

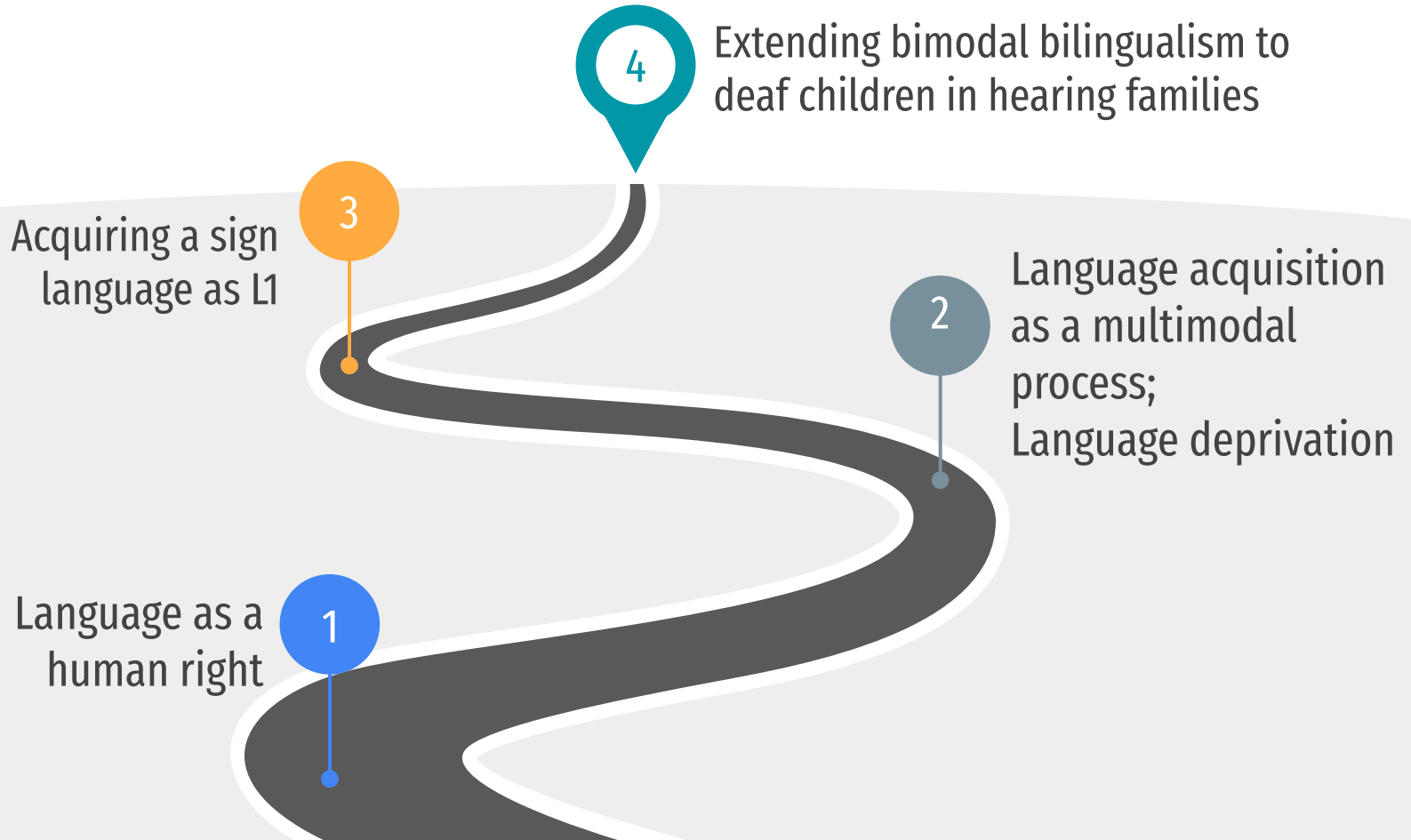
# Sign Language Acquisition as a Human Right

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*Chosun University Seminar*  
*July 2023*



# Roadmap for this talk



# Human Rights: History

1948 UDHR	Universal Declaration of Human Rights
1989 UNCRC	United Nations Convention on the Rights of Children
2006 UNCRPD	United Nations Convention on the Rights of People with Disabilities

UDHR, 1948; UNCRC, 1989; UNCRPD, 2006

# Human Rights: Discrimination

**Audism**

**Phonocentrism**

**Linguisticism**

# Human Rights: Language

**Article 2  
Definition**

**Article 9  
Accessibility**

**Article 21  
Freedom of  
Expression & Opinion**

**Article 24  
Education**

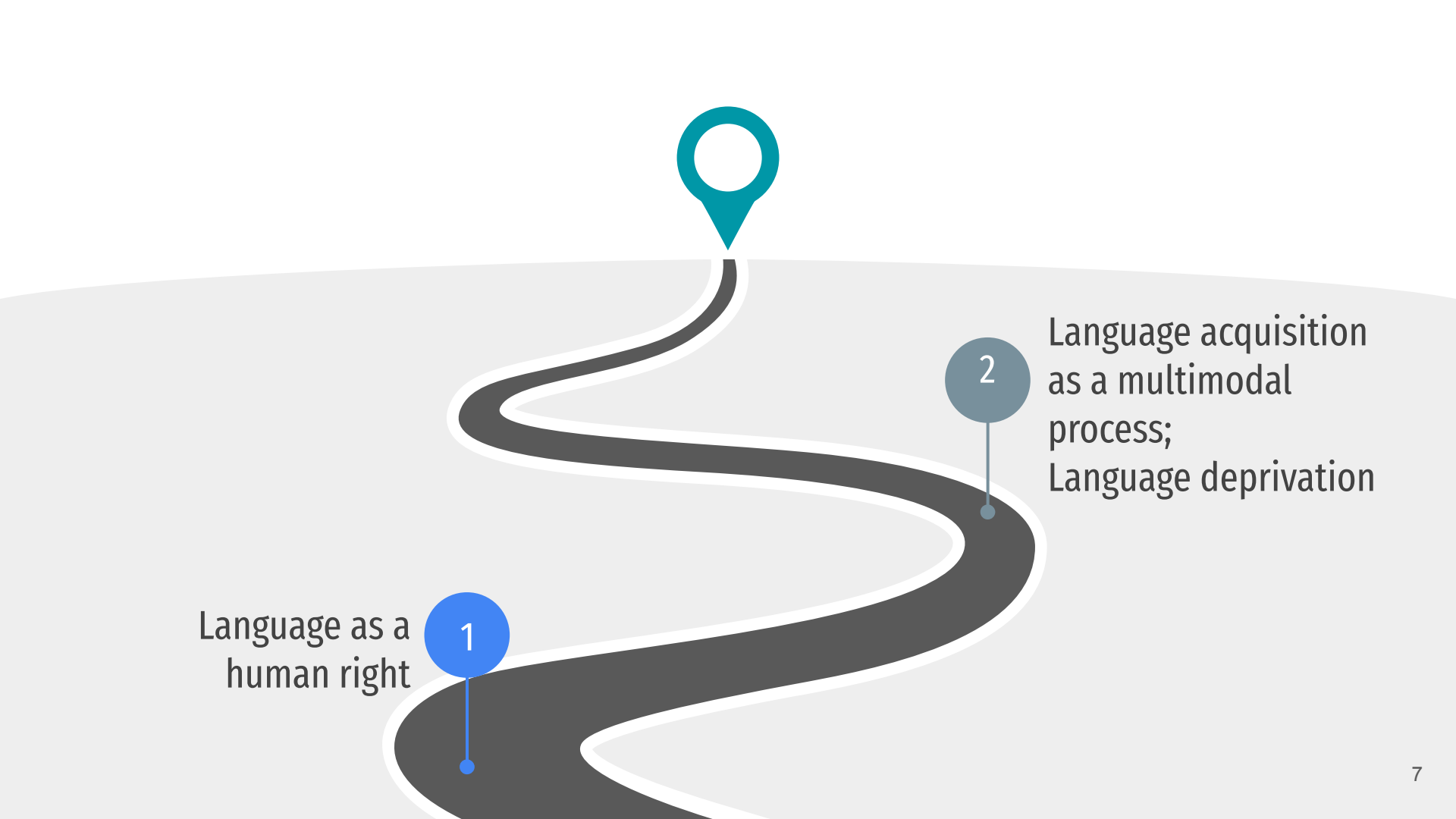
# Deaf Gain

Closed  
Captioning

Sign from a  
Distance

Football  
Huddle

Sign with  
Babies



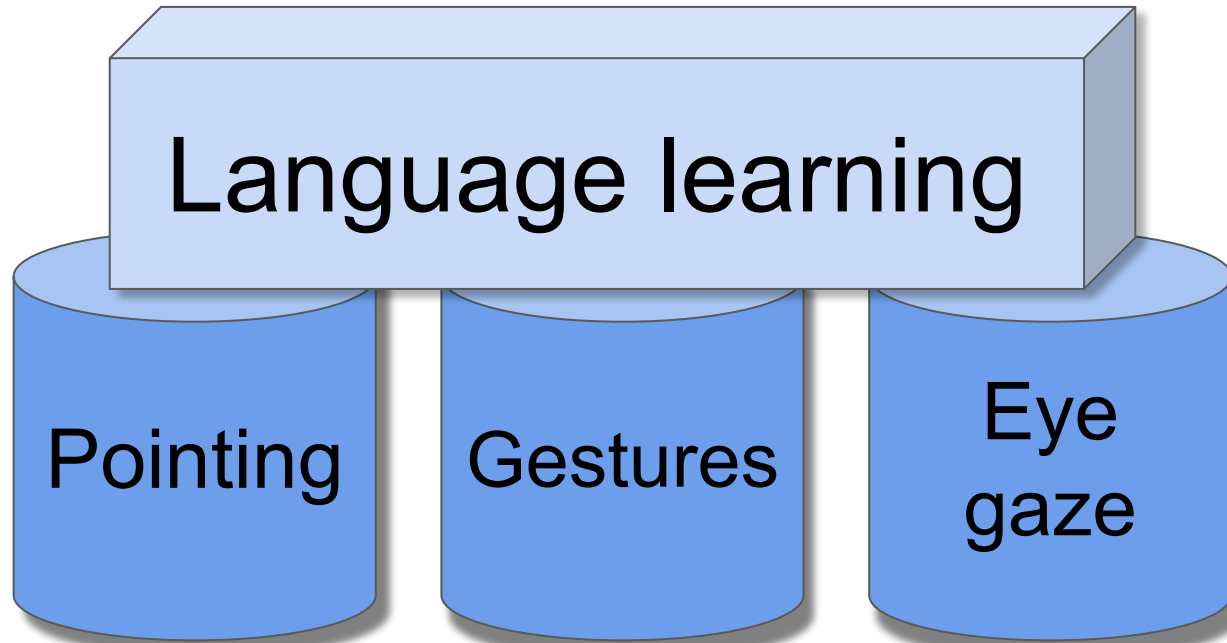
Language as a  
human right

1

2

Language acquisition  
as a multimodal  
process;  
Language deprivation

# Multimodality





# Multimodality

ALL children's  
language learning is  
multimodal



Deaf children need the  
benefit of multimodal  
learning too

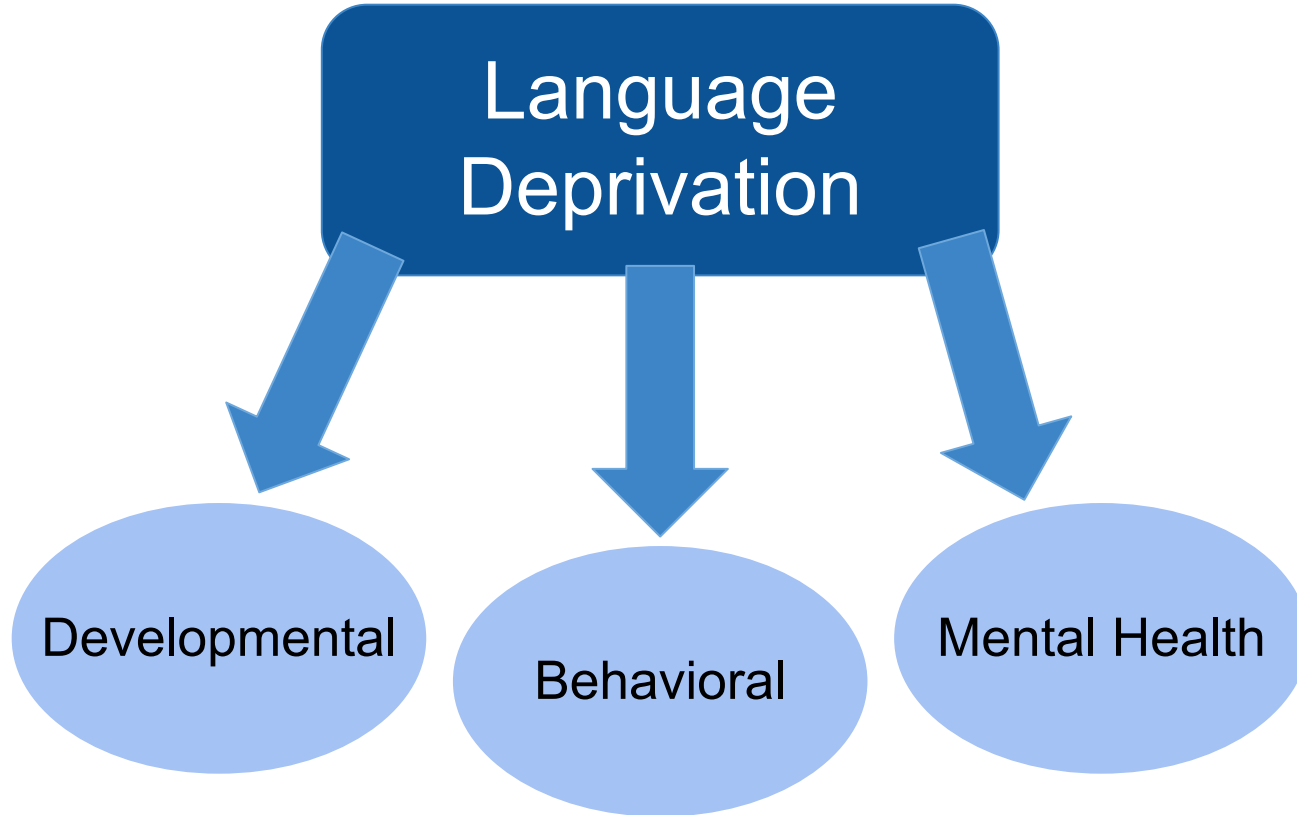
# Language Deprivation

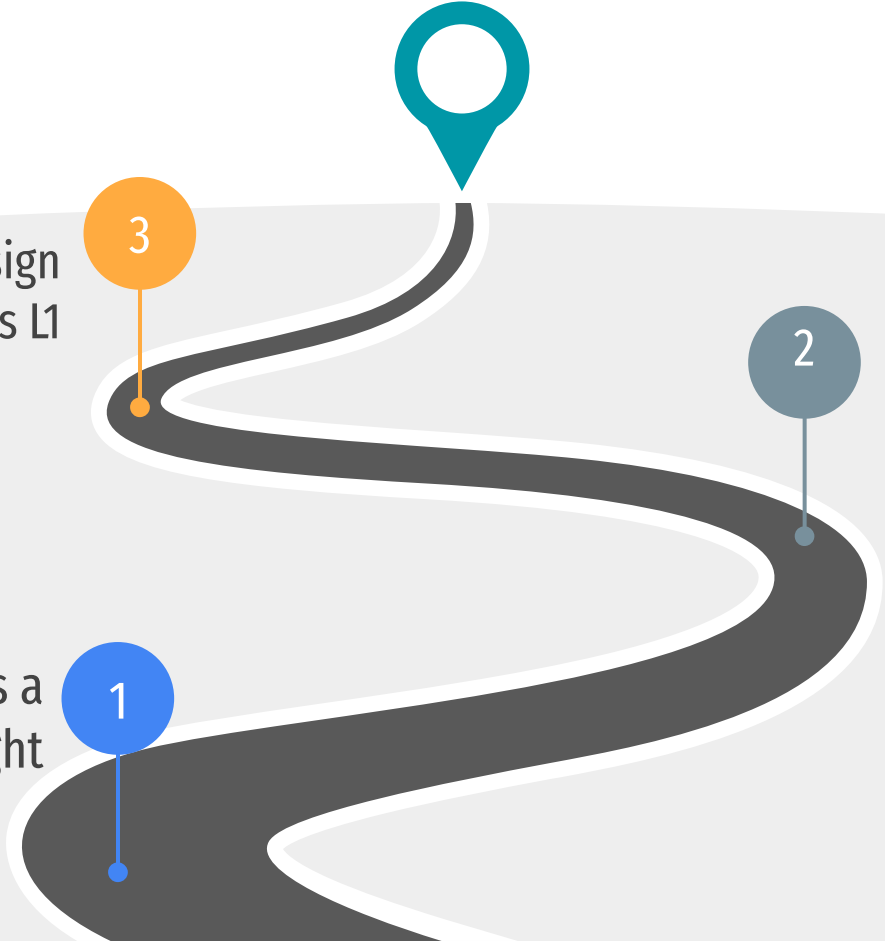
Language is a neurologically expected experience

Absence of sufficient access or exposure to language to develop language on a typical timeline

Language deprivation has environmental causes

# Language Deprivation



A diagram showing a winding path with three numbered stops and a destination marker. The path starts at the bottom left, goes up and right, then down and right, then up and right, and finally up and right to a teal location pin. The stops are numbered 1, 2, and 3 from bottom to top. Stop 1 is a blue circle, stop 2 is a grey circle, and stop 3 is an orange circle. The path is a dark grey line with a white outline.

Acquiring a sign language as L1

Language as a human right

1

2

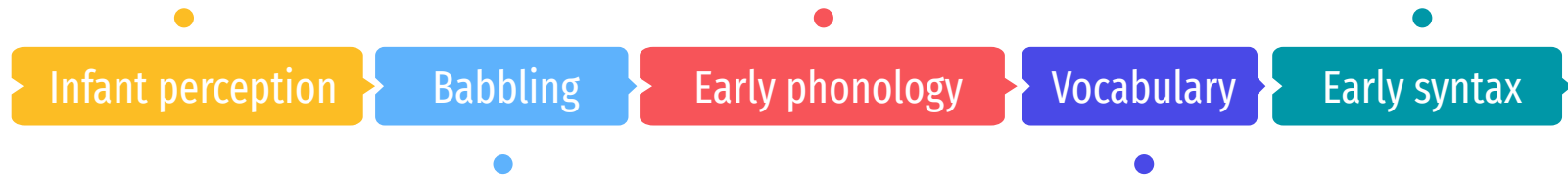
Language acquisition as a multimodal process;  
Language deprivation

3

# Acquiring a Sign Language as L1

First language acquisition occurs naturally with full access to sign language.

Children with early sign language input follow a developmental trajectory that parallels L1 spoken language acquisition.



# Sign language as L1: Infant perception

Deaf and hearing infants (5-18 mo.) distinguish between RSL/DGS and ASL/SEE, even without previous experience → early sensitivity to visual prosodic patterns (multimodal competence).



Infant perception

Modified from Blau (2023)

# Sign language as L1: Babbling

Sign-exposed babies produce manual babbling, comparable to vocal babbling in timing and structure (Petitto & Marentette 1991).



<https://www.youtube.com/watch?v=u7xQfD8lsuo>

Babbling



Manual babbling from a 1;06 koda 0:15

<https://youtu.be/DXfxGybGiUk>

# Sign language as L1: Early phonology

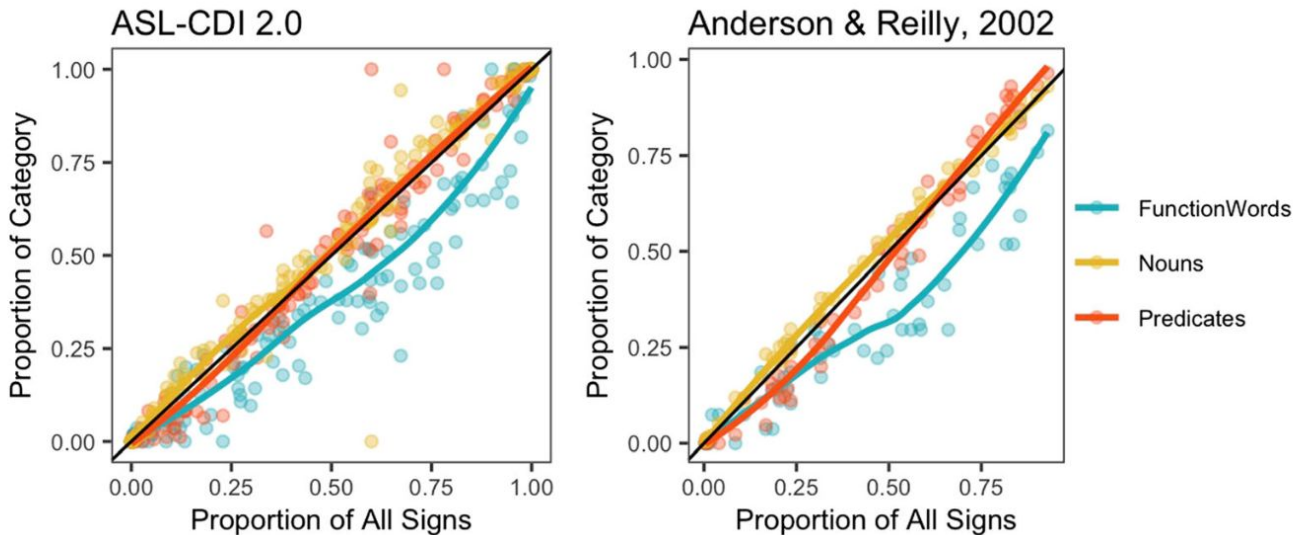


Typical phonological errors from a 2;0 koda  
<https://youtu.be/InGloVPEAnk>



# Sign language as L1: Vocabulary

Two ASL adaptations of the MacArthur-Bates Communication Development Inventory (CDI) report vocabulary patterns for DoD children that are similar to those observed for other languages.

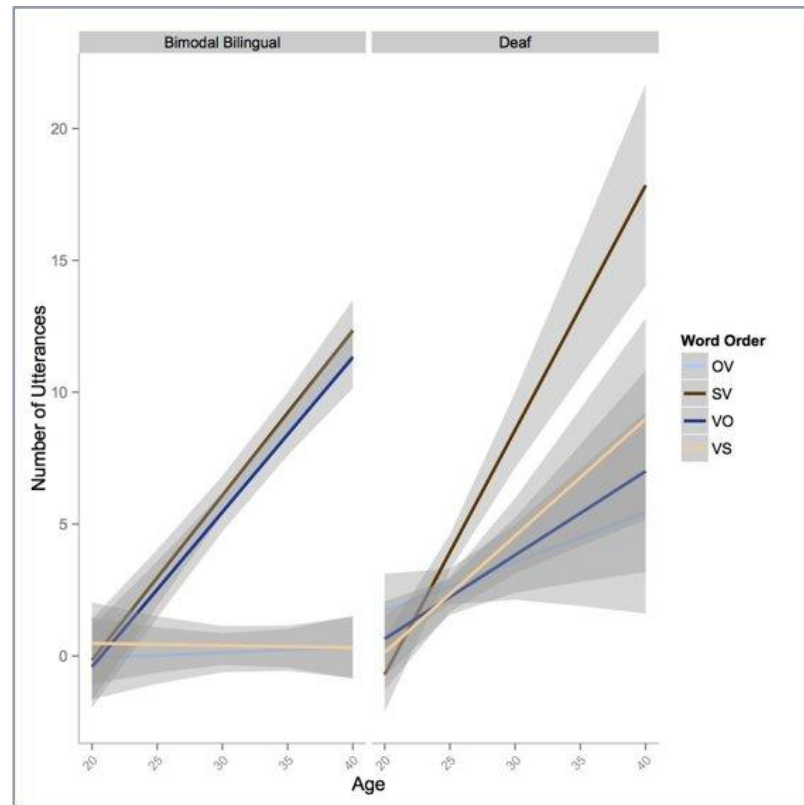


# Sign language as L1: Early syntax

	Koda/DDCI	Deaf
SV	23 mo.	23 mo.
VS	*	30 mo.
VO	23 mo.	23 mo.
OV	*	30 mo.

Similar reduction in word order variation for Wh-questions for koda/DDCI; likely **heritage language effect**.

Early syntax



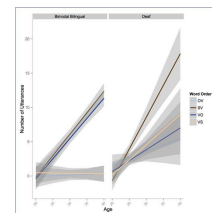
# Sign language as L1: Summary



Manual babbling parallels vocal babbling patterns



Expressive > Receptive vocabulary; typical semantic categories; early noun bias



Infant perception

Infants are sensitive to visual prosodic patterns that distinguish sign languages, even without prior exposure

Babbling

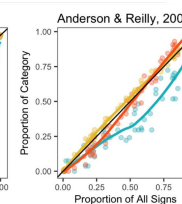
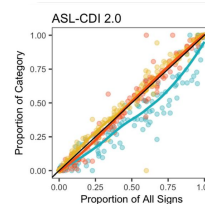
Early phonology

Typical phonological errors involve simplification and substitution

Vocabulary

Early syntax

Toddlers use basic word order patterns early, but word order variation is subject to heritage language effects.

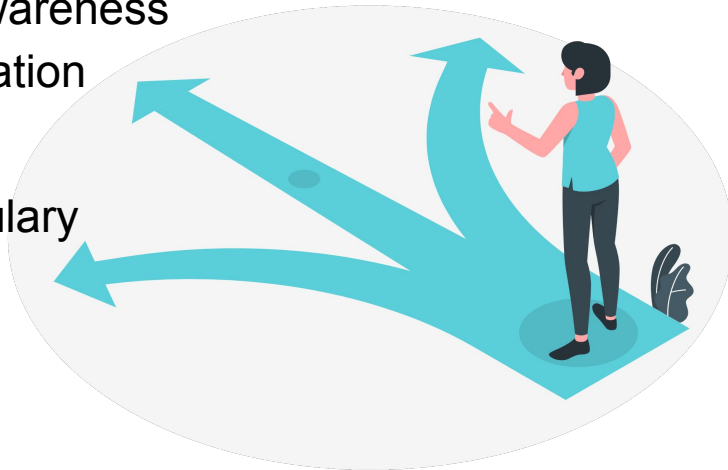


# English development by bimodal bilinguals

General language measures  
Preschool Language Scale

Phonological awareness  
Phonetic articulation

Expressive vocabulary  
Productive syntax



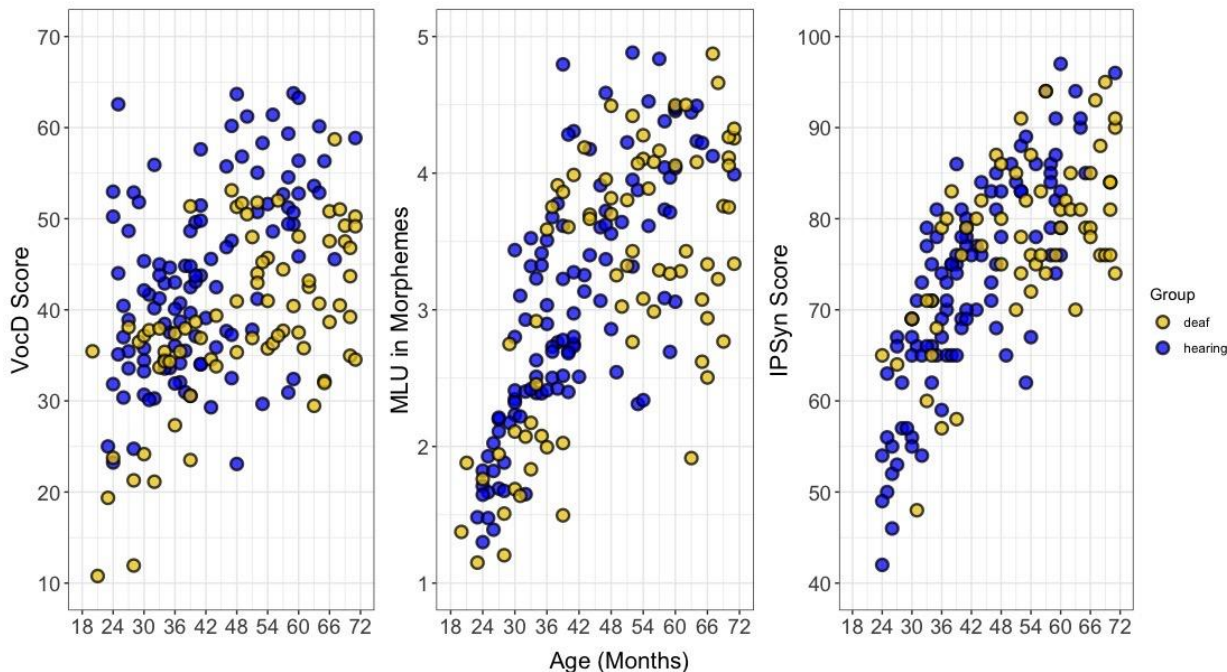
Kodas and deaf children with CI who use a natural sign language with their Deaf families scored in the normal range for hearing children on standard English tests, outperforming oral-only DHH children.

Davidson, Lillo-Martin & Chen Pichler (2014)

[Marketing illustrations by Storyset](https://storyset.com/marketing)

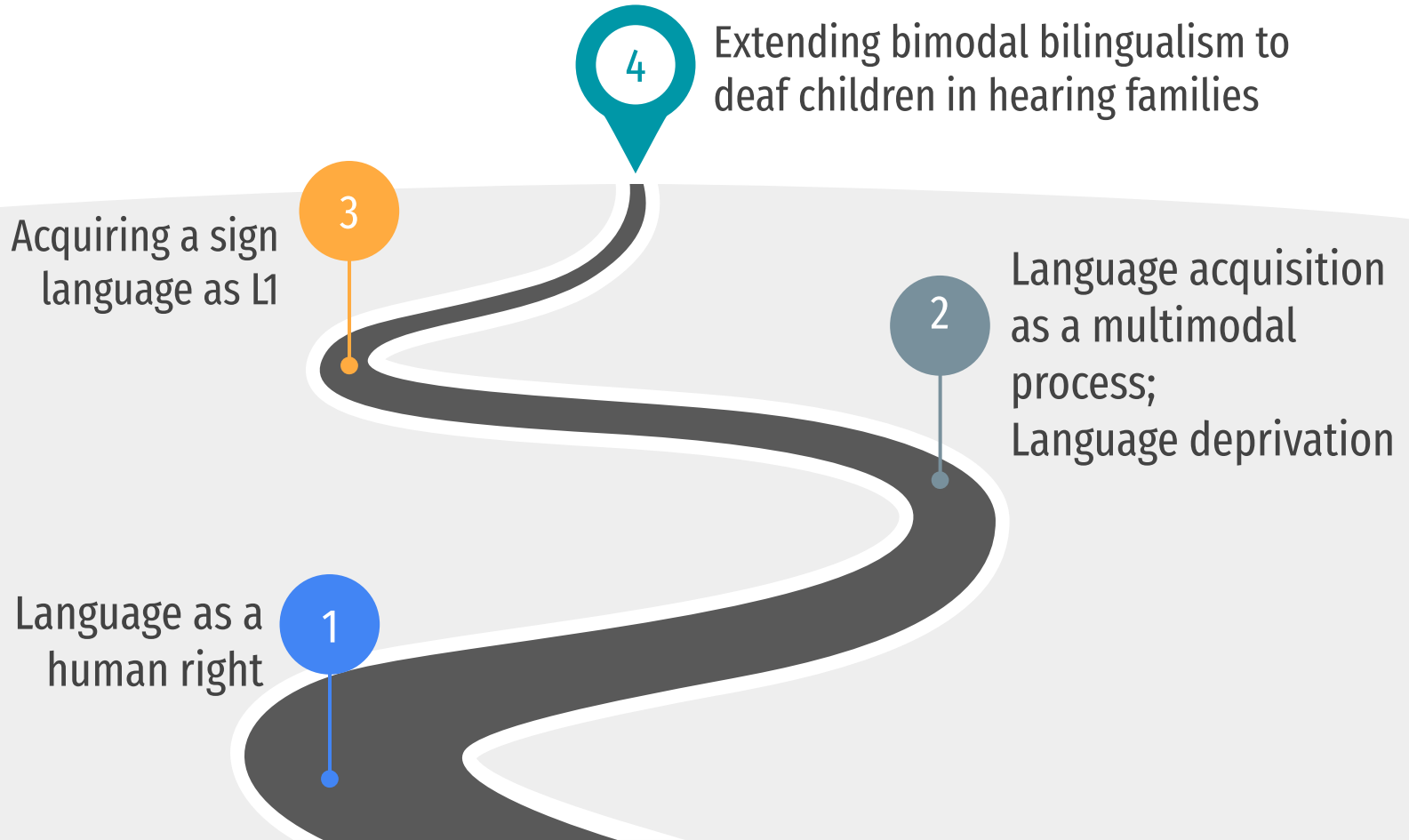
# English development by bimodal bilinguals

Analysis of longitudinal English data from 12 bimodal bilingual children (6 DDCl, 6 koda):

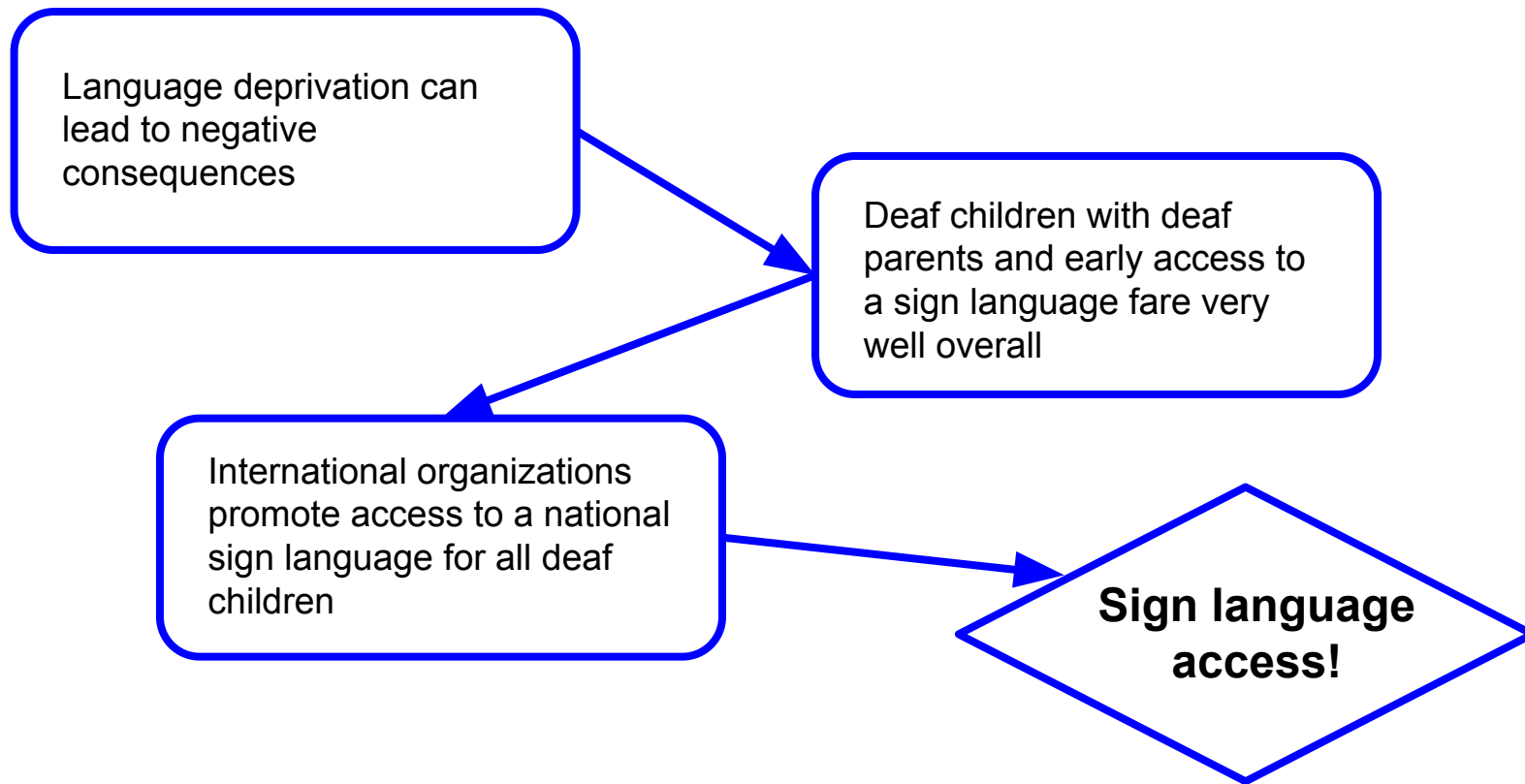


Goodwin & Lillo-Martin (under revision)

# Roadmap for this talk



# Bimodal Bilingualism as a Solution to the Language Deprivation Problem



# Learning from the Model of Deaf Parents

As deaf adults, deaf parents understand about effective ways to communicate with deaf children.

What strategies are used by deaf parents when communicating with their children?





# Visual Strategies



**Attention**

**eyegaze for  
attention**



**Parentese**

**exaggerate  
movements**



**Joint  
Attention**

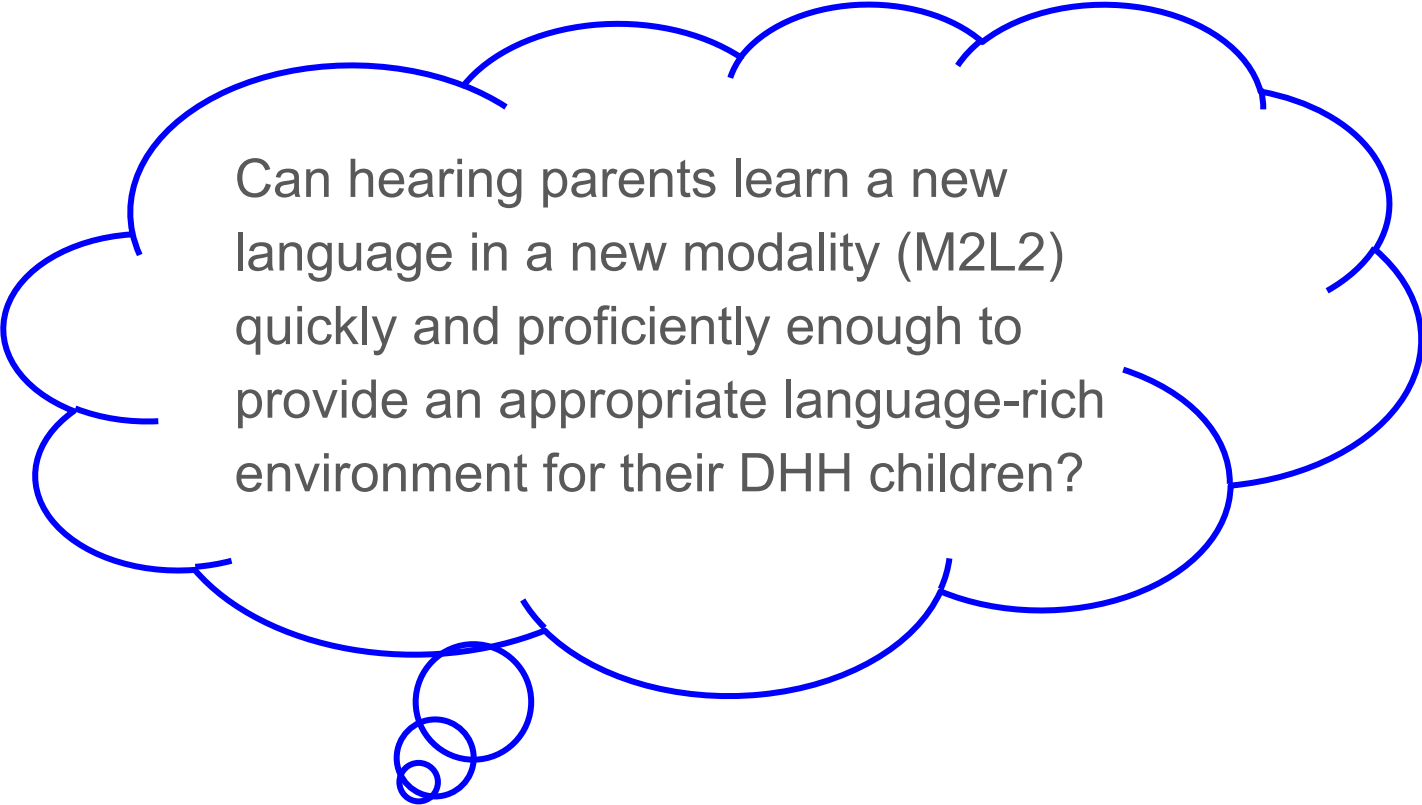
**wait time  
to explore**



**Shared  
Reading**

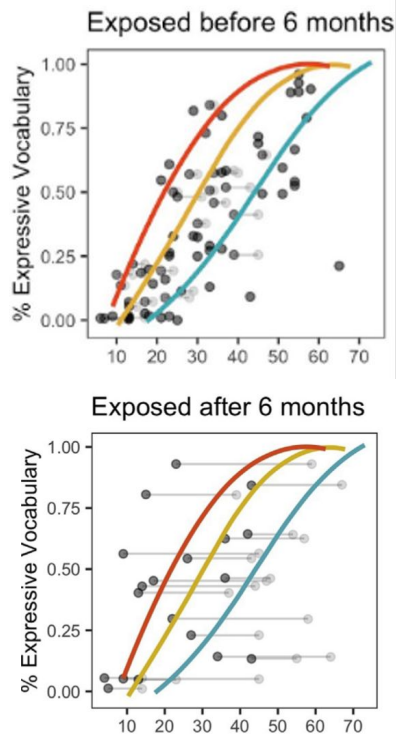
**adjust sign  
placement**

# Hearing Parents as M2L2 Learners



Can hearing parents learn a new language in a new modality (M2L2) quickly and proficiently enough to provide an appropriate language-rich environment for their DHH children?

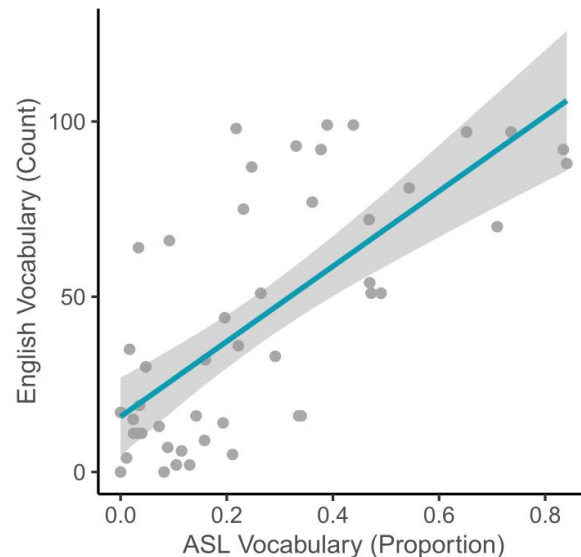
# Vocabulary development in deaf children with hearing parents learning ASL



Caselli et al. 2021

Children exposed to ASL by 6 months develop ASL vocabulary on par with deaf children from Deaf, signing families.

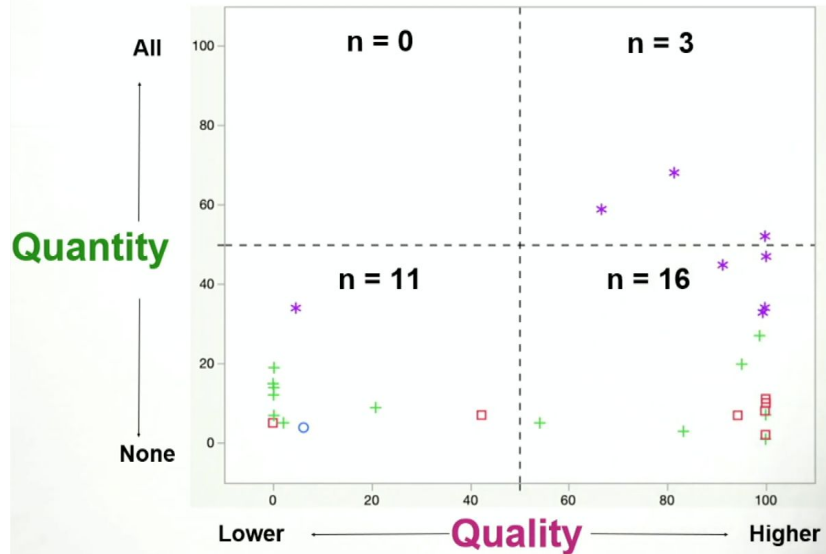
Also, children's ASL and English vocabulary are strongly correlated.



Pontecorvo et al. 2023

# Low quantity (not quality) is the bigger barrier to child ASL development

Question 4: What is the relationship between quality & quantity of ASL input?



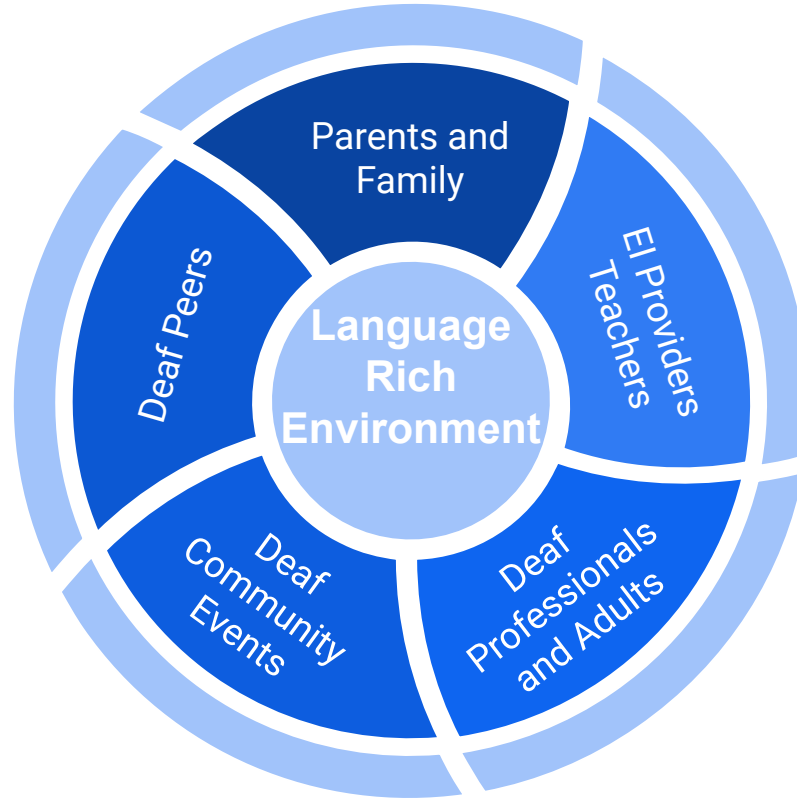
30 DHH children learning ASL.

DHH Language Exposure Assessment Tool (D-LEAT):

- no one is getting large quantities of poor ASL.
- some get low quantities of low quality ASL.

**Focus on increasing quantity.**

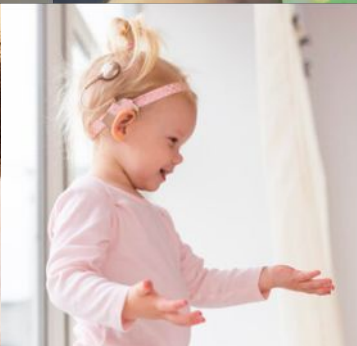
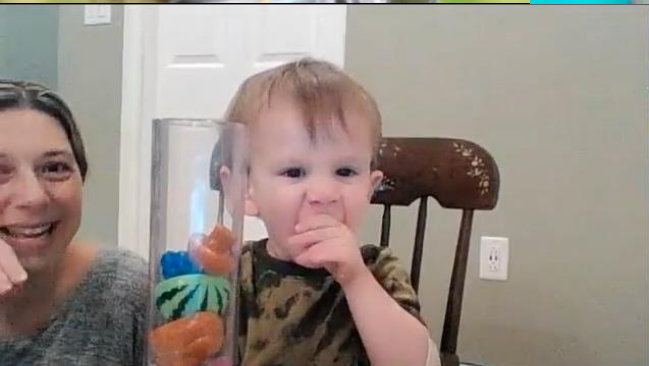
# Strategies for Providing a Language-Rich Environment for DHH Children



**Conclusion**



Photo credit: J.A. Hochgesang & O.V. Cameron





**SIGN LANGUAGE**  
*Rights for All!*



WORLD FEDERATION OF THE DEAF



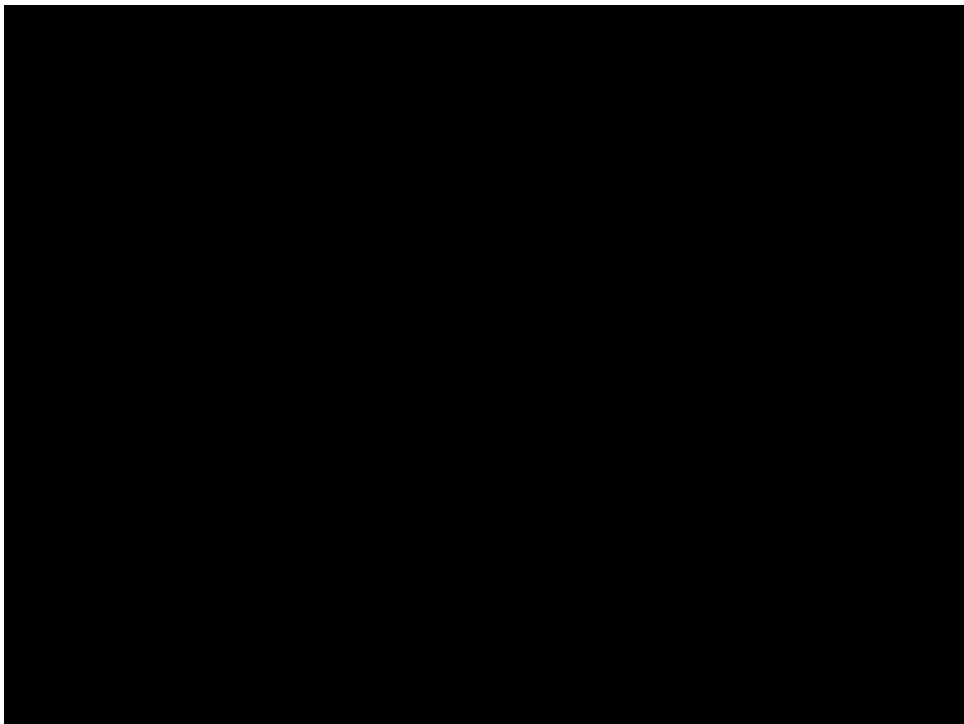
*International Week  
of the Deaf*  
September

**INTERNATIONAL WEEK  
OF THE DEAF 2019**

*23-29 September 2019*

***International Week of the Deaf 2019***  
***Theme***







**SIGN LANGUAGE**  
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Spare Slides

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# Bimodal bilinguals: Code-blending

Bimodal bilinguals engage in frequent code-mixing, a quintessential bilingual behavior, in the form of code-blending (simultaneous sign + speech/whisper)



# Bimodal bilinguals: Language choice

