

Methodology in Bilingual Research

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Bilingual acquisition: New methods and new directions

- Babies to adults
- Group comparisons
 - Speaker-defined: Bilingual vs. mono
 - Across vs within languages
 - Bilingual Lang X vs Lang Y
 - Exposure-defined

Challenging assumptions; new generalizations

- Babies are actively engaged in learning two languages
- Cognitive advantages accrue
- Processing two languages simultaneously is effective, not muddled
- Children keep multiple languages sorted out

Cf SLI assumptions discarded:

- They are generally immature.
- They will outgrow it.
- Different linguistic systems are affected similarly
- Attributed to insufficient home input
- Attributed to faulty learning mechanisms




Common issues


- Consideration of individual differences—performance relative to age-referenced expectations; “delay” versus “deviance”
- Benchmarked to map of language—mapping the landscape/discovery inquiry/establishing the phenomena


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- Comparison groups; well-defined control groups
 - Emerging experimental studies

more on methods


- Group comparisons: cross-sectional slices, age stratified
- Biling vs mono: Werker, Vihman, Geva, Bialystok, Nicoladis

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- Bilingual, L1 vs L2 within subjects:
Vihman, Genesee, Hyltenstam, Allen
 - Lang X: L1 vs L2 Verhoeven,
Meisel

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- Home Exposure: Mono vs biling
DeHouwer, Pearson
Home L2: Deep vs Shallow
Pearson

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- Mono vs Bilingual,
 - Eng vs French
 - SLI vs controls, Eng
 - SLI vs controls, Fr
 - Biling Eng/Fr, SLI vs contrls

 - Paradis & Crago


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- Mono vs Bilingual
 - Sign vs Oral
 - Biling Lang X, Sign vs oral
 - Lang Y, sign vs oral

 - Mayberry



Issues and limitations

- Low power to detect differences
- Small numbers of participants
- Uneven replication
- Need for congruence across findings and methods

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- Possible solutions to power: More participants, more precise measurement, repeated measures



Examples from SLI

- Power of longitudinal studies + precise measurement = new insights about growth, relative linguistic strengths and limitations

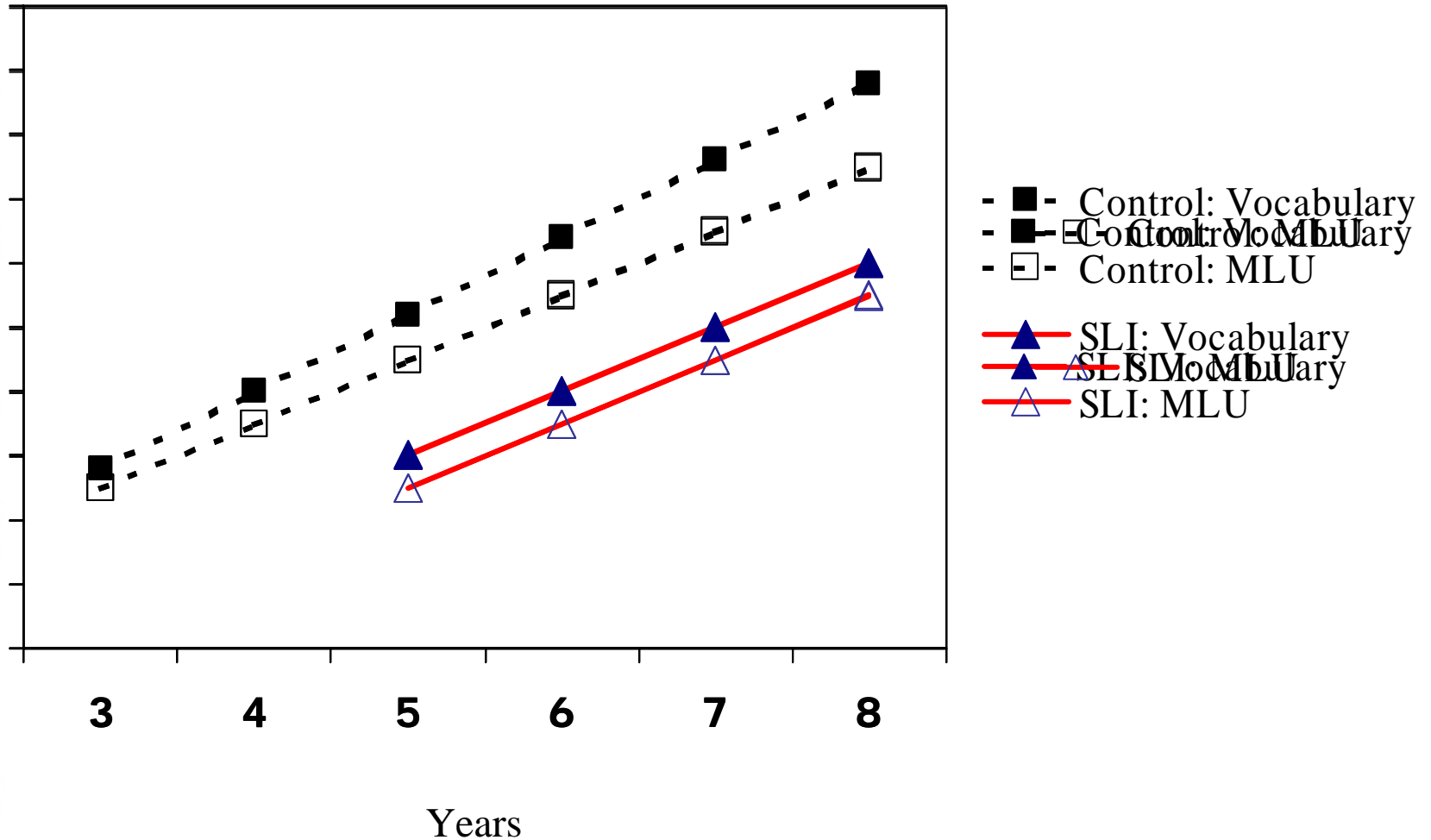
Dimensions of language are not equally affected in SLI


- Vocabulary and utterance length are delayed relative to age peers
- Morphosyntactic deficits show greater deficits relative to age peers than do vocabulary and utterance length
 - Examples: *She (is) happy; *(Is) she cooking? *(Does) she want a cookie? *She fall(fell) down; *She want(s) a cookie?



Growth shows linguistic differences

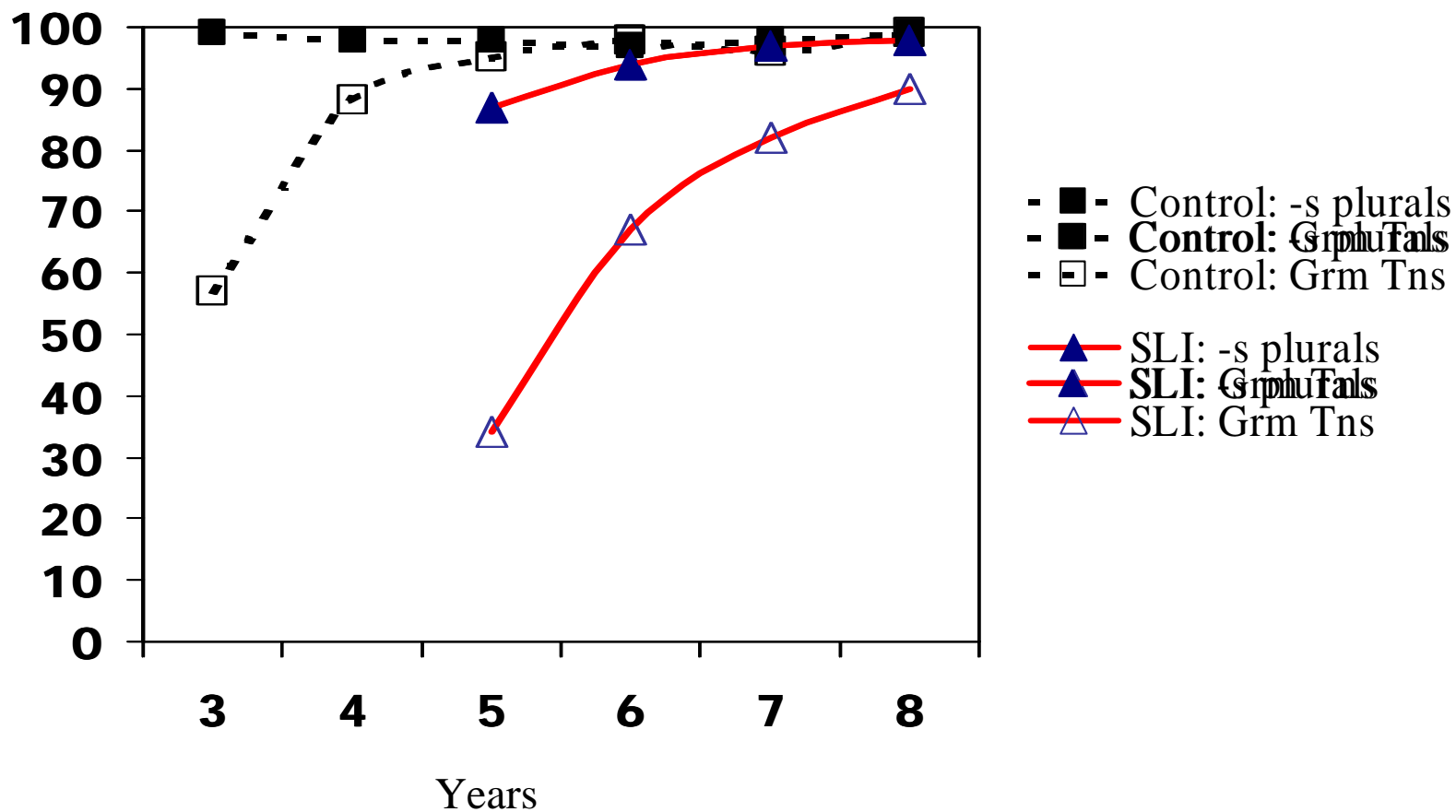
Growth in receptive vocabulary and MLU for children with SLI and unaffected children






Children with SLI follow the same growth curves as younger unaffected children, *although offset in onset age*

Growth in grammatical tense marking in simple clauses for children with SLI and unaffected children, compared with –s plurals





For grammatical tense marking children with SLI follow the same growth curves as unaffected children although offset in onset age *and at lower levels of performance.*

Methodological next steps for bilingualism

- Longitudinal studies
- Help sort out babies' possible u-shaped development
- Clarify language use/loss
- Help sort out relative strengths and weaknesses



Prediction (cf Pearson, Verhoeven, Geva)

Sources of individual variation
(those messy outliers---) genetics?

Sources of input variation: strategic
intervention studies (cf Bialystok)

Clinical/educational relevance

- Sort out “delay” versus “deviance” with regard to individual differences and growth trajectories
- Identify strengths and weaknesses of learners in language and cognitive domains
- Learner + home interactions: possible thresholds for both