



# The Role of the Brain Hemispheres in Gesture Production: Insights from Behavioural Studies

**28 February 2024     4:00 p.m. (HKT)**  
**EN Meeting Room (CMC M8015) and Zoom**

## Abstract

Gesture is an essential part of communication. When we speak we often spontaneously produce "representational gestures" to depict movement and action or to point at a location of interest. This talk discusses how the two hemispheres contribute to production of representational gestures, and how laterality of language processing influences laterality of gesture production. I will present results from four behavioural studies involving infants, pre-schoolers, neurotypical adults and split brain patients. All studies used the gesturing hand (right hand vs. left hand) as a key variable to probe the role the two brain hemispheres. Three studies with neurotypical child and adult participants showed that language processing in a particular brain hemisphere activates gesture production in the contralateral hand, and conversely, gesture production in a particular hand activates language processing in the contra lateral hemisphere. Furthermore, the study on split brain patients indicates that gestures can be generated from the hemisphere that has no speech production capability. To conclude, gestures production is a process independent from language production processes, but it interacts with language production process.

## Contact

Dr. Simon Harrison  
Department of English  
Tel: (852) 3442 9608  
Email: [simon.harrison@cityu.edu.hk](mailto:simon.harrison@cityu.edu.hk)

Professor Fiona NAH Fui-Hoon  
Department of Media and Communication  
Tel: (852) 3442 8868  
Email: [fiona.nah@cityu.edu.hk](mailto:fiona.nah@cityu.edu.hk)  
<https://research.class.cityu.edu.hk/brain/>

## Speaker



Sotaro Kita is Professor of Psychology of Language in the Department of Psychology at the University of Warwick. He received his Ph.D. in psychology and linguistics from the University of Chicago (1993), before joining the Max Planck Institute for Psycholinguistics in the Netherlands as post-doc then Senior Researcher (1993 - 2003).

Professor Kita's previously held positions as Senior Lecturer at the Department of Experimental Psychology in the University of Bristol (2003-2006) and Reader at the School of Psychology in the University of Birmingham (2006-2013). His research on gesture spans both production and comprehension, investigation of patients, and neurophysiological methods.

## In-person



For registration, kindly scan the QR code or visit the following link before noon, 27th Feb:  
<https://forms.gle/k441Zzu73QLQWxTk6>

## ZOOM



To register, please visit:  
[https://cityu.zoom.us/join/register/tJEvdu-qqDMtGtGNiIL6Mza1V5L\\_KrIXJ-9i](https://cityu.zoom.us/join/register/tJEvdu-qqDMtGtGNiIL6Mza1V5L_KrIXJ-9i)