Research Question: What are the cue strengths in Japanese input and output in L1 and L2 corpus?

Cues in Japanese:
- Word order: canonically SOV but allows scrambling (33%; Matsuo et al. 2012) and null arguments (87%; Rispoli 1989)
- Case Marker: nominative -ga, accusative -o, frequently omitted (35% for -ga, 66% for -o; Rispoli, 1989)
- Animacy: typically animate subject and inanimate object

Cue hierarchy in adult native speakers of Japanese: Case > Animacy > SOV

L1 children:
- Less reliance on case (e.g., Rispoli 1989)
- Importance of animacy (e.g., Rispoli 1989)

L2 learners:
- Transfer of L1 strategy (e.g., Koda 1993)
- Reliance on animacy (Sasaki 1994)

Remaining questions:
- What kind of input do children and learners receive?
- How do learners use these cues in their production?

Estimate of cue strengths based on corpora (based on Kempe & MacWhinney 1998)

3. Results

![Graph showing cue strengths in L1 and L2 input/output with L1 input: 0.052, 0.175, 0.038, 0.082; L1 output: 0.177, 0.047, 0.043, 0.053; L2 input: 0.933, 0.947, 0.943, 0.911; L2 output: 0.09, 0.18, 0.17, 0.16.]

Cue Estimation

Cue strengths were estimated based on cue validity, calculated by multiplying availability by reliability:

Word Order (WO)
- Availability: available when both subject and object are present
- Reliability: reliable when the word order is SOV

Case Marker (CM)
- Availability: when either NP is marked with -ga or -o
- Reliability: when the subject is marked with -ga and/or the object is marked with -o

Animacy Contrast (AC)
- Availability: when one of the NPs is animate and the other is inanimate
- Reliability: when the subject is animate and the object is inanimate

Additional observations:
- No difference between L1 groups in the L2 data
- Coalition of WO and AC is frequent in L1 data
- AC is most likely to appear as the single reliable cue in both L1 and L2 data
- CM is never used as the sole reliable cue in L1 data; used only in redundant contexts

Future directions
- How is case acquired? → Investigation of the role of instruction
- Analysis of longitudinal L2 corpus

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References