

## THE STUDY OF ONOMATOPOEIA FROM THE COMPARATIVE DEVELOPMENTAL PERSPECTIVE

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### **1. Introduction**

Onomatopoeia is the use of words that imitate the sounds associated with the objects or actions they refer to. Onomatopoeias have been attracting attentions in various fields in human linguistics (e.g., Laing, 2019), but have not previously been explored from the cognitive developmental aspects for species comparisons. This study examines the origin and context of onomatopoeia and determines its significance in linguistic development from the evolutionary viewpoint.

#### ***1.1. A review on existing literatures on onomatopoeia***

The Japanese language has a wide range of onomatopoeic expressions. Various onomatopoeias have been used to convey subtle information that cannot be expressed in normal words. Among the five categories used in a review on onomatopoeias in Japanese articles (Yamada et al., 2022), we specifically focused on the following two areas. (ii) Psychology and human relations: onomatopoeias have been referred to as sound symbolism (Imai & Kita, 2014), facilitating linkage between a linguistic sound to a perceptual image in early childhood. (iii) Physical expression: onomatopoeias can be easily combined with physical/bodily actions and gestures, thus, facilitate sharing vivid images.

### **2. Methods and results of observational study on human children**

We conducted observations and video recordings in two settings by focusing on onomatopoeias in the social interactions involving children in Japanese culture.

### **2.1. Onomatopoeias in mother-child interactions**

Observations on mother-child interactions took place in a facility providing a playroom and toys to mothers and children, located in CGU. We focused on an episode which included onomatopoeic and gestural expressions from a three-year-old child during playing house. Some gestural patterns were linked to onomatopoeias, indicating the emergence of rudimentary forms of linguistic categorization on internal action images in early childhood.

### **2.2. Onomatopoeias in interactions among peers**

Observations on social interactions among peers took place in a kindergarten. We focused on an episode which included onomatopoeic expressions from four-year-old children recorded during play activities. Children's vocalizations may express their feelings in communicative contexts as action words of onomatopoeias.

## **3. Implications for the comparative studies on cognitive development**

Japanese children used a rich repertoire of onomatopoeias to communicate about their internal images accompanied by gestures or bodily actions. Onomatopoeias may bridge the babbling or simple actions in infancy with symbolic word utterances, iconic gestures, or symbolic plays in early childhood, thus, have a scaffolding effect on the linguistic development. Since onomatopoeias connect simple vocalizations/gestures to the subsequent linguistic abilities in humans, more observations in early childhood will highlight the evolutional continuity with gestural communications or manipulative plays in nonhuman primates.

## **References**

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