

Autism, Blindness

Unit 3
Class 7

Last Time

- What language deficits tell us
- Language vs. cognition
- Children with a general impairment
 - Down Syndrome
- Children with specific impairments
 - SLI vs. WS

Language and Autism

- Autism: severe developmental disability affecting
 - Social development - poor bonding with parents, peers
 - Stereotyped behaviours
 - "Insistence on sameness"
 - Very poor communication
- Communicative and cognitive abilities vary significantly
 - "low functioning" vs. "high functioning"

Language in Low Functioning Autism

- Very low IQs
- Very poor language abilities
- Some are completely non-verbal
- Echolalia
 - Repeating what they hear
 - Sometimes immediately, other times much earlier
- Facilitated communication
 - 'interpreters' act like Ouija boards
 - Range from 'clever Hans' effects, to outright fraud

High functioning language

- Some individuals have very good language
- Many are 'normal' when compared to IQ matched controls
 - E.g., (much) younger children at a similar mental age as the autistic child
- Some differences:
 - Poor prosody
 - Poor use of words that refer to mental states (due to poor **theory of mind**)
 - Difficulty using social cues to learn names of things

More...

- Generally poor **communication**
 - Not interested in conversations
 - Language produced focuses on their own needs

Interesting?

- Autistic children might have normal grammar, but poor communication
- Suggests a decoupling of
 - the rules of language (grammatical competence)
 - the communicative purpose of language (language performance, social aspects of communication)
- Note recent evidence suggests autistic children *do* have grammar deficits
 - Problems with morphology and syntax similar to SLI!
- Lots of work yet to be done in this field

Bilingualism

Chapter 2 p. 63-68
Chapter 8

Critical Periods

- How does learning a second language (L2) differ from learning a first language (L1)?
- L2 acquisition is harder
- Some people are good at it
 - But not a universal phenomenon like L1 acquisition!
- Age appears to matter

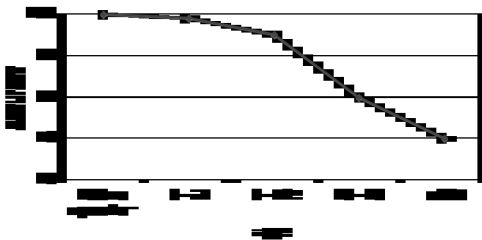
Studies of Immigration

- Oyama (1978), Johnson & Newport (1989)
- Examined language in immigrants who arrived in the US from Asia
- What best predicts success in learning English?
 - Time since arrival in the US? ✗
 - Age of arrival to the US? ✓

Testing language ability in L2

- Rating quality of speech
 - How much of an accent someone has
- Ability to accurately repeat sentences in noise
- Grammaticality judgment

Johnson & Newport data



Continuity vs. Discontinuity

- Is the critical period and absolute time frame?
- Discontinuity:
 - Acquisition within the critical period always leads to native proficiency
 - Acquisition after critical period never leads to native proficiency
- Continuity
 - There is no absolute critical period
 - Performance slowly wanes with age

Evidence for Continuity?

- Closer examination of the data reveals slightly poorer performance in children learning L2 at 5 vs. native speakers
- Suggests a slow roll-off in performance with time
- *Some* individuals > 12 do achieve native-like performance
- Overall, seems like there is no **absolute** critical period

Studying Bilingualism

- Simultaneous vs. sequential bilingualism
- Simultaneous: hard to study
 - Hard to gauge strength of exposure to either language
 - Who speaks which language does matter
 - Social status of the two languages can vary
 - Not consistent across communities

Learning Two Language at Once

- Tricky part: **differentiating** the two languages!
- Can children learn both separately?
 - or are they initially confused and learn both as one language (fusion hypothesis)?
- Some clues
 - Only one used by a certain parent/caregiver
 - Used in different social contexts
 - They sound different!
- Early suggestion that both are learned as one
- More recent evidence suggests kids can differentiate them early on

Phonological Differentiation?

- Newborns can discriminate phonology of two different languages
- But soon tune into one language
 - Can differentiate L1 from others
 - But can't differentiate two foreign languages
- Bilingual babies can differentiate their two native languages by ~4 mos
- So this likely all happens early on

Lexical Differentiation?

- Two lexicons or one?
- Single storage system with words of both languages?
 - Or two separate storage systems?
- Evidence from translation equivalents
 - Do kids know both "chien" and "dog"?
 - More equivalents = greater likelihood of two systems
- Unfortunately the data are very messy
- Evidence from adults?

Grammatical Differentiation?

- Do bilingual children confuse their grammars?
- Apparently not
 - German/French bilingual children don't confuse the two grammars
- Sometimes use words from the wrong language
 - But use the 'correct' syntax for the language they're speaking in

Does Bilingualism Delay Language Learning?

- Some suggest it has zero effect
- Hard to study given socioeconomic differences
 - Often bilingual families are different from monolingual ones
 - E.g., Pettito: studies of bilingualism in Montreal
- Studies have identified interesting differences
 - Smaller vocabularies in either language
 - Slower syntactic development
- Note these findings are in younger children
- Effects tend to disappear by late childhood

Reading in Signers

- Signers have great difficulty learning to read
- Why?
 - Have to learn to read in a different language than they sign
- Interesting case of bilingualism...
- Age of acquisition effect:
 - Early signers are better readers than late signers
- Why?
 - Might suggest learning first language better makes it easier to acquire subsequent languages

Summary

- Language in autistic children
- L2 acquisition
 - Age of acquisition effects
- Learning two languages at once
