

Prelinguistic Behaviors

When does Language Acquisition BEGIN??

Newborns (3 days old) Preference

- Mother's voice
- Native Language

“Protoconversations”

- 'Turn-taking' during breast feeding
- passive vs active

Speech Recognition: English

- Categorical Recognition(6-10 mo)
 - TA/DA or PA/BA
 - EEHHH/AHHH

Biological Capacity to recognize categories which will have linguistic significance

Speech Recognition (con't)

Distinctions fade/ignored (10 mo)

ba/pa in infants from spanish-speaking environments

la/ra in japanese-speaking environments

*Bilingual Perception/Distinctions

Syntax Awareness

- 4 1/2 months: proper sentence endings
-regardless of language

Jusczyk, 1991:

- Sentences:
 - At the bakery, workers will be baking bread.
 - *On Tuesday morning, the people have going to work
- Grammatical vs ungrammatical (18 mo.)

Early Production of Speech-like behaviors

- Infant Cry analysis
 - Communication intonation
 - 3-5 months vs 7-8 months
- Babbling
 - Play with sound alone
 - Variation

Vocal Babbling Stages

- 1 mo: cooing, vowel sounds
- 6 mo: CV babbling, play alone (including Deaf babies)
- 9-12 mo: overlap with first word
intonation patterns (lang)
complex sounds
Deaf babies stop

Relationship between Babbling and Speech?

Relationship between Babbling and Language?

-Early Brain imaging studies (Petitto, et al)

Summary: Prelinguistic

- 10 mo: infants affected by input
- Production: not seem as important
- ***Desire to communicate**

NEXT: Sign Babbling

Petitto, L.A. and Marentette, P.F. (1991). Babbling in the Manual Mode

- Research Questions
 - Are the innate abilities of language users specific to SPOKEN language and sparked into use only by speech?
 - Can sign language spark these innate abilities?
- If both: evidence of BRAIN based language capacity.

Research

■ SUBJECTS

- 5 infants @ 10, 12, & 14 months)
 - 2 DCDP learning ASL
 - 2 HCHP learning English
 - 1 HCHP learning French

■ DATA

- Natural and experimental
- Manual activity=gestures/hand movements

Data: Manual Activity=gestures + babbling

Hearing babies

- gestures with meaning
- manual babbles 4-15% of manual activity
 - only 3 handshapes in 80% (F, O, bO)
 - 84% one movement
 - 100% in neutral space
- little variation and development

Deaf babies

- gestures with meaning
- manual babbles 32-71% of manual activity
 - 32% of ASL handshapes
 - 54% of ASL movements
 - 98% in neutral space
- continuation of preferences for first signs

Data: A Closer look

- Manual Babbling: “linguistically important handshapes/movements” “syllables”
 - 5, 5-claw, g, a a-thumbextend, s, B, l, F, C, O, bO, *A-thumb insert
 - Syllabic Babbling=2 hs repeated

Conclusions: Manual and vocal babbling

- Both between 0;4-1;0 similar time frames
 - Babbling occurs in phonetic/syllabic forms
 - Play-no communication/meaning intent
 - Infants look for language patterns in the environment
 - Babbling patterns help predict phonology of first sign/word
- **THUS**, stimulation of innate language abilities likely happen in **LANGUAGES** regardless of modality

final Thoughts...

- Interesting Fact
 - Deaf mothers responded to sign babbling with language...gestures with action...
- Limitations
 - Small sample...cross-linguistic sign
 - **Necessity** of babbling for language acquisition