Understanding Sign Languages and Deaf Communities

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Outline

- Common misconceptions about sign languages
- Sign languages as natural human languages
  - Simultaneity
  - Linguistic variations
- Importance of sign languages for the Deaf community

Common misconceptions about sign languages

Sign Languages are UNIVERSAL??

- No
- 130 documented sign languages around the world (as of 2009).
  - (Gordon, Raymond G., Jr. (ed.) Ethnologue: Languages of the World, 15th ed. Dallas, Tex.: SIL International. Online version: http://www.ethnologue.com/show_family.asp?subid=23-16, data retrieved 18th September 2012, data updated approximately every four years)

- Lots of sign languages awaiting documentation (dictionary making, data archiving)!

Only 1 sign language in 1 country?

- Not necessarily.
- Isma (2012, MA thesis, CUHK):
- The signing varieties in Jakarta and Yoyakarta in Indonesia show sufficient differences in vocabularies and word order preferences to be treated as two separate sign languages.

Are sign languages too iconic to be natural languages?

- Spoken languages: arbitrary mapping of form of meanings for most words
- How is this object named in different spoken languages?
  - English：['teibl]
  - Cantonese：[toi]
  - Mandarin：[zuo zi]
  - Shanghainese：[de]
  - German：Platte [plata]
  - Japanese：[hayami]
  - Swedish：[bord]

Are sign languages too iconic to be natural languages?

- '*Sign languages consist of iconic signs only and therefore do not meet the criterion of being a natural language.*' → correct?

  - → incorrect

- Not all signs look iconic.
- Can you guess the meaning of the following signs in Ho Chi Minh Sign Language?

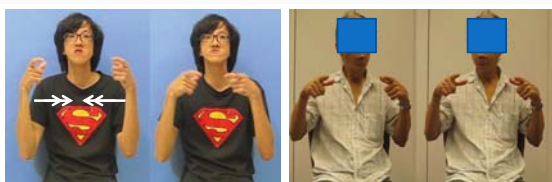## Are sign languages too iconic to be natural languages?

- ORANGE in different sign languages:

ORANGE–Hong Kong Sign Language

Are sign languages too iconic to be natural languages?

- Some signs are iconic in origin, but which visual feature of the object is picked by signers to stand for it varies across sign languages.

Are sign languages too iconic to be natural languages?

(Sze et al. 2012)

- Signs that are originally iconic in nature undergo changes over time to become less iconic → more and more arbitrary. (Sze et al. 2012)

Sign language does not have a grammar??

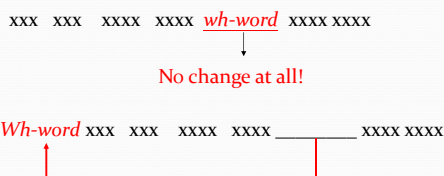- "我們每學習一種語言或文字，都會學習其文法或修辭，但手語則剛剛相反，因為條件的限制，它只能以最簡單直接的方法，概括地表達其意思，因此沒有文法或修辭可言….." <香港手語小手冊 橈炘著>

Sign language does not have a grammar??

- Sign languages have their own grammars, though they may differ significantly from those of the spoken languages in the hearing communities.
- In what ways is Hong Kong Sign Language grammar different from that of English and Cantonese?
  1. Father did not buy a car. 爸爸冇買車
  2. Father will buy a car. 爸爸會買車
  3. Who bought a car? 邊個買車？

Sign language does not have a grammar??

- Sign languages may show grammatical patterns rarely found in spoken languages.
- Spoken languages: mainly two options for wh-word placement. (Dryer 2012)

  xxx xxx xxxx xxxx *wh-word* xxxx xxxx

  No change at all!

  Wh-word xxx xxx xxxx xxxx _____ xxxx xxxx

Sign language does not have a grammar??

- In quite a number of sign languages, however, wh-words are allowed /required to occur sentence-finally (Zeshan 2004).
- Similar observations are found in Asian Sign Languages such as Sri Lankan Sign Language and Jakarta Sign Language.

Sign language does not have a grammar??

IX-you LATE WHY?
"Why are you late?"
Sri Lankan Sign Language

- Sign languages may show unique typological patterns markedly different from spoken languages → Studies in sign languages are important for linguistic theory.

Sign languages are very similar to each other??

Not really.
Nodding & headshaking for YES and NO across sign languages?

Sri Lankan SL:
IX-you TRAIN MEET IX-you
"Can we meet at the train station?"
"Yes".

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Sign languages are very similar to each other??

Turkish Sign Language

IX-1 SPEAK   NOT

'I'm not a speaking person.'

- Sign language exhibit cross-linguistic variations as in spoken languages. Typological studies are important.

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Sign Languages as natural languages:
Simultaneous constructions & sociolinguistic variations
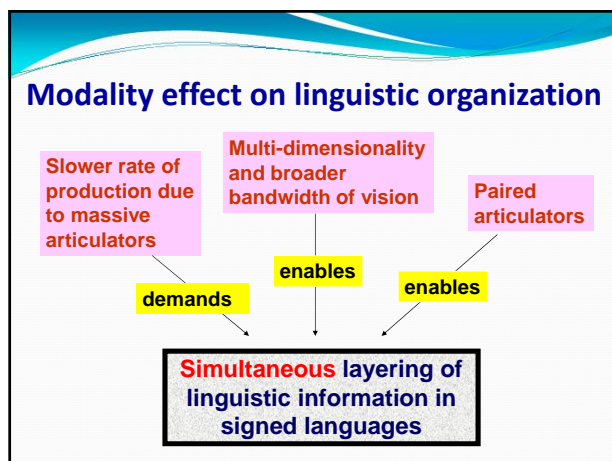
Modality effect on linguistic organization

- Modality: the means by which linguistic messages are perceived and conveyed.
- Spoken languages:

Vocal-audio

- Sign languages:

visual – gestural

Different modality: Comparing articulators

- Which modality is faster?
  - Signs are produced at a rate slower than the rate at which spoken words are produced.
  - Speech: 10-15 segments/sec.
  - Signs: 7-11 segments/sec.
- Is sign language 'less efficient'?

Different modality: Comparing perception

- Which can process more sensory input at the same time, ears or eyes?

- Given the same duration of time, which contain more information, visual or auditory signals?

- How can these two factors, combined with the fact the signers have two manual articulators, overcome the slower production rate of sign language?

Modality effect on linguistic organization

Slower rate of production due to massive articulators

Multi-dimensionality and broader bandwidth of vision

Paired articulators

demands

enables

enables

Simultaneous layering of linguistic information in signed languages

Examples of simultaneous constructions in sign languages

Sze & Lee (2010)

- Movements can be modified simultaneously to show aspectual information.
- Look - <u>uninflected form</u>, Look - <u>durational (for a long time)</u>
- Look - <u>habitual (regularly)</u> (A boy in my class always turns his head back to look at me)
- Look - <u>continuative (again and again)</u> (A passenger sitting in front of me on the bus turned his head back to look at me again and again)

Examples of simultaneous constructions in sign languages

IX-that STUDENT NAUGHTY, CUT-PAPER (haphazardly)

IX-that MALE STUDENT NAUGHTY, STUDY DISLIKE, DO-HOMEWORK(haphazardly)

Examples of simultaneous constructions in sign languages

Facial expression: Adverb

Two hands: Verb

Examples of simultaneous constructions in sign languages

- What is your name? IX-you NAME WHAT? NAME?

Examples of simultaneous constructions in sign languages

Brow furrow:
Question marker

NAME

Simultaneity and sequentiality

LOUSY IX-1   DISLIKE
'Lousy (handwriting), I don't like (it)'. (Topiclaization. Sze, 2011)

AGAIN   STUDY   NOT   IX-lisa
'Lisa did not study (design) again.' (Right dislocation, Sze, in press)

Linguistic variations in sign languages

- As in spoken languages, sign languages exhibit linguistic variations.

Concerning lexical variations:
- Regional variations in the lexicon
- Our recent studies on sociolinguistic variations on Japanese Sign Language and Hong Kong Sign Language (Isobe et al. 2012, Sze et al. 2012) :
  - Relevant factors including age and educational background.
  - Variations resulting from natural phonological processes reflect interesting diachronic changes in progress.

Linguistic variations in sign languages

- In line with previous studies (e.g. Frishberg 1975, Woodward & Erting 1975), lexical signs in JSL and HKSL undergo phonological changes over time to become :
  - more symmetrical (i.e. two hands sharing the same handshape and movement);
  - centralized (i.e. signs originally in a relatively peripheral location moving towards the centre of the signing space); and
  - fluid (i.e. complex movements being simplified) due to the motivations for the ease of articulation and perception

Linguistic variations in sign languages

- Signs becoming more centralized:

Japanese Sign Language: STUDENT (Isobe et al. 2012)

Older form:
A sign that described the belt of students

A more current form:
The sign being moved up in the signing space

Linguistic variations in sign languages

- Signs becoming more fluid:

Japanese Sign Language: Okinawa 沖繩

Originally complex movements being smoothed out.

Older form

A more current form

Linguistic variations in sign languages

1. DELETION of one hand

2. Initial LOWERING found by signers of similar age

3. Further LOWERING by younger signers.

FISH has become
- simpler in structure
- centralized in place of articulation

Linguistic variations in sign languages

- KWUN-TONG官塘 (a place name)
- Original form: based on signed Chinese:

KWUN官: TONG 塘:

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1. Metathesis of the two sign components from early on.

2. Followed by handshape assimilation

3. Initial displacement of the 2nd component:
Middle of forehead → temple

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4. Further displacement of: cheek only

Original compound → centralized and fluid

Importance of Sign Languages to the Deaf Communities

Importance of sign languages

- Sign languages, due to its visual nature, are the preferred means of the majority of Deaf people around the world.
- → is what defines their identity and culture.
- Around the world there are Deaf movements to fight for their rights.

Importance of sign languages

- Difficulty in spoken and written communication with hearing people can lead to a higher risk of mental illness among Deaf people. (Fellinger et al. 2005)

Particularly for Deaf children:
- A higher risk of child abuse due to excessive stress on the part of parents if they cannot communicate effectively with their Deaf children. (Brodbar 2003)

- Deaf people are at a slightly higher risk to have mental health problems if they don't share the same communication mode with their parents.(Wallis et al. 2004)

Importance of sign languages

- Early exposure to sign language is beneficial to Deaf children's cognitive development → better academic attainment(Kourbetis, 1987; Weisel, 1988; Israelite and Ewoldt, 1992; Singleton, Supalla, Litchfield, & Schley, 1998; Strong & Prinz, 1997, 2000, among many others).

- Early exposure to sign language enhances the overall linguistic ability of Deaf children, including speech intelligibility and literacy (Preisler et al., 2002; Yoshinaga-Itano and Sedey, 2000)

International recognition of the value of sign languages

- The 21st International Congress on the Education of the Deaf (ICED)held in Vancouver in July 2010:

  - The organizing committee openly expressed regret over the devastating consequences of the removal of sign languages from deaf education due to the 2nd ICED held in Milan in 1880.

  - It called upon all nations of the world to ensure that educational programs of deaf people accept and respect sign languages.

International recognition of the value of sign languages

- United Nation: The Convention on the Rights of Persons with Disabilities (CRPD)

  - Emphasizes the respect and promotion of the use of sign languages in all nations.

  TIME TO ACT!!

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