Bilingual Language Acquisition

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• “The bilingual child is not simply two monolingual children in one.”
  – Hammer et. al., 2004

Background

• Simultaneous vs. Sequential
• When do we make the cut-off?
  – Typically 3 y.o.
  – Bhatia & Ritchie (1999) suggest prior to 1-word stage

Background, Cont.

• Simultaneous Bilinguals (Hammer, Miccio, Rodriguez, 2004)
  – To be in a bilingual environment must:
    • Follow directions
    • Speak
    • Interact
  – So TV doesn’t make a child bilingual– why?
Background, Cont.

- **Simultaneous bilinguals**
  - “Rule of Grammont” (1913!): each parent/context should speak only one language (i.e. “domain allocation”)
  - Not necessary (Garcia, 1983–Preschoolers can separate mixed input)
  - Limitations (Hammer et. al., 2004)
    - 1) unnatural input pattern
    - 2) input not necessarily balanced
    - 3) unnatural social environment
    - 4) It’s really tough to do! (Goodz, 1999)

Implications

- Do these findings regarding the unique course of bilingual language development reflect on the unitary language vs. differentiated systems?

Background, Cont.

- **Simultaneous Bilinguals**
  - Patterns of Acquisition (Patterson, 1998)

<table>
<thead>
<tr>
<th>Age (months)</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>Range</th>
<th>Minimum for 50% of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>21–22</td>
<td>31</td>
<td>101</td>
<td>49</td>
<td>7–525</td>
<td>20</td>
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<td>23–25</td>
<td>43</td>
<td>128</td>
<td>110</td>
<td>18–297</td>
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</tr>
</tbody>
</table>

Background, Cont.

- **Sequential Bilinguals**
  - Stages of Acquisition (Roseberry-McKibben)
    - I: Preproduction (Silent period!!)
    - II: Early Production (1–3 Words)
    - III: Speech Emergence (Simple sentences)
    - IV: Intermediate Fluency (Simple Narratives and Conversation)
    - V: Fluency
Background, Cont.

- **Sequential Bilinguals**
- How long does it take? (Dulay and Burt, 1980)
  - 2-3 years = BICS
  - 5-7 years = CALPS
- Children may fall behind academically because they don’t have the language skills
- “Bilingual children may have no trouble communicating in interpersonal conversations but may have difficulty with the decontextualized language that is necessary for school learning.” Schiff-Myers, 1992

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Background, Cont.

- **Sequential Bilinguals: Phenomena**
- Schiff-Myers, 1992
  - Language Loss: “the weakening of an individual’s first language because of a concentrated focus on the development of L2.”
  - Arrested development: “the child ceases to develop in L1.”
  - Semilingualism: “a condition in which one can communicate in both languages, but in which one can fail to reach monolingual literacy proficiencies in either.”
  - Occur in Subtractive Environments

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Background, Cont.

- **Sequential Bilinguals**
- Patterns of Acquisition (Hammer et. al., 2004)
  - May be dominant in either L1 or L2
  - Both languages may be maintained
  - Non-dominant system may be lost and fluency in dominant attained
  - L1 may be lost fluency in L2 may not be attained (Limited Bilinguals!)

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Background, Cont.

- **Sequential Bilinguals**
- Suggest that:
  - Exposure to L2 IN THE WRONG ENVIRONMENT prior to full proficiency in L1 may result in arrested development or regression
  - The level of competence in L2 is a function of competence in L1
Background, Cont.

• **Sequential Bilinguals**
  - Skutnabb-Kangas & Toukomosa, 1976
    – Studied Finnish “working class” in Sweden
    – There was “a strong correlation between the development of Finnish prior to contact with Swedish and later proficiency in Swedish.”
      - Children who migrated after age 10 were able to have skills equivalent to those of monolingual Swedish and Finnish speakers
      - Children who moved to Sweden prior to 6-7 y.o. “were more likely to achieve low literacy skills in both languages.”

Implications

• So why do we care?
  – Besides justifying my own existence… 😊
  – Cummins interdependence and threshold hypothesis have profound implications for whether bilingualism operates as a “unitary language”
    - Interdependence: Instruction in L1 will facilitate development of L2
    - Threshold: The level of L1 proficiency needed for L2 acquisition

Genesee

• Big Question: Is bilingual acquisition:
  – “an undifferentiated or unitary underlying system”? 
  – Or are young children “psycholinguistically able to differentiate two languages from the earliest stages of bilingual development [and] use their two languages in functionally differentiated ways”? 
  – Genesee argues that the former is not a foregone conclusion

Background, Cont.

• **Sequential Bilinguals**
  - Perozzi & Sanchez, 1992
    – Compared receptive acquisition of English prepositions and pronouns in two groups of English-Spanish bilingual first graders with LLD
    – Those who received instruction in Spanish acquired the ENGLISH words in _ the time of those who received instruction in English only
Genesee

- Types of mixing
  - Phonological
  - Lexical (Most common)
  - Phrasal (supposedly no redundancy or errors?)
  - Morphological
  - Syntactic
  - Semantic
  - Pragmatic (odd example?)

Genesee

- Period of language mixing lasts until between 2 and 3
- Then period of language differentiation is entered
- Mixing considered evidence of unitary language system hypothesis
- Problem: These data not analyzed by context

Genesee

- Alternate explanations of mixing
  - Mixing may decline not because of separation of languages but because greater language proficiency renders it unnecessary
    - Children borrow lexical items from one language to complement the other
    - Means differentiation is a result of social competence
  - Children identify items with the most frequently applied label (???)
  - Children use the more simple and salient terms

Genesee

- What’s shared in the processes for acquisition not the language system
- i.e. These explanations say that the acquisitional processes used in bilingual acq. are the same as those used monolingual acq.
  - Overextensions
  - Underextensions
Genesee

• Yet another explanation is that mixing are due to models of language mixing
  – Gave rise to rule of Grammont
  – Goodz, 1989: Frequency of children’s mixed utterances correlated with the frequency of parental mixing
  – Methodological and practical concerns

Genesee

• Also language sample analysis shows that children may use their languages differentially based on pragmatics well before the differentiation phase

Genesee

• Evidence from infant perception studies:
  – Infants can differentiate at least the supersegmental aspects of language from birth
  – “Differentiation… minimally requires that children be able to discriminate perceptually.”
  – In other words, these studies indicate that the foundation to begin differentiation is there from birth

Genesee

• Your Questions
  – Does this paper reflect current understanding?
  – How can we implement his methodological suggestions?
Kohnert & Bates

• Research Questions:
  – How long does it take to achieve efficient processing in L2?
  – What happens to L1 as L2 skills increase?
  – Is there a processing cost of mixed-language tasks?
  – Are there differences with age?

Kohnert & Bates

• Models of Language Acquisition
  – Skill-learning: the two languages are two skills that compete for resources and can interfere with each other (predicts L1 loss)
  – Discontinuous: acquisition of language within a critical period guarantees retention of native-like skills irregardless of context

Kohnert & Bates

• Magiste
  – 4-6 years before processing speed was equal in L2 to that in L1 for simple tasks
  – Is this BICS?
  – Efficiency in L1 regressed as L2 improved

Kohnert & Bates

• The Experiment
  – 100 sequential bilinguals in 5 age groups (5-22 y.o.)
  – All participants acquired L2 in a subtractive formal schooling enviro. Beginning at ~5 y.o.
  – Measured response time and accuracy in determining if a picture and a spoken word “matched.”
Kohnert & Bates

• Results
  – Response time fell with age for all language conditions
  – A language preference shift occurred

Kohnert & Bates

• Results, Cont.
  – 10 years req.’d for a switch to English production dominance
  – Consistent with skill-learning models

Kohnert & Bates

• Your Questions
  – How should findings like these inform policy?
  – Why did this study not show L1 loss because the participants were in subtractive environments?
  – Why did differences in comprehension proceed differences in production?
  – What type of subjects (i.e. children vs. adults) are necessary for developmental research?
  – Would these results generalize to other language groups?

Mishina-Mori

• ULSH vs. Independent Development Hypothesis– Factors to Consider
  – Transfer: “the incorporation of a grammatical property from one statement to another.”
  – Acceleration: influence on the developmental timetable between the two languages
Mishina-Mori

- **Research Questions**
  - Is there structural influence?
  - Is there interference? In what percentage of the children?
  - Is the interaction of the languages affected by the nature of the languages?

Mishina-Mori

- **Hypothesis**
  - “There will be no transfer of question formation devices from one language to another.”

Mishina-Mori

- **The experiment**
  - Two subjects (Ken and Rie) with differing Japanese-English bilingual environments
  - 1-2 Hour language samples over the course of the year
  - Question structure was analyzed for interference

Mishina-Mori

- **The conclusions**
  - English and Japanese questions develop in a similar manner as in monolingual peers
  - But maybe some transfer for Ken?
  - There are both autonomy and interaction between the two language systems (Huh?)
• Your Questions
  – Do bilingual children receive enough input from the environment?
  – Which theory (Unitary or dual) is currently in favor?
  – Why do grammatical structures develop at different times?
  – Why such big research questions?
  – Subject selection? Small n?

“Big Questions” for Discussion
• Do language acquisition patterns (sequential vs. simultaneous) and individual differences bear on whether bilinguals acquire languages as unitary or separate?
• How do these philosophical differences come from and/or inform policy decisions?
• What is the ultimate goal of bilingual language acquisition? Someone functioning at the level of two monolinguals? Someone functioning at the level of one monolingual?
• What type of function are we talking about here? Oral and contextualized? Written and decontextualized?
• Can we really compare studies and draw conclusions when they vary so dramatically on patterns of acquisition, subject age and selection, type of proficiency and type of task?
• What’s the “take-home message” here that can inform our practice or research?