

STRATEGIES IN GESTURE AND SIGN FOR DEMOTING AN AGENT: EFFECTS OF LANGUAGE COMMUNITY AND INPUT

LILIA RISSMAN, LAURA HORTON, MOLLY FLAHERTY, DIANE BRENTARI,
SUSAN GOLDIN-MEADOW

*Department of Psychology, University of Chicago
Chicago, USA*

*lrissman@uchicago.edu, laurahorton@uchicago.edu, mflaherty@uchicago.edu,
dbrentari@uchicago.edu, sgm@uchicago.edu*

ANN SENGHAS

*Department of Psychology, Barnard College of Columbia University
New York, USA*

asenghas@barnard.edu

MARIE COPPOLA

*Department of Psychological Sciences, University of Connecticut
Storrs, USA*

marie.coppola@uconn.edu

Languages use a variety of devices to indicate that an agent is present in an event but not particularly salient (see Siewierska, 2013 for a typology of passive voice and other agent demotion devices). Here we investigate agent-demotion in an emerging sign language in Nicaragua. Nicaraguan Sign Language (NSL) began when Hometown signers (deaf individuals who use homemade gestures to communicate with hearing individuals) were brought together for the first time in the late 1970s (Cohort 1 signers). Cohort 2 signers entered the community after 1984, and Cohort 3 signers joined after 1994; these later cohorts learned their sign language from the previous generations. We asked Hometown signers, Cohort 1 signers, and Cohort 2-3 signers to describe vignettes that varied in how salient the agent was. All groups used verbal morphology to distinguish agentive vs. non-agentive scenes. However, only signers who learned their language from older peers (i.e., Cohorts 2-3) used verbal morphology for agent demotion. This finding suggests that linguistic devices for demoting agents evolve more slowly than devices for distinguishing agents from non-agents, and that the former may emerge only when language is transmitted to a subsequent generation of learners.

In many sign languages around the world, agency is encoded via handshape morphemes in classifier predicates (Benedicto & Brentari, 2004). For example, *handling* handshapes (e.g., the hand represents how the pen is held as it is lifted off a table) are used in predicates that describe agentive events. By contrast, *object* handshapes (e.g. an extended index finger represents the pen itself as it rolls off a table) are used in predicates that describe agent-less events. In our study, we asked whether signers of an emerging language use handshape to distinguish among scenes with a more or less salient agent and, if so, at what point in the process of language emergence this distinction is first made.

We tested 4 adult hometown signers living in Nicaragua, 8 Cohort 1 signers and 10 Cohort 2-3 signers. We collapsed data from Cohorts 2 and 3, both of whom received a linguistic system (NSL) as input, and compared their productions to Cohort 1 signers, who did not receive linguistic input but did have a linguistic community, and to Hometown signers, who had neither linguistic input nor a linguistic community. As a test of their agent-demotion language, participants viewed video clips from a Body condition (a person manipulates an object, e.g., woman pushes over a book) vs. a Hand condition (a hand manipulates an object without the body/face shown, e.g., hand pushes over a book). We believed this Body/Hand

distinction would elicit agent-demotion language, as pilot studies showed that in the Hand condition, English speakers were 40% more likely to use passive, e.g. *the book was pushed over*. As a control, participants also described No-Agent scenes (the object moves by itself, e.g. book falls over).

Each predicate in a signer's descriptions was glossed and coded for handshape type (handling vs. object). We categorized each trial by response strategy: handling predicates only, object predicates only, or both handling and object predicates. Figure 1 shows these results as a function of signing group and condition:

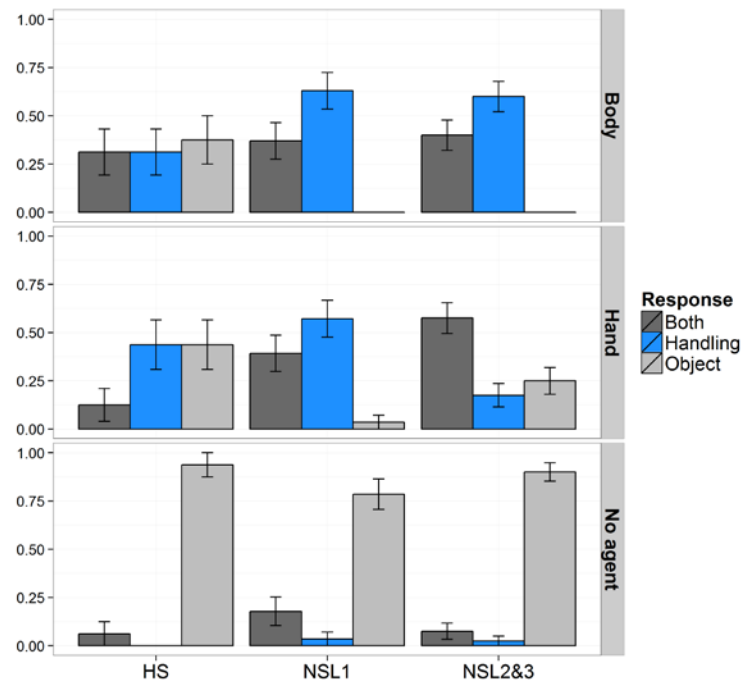


Figure 1. Distribution of handshape responses by Signing group & Condition.

All 3 groups were more likely to use handling handshape (blue bars) for agentive scenes and object handshapes (light gray bars) for non-agentive scenes, suggesting that marking agency requires neither a linguistic community nor linguistic input for its emergence. Note, however, that Homesigners did use some object handshapes alone for Body events, whereas Cohorts 1 and 2-3 did not, suggesting that agency is marked more categorically in signers who have a linguistic community. Moreover, only Cohorts 2-3 made a distinction between weakly agentive (Hand) and strongly agentive (Body) events. They produced utterances with two predicates for Hand events, one with a handling handshape and one with an object handshape, which may indicate the emergence of a serial verb strategy for demoting agents. In contrast, Cohort 2 signers favored single predicates with a handling handshape for Body events. The fact that only Cohorts 2-3 distinguish Body from Hand events suggests that linguistic input may be essential to the emergence of agent-demotion devices. In particular, for Cohort 1 signers the handling/object distinction may serve primarily to mark the fundamental agent/no-agent contrast, whereas Cohort 2 signers can use the distribution of handling and object handshapes to also mark the more subtle demoted-agent contrast.

References

- Benedicto, E., & Brentari, D. (2004). Where did all the arguments go?: Argument-changing properties of classifiers in ASL. *Natural Language & Linguistic Theory*, 22(4), 743-810.
- Senghas, A., & Coppola, M. (2001). Children Creating Language: How Nicaraguan Sign Language Acquired a Spatial Grammar. *Psychological Science*, 12(4), 323-328.
- Siewierska, A. (2013). Passive Constructions. In: Dryer, Matthew S. & Haspelmath, Martin (eds.) *The World Atlas of Language Structures Online*.