

Japanese is known to have a rich system of ideophones that are a class of referential words, evoking a vivid, sensational feeling or depictive meanings (Kita, 1997; Hamano, 1998; Tamori & Schourup, 1999; Akita, 2009; Dingemanse, 2011, 2015; Dingemanse & Akita, 2017). Native speakers of Japanese have the intuition that ideophones induce direct some sensory impressions, allowing them to detect the non-arbitrary or iconic relations between sounds and meanings. The focus of this talk is on the gradability of ideophones, in which the core meaning of gradability is based on the abstract representation of measurement or scales. Based on degree constructions, I will show that ideophones are ‘flexible’ in that they can be both absolute and relative depending on the context (Kennedy & McNally, 2005; Kennedy, 2007). A consequence of the present study is that ideophones can be analyzed in terms of the ontology of degrees and that their sensational flavour is due to the availability of a ‘extreme’ standard that is also found in extreme adjectives (e.g. *gorgeous*, *fantastic*).

Some ideophones are gradable and thus they are available in comparative constructions.

- (1) a. Okuba-ga maeba yori(mo) guragura-suru.  
back.tooth-NOM front.tooth than IDEOPHONE-do  
‘(Lit.) My back tooth seems more GURAGURA (loose) than my front tooth.’  
b. Zenkai-no sigoto yori(mo) kutakuta-da.  
last-GEN job than IDEOPHONE-be  
‘(Lit.) I am more KUTAKUTA (exhausted) than the last job.’

Assuming that the ideophone *guragura* contains degrees and the comparative marker *yorimo* denotes degree relations and the verb *suru* ‘do’ is semantically vacuous, the meaning of the comparative predicate *maeba yorimo guragura-suru* ‘more GURAGURA than my front teeth’ in (1a) can be expressed as follows (Kennedy, 1999; Heim, 2001; Kennedy & McNally, 2005; Kennedy, 2007):

- (2) a.  $[[guragura]] = \lambda d \lambda x. \mathbf{guragura}(x) = d$   
b.  $[[d_C \text{ yorimo}]] = \lambda G \lambda x. \exists d [d \succeq d_C \wedge G(d)(x)]$   
c.  $[[maeba]] [[yorimo]] [[guragura]]$   
 $= \lambda x. \exists d [d > \mathbf{d}_{my.front.tooth} \wedge \mathbf{guragura}(x) = d]$

Degree modifiers have been used as a diagnosis for dividing gradable expressions into subclasses, but both *totemo* ‘very’ that is related to relative or context-sensitive gradable adjectives and *sukkari* ‘completely’ that is for absolute adjectives with a maximum standard can modify ideophones as shown in (3) (Most gradable ideophones can be modified by them.) (Tsujimura, 2001).

- (3) a. *totemo guragura, sukkari guragura*  
b. *totemo kutakuta, sukkari kutakuta*

The meanings of the degree modifiers can be expressed à la Kennedy and McNally (2005), where *pos* expresses an abstract positive degree morpheme that introduces a standard of comparison; *Totemo X* is true of an object if the degree to which it is X exceeds a standard even among objects that are X and *sukkari X* is true of an object if the degree to which it is maximally X.

- (4) a.  $[[totemo]]^C = \lambda G \lambda x. \exists d [\mathbf{stnd}(d)(G)(\lambda y. [[pos(G)(y)]]^C) \wedge G(d)(x)]$   
b.  $[[sukkari]] = \lambda G \lambda x. \exists d [d = \mathbf{max}(S_G) \wedge G(d)(x)]$

The modifiability by the degree modifiers indicates that ideophones can be either context-dependent (relative) or absolute (maximal). The latter interpretation is required in their phonologically emphatic forms (e.g. *gurragura*, *kuttakuta*). The emphatic forms resist comparative constructions, because a standard must be maximal and thus a comparative phrase is redundant as shown in (5). The emphatic interpretation can also be found in extreme adjectives that are in principle not available in comparative constructions either (Bolinger, 1967; Cruse, 1986; Morzycki, 2012). I will also claim that the maximality found in ideophones and extreme adjectives can lead to a sensational flavour of these expressions.

- (5) a. ?? Okuba-ga maeba yori(mo) gurragura-suru.  
b. ?? Zenkai-no sigoto yori(mo) kuttakuta-da.

## References

- Akita, K. (2009). *A grammar of sound-symbolic words in Japanese*. Ph.D. dissertation, Kobe University.
- Bolinger, D. (1967). Adjective comparison: A semantic scale. *Journal of English Linguistics* **1**. 2–10.
- Cruse, D. A. (1986). *Lexical semantics*. Cambridge, Great Britain: Cambridge University Press.
- Dingemanse, M. (2011). *The meaning and use of ideophones in Siwu*. Ph.D. dissertation, Max Planck Institute for Psycholinguistics.
- Dingemanse, M. (2015). Ideophones and reduplication: Depiction, description, and the interpretation of repeated talk in discourse. *Studies in Language* **39**. 946–970.
- Dingemanse, M. & Akita, K. (2017). An inverse relation between expressiveness and grammatical integration: On the morphosyntactic typology of ideophones, with special reference to Japanese. *Journal of Linguistics* **53**. 501–532.
- Hamano, S. (1998). *The sound-symbolic system of Japanese*. Cambridge: Cambridge University Press.
- Heim, I. (2001). Degree operators and scope. In Fery, C. & Sternefeld, W. (eds.), *Audiatu vox sapientiae. a festschrift for Arnim von Stechow*, Berlin: Akademie Verlag. 214–239.
- Kennedy, C. (1999). *Projecting the adjective: The syntax and semantics of gradability and comparison*. New York: Garland Publishers.
- Kennedy, C. (2007). Vagueness and grammar: the semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy* **30**. 1–45.
- Kennedy, C. & McNally, L. (2005). Scale structure, degree modification, and the semantics of gradable predicates. *Language* **81**. 345–381.
- Kita, S. (1997). Two-dimensional semantic analysis of Japanese mimetics. *Linguistics* **35**. 379–415.
- Morzycki, M. (2012). Adjectival extremeness: Degree modification and contextually restricted scales. *Natural Language and Linguistic Theory* **30**. 567–609.
- Tamori, I. & Schourup, L. (1999). *Onomatopoe: Keitai-to imi (Onomatopoeia: Form and meaning)*. Tokyo: Kurosio Publishers.
- Tsujimura, N. (2001). Degree words and scalar structure in Japanese. *Lingua* **111**. 29–52.