5-30-2012

Review of Marianne Gullberg and Kees de Bot (eds): Gestures in Language Development.

Gale Stam
National-Louis University, gstam@nl.edu

Applied Linguistics Advance Access published May 30, 2012

Applied Linguistics 2012: 1–5

REVIEW

Marianne Gullberg and Kees de Bot (eds): GESTURES IN LANGUAGE DEVELOPMENT. John Benjamins, 2010

Since the 1970s, there has been a growing body of research on the role of gesture in first (L1) and second language (L2) development. The six papers in this volume, an outgrowth of a workshop on 'Gestures in Language Development' held at Rijksuniversiteit in Groningen, the Netherlands, in April 2006 and previously published in *Gesture* 8: 2 (2008), contribute further insights to this field of study.

Marianne Gullberg, Kees de Bot, and Virginia Volterra provide a thorough introduction to the topic of language development and gesture and to the other papers in the volume (two on first language and three on second language development). They review previous research on the topic as well as theories of speech and gesture, discuss common themes that studies on language development and gesture can address, and outline areas for further research. They point out three ways that gestures can be studied in language development to increase our understanding of the language acquisition process, the first 'as a medium of language development', the second 'as a reflection of language development', and the third 'as language development itself'. The common themes these authors see that gesture can address in language development studies are the role of gestures in input and output, individual variation and differences, and the use of gesture as compensation. They suggest further research should include L1 speech and gesture beyond the two-word stage, speech, gesture practices of native speakers who know other and multiple languages, native speakers' perception of non-native speakers' gesture, the teachability of gesture, and gestures and aging.

In the next paper, Ulf Liszkowski explores infants' pointing and representational gestures in the prelinguistic period. He argues that pointing gestures are principal in the development of human communication, they are communicatively complex, they show intentionality on the part of the infant, and they demonstrate referential communication. To support this perspective, he reports on the findings of several experimental studies, he and his colleagues did on infant pointing, where they found that infants point to communicate, they point referentially, and they point cooperatively, that is with social motives, and they understand others' pointing (p. 40–1). On the other hand, he proposes a re-interpretation of infants' representational gestures. He claims that these gestures are not initially symbolic but rather originate from participation in gestural social acts—games, routines, and situational context—and are motivated by the infant's desire to be social.

His paper is thought provoking and raises several questions. First, is there really a prelinguistic period? Recent research has shown that infants as young

as three days of age cry in the intonation pattern of their language (Mampe *et al*. 2009) and infants of six to nine months understand the meaning of words (Bergelson and Swingley 2012). This suggests that perhaps a better name for the period before infants utter their first word is *preverbal* as they already demonstrate some knowledge of language. Second, the gestural social acts may not be initially symbolic for infants, but are they truly non-symbolic? Because infants in their development may not yet recognize that something is symbolic or may not yet be able to use a gesture in a symbolic way does not mean that it is non-symbolic. These acts are engaged in by an adult and a child, and the gestures are symbolic for the adult. Is this not perhaps an example of adults scaffolding infants and interaction on the interpsychological plane, which the infants will later internalize on the intrapsychological plane (Vygotsky 1978)? Finally, I agree with Liszkowski's position on infants' pointing gestures, but how did these develop? Did they develop as a result of interaction between adults and infants with adults performing pointing gestures that the infant first understood in the interaction and later internalized?

The following paper by Silvia Stefanini, Martina Recchia, and Maria Cristina Caselli investigates the question of whether gesture use is related to linguistic or cognitive abilities. To do this, they examined the relationship between gesture production and spoken lexical ability in a group of children with Down Syndrome (DS) and two groups of typically developing (TD) children matched for lexical ability and developmental age in a picture-naming task. They found that both groups of TD children produced a higher proportion of deictic gestures than representational gestures whereas the DS children produced a similar proportion of the two types of gesture. Stefanini and colleagues attribute this difference in DS children's use of representational gestures to the children using the gestures to compensate for their lack of verbal ability that is, using the gestures to express what they are unable to express in speech. This finding has significance for understanding cognitive ability in children with DS. It also suggests that gesture may be a better way of assessing children's knowledge than speech is.

Switching to the topic of second language development and gesture, Marion Tellier provides evidence of the positive effect gesture has on the memorization and recall of English words by French children with a mean age of 5, who had no prior exposure to English. Her study looked at whether having children produce gesture with spoken vocabulary facilitated vocabulary memorization. She compared two groups of children: one a picture group that was taught eight words with pictures and had to repeat the word and the other a gesture group that was taught eight words with gestures and had to repeat the word and gesture. She found significant differences in active knowledge between the two groups with the gesture group doing better. Her results have implications for the classroom and the teaching of a second language as it appears that having learners involve the body in learning enhances memorization.

Keiko Yoshioka explores the topic of over-explicitnesses in second language learners' referent marking in speech and gesture in a narrative task.

In particular, she examines maintained and re-introduced referent marking among Dutch learners of Japanese in both their L1 Dutch and L2 Japanese in comparison to native speakers of Japanese in their use of lexical noun phrases (NP), pronouns, zero-anaphora, and gesture. She reports that Japanese speakers tend to use zero-anaphora and speaker viewpoint in narrations. She also points out that whereas Dutch has obligatory articles and a complex pronoun system, Japanese does not have articles and true third-person pronouns that are regularly used in narratives. She found that the learners used lexical NPs more frequently than the native speakers for both maintaining and re-introducing reference in line with previous research (p. 103–5), but that they used gestures more frequently only with NPs accompanying reintroduced referents not maintained referents. She suggests that the reasons for learners' over-marking of references may be due to their desire to be hyper-clear as well as their attempt to differentiate between main and peripheral characters in re-introduced referents. She points out that more research needs to be done on learners' gestural marking of referents in a number of different L1s and L2s to understand this phenomenon better.

In the last paper in the volume, Amanda Brown shows that an L2 even at low proficiency levels can affect an L1 and raises the question of what 'native speaker' performance actually is. She examines Character Viewpoint (C-VPT) and Observer Viewpoint (O-VPT) gestures in the narrations of monolingual Japanese speakers, native Japanese speakers with knowledge of L2 English, and monolingual English speakers. She found significant differences among the three groups in their use of C-VPT gestures: the monolingual Japanese speakers produced more C-VPT gestures than the monolingual English speakers did and more than the Japanese speakers with English did in their L1 Japanese. In other words, she found that the native Japanese with English patterned more like English speakers in their L1 Japanese than like monolingual Japanese speakers. She concludes that cross-linguistic influence is bidirectional between an L1 and an emerging L2 and suggests that the concept of a 'native speaker' standard may need to be re-evaluated as 'performance may actually be rather variable depending on the language experience of each individual' (p. 130).

In conclusion, the volume *Gestures in Language Development* is a valuable contribution to the field of gesture and language development. It expands our knowledge of how looking at gesture can inform our understanding of both first and second language development. The papers themselves are easy to read, make important points, and raise further questions (an indication of good research). It is well worth taking the time to read the volume.

Reviewed by Gale Stam
National Louis University
E-mail: gstam@nl.edu
doi:10.1093/applin/ams021

REFERENCES

Bergelson, E. and **D. Swingley.** 2012. 'At 6–9 months, human infants know the meanings of many common nouns,' *PNAS* 109/9: 3253–8.

Mampe, B., A. D. Friederici, A. Christophe, and **K. Wermke.** 2009. 'Newborns' cry melody is shaped by their native language,' *Current Biology* 19: 1994–7.

Vygotsky, L. 1978. *Mind in Society: The Development of Higher Mental Processes* in M. Cole, V. John-Steiner, S. Scribner and E. Souberman (eds): Harvard University Press, pp. 52–57.

NOTES ON CONTRIBUTOR

Gale Stam, PhD, is Professor and Department Chair of Psychology at National Louis University in Chicago, Illinois. Her research interests include language and culture, language and cognition, gesture, and first language and second language acquisition. She has published articles on changes in thinking for speaking, the importance of looking at gesture in second language (L2) acquisition, gesture and lexical retrieval in a L2, and language teachers' gestures. She is a member of editorial board of the journal *Gesture* and co-editor of two volumes on speech and gesture—*Gesture: Second Language Acquisition and Classroom Research* (Routledge, 2008) and *Integrating Gestures: The Interdisciplinary Nature of Gesture* (John Benjamins, 2011). *Address for correspondence*: Gale Stam, PhD, Professor, Department of Psychology, National Louis University, 5202 Old Orchard Road, Suite 300, Skokie, IL 60077-4409, USA. <*gstam@nl.edu*>