Skilled hands – Local and global perspectives on sign languages in unusual settings

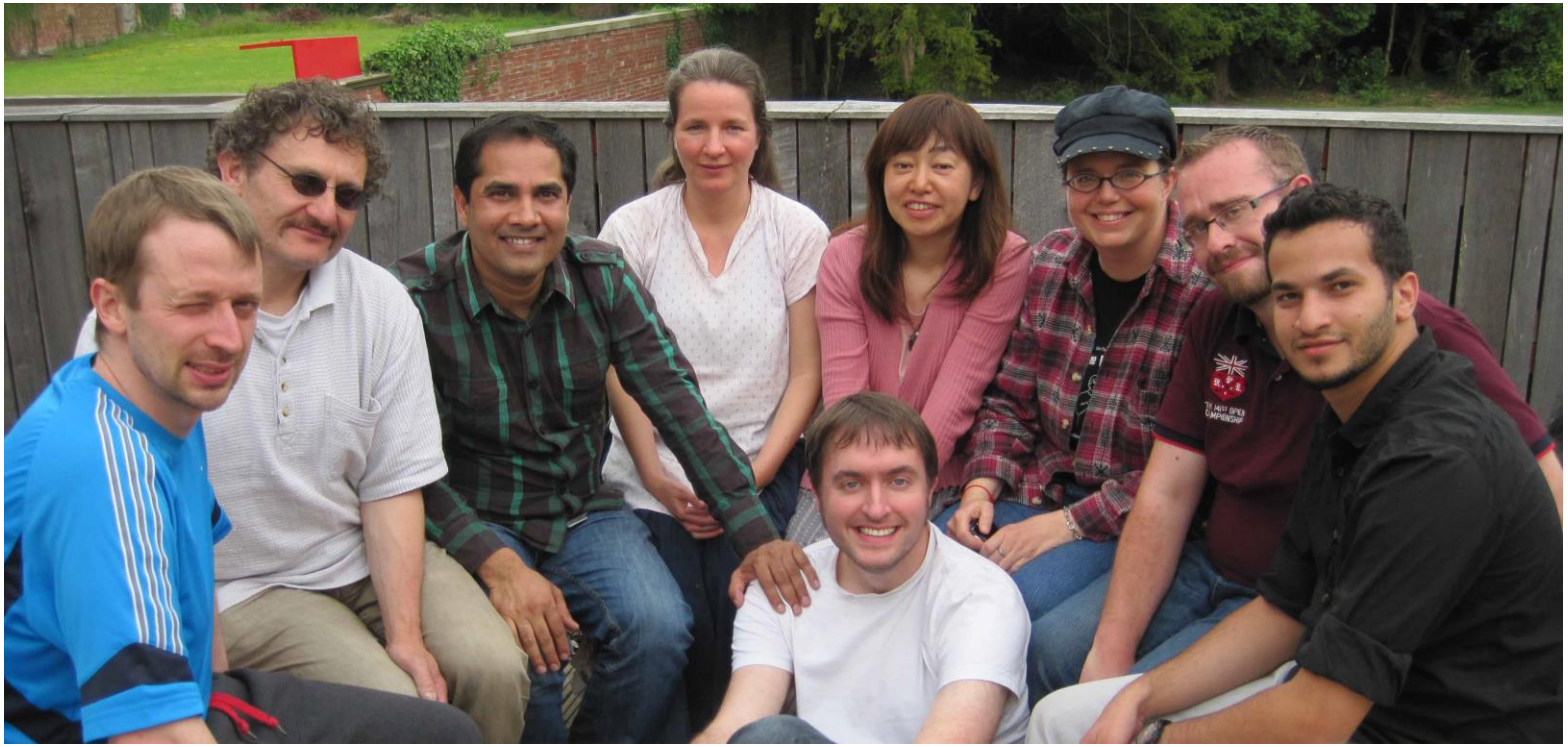
Ulrike Zeshan

International Institute for Sign Languages and Deaf Studies

University of Central Lancashire, Preston, UK

uzeshan@uclan.ac.uk

The iSLanDS Institute



UK UK India Germany UK Japan USA UK Jordan

"Academic excellence and community empowerment"

Structure of the presentation

- Introduction to sign languages and Deaf Communities
- The global perspective: Transnational sign language contact
- The local perspective: Sign languages in small-scale rural communities
- Conclusions: Cognitive Linguistics looking outwards

uclan

Introduction to sign languages and Deaf Communities

Sign languages

Known since the beginning of sign linguistics:

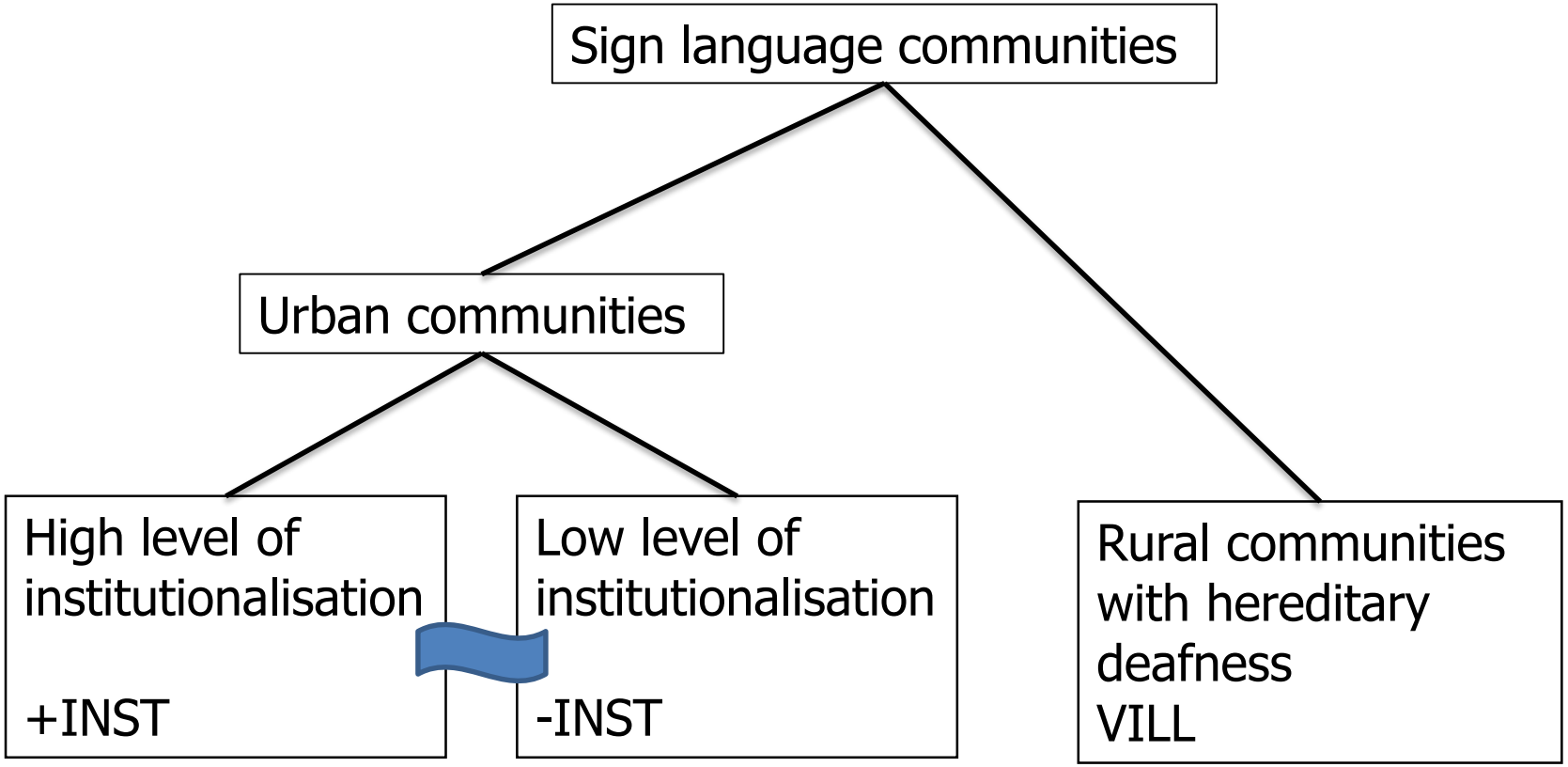
- Visual-gestural languages with complex grammars
- Characteristics of linguistic-cultural minority communities
- Unusual patterns of language transmission
- Not similar or linked to the spoken language(s) in the same country/region
- History of oppression in many cases

Discovered more recently:

- MUCH MORE DIVERSITY ACROSS SIGN LANGUAGES AND DEAF COMMUNITIES THAN ORIGINALLY ASSUMED

uclan

Types of signing communities

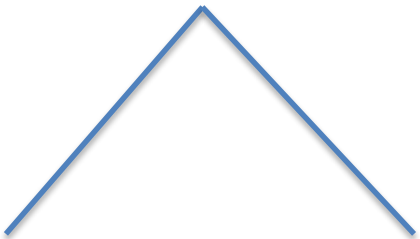


Example: Turkey

The global perspective: Transnational sign language contact

“Multilingual behaviours in sign language users” (ERC project)

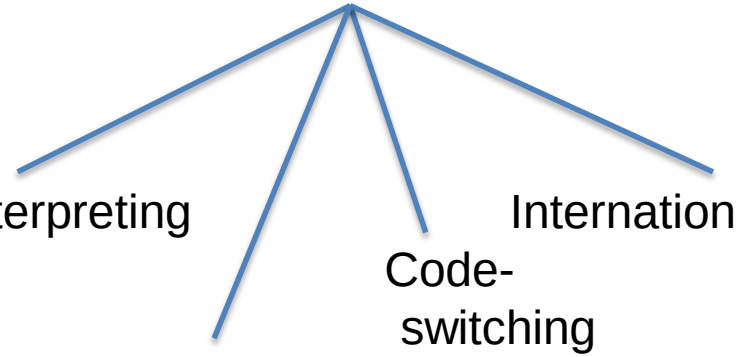
Contact between signed and spoken language



Simultaneous interpreting

Communication

Contact between two or more signed languages



interpreting

International Sign

Code-switching

Ad hoc signed communication

“Multilingual behaviours in sign language users” (ERC project)

Contact between signed and spoken language

Simultaneous Communication

interpreting

Contact between two or more signed languages

interpreting

Code-switching

International Sign

Ad hoc signed communication
→ “Cross-signing”

The cross-signing study

A study of language contact between pairs of signers from different linguistic backgrounds who do not have a shared language between them

Video recordings of dyadic conversations at regular intervals:

- First day
- One week
- One month

Research questions

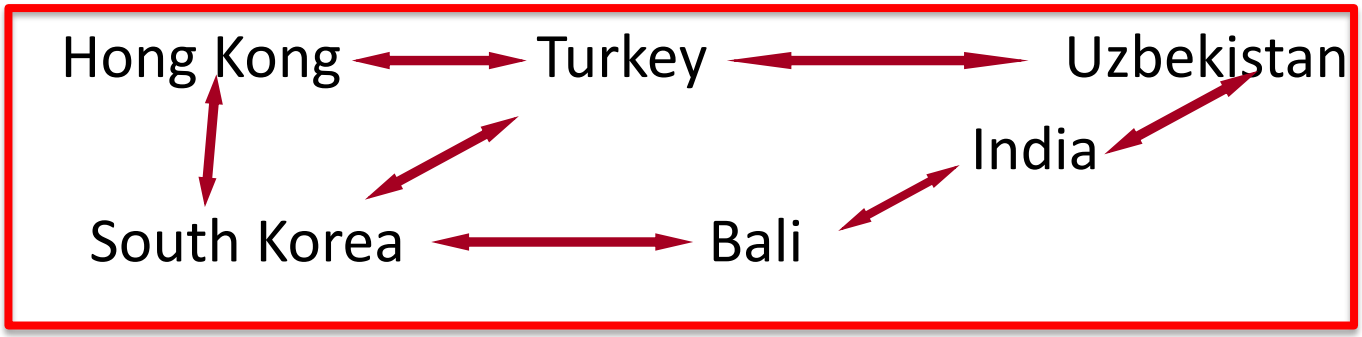
- Range of communicative strategies and linguistic resources
- Development of successful communication over time
- Linguistic status of “cross-signing”

“Cross-signing” data

a) Casual conversation between multiply matched dyads:

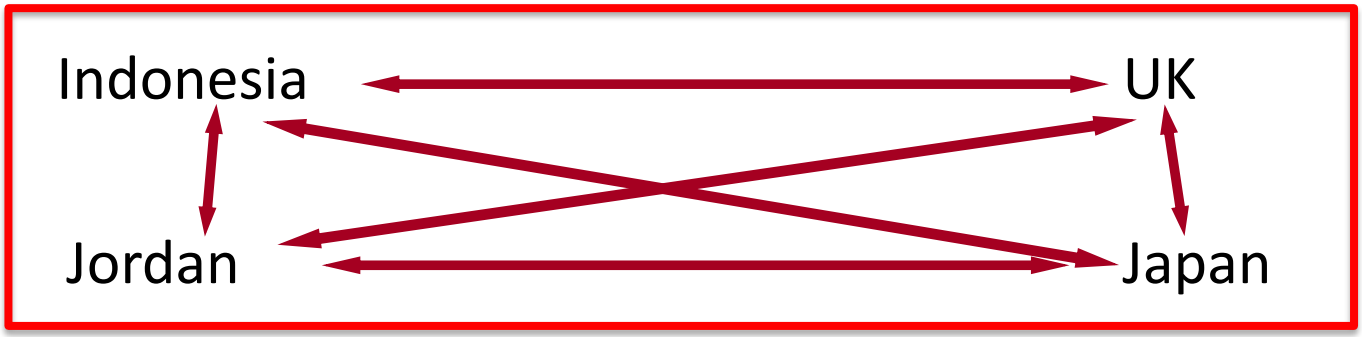
Pilot data (2003-2005):

20 hours of video data; signers from countries with unrelated, mutually unintelligible sign languages



“Cross-signing” data

b) Casual conversation and experimental data from multiply matched dyads (2012):



Conversation (15 hrs of video)

- First contact
- After one week
- After one month

Experiment (2 hrs of video)

- First contact

- After one month

uclan

Participants

- MI: Indonesian Sign Language, Bahasa Indonesia
- MS: Jordanian Sign Language, Arabic (limited)
- CP: British Sign Language, English, International Sign
- MH: Japanese Sign Language, Japanese

Conversational data

Observations from data

- Signers operate in a multilingual-multimodal space and use a wide range of resources, often exploiting iconicity.
- There are many communication breakdowns and repairs, some of which only become apparent in post-hoc interviews.


夢中

Observations from data

- Focus of current analysis: Numerals
- The use of numeral signs is shaped by competing motivations: INNOVATION, ACCOMMODATION, and PERSISTENCE

uclan


夢中

Experimental data

Jordan - UK

Format of results

Description	Target picture	Signer	Result	Start time	End time	Time Taken	No. of Turns
apple-orange	orange	MH	right	0:07	0:31	0:24	1
policeman-soldier	soldier	MI	right	0:36	0:48	0:12	1
duck-sparrow-hen	hen	MH	right	1:12	1:53	0:41	1
pen-pencil	pencil	MH	right	4:20	4:52	0:32	3
person on chair- chair	chair	MI	right	5:04	5:39	0:35	2
fish-snake-whale	fish	MH	right	5:47	6:03	0:16	1
argue-angry man	argue	MI	right	6:12	6:20	0:08	1

Results

- Experiment at first contact (Set 1): total 119 pictures described; experiment after five weeks (Set 2): total 128 pictures described.
- The error rate (picking the wrong picture) is remarkably low for both Sets: 7.5% Set 1, and 3.9% Set 2.
- No noticeable difference in the number of communicative turns.

uclan

Results

- Most important differences with respect to timing:
- Overall, Set 2 was resolved 30 % more quickly than Set 1.
- Resolving a picture in 10 seconds or less was three times more frequent in Set 2.
- Very few extra-long sequences (40+ sec) in Set 2.

The local perspective: Sign languages in small-scale rural communities

Community characteristics

- Hereditary deafness over a number of generations; no or little contact with deaf people from outside the village.
- Deaf people are integrated into the hearing majority and do not face major communication barriers.
- Most hearing people in the village community are more or less fluent in the local sign language.
- Consequently, most users of the sign language are bilingual L2 users; only the deaf are monolingual signers.
- No official status for the SL and no deaf education.

uclan

Alipur Sign Language, South India

- Muslim Shia enclave.
- Long-standing pattern of intermarriage within the village.
- Deafness for at least 5 generations or longer.
- Ca. 140 deaf people out of ca. 14,000 (1%).
- Strict separation of genders.
- Deaf and hearing villagers use the local sign language, which is different from the urban Indian Sign Language.

uclan

Alipur, South India

Unity School for the Deaf, Alipur

Sign languages in rural communities

Home sign

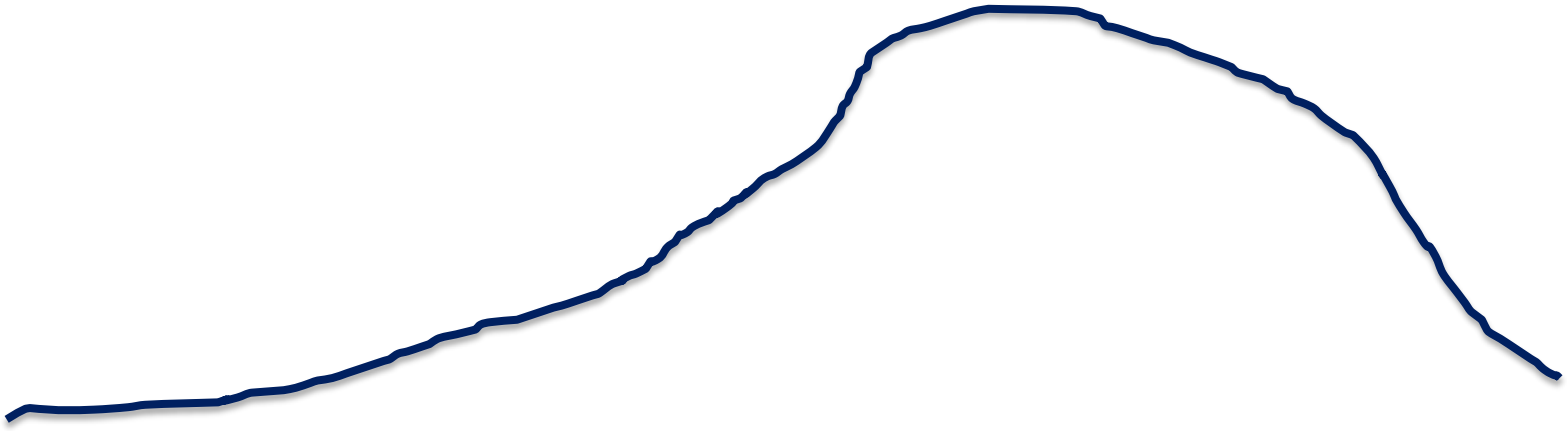
Family sign language
(genetic deafness)

Communal home sign
(non-genetic deafness)

Rural sign
language

End of genetic
deafness

Shift to urban
sign language

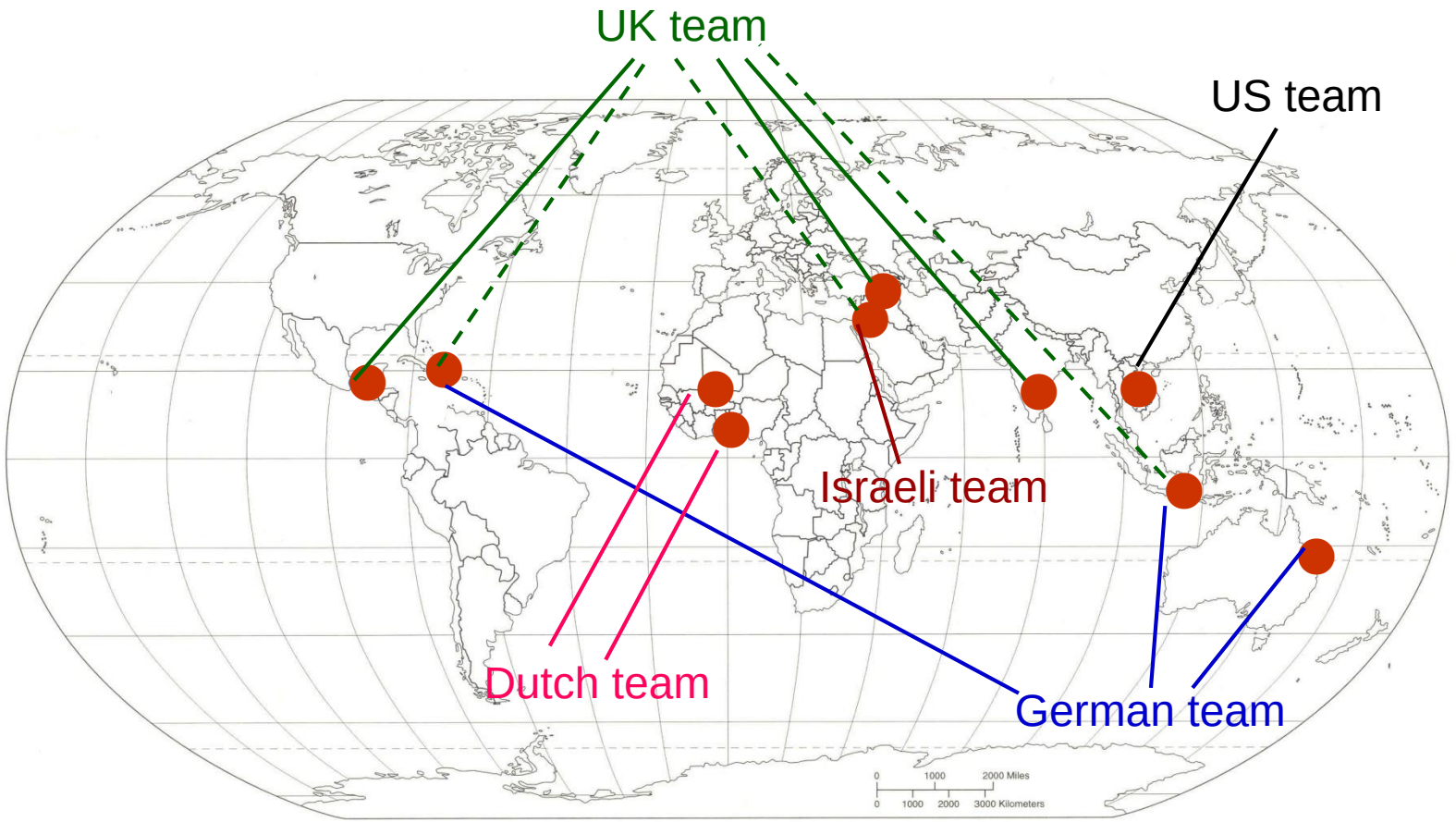


Project “Endangered sign languages in village communities”

- Funded through the EUROCORES programme of the European Science Foundation (EuroBABEL)
- Studying 10 sign languages and communities, in Turkey, India, Jamaica, Mexico, Australia, Thailand, Israel, Mali, Ghana and Indonesia

uclan

Field sites and research teams



Linguistic significance of data from rural sign languages

- Challenge presumed sign language universals (e.g. spatial grammar)
- Add to known typological diversity (e.g. numerals)
- Live laboratory for sign language acquisition, multilingualism, bilingual deaf education, etc.

uclan

Counter-examples to sign language “universals”: Sign space

Features of spatial grammar	X Sign Language		
Directional verbs	YES		
Whole entity classifiers	YES		

Features of spatial grammar	X Sign Language	Adamorobe Sign Language	
Directional verbs	YES	YES	
Whole entity classifiers	YES	NO	

Features of spatial grammar	X Sign Language	Adamorobe Sign Language	Kata Kolok
Directional verbs	YES	YES	NO
Whole entity classifiers	YES	NO	YES

→ These two village sign languages differ from urban sign languages, but also from each other!

Increased typological diversity: Numerals

Data collection

- Conversational data (mostly monologues and dialogues); organised corpora with ELAN transcriptions
- Focus on colour terms, kinship terms, and numerals
- Standardised questionnaires and elicitation materials

ELAN transcription

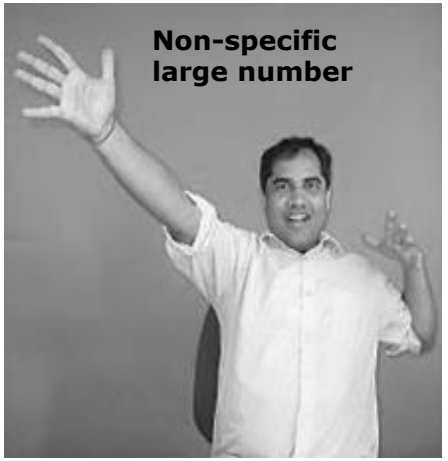
Numerals questionnaire, short version with colour coding

Are the cardinal numbers iconic?

a) The cardinal numbers are represented by the extended finger of the hand. Please indicate for which of the numbers this is the case.
b) The cardinal numbers are motivated by the writing system. Please indicate for which of the numbers this is the case.
c) The cardinal numbers are non-iconic. Please indicate for which of the numbers this is the case.
d) The cardinal numbers are motivated, but in a different way.

uclan

Alipur Sign Language



Spatial inflection in numerals

uclan

uclan

Mardin Sign Language

- Complex sub-systems:

- Multiplicative	- Additive	- Subtractive
40 (2x20)	50	18 (20-2)
60 (3x20)	70 (20+50)	19 (20-1)
80 (4x20)	90 (40+50)	
(vigesimal)		

Summary of findings

	Alipur Sign Language	Chican Sign Language	Mardin Sign Language	Turkish Sign Language	Indo-Pakistani Sign Language	Mexican Sign Language
base-20 numerals	-	X	X	-	-	-
base-50 numerals	X	X	X	-	-	-
Subtractive	X	-	X	-	-	-
Spatial modification	X	-	-	-	-	-
Additive	X	X	X	X	-	X
multiplicative	X	-	X	X	-	X
Digital	X	-	-	X	X	-

Cardinal numerals 0-100

uclan

Summary of findings

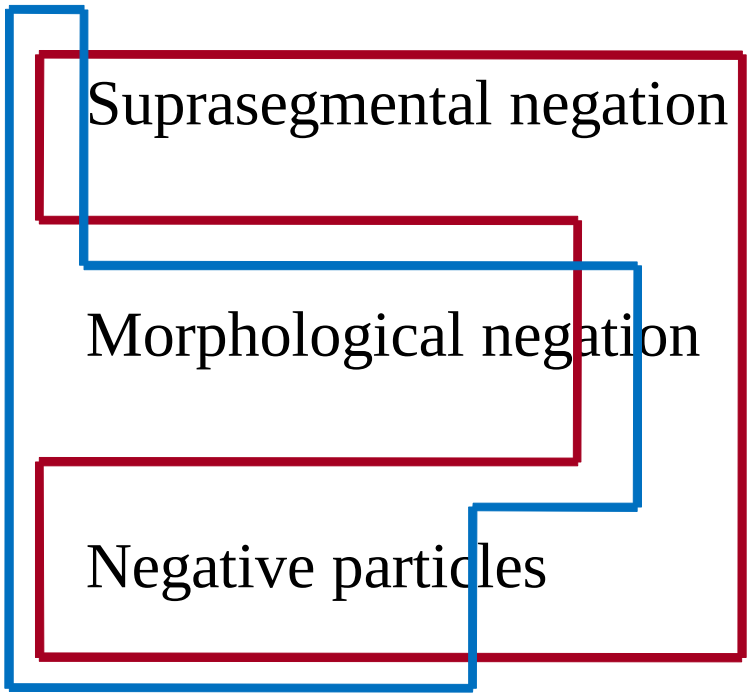
	Alipur Sign Language	Chican Sign Language	Mardin Sign Language	Turkish Sign Language	Indo-Pakistani Sign Language	Mexican Sign Language
base-20 numerals	-	X	X	-	-	-
base-50 numerals	X	X	X	-	-	-
Subtractive	X	-	X	-	-	-
Spatial modification	X	-	-	-	-	-
Additive	X	X	X	X	-	X
multiplicative	X	-	X	X	-	X
Digital	X	-	-	X	X	-

uclan

Conclusions: Cognitive linguistics looking outwards

1. Cognitive bases of cross-modal typology

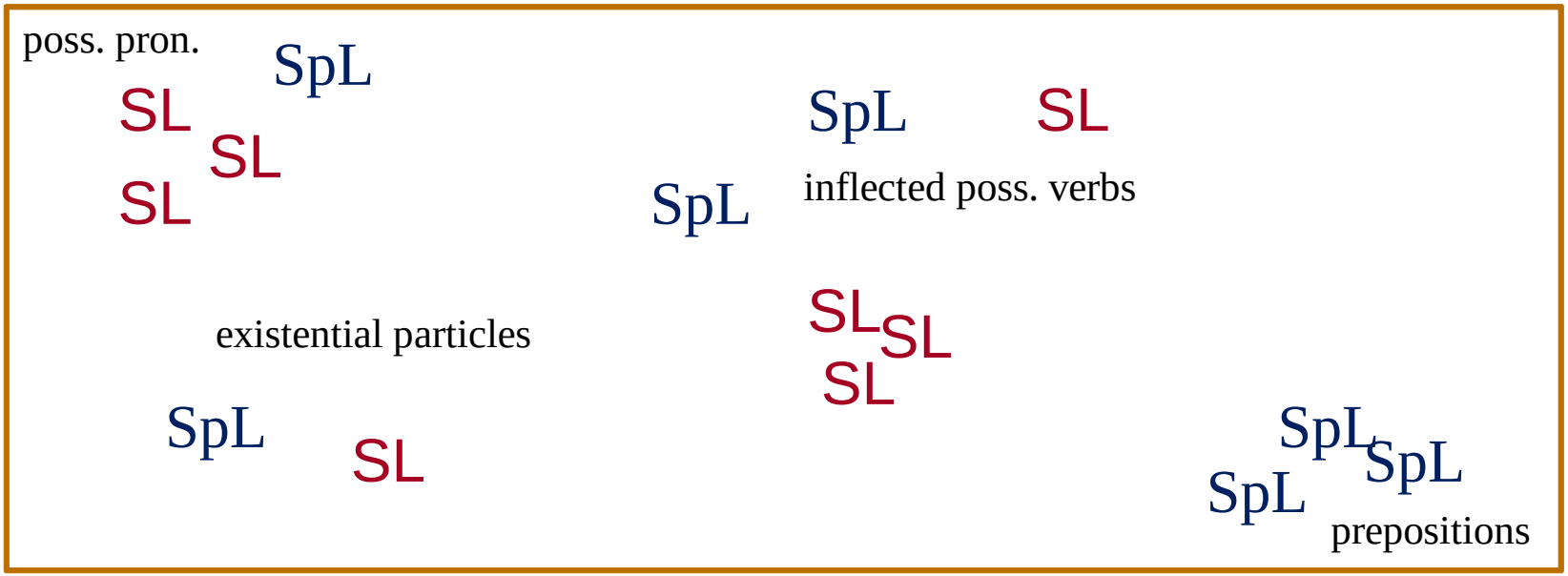
Structural space: Negation



Sign languages

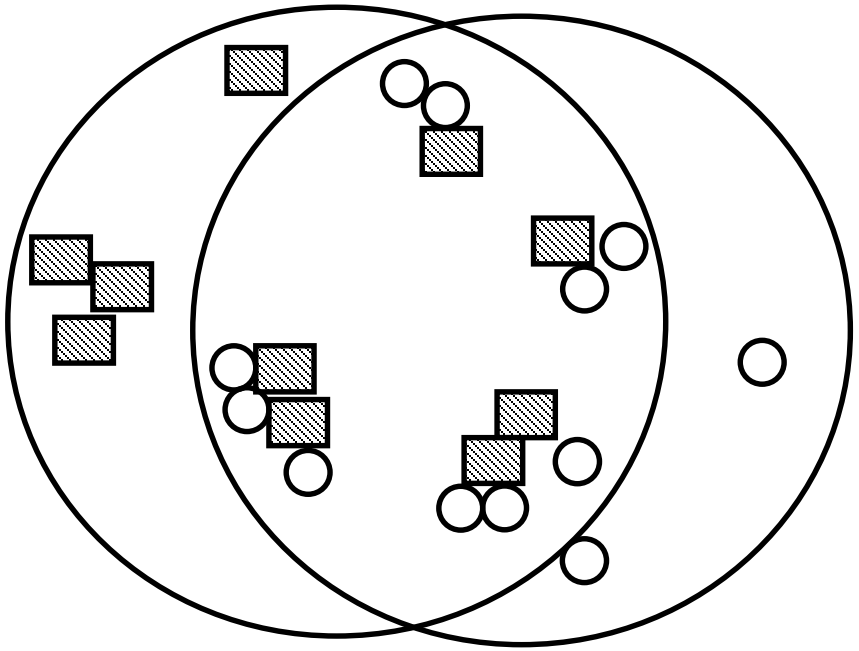
Spoken languages

Cognitive-structural space: Possession



Cognitive basis; existence, location & possession; grammaticalisation pathways

Cross-modal typology



Sign Languages Spoken Languages

2. Communication in multilingual-multimodal spaces

“Making meaning…”

- Creating meaning from multiple mutually supporting sources
- Co-creating meaning in interactions
- Iconicity
- Meta-linguistic skills

References

Marsaja, I Gede. 2008. *Desa Kolok: a deaf village and its sign language in Bali, Indonesia.* Nijmegen: Ishara Press.

Nyst, Victoria. 2007. *A descriptive analysis of Adamorobe Sign Language (Ghana).* Utrecht: LOT.

Panda, Sibaji (ed.): *Sign languages in village communities*. Ishara Signed Publications No. 2. Nimegen: Ishara Press.

Zeshan, Ulrike (2005): Sign Languages. In: Dryer, Matthew, David Gil & Martin Haspelmath (eds.): *World Atlas of Language Structures. Oxford: Oxford University Press. pp. 558-567.*

Zeshan, Ulrike (2006a) (ed.): *Interrogative and negative constructions in sign languages. Sign Language Typology Series No. 1*. Nijmegen: Ishara Press.

--. (2007): The ethics of documenting sign languages in village communities. In: Austin, Peter K, Oliver Bond & David Nathan (eds.): *Proceedings of the Conference on Language Documentation and Linguistic Theory*, 7-8 December 2007, SOAS, London. pp. 269-279.

Zeshan, Ulrike & Pamela Perniss (eds.) (2008*): Possessive and existential constructions in sign languages.* Sign Language Typology Series No. 2. Nijmegen: Ishara Press.

Zeshan, Ulrike & Connie de Vos (eds.) (2012): *Sign languages in village communities. Anthropological and Linguistic Insights. Sign Language Typology Series No. 4.* Berlin a.o.: De Gruyter Mouton & Nijmegen: Ishara Press.

uclan

With thanks to...

- European Science Foundation
- Arts & Humanities Research Council, UK
- European Research Council
- Endangered Languages Documentation Programme

uclan

With thanks to...

- Muhammad Isnaini, Claire Perdomo, Mohammed Salha, Masaomi Hayashi (ERC participants)
- Sibaji Panda, Hasan Dikyuva, Cesar Ernesto Escobedo Delgado (ESF fieldwork researchers)
- Alipur village, Chican village, Bengkala village, and the Dilsiz family
- The iSLanDS team

uclan