

The Effects of Social Convention and Experience on Processing Pragmatic Knowledge in L1 and L2: An fMRI Study of Japanese Honorifics

Dr. Haining Cui (崔海寧)

Research fellow

Department of Linguistics, Graduate School of Arts and Letters;
Department of Applied Linguistics, Graduate School
of International Cultural Studies;
Department of Human Brain Science, Institute of
Development, Aging and Cancer (IDAC),
Tohoku University

FRIDAY, JULY 2, 2021 • 16:20-17:50 • ZOOM

Free and open to the public.

Please register via URL or QR code.

<https://forms.gle/4wQkE3EqLj75r428A>

Contact: Sachiko Kiyama. E-mail: skiyama:at:tohoku.ac.jp



Abstract

This fMRI study aimed to investigate the brain mechanisms that mediate processing grammaticalized pragmatic knowledge (i.e., Japanese honorific agreement) in L1 and L2 under the impact of social convention (i.e., speakers of lower social status use honorifics toward addressees of higher social status). In addition, we are also interested in examining whether the social experience of honorific use would affect the brain correlates of honorific agreement. Because young adults usually acquire honorifics via workplaces where they need to master these expressions to interact with people of superior or guests. Japanese native speakers (L1) and Chinese learners of Japanese (L2) judged the conventionality (Conventional [C] vs. Unconventional [U]) of honorific sentences based on the social status of interlocutors (Lower [L] vs. Higher [H]). The result of group comparison revealed that irrespective of conventionality, the L1 group showed higher activations than L2 learners for the [L > H] contrast in the brain regions related to grammar processing (i.e., left inferior frontal gyrus), suggesting L1 speakers have advantages in using the social convention (e.g., an office worker use honorifics towards a president) as cues to analyze honorific agreement rules than L2 learners. Moreover, both L1 and L2 speakers' social experience of honorific use was correlated with brain activation sensitive to social learning (i.e., inferior parietal lobes, caudate nucleus), indicating that social experience plays an essential role in processing and learning pragmatic knowledge.