



Grammaticalization of points in Nicaraguan signing

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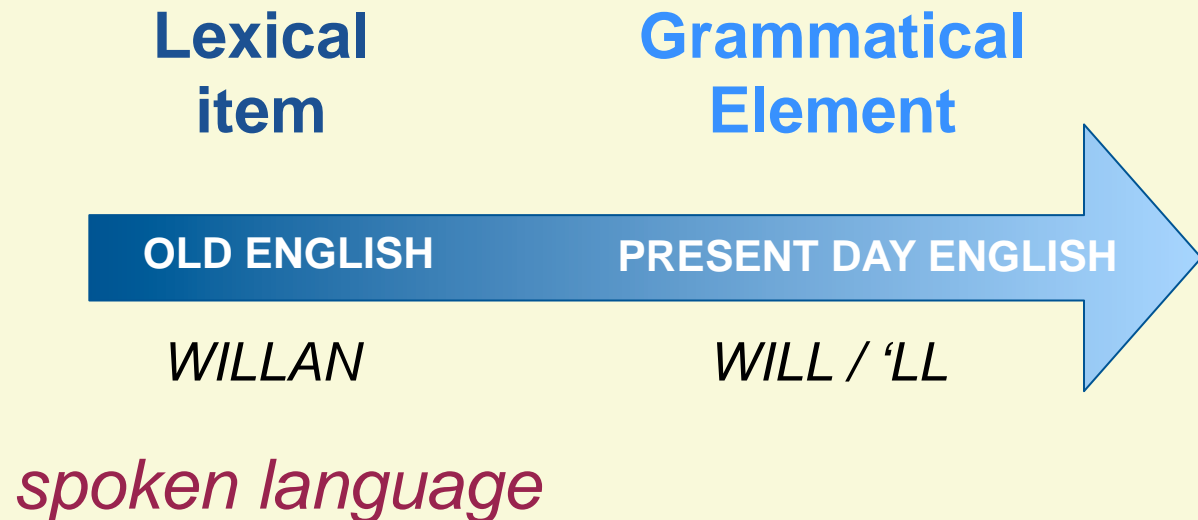
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Grammaticalization Pathways

(Hopper & Traugott, 1993; Janzen & Shaffer 2002; Wilcox, 2004; Pfau & Steinbach 2006)



Grammaticalization Pathways

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sign language



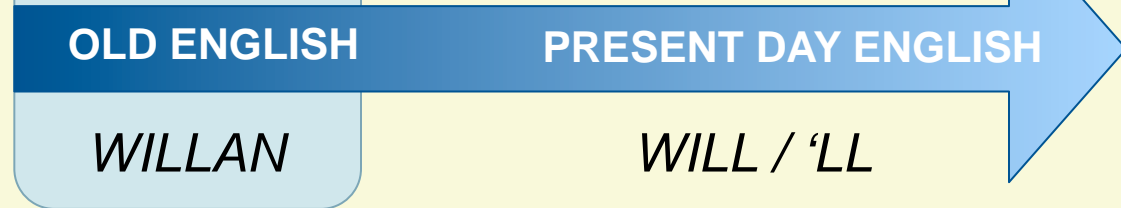
“to leave”

**Lexical
item**



future marker

**Grammatical
Element**



WILLAN

WILL / 'LL

spoken language

Grammaticalization Pathways

(Hopper & Traugott, 1993; Janzen & Shaffer 2002; Wilcox, 2004; Pfau & Steinbach 2006)

sign language



- Conventional Gesture
- Manner
- Non-manuals

**Non-Lexical
Forms**



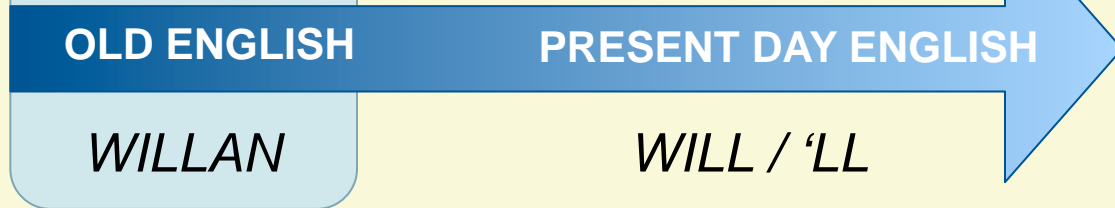
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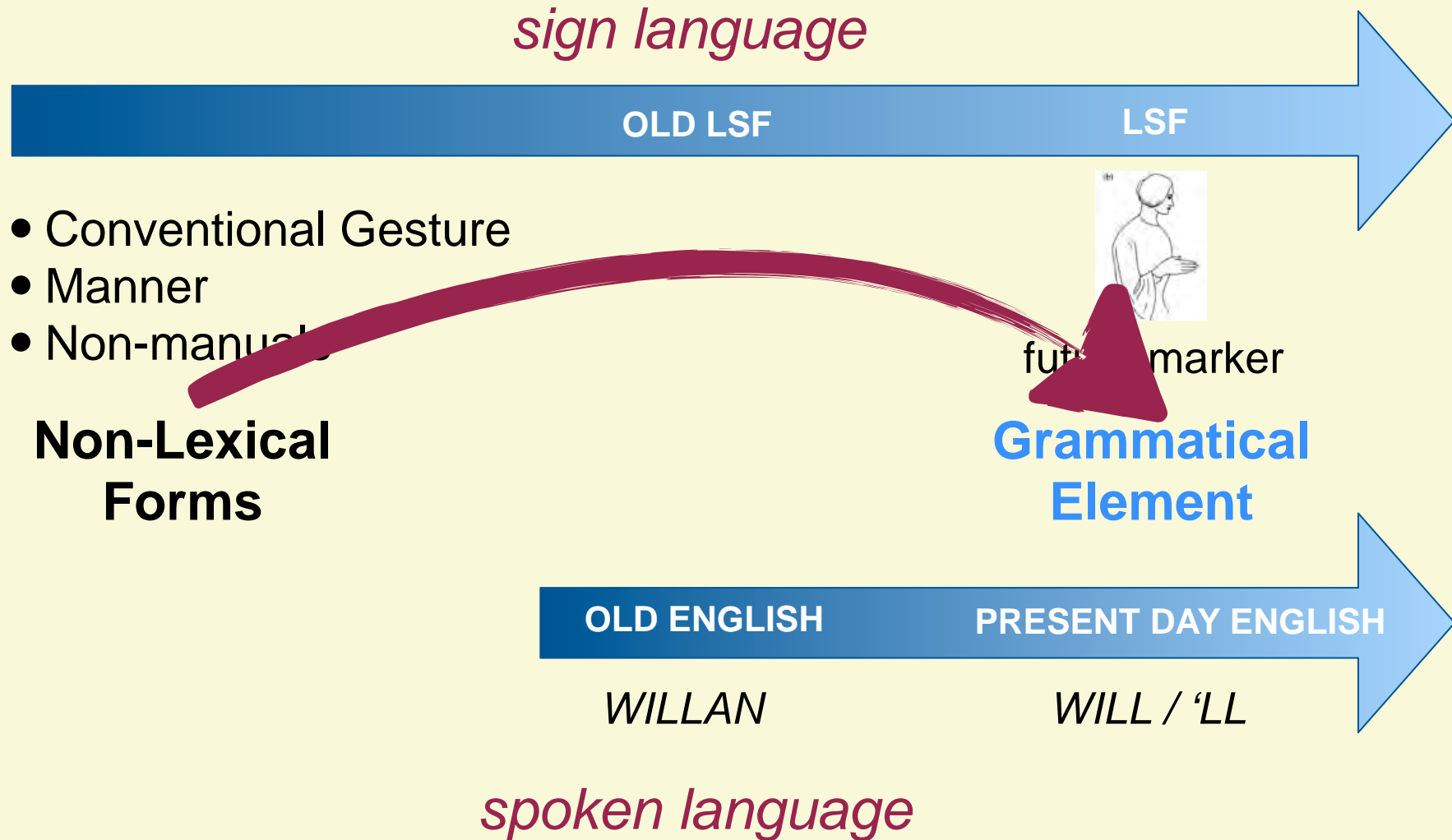
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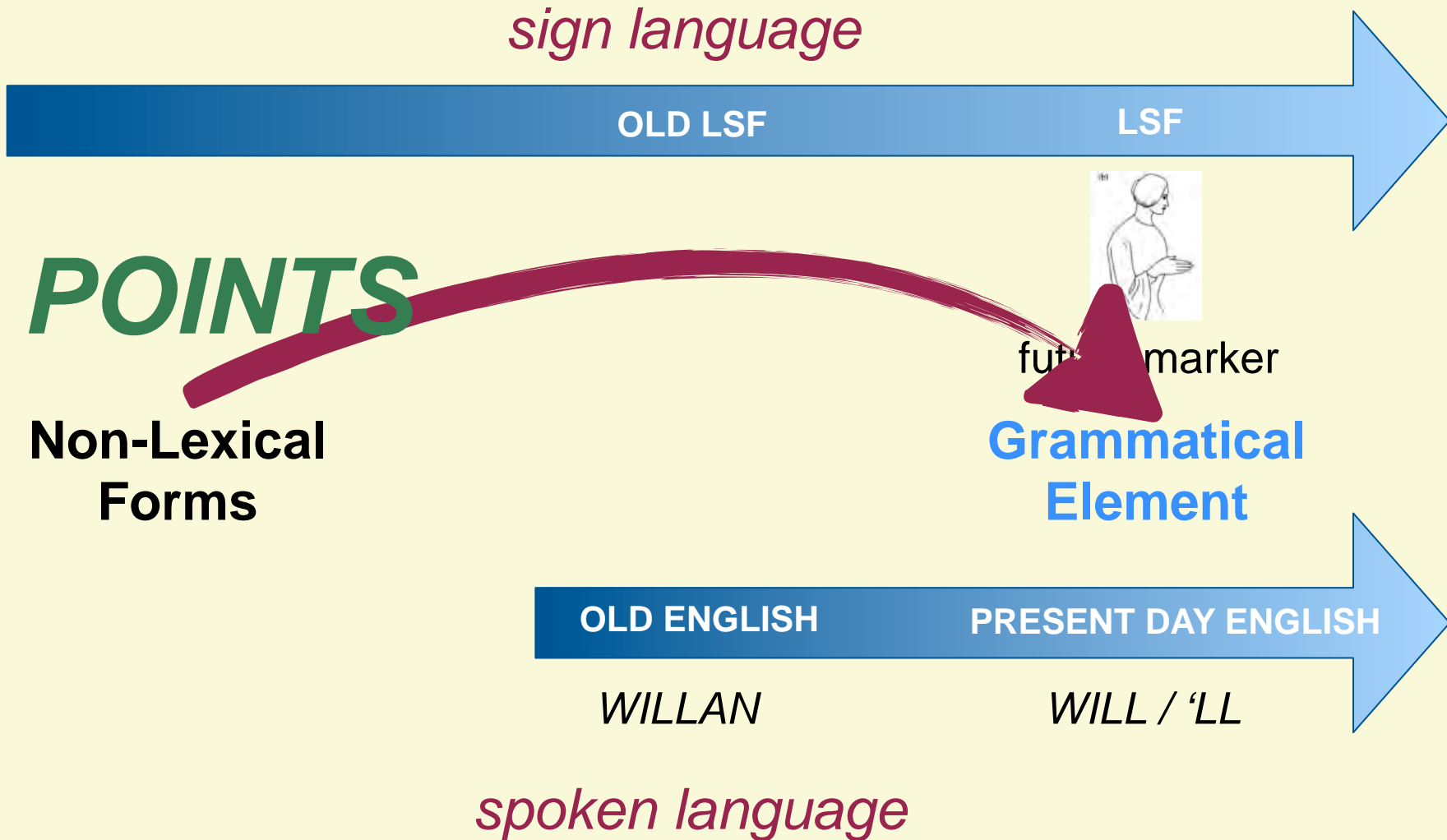
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Nicaraguan children today

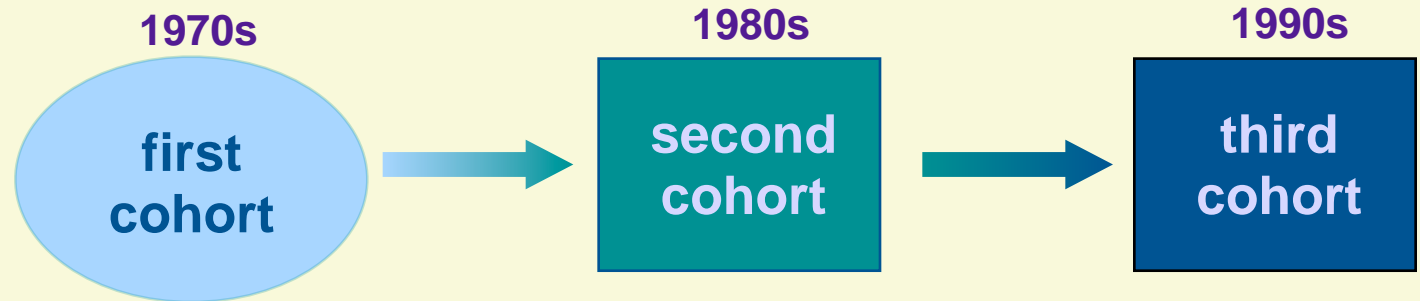


Nicaraguan teens today



Nicaraguan adults today





The emergence of the Nicaraguan Deaf community

co-existing cohorts of learners

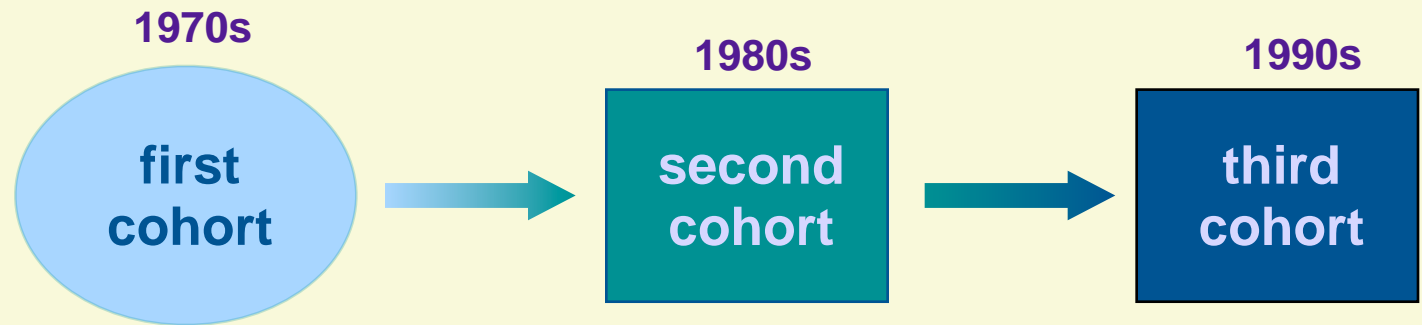


By comparing signers of different ages today, we can see the course of language emergence.

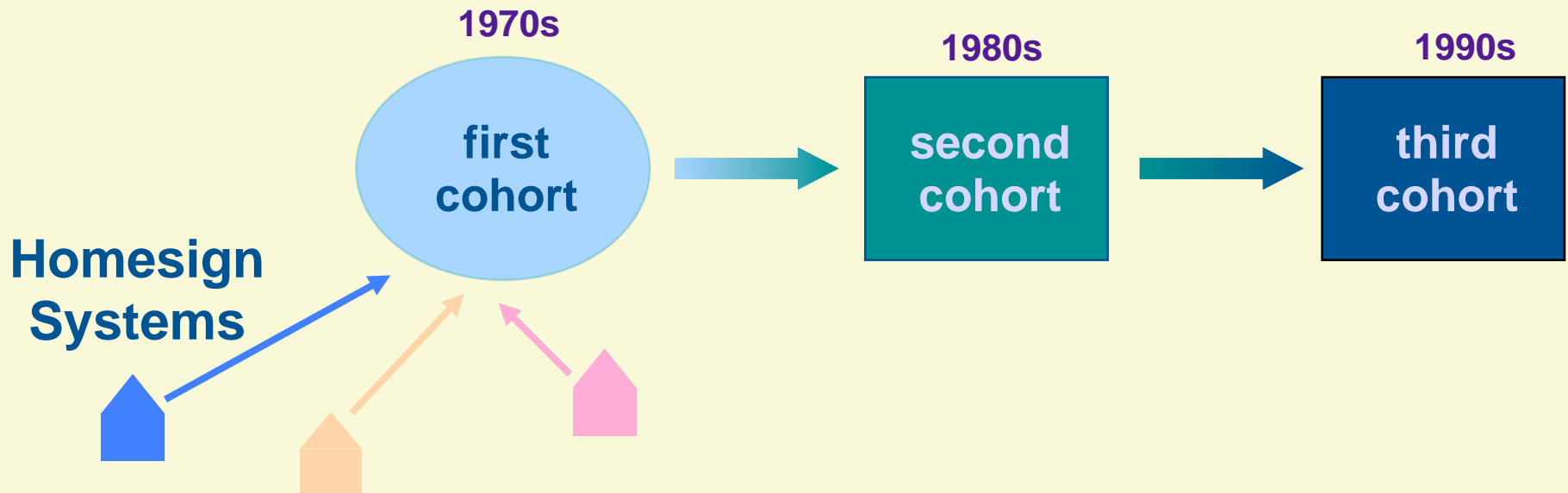


Homesigner in Nicaragua

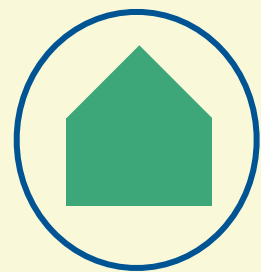




The emergence of Nicaraguan Sign Language



The emergence of Nicaraguan Sign Language



HomeSign
Systems



1970s

first
cohort



1980s

second
cohort



1990s

third
cohort

The emergence of Nicaraguan Sign Language

Method

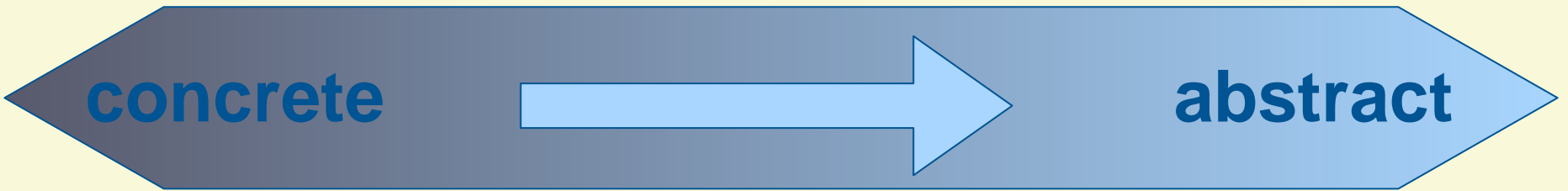
- 16 deaf people participated
 - ➔ 4 Homesigners who don't know NSL or each other
 - ➔ 4 signers from Cohort 1 of NSL
 - ➔ 4 signers from Cohort 2 of NSL
 - ➔ 4 signers from Cohort 3 of NSL
- Each person saw a cartoon of Tweety the bird and Sylvester the cat, and then signed the story to another person
- Every point identified and coded
 - points to real object (n = 11)
 - points to empty space and chest (n = 542)

Method

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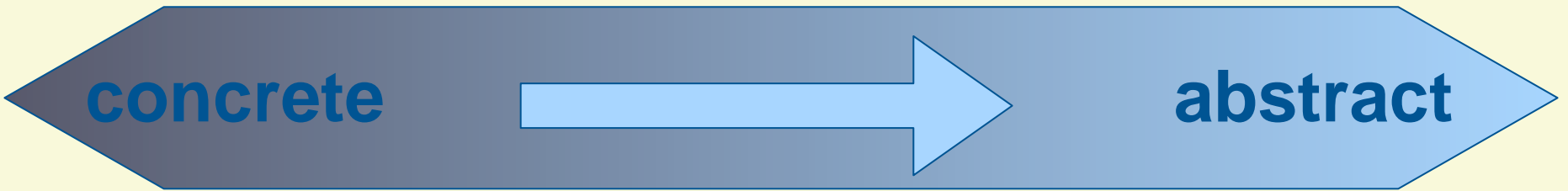
all YOUNG learners!

FORM



FORM

point to a
space on
the right



real space
on the right

FORM

point to a
space on
the right

point to a
space on
the right

concrete

abstract

real space
on the right

story space
(e.g., to a
character's right)

FORM

point to a
space on
the right

point to a
space on
the right

point to a
space on
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concrete

abstract

real space
on the right

story space
(e.g., to a
character's right)

**story
character**
(not space!)

FORM

point to a
space on
the right

point to a
space on
the right

point to a
space on
the right



gesture

language

real space
on the right

story space
(e.g., to a
character's right)

**story
character**
(not space!)

FORM

point to a
space on
the right

point to a
space on
the right

gesture

language

story space
(e.g., to a
character's right)

**story
character**
(not space!)

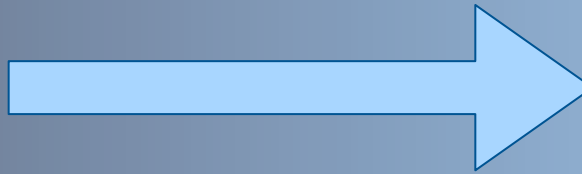
reliability = 95%

FORM

point to a
space on
the right

point to a
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the right

gesture



language

story space
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character's right)

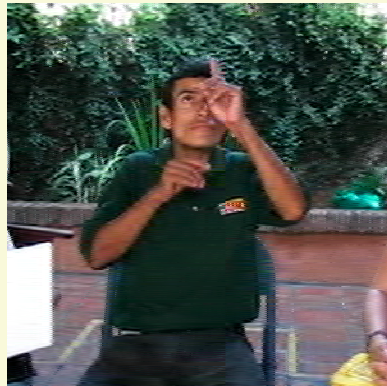
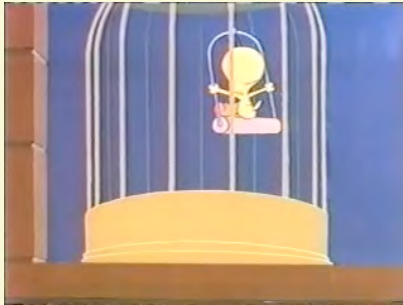
**story
character**
(*not space!*)

***Locative
(place)
point***

***Nominal
(noun)
point***

reliability = 95%

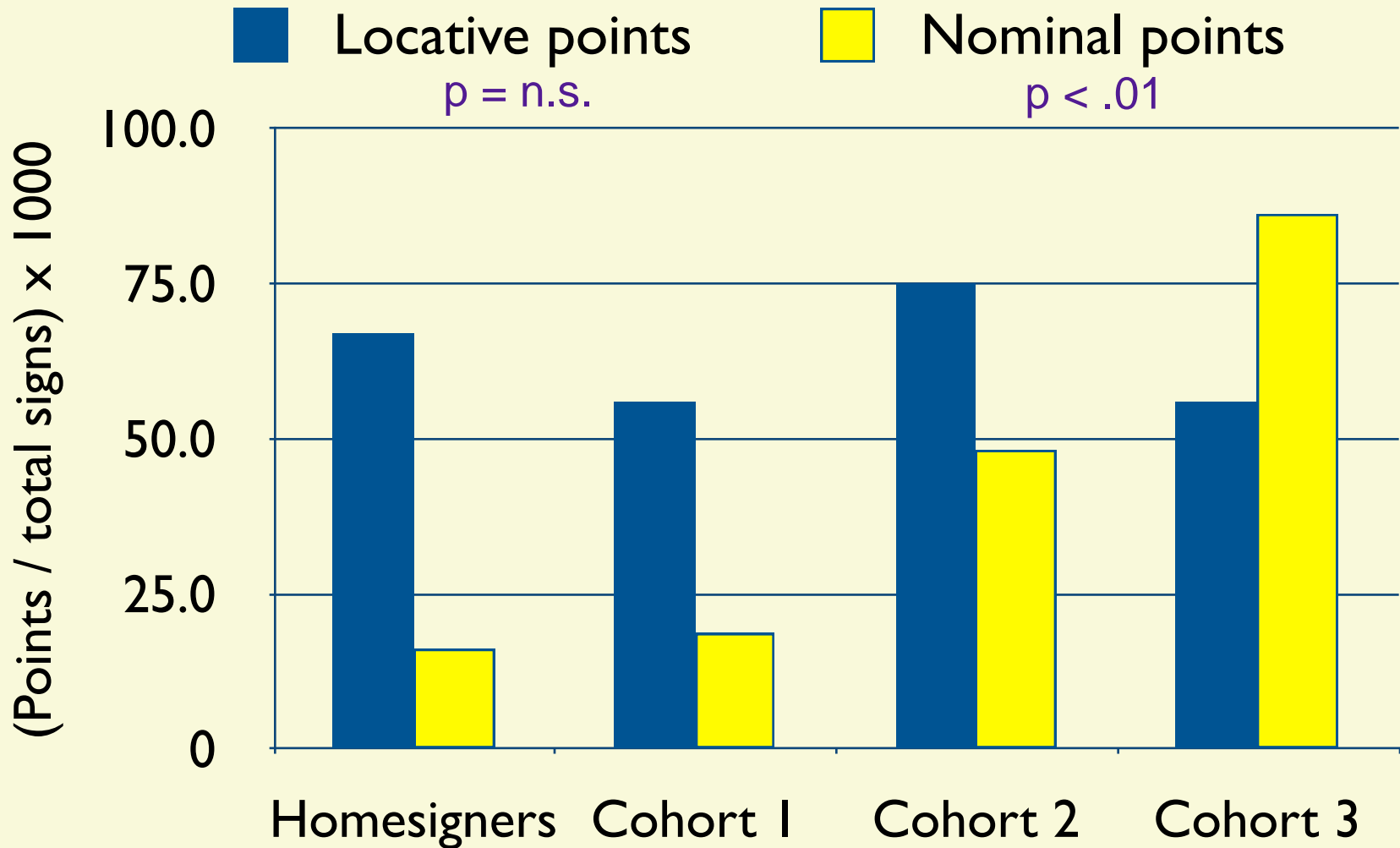
Point that refers to a location



Point that refers to a character



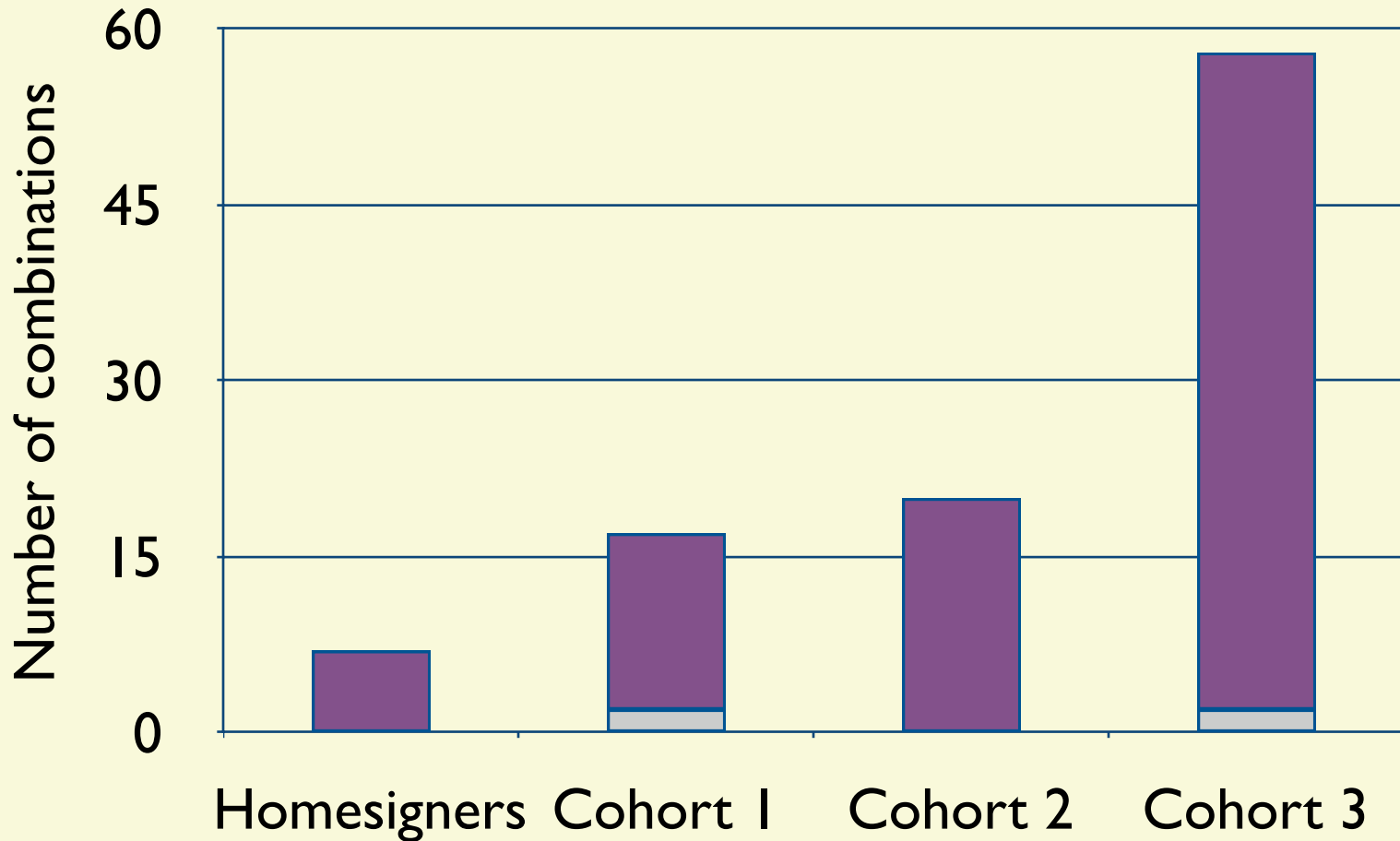
Locative points do not change but nominal points increase



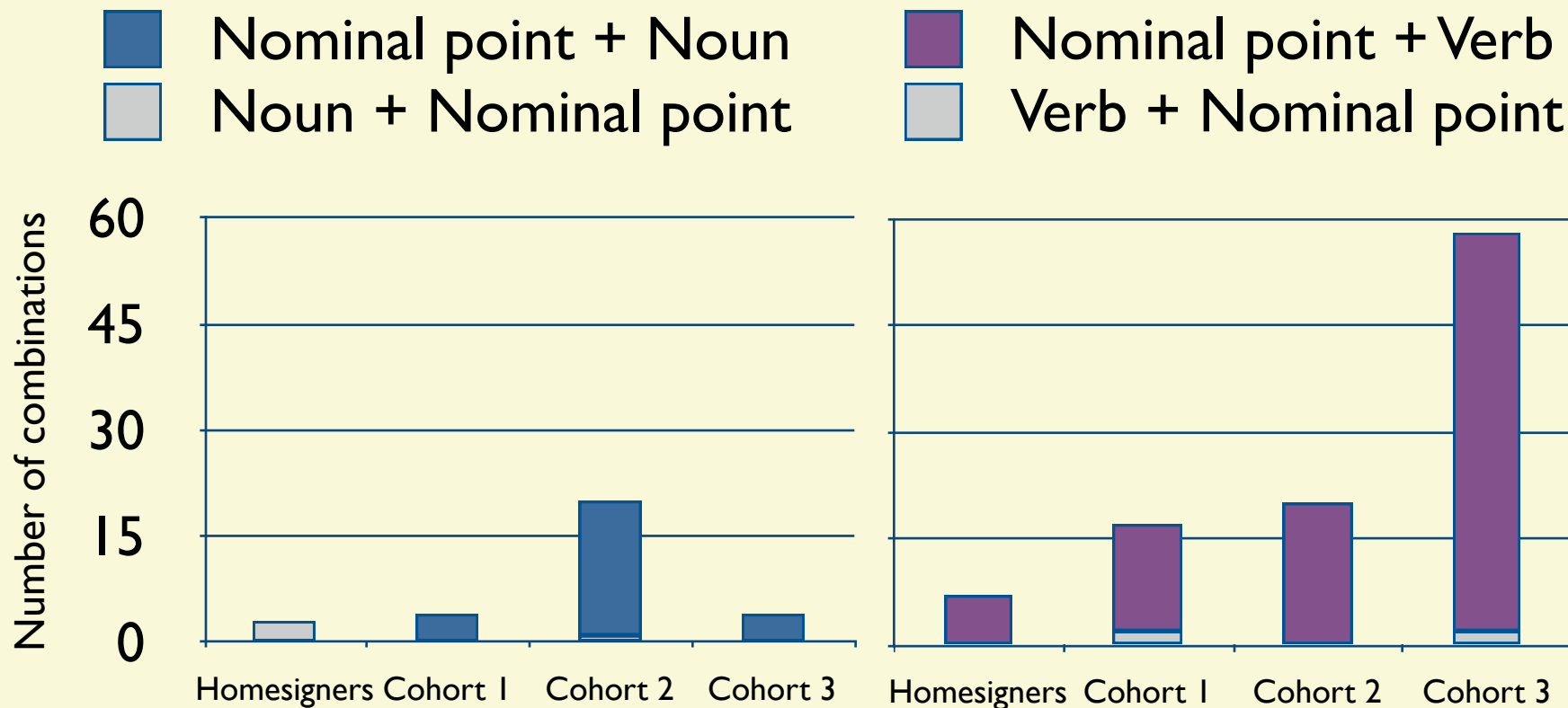
Coppola & Senghas, *Sign Languages*, D. Brentari, Ed., Cambridge University Press, 2010.

Nominal points fill subject slots

■ Verb + Nominal point ■ Nominal point + Verb

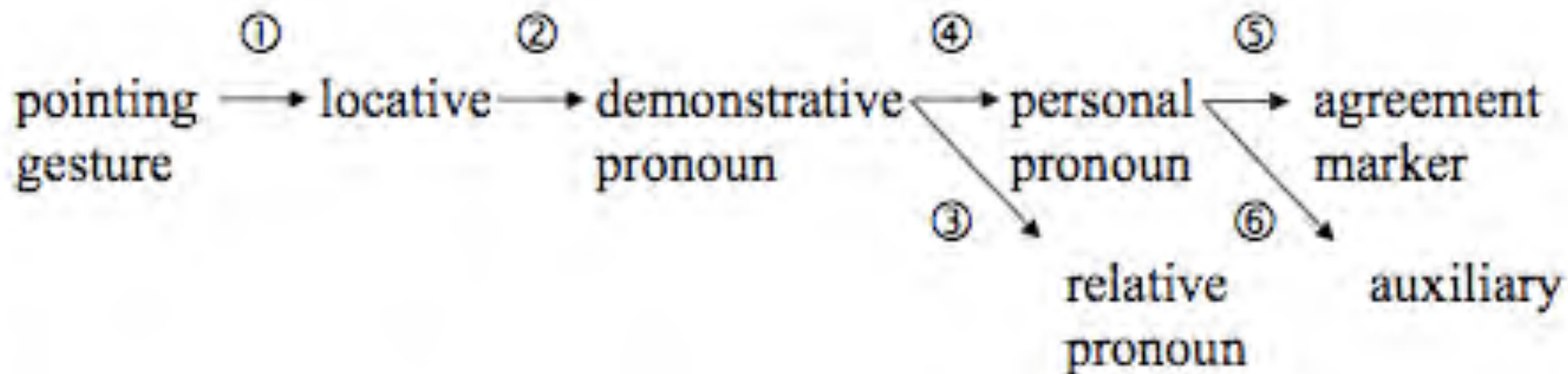


Emergence of Subject + Verb combinations



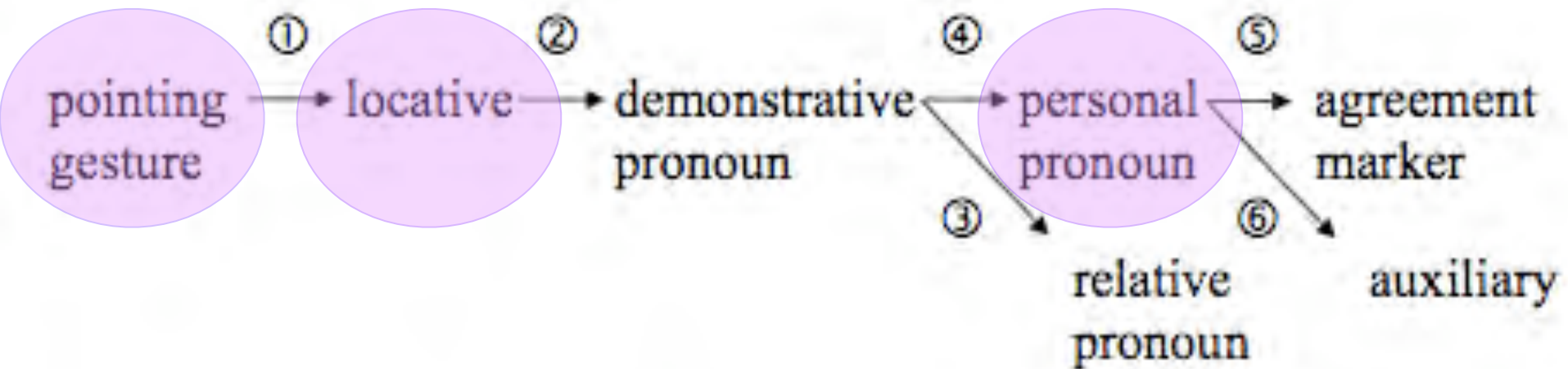
Proposed grammaticalization path for points

(Pfau & Steinbach 2006)



Proposed grammaticalization path for points

(Pfau & Steinbach 2006)



In Nicaragua, within 30 years, the “simple” point has evolved:

- from gesture that picks out a real object
- to an abstract point at empty air
 - that refers to some non-present referent
 - at some non-present time
 - serving a particular linguistic role in the sentence (such as syntactic subject)

Language emergence follows the path of historical language change and grammaticalization in a shorter time span.

We propose that the same mechanisms underlie both kinds of language change.

Future analyses

- Began with **points** and compared their functions in the grammar
- Next: begin with ***characters*** and track how signers refer to them throughout the narrative

Acknowledgements

All participants and their families
Nicaraguan National Deaf Association
Melania Morales Center for Special Education

Molly Flaherty, Jennie Pyers,
& Deanna Gagne



Funding sources:

National Institutes of Health: NIDCD (to Ann Senghas)
National Institutes of Health: NIDCD (to Susan Goldin-Meadow)
National Science Foundation (to Diane Brentari)