

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Associative learning of new word forms in a first language and gustatory stimuli

Permalink

<https://escholarship.org/uc/item/80p5n0ct>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

Authors

Yan, Yan

Yang, Yutao

Ando, Misa

et al.

Publication Date

2021

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Associative learning of new word forms in a first language and gustatory stimuli

Yan Yan

Hiroshima University, Hiroshima, Japan

Yutao Yang

Hiroshima University, Hiroshima, Japan

Misa Ando

Hiroshima University, Higashihiroshima, Hiroshima, Japan

Xinyi Liu

Hiroshima University, Higashi Hiroshima, Hiroshima, Japan

Toshimune Kambara

Hiroshima University, Higashihiroshima, Hiroshima, Japan

Abstract

This study investigated the effect of gustatory stimuli on the associative learning of new (meaningless) word forms in a first language. Japanese native speakers performed the following tasks: (1) subjective evaluations of gustatory stimuli; (2) learning tasks of associative pairs of a new word form and gustatory stimulus (G) or only new word forms (W); (3) recognition memory tasks associated with the G/W condition; (4) free recall task for the G/W conditions. The accuracy rates of W were highest, whereas there was no significant difference between free recall scores. Subjective evaluations of gustatory stimuli negatively correlated with the free recall performance of word forms associated with the gustatory stimuli, while accuracy rates of the recognition and free recall tasks of G were positively correlated. Accordingly, learning new word forms on their own is more effective than associative learning of new word forms and gustatory stimuli in one day of learning.