

A Cognitive Approach to Mimetic Aspect in Japanese*

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0. Introduction

A specification of a component of a sentence can be in agreement or in disagreement with the basic specification of another component of the same sentence. Talmy (2000b:323) observes that if hearers are presented with two pieces of conflicting information, they can resort to cognitive means in order to interpret the sentence, terming the general category of this type of cognitive process “semantic resolution.” This paper shows that the aspect of a mimetic can be in agreement or in disagreement with the basic aspectual specification of the other components of the sentence. It also argues that semantic resolution is a useful notion in explicating the cognitive process in which the hearer engages when there is a mismatch in aspectual specification between the mimetic and the other components of the sentence. First, a brief description of mimetics is in order.

In one’s daily life, one (i.e. the cognizer) experiences various things: one may see the glittering of the ocean in the sun; one may hear the sound of the hinge as one opens a creaky door; or one may feel a fresh breeze as one takes a walk in the park. Japanese has a large inventory of linguistic expressions, termed mimetics, that capture these sensory perceptions, which include not only the auditory but also the other sensations such as visual, olfactory, and cutaneous. They also can portray a motion (e.g. a swaying motion) or a state (e.g. being dry) perceived by the cognizer. Their forms often mirror what the cognizer is experiencing or has just experienced. “Mimetics” in this paper refer to adverbs that cover words traditionally classed as *giongo* ‘onomatopoeias’ and *gitaigo* ‘ideophones’, which together number at least several hundred.¹ Example (1) shows how a mimetic occurs in a sentence: the mimetic *bataN* (1a) is synesthetic, capturing both the motion

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¹ Atoda and Hoshino’s (1993) mimetic dictionary lists 738 headwords and approximately 1,700 mimetics if their variant forms are included.

and the quality of sound of the door slammed shut, and *téku-teku* (1b) portrays the cognizer's visual image of the person walking at a constant pace.

- (1) a. to-ga bataN-to simat-ta
 door-NOM mimetic-P shut-PAST²
 'The door slammed shut.' (lit. 'The door shut with a slam.')
- b. téku-teku(-to) arui-ta
 mimetic- P walk- PAST
 '(He) walked at a constant pace.'

In order to occur as an adverb in a sentence, mimetics are marked by a particle *to* although reduplicated mimetics often do not require *to*-marking (see (1b)). Despite being adverbs, mimetics are analogues of verbs semantically: they can be characterized as denoting a type of a state of affairs (Kita 1997). For example, *bataN* (1a) denotes an event in which something slams/falls and *téku-teku* (1b) denotes an event in which someone walks at a constant pace. Moreover, like verbs, mimetics are sensitive to aspect.

Hamano (1986), discovering various form-aspect relations, suggests that aspect is part of the meaning of mimetics: for example, a short vowel in a monosyllabic mimetic refers to an instantaneously completed event (e.g. *paN* 'a (short) bang') whereas its vowel-lengthened counterpart expresses that "the action takes longer...temporally" (e.g. *paaN* 'a (long) bang') (Hamano 1986:90). Hamano furthermore notices that co-occurrence restrictions on aspect exist between the mimetic and its clause-mate verb as in (2).³

- (2) Ano ko tui saikiN inaka kara poQ (*poQ poQ) to
 that child merely recently country from
- de -te ki-ta N des -u
 come out-and come-PAST COMP COP.POL -PRES
- 'That girl arrived from the countryside just recently looking unprepared.'
 = 'She came right out of the sticks.' (Hamano 1986:81, the underscore and the note in the original, the information in parentheses added.)

In this sentence, the singleton form *poQ* 'manner of coming out' is felicitous but its repeated form *poQ poQ* is infelicitous. Hamano explains that it is "because the context makes it clear that there is a single event [of coming out]" (ibid.), sug-

² The following abbreviations are used: DAT=dative, GEN=genitive, L=linker, NOM=nominative, NPAST=non-past, P=particle, TOP=topic. And /N/ stands for the syllable-final nasal and /Q/, the first half of a geminate cluster, following Hamano (1986, 1998).

³ The predicating element that co-occurs with a mimetic within the same sentence can be a verb or an adjective.

gesting that the form of a mimetic plays a role in assigning an interpretation to the sentence. More recently, Kita (1997:404) offers an account of such co-occurrence restrictions proposing that “[a]dverbial mimetics select some combination of Vendler’s (1967) categories.” While Kita’s proposal suggests that mimetics are sensitive to certain aspectual features, it is not made explicit what they are, what makes the “selection” possible, or what the possibilities are. In the light of these questions, Toratani (1999:503) proposes that telicity determines the acceptability of the sentence, hypothesizing that “[t]he mimetic aspect must match the aspect of the verb for telicity within the single event denoted by the verb.”

These previous studies suggest that the aspect of a mimetic must be congruent with the aspect of the other components of the sentence. Expanding on this point, this paper first examines on which aspectual specification the mimetic and the other components are congruent with each other. It offers a counterargument to Toratani (1999), arguing that the overall aspect which the sentence with a mimetic observes should be characterized in terms of boundedness (Depraetere 1995) but not telicity, and that the felicity of the sentence cannot be accounted for on the basis of a simple matching on telicity between the mimetic and the verb at the lexical level. Rather, the aspect entailed by the entire predicate must be considered. This paper, then, turns to the case where there is an aspectual mismatch between the mimetic and the other components. It is argued that the sentence can still be construed felicitously even in such a case by resorting to cognitive means of a juxtaposition and a shift, sub-types of semantic resolution (Talmy 2000b).

The organization of this paper is as follows: Section 1 describes the terms employed in this paper; Section 2 examines the aspectual interaction of the mimetic and the other components in the sentence; and Section 3 offers concluding remarks.

1. Mimetic Aspect: Telicity and Boundedness

This paper employs two pairs of terms employed in Toratani (1999) in order to make the analysis comparable: they are telicity vs. boundedness (Depraetere 1995) and the reduplicated vs. the *n*-times instantiated mimetics.

First, the distinction between telicity and boundedness is made in Depraetere (1995:2) as follows: telicity is concerned with whether the situation has “an inherent or intended end point” whereas boundedness is concerned whether “the situation is described as having reached a temporal boundary” (ibid.:3). For example, in *John was opening the parcel*, the referent scene is telic because the event has an intended end point but is unbounded because it refers to the progressive phase, which is indifferent to the initial or the final point of the situation. In another example, *Mary played in the garden for one hour*, the referent scene is atelic because Mary’s playing in the garden does not have any inherent or intended end point, but the situation is bounded because the one hour in question has the beginning and the ending points.

Secondly, on the basis of Hamano’s (1986, 1998) observations regarding aspect, Toratani (1999) divides mimetics into two groups, which are called redupli-

cated mimetics (3) and the *n*-times instantiated mimetics (4).

(3) *núru-nuru*, *kíri-kiri*, *gúra-gura*, *pára-para*, *éN-eN*, *ói-oi*

(4) *paQ*, *pakuQ*, *pa-paQ*, *paN*, *pakuN*, *pa-paN*, *pa-pa-paN*, *pui*, *poi*, *potori*

The *reduplicated* mimetics refer to fully reduplicated forms whose initial vowel is accented, as in *núru-nuru* and *kíri-kiri*. The *n*-times instantiated forms ($n \geq 1$) refer to the remaining forms, which can be repeated *n* number of times iconically to the occurrence of the event if the scene is inherently repeatable. For example, the sound of a knock, *koN*, a one-time instantiated form, can be repeated twice as in *koN koN* ‘the sound of two knocks’ (two-times instantiated form) or three times as in *koN koN koN* ‘the sound of three knocks’ (three-times instantiated form) and so on. The two forms differ on temporal boundedness. The reduplicated mimetics express a scene which is unbounded, whereas the *n*-times instantiated forms express a scene which is bounded.⁴ Moreover, since each form may denote an atelic or a telic scene, four combinations are rendered: [unbounded, atelic] (5a), [unbounded, telic] (5b), [bounded, atelic] (6a) and [bounded, telic] (6b).

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|--------|---|---|-----------------------|---------------------|
| (5) a. | heya-ga
room-NOM
‘This room is pleasantly warm.’
<i>póka-poka</i> : sensation of pleasant warmth | póka-poka-to
mimetic-P
warm.NPAST | atatakai | [unbounded, atelic] |
| b. | usi-ga
cow-NOM
‘Cow after cow died.’
<i>báta-bata</i> : continuous thudding | báta-bata-to
mimetic-P | sin-da
die-PAST | [unbounded, telic] |
| (6) a. | inu-ga
dog-NOM
‘A dog gave a single bark.’
<i>waN</i> : a single bark of a dog | waN-to
mimetic-P | nai-ta
bark-PAST | [bounded, atelic] |
| b. | sukaato-ga
skirt-NOM
‘(Her) skirt ripped.’
<i>biriQ</i> : the sound of a rip | biriQ-to
mimetic-P | yabure-ta
rip-PAST | [bounded, telic] |

⁴ Hamano (1998:67, 106-107) observes that the final segments /N/, /Q/, Ø and -ri are suggestive of ending. Some -ri-suffixed mimetics have non-ri-suffixed counterparts (e.g. *potoQ* ‘a drip’ vs. *po-tori* ‘a drip’). In these cases, -ri is suggestive of ending. On the other hand, some do not have non-ri-suffixed counterparts (e.g. **siQto/*sitoN* vs. *siQtori* ‘moistly’). In these cases, they are suggestive of non-ending. Only the former type groups with the *n*-times instantiated forms, and the discussion here is limited to the *n*-times instantiated forms that are suggestive of ending.

The mimetics in (5) are reduplicated and both refer to an unbounded scene because neither *póka-poka* ‘warm sensation’ (5a) nor *báta-bata* ‘continuous thudding’ (5b) can be described as “having reached a temporal boundary.” On the other hand, the former *póka-poka* is atelic since it has no inherent or potential terminal point, whereas the latter *báta-bata* is telic because each individuated core event (i.e. a thud) has an inherent terminal point. The mimetics in (6) occur in the *n*-times instantiated forms, both referring to a temporally bounded scene: *waN* (6a) expresses a bark that lasted only briefly; *biriQ* entails that something ripped within a short duration of time. On the other hand, the former *waN* is atelic since an event of barking contains no inherent or potential terminal point, whereas the latter *biriQ* is telic because it entails that something ripped whose event has a clear terminus. In a nutshell, the distinction of the reduplicated and the *n*-times instantiated mimetics is based on temporal boundedness and the respective form may refer to a telic or an atelic situation. With these terms in mind, it can now be discussed how the presence of a mimetic affects the interpretation of the sentence.

2. Aspectual Interaction

2.1. In Agreement

Talmy (2000b:280) suggests that there is a single aspectual parameter to which the sentence conforms.⁵ In the case of a sentence with a mimetic, Toratani (1999) proposes that the parameter is telicity. This proposal correctly accounts for instances where the predicate consists of a simplex verb such as (7).

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|-----|-------------------------|-----------------------|-----------------------|-------|
| (7) | sukaato-ga
skirt-NOM | biriQ-to
mimetic-P | yabure-ta
rip-PAST | (=6b) |
| | ‘(Her) skirt ripped.’ | | | |

In (7) a telic verb *yabure-* ‘rip’ co-occurs with a telic mimetic *biriQ* ‘sound of a rip’, confirming that the mimetic and the verb match for telicity. A problem arises, however, if the predicate is complex. For example, (8) is fully interpretable despite the fact that the verb’s telicity does not match the mimetic telicity.

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|--------|--|--------------------------------------|---|------------------|
| (8) a. | kona-wa ...
powder-TOP | bin-no naka-ni
jar-GEN inside-DAT | sára-sara-to oti-te-it-ta
mimetic-P fall-L-GO-PAST | (Text:H, 271) |
| | ‘Powder sifted into the jar.’ | | | |
| b. | kawa-wa ...
river-TOP | úne-une-to
mimetic-P | nobi-te-i-ta
extend-L-exist-PAST | (Text:T, 5-9-10) |
| | ‘The river meanders (over the plain).’ | | | |

In (8a), the mimetic *sára-sara* is atelic because it expresses a ‘powdery and dry sensation’, whereas the verb *oti-* ‘fall’ is telic because it has an inherent terminal

⁵A similar idea is discussed in Croft (2002) in terms of the “unity of selection.”

point. This example shows that what the mimetic is sensitive to is not the terminus of the falling event but the unbounded phase portrayed by the entire predicate *otite-ik-*, which consists of the telic base verb *oti-*, a linker *-te*, and an auxiliary verb *ik-* 'go'. Hasegawa (1996:120) notices that *ik-* 'go' licenses an achievement verb to express progressive aspect. Accordingly, in (8a), the complex predicate expresses a progressive phase, i.e. an unbounded phase, and the mimetic describes the condition of the powder during this phase. Example (8b) offers an analogous scenario. The mimetic *úne-une* 'manner of meandering' is atelic because it describes a state of being meandrous, whereas the verb *nobi-* 'extend' is telic, having an inherent terminal point, but the entire predicate expresses an unbounded state. In Japanese, if a telic verb is followed by *-te-i-* 'linker-exist', it expresses a resultative state (e.g. Kindaichi 1976[1950]) and the complex predicate *nobi-te-i-* refers to an already existing state in which the river fictively (Talmy 1996) meanders through the area. In this example as well, the overall aspect of the situation to which the mimetic and the complex predicate conform is unboundedness. These examples show that the mimetic is corresponding to the aspect entailed by the entire predicate which should be characterized in terms of boundedness, not telicity.

2.2. Disagreement and Reconciliation

The next question is what happens if there is a disagreement in specification on boundedness between the mimetic and the predicate. A disagreement does not automatically result in the unacceptability of the sentence – it can be reconciled. Two types of reconciliation are observed: (i) the sentence is construed as keeping the two specifications in juxtaposition, or, to be more precise, aligned along the temporal axis and (ii) the overall specification is shifted to that of the mimetic.

To elaborate on the first type of reconciliation, it is necessary to elucidate the semantic relation of a mimetic and the clause-mate verb. As briefly stated in the introduction, mimetics have a verb-like character in that they refer to an event. What has not been mentioned is that mimetics often co-occur with a verb that matches on eventuality (cf. Hamano 1986:14). In the most basic case, a mimetic co-occurs with a verb that belongs to the mimetic superordinate semantic category as in *téku-teku aruk-* (see (1b)), in which the mimetic *téku-teku* denotes a sub-type of a walking event (i.e. to walk at a constant pace) and the verb *aruk-* denotes a general event of walking. In a case like this, as one hears the sentence, the mimetic event maps naturally onto the verbal event without any extra processing effort because they contain compatible information on both the event and the aspect type. A slightly more marked case is a combination like (9), in which the mimetic and the predicate match for unboundedness but there is a mismatch on the event type between them.

- (9) niko-niko-to akarui
mimetic-P cheerful
'(He) is cheerful, smiling.' (Text:H, 10)

The mimetic *níko-níko* denotes a manner of smiling and is anticipated to co-occur with a verb which means to laugh (e.g. *waraw-* ‘laugh’), but in fact it co-occurs with an adjective *akarui* which denotes a state of being cheerful. Still the sentence can be readily interpreted. Because both the mimetic and the predicate describe an unbounded condition of the same referent, the mimetic event maps itself onto the predicate event as one hears the sentence. There is variation in how semantically tightly the mimetic event parallels the predicate event. The most marked case is a combination like (10) in which the mimetic (*kóro-koro* ‘manner of rolling’) and the verb (*hair-* ‘enter’) differ not only in the event type but also in the boundedness specification.

- (10) *booru-ga* *kóro-koro-to* *ana-ni* *hait-ta*
 ball-NOM mimetic-P hole-to enter-PAST
 ‘The ball entered the hole, rolling.’ (adapted from Toratani 1999:505)
 kóro-koro: manner of a small object rolling continuously

Normally, upon hearing the mimetic *kóro-koro*, the hearer would anticipate a verb which means to roll such as *korogar-* ‘roll’. However, the verb actually mentioned is *hair-* ‘enter’, which differs from the anticipated verb. Moreover, the mimetic is unbounded, whereas the verb is bounded. The path created when the ball crosses the boundary in order to enter the hole is extremely short,⁶ and the continuing path created as the ball rolls, as entailed by the mimetic cannot be forced onto that short path. Here emerges a conflict. Talmy defines the term “juxtaposition” as follows:

[T]he cognitive process of juxtaposition places them [two specifications] side by side for simultaneous consideration within a larger cognitive context...[and] the original specifications retain their individuality as well as the conceptual conflict they produce together. (Talmy 2000b:332)

This is to explain a process involved when interpreting a sentence like *She’s slightly pregnant*, in which *slightly* and *pregnant* conflict on the scalar quality. This definition does not fully capture the phenomenon in (10), for the conflict is not present at the end. On the other hand, this sentence can be argued to refer to a case of juxtaposition in that the construal of the referent scene involves a semantic conflict initially and the two specifications are considered while keeping their own individuality, which is the hallmark of juxtaposition. Though this categorization is arguable, it is maintained that the hearer engages in some type of cognitive operation to resolve the aspectual conflict (i.e. the unbounded mimetic event cannot be mapped onto the bounded verbal event). The event of *hair-* ‘enter’ is reconceptualized as consisting of two aspectual phases: the terminal phase where the crossing-the-boundary takes place and the unbounded phase that precedes the terminal

⁶ Whether *hair-* ‘enter’ is a motion verb has been controversial (see e.g. Tsujimura (2002)).

phase, the latter of which the mimetic event is mapped onto.⁷ Importantly, the mimetic does not affect the predicate aspect here.

The second type of reconciliation is a shift in which a portion of the specification is “suspended or canceled” (Talmy 2000b:325) in order to be in accord with the other specification of the sentence. For example, in *The tumbleweed rolled across the field in one hour* (ibid.), the path compatible with *across* extends from one end to the other end of the field. In *The tumbleweed rolled across the prairie for an hour* (ibid.:326), however, with the *for*-phrase and a grand vista of *prairie*, the initial and the final components of the *across*-scheme are together cancelled, resulting in an interpretation that only the middle portion of the path was covered in accordance with the time frame specified by the *for*-phrase.

Shifts observed with mimetics are the cancellation of the basic aspectual construal of a predicate and a noun that co-occur with the mimetic. Shifts happen when the mimetic and the predicate agree on the event type but disagree on boundedness. Before an analysis of a sentence with a mimetic is presented, it would be useful to understand the boundedness-related characteristics of mimetics at the word level.

This paper notices that mimetics draw a distinction that corresponds to the mass-count distinction of noun phrases, which has also been observed to tightly parallel the unbounded-bounded distinction of events (e.g. Bach 1986). The cross-categorical correspondence among noun, verb and mimetic is summarized in Table 1.

Table 1: Cross-categorical correspondence

	I Bounded	II Unbounded	III Unbounded	IV Bounded
Noun	<i>an orange</i> [count noun]	<i>oranges</i> [bare plurals]	<i>water</i> [mass noun]	<i>a glass of water</i> [measured volume]
Verb	<i>flash</i>	<i>keep flashing</i>	<i>sleep</i>	<i>sleep for one hour</i>
Mimetic	<i>bataN</i> ‘a thud’	<i>báta-bata</i> ‘continuous thudding’	<i>záa-zaa</i> ‘continuous flow’	<i>zaaQ</i> ‘a flow’

“Count noun” refers to an individuated entity which has a clear boundary to separate itself from the rest of the space, e.g. *an orange* (see column I), whereas “mass noun” refers to substance with no intrinsic demarcation, e.g. *water* (see column III). The respective event counterparts include *to flash* and *to sleep*: *to flash* is an

⁷ Such a phase prior to the later-bounded event is called “preliminary stages” in Smith (1997:31).

individuated event because it begins and ends in a bounded span of time whereas to *sleep* is an event that has no intrinsic boundaries. To place those events along a temporal axis, the event of flashing is schematized as a point-like object, whereas to *sleep* is schematized as extended parallel with the temporal axis. The respective mimetic counterparts include *bataN* and *záa-zaa*. *BataN* ‘a thud’ is a count-noun type, because this event has a clear boundary occurring in a short duration of time. On the other hand, *záa-zaa*, the sound of a watery substance moving continuously, is the mass-noun equivalent because it makes no reference to the onset or the terminus of the event. Furthermore, it is also widely observed that the original specification on boundedness can be shifted to the alternative. To employ Talmy’s (2000a:51) terms, these cognitive operations are called debounding and bounding. Count nouns, e.g. *an orange*, are debounded in bare plurals, e.g. *oranges* (see column II), which behave like a mass. Mass nouns, e.g. *water*, are bounded in measured volumes, e.g. *a glass of water* (see column IV), which behave like count nouns. Mimetics also display the corresponding patterns. A count noun type *bataN* ‘a thud’ has a bare plural counterpart *báta-bata* ‘continuous thudding’. Mass noun type *záa-zaa* ‘sound of watery substance moving continuously’ has a measured volume counterpart *zaaQ* ‘sound of watery substance moving for a short time’. In the case of mimetics, debounding can be performed by reduplicating the one-time instantiated form, and bounding is achievable by selecting its one-time instantiated form.

Next, an analysis of a sentence with a mimetic is presented. Filip (1994, 1996) examines how a verb affects the interpretation of nominal arguments within the same sentence in Czech. Following Filip’s insights, the effect of the mimetic on the interpretation of the nominal arguments and the verbal event can be examined. Like Czech, Japanese does not overtly mark plurality or referential specificity, and hence the interpretation of noun phrases relies on the contextual information. This point can be first illustrated with a bounded event with *taore* ‘fall’ in (11).

(11) a. *taore-ta*
 fall-PAST
 ‘(A book) fell.’

b. <i>hon-ga</i>	bataN-to	taore-ta
book-NOM	mimetic-P	fall-PAST
‘A book fell with a thud.’		

c. <i>hon-ga</i>	bataN bataN-to	taore-ta
book-NOM	mimetic-P	fall-PAST
‘Two books thudded down one after another.’/		
‘The book fell with two thuds.’		

d. hon-ga	báta-bata-to	taore-ta
book-NOM	mimetic-P	fall-PAST
'Books fell one after another.'		

The default interpretation of (11a) is that something fell, which must be a referent of a singular count noun phrase such as 'a book'. This interpretation is not affected by the presence of a one-time instantiated mimetic *bataN* in (11b). To be more precise, with this mimetic the event has to be construed as bounded and the object as a single individuated object. With the two-times instantiated form *bataN bataN* (11c), however, there is a shift in the specification. Under one reading, the number of the books is construed as two, and the number of falling events as two. Under the other reading, the number of falling events is construed as two, but the number of books as one. Similarly, with the reduplicated form *báta-bata* (11d), the numbers of books and of falling events are construed as unbounded.

An analogous point is observed with an unbounded event *nagare-* 'flow' in (12).

(12)a. *nagare-ta*
flow-PAST
'(Water) flowed.'

b. <i>mizu-ga</i>	<i>záa-zaa</i>	<i>nagare-ta</i> ⁸
water-NOM	mimetic	flow-PAST
'Water flowed (continuously).'		

c. <i>mizu-ga</i>	<i>zaaQ-to</i>	<i>nagare-ta</i>
water-NOM	mimetic-P	flow-PAST
'(One burst of) water gushed (from the hose).'		
lit. 'Water flowed (for a short period of time).'		

d. <i>mizu-ga</i>	<i>zaaQ zaaQ-to</i>	<i>nagare-ta</i>
water-NOM	mimetic-P	flow-PAST
'(Two bursts of) water gushed (from the hose).'		
lit. 'Water flowed (for a short period of time and flowed again).'		

The default interpretation of (12a) is that there was a temporally unbounded event of flowing, which requires an unbounded volume of liquid. This interpretation remains intact even if it occurs with the reduplicated mimetic *záa-zaa* (12b). However, a shift on these specifications takes place when the verb co-occurs with the *n*-times instantiated mimetics. With the one-time instantiated mimetic *zaaQ*

⁸ Similar data to this example have already been discussed in Tsujimura and Deguchi (to appear), which convincingly argues for reduplicated mimetics' effects on the telicity reading of the sentence. I thank Natsuko Tsujimura for bringing this point to my attention.

(12c), the volume of water involved is construed as bounded, and the event is also construed as bounded, having lasted for a short time. With the two-time instantiated form *zaaQ zaaQ* (12d), the volume of water involved is also construed as bounded, having flowed on two separate occasions. The first flowing event lasts for a short time but is repeated after a brief interval. Thus, both the volume of the water and the event of flowing are construed as bounded.

In brief, these examples show that the construal of the sentence depends on the morphological shape of the mimetic, which determines whether the event is bounded or unbounded, how many times the event occurred, or how many objects are possibly involved in the referent scene.

3. Conclusion

This paper examined the aspectual interaction between the mimetic and the other components of the sentence. It showed that in one case the boundedness of the mimetic matches that of the predicate, and in the other case the boundedness of the mimetic is mismatched with the basic boundedness of the other components of the sentence. A mismatch, however, can be reconciled through the process of semantic resolution (Talmy 2000b): the mimetic event can be mapped onto the most suited aspectual phase of the predicate event if such a phase is available, or the boundedness of the predicate and of the nominal arguments can be shifted to that of the mimetic. This last point lends support to Tsujimura and Deguchi (to appear), which argues that mimetics can make as significant contributions to the interpretation of the sentence as non-mimetic words can.

The notion of boundedness has been applied to nouns and verbs (e.g. Jackendoff 1991) and adjectives (Paradis 2001). This paper has shown that it can extend to a subset of adverbs, mimetics in Japanese. Such a close parallelism across categories becomes discernible with the aid of schematization.

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