Language Acquisition
(in Early Childhood)

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• VIDEO
Language Acquisition in Early Childhood

First Language Acquisition
- Cantonese
- English

Bilingual
- Hindi
- French
- Mandarin

Second Language Acquisition
- Arabic

Second First Language Acquisition
- Cree
- Inuktitut

Monolingual
- African American English

Spanish
Linguistic Diversity in Canada
(Statistics Canada, 2006)
Today’s Focus

• First Language Acquisition
  – English

• Typical Language Development

• Second language acquisition in immigrant children
Why study child language acquisition?

“...a child who has acquired an incredibly complex and powerful system. If we understood how children accomplish this task, we would know something substantial about how the human mind works”

(Hoff, 2009)
What do children need to learn when they acquire a language?

• Four Domains
  – Phonology (sounds)
  – Lexical (Vocabulary)
  – Grammar (sentences)
  – Pragmatics (context-dependent rules, style)
Phonology (Sounds)

• **Perception and categorization**
  - sit vs. zit
  - bias towards their language by 9 months

• **Production**
  - Birth: reflexive crying
  - 2 months: cooing
  - 4 months: laughing and vocal play begins
  - 7 months: reduplicative babbling (mamamama)
  - 10 months: nonreduplicative babbling (padeeta)
  - 12 months: first words

Hoff (2009)
Lexical (Vocabulary)

2.5-week intervals starting at 14 months

Spurt at 16 months

Spurt at 19.5 months

Spurt at 22 months

Gradual word learner

Cumulative vocabulary

Reproduced from Hoff (2009)
Noun Bias

• Early vocabularies (first 50 words) = mostly nouns (names of things: people, food, body parts, etc.)
  – English-speaking children: 45% nouns, 3% verbs
  – Korean, Japanese, and Chinese-speaking children: much less of a noun bias
Grammar (Sentences)

Reproduced from Hoff (2009)
What does a sentence need?

• **Word Order**
  – In English, words have to go in a certain order. (e.g., John gave Mary the book).
  – Children have to learn the general rules of English, but also exceptions. (e.g., NOT: John carried Mary the book).
  – Overgeneralization: “I said her no” (should be: I said no to her)

• **Inflectional Morphology**
  – 2 year-olds: Telegraphic speech (e.g., mommy sock, three ball)
    • Telegraphic stage may not be universal. For example, Turkish children add morphemes before building phrases.
  – Early morphemes: -ing, in, on, -s (plural)
  – Late morphemes: -ed (past), BE (is, am, are), -s (third person singular, he runs)
Pragmatics (Style)

- Sociolinguistic development: socially competent language user
- Sociolinguistic practices are culture specific

- Requests
  - Two year olds: more juice! (demand, direct request)
  - Three year olds: Can you give me one car, please? (direct request)
  - Three year olds: you can make a crown (hint, indirect request)
  - 3-5 year olds know more than one way to make requests. Selection based on social situations.

Hoff (2009)
How do children learn language?
(\textit{words})

- **Lexical Constraints**
  - Whole-object assumption: word refer to whole objects
  - Mutual exclusivity: different words refer to different things

- **Pragmatic Constraints**
  - Children use social cues to learn word meanings (e.g., speaker’s gaze)

- **Syntactic Cues**
  - Syntactic bootstrapping

Hoff (2009)
Syntactic Bootstrapping

the rabbit is gorping the duck
vs.
the rabbit and duck are gorping

Hoff (2009)
How do children learn language?

(Grammar)

• **Language is innate:**
  - Language is learned too quickly for it to be fully learned
  - Humans are the only ones with language
    - Other species have communicative systems (e.g., honey bees, vervet monkeys)
    - Chimpanzees and bonobos = approx. 2 year old level of language (lots of training)

• **General Cognition (aka usage-based)**
  - E.g., Memory and Pattern recognition
Child Directed Speech (Motherese)

- Very few grammatical errors
- Focus on the here and now
- Gestures to draw attention
- Lots of repetitions
- Prosodic features are exaggerated (e.g., more pauses, exaggerated pitch changes)

Hoff (2009)
Child Directed Speech (around the world)

“the Western middle-class practice of speaking in short sentences, with exaggerated intonation contours and using restricted vocabulary, while widespread, is not universal” (Hoff, 2009, p. 273-274)

- Chinese mothers tend to encourage more direct imitations of utterances
- Japanese mothers tend to encourage children to be more brief in their narratives
- Other cultures encourage children to frequently listen and observe adult interactions

Hoff (2009)
Differences in children’s language input could lead to differences in the rate and order of language acquisition.

Nevertheless, children from all cultures become competent speakers of their language.
Second Language Acquisition in Childhood

- What do children need to learn when they acquire a second language?
  - Phonology (sounds)
  - Lexical (Vocabulary)
  - Grammar (sentences)
  - Pragmatics (context-dependent rules, style)
Why is Second Language Acquisition in Childhood Unique?

• Child second language acquisition is different from adult second language acquisition
  – E.g. Potential for native-like attainment

• Child second language acquisition is different from first language acquisition
  – E.g., already have a first language; more cognitively mature.
Practical Reasons for Understanding Second Language Acquisition

Test of Early Grammatical Impairment: Screener Scores

Monolingual cut off

2/3 of child second language learners score lower than the monolingual cut off

Sorenson Duncan & Paradis (2012)
Nonword Repetition

- VIDEO
Clinical Insights from A linguist: Nonword Repetition Tasks – Language Free?

- **Phonological short-term memory (STM)**
  - Important for learning new words

- Minimize the effect of vocabulary size

- Language independent measure of language learning?
But Second Language Learning Children DO NOT perform like Monolingual Children

35% of typically-developing child second language learners look like they have a language impairment, when the monolingual norms are used.

Sorenson Duncan (in prep)
More information:

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• Child English Language Resource Center (CHESL)
  – http://www.chesl.ualberta.ca/

• Linguistic Courses:
  – LING 319: Child Language Acquisition (mostly first language acquisition but includes bilingualism)
  – LING 320: Second Language Acquisition (adult focus)
  – LING 419: Linguistics and Child Language Disorders
  – LING 420: Phonological Acquisition