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# Cross-cultural differences in the emergence of referential strategies in artificial sign languages

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## Abstract

While the grammatical use of space for referential strategies is attested across many sign languages of Western Europe, Kata Kolok, a rural sign language used in Northern Bali, has not developed anaphoric pointing in space nor agreement verbs (Engberg-Pedersen, 1993; Liddell, 2003; de Vos, 2012). To find out whether such typological differences can be explained by differences in the respective co-speech gesture systems, this preregistered study is collecting data for a cross-cultural comparison. Building on Motamedi et al. (2021), we are conducting studies in Bali and the Netherlands using an iterated learning silent gesture paradigm in which hearing people communicate transitive events using only gestures. Preliminary data indeed suggest that our Balinese participants do not employ space the same way our Dutch participants do. We will present comparative analyses and evaluate the role of co-speech gesture systems in sign language emergence in the lab or when evolving from spontaneous interaction.