### Special types of language

IIE 366: Developmental
Psychology
Greg Francis
Lecture 22

### Focus Lecture: Language

- I. Language Development in Deaf Children
- II. Children with Specific Language Impairment (SLI)
- III. Bilingual Development
- IV. Very special case

### I. Language Development in Deaf Children

- A. Who are they and how do they learn language?
- B. Learning sign language
- C. Oral language development

# A. Who are they and how do they learn language?

- .1% of children are born deaf or lose hearing before learning language
- deaf children of deaf parents learn sign language from the start
- deaf children of hearing parents learning language through lip reading and gestures

### **B.** Learning Sign Language

- different sign languages; ASL used in US and English-speaking Canada
- ASL is a real language, not pantomime
- mastery of ASL involves same stages and similar processes and similar timing

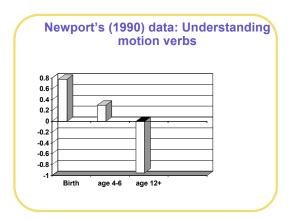
"more" in ASL:hands in "loose O" toward each other, 2X

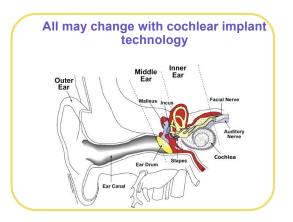


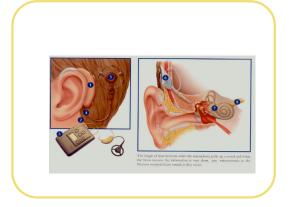


## C. Oral language development

- Not successful--less than 50% of deaf children achieve intelligible speech.
- Average deaf high school graduates read at the 3rd or 4th grade level.
- Deaf 18-year-olds have grammar of hearing 10-year-olds.
- Often learn ASL, but master it only if exposed before 12.









### **Cochlear implant**

- Being performed at younger ages 2 years.
- Earlier the better for language.
- Wide range of individual differences: Some children with cochlear implants have remarkable language skill; others are better than they would have been but delayed in language.

# II. Children with Specific Language Impairment (SLI)

- A. Characteristics of language in children with SLI
- B. Nature and nurture in SLI
- C. Linguistic and cognitive factors in SLI

# A. Characteristics of children with SLI

- normal hearing, normal intelligence, but delayed language
- sometimes called "developmental language disorder" or "developmental dysphasia"
- 3 to 5% of all children affected
- · delay in all aspects of language

#### B. Nature and nurture in SLI

- conversations between parents and children with SLI are more "lopsided" but is this cause or effect?
- has some genetic basis, because SLI definitely runs in families

# C. Linguistic and cognitive factors in SLI

- linguistic accounts suggest that children with SLI lack some part of the basic mechanism that allows people to master language
- possible cognitive (nonlanguage) factors: phonological memory
  - , prioriological memory
  - , temporal processing

## **III. Bilingual Development**



### III. Bilingual Development

- A. The circumstances of bilingual development
- B. Language differentiation in bilingual development
- C. Effect of bilingualism on language acquisition
- D. Bilingualism and cognitive development

# A. The circumstances of bilingual development

- Roughly half the world's children are exposed to more than one language.
- How
  - community itself is bilingual
  - monolingual except for bilingual parent(s)
  - one language at home, another in school

# B. Language differentiation in bilingual development

- Do young children get confused when they hear two languages around them?
- No. Very rare to exchange language sounds or syntax.
- Sometimes children will substitute words but this seems to be a strategy for dealing with unknown words in one language.

# C. Effect of bilingualism on language acquisition

- Does learning two language at once slow a child's progress in each language individually, compared to monolinguals?
- Slightly. Vocabulary size in each language tends to be smaller (particularly for productive vocabulary) but total vocabulary is about the same.

# D. Bilingualism and cognitive development

- No harm but one apparent benefit: greater awareness of language
- Example: "a turtle is an airplane"
  - "Can the turtle fly?
  - "How does the turtle fly?"

#### IV. Very special case

- Nicaraguan schools for the deaf (1979)
  - tried to teach children to lip-read (poor results)
  - but children started making a pidgin (protolanguage) on the playground
    - » Lenguaje de Signos Nicaraguense (LSN)
- New students took the pidgin and created a new language (creole)
  - Idioma de Signos Nicarguense (ISN)

## **Next time**

Emotional development