The Body as Subject: The Emergence of Form-Meaning Correspondence

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Emergence of Language Structures Workshop
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Formational means available to sign languages

Sign languages:
- Exploit space around the signer’s body
- Exploit movement of hands
- Exploit body of the signer
Formational means available to sign languages: The body of the signer

- An examination of verb forms from three different sign languages (ASL, Israeli Sign Language and ABSL), shows that the body represents an argument of the event.
Examples:

**EAT** (ASL, ISL)

- **Phonological form**
  - **Handshape:**
  - **Location:** mouth
  - **Movement:** double, inward

- **Semantics:**
  - $X$ CAUSE $Y$ GO INTO MOUTH-OF $X$

<table>
<thead>
<tr>
<th>FORM</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>handshape</td>
<td>Holding an object (food)</td>
</tr>
<tr>
<td>X CAUSE Y</td>
<td></td>
</tr>
</tbody>
</table>

Following Taub 2001
Examples:

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<tr>
<td>Inward Movement</td>
<td>Putting an object into mouth Y GO INTO MOUTH</td>
</tr>
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Following Taub 2001
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<tr>
<td>Mouth of signer</td>
<td>Mouth of agent MOUTH-OF $X$</td>
</tr>
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Following Taub 2001
**Examples:**

ASK (ISL)

- **Phonological form**
  - **Handshape:**
  - **Location:** mouth
  - **Movement:** arc, outward

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<tr>
<td><img src="image" alt="handshape" /></td>
<td>Uni-dimentinal object</td>
</tr>
<tr>
<td><img src="image" alt="Mouth of signer" /></td>
<td>Mouth of agent</td>
</tr>
<tr>
<td><img src="image" alt="Outward movement" /></td>
<td>Transferring something towards the addressee</td>
</tr>
<tr>
<td><img src="image" alt="Arc movement" /></td>
<td></td>
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Following Taub 2001
Body Features Represent an Argument

- **Psych verbs:** HAPPY, LOVE, SUFFER, UPSET, BE-FED-UP-WITH
  - Chest represents the site of the feelings of the *experiencer* argument
- **Verbs of mental activities:** KNOW, REMEMBER, LEARN, WORRY, THINK, DREAM, UNDERSTAND
  - Temple or the forehead represent the site of the mental actions of the *experiencer*.
- **Verbs of perception:** SEE, LOOK, HEAR, LISTEN, SMELL
  - Eyes, ear or nose represent the site of the actions of the *experiencer* (perceiver).
Body Features Represent an Argument

- **Verbs of saying:** SAY, ASK, ANSWER, EXPLAIN, SHOUT
  - Mouth represents the mouth of the agent argument
- **Change-of-state verbs:** BLUSH, GET-WELL, WAKE-UP
  - Face, body, eyes represent body parts of the patient argument
The body may be associated with arguments bearing different thematic roles.

But the body is always associated with the argument bearing the highest ranking thematic role, and the one which is predicated of - the Subject.

A basic strategy for conceptualizing an event in a sign language is Body as Subject.
Hands as Predicate

- The action itself is represented by the movement features of the sign (direction of movement, type of movement) (cf. Wilbur, in press)
- The object argument may be associated with the handshape, or with the final location of the verb’s movement.
Hands as Predicate

- The object argument is more closely associated with the action than the subject; both object and action are represented by the hands.
“Human concepts are not just reflections of an external reality, but they are crucially shaped by our bodies and brains, especially by our sensorimotor system.” (Lakoff and Johnson, 1999: “Philosophy In The Flesh, The Embodied Mind” p. 22)
Verb morphology in established sign languages

- Tripartite verb system in many sign languages
  - **Plain**: no person or number inflection
  - **Spatial**: locative markers only
  - **Agreement**: person and number inflection of subject and object
Person inflection on verbs

- In agreement verbs
  - Body is not Subject, but 1st person
  - Space around signer’s body is 2nd or 3rd person
  - Syntactic roles encoded by hands (direction of movement)
Girl gives ball to boy (ISL)
Typological and Diachronic Implications
Prediction

- If Body as Subject is early strategy for encoding events in sign languages, then we expect to find:
  - languages with plain verbs and no agreement verbs, but not vice versa
  - earlier stages of a sign language with plain verbs, and agreement verbs appearing later (or not at all)
Verbs of transfer in ABSL

- Verb forms do not move from side to side
- Verb forms move from center of torso outward towards the addressee for all forms, regardless of who is doing the transfer
Transfer verbs in ABSL
ABSL: no agreement verbs

- Verbs of transfer pattern like plain verbs:
  - Movement is from the center of the body outward (GIVE, THROW), or inward (TAKE, CATCH)
  - Movement is not side to side to mark 3rd person inflection
  - Body is Subject, not 1st person
  - Grammatical relations expressed through word order
S-O-V word order in ABSL
Emergence of argument structure in ABSL

- In a new sign language
  - Word order appears early
  - In verbs, body is Subject
  - No person inflection

- Conclusion: Morphology takes time to develop
The diachronic perspective: Agreement verbs appear later

- **Israeli Sign Language:**
  - 3 stages of development of agreement verbs:
    - No agreement; Body is subject
    - Object agreement; Body is subject
    - Subject and Object agreement; Body is 1st person
ISL: Three stages of development
A. No agreement

MALE THROW, FEMALE CATCH
B. Agreement with object
C. Agreement with subject and object

A girl gives a ball to a boy
The Centrality of Subject in Language

**Sign Languages:**
Lexicalization pattern
Body-as-Subject

**Spoken Languages:**
Implicational hierarchy:
Subject > Object

Human language:
Subject