

Points to self by Deaf, hearing and Coda children





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Introduction

Pointing: Ubiquitous, early, common Or is it?



- Pointing is known to be ubiquitous, early to develop, and common across signers and non-signers
- But: does this characterization hold for pointing to self?
- If pointing is an early, gestural phenomenon, can signing children refer to themselves before the age at which linguistic reference to self develops in spoken languages?





Development of pointing in Sign Languages

Petitto (1987) – American Sign Language:

- Assumption: all infants point from an early age
- Two Deaf signing children acquiring ASL
 - Both avoided pointing to self and addressee between 12 and 18 months
 - Resumed such points at 21 to 26 months
- Lexical learning of pronouns is required despite apparent iconicity

Similar data found for two other sign languages

- Hatzopoulou (2008) Greek Sign Language (one deaf child)
- Morgenstern et al. (2010) French Sign Language
 - One deaf child used increasing numbers of points to self between age 1 and 2
 - One koda child rarely used points to self

Questions for our prior study of Kodas

Kodas, as bimodal bilingual children, are acquiring both a sign language and a spoken language

- Does use of points to self might start between ages 1 and 2?
- Do the children differentiate sign-target and speech-target sessions in terms of pointing to self or others?

Gökgöz, Quadros, Oliveira & Lillo-Martin (2015)



Participants

- All child participants have at least one Deaf parent and relatively equal exposure to both sign and spoken languages.
- Filmed in naturalistic play sessions leading to spontaneous language production
- Adults in sign sessions are child's Deaf parent or a Deaf RA.
- Adults in speech sessions are hearing signers.

Gökgöz, Quadros, Oliveira & Lillo-Martin (2015)

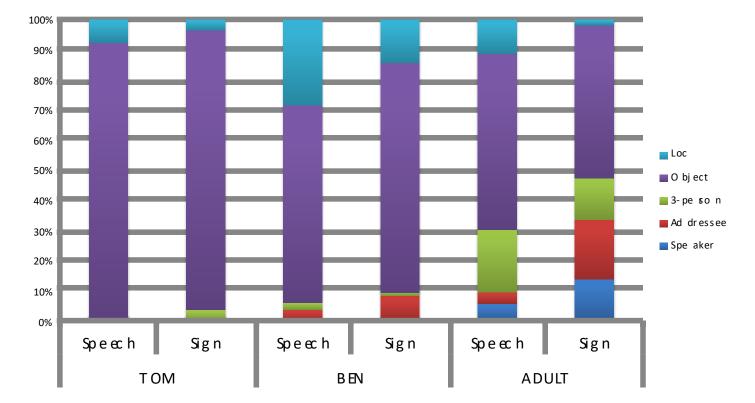


Participants

Child	Age	Target language	#sessions	# Child IX	# Adult IX
BEN	2;00-2;06	ASL	2	182	233
(US)	2;00-2;06	English	2	156	103
том	1;11-2;06	ASL	2	47	
(US)	2;00-2;06	English	2	31	

Adapted from Gökgöz, Quadros, Oliveira & Lillo-Martin (2015)

Pointing Results: US data



Gökgöz, Quadros, Oliveira & Lillo-Martin (2015)

New Research questions

- Is the same pattern of results found with analysis of more Koda data sessions?
- Are points to self also late to emerge in Deaf native signers?
- When are points to self observed in hearing non-signers?

Study 1: Koda pointing



Data

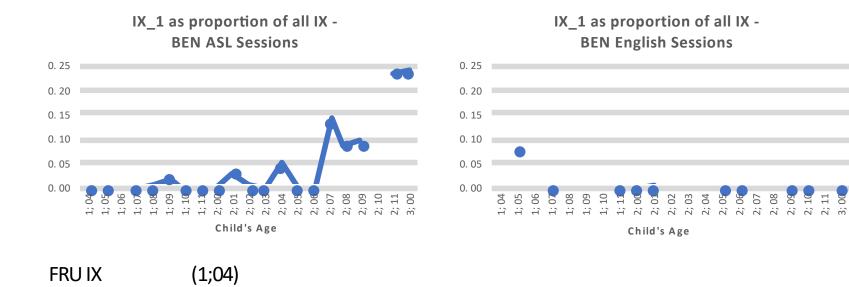
- One bimodal bilingual child (BEN)
- All sessions transcribed for ASL between the start of recording and 3;00 were analyzed
- All instances of IX_1, IX produced by child tabulated
- FRU of IX, IX_1 determined

Child	Age	Target language	#sessions	# IX	# IX_1
BEN	1;04-3;00	ASL	27	2645	127
(US)	1;05-3;00	English	12	837	2

IX_1 Timecourse – BEN

2;07

FRU IX_1



Summary – Kodas

- Kodas (Ben, Tom) seem to acquire IX_1 relatively late
- Clear distinction between use of IX_1 in sign and speech contexts

➤How does this compare to

- Deaf native signers
- Hearing non-signers

Study 2: Deaf children with Deaf, signing parents

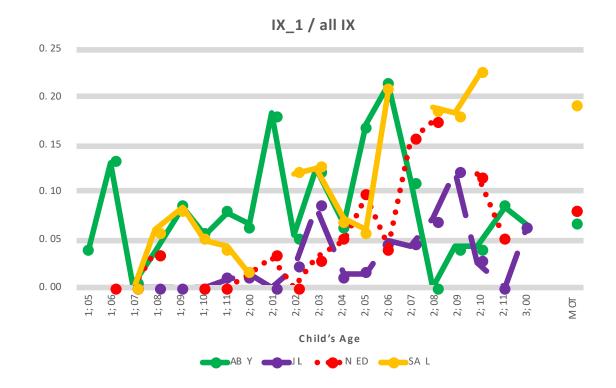


Data

Participant	Age Range	# of Sessions	Total # IX	# IX_1	FRU of IX_1
ABY	1;05-3;00	30	2295	203	1;05
ABY's MOT	1;05-3;00	22	1992	144	
JIL	1;07-3;00	33	2239	77	1;11*
JIL's MOT	1;08-3;00	19	1335	108	
NED	1;06-3;00	25	1620	202	2;00*
NED's MOT	1;06-3;00	25	4022	335	
SAL	1;07-2;10	18	2769	357	1;08*
SAL's MOT	1;07-2;08	14	1905	363	

*p < .05 binomial

Results – IX_1 timecourse



Summary – Deaf native signers

- All have IX(obj/loc) from first observation
- All acquire IX_1 by the age of 2;00, but *not* all have it very early

Study 3: Development of points to people in hearing non-signers

Corpus Study: 4 Hearing, English-speaking children

					Total	Pt	Pt	Pt	Pt
Child	Age Range	# Sessions	Tot. time	# Utts	# Pt	thing/loc	person	person*	self*
Alex	2;00-3;00	5	4:46:41	3392	263	244	2	0	NYO
Lily	2;00-3;00	5	4:45:46	2364	211	211	0	0	NYO
Naima	2;00-3;00	5	5:19:43	2274	68	65	3	1	NYO
Violet	2;00-3;00	5	3:33:00	1995	155	153	2	0	NYO

*outside of "where's X" games

CHILDES, Providence corpus; Katherine Demuth et al. (2006, 2009)

General Discussion

Summary

- Points to self are not like other points
- Hearing non-signers, deaf native signers, and kodas all point to objects/locations from the first session
- Hearing non-signers do not point to self before age 3;00
- Deaf native signers acquire IX_1 by age 2;00
- Kodas
 - Tom did not acquire IX_1 by age 2;06
 - Ben acquired IX_1 age 2;07

Conclusions

- In signers, IX_1 needs to be acquired as part of the linguistic system for reference to persons
- Deaf native signers acquire it in the expected age range for a pronominal system
- Kodas seem to require more time to acquire this element
 - Likely a bilingualism effect
 - Similar to other heritage language effects

Thank you