Bilingual Exposure At Different Ages in Childhood: Do they Exhibit "Stage-Like" Language Acquisition Similar to Young Monolinguals?

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INTRODUCTION

Decades of discoveries in child language show that young children master specific parts of language within highly regular and universal maturational periods Despite

varying environments

differences among language organization and surface structure (typology)
Achievement of specific linguistic knowledge at regular maturational ages is under biological control

Linguistic Stages = The stable relationship between specific maturational ages and the child's sensitivity to and achievement of specific types of linguistic knowledge at the core of human language structure (e.g., phonology, morphology, syntax, semantics), and its change over time

"Stages" do <u>not</u> predict regularity in contents across all language typologies "Stages" <u>do</u> predict regularity in "kind" (which parts of language structure will be tackled during which maturational age range)

Questions

Do young bilinguals exposed to two languages exhibit stage-like language acquisition comparable to monolinguals?

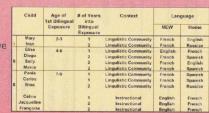
Does learning context matter?

Subjects

Bilingual children, where first exposure to their NEW language occurred at key ages corresponding to maturational brain growth, varying 1st or 2nd year into bilingual exposure, across 4 language populations N=11 children, three sessions each, over 6 months. **Table 1**

Context of Acquisition

Linguistic Community = Intensive NEW language exposure external to home, and over multiple contexts Instructional = NEW language in classroom only



METHODS

Assessing Linguistic Stages in the Bilingual Child

We compared a bilingual child's NEW language (English or French) to the FIVE stages in monolingual children acquiring English⁷ **Appendix 1**

OR

the FIVE stages in monolingual children acquiring French⁸ Appendix 2

Analyses

Calculation of stages of NEW language acquisition

Calculation of success of NEW language mastery by age & context of exposure Calculation of the percent time major morpho-syntactic markers (subject, verb or direct object) were missing in obligatory linguistic contexts⁷⁻⁸

RESULTS

Impact of Age of First Bilingual Exposure on NEW Language Mastery

NEW Language Competence & Community Exposure

First Year All children (all age groups) used the morpho-syntactic markers identified in Stages (I) to (III) for English, or for French, plus Stage (IV) Nascent

Second Year All children achieved (I)-(III), plus Stage (IV), and into Stage (V) Figure 1

NEW Language Competence & Instructional Exposure

First & Second Year All children (all age groups) did not exhibit

"stage-like" language acquisition regardless of #years into NEW
language. Many One-word utterances characteristic of monolingual

"Stage I" A few isolated routinized phrases, e.g., social routines

("What's your name?") characteristic of Stage (IV) Figure 1

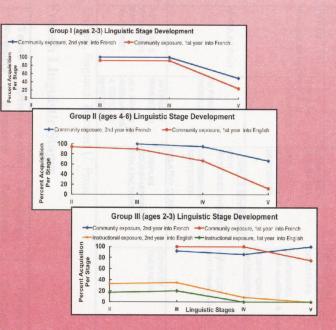
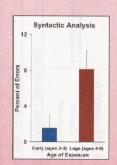


Figure 1



Bilingual children in the youngest age group with community exposure had significantly less syntactic errors in their NEW language as compared to the older-exposed children (Kruskal-Walis test: χ^2 =4.00, p < 0.05)

CONCLUSIONS

Bilingual children do exhibit "stage-like" language acquisition comparable to monolinguals across several developmental ages of fist exposure to a NEW language (i.e., ages 2, 4, 7)

BUT

only with intensive community exposure (not instructional)

This should prove useful for future linguistic assessment of young bilinguals in educational settings

Only bilingual children with intensive community exposure exhibit the core set of linguistic structures in their NEW language within only 2 years (not instructional)

Early bilingual exposure is better than later exposure
Successful transition into a NEW language is age dependent

REFERENCES

- 1 Petitto L. A., Katerelos M., Levy G. B., Gauna K., Tetreault K., & Farraro V. (2001) Billingual signed and spoken language acquisition from birth. Implications for the mechanisms underlying early billingual language acquisition. *Journal of Child Language*, 28(2), 453-450.
- 2 Petitto L. A., & Holowka S. (2002). Evaluating attributions of delay and confusion in young billinguals: Special Insights from Infants acquiring a signed and a spoken language. *Journal of Sian Language Studies*, 3(1), 4-33
- 3 Holowka S., Brosseau-Lapré F., & Petitto L. A. (2002). Semantic and conceptual knowledge underlying billingual babies' first signs and words. *Language Learning*, 52(2), 205-262
- 4 Kovelman I., & Petitto L. A. (2002). Conference for the Society for Neuroscience, Orlando, FL
- 5 Petitto L. A., & Kovelman I. (in press). Learning Languages
- 6 Pearson B. Z., Fernandez S. C., & Oller D. K. (1993). Language Learning, 43(1)
- 7 Brown R. (1973). A First Language: The Early Stages. Oxford, England: Harvard U. Press
- 8 Heinen S., & Kadow H. (1990). The acquisition of French by monolingual children. A review of literature. In J. M. Mossel (Ed.), Two First Languages: Early Grammatical Development in Bilingual Children. Dordrecht: Forsi Publications

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