports essentially the same facts about the spread of both *wh*-marking and rhetorical *wh*-marking, although her analysis of these constructions is quite different:

“1) If the only *wh*-term appears at the end of the question segment, the *rhq* marker can co-occur either with only the *wh*-term, or with the entire question segment...

2) If there is not a *wh*-term at the end of the question segment, the *rhq* marker co-occurs with all the signs in the question segment...

3) If there is a *wh*-term at the beginning of the question segment, the *rhq* marker co-occurs with the entire question segment.”

2.1 Answers to information-seeking *wh*-questions

In ASL, as in other languages, the answer to a *wh*-question may be a single constituent, an entire CP, or a whole section of discourse, depending on the information sought by the question. Additionally, the answer may be syntactically unrelated to the question, but still clearly understood within the discourse as answering the question, for example:

Question:

- (28) $\frac{\text{wh}}{\text{JOHN SHOW-UP WHEN}}$
When is John showing up?

Answer:

- (29) MARY_i IX_i $\frac{\text{hn}}{\text{TAKE-CARE}}$ $\frac{\text{neg}}{\text{NOT WORRY, IX}_{2p}}$
Mary will take care of it. Don't worry.

It is also possible to find topics (which occur left-adjoined to the main clause) in the answer to an information-seeking *wh*-question, as in the following sequence:

Question:

- (30) $\frac{\text{wh}}{\text{JOHN SHOW-UP WHEN}}$
When is John showing up?

Answer:

- (31) $\frac{\text{tm}_2}{\text{MARY}_i}$, IX_i $\frac{\text{hn}}{\text{TAKE-CARE}}$ $\frac{\text{neg}}{\text{NOT WORRY, IX}_{2p}}$
As for Mary, she'll take care of it. Don't worry.

2.2 Answers to rhetorical *wh*-questions

The answers to rhetorical *wh*-questions pattern like answers to information-seeking *wh*-questions. The answer to a rhetorical *wh*-question may be a single constituent:

- (32) $\frac{\text{rh/wh}}{[[\text{WHO WILL TELL}_j \text{ BILL}_j]_{\text{IP}} [+wh]_{\text{C}}]_{\text{CP}}}$ MARY
Who will tell Bill? Mary.

The answer may be an entire CP:

- (33) $\frac{\text{rh/wh}}{[[\text{WHO WILL TELL}_j \text{ BILL}_j]_{\text{IP}} [+wh]_{\text{C}}]_{\text{CP}}}$ MARY $\frac{\text{hn}}{\text{WILL } [e]_{\text{VP}}}$
 Who will tell Bill? Mary will.

Note that, as with information-seeking questions, the answer to a rhetorical wh-question may also be an elliptical clause, as shown in (34).

- (34) $\frac{\text{rh/wh}}{[[\text{WHO WILL TELL}_j \text{ BILL}_j]_{\text{IP}} [+wh]_{\text{C}}]_{\text{CP}}}$ MARY $\frac{\text{hn}}{\text{MARY}}$
 Who will tell Bill? Mary will.

While (32) and (34) may appear at first glance to be the same, the headnod in (34), as we have argued elsewhere (see ABKN 1992, 1995), following Liddell (1980), is a diagnostic of a clausal structure. Thus, (34) has a slightly different interpretation, as indicated in the English translation.

The answer may also, in appropriate contexts, be a whole section of discourse:

- (35) $\frac{\text{rh/wh}}{\text{JOHN}_i \text{ COME WHEN NOW IX}_i \text{ VISIT SISTER}}$
 FEEL IX_i POSTPONE COME TOMORROW

When is John coming? Now he's visiting his sister.
 I think he's going to postpone (his visit). He'll come tomorrow.

As with answers to information-seeking wh-questions, answers to rhetorical wh-questions may be syntactically unrelated, but appropriate within the discourse context, as in the following example:

- (36) $\frac{\text{rh/wh}}{\text{JOHN}_i \text{ WHERE MARY STRONG PERFUME}}$
 IX_i $\frac{\text{neg}}{\text{CAN'T+STAND}}$ LEAVE

Where is John? Mary has really strong perfume.
 He can't stand it. So he left.

For both types of questions, previous discourse and shared knowledge would determine the appropriateness of the answer. Note that this is counter to claims in Wilbur (1994a, 1996); see section 3.1.2.

The answer to a rhetorical question may also include topic constituents. Consider, for example, the situation in which Bill is making a bet with a friend about what John will choose from the buffet table when he arrives. In predicting what John will choose, Bill might say to his friend:

- (37) $\frac{\text{rh/wh}}{\text{JOHN EAT "WHAT"}}$ $\frac{\text{top2}}{\text{VEGETABLE, FEEL EAT CORN}}$
 $\frac{\text{top2}}{\text{MEAT, FEEL EAT HAMBURGER}}$

What will John eat? As for vegetables, I feel he will eat corn;
 as for meat, I feel he will eat hamburger.

2.3 Structure of the answer to information-seeking yes-no questions

In ASL, the answer to a yes-no question can be an affirmation such as YES, a negation such as NO, as well as other answers such as MAYBE, #SURE, 'hand-wave,' 'finger-wave,' head shake (without any lexical material), and headnod (without lexical material). These may be followed by:

- a single constituent:

- (38) YES, TOMORROW
 Yes, tomorrow.

- a full CP:

- (39) [head shake], $\frac{\text{neg}}{\text{IX}_{1\text{p}} \text{DON'T-KNOW WHO}}$
 No, I don't know who.

- or a section of discourse:

CONTEXT: There is a meeting planned to take place in Chicago. The signer is asked whether or not s/he is going to Chicago.

REPLY:

- (40) YES MEETING IMPORTANT HOT DISCUSS
 $\frac{\text{neg}}{\text{CAN'T MISS, IX}_{1\text{p}}}$

Yes. The meeting is important. There will be a hot discussion.
 I can't miss it.

2.4 Answers to rhetorical yes-no questions

Answers to rhetorical yes-no questions consistently pattern with answers to information-seeking yes-no questions. As with information-seeking questions, certain answer words such as YES, NO, MAYBE, #SURE, 'hand-wave' or 'finger-wave,' or non-manual answers such as a headnod or head shake may either constitute an answer or may precede:

- a single constituent:

(41) $\frac{\text{rh/y-n}}{\text{IX}_{1\text{p}} \text{ GO TOMORROW}} \quad \frac{\text{neg}}{\text{NO, NEXT-WEEK}}$
 Am I going tomorrow? No, next week.

- a full CP:

(42) $\frac{\text{rh/y-n}}{\text{SURPRISE, IX}_{1\text{p}_i} \text{ [headnod]}} \quad \frac{\text{neg}}{\text{NOT EXPECT IX}_j \text{ SHOW-UP}}$
 Was I surprised? Yes, I didn't expect s/he would show up.

- or a section of discourse:

CONTEXT: There is a meeting planned to take place in Chicago.

(43) $\frac{\text{rh/y-n}}{\text{GO CHICAGO, IX}_{1\text{p}}}$ YES MEETING IMPORTANT
 HOT DISCUSS $\frac{\text{neg}}{\text{CAN'T MISS, IX}_{1\text{p}}}$

Am I going to Chicago? Yes. The meeting is important.
 There will be a hot discussion. I can't miss it.

2.5 Conclusion

As this section has shown, answers to rhetorical questions pattern like answers to information-seeking questions.

3. The syntactic analysis of the question-answer combination

Having established that the individual question and answer components of the rhq-answer sequence parallel the components of information-seeking question-answer sequences, we now turn to examine the syntactic relation between the components of the rhq-answer sequence. Section 3.1 considers proposals by others that the two parts form a single syntactic clause and concludes that such an analysis is problematic. Section 3.2 argues for the alternative view, namely, that the question and answer are not contained in a single clause.

3.1 Examination of a single syntactic clause analysis

In this section we first summarize previous proposals for a single-clause analysis of rhq-answer sequences. We next discuss some general problems that such analyses face. Finally, we address arguments that have been put forward in favor of the single clause analysis, showing that they cannot be maintained. We conclude, therefore, that there is, in fact, no evidence necessitating a single clause analysis, and furthermore that such an analysis is problematic in a number of respects.

3.1.1 *Previous proposals*

In contradistinction to the general assumptions made in earlier descriptive accounts of rhq-answer sequences, all of the recent syntactic proposals (except for Aarons 1994 and NKBAM in press) to account for rhq-answer sequences have involved a single syntactic clause containing both the question and the answer. Petronio (1991) suggests that the answer portion occurs at the right edge of the sentence, in the specifier position of a right-headed Focus Phrase that dominates CP, while the question portion is contained in the CP itself.¹⁶ Wilbur (1994a) suggests that the question portion is a sentential subject and the answer portion is the main predicate of the sentence. Wilbur (1996), however, dismisses her own prior analysis. Instead, Wilbur (1996) proposes, based on Heggie's (1988) analysis of English wh-clefts, that the question and answer portions are generated as a small clause; the question portion raises leftward to [Spec, CP] and the answer portion raises leftward to [Spec, IP]. What all of these various proposals have in common is the claim that the rhetorical question and its answer constitute a single syntactic clausal unit.¹⁷ Therefore, if it turns out that rhetorical questions and their answers do not constitute a single clause, then all of above proposals must be rejected. Furthermore, none of the single-clause proposals for wh rhq-answer sequences can be extended to yes-no rhq-answer sequences (which are uniformly treated as question-answer sequences—when they are explicitly discussed, as in Wilbur 1996).¹⁸

3.1.2 *Problems with a single clause analysis*

Consider first the pseudocleft-type analysis, according to which the answer portion occurs as the main predicate of the higher clause while the question portion constitutes a free relative clause occurring in [Spec, IP] (as was proposed in Wilbur 1994a). With such an analysis, one would expect to find the normal possibilities for inflectional material occurring between the sentential subject and the main clause predicate. That is, one would expect that such constructions could be marked for tense and aspect, and also that they could be negated. Additionally, one would expect to be able to question the relation between the free relative and the predicate. As the following examples show, all of these constructions are possible with the English pseudocleft.

¹⁶ Petronio suggests that the answer is coindexed with the wh-phrase in the question portion (although it is unclear how this coindexing is achieved and how it is to be interpreted).

¹⁷ Fischer (1990) also very briefly discusses the rhetorical question-answer sequence, and suggests that the question is a free relative that has been topicalized and fronted. See Wilbur (1994a, in a footnote) for arguments against this.

¹⁸ Petronio (1991) includes example sentences that involve yes-no rhq-answer sequences, but does not identify them as such or discuss them, and clearly her analysis of wh rhq-answer sequences cannot be extended to account for yes-no rhq-answer sequences.

- (44) What she saw was a UFO. [Typical pseudocleft construction]
 (45) What she saw was not a UFO. [Negated pseudocleft]
 (46) What she will see will be a UFO. [Pseudocleft marked for tense]
 (47) What she saw had been a UFO. [Pseudocleft marked for aspect]
 (48) Was what she saw a UFO? [Questioned pseudocleft]

However, the corresponding examples in (50) through (53) from ASL—in which the negation, tense marking, aspect marking or questioning apply to the relation between the question and the answer—are ungrammatical, providing strong evidence against applying this type of the single clause analysis to ASL rhq-answer sequences.

- (49) $\frac{\text{rh/wh}}{\text{MARY SEE "WHAT" BOOK}}$ [Rhq-answer sequence]
 What did Mary see? A book.
- (50) * $\frac{\text{rh/wh}}{\text{MARY SEE "WHAT" NOT BOOK}}$ $\frac{\text{neg}}{\text{NOT BOOK}}$ [negated]
- (51) * $\frac{\text{rh/wh}}{\text{MARY WILL SEE "WHAT" WILL BOOK}}$ [marked for tense]
- (52) * $\frac{\text{rh/wh}}{\text{MARY FINISH SEE "WHAT" FINISH BOOK}}$ [marked for aspect]
- (53) * $\frac{\text{rh/wh}}{\text{MARY SEE "WHAT" BOOK}}$ $\frac{\text{y-n}}{\text{BOOK}}$ [questioned]¹⁹

Examples (50)-(53) are all ungrammatical on the readings that correlate with those in (45)-(48).²⁰ This suggests that Wilbur's (1994) pseudocleft analysis is incorrect.

Notice that the same counterargument can be made for the alternative proposal offered by Wilbur (1996). In this case as well, there is assumed to be an inflectional node in the main clause that contains both the question and answer portion. While Wilbur's various proposals make slightly different predictions about whether inflectional material would appear before or after the answer portion, note

¹⁹ While it is not completely clear how these overlapping non-manual markings would be realized, there is nothing close to this construction that is acceptable. The intended meaning could only be expressed by the use of two separate questions: MARY SEE WHAT? BOOK? roughly corresponding to the English: 'What did Mary see? A book?' However, if this construction consists of a rhetorical wh-question followed by an information-seeking yes-no question, these sentences would be nonsensical. It is only grammatical when the first question is an information-seeking wh-question and the second is an information-seeking yes-no question.

²⁰ There is a reading on which (50) is grammatical (namely, where the answer portion contains constituent negation). However, the sentence is ungrammatical on the relevant reading: 'What Mary saw is not a book.'

that the examples in (50) through (53) are just as ungrammatical if the answer portion is placed before the relevant inflectional material (Wilbur notwithstanding).²¹

Furthermore, the pseudocleft-type analysis for ASL rhq-answer sequences is problematic in several other respects. First, on such a single-clause analysis, one would expect to be able to find, after the answer, a right dislocation (which occurs at the right periphery of a clause) referring back to an NP in the question. However, this does not result in a grammatical sentence, as shown by the ungrammaticality of (55),²² as compared with the grammaticality of (54).²³

(54) IX_i BUY BOOK, IX_i
S/he is buying the book, s/he.

rh/wh
(55) * IX_i BUY WHAT BOOK, IX_i
What is s/he buying? The book, s/he.

Second, if Wilbur's pseudocleft analysis were correct, then ASL would pose a particular anomaly with respect to crosslinguistic characteristics of pseudoclefts. As is well known, there are two general types of pseudocleft constructions, one which has been termed "predicational," as in (56), and one which is "equative" or "specificational", as in (57).²⁴

(56) What I saw was beautiful. (predicational pseudocleft)
(57) What I saw was a UFO. (specificational/equative pseudocleft)

²¹ Wilbur (1994a, 1996) acknowledges this basic fact, with Wilbur 1994a showing that inflectional material cannot occur in the medial position (and citing this as a "feature" of the rhetorical question construction (Wilbur, 1994a; see Section 3)) and Wilbur (1996) stating that it cannot occur in final position. The one difference concerns sentential negation, which Wilbur claims exists with this construction. Wilbur (1996) presents examples such as the following as proof that there can be clause-final sentential negation with this construction:

(i) LEE PAINT WHAT, CHAIR NOTHING (Wilbur's example 72a)
br neg
'What Lee painted wasn't the chair.'

First, our informants do not accept this sentence as grammatical. Second, in any event, it does not involve sentential negation. The sign NOTHING is not the sign used for sentential negation.

²² There is a significant syntactic difference between a right-dislocated index (which has no headnod) and an index that is part of a clausal tag construction (as signalled by the presence of a headnod). To the extent that (55) seems marginally acceptable, we believe that this is because the change in head position from the slightly back position used for the rhetorical question to the neutral head position that the signer assumes for the answer can resemble the headnod that would allow the answer to be interpreted as clausal. (It is also important to note that the index glossed here involves the index finger. The thumb index appears to have a less restricted distribution, which requires further study.)

²³ Wilbur 1994b:667 says: "ASL, however, appears to make little or no use of Right Dislocation..." (See footnote 13 in Lee, Neidle, MacLaughlin, Bahan, and Kegl in this volume.) In fact, we have discussed the right dislocation construction (see ABKN 1992, e.g.). Pronominal right dislocation in ASL appears to work in very much the same way as it does in French and Norwegian (cf. Fretheim 1995).

²⁴ For more information about pseudoclefts, see Higgins (1979), Bresnan and Grimshaw (1979), Williams (1983), and Iatridou and Varlokosta (1995) and references cited therein.

As Iatridou and Varlokosta (1995) observe, there are languages that have both types, such as English, German, Spanish, Galician, and Welsh, and other languages that have only the first type (56) but not the second (57), such as Modern Greek, Finnish, Bulgarian, Italian, Polish, and Catalan. However, Iatridou and Varlokosta (1995) have found no languages with pseudoclefts only of the second type. This is precisely the kind of language that Wilbur claims ASL to be, since Wilbur acknowledges that the “ASL pseudocleft” cannot be used predicationally, as shown by the following ungrammatical example:

_____ rh/wh

(58) * JOHN SEE WHAT BEAUTIFUL

Third, there are no independent occurrences of *wh* free relative clauses (the construction that Wilbur believes is exploited for *rhq*-answer sequences) in ASL. Since the free relative comprises part of the pseudocleft, according to Wilbur’s proposal, it is hard to understand how its distribution could be limited to only this context.

Fourth, the following claim by Wilbur (1994b:661) is incorrect: “the focused phrase [i.e., the answer portion] must provide the information that corresponds *directly* to the variable in the *Wh*-clause.”²⁵ (emphasis hers) As shown in prior examples such as (35) and (36), the answer may bear a loose discourse relation to the question, but not correspond syntactically to the argument associated with the *wh*-phrase, as would be required for the pseudocleft analysis.²⁶

Furthermore, the signer need not even know the answer to the rhetorical question being posed. A rhetorical question may be used to highlight the fact that the answer is unknown to the signer, as in the following examples:

_____ rh/wh

(59) WHAT HAPPEN DON’T-KNOW, IX_{1p}
What happened? I don’t know, me.

_____ rh/wh

(60) JOHN LATE WHY DON’T-KNOW, IX_{1p}
Why is John late? I don’t know, me.

These examples could not be interpreted as a pseudocleft. Notice that languages such as English, with a pseudocleft construction, do not allow such sentences.

(61) * What happened was I don’t know.

(62) * Why John is late is I don’t know.

²⁵ Moreover, even the purported ungrammatical example that Wilbur provides, to illustrate her claim, would be acceptable as a rhetorical question-answer sequence in the appropriate discourse context.

²⁶ Petronio’s (1991) analysis, wherein the *wh*-word and answer are coindexed (see footnote 16), would also presumably predict a tight relation between the two elements and, therefore, could not account for these facts.

Also problematic for a single clause analysis is the fact that the answer to a rhetorical wh-question may be an entire section of discourse (see examples (35), (36), and (43)). This is problematic for any single clause analysis, since it demonstrates that these rhq-answer sequences must be analyzed as involving question-answer sequences. Once such constructions are recognized, this automatically provides an account for cases where the answer is a single constituent or a clause. Since accounting for those utterances in a different way requires additional machinery, there would need to be evidence that a different mechanism is required. There is absolutely no basis for distinguishing syntactically the cases where the rhetorical question is followed by a constituent, a clause, or a section of discourse.

3.1.3 Purported support for a single clause analysis

In the previous section, we discussed some general problems facing any single clause analysis of rhq-answer sequences. So what kind of evidence may have led other researchers to propose such analyses? In this section, we consider the evidence that has been offered to support the need for a single clause analysis of the rhq-answer sequence. We focus mainly on the works of Wilbur, since she has argued most explicitly for this position. She has put forward several pieces of data which, at first glance, might seem to require a single clause analysis of the rhq-answer sequence. These will be investigated in turn, and we will argue that the evidence is not as it might appear.

3.1.3.1 Topics

Wilbur (1994a) suggests that it is possible to find material from the answer portion moved to a topic position to the left of the question. If this were true, then it would necessarily entail that the question and answer are contained in a single clause. However, the evidence she presents is highly questionable. Consider her example:

(63) $\frac{\quad}{\text{JOHN}_a}$ $\frac{\quad}{\text{PARTY}}$ $\frac{\quad}{\text{PT}_a}$ $\frac{\quad}{\text{SEE WHAT?}}$
 MARY LEAVE t EARLY

As for John, as for the party, what John saw was Mary leave it early.

Wilbur's (1994a) example (57)

Wilbur claims that PARTY has been extracted from the answer portion (leaving a trace) to the topic position that occurs prior to the question. Not only is this analysis highly implausible, it can also be demonstrated to be false, since Aarons (1994) has shown that moved topics bear a unique non-manual marking (which she labeled "tm1") that is not found with base-generated topics (which may be "tm2" or "tm3"). Although Wilbur does not differentiate these topic markings, when one considers this evidence, the markings reveal that only a base-generated topic is acceptable in this construction. Compare:

(64) $\frac{tm2}{JOHN_i}$ $\frac{tm2}{PARTY}$ $\frac{rh/wh}{IX_i \text{ SEE WHAT MARY LEAVE EARLY}}$
 As for John, as for the party, what did he see? Mary left early.

(65) * $\frac{tm2}{JOHN_i}$ $\frac{tm1}{PARTY_j}$ $\frac{rh/wh}{IX_i \text{ SEE WHAT MARY LEAVE } t_j \text{ EARLY}}$

Thus, it has not been shown that topicalization can move a constituent out of the answer portion to a position to the left of the question portion.

3.1.3.2 *Embedding*

Another set of examples that Wilbur offers in support of a single clause analysis purportedly illustrates the possibility of embedding both the question and the answer beneath a higher verb. Consider the following, from Wilbur 1994b (her example 5), where we indicate in square brackets the question and answer combination that she claims to be embedded beneath the verb SEE.

(66) KIM SEE $\frac{br}{[\text{STEAL TTY WHO LEE }]}$ Wilbur's (1994b) example (5)

What is crucial here is the scope of the non-manual marking. Note that this example is distinct from one in which the rhetorical question marking extends over KIM SEE, as well, as shown below:

(67) $\frac{rh/wh}{[[[\text{KIM SEE } [[t_i \text{ THROW APPLE }]_{IP_2} t_i]_{CP_2}]_{IP_1} \text{ WHO}_i]_{CP_1} \text{ BILL}]}$
 Who did Kim see throw the apple? Bill.

While sentence (67) would be interpreted as a single rhetorical question followed by an answer, sentence (66) cannot have this interpretation. Because the rhetorical question marking spreads over the entire CP corresponding to the question, the lack of spread over KIM SEE shows that these signs are outside of the domain of the question. Therefore, if (66) is a single sentence, it would involve embedding both the question and the answer as a unit beneath the verb. However, it appears that there may be an alternative analysis for the construction in (66).

While our informants accept both (66) and (67) as grammatical, their production of examples like (66) is interesting in a number of respects. They add a headnod over the subject and the verb (see, e.g., (69) and (71) below), add a pause or eyeblink between the verb and the following clause (examples (68) and (70)), or change the structure of the utterances altogether (example (72)).

An even stronger indication of this clause boundary is the fact that there may be right-dislocated material that precedes the rhetorical question.

$$(74) \quad \left[\left[\overset{\text{hn}}{\text{IX}_{1\text{p}}} \text{ FEEL} \right]_{\text{CP}} \text{ IX}_{1\text{p}} \right]_{\text{CP}} \left[\overset{\text{rh/wh}}{\text{MARY SEE WHO}} \right]_{\text{CP}} \text{ JOHN}$$

I think, me: Who did Mary see? John.

As discussed in ABKN (1992), for example, such dislocated constituents occur right-adjoined to CP.

These facts, therefore, provide strong evidence that the portion preceding the rhetorical question is actually a separate clause. We therefore maintain that Wilbur's examples do not provide evidence that rhq-answer sequences can be embedded. More specifically, we analyze examples with non-manual distribution as found in examples like (66) as involving three distinct parts: an autonomous sentence (possibly with an implicit object), a rhetorical question (bearing rh/wh marking), and the answer to the question.

3.1.4 Summary

The single syntactic clause analysis for the rhetorical question-answer sequence is problematic in several ways. First, it cannot account for the unacceptability of inflectional material that should be allowed to occur in clauses. Second, the pseudocleft analysis forces postulation of a free relative construction that does not occur independently in the language. Such an analysis would also set ASL apart from other known languages with respect to pseudoclefts. Third, it cannot account for constructions in which the answer portion is comprised of a section of discourse or in which the answer is only indirectly related to the wh-phrase. These facts provide strong counterevidence to a single clause analysis.

In this section, evidence that had been offered in the literature to support a single clause analysis has been challenged. We claim that the purported cases of topicalization from the answer portion have been misanalyzed, and that this does not, in fact, occur. We also claim that the question and answer portion cannot be embedded as a unit beneath a higher verb. Thus, there are, in our view, no remaining arguments necessitating an analysis in which the question and answer form part of a single clause.

3.2 An alternative view

The alternative approach to analyzing the rhq-answer sequence is much closer to what has traditionally been claimed; that is, there is a question followed by an answer. The question and answer do not constitute a single syntactic constituent, although they combine for a specific discourse function. This analysis finds support from the fundamental syntactic similarities between rhetorical and non-rhetorical questions, and between the answers to rhetorical and non-rhetorical questions. Contrary to certain claims that have appeared in the literature, rhetorical and non-rhetorical questions have the same syntactic structure and take answers of the same type (as

shown in Sections 1 and 2). This approach has the additional advantage of allowing for a unified account of rhetorical yes-no questions and wh-questions.

4. Conclusion

This paper has explored the construction traditionally referred to as rhetorical questions, referred to here as rhq-answer sequences, in order to determine the proper syntactic analysis of its structure. Although suggestions have been made in the literature that ASL rhetorical questions are different in kind from information-seeking questions, the evidence presented in this paper strongly suggests the contrary: there is no need to propose distinct analyses for rhetorical and information-seeking questions. The structure of rhetorical questions is the same in all essential syntactic respects as that of information-seeking questions. Furthermore, the answers to both rhetorical wh and yes-no questions take exactly the same form as answers to information-seeking wh and yes-no questions.

While there are differences in the non-manual markings found with information-seeking and rhetorical questions, our claim is that the syntactic structure of the question is the same, regardless of the particular discourse function for which it is used. Both yes-no and wh rhq-answer sequences serve to introduce or draw attention to new information in discourse. Our analysis provides a unified account of yes-no and wh rhq-answer sequences, according to which the relation between these two question types is the same as that commonly assumed to exist between yes-no and wh information-seeking questions. Thus, our analysis captures the similarities between information-seeking and rhetorical questions, on the one hand, and the parallelism of wh and yes-no question-answer sequences, on the other.

speech construction. Section 4 considers a different proposal that has been put forward by Lillo-Martin.

1. Reference in ASL

1.1 At the sentence level

ASL is a visual-spatial language that uses three-dimensional space to encode meaning. For example, signers establish referents in a particular location in space. Subsequent reference is accomplished by accessing the location in space associated with a referent. In ASL, several classes of grammatical morphemes systematically incorporate reference to spatial loci.

1. Definite determiners used with referential noun phrases involve pointing to the location associated with the referent of the head noun.

- (2) [IX_i MAN] ARRIVE
The man arrived.

2. Pronominal reference involves pointing, normally with the index finger,⁴ to the specific location associated with the appropriate referent.⁵

- (3) JOHN_i GO STORE IX_i BUY APPLE
John went to the store. He bought an apple.

- (4) JOHN_i GO STORE, IX_i
John went to the store, he did.

3. Reflexives, emphatics, and intimacy markers⁶ are articulated in the same manner as pronominals, but they involve a different handshape: a closed hand, with the thumb pointing up.

- (5) JOHN_i SELF_i DEAF
John himself is deaf.

4. Possessives are marked with an open hand pointing to, and with the palm oriented toward, the location associated with the possessor.

- (6) JOHN_i BUY APPLE POSS_i MOTHER_j BUY BOOK
John bought an apple. His mother bought a book.

⁴ In some contexts, signers point using the thumb instead of the index finger. There is also an honorific pronominal form involving a B-handshape with the palm oriented upward.

⁵ Commas are used to indicate material adjoined to the clause. This is not intended to indicate pausing, although a pause is sometimes found between the clause and the adjoined material.

⁶ Intimacy markers are articulated using the same handshape as is used for anaphors, but with the same function and distribution as the standard pronominal IX. They are used to indicate a more intimate relationship with the referent (see Kegl 1985:468).

5. Affixes for marking subject and object agreement manually on agreeing verbs involve the points in space corresponding to the subject and object referents. These points are used as the starting and ending points of the articulation of the verb (see, e.g., Padden 1983, 1988).

- (7) JOHN TELL_j BILL_j
John told Bill.
- (8) JOHN_i iGIVE_j MARY_j BOOK
John gives Mary a book.

These uses of spatial locations for purposes of reference and agreement correspond to essential syntactic contexts in which phi-features (agreement features) are relevant crosslinguistically. For this reason, we have argued that ASL makes use of spatial locations for instantiation of phi-features (more specifically, person features). These locations can be signaled manually, as in the above examples.

Recent work has identified additional, non-manual, manifestations of agreement features. Bahan (1996) has shown that there are non-manual correlates of subject and object agreement that access the same referential points in space that can be signaled manually. His work specifically examines the functions of head tilt and eye gaze as the non-manual correlates of syntactic agreement within the clause.

- | | | |
|-------|-------------------|--------------------------|
| _____ | tilt _i | Subject Agreement |
| _____ | gaze _j | Object Agreement |
- (9) JOHN_i WILL VISIT MOTHER_j
John will visit (his) mother.

Bahan shows that these optional non-manual correlates of syntactic agreement, usually involving the head tilting toward the location associated with the subject and the eyes gazing to the location associated with the object, occur with all classes of verbs in ASL. The same correlates of syntactic agreement are also observed internal to determiner phrases (see MacLaughlin 1997).

1.2 At the discourse level

The discussion thus far has focused primarily on morpho-syntax and the role of space in reference at the sentence level. However, space also plays a role at the level of discourse. Recent work has examined the use of space to structure discourse (Winston 1991, among others). However the relation between syntactic reference and discourse-level reference has been little explored. In role shift constructions, discourse referents are highlighted in ways that are quite similar to the ways in which syntactic agreement is marked. Just as signers use spatial locations to mark syntactic relations both manually and non-manually, spatial locations are also exploited to mark relations among discourse participants.

In fact, non-manually, the same kinds of markings are used at both levels. Just as head position is used to signal syntactic relations, it also has a discourse-level function. In role shift constructions, the signer's head, by virtue of being in a position

associated with a referent, may serve to mark that referent as the current active speaker. Similarly, while eye gaze often marks object agreement in the clause, it, too, may have an additional function at the discourse level. In role shift constructions where the shifted referent is ‘conversing’ with one or more represented addressees (as in a role shifted dialog), the signer breaks eye gaze with the real world addressee and gazes toward the location(s) in space associated with the represented addressee(s).⁷ Thus, ASL makes use of the same inventory of non-manual markings (i.e., head position and eye gaze) for differing functions at a variety of linguistic levels.

1.3 Summary

The table below summarizes the variety of ways in which signers access locations in space that are associated with referents.

Level of Reference	Expression	Function
Sentence Level	<i>Manual</i>	
	IX to spatial location	Determiner
	IX " " "	Pronoun
	POSS " " "	Possessive
	SELF " " "	Reflexive/Emphatic
	Spatial location used as affix	Subject/Object verb agreement
	<i>Non-manual</i>	
	Head tilt/eye gaze toward spatial location	Syntactic agreement (in clause or determiner phrase)
Discourse Level	<i>Non-manual</i>	
	Body shift into spatial location	Role shift
	Head tilt/eye gaze toward spatial location	Signaling of speaker(s)/ addressee(s)

2. Background on role shift

Several different constructions in ASL have been labeled ‘role shift,’ also called ‘referential shift’ in some of the more recent literature, including the direct speech construction that is the focus of this paper (akin to: John said: "I am going out."). Descriptive work on the role shift construction has included a variety of phenomena, such as reported speech, self-talk, and constructions with and without overt verbs (e.g., SAY, TELL) (Bahan and Petitto 1980; Lentz 1986; Padden 1986; Engberg-Pedersen 1993, 1995; Poulin and Miller 1995; among others). To mark a person other than the

⁷ This is consistent with the use of eye gaze in actual conversation. Signers use eye gaze with addressee(s) for backchannel information, as well as to regulate turn-taking (see, for example, Bahan and Supalla 1995; Baker 1976, 1977). In other words, signers use the same mechanisms that are employed in ‘real’ conversations when signing a role shifted conversation.

signer as the speaker,⁸ a variety of devices can be used, such as those listed by Bahan and Petitto (1980): eye gaze, head shift, facial expression, stylistic variation, and use of signing space. More recently, Loew, Kegl, and Poizner (1997) have noted the following identifying signals of role shift: "a shift of the torso or head, a break in eye contact with the real world addressee, and the use of caricature (changes in facial expression, posture, or signing style that uniquely identify the new role)."

Essentially, then, the signer's head position may be associated with the current speaker. In the neutral, default position, the signer is the active speaker. In a role shift construction, where the signer's body shifts to a location associated with another referent, that referent is marked as the active speaker; the signer's gaze can mark the entity with which the signer is interacting. For example, in a role shift dialogue, the signer's eyes generally gaze toward the location in space associated with the (represented) interlocutor.

While previous studies have described the overt markings of role shift, there has been relatively little work addressing the syntactic structure of the construction. The most explicit analysis proposed for such constructions is found in Lillo-Martin (1995).⁹ According to Lillo-Martin, in a direct speech construction that contains a verb of saying, the portion of the sentence corresponding to direct speech is embedded below—and therefore contained in the same clause as—that verb. However, this paper presents evidence that strongly suggests a different structure. Evidence from the distribution of clause-final adverbials, pronominal right dislocations, and wh-movement suggests that such constructions actually involve two syntactically independent (although logically related) clauses, used together for the specific discourse purpose of attributing direct speech to another person.

3. The syntactic analysis of direct speech constructions

This section provides evidence that the direct speech role shift construction consists of two syntactically independent clauses used for a single discourse purpose. The data disconfirm the hypothesis, advanced by Lillo-Martin, that both the verb of saying and the direct speech clause are contained in a single clausal unit.

3.1 *Use of role shift for direct speech*

The direct speech role shift construction consists of an introductory clause (e.g., JOHN SAY) followed by the phrase being quoted. As stated above, the shift can be marked in a variety of ways. Direct speech is frequently (but not always) marked by a shift of the upper body toward the location in space associated with the speaker of the quote. In the construction with SAY and role shift, the quote is directly attributed to the designated speaker. The shift, when present, differentiates the direct quotation from indirect speech. Thus, in the following examples, where no role shift occurs, the sentences are interpreted as indirect speech.

⁸ A shift could also mark the signer as "speaker" in a context other than the present, as when the signer reports some thought, idea or previous quote of his/her own. In these instances, the signer is shifting to him/herself in another context, not in the present.

⁹ See also a brief discussion in Aarons, Bahan, Kegl, and Neidle (1992).

- (10) JOHN_i SAY IX_i WANT GO
John said that he wants to go.
- (11) JOHN_i SAY [pro_i] WANT GO, IX_i
John said that he wants to go, him.
- (12) JOHN_i SAY IX_i WANT GO, IX_i
John said that he wants to go, him.

In (10)-(12) the portion of the sentence that represents indirect speech is embedded beneath the main verb (and thus each example consists of a single sentence).

In contrast, the direct speech role shift construction involves a verb of saying (e.g. SAY, TELL, etc.) plus an overt body shift to the location in space associated with the attributed speaker.

- (13) JOHN_i SAY _____ rsi IX_{1p_i} WANT GO
John said: "I want to go."

In this case, note that the pronoun understood to refer back to JOHN is grammatically a first person pronoun. It is articulated with the index pointing toward the signer. However, since the signer has shifted into the location in space associated with JOHN, the understood referent is not the signer, but rather the attributed speaker, JOHN. First and non-first person pronouns are distinct in form. In the glosses presented here, IX_i is understood to correspond to the non-first person form, distinguished from from IX_{1p} (or IX_{1p_i}). This distinction is crucial in the examples that follow.

3.2 Status of the direct speech clause

While (13) may look superficially like (10), the claim advanced in this paper is that (10) consists of one complex clausal constituent containing an embedded structure, while (13) is, in fact, two separate clauses. A variety of tests can be used to determine the structure of direct speech role shift constructions like (13). For each of these tests, we first present the evidence that supports the claim that the direct speech (DS) construction consists of two distinct clauses, rather than a single structure containing an embedded clause. We then contrast this structure with sentences containing indirect speech (IS) clauses, such as (12).

3.2.1 IP-final adverbials

To determine where the clause containing the main verb SAY in (13) ends, we can test for the occurrence of a sentence-final adverbial modifying that verb. Normally, an adverb, such as YESTERDAY, occurs in a clause-final position (although it may also appear in other specific locations within the clause).¹⁰

¹⁰ The "tm1" label in example (15) marks a moved topic. For a description of the various types of non-manual topic marking, see Aarons (1994, 1996) and Appendix II in this volume.

- (14) JOHN BUY BOOK YESTERDAY
John bought a book yesterday.

- (15) $\frac{\text{tm1}}{\text{YESTERDAY}_i \text{ JOHN BUY BOOK } t_i}$
Yesterday, John bought a book.

It is important to note, however, that one position in which such adverbs may not occur is in between the main verb and its object.¹¹

- (16) * JOHN BUY YESTERDAY BOOK

If the direct speech role shift construction illustrated in (13) constituted a single clause, then it should be possible to find YESTERDAY appearing after the reported speech clause and modifying the verb SAY. However, this is disallowed:

- (17) * JOHN_i SAY $\frac{\text{rsj}}{\text{MARY BUY BOOK YESTERDAY}}$ DS

Note that the order of the signs in (17) is acceptable, but only if YESTERDAY is included within the direct speech (where it modifies the action in the direct speech clause), as in:

- (18) JOHN_i SAY $\frac{\text{rsj}}{\text{MARY BUY BOOK YESTERDAY}}$ DS
John said: "Mary bought a book yesterday."

In (18), YESTERDAY occurs in a clause-final position within the direct speech clause, and thus has no relevance to the clause containing SAY.

In contrast, the adverb YESTERDAY can occur in between SAY and the reported speech.¹²

- (19) JOHN_i SAY YESTERDAY $\frac{\text{rsj}}{\text{MARY BUY BOOK}}$ DS
John said yesterday: "Mary bought a book."

This would be predicted to be ungrammatical if the clause containing the reported speech were analyzed as the complement of the verb. However, the grammaticality of this example is completely consistent with the view that there is a clause boundary intervening between SAY and MARY in (13).

Thus, the evidence presented by the ungrammaticality of (16) as compared with the grammaticality of (19) suggests that the reported speech is not functioning as

¹¹ This example can be made slightly better if YESTERDAY is a parenthetical.

¹² The grammaticality of (19) cannot be explained in terms of extraposition of the clause. As will be shown with respect to indirect speech constructions, such extraposition is not possible (cf. the ungrammaticality of (23)).

the complement of the verb SAY. The ungrammaticality of (17) (repeated below as (20)), suggests that there are, in fact, two distinct sentences involved in this construction. The following examples illustrate striking differences with respect to the distribution of sentence-final adverbials between instances of direct and indirect speech.

- | | | | | | | | | |
|------|---|---------------------------------|--|-----------------------------|--|--|--|-----------|
| | | | _____ rs_i | | | | | |
| (20) | * | JOHN _i SAY | MARY BUY BOOK YESTERDAY | | | | | DS |
| (21) | | JOHN _i SAY | MARY BUY BOOK YESTERDAY | | | | | IS |
| | | | John said that Mary bought a book yesterday. | | | | | |
| | | | | _____ rs_i | | | | |
| (22) | | JOHN _i SAY YESTERDAY | MARY BUY BOOK | | | | | DS |
| | | | John said yesterday: "Mary bought a book." | | | | | |
| (23) | * | JOHN _i SAY YESTERDAY | MARY BUY BOOK | | | | | IS |

The prediction of a two-clause analysis of the direct speech construction is borne out by the data shown above. The distribution of the clause-final adverbial YESTERDAY (on the reading where it is intended to modify the verb SAY) points to differing analyses of the indirect speech construction in (21) and the direct speech construction in (22). The indirect speech construction involves a clause embedded under the verb SAY; in this construction, the adverb cannot intervene between SAY and the indirect speech clause. In contrast, the direct speech construction involves two separate clauses; the adverb can intervene between SAY and the direct speech clause (i.e., it occurs clause-finally within the first clause).

3.2.2 Right dislocation

Another test to determine the distribution of clause boundaries in direct speech constructions involves pronominal right dislocation.¹³ Like the sentence-final adverbials just described, pronominal right dislocation occurs at the right edge of a sentence (in fact, in a position even further to the right than that of sentence-final adverbials). In such constructions, there is an unstressed pronominal right-adjoined to the main sentence, which refers back to another noun phrase in the sentence.

¹³ For brief discussion of right dislocation in ASL, see Aarons, Bahan, Kegl and Neidle (1992); also Bahan (1996). Wilbur (1994b:666) claims that ASL does not have right dislocation, since her definition of right dislocation is restricted to a full noun phrase on the right with a corresponding pronoun in IP: "What is needed to confirm that ASL does indeed have Right Dislocation is examples where the pronoun is in the main clause and the full NP follows (after an intonation break)." This comment is puzzling, since right dislocation does not solely involve full noun phrases; crosslinguistically, pronouns also frequently occur as right dislocations. Pronominal right dislocation is extremely frequent in ASL, and appears to be quite similar to constructions found in languages like French and Norwegian.

- (24) JOHN_i LIKE CORN, IX_i
John likes corn, him.
- (25) JOHN TELL_j MARY_j, IX_j
John told Mary, her.

It is important to note that such pronominal elements cannot intervene between a verb and its object, but are restricted to sentence-final position. This is illustrated in the following two ungrammatical sentences.

- (26) * JOHN_i LIKE IX_i CORN
- (27) * JOHN_i TELL_j IX_i MARY_j

If role shift phrases were embedded beneath the verb of saying, we would expect to be able to have a right-dislocated pronoun coreferential with the subject of the verb of saying. However, this is ungrammatical, as illustrated by (28):

- (28) * JOHN_i SAY $\overline{\text{IX}_{1p_i}}$ SEE MARY, IX_i DS

Note that the order of the signs in (28) is acceptable if the pronominal right dislocation is included within the direct speech and refers back to an argument from the direct speech clause, as in:

- (29) JOHN_i SAY $\overline{\text{IX}_{1p_i}}$ SEE MARY, IX_{1p_i} DS
John said: "I saw Mary, me."

In this example, IX_{1p} (a first person pronoun understood to be coreferent with JOHN) occurs in a clause-final position, but within the reported speech clause.

In contrast, in role shift constructions, the dislocated element can appear between SAY and the reported speech.¹⁴

- (30) JOHN_i SAY, IX_i $\overline{\text{IX}_{1p_i}}$ SEE MARY DS
John said, him: "I see Mary."

- (31) JOHN_i SAY, IX_i $\overline{\text{MARY LOVE}}$ IX_{1p_i} DS
John said, him: "Mary loves me."

¹⁴ The first example, (30), is acceptable, but tends to have a significant pause before the shift, perhaps because of the awkwardness of articulating two indexes in a row, both referring to the same person but articulated in different locations (because of the intervening role shift clause). This can occur most naturally if there is a substantial pause in between. Note that (31) is perfectly acceptable, since this situation does not occur.

An embedded clause analysis would predict examples (30) and (31) to be ungrammatical. However, they are, in fact, grammatical (unlike (26) and (27)). The grammaticality of (30) and (31) is perfectly consistent with the view that the clause containing SAY does not include the direct speech clause.

The fact that right-dislocated pronominals can appear in different positions in direct versus indirect speech constructions supports the analysis proposed here and argued for in section 3.2.1. The data suggest that the clause containing the direct speech is not embedded within the same clause as the first verb. Again, however, the predictions for the distribution of right-dislocated pronominals within a single sentence are attested, not for this construction, but rather for the construction involving indirect speech. Compare the following examples.¹⁵

(32) * JOHN_i SAY $\overline{\text{IX}_{1p_i} \text{ SEE MARY}}^{\text{rs}_j}$ IX_i DS

(33) JOHN_i SAY IX_j SEE MARY_k IX_i IS
 John said that s/he (John) saw Mary, him (= John).

(34) JOHN_i SAY, IX_i $\overline{\text{MARY LOVE}}^{\text{rs}_j}$ IX_{1p_i} DS
 John said, him: "Mary loves me."

(35) * JOHN_i SAY, IX_i MARY LOVE IX_i IS

The difference in distribution of right-dislocated pronominals in direct and indirect speech constructions supports the claim that constructions involving indirect speech involve a single sentence with an embedded clause, while the direct speech constructions involve two separate sentences.

3.2.3 *Wh-movement*

Another test for sentence-final position involves constructions where a *wh*-phrase has moved rightward. In ASL, *wh*-phrases need not move out of the position in which they are base-generated (i.e., they may remain *in situ*). When they do move, they move to the right edge of the clause.¹⁶

¹⁵ In this case, note that a pronoun distinct in reference from JOHN has been chosen as the subject of SEE in (33), to make it clear that the pronominal right dislocation is referring back to the first rather than the second subject.

¹⁶ See Neidle, Kegl, Bahan, Aarons and MacLaughlin (in press), also Aarons, Bahan, Kegl, and Neidle (1992) and Aarons (1994). For a different view of *wh*-movement see Lillo-Martin (1990); Petronio (1993); Lillo-Martin and Fischer (1992); Petronio and Lillo-Martin (1995, 1997).

- (36) $\frac{\text{wh}}{\text{WHO BUY BOOK}}$ (in situ)
Who bought the book?
- (37) $\frac{\text{wh}}{t_j \text{ BUY BOOK WHO}_i}$ (moved to right edge of clause)
Who bought the book?

While it is perhaps obvious, it is important to note that the *wh*-phrase in (36) cannot move to a position in between the main verb and its object, as illustrated here:

- (38) * $\frac{\text{wh}}{t_j \text{ BUY WHO}_i \text{ BOOK}}$

We now consider what happens when the subject of the verb of saying is questioned. In a basic embedded clause construction like (39), a moved *wh*-phrase corresponding to the subject of the higher verb appears in final position (to the right of the entire embedded clause).

- (39) $\frac{\text{wh}}{t_j \text{ EXPECT MARY PASS TEST WHO}_i}$
Who expected Mary to pass the test?

So, if the direct speech construction consisted of a single clause (with the quotation embedded within it, beneath the verb of saying), this would predict that the subject of the verb of saying, when questioned, could follow the direct speech clause. However, as shown in (40), this is not possible.

- (40) * $\frac{\text{wh}}{t_j \text{ SAY } \frac{\text{rs}_j}{\text{MARY BUY BOOK}} \text{ WHO}_i}$

It is possible to find a *wh*-phrase in final position in direct speech constructions, however *only* if the *wh*-phrase corresponds to an argument of the direct speech clause (and occurs within the scope of the role shift).

- (41) $\frac{\text{rs}_j}{\frac{\text{wh}}{\text{MARY}_i \text{ SAY } t_j \text{ BUY BOOK } \text{WHO}_j}}$
Mary said: "Who bought the book?"

It is possible to question the subject of the verb of saying, in which case the *wh*-phrase appears either *in situ*, as in (42) and (43), or immediately to the left of the direct speech clause, as in (44).¹⁷ However, in such cases, it is most natural to find additional *wh*-question material after the direct speech clause.¹⁸

(42) $\frac{\text{wh}}{\text{WHO SAY}} \quad \frac{\text{rs}}{\text{IX}_{1\text{p}} \text{ DON'T-WANT GO}} \quad \frac{\text{wh}}{\text{WHO "WHAT"}}$
 Who says: "I don't want to go?" Who ??

(43) $\frac{\text{wh}}{\text{WHO TEND SAY}} \quad \frac{\text{rs}}{\text{IX}_{1\text{p}} \text{ DON'T-WANT GO}} \quad \frac{\text{wh}}{\text{WHO "WHAT"}}$
 Who tends to say: "I don't want to go." Who ??

(44) $\frac{\text{wh}}{t_i \text{ TEND SAY WHO}_i} \quad \frac{\text{rs}}{\text{IX}_{1\text{p}} \text{ DON'T-WANT GO}} \quad \frac{\text{wh}}{\text{WHO "WHAT"}}$
 Who tends to say: "I don't want to go?" Who ??

We analyze these sequences as involving three separate sentences.¹⁹ The prosody supports this analysis. There is a significant break before the second WHO.

It is important to note that (43) would be anomalous if the final *wh*-question is not included. Presumably, this is because the overall discourse purpose of this speech act is to ask a question about the identity of the speaker of the direct speech; therefore, to elicit a response, it is natural to have an explicit question at the end.

The *wh*-question data provide confirmation for the analysis that the clause containing the verb of saying ends prior to the beginning of the direct speech clause, since a *wh*-phrase has moved from subject position of the first clause to a clause-final [Spec, CP] position (to the left of the direct speech clause). The key point for present

¹⁷ Note that the sign glossed as "WHAT" is different from the sign glossed (without quotes) as WHAT. "WHAT" is articulated with both hands open in front of the body, palms facing up moving in with a slight side to side motion. For the specifics of the distribution and function of this sign see Neidle, Kegl, Bahan, Aarons, and MacLaughlin (in press).

¹⁸ While the purpose of this construction, like other direct speech constructions, is to attribute an utterance to another person, in this example, the speaker is unknown. In role shift constructions, the shift is into a location in space associated with a specific referent. The "shift" in (42) is used by a signer to ascribe the following utterance to someone other than him/herself. However, since the identity of the speaker is in question, the location of the shift does not carry referential information of the kind normally involved in role shift. In any event, the shift here enables the signer to convey information about the manner of the "reported" speech (which cannot be conveyed using indirect speech).

¹⁹ If (43) did indeed involve a *wh*-phrase occurring at the end of the same clause that contained the initial *wh*-marking, one would expect perseveration of the *wh*-marking to occur (see Neidle, Kegl, Bahan, Aarons, and MacLaughlin in press). However, this is ungrammatical:

(i) * $\frac{\text{wh}}{\text{WHO TEND SAY}} \quad \frac{\text{rs}}{\text{IX}_{1\text{p}} \text{ NOT WANT GO}} \quad \frac{\text{wh}}{\text{WHO "WHAT"}}$

purposes is that extraction of an argument of the verb SAY to a clause-final [Spec, CP] position results in its occurrence prior to the role shift clause (cf. (44)) but not following the role shift clause (cf. (40)), thus providing evidence for a two sentence analysis of the direct speech role shift construction.

3.2.4 *Summary of evidence about clause structure*

The previous sections presented syntactic evidence for a two-clause analysis of direct speech role shift constructions in ASL. Section 3.2.1 showed that IP-final adverbials (like YESTERDAY) can appear between the verb SAY and the direct speech role shift clause, providing evidence for a right-edge clause boundary between the SAY and the role shift clause. The difference in distribution of adverbs in indirect speech sentences like (21) and direct speech utterances like (22) supports the notion that these two constructions should be analyzed differently, (21) being a sentence with a clause embedded under SAY and (22) consisting of two independent clauses.

Section 3.2.2 showed that a right-dislocated pronominal coreferential with the subject of the verb SAY can appear before the role shift clause, but not after it. In indirect speech constructions, the opposite is found: a right-dislocated pronominal corresponding to the subject of the verb of saying may occur only after the indirect speech clause but not before it. This again, supports an independent clause analysis of the direct speech role shift construction, as the presence of a right-dislocated pronominal is an indicator of a right-edge clause boundary. In addition, since these pronominals cannot intervene between a verb and its object, the role shifted clause could not be a complement of SAY, but rather must be in a separate clause.

Finally, section 3.2.3 presented evidence from the distribution of moved wh-phrases. In general, ASL allows wh-movement rightward out of both main and embedded clauses to [Spec, CP]. Wh-movement of an argument of the verb of saying to a position following the role shifted construction (i.e., to the position after the reported speech) is disallowed. This contrasts with the case of the indirect speech constructions, in which a moved wh-phrase necessarily appears after the embedded clause. Thus, evidence from wh-movement is consistent with an analysis according to which the role shift clause is not embedded under the verb SAY in the way that an indirect speech clause is.²⁰

Thus, the above evidence supports the claim that direct speech clauses in ASL are not embedded under verbs of saying. Notice that, in this respect, ASL differs in some significant ways from English. For example, in English, evidence can be found that, at least in some cases, the direct speech proposition can be contained within the same syntactic clause as the verb of saying:

²⁰ At this point we are leaving open the question of the exact structure of the introductory (e.g., JOHN SAY) clause. It is possible that SAY includes some type of implied object. There seems to be a specific class of verbs that can, like SAY, be followed by a syntactically independent but logically related clause (see, e.g., our analysis of the rhetorical question construction, Hoza, Neidle, MacLaughlin, Kegl, and Bahan in this volume). However, more research is needed to determine the exact nature of these constructions.

- (45) Janet Reno said, "I am going to quit" yesterday.
 (46) Mary screamed, "never again," in a defiant tone.

It is interesting to note that ASL seems, in some constructions, to employ a strategy other than syntactic embedding for expression of tightly related discourse propositions. Such is the case, for example, with the rhetorical question-answer sequence, as analyzed in Hoza, Neidle, MacLaughlin, Kegl, and Bahan (in this volume). They demonstrate that the question and answer in such a sequence are in distinct syntactic clauses, on the basis of evidence similar to that presented here.²¹

4. An alternative proposal offered by Lillo-Martin

This section addresses a proposed syntactic analysis of the role shift construction put forward in Lillo-Martin (1995). We first summarize the proposal. We then examine the evidence she offers in support of her proposal, as well as additional predictions that would follow from her claims. We conclude that this analysis cannot account for the data.

4.1 *Lillo-Martin (1995)*

Lillo-Martin (1995) proposes that role shift constructions crucially involve a Point of View (POV) predicate. On her account, POV is equivalent to a verb, which happens to have no manual instantiation. However, the POV verb expresses agreement spatially, through body shift.

The Point of View predicate takes an embedded CP argument, which contains the direct speech clause. That CP is introduced by a null operator, in [Spec, CP].²² In her analysis, the operator serves to bind all subsequent first person pronouns to the subject of the POV clause. The POV subject may or may not be overt. According to her analysis, the spatial agreement expressed by POV via body shift can license a null subject.

Those cases involving an overt verb of saying, such as (47), are analyzed as containing three clauses. The verb of saying is in the highest clause, the direct speech is in the lowest clause, and the POV predicate and its null subject (coreferential with the matrix subject) occupy the intervening clause, which contains body shift as its only overt instantiation. Her analysis of such a construction is illustrated in (48).

²¹ Hoza, Neidle, MacLaughlin, Kegl, and Bahan (in this volume) show that rhetorical question-answer sequences involve a question followed by a distinct answer, rather than consisting of some kind of single "pseudocleft"-like clause, as had been assumed by Wilbur (1994a,b).

²² "I leave open for now whether the operator is created by movement, inserted at LF, or otherwise." (Lillo-Martin 1995: 162, fn.)

- < aPOV>
- whq
- (51) a BILL a POV WHO $_1$ PRONOUN CHOOSE $_b$ (her example 13)
- Bill's like, "Who should I choose?" [Lillo-Martin's translation]

There are several problems here. First, our informants judge this example to be ungrammatical.²⁵ However, for purposes of discussion, (52) corresponds to a grammatical *wh*-question in which an argument of the direct speech clause is questioned.

- rsj
- wh
- (52) BILL $_i$ SAY t_j BUY BOOK WHO $_j$
- Bill said: "Who bought the book?"

In such a case, it is still clear that the non-manual *wh*-marking could not spread to the left of the question clause. Thus, we agree with Lillo-Martin in concluding that the spread of non-manual *wh*-marking cannot extend beyond the boundaries of the direct speech clause.

However, this fact does not demonstrate that the direct speech clause is embedded. It only means that BILL lies outside the scope of the *wh*-question (i.e., not within the *c*-command domain of the complementizer of the direct speech clause). Thus, these examples are compatible with either an embedded clause analysis involving BILL occurring in a structural position higher than that of the embedded clause or a non-embedded clause analysis. Therefore, this test is inconclusive; it provides no useful information about the position of material outside the scope of the *wh*-question (i.e., outside of the direct speech clause).

Notice, in any event, that *wh*-movement within the role shift clause is incompatible with Lillo-Martin's own analysis of POV. According to Lillo-Martin, the [Spec, CP] position is occupied by an operator, which should preclude *wh*-movement to that position. However, as is undisputed, *wh*-movement can, in fact, occur within the direct speech clause.

4.2.2 Topic constructions

Lillo-Martin claims that examples such as the following are grammatical and involve topicalization of an argument out of the direct speech clause to a position preceding the subject of her POV predicate.

- _____ t < aPOV>
- (53) $_b$ MARY, $_a$ JOHN $_a$ POV LOVE (her number 14b)
- As for Mary, John's like, "I love her." [Lillo-Martin's translation]

²⁵ This is to be expected, because, as stated earlier, *wh*-movement involves movement of the *wh*-phrase to a [Spec, CP] position that is clause-final, not clause-initial (*contra* Lillo-Martin 1990).

As with example (51), however, our informants judge this sentence to be ungrammatical.

In any event, even if this example were grammatical, it is unclear how Lillo-Martin would account for the acceptability of the null subject of LOVE. A more explicit representation of (53) is shown in (54):

$$(54) \quad \begin{array}{c} \text{_____} \\ \text{t} \end{array} < \begin{array}{c} \text{aPOV} \\ \text{>} \end{array} \\ \text{b}_b\text{MARY, } \text{a}_a\text{JOHN } \text{a}_a\text{POV [Operator}_a \text{ C [pro}_a \text{ LOVE } \text{t}_b \text{] } \text{]}_{\text{CP}}$$

Lillo-Martin's own account of the licensing of null subjects in ASL should predict that the null subject of LOVE is ungrammatical here, since she would require that the null subject of a plain verb be licensed by Topic, and yet she claims crucially that the subject of the POV predicate is not a topic.²⁶

Note also that replacing the null subject with an overt pronoun does not save this example. Extraction from a role shift clause results in ungrammaticality. Thus, in summary, the relevance of topicalization to Lillo-Martin's proposal hinges on the claim that arguments can be extracted from the direct speech clause, which we believe is factually incorrect.

4.2.3 Reflexives

Lillo-Martin next uses the distribution of the reflexive pronoun SELF as support for her analysis. She claims that sentences such as (55) provide evidence that binding in ASL works differently from what might be expected.

Although this has not been reported in the literature (to my knowledge), ASL seems to allow a reflexive pronoun, as well as a non-reflexive pronoun, in embedded subject position, to be coreferential with an NP in the matrix clause...but the reflexive can only go up one clause. (p. 166)

- (55) LOWELL FEEL [SELF INTELLIGENT] (her example 17a)
Lowell thinks he (Lowell) is intelligent.

According to Lillo-Martin, SELF functions as the subject of the embedded clause and lacks a local antecedent. Furthermore, she claims that the antecedent of SELF must be contained in the immediately higher clause, but no higher. She does not offer any explanation for this.²⁷ Here again, Lillo-Martin fails to argue against a number of alternative explanations for these data, the most obvious being that there is a null

²⁶ Lillo-Martin (1986, 1991) has proposed a dual licensing mechanism for null subjects in ASL. She proposes that in sentences with agreeing verbs, null subjects are licensed by agreement (as in Italian) while in sentences with plain verbs, null subjects are licensed by Topic (as in Chinese). However, Aarons, Bahan, Kegl, and Neidle (1994), Bahan (1996), and Bahan, Kegl, Lee, MacLaughlin, and Neidle (in prep.) have argued against her account. Our conclusion is that null subjects are licensed uniformly by some overt manifestation of subject agreement (either manual or non-manual). Since a verb like LOVE does not exhibit manual agreement, some non-manual realization of subject agreement must be present in order to license a null subject in this sentence (cf. Bahan 1996). Lillo-Martin does not indicate the presence of such non-manual agreement marking, however.

²⁷ She states (p. 167): "Without offering a theoretical explanation for these facts, I would like to use them to test the proposed structure of POV".

subject in the embedded clause, which serves as a local antecedent for the emphatic SELF, analogous to the overt antecedent of SELF in the following sentence:

- (56) LOWELL_i SELF_i LIKE VEGETABLE
 Lowell himself likes vegetables.

Thus, one might more plausibly analyze her example 17a as having the following structure:

- (57) LOWELL FEEL [pro_i SELF_i INTELLIGENT]
 Lowell feels that (he) himself is intelligent.

Nonetheless, she uses this purported generalization about potential antecedents for SELF as a test for clause structure. Despite the fact that this test is invalid because it is based on a misanalysis of the SELF construction, her generalization about anaphor binding cannot be correct. Consider an example like the following (similar to Lillo-Martin's 19c in all crucial respects):

- (58) [IX_i KNOW [IX_{1p} THINK [e_i SELF_i PEA-BRAIN]]]
 He/she knows I think (he/she) himself/herself is an idiot.

Lillo-Martin predicts that SELF necessarily refers to an antecedent one clause higher, that is, that it can only refer to the first person pronoun (subject of THINK) in this example. However, this prediction is incorrect, since SELF can be interpreted as coreferent with the subject of KNOW. Thus, Lillo-Martin's generalization about binding is simply incorrect, and, therefore, cannot be used as a test for the structure of role shift constructions.

Note that examples like (55) can be explained within standard conceptions of binding theory, without any additional stipulations. As indicated in the gloss, we would analyze this sentence as involving a null subject of the most deeply embedded clause, to which SELF refers back emphatically.

4.3 Additional predictions

We have shown that the evidence presented by Lillo-Martin fails to support an embedded clause analysis of role shift constructions. However, if these constructions did indeed involve a point of view predicate, as she claims, then we would expect certain additional predictions to follow. This section considers some of those predictions. First, Lillo-Martin claims that role shift constructions containing an overt verb of saying involve a null pronominal subject of a point of view predicate. It follows from this that an overt DP should be able to occur in the same position as the purported null subject; however, this is not the case. Second, Lillo-Martin postulates the existence of an intervening clause headed by the point of view "predicate". This predicts that the clause containing POV should be able to be co-occur with negation, tense markers, and modals, and that it should be able to be questioned. We show that the facts are incompatible with these predictions.

4.3.1 Subject of the POV Predicate

Lillo-Martin claims that there is a null pronoun in the subject position of the POV in examples containing an overt verb of saying and a direct speech clause. If this were true, then it would be the only case thus far attested in ASL (or for that matter, any other language) where a null referential pronoun occurs in a syntactic configuration in which an overt DP is unacceptable. Consider the following:

- (59) JOHN_i TELL_j MARY_j $\overline{\text{rs}_j}$ IX_{1p_i} WANT GO
 John told Mary: "I want to go."

Following Lillo-Martin's account, the structure would be:

$$[CP_1 [IP_1 \text{JOHN}_i \text{ TELL}_j \text{ MARY}_j [[[\text{pro}]_{NP_i} [POV_i [[OP_i [IX_{1p_i} \text{ WANT GO}]]]]]]]]$$

The supposed null pronominal preceding the POV could not be replaced by an overt DP:²⁸

- (60) * JOHN_i TELL_j MARY_j [IX_i $\overline{\text{rs}_j}$ IX_{1p_i} WANT GO]

$$[CP_1 [IP_1 \text{JOHN}_i \text{ TELL}_j \text{ MARY}_j [[[IX_i]_{NP_i} [POV_i [[OP_i [IX_{1p_i} \text{ WANT GO}]]]]]]]]$$

- (61) * JOHN_i TELL_j MARY_j [BILL_k $\overline{\text{rs}_j}$ IX_{1p_k} WANT GO]

$$[CP_1 [IP_1 \text{JOHN}_i \text{ TELL}_j \text{ MARY}_j [[[BILL_k]_{NP_k} [POV_k [[OP_k [IX_{1p_i} \text{ WANT GO}]]]]]]]]$$

Thus, postulating a null pronoun as the subject of a point of view predicate in such constructions is highly suspect.

4.3.2 Syntactic operations on the POV clause

If POV were truly the main predicate of a CP (occurring in either a main or embedded clause), then it should be able to co-occur with the kind of inflectional material that co-occurs with other such verb phrases. Specifically, we would expect that the POV could be negated, that it could appear with tense markers and modals, and that it could be questioned. However, contrary to the predictions of Lillo-Martin's analysis, we find a systematic contrast in the acceptability of inflectional material occurring in

²⁸ This sequence of signs is acceptable only if IX is interpreted as a right-dislocated pronominal occurring clause-finally within the same clause as the verb of saying (as previously shown in example (30)). In such a case, however, the IX necessarily is unstressed and forms a constituent with the preceding clause; it is set off prosodically from the following material (by prosodic signals such as pausing, eye blink, etc.). Thus, the case of a right-dislocated pronominal is distinguishable from the structure in question here.

clauses that contain ordinary verbs and in clauses that Lillo-Martin analyzes as containing a POV predicate.

Negation²⁹

(62) $\overline{\text{neg}}$ JOHN NOT LIKE MARY
John does not like Mary.

(63) * JOHN NOT [POV] IX_{1p} $\overline{\text{neg}}$ LIKE MARY

Tense Markers

(64) JOHN WILL GO HOME
John will go home.

(65) * JOHN WILL [POV] IX_{1p} < POV > GO HOME

Modals

(66) JOHN SHOULD GO HOME
John should go home.

(67) * JOHN SHOULD [POV] IX_{1p} < POV > GO HOME

Yes/No Questions

(68) $\overline{\text{y/n}}$ JOHN_i SAY IX_i WANT GO
Did John say he wants to go?

(69) * JOHN SAY [POV] IX_{1p} < POV > $\overline{\text{y/n}}$ WANT GO

²⁹ Lillo-Martin (1991) has claimed that the following is possible:

i. $\overline{\text{neg}}$ JOHN_a POV_a LIKE $\overline{\text{neg}}$ MARY_b [POV]_a (her example 39c)
'It's not John_i (from his_i point of view) I_i don't like Mary.'
[Lillo-Martin's translation]

While this would be surprising even if POV were a predicate, our informants find this ungrammatical.

speech clause contain the direct speech clause embedded beneath the verb of saying. However, this paper has presented evidence that such constructions are actually composed of logically related, yet syntactically separate, clauses. While there is a tight discourse relationship between the two clauses, we have argued that this is not expressed via syntactic embedding.

APPENDIX I NOTATIONAL CONVENTIONS

example	explanation
SEE, JOHN ¹	gloss for a sign
SHOW-UP	multiword gloss for a single sign
CAN'T+STAND 'finger-wave'	compound sign Single quotes are used to describe gesture-like signs. This particular example indicates a negation sign produced by shaking an extended index finger slightly from side to side.
"WHAT"	a wh-sign produced with both hands extended and moving slightly from side to side
IX	pointing sign (used for pronominal reference)
non-manuals	extended line indicates the domain over which the non-manual marker occurs
<u>wh</u> WHO	wh-question marker
<u>rh/wh</u> WHO	rhetorical wh-question marker
<u>y-n</u> JOHN GO	yes-no question marker
<u>rh/y-n</u> JOHN GO	rhetorical yes-no question marker
<u>hn</u> <u>shn</u> WILL GO, SURE	headnod ²
<u>neg</u> NOT WORRY	negative marking
<u>br</u> FINISH	raised eyebrows
<u>tm1,tm2,tm3</u> VEGETABLE	topic markings; see Appendix II
<u>rs</u> IX _{1p} WANT GO	role shift marking
<u>tilt</u>	head tilt
<u>gaze</u> VISIT MOTHER	eye gaze

¹ Proper names are actually fingerspelled, but this is not marked explicitly for ease of presentation.

² We adopt Liddell's (1980) notation for headnods. The headnod noted as 'hn' is a slow, repeated headnod, and the head nod coded as 'shn' is a single head nod. In general, we have notated movements in the example sentences only when they are relevant to the linguistic points under discussion.

formal notation

JOHN _i IX _i	referential indices {i, j} indicate intended coreference of two elements in a sentence or discourse
_i VERB _j	indices on a verb indicate subject and object agreement
pro	null pronominal
e	empty element
t _i	trace coindexed with some moved element
IX _{1p} , IX _{2p}	index points marked for person (first person, second person) ³
IP, CP, VP, I, C, V	IP, CP, and VP are phrasal categories; I (Inflection), C (Complementizer), and V (Verb) are heads of their respective phrases
<u>tm</u> ₂	
JOHN _i , ... ,IX _i	commas are used to set off constituents that are outside the main clause
[+wh]	abstract question feature that is postulated to occur in C

³ The distinction between 2nd and 3rd person in the glosses is used here only for clarity and does not reflect a theoretical stand on the status of person features in ASL. For discussion of this issue, see for example, Meier (1990) and Lillo-Martin and Klima (1990). For a more general discussion of person features in ASL, see Bahan (1996), MacLaughlin (1997), and references therein.

APPENDIX II NON-MANUAL MARKING

	<i>information-seeking</i>	<i>rhetorical</i>
<i>yes-no</i>	raised brows head tilt forward	
<i>wh</i>	lowered brows	raised brows
	headshake tilt of the head	

**Non-manual behaviors associated with information-seeking
and rhetorical yes-no and wh questions⁴**

	<u>non-manual realization</u>	<u>moved vs. base gen.</u>	<u>relation to argument</u>	<u>function</u>
tm1	raised brows, head tilted slightly back; eyes widened	moved	part of argument chain	can be contrastive focus, new info. in a limited set
tm2	large movement of head back ; eyes widened; head moves down as topic is signed	base-generated	sometimes associated with argument by a class member relationship, sometimes coreferential with an argument	changes discourse topic, introduces new information
tm3	upper lip raised; eyebrows raised; eyes wide open, fixed gaze, slight rapid head nods	base-generated	coreferential with an argument	can only be used with known referents, introduces a major new discourse topic

Topics and Their Relation to CP (based on Aarons, 1994)⁵

⁴ Note that although information-seeking and rhetorical yes-no questions have the same brow and head positioning, they can still be differentiated. Specifically, in information-seeking yes-no questions the last sign is held and there is a more direct eye gaze with the addressee, signaling that the signer expects an answer from the addressee.

⁵ This table is used with the author's permission. The distinction among the three topic markers had not been identified prior to Aarons (1994).

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