



*Effects of Age and
Input on
Acquisition*

Reference: Elissa Newport
ASL Lecture Series

- Timing of exposure to language input
- The type of language input
- Accessibility of the input

Analogy from Bird Studies

- Background: Male birds- mating calls, Birds of different species-different songs
- Birds have innate(template) + exposure =acquire birdsong
- song (-((--((((---((



Analogy (con't)

- NO INPUT (no exposure to song)

RESULT: “skeletal song” (basic structure)

EXAMPLE:

full song: (-((--((((--((

skeletal song: ---- ---- ----



Marler (1991) con't

- If Birds exposed to the “wrong song” (white crested sparrow: swamp sparrow)

RESULT: “skeletal song” (same as if no input)

If birds exposed to “right song” after youth

RESULT: “skeletal song”



Conclusion: INPUT must stimulate what is INNATE and must happen when young

Goldin-Meadow's Studies

- 10 DCHP (1;4-5;9)
- Profoundly Deaf children in homes with no signing
- No significant progress in spoken English
- No Accessible Language Input
- Use of speech and 'gestures/homesigns'

Goldin-Meadow Data

- PT(at train) index traces a circle
- PT (at jar) mimes twist motion
- PT-YOU, give gesture PT-duck, PT-to-Susan
- Children's gestures and gesture strings much more complex and systematic than parents' gestures

Goldin-Meadow: Conclusions

- **RESULTS:** Children produce a ‘skeletal sign language’
- ..use of spatial features...
- **Much like the bird with no input**



Singleton and Newport

- Case Study of “Simon” Deaf, oral prgm.
- Parents: Deaf, late-learners of ASL (age 15/16)
- Input in ASL: Only from parents
- **What happens if input is not perfectly grammatical?

Data: Singleton and Newport

- Input: Verbs of motion
- --parents sign. Lower than NS
- --ASL input=impoverished
- Output: Verbs of motion
- --Simon equal to NS of same age
- --ASL output=beyond parents/native-like



S. Supalla: SEE2 input

- Can the structure of a spoken language in a signed modality ‘act like’ a natural language as input?
- Subjects: 9-11 yrs old, used SEE2 since 5
- Teachers use SEE2 relatively consistent verbs, pronouns and tenses

S.Supalla Data

- Teacher (input) uses non-spatial verbs and pronouns... verb tenses
- CHILDREN (output) use spatial verbs, spatial pronouns, ... strip verb tenses
- DATA

S.Supalla

- OUTPUT-looks more like a natural sign language
- children 'screen out'...
- SEE2=the 'wrong' song



Newport and T.Supalla: Age Effects/Timing of Exposure

- A variety of studies: ACQ/Learn of ASL
- ... comprehension/production ..7 tests
- Native Signers: birth-skilled
- Early Learners (4-6)=good, not equal, variant
- Late Learners (14-26)=most errors/deletions morphology, most variant

Conclusions:

- The input must be a **natural language**
- The input must be **accessible**
- The input must happen at an **early age**

THEREFORE

- If natural language/native input/begin at birth=natural language development
- If no accessible input=skeletal language
- If impoverished input at young age=can become native/better than input
- If unnatural input/communication at a young age=will screen out and look more like a natural language