Subjective Ideophones and Their Core **Meanings**

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Introduction

Japanese is known to have a rich system of ideophones, which are a class of referential words, evoking a vivid, sensory feeling, or depictive meanings (Kita 1997; Tamori and Schourup 1999; Akita 2009; Dingemanse 2011, 2012, 2015; Dingemanse and Akita 2017; Dingemanse 2017). Native speakers of Japanese have the intuition that ideophones induce direct, sensory impressions, allowing them to detect the nonarbitrary or iconic relations between sounds and meanings. Ideophones are sound-symbolic words and are sometimes called *onomatopoeia*. While the term *onomatopoeia* is most generally used for sound-symbolic words in Japanese linguistics (Kakehi and Tamori 1993; Tamori and Schourup 1999), it is usually understood to be limited to words of imitative sound (Moore 2015; Dingemanse 2018). Hence, onomatopoeia is deemed a subset of ideophones. This paper uses the term ideophones to cover the broad class of sound-sympoblic words.

NHK (Japan Broadcasting Corporation, Close-up Gendai, 11 June 2013) once broadcasted that sweets in convenience stores sold five times better than normal when ideophones were used (e.g., motitto hottokeeki 'motitto hot cakes', motimoti kurumipan 'motimoti walnut bread'). On convenience stores' websites, quite a large number of ideophones can be found. This prevalence is because ideophones express vivid sensory imagery and are closely linked to perception and the senses, and thus, prospective customers can imagine what these foods are like very easily.

The goal of this paper is to investigate how and why ideophones can express such sensory meanings. I begin from a descriptive perspective to introduce several properties that ideophones show, pointing out that ideophones share their core properties with subjective predicates. I argue that ideophones are sorted out based on their core meanings but they differ in their morphological and phonological properties. I propose that ideophones are usable if there are other alternative resolutions. Since there are plenty of options available in each selection of an ideophone, ideophones can express rich and sensory feelings.

2 Ideophones

The purpose of this section is to introduce the core properties of ideophones. I first discuss the parallel behavior of ideophones with subjective predicates and then address the measurability and comparability of ideophones.

2.1 Subjective Ideophones

Ideophones show parallel properties with subjective predicates such as *tasty*. First, they both have a kind of non-indexical perspective dependence, which is made clear in linguistic disagreement (Kennedy and Willer 2016, 2017). The conversation in (1) is a contradiction if speakers A and B have identical evidential bases (both mention the same individual called *John*). In short, the conversation is flawed. What is evident in the case of the subjective predicate in (2) is that the disagreement is faultless. It is impossible at the same time for the same speaker to believe that the propositions are both true, but the different speakers can have a different judgment about the same object. That is, the conversation in (2) is not contradictory and one does not find it strange. Such faultless disagreement can be found in Japanese, as shown in (3), which is famous for its rich system of ideophones.

- (1) a. A: John is dead.
 - b. B: No, he is not dead.
- (2) a. A: This pie is tasty.
 - b. B: No, this pie is not tasty.
- (3) a. A: Kono pai-wa karikari da. this pie-TOP IDEO COP
 - 'This pie is karikari (crispy).'
 - b. B: Iya, *karikari* dewa nai. (*Sakusaku*-da.) no IDEO COP NEG (IDEO-COP)
 - 'No, this pie is not karikari (crispy). (It is sakusaku (crispy).)'

Second, an assertion or denial of subjective predicates and ideophones often implies direct experiences by a speaker or an acquaintance inference (Ninan 2014; Kennedy and Willer 2016, 2017). The following sentences make

the previous examples odd, because the speakers who use the subjective predicates and ideophones cannot use these words if they do not have an experience with the given object.

- (4) a. This pie is tasty. #I have never tried it, but I can tell from how it looks.
 - b. This pie is not tasty. #I have never tried it, and I never will.
 - c. Kono pai-wa *karikari* da. #Tabeta koto nai kedo, this pie-TOP IDEO COP ate thing NEG but mitame-de wakaru.

look-from know

'This pie is *karikari*. I have never tried it, but I can tell from how it looks.'

d. Kono pai-wa *karikari* dewa nai. #Tabeta koto nai si, this pie-TOP IDEO COP NEG ate thing NEG and taberu ki-mo nai kedo.

eat intention-also NEG though

'This pie is not karikari. I have never tried it, and I never will.'

Although the acquaintance inference projects over negation, it does not project out of other presupposition holes, as is noted by Ninan (2014); Kennedy and Willer (2016, 2017). None of the following examples implies that the speaker has tasted the pie.

- (5) a. If this pie is tasty, I will buy it.
 - b. This pie might be tasty. / This pie must be tasty.
 - c. Mosi pai-ga *karikari* nara, kai masu. if pie-NOM IDEO then, buy will 'If this pie is *karikari*, I will buy it.'
 - d. Pai-ga *karikari* kamosirenai. / Pai-ga *karikari* nitigainai. pie-NOM IDEO might pie-NOM IDEO must 'This pie might be *karikari*.' / 'This pie must be *karikari*.'

Finally, subjective predicates and ideophones can be embedded under subjective attitude verbs (SAVs, e.g. *find*). Japanese has the adverb *tukuduku* 'utterly, intently' that makes ordinary doxastic attitude verbs SAVs. The following contrast shows that ideophones are subjective.

- (6) a. Kono pai-wa {oisii, karikari da} to tukuduku omou. this pie-TOP tasty IDEO COP COMP utterly think 'I (intently) find this pie {tasty, karikari}.'
 - b. Kono pai-wa eikokusei da to (??tukuduku) omou. this pie-TOP English COP COMP utterly think '??I (intently) find this pie English.'

2.2 Measurability

The meanings of a sentence are evaluative if it expresses that a degree exceeds some contextual standard (Bierwisch 1989; Rett 2015). Ideophones can be paraphrased as gradable adjectives, but a difference lies in their evaluativity. Ideophones do not receive a dimensional interpretation, while gradable adjectives can combine with a measure phrase. Japanese gradable adjectives denote a differential degree, as has been discussed by Sawada and Grano (2011). Note also that the number of ideophones is much greater than that of their counterpart adjectives.

- (7) a. go-do {samui, atatakai} five degrees {colder, warmer}
 - b. go-do {colder: *hinyari-da, *hiyahiya-da, *suusuu-suru} {warmer: *nukunuku-da, *hokahoka-da, *pokapoka-da}
- (8) a. go-kiro omoi (five kilograms heavier)
 - b. go-kiro *bukubuku-da, *buyobuyo-da, *poQtyari-da, *potyapotya-da, *deQpuri-da
- (9) a. go-do magat-te iru (five-degrees more bent)
 - b. go-do *gunyari-da, *gunyagunya-da, *uneune-da
- (10) a. go-hiki ooi (five-CLASSIFIER more)
 - b. go-hiki *uzyauzya-da, *uyouyo-da
- (11) a. go-byoo {hayai, osoi} (five-seconds faster, later)
 - b. go-byoo {faster: *saQsaQ-da, *sasaQ, *suiQ, *susuQ, *paQpaQ, *papaQ, *byuun}
 - c. go-byoo {later: *guzuguzu, *ziriziri, *ziwari, *zusizusi, *daradadra, *nokonoko, *nosonoso, *motamota}

Since measurability is related to objectivity, the incompatibility of ideophones with measure phrases implies that ideophones inherently denote subjective meanings, which this paper tries to describe.

2.3 Comparability

Ideophones are comparable (Kawahara 2019). The availability of this comparative function indicates that ideophones are somehow related to an abstract representation of measurement, or a scale. Gradable adjectives are possible in comparisons, because they are related to a scale by taking an object to return a degree (Kennedy 1999; Kennedy and McNally 2005). For example, the adjective *tall* is related to a scale of height, by which two objects can be compared based on the same standard. Faultless disagreement arises in an evaluative or metaphorical meaning in (13). Tokyo is the capital of Japan, and the average temperature there is 15.4C°; Sapporo is the central city of Hokkaido, the northern part of Japan, and the average temperature is 8.9C°. Everyone in Japan knows this fact, and thus, it is almost impossible for Sapporo to be

warmer than Tokyo, unless the speakers are talking about the room temperature. The adjective *atui*, however, has an evaluative meaning that could be translated as 'heated' or 'exciting'. In the interpretation, the conversation in (13) is faultless. The ideophone is faultless by default as shown in (14).

- (12) Tokyo-wa Sapporo yori(mo) {atui, pokapoka-da}. Tokyo-TOP Sapporo than warmer, IDEO-COP 'Tokyo is warmer than Sapporo.'
- (13) a. A: Sapporo-wa Tokyo yori(mo) atui.
 Sapporo-TOP Tokyo than ??warmer/exciting
 'Sapporo is more exciting than Tokyo.'
 - b. B: Iya, sonna koto nai.no that thing NEG'No, that's not true.'
- (14) a. A: Sapporo-wa Tokyo yori(mo) pokapoka-da.
 Sapporo-TOP Tokyo than IDEO-COP
 'Sapporo is more exciting than Tokyo.'
 - b. B: Iya, sonna koto nai.no that thing NEG'No, that's not true.'

To summarize, ideophones are subjective, receiving an evaluative meaning. Since ideophones are subjective, they are not measurable, and thus, cannot combine with measure phrases. Ideophones can be related to a scale, but the scale is somehow subjective; an objective standard is not possible.

3 Proposal

What should be emphasized is that ideophones evoke a vivid feeling and can express refined and delicate meanings, whereby, for example, potential customers can imagine what products are like in convenience stores.

I argue that the properties of ideophones are derived from a preconditioned ample set of alternatives. Several sets of ideophones are sorted out depending on a (shared) standard, and they express the same meaning at their core, at-issue content. The difference lies in the selection of stances one takes. The analysis is made possible by introducing the counterstance approach to subjective predicates developed by Kennedy and Willer (2016, 2017). Kennedy and Willer (2016, 2017) argue that subjectivity emerges out of language users' sensitivity to, and awareness of, underdetermination of linguistic practice by what they accept as the facts. It is assumed that determining meanings of expressions in a discourse involves decisions about how to fix semantic and pragmatic underdetermination and that language users notice that these decisions are arbitrary and vary depending on various factors. Kennedy and Willer refer to alternative resolutions of underdetermined

aspects of meaning and use as COUNTERSTANCES modeled as sets of possible worlds. The definition of counterstance is as follows, where s is the common ground.

(15) κ_c : a (possibly partial) function from a context set (or other information carrier) to a set of its *counterstances*, where each $s' \in \kappa_c(s)$ agrees with s on its factual information but disagrees on contextually salient decisions about linguistic practice.

With this consideration, the authors define the concept of RADICAL COUNTERSTANCE CONTINGENCY, which is applied to SUBJECTIVE ATTITUDE VERBS (SAVs) such as *find* and predicates of personal taste, where κ_c^* is a function from a set of counterstances to a set of its subsets, such that the members of each subset agree on those resolutions of uncertainty of meaning that support coordination by stipulation.

(16) A proposition p is radically counterstance contingent in context c iff $\exists s \in \wp(W)$: $s \subseteq p \& \forall \pi \in \kappa_c^*(\kappa_c(s)) \exists s' \in \pi$: $s' \not\subseteq p$

Kennedy and Willer (2017) use the following examples. First, *tasty* can be embedded into SAVs and the regular doxastic attitude verb *believe*.

- (17) a. Kim finds this beer tasty.
 - b. Kim considers this beer tasty.
 - c. Kim believes this beer to be tasty.

The vague predicate *transparent* is embeddable under *consider* and *believe*, but not under *find*.

- (18) a. # Kim finds this beer transparent.
 - b. Kim considers this beer transparent.
 - c. Kim believes this beer to be transparent.

Japanese used in reference to the origin of the beer is only acceptable under believe.

- (19) a. # Kim finds this beer Japanese.
 - b. # Kim considers this beer Japanese.
 - c. Kim believes this beer to be Japanese.

According to Kennedy and Willer (2017), the meanings of SAVs and the doxastic attitude verb will be as follows.

- (20) a. $\llbracket \alpha \text{ believes } \phi \rrbracket^{c,w} = 1 \text{ iff } \operatorname{Dox}(w(\alpha),w) \subseteq \llbracket \phi \rrbracket^c$
 - b. $\llbracket \alpha \text{ considers } \phi \rrbracket^{cw} \text{ is defined only if } \llbracket \phi \rrbracket^c \text{ is counterstance contingent in context } c$. If defined, then $\llbracket \alpha \text{ considers } \phi \rrbracket^{c,w} = \llbracket \alpha \text{ believes } \phi \rrbracket^{c,w}$
 - c. $\llbracket \alpha \text{ finds } \phi \rrbracket^{cw}$ is defined only if $\llbracket \phi \rrbracket^c$ is radically counterstance contingent in context c. If defined, then $\llbracket \alpha \text{ finds } \phi \rrbracket^{c,w} = \llbracket \alpha \text{ believes } \phi \rrbracket^{c,w}$

The contrasts above are explained by these denotations. The examples in (17) are acceptable, because the embedded proposition is radically counterstance contingent; the criteria for deriving a meaning of the subjective predicate *tasty* are indeterminate and cannot be stipulated. The criteria for a meaning of *transparent* is, in contrast, can be stipulated. The embedded proposition in (18) is counterstance contingent but not radically counterstance contingent. Hence, embedding under *find* is unacceptable, but embedding under *consider* is possible. The criteria for fixing a meaning of *Japanese* is determined by the facts in the present world. Hence, the embedded proposition is not variable and not counterstance contingent.

Since the criteria for fixing a meaning of subjective predicates and ideophones is variable and indeterminate, (1c) repeated here is faultless.

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(21) a. A: Kono pai-wa karikari da.
this pie-TOP IDEO COP.
'This pie is karikari (crispy).'
b. B: Iya, karikari dewa nai. (Sakusaku-da.)
no IDEO COP NEG (IDEO-COP)
'No, this pie is not karikari (crispy). (It is sakusaku (crispy).)'
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For the selection of *karikari*, there are several alternative stances available that designate the state of crispy pie shown in (22b).

- (22) a. $\llbracket P(x) \rrbracket^{\varsigma w}$ is defined only if $\llbracket P(x) \rrbracket^c$ is radically counterstance contingent in context c. If defined, then $\llbracket P(x) \rrbracket^{\varsigma w} = \llbracket CRISPY(x) \rrbracket^{\varsigma w}$
 - b. P = Predicative ideophones (based on the scale of crispiness): *karikari, sakusaku, paripari* etc.

According to the analysis, the truth of the proposition varies depending on what stances one takes, that is, it can be defined only if there exists a stance that makes the proposition false in the set of all the hypothetical stances. Speaker A in (21) asserts that the pie is *tasty* and proposes to update the discourse model to eliminate counterstances in which this proposition is false (Barker 2002). Since the felicity condition requires that the speaker knows what they assert, direct experience of the relevant sort follows due to the evidential conditions.

The counterstance analysis of predicates of personal tastes can be extended to ideophones, but in ideophones, there exists a set of expressions that are based on the scale of relevant sort. In (21b) the speaker picks out *sakusaku*, but some other stances listed in (22b) are available depending on the speakers. The selection of several ideophones makes ideophones special in that the wide choice with subtle differences leads to their vivid properties. It is in the selection of hypothetical stances that the sound symbolism of ideophones works (Hamano 1998; Dingemanse et al. 2016). Words beginning with the voiceless bilabial plosive /p/ are typical of Japanese ideophones (Hamano 1998). The ideophone *paripari* expresses that layers of pies break instantly and strongly.

The word *karikari* begins with voiceless velar plosive /k/. Since /k/ is also plosive, *karikari* denotes the state of breaking layers of pies instantly, but the degree of break is somewhat modest compared to *paripari*. *Sakusaku* begins with voiceless alveolar fricative /s/, and thus, it denotes the state of breaking layers of pies; however, the degree of breaking is not strong but rather modest and appropriate compared to *paripari* and *karikari*. This difference may be because the disruption of air in the articulation of fricatives is slightly weaker than that of plosives and because the physical movement is related to the sound symbolism.

Since the criteria for fixing the meaning of ideophones are variable and cannot be stipulated, it is expected that ideophones are embeddable under SAVs. As has been pointed out in (6), Japanese has an adverb, *tukuduku* 'utterly, intently' that makes ordinary doxastic attitude verbs SAVs. Ideophones can be embedded under *tukuduku omou* '(intently) find', but an adjective that expresses nationality (e.g., English) cannot. This difference is because the criteria for fixing a meaning of *English* is not variable and can be stipulated. The following contrast supports the view that ideophones are a type of subjective predicates.

- (23) a. Kono pai-wa {oisii, *karikari* da} to tukuduku omou. this pie-TOP tasty IDEO COP COMP utterly think 'I (intently) find this pie {tasty, *karikari*}.'
 - b. Kono pai-wa eikokusei da to (??tukuduku) omou. this pie-TOP English COP COMP utterly think '??I (intently) find this pie English.'

Finally, since subjectivity is incompatible with measurability that is objective, ideophones are not measurable but are comparable as long as they are associated with some scale.

4 Conclusion

This paper has shown that ideophones are subjective and that they are available if there are other alternative resolutions. The subjective property can be described by introducing the counterstance approach developed by Kennedy and Willer (2016, 2017). Several sets of ideophones are sorted out based on their core meanings. Since there are many alternative resolutions available, ideophones can invoke vivid sensory imagery and denote fine-grained meanings.

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References

- Akita, K. 2009. A Grammar of Sound-Symbolic Words in Japanese. Ph. D. thesis, Kobe University.
- Barker, C. 2002. Continuations and the Nature of Quantification. *Natural Language Semantics* 10(3), 211–242.
- Bierwisch, M. 1989. The Semantics of Gradation. In M. Bierwisch and E. Lang (Eds.), *Dimensional Adjectives*, pp. 71–262. Berlin: Springer.
- Dingemanse, M. 2011. *The Meaning and Use of Ideophones in Siwu*. Ph. D. thesis, Max Plank Institute for Psycholinguistics.
- Dingemanse, M. 2012. Advances in the Cross-Linguistic Study of Ideophones. *Language and Linguistics Compass* 6, 654–672.
- Dingemanse, M. 2015. Ideophones and Reduplication: Depiction, Description, and the Interpretation of Repeated Talk in Discourse. *Studies in Language 39*, 946–970
- Dingemanse, M. 2017. Expressiveness and System Integration: On the Typology of Ideophones, With Special Reference to Siwu. STUF Language Typology and Universals 70, 363–384.
- Dingemanse, M. 2018. Redrawing the Margins of Language: Lessons from Research on Ideophones. *Glossa 3*, 1–30.
- Dingemanse, M. and K. Akita 2017. An Inverse Relation between Expressiveness and Grammatical Integration: On the Morphosyntactic Typology of Ideophones, With Spetial Reference to Japanese. *Journal of Linguistics* 53, 501–532.
- Dingemanse, M., W. Schuerman, E. Reinisch, S. Tufvesson, and H. Mitterer 2016. What sound symbolism can and cannot do: Testing the iconicity of ideophones from five languages. *Language* 92, 117–133.
- Hamano, S. 1998. *The Sound-Symbolic System of Japanese*. Cambridge: Cambridge University Press.
- Kakehi, H. and I. Tamori 1993. Onomatopoeia-Gion/Gitaigo-no Rakuen. Keisoshobo.
- Kawahara, K. 2019. Gradable Ideophones, Scales and Maximality in Grammar. In K. Garvin, N. Hermalin, M. Lapierre, Y. Melguy, T. Scott, and E. Wibanks (Eds.), Berkeley Linguistics Society, Volume 44, pp. 115–130. University of California, Berkeley.
- Kennedy, C. 1999. *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison.* New York: Garland Publishers.
- Kennedy, C. and L. McNally 2005. Scale Structure, Degree Modification, and the Semantics of Gradable Predicates. *Language* 81(2), 345–381.
- Kennedy, C. and M. Willer 2016. Subjective Attitudes and Counterctance Contingency. In Semantics and Linguistic Theory, Volume 26, pp. 913–933.
- Kennedy, C. and M. Willer 2017. Counterstance Contingency: A Pragmatic Theory of Subjective Meaning. In *Linguistic Society of Japan*, pp. 1–10.
- Kita, S. 1997. Two-dimensional Semantic Analysis of Japanese mimetics. *Linguistics* 35, 379–415.
- Moore, C. 2015. An Ideological History of the Englsih Term Onomatopoeia. In M. Adams, L. J. Brinton, and R. Fulk (Eds.), Studies in the History of the Englsih Language, pp. 307–320. Walter de Gruyter.

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- Ninan, D. 2014. Taste Predicates and the Acquainstance Inference. In *Semantics and Linguistic Theory*, Volume 24, pp. 290–304.
- Rett, J. 2015. The Semantics of Evaluativity. Oxford: Oxford University Press.
- Sawada, O. and T. Grano 2011. Scale Structure, Coercion, and the Interpretation of Measure Phrases in Japanese. *Natural Language Semantics* 19, 191–226.
- Tamori, I. and L. Schourup 1999. *Onomatopoe: Keitai-to imi (Onomatopoeia: Form and Meaning)*. Tokyo: Kurosio Publishers.