Here lies the handout from the talk presented at the Tilburg Conference on Rightward Movement, in Tilburg, the Netherlands, on October 7, 1994: Carol Neidle, Judy Kegl, Benjamin Bahan, and Debra Aarons, **Rightward Wh-Movement in American Sign Language**.


More updated information about the work of the American Sign Language Linguistic Research Project is available at [http://web.bu.edu/ASLLRP](http://web.bu.edu/ASLLRP).
Rightward Wh-Movement in American Sign Language

Carol Neidle*, Judy Kegl**, Benjamin Bahan*, and Debra Aarons***

carol@louis-xiv.bu.edu, kegl@andromeda.rutgers.edu, bahan@louis-xiv.bu.edu, aarons@louis-xiv.bu.edu

*Boston University, Program in Applied Linguistics, 718 Commonwealth Avenue, Boston, MA 02215 USA
**Rutgers University, Center for Molecular and Behavioral Neuroscience, 197 University Avenue, Newark, NJ 07102 USA
***University of Stellenbosch, Department of General Linguistics, Private Bag X5018, 7599 Stellenbosch, South Africa

This work has been supported in part by NSF grant #SBR-9410562.

I. Illustration of non-manual grammatical markings in ASL

1. JOHN BUY HOUSE
   ‘John bought a house.’

2. JOHN BUY HOUSE
   ‘Did John buy a house?’

3. JOHN BUY WHAT
   ‘What did John buy?’

4. JOHN NOT BUY HOUSE
   ‘John did not buy a house.’

II. Optional spread of non-manuals over c-command domain

5. JOHN NOT [ BUY HOUSE ]VP
   ‘John did not buy a house.’

6. JOHN NOT [ BUY HOUSE ]VP
   ‘John did not buy a house.’

7. [JOHN BUY t_i YESTERDAY ]IP WHAT_i
   ‘What did John buy yesterday?’

8. [JOHN BUY t_i YESTERDAY ]IP WHAT_i
   ‘What did John buy yesterday?’

III. Obligatory spread as required for realization of non-manual marking with manual material

9-a. * JOHN [ ]_Neg BUY HOUSE

9-b. JOHN [ ]_Neg BUY HOUSE
   ‘John did not buy a house.’


10-b. * [[ JOHN BUY WHAT YESTERDAY ] IP [ ]_C/+wh ]

10-c. [[ JOHN BUY WHAT YESTERDAY ] IP [ ]_C/+wh ]
   ‘What did John buy yesterday?’

IV. Evidence for rightward wh-movement in ASL
   (see chart on next page for examples 11 through 20)

V. Evidence that it is an entire phrase that moves

21-a. JOHN SEE t YESTERDAY WHICH TEACHER TWO-OF-THEM
   ‘Which of those two teachers did John see yesterday?’

21-b. JOHN SEE t YESTERDAY WHICH TEACHER TWO-OF-THEM
   ‘Which of those two teachers did John see yesterday?’
IV. Evidence for rightward wh-movement

How to decide between rightward and leftward wh-movement? The labelled columns contain the sentences predicted to be grammatical assuming leftward/rightward movement. Those that are struck through represent data that are equally consistent with the alternative hypothesis, and thus not decisive.

<table>
<thead>
<tr>
<th>Apparent leftward movement?</th>
<th>In situ</th>
<th>Apparent rightward movement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. [ WHO _ LOVE _ JOHN ]</td>
<td>WHO LOVE JOHN $w_h$</td>
<td>[ t _ LOVE _ JOHN ] $w_h$</td>
</tr>
<tr>
<td>12. [ JOHN _ LOVE _ WHO ]</td>
<td>JOHN LOVE WHO $w_h$</td>
<td>[ JOHN _ LOVE _ t ] $w_h$</td>
</tr>
<tr>
<td>13. [ WHO _ t _ LOVE _ JOHN ]</td>
<td>WHO + LOVE + JOHN $w_h$</td>
<td>[ t _ LOVE _ JOHN ] $w_h$</td>
</tr>
<tr>
<td>14. *? [ WHO _ JOHN _ LOVE _ t ]</td>
<td>WHO + JOHN + LOVE t $w_h$</td>
<td>[ JOHN _ t _ LOVE _ WHO ] $w_h$</td>
</tr>
</tbody>
</table>

How to distinguish in situ wh-words in object position (e.g., (12)) from object wh-words in Spec of CP (e.g., (16))?
• Position with respect to IP-final adverb.

Evidence that (20) involves rightward movement

<table>
<thead>
<tr>
<th>Evidence that (20) involves rightward movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. [ JOHN LIPOREAD MARY YESTERDAY ]$_{IP}$</td>
</tr>
<tr>
<td>19. [ JOHN LIPOREAD WHO YESTERDAY ]$_{IP}$ $w_h$</td>
</tr>
</tbody>
</table>

How to distinguish in situ wh-words in subject position ((11)) from a subject that has moved left to Spec of CP ((13))?• Non-manual spread distinguishes in situ and moved cases.

Evidence that (11) does not involve leftward movement:

<table>
<thead>
<tr>
<th>Spread over entire clause is obligatory with in situ wh-words:</th>
</tr>
</thead>
<tbody>
<tr>
<td>19'. * [ JOHN LIPOREAD WHO YESTERDAY ]$_{IP}$ $w_h$</td>
</tr>
<tr>
<td>11'. * [ WHO _ LOVE _ JOHN]$_{IP}$ $w_h$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spread over entire clause is optional with wh-words in Spec of CP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20'. [ JOHN LIPOREAD t YESTERDAY ]$_{IP}$ WHO $w_h$</td>
</tr>
<tr>
<td>15'. [ t _ LOVE _ JOHN ] $w_h$ WHO</td>
</tr>
</tbody>
</table>
VI. Extraction to [Spec, CP] of embedded clause vs. matrix clause, with optional spread of non-manual over c-command domains

22. \([\text{CP}_1 \ [\text{IP}_1 \ \text{JOHN WONDER} \ [\text{CP}_2 \ [\text{IP}_2 \ \text{MARY BUY} \ t_i \ ]_{\text{IP}_2} \ \text{WHAT}_i \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\)

23. \([\text{CP}_1 \ [\text{IP}_1 \ \text{JOHN WONDER} \ [\text{CP}_2 \ [\text{IP}_2 \ \text{MARY BUY} \ t_i \ ]_{\text{IP}_2} \ \text{WHAT}_i \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\)

24. *\([\text{CP}_1 \ [\text{IP}_1 \ \text{JOHN WONDER} \ [\text{CP}_2 \ [\text{IP}_2 \ \text{MARY BUY} \ t_i \ ]_{\text{IP}_2} \ \text{WHAT}_i \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\) (on this reading)

‘John wonders what Mary bought.’

25. \([\text{CP}_1 \ [\text{IP}_1 \ \text{TEACHER EXPECT} \ [\text{CP}_2 \ [\text{IP}_2 \ t_i \ \text{PASS TEST} \ ]_{\text{IP}_2} \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\)

26.*\([\text{CP}_1 \ [\text{IP}_1 \ \text{TEACHER EXPECT} \ [\text{CP}_2 \ [\text{IP}_2 \ t_i \ \text{PASS TEST} \ ]_{\text{IP}_2} \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\)

27. \([\text{CP}_1 \ [\text{IP}_1 \ \text{TEACHER EXPECT} \ [\text{CP}_2 \ [\text{IP}_2 \ t_i \ \text{PASS TEST} \ ]_{\text{IP}_2} \ ]_{\text{CP}_2} \ ]_{\text{IP}_1} \ ]_{\text{CP}_1}\)

‘Who did the teacher expect to pass the test?’

VII. Rhetorical questions, with same wh-movement as wh-questions

28-a. LOVE JOHN WHO MARY

‘Mary is the one John loves.’

28-b. LOVE JOHN WHO MARY

VIII. Non-manual spread determined post-movement

29. JOHN_i, YOU SEE t_i WHERE

‘John where did you see?’

30. YOU SEE JOHN WHERE

‘Where did you see John?’
References


Basic sentence structure for ASL (as argued for in Aarons, Bahan, Kegl & Neidle)

positions for left dislocations and topics

positions for right dislocation

position to which wh-words may move

surface subject

TENSE (position for modals, lexical tense markers)

NEGATION (position for NOT, NEVER)

ASPECT (e.g., FINISH/PERF-ASP)

TAG consisting of reduced version of main clause (CP), including (potentially) TENSE, affirmative or negative marking, NP subject, wh-word

shares essential features of main clause (tense, polarity, question-status)