The Evolution of Verb Classes and Verb Agreement in Sign Languages

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Main claim

- Sign language and spoken language verb agreement are cases of convergent evolution:
- The two mechanisms developed from different structures, but evolved to serve the same function in the language. They became more similar to each other because of the functional similarity.
Peculiarities of sign language verb agreement

- Object agreement “stronger” than subject agreement
- Restricted to one sub-class of verbs
  - Verbs of transfer (Meir 2002)
- Not obligatory
How do agreement systems arise?

- **Spoken languages:**
  - attachment of bound clitic pronouns to the verb
    (Givón 1976, van Geldern 2007)

  “One overriding theme – and claim – of this paper is that verb agreement paradigms always arise from anaphoric pronoun paradigms.”

<table>
<thead>
<tr>
<th>Tok Pisin:</th>
<th>Em i-paitim</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Him he fight-him</td>
</tr>
<tr>
<td></td>
<td>‘He beat him’</td>
</tr>
</tbody>
</table>

(Givón 1976)
How do agreement systems arise?

- **Signed languages:**
  - Cliticization account fails for sign languages:
    - Has not been attested
    - Cannot explain why only verbs of transfer inflect for agreement
    - Cannot explain the existence of backwards verbs
  
  - Recruitment of space into grammar
Backwards verb: TAKE

Properties of backwards verbs:
- Reverse order of agreement markers
  - Verb moves from object to subject
- Same syntax

\[
\begin{align*}
I_1 \text{GIVE}_2 & \quad \text{‘I gave you’} \\
I_2 \text{TAKE}_1 & \quad \text{‘I took from you’}
\end{align*}
\]

In backwards verbs, order of agr markers does not match order of pronouns.
Multiple iconicities

Verb system reflects two iconic systems
(Meir et al 2007):

- Body as subject
- Body as first person
‘Body as Subject’:
Body represents an argument

- When using body and space to represent an event
- Body features (location features) represent a specific argument of the event
Body as Subject: examples

- **Psych verbs:** HAPPY, LOVE, SUFFER, UPSET, BE-FED-UP-WITH
  - Chest = the site of the feelings of the *experiencer* argument

- **Verbs of mental activities:** KNOW, REMEMBER, LEARN, WORRY, THINK, DREAM, UNDERSTAND
  - Temple or the forehead = the site of the mental actions of the *agent/experiencer*.

- **Verbs of perception:** SEE, LOOK, HEAR, LISTEN, SMELL
  - Eyes, ear or nose = the site of the actions of the *experiencer* (perceiver).
‘Body as Subject’: examples

- **Verbs of saying:** SAY, ASK, ANSWER, EXPLAIN, SHOUT
  - ♦ Mouth = the mouth of the agent argument

- **Change-of-state verbs:** BLUSH, GET-WELL, WAKE-UP
  - ♦ Face, body, eyes = body parts of the patient argument
The body may be associated with arguments bearing different thematic roles.

But it is always associated with the argument bearing the highest ranking thematic role, and the one which is predicated of – the Subject.
Body as first person

- In pronominal signs
- In verb agreement forms

**POSSIBLE CONFLICT**

- Agreeing verbs encode both the event and the pronominal features of the arguments
Conflicting iconicities

- ‘He-sent-me the book.’

**Body as subject:**
- Body represents sender (subject)
- Verb moves outward from the body

**Body as 1st person:**
- Body represents recipient (object)
- Verb moves inward to the body

Introduction

Conflicting Iconicities:
- Body as subject
- Body as 1P

Diachronic developments:
- ABSL
- ISL
- ASL

Conclusions
Introduction

Conflicting Iconicities:
- Body as subject
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Diachronic developments:
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Conclusions

- Body is not the subject
- Body is 1st person, not associated with a particular syntactic role
- Subject and object are encoded by direction of movement and facing
Diachronic development

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Conclusions

- **Within the verbal system**
  - ‘Body as subject’ is more basic, comes first diachronically
  - ‘Body as subject’ persists in plain verbs
  - In agreeing verbs, ‘body as subject’ is present when subject agreement is dropped
  - ‘Body as 1\textsuperscript{st} person’ comes later diachronically (if at all)

(Padden et al in press)
AL-SAYYID BEDOUIN SIGN LANGUAGE

Introduction

♦ Developed in a village community: about ~150 deaf in a village of ~3,500

♦ Currently in its third generation

♦ Widely used by both hearing and deaf members of the community

♦ Differs in vocabulary and structure from surrounding languages
ABSL: Body as subject; no verb agreement

Verbs of transfer are signed from the body or towards the body. They do not make use of space.

(Morphological Universals & the Sign Language Type. Aronoff et al 2004)
Israeli Sign Language

Emerged in the 1930s, with the emergence of the Deaf community in the country

In a contact situation

About 10,000 members today

First generation signers still with us

1. Body is subject
2. End-point of sign is directed towards a referent in space
   - Reanalysis:
   - End-point=referent (Ann Senghas, p.c.)
3. Beginning-point of sign is directed towards a referent in space
   - Reanalysis:
   - Beginning-point=referent

(Emergence of argument structure. Meir in press)
Verbs of transfer are signed from the body or towards the body. They do not make use of space.
Verbs of transfer are signed from the body towards a location in space.
Verbs of transfer are signed from one location in space towards another.
‘Body as Subject’ is still there…

- Single agreeing forms:
  - Initial point: Body as subject
  - End point: Encodes non-subject argument

- Non-obligatoriness of verb agreement
  - Signers can always use ‘Body as subject’ ⇒ single/non-agreeing forms
ASL: Variations in form

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Conclusions

Agreeing form

Non-agreeing form
Why is verb agreement restricted to verbs of transfer?

- The form of transfer verbs involves body and space:
  - one end has to be away from body
- When a language acquires systematic referential use of space
- Verbs of transfer lend themselves more easily to reanalysis:
  
  Endpoints=referents
Co-evolution of iconicity and grammar

- Iconicity is not a unitary system.
- Iconic use of Body as Subject emerges very early in the life of a sign language.
- Different types of iconicity are distributed over different parts of the grammar, and these parts of grammar are assembled over time.

(Iconicity in a new sign language. Padden in press)
Convergent structures in language evolution

**Aural, 1-D**
- Pronouns
- Cliticization

**Spatial, 3-D**
- Verbs of transfer
- Reanalysis of endpoints

**Function**: Reference tracking

**Means**: encoding pronominal features on verb forms

**Origin**

**Process**

**Modality**

**Finite**, encoding lexical features

Non-finite? encoding discourse established indices
Thank you