

Can a Click be a Word?

Infants' Learning of Unassimilable yet Linguistic Labels

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Question

- What types of symbol-forms will infants accept as potential object labels?

Background

- A narrowing occurs by 20 mo for “what may be a word”:
 - 14-17mo infants accept a wide range of symbols as labels, while 20-26mo infants accept only words (Namy & Waxman, 1998; Namy, 2001; Woodward & Hoyne, 1999).
- However the extent of this narrowing is unknown.
 - Do 20+mo infants exclude only non-language sounds as labels, or non-native sounds as well?
- Is this narrowing influenced by the presence/absence of referential cues in the word-learning situation?
 - In a purely associative word-learning task, even younger infants (12mo) appear to be selective in what they will accept as a label (Mackenzie, Graham, & Curtin, 2011).

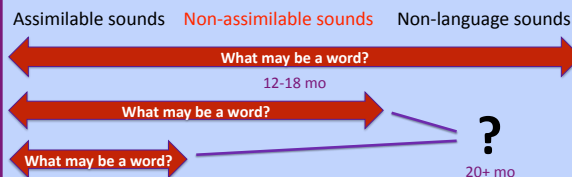
Hypothesis

Native Language Word-Learning Constraint (NLC)

- For older infants, symbols are accepted as labels only when all the components assimilate into native language speech sound categories



What may be a Word: Developmental Narrowing



Methods

Study 1: Referential Word-Learning with 14mo	Establish Referential Word-Learning Methodology
Study 2: Referential Word-Learning with 20mo	Explore Native Language Word-Learning Constraint (NLC)
Study 3: Associative Word-Learning with 14mo	Compare NLC across Referential & Associative Word-Learning
Study 4: Associative Word-Learning with 20mo	Compare NLC across Referential & Associative Word-Learning

Stimuli

- CV words containing click consonants, from the language N|uu.
- [!a] and [!|u]



Referential Word-Learning Task

(Fennell & Waxman, 2011)

Training (x4): [kitty]

Habituation:

- Pair 1: [!a]
Pair 2: [!|u]

Test:

- Same: [!a]
Switch: [!|u]

Associative Word-Learning Task

(Werker, Cohen, Lloyd, Casasola, & Stager, 1998)

No Training

Habituation:

- Pair 1: [!a]
Pair 2: [!|u]

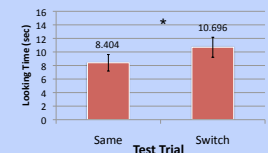
Test:

- Same: [!a]
Switch: [!|u]

Results

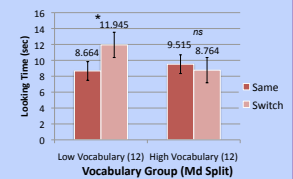
•Study 1

- Referential Word-Learning
- 14mo (n=16, 13.75-14.5m)
- MacArthur CDI Short-Form I



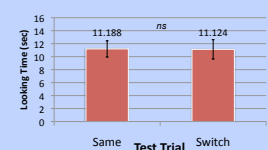
•Study 2

- Referential Word-Learning
- 20mo (n=24, 19.5-20.5m)
- MacArthur CDI Short-Form IIA



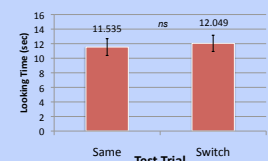
•Study 3

- Associative Word-Learning
- 14mo (n=16, 13.75-14.5m)
- MacArthur CDI Short-Form I



•Study 4

- Associative Word-Learning
- 20mo (n=20, 19.5-20.5m)
- MacArthur CDI Short-Form IIA



Discussion

- In the referential word-learning situation only, 14mo and low-vocab. 20mo infants treated unassimilable click words as potential labels, while high-vocab. 20mo infants did not.
- Supports emergence of a Native Language Word-Learning constraint as the lexicon is established.
- Results indicate that both the availability of referential cues and the similarity of word-forms to native language sounds impact the range of symbols infants accept as potential labels.