



Embodiment and gestural realization of ergative verbs

Omid Khatin-Zadeh¹ · Jiehui Hu¹ · Zahra Eskandari¹ · Hassan Banaruee² · Zhu Yanjiao¹ · Danyal Farsani³ · Jiayong He^{1,4}

Received: 2 August 2023 / Accepted: 1 October 2023

© The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2023

Abstract

In this study, we examined the gestural embodiment of active, passive, and active-form/passive-sense voices of ergative verbs in English. We analyzed gestures produced by presenters talking about a variety of subjects in a set of videos. We used several Chi-square tests to find out what type of gesture (representational, beat, and pointing gestures) co-occurred more frequently with active, passive, and active-form/passive-sense voices of ergative verbs. The results showed that representational gestures occurred more frequently with active than passive and active-form/passive-sense voices of ergative verbs. Furthermore, representational gestures occurred more frequently with active voices of ergative verbs having human subjects than non-human subjects. This was also the case with active-form/passive-sense sentences. Based on these results, it is suggested that form of a sentence is an influential factor in the process of embodying the situation that is described by that sentence. Active voice of an English ergative verb is more likely to be accompanied by representational gestures and is embodied more strongly than passive and active-form/passive-sense voices of that verb.