The Changing Grammatical Usage of Mimetics in Japanese

A thesis submitted to the University of Manchester for the degree of Doctor of Philosophy in the Faculty of Humanities

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Consent form (Japanese)  
Consent form (English)  
Participant data and examples

58,454 words
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACC</td>
<td>accusative</td>
</tr>
<tr>
<td>ADD</td>
<td>form of address; title</td>
</tr>
<tr>
<td>ADJ</td>
<td>adjective</td>
</tr>
<tr>
<td>ADV</td>
<td>adverb</td>
</tr>
<tr>
<td>AP</td>
<td>adjective phrase</td>
</tr>
<tr>
<td>C</td>
<td>consonant</td>
</tr>
<tr>
<td>COP</td>
<td>copula</td>
</tr>
<tr>
<td>DAT</td>
<td>dative</td>
</tr>
<tr>
<td>DIE</td>
<td>Dictionary of Iconic Expressions in Japanese</td>
</tr>
<tr>
<td>DJS</td>
<td>Dai-Ji-Sen</td>
</tr>
<tr>
<td>ED2</td>
<td>The Electronic Dictionary of Japanese (EDICT2)</td>
</tr>
<tr>
<td>EMP</td>
<td>emphasis marker</td>
</tr>
<tr>
<td>GEN</td>
<td>genitive</td>
</tr>
<tr>
<td>GER</td>
<td>gerund</td>
</tr>
<tr>
<td>HEP</td>
<td>Hepburn’s Japanese-English / English-Japanese Dictionary</td>
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<tr>
<td>HON</td>
<td>honorific</td>
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<tr>
<td>IMP</td>
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<tr>
<td>INST</td>
<td>instrumental</td>
</tr>
<tr>
<td>KYDna</td>
<td>nominal adjective linker na</td>
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<tr>
<td>KYDni</td>
<td>nominal adjective marker ni</td>
</tr>
<tr>
<td>KKS</td>
<td>Kenkyusha Waei Chujiten</td>
</tr>
<tr>
<td>LOC</td>
<td>locative</td>
</tr>
<tr>
<td>JTT</td>
<td>jpTenTen Corpus</td>
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<tr>
<td>MIM</td>
<td>mimetic</td>
</tr>
<tr>
<td>NKD</td>
<td>Nihon Kokugo Daijiten</td>
</tr>
<tr>
<td>NP</td>
<td>noun phrase</td>
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<tr>
<td>PASS</td>
<td>passive voice</td>
</tr>
<tr>
<td>PAST</td>
<td>past tense</td>
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<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>POL</td>
<td>polite form or marker</td>
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<tr>
<td>POT</td>
<td>potential voice</td>
</tr>
<tr>
<td>PRS</td>
<td>present tense</td>
</tr>
<tr>
<td>P</td>
<td>participant</td>
</tr>
<tr>
<td>Q</td>
<td>glottal stop</td>
</tr>
<tr>
<td>QM</td>
<td>question marker</td>
</tr>
<tr>
<td>QP</td>
<td>quotative particle</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SBJ</td>
<td>subject</td>
</tr>
<tr>
<td>SUB</td>
<td>subjunctive</td>
</tr>
<tr>
<td>TEMP</td>
<td>temporal clause marker</td>
</tr>
<tr>
<td>TOP</td>
<td>topic marker</td>
</tr>
<tr>
<td>V</td>
<td>vowel or verb</td>
</tr>
<tr>
<td>VP</td>
<td>verb phrase</td>
</tr>
<tr>
<td>Ø</td>
<td>nothing; empty set</td>
</tr>
<tr>
<td>ʔ</td>
<td>glottal stop</td>
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Abstract

Mimetics in Japanese comprise both onomatopoeic expressions (phonomimes) and other ideophones (phonomimes; psychomimes), which do not imitate acoustic phenomena. They can appear in various syntactic positions and adopt the syntactic functions of nouns in a referential phrase, predicates, attributes in a noun phrase and adverbs, with the latter being the most common usage. Since the stem of mimetic expressions such as suton (‘thump’), kirari (‘flash’), kyaaaQ (‘AAAAAH!’) or gan-gan (‘pounding’) cannot be altered and common suffixes such as /N/, /RI/ and /Q/ (glottal stop) cannot be inflected, the syntactic function of mimetics in Japanese is determined by their position in the sentence and the particles (postpositions) used to indicate their function within a larger constituent. In colloquial speech, these particles may also be omitted (∅), which sometimes results in the syntactic position being the only indicator of the syntactic function.

However, when contrasting the grammatical usage of mimetics in data sources from various speech registers, it becomes apparent that not all mimetics are used with all particles and in all syntactic positions. Moreover, some mimetics may be combined with certain particles in idiomatic contexts, but would be used differently in spontaneous speech. For this reason, it is not surprising that opinions vary greatly when it comes to determining the distribution of individual mimetics, and mimetics as a class. This often results in L2 learners of Japanese being confused by contradictory statements in dictionaries and textbooks, which may not necessarily reflect the actual usage of mimetics in spoken Japanese and thus constitute an obstacle to effective language learning.

The focus of this thesis is a description of the variable use of selected mimetics in attributive contexts, to shed light on the factors underlying the variation, and to establish whether a language change has been taking place in recent years. Empirical data collected from dictionaries, corpora, surveys and interviews shows that sociolinguistic factors such as gender, age and media exposure may influence the grammatical preferences of native speakers and their perception of mimetics. For this reason, both linguistic and extra-linguistic factors have to be taken into account in order to establish a grammatical framework for mimetics in Japanese.
Declaration

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A special thank you goes to Ayumi Miura from Osaka University, who – aside from being a great mentor who shares my passion for Old English – has very impressive networking skills, which enabled me to reach a wider audience for my empirical research.

My path in life would have looked very different if it had not been for Sackie Will, who drove to my little German village every Wednesday afternoon during my high-school years to teach me Japanese with her children’s fairy tale books. My interest in Japanese language and culture led me to pursue a degree in Japanese Studies at the University of Tübingen, where Professor Viktoria Eschbach-Szabo and Dr Martina Ebi introduced me to the wonderful world of linguistics.

Last but most, I would like to thank my amazing (if slightly crazy) family, who have encouraged and supported me unconditionally throughout my studies. I sincerely doubt I would have ever completed this thesis without my mother’s constant supply of my favourite childhood soup!
The Author

I graduated from the University of Tübingen with a joint Masters in Japanese Studies and English Linguistics (distinction), after which I was awarded a MEXT research scholarship at Chuo University in Tokyo.

My journey continued at the University of Manchester, where I began my doctoral research in Japanese linguistics. Throughout my postgraduate studies, I enjoyed working as a teaching assistant for both Japanese and English linguistics, which allowed me to put my knowledge of both subject areas into practice.

Aspects of my work have been presented at the 15th Japanologentag (University of Zürich 2012), the Grammar of Mimetics workshop (SOAS 2013), the 10th EAJS PhD Workshop (University of Ljubljana 2014), the Manchester Forum in Linguistics (University of Manchester 2014), the Future and Past of Categories in English and beyond workshop (University of Manchester 2015) and the Great Britain Sasakawa Foundation Postgraduate Workshop (SOAS 2017).
1 INTRODUCTION

Ideophones can be found in most, if not all languages (Voeltz and Kilian-Hatz 2001: 3), and range from true onomatopoeia, like the loud ‘bang’ of a door slamming shut, to expressions that describe non-acoustic phenomena, such as the geometric pattern of a ‘zig-zag’ line on the road. The Japanese language features a large set of ideophones, which has been estimated to comprise between 4,000 and 6,000 expressions (Eschbach-Szabo 1992: 43), not including dialectal variations.

Ideophones in Japanese are commonly referred to as ‘mimetics’ in English language publications, whereas the loanword onomatope(a) is the preferred term in most Japanese publications. This paper will follow the tradition in Western literature and adopt the term mimetics to refer to all ideophones in Japanese.

Mimetics in Japanese are abundant and part of every-day life in Japan. In contrast to most Western languages, even purely onomatopoeic expressions such as hyû-hyû (the whistling sound of wind) are not limited to child language or graphic novels in Japanese. They can appear in conversations about the weather, for example when complaining about the hot and humid climate during rainy season in July, which is decidedly mun-mun. They also appear in advertisements and on product packaging: cosmetic brands targeting young women promise kira-kira (‘sparkling’) eyes and and sara-sara (‘flowing’) hair, while national chain ‘Mister Donut’ uses mimetics such as puchi-puchi (‘bubbly’) and fuwaQ (‘soft’) to give the customer a more vivid impression of the texture of their bumpy Pon De Ringu doughnuts.

A very creative example of mimetics in Japanese can be found in the children’s book Koguma-chan no hottokēki (‘The little bear’s pancakes.’, 1972) by Ken Wakayama, who illustrates the various stages of pancake making with different mimetics. Studies such as Miyazaki et al. (2010) observed that Japanese mothers often rely on mimetics to explain pictures to their nursery age children, which is echoed in children’s books like Wakayama’s in which single mimetics are used to describe the actions, sounds and smells involved in pancake making.
The mimetics highlighted in this example include onomatopoeia, such as the *petan* ("Thud!") of a pancake hitting the pan after being turned, as well as mimetics describing a state, like *fuku-fuku* ("puffy") or an action, as in *poiQ* (flipping the pancake out of the pan). Apart from different semantics, the mimetics used in Wakayama’s illustrations are phonologically and morphologically diverse, with no single recognisable feature that may identify them as such at first glance. In addition, these mimetics are isolated descriptions of sounds, states and actions, and may occur in the form of exclamations or interjections\(^1\) in daily conversations, but do not provide any

\(^1\)The term ‘interjection; as used in this thesis refers to spontaneous remarks not grammatically related to the rest of a phrase or sentence, e.g. “And then – poof! – he was gone.”
evidence for the grammatical usage of mimetics and their possible syntactic roles.

The grammar of mimetics in Japanese, and ideophones in other languages, has only very recently come into focus, since iconic expressions in general were neglected in earlier linguistic research. This may be explained by traditional attitudes towards onomatopoeia in Western languages, which 19th century linguists often reduced to entertaining but inconsequential features of children’s language, graphic novels and poetry (cf. Wedgwood 1845). This attitude started to change with linguists such as Diffloth (1976), whose research on the grammar of Semai, a language spoken by an ethnic group on the Malay peninsula, introduced the concept of iconic expressions to a wider audience. While there have been numerous publications on mimetics in Japanese (Waida 1984; Hamano 1986; Kakehi and Tamori 1993; Kita 1997; Oda 2000; Akita 2013a; Katsuki-Pestemer 2012 and 2014; and many others), the syntactic distribution and semantic characteristics of these expressions have only recently started to receive attention (Toratani 2015: 126). The grammatical usage of mimetics in Japanese is still a matter of debate, with no general consensus on their syntactic roles and typology. This thesis aims to contribute a small part to the current discourse on mimetics in Japanese by observing their grammatical behaviour in various speech registers and identifying sociolinguistic factors that may influence the linguistic properties of mimetics in the mental lexicon of Japanese native speakers.

1.1 THE GRAMMAR OF MIMETICS

Japanese mimetics have not only become a popular research topic in recent years, but proved to be of great interest to the general public as well. Dictionaries and usage guides for both native speakers and advanced learners of Japanese have been published in abundance, with titles ranging from FLIP, SLITHER & BANG: JAPANESE SOUND AND ACTION WORDS (Fukuda 1993) to Onomatope ga aru kara nihongo wa tanoshii (‘Japanese is fun because it has mimetics’, Ono 2009). L2 textbooks for beginners tend to
avoid mimetics altogether, with the exception of frequently used onomatopoeia such as *wan-wan* (‘woof-woof’), which have onomatopoeic equivalents in most languages and can thus be directly translated. Traditionally, mimetics were either marked as colloquial or excluded altogether in most monolingual Japanese dictionaries, which almost exclusively quoted literary sources. With the digitalisation of all major Japanese dictionaries and an increasing demand by learners of Japanese, this conservative approach is gradually changing and more colloquial examples, including mimetics, are being included in recent editions.

But although mimetics seem to be a topic of great interest to the public, and are an essential part of every-day communication, dictionaries and textbooks often disagree on their semantic categorisation and grammatical usage, which especially seems to concern prenominal attributive constructions (cf. chapter 3). Due to the vast vocabulary of ideophones in Japanese and the additional differences between dialects and individual native speakers, opinions vary greatly when it comes to defining clear lexical and structural boundaries that may apply in every possible context. Contradictory statements on the grammaticality of mimetics in dictionaries may lead to confusion among L2 learners, while textbooks often err on the conservative side and focus on adverbal usage only, which does not fully reflect the grammatical spectrum of mimetics in spoken Japanese. This may prove to be an obstacle for effective language learning\(^2\), since the usage of mimetics in various syntactic positions is required for the intermediate levels of the JLPT\(^3\).

While it has been established that Japanese mimetics predominantly occur as adverbs (Kindaichi 1979; Hamano 1998; Toratani 2015), they may also act as nominal adjectives, nouns and verbs. Empirical studies such as in Akita (2013) and Toratani (2015) have yielded contradictory results on the

\(^2\) Iwasaki (2008; 2016) observes that only English speakers with an advanced level of Japanese or above actively produce utterances containing mimetics, while their vocabulary of mimetics mainly consisted of non-onomatopoeic mimetic expressions, contrary to L1 speakers, who acquire onomatopoeia first (Herlofsky 1998, quoted in Iwasaki 2016: 154).

\(^3\) The **Japanese Language Proficiency Test** (日本語能力試験, *nihongo nōryoku shiken*) is a standardised test of Japanese language proficiency which consists of 5 levels and evaluates reading, listening and writing skills, similar to the TOEFL and IELTS for English language proficiency.
predictability of syntactic roles in relation to the semantics of a mimetic, with nominal adjective-like usage being the main focus of the current debate. The varying outcomes of these studies can largely be explained by different data sources, which vary in size and may only represent a limited amount of speech registers. A broader variety of data sources and a contrastive analysis of the grammatical usage of mimetics within each data source may help to clarify the following five research questions, which form the core of this thesis:

(I) **What is the syntactic distribution of mimetics in various speech registers?**

While mimetics are present and numerous in both written and spoken Japanese, their syntactic roles as adverbs, nominal adjectives, predicates and rarely nouns may vary between different speech registers. With monolingual dictionaries traditionally using examples from literary sources, mimetics primarily occurring in spoken language are not always included. In addition, the functions of mimetics listed in these dictionaries may not cover the whole spectrum of possible grammatical usage. A comparison of data collected from dictionaries and corpora with those from surveys and interviews will shed light on the syntactic roles of mimetics in different speech registers.

(II) **Do the morphological or semantic characteristics of individual mimetics or groups of mimetics influence their grammatical usage?**

In previous research, mimetics in Japanese have been categorised based on their morphological structure (reduplication vs. single forms; /RI/, /N/ or /Q/ suffixes; e.g. Toratani 2007) and semantic type (phonomimes vs. phenomimes vs. psychomimes; cf, Eschbach-Szabo 1992 and Akita and Tsujimura 2016). These morphological and semantic characteristics have a potential impact on the syntactic
distribution of mimetics or groups of mimetics that share certain sets of features (cf. Tamori and Schourup 1999; Akita 2013a) and will be investigated by contrasting data collected from dictionaries and corpora with surveys and interviews conducted with native speakers of Japanese.

(III) Are there any extra-linguistic factors that may influence the grammatical usage of mimetics?

Apart from the morphological and semantic characteristics of mimetics, sociolinguistic factors such as age and gender may also influence the grammatical usage of mimetics by individual native speakers. In Japanese fiction, *Yakuwarigo* is a popular stylistic means to portray distinct speech patterns according to a person’s ‘social role’ (cf. Jones and Ono 2008). Stereotypical and highly stylised gender- and age-specific prosody, pronunciation and speech patterns can be found in ‘real life’ as well (Inoue 2002, Nakamura 2007, Kinsui & Yamakido 2015). However, research on the usage of Japanese mimetics has so far neglected the possible impact of social roles on the vocabulary and grammatical usage of mimetics in ‘real life’. As such extra-linguistic factors may compete with morphological and semantic factors, it is worth investigating whether the social role a native speaker occupies in a conversation, their gender, their age and their identification with a group (e.g. ‘undergraduate student’) may predict tendencies for their active usage of mimetics. Since dictionaries and corpora generally do not provide information on the social background of individual speakers, an online survey and interviews with native speakers have been conducted to shed light on this research question (chapter 4).

---

4 In Japanese fiction, *yakuwarigo* (役割語, approximate translation: ‘role playing speech’) is used to emphasise a character’s age, gender and social standing by employing speech patterns that are perceived as stereotypically young vs. old, male vs. female, upper class vs. working class, etc.
(IV) Has the grammatical usage of mimetics undergone any change in recent years? Is this change universal or limited to certain populations?

Mimetics are not only part of every-day conversations, but also very popular in various media, from graphic novels to cooking shows. In an increasingly digitalised and connected world, native speakers of all ages have access to and are exposed to a plethora of mimetics that may appear in different contexts with different target audiences. This thesis will investigate whether mimetics have undergone grammatical change in recent years and whether such a change is limited to certain populations that may have been exposed to grammatical patterns that have previously been considered ungrammatical.

(V) Taking the findings from (I)-(IV) into account, can mimetics in Japanese be categorised as a separate part of speech?

With mimetic expressions adopting many different syntactic roles and morphological, semantic and sociolinguistic factors having a possible impact on their grammatical usage, the typology of Japanese mimetics is not straightforward and has been a cause of debate among linguists for many years (cf. Waida 1984). While this thesis may not be able to give a final answer to the question whether Japanese mimetics can be regarded as a separate part of speech due to its limited scope and data set, the evidence collected in the course of this analysis may contribute new material for a discussion on the semantic categorisation of mimetics and their syntactic roles.
1.2 OVERVIEW OF THESIS

The aim of this thesis is to give an overview of the contemporary grammatical usage of Japanese mimetics, define criteria for their restrictive usage in different contexts and trace a possible language change in recent years. **Chapter 1** introduces the basics of mimetic expressions in Japanese and concluded with five research questions, which are to be explored in the course of this analysis. The following paragraphs will summarise the aims and scope of each chapter. Further details on the objectives and methodology of the empirical studies will be provided at the beginning of the relevant sections.

**Chapter 2** consists of a literature review of all relevant research on Japanese mimetics to date and provides the grammatical framework for this analysis. Section 2.1 begins with an overview of historical and contemporary definitions of ideophones in general, which are then applied to Japanese mimetics in order to develop a preliminary definition, which will then be put to the test in the following chapters. Section 2.2 summarises several methods of classification based on the semantic properties of mimetics, while section 2.3 focuses the phonological and morphological characteristics. Section 2.4 gives an overview of the syntactic distribution of mimetics and identifies several gaps in previous research that this thesis will explore further.

**Chapter 3** introduces a set of 20 mimetics, which will be put to the test in all empirical studies featured in this thesis. The contrastive analysis of dictionary and corpus data in chapter 3 serves as a first step towards defining criteria for the grammatical usage of mimetics, with special focus on their morphological and semantic characteristics, which may limit their syntactic distribution.

This is followed by two empirical studies on the grammatical usage of mimetics in chapters 4 and 5, which present and compare findings from an online survey and interviews with native speakers in Japan. These studies take into account sociolinguistic factors such as age and gender, which may influence the grammatical usage and typology of mimetics in the mental lexicon of individual native speakers. Chapter 5 concludes with an analysis
and discussion of all previous findings from dictionaries, corpora, surveys and interviews.

Chapter 6 summarises the results of this analysis and critically reflects on the five main research questions, which were identified in chapter 1. The implications of the findings presented in chapters 3-5 will be highlighted in a discussion of the typology of mimetics in Japanese. The last section of this thesis discusses opportunities for further research and points out research gaps which could not be addressed within the scope of this thesis.

1.3 TRANSLITERATION, TRANSCRIPTION AND DATA SOURCES

Japanese language data has been collected from both written and spoken sources, including dictionaries, corpora, surveys and interviews with native speakers. Unless otherwise stated, examples in Japanese have been retrieved from Sketch Engine’s *jpTenTen* corpus. All examples are numbered, transliterated, glossed and translated to ensure easy readability, as demonstrated below.

(1) fuwa-fuwa na pankēki ga tabetakatta
MIM KYDna pancake SBJ eat-want-PAST
‘I wanted to eat soft pancakes.’

The transliteration of Japanese in this thesis follows the Modified Hepburn System for Romanisation (修正ヘボン式ローマ字 *shūsei Hebon-shiki*). The International Phonetic Alphabet (IPA) is reserved for instances where a more detailed phonetic analysis is required. Interlinear glosses follow standard conventions in Western literature, with additional tags and minor adaptations for grammatical features unique to Japanese. With regards to reduplication, this thesis will follow the transcription conventions in literature on Japanese mimetics and indicate reduplication with [ ] as demonstrated in example (1).

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5 The *jpTenTen* corpus is part of the Sketch Engine webcrawler series (Kilgarriff et al. 2004, 2014) and comprises over 8 trillion tokenised and tagged words. See page 79 for a detailed introduction and methodology.
Translations are my own, unless otherwise indicated. Mimetics are not translated in the interlinear glosses and have been marked as MIM to highlight their grammatical properties irrespective of denotations and connotations, with context-appropriate translations in the free translation line. A list of all symbols and abbreviations used in this thesis can be found on page 5.
2 MIMETICS IN JAPANESE

Despite their popularity in recent academic discourse, ideophones continue to provide a challenge for linguists trying to define their phonological, morphological, semantic and syntactic characteristics. Crosslinguistic comparisons of the morphosyntactic typology of ideophones in various languages have highlighted the need for a language specific approach. While this thesis focuses on the grammatical usage of mimetics in Japanese, a purely syntactic analysis is not sufficient, as form and meaning constitute a possible influence on grammatical usage. This aim of this chapter is to give an overview of the historical and contemporary linguistic discourse on ideophones in general, on the basis of which a working definition of Japanese mimetics will be devised (section 2.1). The subsequent sections will summarise and review literature on the semantic classification (2.2), phonological and morphological characteristics (2.3.) and syntactic distribution (2.4) of mimetics in Japanese, which will lay the foundation for a more in-depth grammatical analysis and bring attention to gaps in previous research.

2.1 DEFINITION

Ideophones have been identified as a common phenomenon in many languages, which is why it may seem surprising that a cross-linguistically applicable definition with formal criteria has eluded linguists so far (Kilian Hatz 2010: 400). One of the reasons for this lack of a general definition may be that historically, ideophones have not always been considered worth researching from a linguistic perspective, as they were often reduced to a stylistic means in poetry or a feature of expressive children’s speech, especially by researchers on standardised varieties of Western languages. In addition, researchers have been faced with many cross-linguistic differences concerning the grammar of ideophones, which in research on some languages have been considered a separate word class, but as part of existing word classes in other languages. This section will give an overview
of the historical terminology and the most commonly used definitions in the
literature, on the basis of which a preliminary definition of ideophones in
Japanese will be proposed.

According to the Oxford English Dictionary, the term ‘ideophone’ was
first used by Alexander Ellis in 1881 on an invitation card to a meeting of
the London Dialectal Society. Ellis defines ideophones as “a group of
sounds denoting an idea” as opposed to ‘ideographs’ denoting an idea in
written language (Ellis 1881, quoted. in OED Online 2016). Twenty years
later, a more elaborate definition was provided by American psychologist
Edward Wheeler Scripture, who contrasted ‘ideophones’ with ‘ideograms’.

It may be suggested that auditory words and phrases form ‘ideophones’
just as printed ones form ‘ideograms’. The further distinctions may be
made of ideograms and ideophones into sensory (visual words and
auditory words) and motor ones (written words and spoken words).

(Scripture 1902: 132)

As one of the pioneers of speech science, Scripture’s research focused on
the phonetic elements of ideophones and their perception in the mental
lexicon, which is also reflected in the above definition. Scripture described
‘ideograms’ as printed words, which are perceived as a whole, rather than
the sum of their phonetic elements (Scripture 1902: 128), with ‘ideophones’
being their spoken counterparts, echoing Ellis’ definition of both terms. It is
important to note, however, that Ellis’ and Scripture’s definition of the term
‘ideophone’ is very broad and encompasses expressions that may not be
defined as ideophones in contemporary linguistic discourse.

One of the earliest attempts to define ideophones as a more specific
lexical concept was made by Clement M. Doke (1935), on the basis of his
observations of the Bantu languages:

A vivid representation of an idea in sound. A word, often onomatopoeic,
which describes a predicate, qualificative⁶ or adverb in respect to
manner, colour, sound, smell, action, state or intensity.

(Doke 1935: 118)

⁶ Used by Doke in the sense of “a word used to qualify a substantive, when associated
directly with that substantive.” (Doke 1935: 56)
Doke’s definition adds a new dimension to the term ideophone, which now includes not only phonological perception, but semantic characteristics and syntactic functions. Doke states that ideophones are often onomatopoeic, i.e. words that imitate sound (OED Online: 2016), but may also describe visual and olfactory sensations, as well as more abstract semantic concepts. While ideophones in Bantu may further modify predicates, qualificatives and adverbs, this may not necessarily be the case in other languages, but Doke’s definition is still applicable cross-linguistically, as it acknowledges that ideophones may function as various parts of speech. Interestingly, Doke describes ideophones as “vivid”, which is a subjective judgment and emotion triggered by the individual perception of a word, rather than a linguistic feature. In fact, many contemporary definitions of ideophones include subjective emotional responses, such as a feeling of ‘vividness’ or ‘expressiveness’ (Dingemanse and Akita 2016; Lockwood and Tuomainen 2015), which is why some authors see ideophones as a subclass of ‘expressives’. Diffloth (1976: 264), who researched Expressives in Semai, states that while expressives and ideophones share the same morpho-syntactic characteristics, expressives do not necessarily possess any phonological symbolism, which is a unique feature of ideophones:

Ideophones are words displaying phonological symbolism of any kind (acoustic, articulatory, structural) and having distinct morpho-syntactic properties); ideophones include onomatopoeia as a subclass.

(Diffloth 1976: 264)

Diffloth’s definition includes the same phonological, grammatical and semantic characteristics proposed by previous authors. His key points ‘perception of vividness’, ‘phonological symbolism’ and ‘distinct morpho-syntactic characteristics’ can still be found in many recent publications on ideophones, with further semantic characteristics (if any) being added depending on the target language. Diffloth’s definition also introduced a clear hierarchy of expressives, which can be summed up as follows (parentheses indicate optional features):
In terms of morpho-syntactic characteristics, Diffloth specifically mentions ‘reduplication’, i.e. the repetition of a segment, syllable or morpheme (Marantz 1982: 437). This phenomenon is not limited to expressives in Semai, as shown by English examples such as *woof-woof* (complete reduplication), *splish-splash* (reduplication with vowel change) and *itsy-bitsy* (partial reduplication). However, this is not necessarily the case in all languages, and even in languages that make use of reduplication to mark certain ideophones, other non-reduplicative ideophones may exist. English examples include onomatopoetic elements integrated into other parts of speech, e.g. the verb *to sizzle*, with /z/ being considered sound-symbolic by native speakers. English also makes use of numerous other non-reduplicative onomatopoeia, such as the exclamation *boom*. For this reason, reduplication cannot be considered a general feature of all ideophones. It is also not possible to use reduplication as a criterion to differentiate between ideophones and non-ideophones, since many languages make use of reduplication in a variety of word classes (Nadarajan 2006: 39). In addition, the boundaries between “reduplication as a regular morphological process, and repetition as a syntactic or discourse phenomenon” are not always clear (Dingemanse 2015: 947). This is
especially true for Japanese, in particular in colloquial speech, in which repetition as a means of emphasis is common (Kwon 2017: 1-2), as will be illustrated in section 2.3.

Japanese ideophones are commonly referred to as mimetics or mimetic adverbs (Hamano 1998: 1-2) in English language publications, whereas most Japanese researchers prefer the terms giongo/giseigo/gitaigo or the loanword onomatope, which will be explained in detail in the following section. As the Japanese terminology is not used in most cross-linguistic studies and the loanword onomatope may be misleading – since it is used synonymously with ideophones, despite not exclusively referring to the imitation of acoustic phenomena – this thesis will also adopt the term mimetic to denote Japanese ideophones, in contrast to ideophones in other languages.

Shoko Hamano’s PhD dissertation on The Sound Symbolic System of Japanese in 1986 laid the foundation for in-depth research of Japanese mimetics by demonstrating a connection between phonological structure and semantic interpretation. Hamano uses the term ‘sound-symbolic’ interchangeably with ‘mimetic’ and describes mimetics as “phono-semantic in the sense that they centre around fixed relationships between phonological units and abstract semantic units”, with varying degrees of iconicity, i.e. “the physical resemblance of a symbol and what it stands for” (Hamano 1998: 9). A similar definition can be found in Kakehi et al., who describe mimetics as iconic “words whose phonetic form is felt by speakers to be imitative of natural sounds, actions, and states” (1996: xi). In fact, most Japanese authors agree that there is indeed a relationship between form and meaning, as Tamori and Schourup (1999) explain in the following:

Mimetics can be defined in various ways and [the outcome of] these definitions may vary. However, all of these definitions agree on the following: for expressions that are considered mimetics, the relationship between form and meaning is not arbitrary, but correlates in some way.

(Tamori 1999: 5)

7 オノマトペはさまざまに定義されていて、その定義は実に多義であるが、それらに共通している考え方は、オノマトペと考えられている語彙の形態と意味の関係が恣意的ではなく、何らかの形で関連しているというである。
These three definitions are representative examples for many Japanese authors who use terms such as ‘iconicity’, ‘vividness’, ‘expressiveness’, ‘mimetic quality’ or ‘lexicality’ to describe the relationship between sound and abstract meaning. However, while Japanese native speakers might agree that onomatopoeia such as buu-buu (the sound a piglet makes) may feel more iconic and closer to the sound they imitate than abstract concepts such as fura-fura (‘being idle’) (cf. Hamano 1998: 9), English native speakers may argue that neither of them is particularly iconic, because to them, little pigs actually sound more like oink-oink than buu-buu. This example shows that the perceived degree of iconicity of a certain mimetic may be influenced by culture and socialisation, since onomatopoeia do not necessarily imitate an actual sound, but represent the cultural perception of a sound and the entity that produces the sound (e.g. a cute little pig). Noriko Katsuki-Pestemer also incorporates this cultural and psychological component in her definition by stating that mimetics “not only invoke human emotions instantaneously, […] but also almost make visible the scenes or objects humans are referring to” (2012: 1). Katsuki-Pestemer further compares this emotional response to the perception of swear-words, which also provoke a strong reaction in native speakers (2012:1), but may not appear particularly offensive to non-native speakers, who have not been socialised to judge them as such. Katsuki-Pestemer’s definition of ideophones makes clear that a definition of mimetics in Japanese has to include extra-linguistic aspects in addition to phonological, morphosyntactic and semantic characteristics, and that terms such as ‘iconicity’ have to be redefined to denote subjective perception.

Recent neuroimaging studies on the perception of sound-symbolic words by native speakers of Japanese also seem to affirm the notion of subjectively perceived iconicity. Lockwood and Tuomainen (2015) presented participants with iconic and non-iconic adverbs embedded in short sentences, which were displayed word by word and altered with nonsense
sentences. ERP\textsuperscript{8} investigations showed a marked increase of the P2\textsuperscript{9} wave in response to ideophones vs. arbitrary adverbs. Lockwood and Tuomainen propose that “this effect may be due to the distinctive phonological properties of ideophones precipitating a sensory integration process between sound of the ideophones and the sensory representations of the triggered sensory domains” (2015: 14). While these findings are possible evidence for the existence of sound symbolism in natural language, further studies with a larger data-set and native speakers from various linguistic backgrounds need to be conducted to be able to draw generalisations on the psychological effect of ideophones. It is also not known whether the manner of perception (visual, auditory, both) may influence participant responses. For these reasons, recent findings from neuroimaging have not been included in the scope and definition of Japanese mimetics in this thesis.

Mimetics in Japanese show various semantic, phonological, morphological and syntactic characteristics that may distinguish them from other expressions, as the following section will illustrate. However, most of these criteria, such as reduplication, are not exclusive to mimetics and not all mimetic expressions possess all of these qualities. There is one exception, however: the marker to, which is used to quote utterances and exclamations in Japanese. To has been analysed as both a ‘quotative particle’ and a ‘complementiser particle’ (Coulmas 1986) when marking non-mimetic utterances, whereas the preferred term in studies on Japanese mimetics is ‘quotative particle’ (most recently Toratani 2018). Along with its colloquial form te, the quotative particle to is commonly used with mimetics to form adverb-like constructions (Hamano 1998: 13) such as niko-niko to warau, literally ‘to laugh smilingly’. While not all Japanese mimetics may share the same phonological, morpho-syntactic and semantic characteristics, as will be illustrated in section 2.4, all adverbial mimetics in Japanese can be

\textsuperscript{8} \textit{Event-related potentials}: “EEG changes that are time locked to sensory, motor or cognitive events that provide safe and noninvasive approach to study psychophysiological correlates of mental processes.” (Sur and Sinha 2009)

\textsuperscript{9} \textit{P2 waveform}: “The positive deflection peaking around 100-250 msec after the stimulus.” (Sur and Sinha 2009)
syntactically integrated with the particle *to* (Hamano 1998: 13)^10^, which may help to distinguish them from other expressions. It should be noted at this point that some dictionaries, such as the DIE, may exclude the usage of *to* in some rare cases, such as with *ira-ira* (‘irritated’). However, as the examples collected from a variety of dictionaries in chapter 3 will show, these expressions can indeed be used with *to*. It is also important to note that some mimetics might have been lexicalised as adverbs over time and are no longer perceived as having mimetic qualities, but can still be used with *to*. One such example is *hakkiri* (clearly), which has been classified as either adverb or mimetic in recent dictionaries. Nevertheless, words like *hakkiri* have been introduced into the language as ideophones, which is why they have been included in this definition.

Based on the crosslinguistic definitions of ideophones discussed in this section, while taking into account the unique characteristics of mimetics in Japanese, the following broad definition can be proposed:

**Japanese mimetics are expressions that trigger an emotional response, often described as a ‘feeling of vividness’ by native speakers, who are culturally conditioned to perceive an iconic relationship between form and meaning. All mimetic expressions in Japanese can function as adverbs and may be used in combination with the quotative particle *to*.**

It has to be acknowledged at this point that the applicability of this definition is limited, which is why it will only serve as the starting point of this analysis and may be revised depending on the outcome of the empirical studies. As stated before, the ‘feeling of vividness’ associated with mimetics may not be quantifiable without more intensive neurological studies, and thus has to be regarded as anecdotal evidence at this stage. Since non-mimetic expressions as well as direct and indirect quotes may also be marked by the quotative particle *to* (cf. section 2.4), the decision on whether an expression is mimetic will be based on its inclusion in the *Dictionary of Iconic Expressions*. The following sections will give an overview of the semantic classification, phonological and morphological characteristics and

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^10^ Some authors, such as Toratani (2007: 314) divide adverbial mimetics into manner mimetics and resultative mimetics, with the latter taking the particle *ni* rather than *to*. This will be discussed in detail in section 2.4.
syntactic functions of mimetics in Japanese, which have been established in previous research and will constitute the foundation of this empirical study.

### 2.1.1 A few notes on lexicalisation

The lexicalisation of ideophones is a re-occurring theme in the works of the authors quoted in the previous section. However, the terminology is not always clearly defined and different linguistic fields may apply these terms to different processes of language change. Wischer (2000: 355 ff.) identified the following definitions, which may overlap in some cases:

**Lexicalisation:**

A) Free semantic groups or ad-hoc formations are turned into lexical units through the addition of a semantic component = **idiomaticisation**.

B) As above, but idiomaticisation is a consequence of lexicalisation.

C) Transferring linguistic material of any kind into the lexicon of a language = **conventionalisation**.

Most authors quoted in this thesis, first and foremost Tamori and Schourup (1999), Flyxe (2002) and Akita (2013a) adhere to definition C) in a very broad sense. It may also be paraphrased as ‘conventionalisation’ or ‘integration into the Japanese lexicon’. This separates non-conventionalised sound imitations from commonly used mimetic expressions included in major monolingual dictionaries\(^\text{11}\).

This thesis will follow the above authors and define lexicalisation as the integration of an expression into the Japanese lexicon, i.e. conventionalisation. Idiomaticisation will be regarded as a separate process (which may follow lexicalisation) and defined as the process of a complex expression turning into a fixed lexical item. This especially concerns the

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\(^{11}\) It is important to note that there may be disagreement between standard monolingual dictionaries and specialised dictionaries of mimetic expressions. Nevertheless, dictionaries will be treated as the first line of evidence for conventionalisation and any discrepancies will be discussed further in chapter 3.
univerbation of [mimetic + light verb] combinations discussed in sections 2.4.2 and 2.4.4. If any of the authors quoted in this thesis define these terms differently, this will be stated clearly.

2.2 SEMANTIC CLASSIFICATION

In general, mimetics in Japanese can be divided into onomatopeia and other mimetics. True onomatopeia are usually classified as either giongo (擬音語 ‘sound imitating word’, such as jū-jū ‘sizzling’) or giseigo (擬声語 ‘voice imitating word’, such as wan-wan ‘woof-woof’). Other mimetic expressions, which share similar morphological and syntactic characteristics, but imitate non-acoustic phenomena, are called gitaigo (擬態語 ‘state imitating word’) (Hamano 1998: 11). In Japanese, giongo, giseigo, as well as gitaigo are commonly referred to as onomatope(a) (e.g. Nasu 2007).

Kakehi and Tamori (1993: iii-v) divide Japanese mimetics into six semantic types, which they label gion, gisei, gitaï, giyō, kanjō and kankaku. The semantic type of a mimetic is determined by the phenomenon that is being imitated and has to fulfil a linear set of five semantic criteria as detailed in Figure 3 and Table 1 (Kakehi and Tamori 1993: iv).

![Figure 3: Semantic classification of mimetics in Japanese according to Kakehi and Tamori](image-url)
Table 1 gives a more detailed overview of all semantic types according to Kakehi and Tamori (1993), with translations and examples for each subtype:

<table>
<thead>
<tr>
<th>GITAIGO</th>
<th>GIONGO</th>
<th>GITUIGO</th>
<th>GISEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-acoustic imitation</td>
<td>acoustic imitation</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
</tr>
<tr>
<td>HIGIJŌ</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>no imitation of emotions</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
<tr>
<td>GITAI</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>imitation of manner (hira-hira ‘fluttering’)</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
<tr>
<td>GIYŌ</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>imitation of state (dere-dere ‘lovestruck’)</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
<tr>
<td>GIIJO</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>imitation of emotions</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
<tr>
<td>KANJO</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>imitation of emotions (ira-ira ‘irritated’)</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
<tr>
<td>KANKAKU</td>
<td>GION</td>
<td>GITUIGO</td>
<td>GISEI</td>
</tr>
<tr>
<td>imitation of physical sensations (gan-gan ‘pounding pain’)</td>
<td>imitation of sounds (jū-jū ‘sizzling’)</td>
<td>imitation of voices (wan-wan ‘woof-woof’)</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Semantic types according to Kakehi and Tamori

Initially, mimetics are classified as either giongo or gitaigo, based on the criterion of onsei (音性, approximately: ‘sound-quality’), which differentiates between sound-imitating mimetics and other mimetics. In order to fulfil the criterion of [+onsei], a mimetic expression has to imitate an acoustic phenomenon. There are two types of mimetics in this category, to which the additional criterion of seisei (声性, ‘voice-quality’) is applied, resulting in either gion (擬音; for sounds) and gisei (擬声; for voices).

For gitaigo, which imitate non-acoustic phenomena, Kakehi and Tamori (1993) define six subcategories, which all share the criterion of [-onsei]. To determine whether a mimetic imitates state/manner or feelings/emotions, the criterion of shinsei (心性, ‘mind’; ‘feeling’) is applied, which leads to the categories higijō (非擬情, ‘imitation of non-feelings’) vs. gijō (擬情, ‘imitation of feelings’). As feelings can be either physical (e.g. pain) or emotional, the criterion of hyōsōsei (表層性, ‘superficiality’) is used to separate kanjō (感情, ‘emotions’) and kankaku (感覚, ‘physical sensations’). Higijō, i.e. mimetics that do not imitate feelings, can be further divided into gitai (擬態, ‘imitation of manner’) and giyō (擬容, ‘imitation of state/form’), which is determined by applying the
criterion of yūseisei (有生性, ‘animacy’). An overview of all six subtypes of mimetics with their corresponding semantic criteria is given below.

GION: [+onsei] [-seisei]
GISEI: [+onsei] [+seisei]
GITAI: [-onsei] [-shinsei] [-yūseisei]
GIYŌ: [-onsei] [-shinsei] [+yūseisei]
KANJŌ: [-onsei] [+shinsei] [-hyōsōsei]
KANKAKU: [-onsei] [+shinsei] [+hyōsōsei]

As Figure 3 illustrates, the semantic type of a mimetic can be decided based on the nature of the phenomenon that is being encoded, all of which fulfil a different set of semantic criteria. This results in a more precise semantic categorisation, as opposed to simpler classification models, such as Diffloth’s [expressives > ideophones > onomatopoeia] (see section 2.1), which may prove useful in a contrastive analysis of the grammatical usage of the mimetics in each subtype. While the criteria established by Kakehi and Tamori (1993) are very useful in the field of Japanese semantics, publications in other linguistic fields, as well as publications aimed at Western audiences, often adopt a simplified version of this classification. The terms phonomimes, phenomimes and psychomimes (Eschbach-Szabo 1992; Akita and Tsujimura 2016) are most frequently used to sum up the various subtypes of mimetics, with psychomimes constituting a separate category, rather than a subtype of phenomimes. This simplified classification is depicted in Figure 4 and contrasted with the corresponding Japanese terms in Kakehi and Tamori (1993).

Figure 4: Simplified semantic classification of Japanese mimetics
In Kakehi et al.’s (1996) *Dictionary of Iconic Expressions in Japanese*, which is primarily aimed at English speaking audiences, this classification is even further simplified to *sound* vs. *manner*, while more detailed information and semantic context are included in the dictionary definitions.

As this thesis focuses on the grammatical usage of Japanese mimetics rather than semantic properties, the simplified classification of *phonomimes*, *phenomimes* and *psychomimes* (Eschbach-Szabo 1992; Akita and Tsujimura 2016) will be adopted to categorise mimetics, unless the grammatical findings justify a closer look at the semantic subtype of certain mimetics, in which case the relevant terminology in Kakehi and Tamori (1993) will be used. It is also important to mention that not all mimetics can be assigned a semantic type with absolute certainty. One such example is the expression *doki-doki* (‘pounding’), which may be interpreted as the sound of a pounding heart, but may also be a metaphor for feelings such as nervousness, especially by younger native speakers of Japanese. This is further complicated by the fact that not even all monolingual dictionaries of Japanese agree on whether a mimetic such as *goron* imitates the sound or manner of an item rolling down a slope. In such cases, this thesis will define the meaning of the mimetic in question within a certain context. The following section will give a detailed overview of the grammatical properties and syntactic functions of Japanese mimetics, which can be influenced by various linguistic and extra-linguistic factors, including the semantic type and scope of a mimetic expression.

### 2.3 PHONOLOGICAL AND MORPHOLOGICAL CHARACTERISTICS

Due to the vast vocabulary of mimetics in Japanese and the additional differences between dialects and individual native speakers, opinions vary

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12 Interestingly, some Western brands targeting English speaking fans of Japanese animation also make use of popular Japanese mimetics such as *doki-doki* to promote their products. One such example is the 2017 visual novel *Doki Doki Literature Club* by Team Salvato, which at first glance may seem like a light-hearted dating game, but gradually turns into psychological horror and comes with appropriate warnings (Salvato et al. 2017). This creatively illustrates the ambiguous nature of *doki-doki* which mimicks a pounding heart and can be interpreted as ‘having butterflies’ or being frightened depending on the context.
greatly when it comes to defining clear lexical and structural boundaries that may apply in every possible context. There are certain phonological and morphological characteristics shared by the majority of mimetic expressions, but as Hamano (1998: 6) states, it is not possible to identify mimetics by simply looking at their forms, grammatical functions and distributions, since “such formal characteristics cross over the boundary into the regular stratum of Japanese”. The following section will give a brief overview of the phonological and morphological characteristics of Japanese mimetics and discuss different methods of identifying them.

With Japanese being a CV-language that does not allow codas in monosyllabic words except for the placeless moraic nasal /N/ (Inaba 1998: 108), one might expect that the number of mimetics and their structural variety is limited in comparison to languages like English which allow a large set of codas and consonant clusters in general. Nonetheless, even within the confines of CV(N), mimetics can be recognised by certain repetitive patterns. An overview of Japanese phonemes is given below (Tsuji 2003: 29):

| 14 consonants: | k, g, t, d, s, z, h, p, b, r, m, n, w, y |
| 5 vowels:      | a, i, u, e, o |

Table 2: Japanese phonemes

Mimetics in Japanese are either monosyllabic or bisyllabic (Hamano 1986/1998; Kita 1997). According to Kita (1997) and Tsuji (2003), the smallest semantic unit of a mimetic expression in Japanese consists of a consonant and a vowel. However, The Dictionary of Iconic Expressions in Japanese already lists a short vowel (one mora) followed by a glottal stop as a recognisable mimetic. For instance, aQ is an exclamation of surprise, whereas uQ is the equivalent of a very painful /ˈaʊtʃ/ in English. Since these expressions are predominantly used as spontaneous exclamations and interjections and rarely function as other parts of speech, they may not be

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13 The voiceless postalveolar fricative /ʃ/ (→ shin) and the voiced postalveolar fricative /ʒ/ which occurs in Japanese as /dʒ/ (→ jin) are not included in this list.
tagged as mimetics in all dictionaries and may not be considered mimetics by some authors. The shortest mimetics mentioned by Tsuji (2003) are made up of a consonant and a mono- or bimoraic vowel, more precisely [onset + nucleus (+ glottal stop)]. A few selected examples following the pattern C-V-Q are listed below with approximate translations in English:

<table>
<thead>
<tr>
<th>[onset + nucleus + glottal stop]</th>
<th>saʔ - suddenly</th>
<th>peʔ - to spit out</th>
<th>muʔ - stuffy (air)</th>
</tr>
</thead>
<tbody>
<tr>
<td>waʔ - to start crying</td>
<td>baʔ - suddenly</td>
<td>soʔ - soft; gentle</td>
<td></td>
</tr>
<tr>
<td>suʔ - quickly; lightly</td>
<td>hoʔ - exhaling sound</td>
<td>gēʔ - retching sound</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: The smallest phonological units forming mimetics in Japanese

(DIE 1996)

Monosyllabic mimetics in Japanese can also consist of a nucleus and a coda, namely a bimoraic long vowel followed by a nasal, as in aaN or āN (sound of loud wailing). The heaviest monosyllabic unit is composed of a consonant, a mono- or bimoraic vowel and a nasal, for instance doN (a dull thunk).

According to Hamano’s original dissertation in 1986, bisyllabic mimetics in Japanese can be divided into two basic patterns: 1) C₁-V₁-C₂-V₂ (e.g. kataQ – ‘knocking, tapping’), where a geminate may occur in C₂ position, and 2) C₁-V₁-C₂-V₂-N (e.g. sutoN – ‘thud’). Formally trisyllabic mimetics with the suffix –RI are counted as bisyllabic in Hamano’s analysis as well and follow the patterns C₁-V₁-Q-C₂-V₂-RI (piQtaRI – ‘to fit perfectly’) or C₁-V₁-N-C₂-V₂-RI (e.g. boNyaRI – ‘dreamily’). Moreover, C₁-V₁-C₂-V₂-RI (kiraRI – glittering), without a glottal stop after the first syllable, is also possible (Hamano 1986: 23-26). The expression koroRIN, which emphasises koro (‘rolling around’) with an additional nasal, is a notable exception to this rule.

There is one morphological characteristic that mimetics seem to have in common in many languages, including Japanese and English: reduplication, that is to say the “semantic reinforcement” (Turchetta 2015) through the repetition of phonemes, syllables or whole words. The Japanese expression
for this phenomenon is *kasanekotoba* (重ね詞, literally ‘stacking words’). which has been documented in Western bilingual dictionaries such as Pfizmaier’s *Japanische Etymologien* as early as 1875 (p.466). While the term repetition may include reduplication in colloquial language, linguists distinguish between repetition as a “syntactic or discourse phenomenon” across word boundaries and reduplication as a “morphological construction […] within words” (Kwon 2017: 4). However, this distinction is not always straightforward, as will be discussed below.

English examples for reduplicative words are actual onomatopoeia like *woof*-woof (a dog barking) or *drip*-drop (soft rain falling on a hard surface), but also iconic expressions like *argy*-bargy (British English for a fight or argument) and *hurly*-burly (‘chaos’ or ‘tumult’). In most cases in English, there is no *total reduplication*, that is an exact copy of the previous morpheme, as the onset (consonant) or nucleus (vowel) of the second syllable tends to change in quality. In Japanese, however, total reduplication of words such as *zā*-zā (‘pouring’) and *kira*-kira (‘shining’) is much more common. Mono-, bi- and trisyllabic mimetics can all be reduplicated, as Table 4 illustrates.

<table>
<thead>
<tr>
<th>TOTAL REDUPLICATION</th>
<th>MONOSYLLABIC MIMETICS</th>
<th>BISYLLABIC MIMETICS</th>
<th>TRISYLLABIC MIMETICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ā-ā</td>
<td>saya-suya</td>
<td>kiraRI-kiraRI</td>
<td></td>
</tr>
<tr>
<td>yawning</td>
<td>snoozing</td>
<td>glittering</td>
<td></td>
</tr>
<tr>
<td>kaQ-kaQ</td>
<td>wan-wan</td>
<td>koroRI-koroRI</td>
<td></td>
</tr>
<tr>
<td>clacking</td>
<td>woof-woof</td>
<td>rolling</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Total reduplication in Japanese

An additional sub-category of reduplicative mimetics in Japanese is defined by Hamano as *semi-reduplicative mimetics*, which are composed of two different stems and can be divided into the four following morphological groups:
While the first and second category of semi-reduplicative mimetics as defined by Hamano (1986) feature reduplication of at least one syllable, mora or phoneme, the third category of semi-reduplicative mimetics is composed of two entirely different stems, which is why these mimetics are not strictly speaking reduplicative, but may be comparable to compound nouns instead. “Semi-reduplicative” mimetics in the fourth category are combinations of idiomatic expressions and comparatively rare according to Hamano (1986: 29). The examples quoted from her data set share the suffixes /RI/ or /N/, and the two mimetics in the idiomatic expression noraRI-kuraRI incidentally share the syllable ra, but due to the small set of mimetics in this category it may not be possible to classify them as semi-reduplicative mimetics. For the above reasons, this thesis will only label mimetics in category I and II as semi-reduplicative.

As noted before, it is important to make a distinction between reduplication and repetition, which may not always be straightforward, especially when a reduplicative mimic is further repeated for stylistic purposes. Especially in spoken Japanese, repetition of total reduplication may be used as a means of emphasis (Ishikawa 2011: 558 ff.), for example to describe the incessant barking of a dog with wan-wan-wan-wan […] However, it is also possible to repeat only the second syllable of a bisyllabic mimetic expression like koro-ro-ro-ro […] in order to convey that a

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14 Deko-boko (凸凹) is one of the few mimetics that can be written in Kanji rather than one of the syllabic scripts hiragana or katakana, with the shape of the Kanji characters coincidentally fitting its meaning of ‘uneven’ or ‘rugged’.

---

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>voiced or voiceless</td>
<td>identical</td>
<td>different word stems</td>
<td>combination of two</td>
</tr>
<tr>
<td>velar stop with</td>
<td>second syllables</td>
<td></td>
<td>mimetics as one</td>
</tr>
<tr>
<td>/a-a/ → /o-o/</td>
<td></td>
<td></td>
<td>idiomatic expression</td>
</tr>
<tr>
<td>kata-koto</td>
<td>chira-hora</td>
<td>gata-pishi</td>
<td>dotaN-bataN stamping</td>
</tr>
<tr>
<td>click-clack</td>
<td>here and there</td>
<td>rattling</td>
<td></td>
</tr>
<tr>
<td>gata-goto</td>
<td>deko-boko *</td>
<td>soso-kusa</td>
<td>doshiN-bataN stamping</td>
</tr>
<tr>
<td>clattering</td>
<td>uneven</td>
<td>in a hurry</td>
<td></td>
</tr>
<tr>
<td>kasa-koso</td>
<td>dogi-magi</td>
<td>pachi-kuri</td>
<td>noraRI-kuraRI</td>
</tr>
<tr>
<td>rustling</td>
<td>flustered</td>
<td>blinking/surprised</td>
<td>lazy; slippery</td>
</tr>
</tbody>
</table>

Table 5: Semi-reduplicative mimetics

(Hamano 1986: 28-29)
certain item keeps rolling. The frequency of repetition depends on the preference of the native speaker and the situation they are describing.

In addition, reduplication not only occurs in mimetics in Japanese, but may express “universality, variety or plurality” (Martin 1952: 65) in reduplicated non-mimetic expressions such as *tokoro-dokoro* (‘place-place’ → ‘here and there’) and *nichi-nichi* (‘day-day’ → ‘daily’). This is taken into account by Waida (1984), who states that reduplication alone is not a sufficient criterion to identify mimetics. Waida proposes that the suffixes */N/, */RI/ and */Q/ (glottal stop) should be considered as additional “onomatopoeic markers” (quoted in Tamori & Schourup 1999: 26). The following table compares examples for single and reduplicated mimetics with various suffixes (the asterisks mark impossible forms):

<table>
<thead>
<tr>
<th>koro-koro</th>
<th>koroQ</th>
<th>koroRI&lt;sup&gt;15&lt;/sup&gt;</th>
<th>koroN</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘rolling’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goro-goro</td>
<td>goroQ</td>
<td>goroRI</td>
<td>goroN</td>
</tr>
<tr>
<td>‘tumbling’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kira-kira</td>
<td>kiraQ</td>
<td>kiraRI</td>
<td>*kiraN</td>
</tr>
<tr>
<td>‘flashing’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do-do</td>
<td>doQ</td>
<td>*doRI</td>
<td>doN</td>
</tr>
<tr>
<td>‘banging’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>zā-zā</td>
<td>zāQ</td>
<td>*zāRI</td>
<td>*zāN</td>
</tr>
<tr>
<td>‘pouring’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wan-wan</td>
<td>*wanQ</td>
<td>*wanRI</td>
<td>*wanN</td>
</tr>
<tr>
<td>‘barking’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 6: Reduplication and suffixes* (DIE 1996)

With a few exceptions, such as *koro* and *goro* (‘rolling; tumbling’) most mimetics may only take either */RI/ or */N/. Monosyllabic mimetics such as the onomatopoetic expression *zā* (‘pouring rain’) take neither suffix and mimetics with the nasal */n/ as coda also lack */Q/.

Nasu (2007) compares the relative frequency of the suffixes */RI/, */N/ and */Q/ on the basis of a semantically and phonologically varied set of 230 mimetics, as shown in Table 7.

<sup>15</sup> [koro] is a special case, as it may take the ending */RI+N/ in the idiomatic expression *koro-koro-kororin* (rolling and rolling).
These results can be explained by the previously mentioned phonological constraints for monosyllabic mimetics and mimetics with /n/ as coda. The examples presented in Nasu’s (2007) empirical study seem to suggest that most mimetics belonging in the /RI/-category are phenomimes or psychomimes, whereas mimetics in the /N/ category are phonomimes. However, a more detailed qualitative study would be necessary to pose a clear hypothesis about the correlation between the semantic type of a mimetic and the suffix it takes.

At first glance, identifying mimetics with the criterion [reduplication + /RI/, /N/, /Q/] seems evident, but as Tamori and Schourup (1999) point out, there are exceptions such as soyo-soyo (‘gentle’, as in ‘a gentle breeze’) which take neither suffix and are just marked by reduplication, which is not exclusive to mimetics in Japanese. For this reason, a different set of criteria needs to be established to include the aforementioned exceptions.

In conclusion, the phonological structure of Japanese mimetics in general is mono-, bi- or trisyllabic. Certain roots or morphemes can undergo a process of reduplication, whereas semi-reduplicative and thus idiomatic forms can also be found. Morphologically, they often, but not always, take one or more of the suffixes /RI/, /N/, /Q/. Specific constraints on the structure of mono- and bisyllabic mimetics, including their reduplicative forms, will be introduced in the following section.

<table>
<thead>
<tr>
<th>/RI/</th>
<th>/N/</th>
<th>/Q/</th>
</tr>
</thead>
<tbody>
<tr>
<td>132 / 230</td>
<td>98 / 230</td>
<td>207 / 230</td>
</tr>
<tr>
<td>only /RI/</td>
<td>only /N/</td>
<td>only /Q/</td>
</tr>
<tr>
<td>4 / 230</td>
<td>18 / 230</td>
<td>59 / 230</td>
</tr>
</tbody>
</table>

Table 7: Relative frequency of /RI/, /N/ and /Q/ (Nasu 2007: 5)
2.3.1 Phonotactic constraints

The previous section introduced the basic phonological and morphological structure of Japanese ideophones, with a focus on the order and quantity of phonemes and syllables, semi-productive endings specific to mimetics, and reduplication. However, there are clear restrictions on their phonotactic structures. These restrictions apply to the general set of syllables available in Japanese and strikingly, certain syllable structures and combinations that are perfectly acceptable in many other lexical groups do not occur in mimetics and vice versa.

In contemporary Japanese, there are certain CV-structures that are illicit or archaic and may only be represented in the Katakana transcription of recent loanwords, for example *we* and *wi*. However, there are native Japanese monosyllabic mimetics like *weeN* to (wailing sound) and *wiQ* to (vocalization expressing consent) that contain exactly these illicit combinations of phonemes (Hamano 1986: 21; 1998: 175-176). This raises the question why the aforementioned constraints do not seem to apply to mimetics. As the examples above are not considered loanwords, it may be conceivable that certain structures within mimetics have successfully resisted the changes the Japanese language has gone through over the past centuries and may still retain archaic structures such as *we* (ゑ) and *wi* (ゐ) in some cases. Another example of obsolete phonemes retained in mimetics is word-initial /p/. As Frellesvig (2010) observes:

[Old Japanese] /p/ was lost in most contexts in the course of sound changes which occurred through the [Middle Japanese] period, merging with /w-/ in medial position after vowels (but preserved after /Q/ in [Early Middle Japanese], and changing to /f-/ in initial position in [Late Middle Japanese].

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16 In traditional linguistic discourse, a set of four core vowels /*i, *a, *u, *ə*/ was assumed for Proto-Japanese, which correspond to /i, a, u, ə/ in Old Japanese (Miller 1967). However, recent studies have proposed a set of seven vowels /*i, *e, *a, *o, *u, *i, *ə*/ for Proto-Japanese (Frellesvig and Whitman 2004), in contrast to six vowels /*i, *e, *a, *o, *u, *ə*/ in Proto-Ryukyuan (Serafim 1999).

17 The stages of the Japanese language are commonly divided into Old Japanese (pre-800), Early Middle Japanese (800-1200), Late Middle Japanese (1200-1600), Early Modern Japanese (1600-19th century) and Modern Japanese (19th century onwards), although exact dates may vary, cf. Frellesvig and Whitman (2004).
In Modern Japanese, word initial /p/ only occurs in mimetics such as *pata-pata* (‘knocking’), as well as loanwords such as *pan* (‘bread’; from French *pain*). This observation provides further evidence for the assumption that certain mimetics constitute a closed lexical group with a special status within the Japanese language\(^\text{18}\). As Klamer (2001: 167) observes, “ideophones often use segments not belonging to the regular phonemic inventory, and violate [the] phonotactic constraints of [a] language” and are “less constrained than the core lexical items”. However, a larger data set of Japanese mimetics is necessary to put this hypothesis to the test, as will be discussed in chapter 3.

When it comes to the frequency of consonants within monosyllabic mimetics, Hamano observes that the flap /r/ rarely occurs in onset position, whereas the glide /y/ is absent altogether (Hamano 1986: 22). As a general rule, both voiced and voiceless obstruents are used more frequently than nasals (Hamano 1986: 23). In nucleus position, /u/ is most frequent, followed by /i/ and /o/, then /a/ and considerably less frequent, /e/ (Hamano 1986: 23).

In bisyllabic mimetics, voiced obstruents are less frequent than voiceless obstruents as the onset of the second syllable, whereas there is no difference in frequency in word-initial position. In contrast to monosyllabic mimetics, in which the flap /r/ may sometimes occur in onset position, it never occurs in initial position with bisyllabic mimetics. And whereas the glide /y/ may occasionally be present in initial position in bisyllabic mimetics, it is absent in monosyllabic mimetics (Hamano 1986: 23). The frequency of all other consonants, however, does not differ from monosyllabic mimetics, which might lead to the assumption that the minimal differences between the (initial) onsets of monosyllabic and bisyllabic mimetics are the result of a limited data set and may not reflect the actual phonotactic constraints and their relative rankings.

Further constraints depend on the nature of the bisyllabic mimetics. Reduplicative bisyllabic mimetics following the pattern $C_1V_1C_2V_2$ - $C_1V_1C_2V_2$ (e.g. *suya-suya*) differ from ‘simple’ bisyllabic expressions with a

\(^{18}\) See also Hamano (2008) for a detailed discussion of the phonological characteristics of mimetics in (Northern) dialects and possible implications on historical linguistics.
CVQCVri (e.g. *piQtaRI*) or CVNCVri (e.g. *funwaRI*) structure (Hamano 1986: 23). For reduplicative bisyllabic mimetics with the structure $C_1V_1C_2V_2 - C_1V_1C_2V_2$, the consonants $C_1$ and $C_2$ are never the same. Moreover, some consonants in onset position of the second syllable ($C_2$) occur more frequently than others. According to Hamano’s research, there is a relative frequency ranking of /t/ > /k/ > /l/ > /s/ > /b/ > /y/ > /z/ > /w/ > /g/ > /m,n/ > /d/ > /h/. Hence, /t/ is the most frequent consonant in $C_2$ position, followed by voiceless obstruents (with the exception of /p/), semi-vowels, voiced obstruents (with the exception of /b/), nasals and finally /p/ and /h/ (Hamano 1986: 23-24).

When it comes to ‘simple’, non-reduplicative bisyllabic mimetics following the pattern CVQCVri or CVNCVri, the near absence of /t/ in initial and secondary position, as well as the absence of /h/ in second syllable onset position is observed. Hamano states that “only voiceless obstruents participate in geminate clusters and only voiced obstruents, nasals, and glides follow /N/” (Hamano 1986: 26). This means that only the combinations /Qp, Qt, Qk, Qs/ and /Nb, Nm, Nz, Nn, Ny, Ng, Nw/ are possible (Hamano 1986: 26).

A further contrast to reduplicative bisyllabic mimetics is the occurrence of /k/ as a consonant in both onset positions. For ‘simple’ bisyllabic mimetics, expressions like *kaQkiRI* (exactly) or *kuQkiRI* (vividly) are possible (Hamano 1986: 26).

In conclusion, mono- and bisyllabic mimetics in Japanese share certain tendencies in consonant and vowel preference, which may vary according to the specific phonological and morphological structure of the mimic expression. They can also violate some phonotactic constraints, which may be evidence for a ‘special status’ of mimetics within the Japanese lexicon.

2.3.2 The relationship between form and meaning

As briefly remarked in section 2.3, the relationship between the morphological structure of a mimetic and its semantic characteristics is not always arbitrary. Hamano (1998: 59ff.) observes that reduplication not only
changes the morphological structure and accent pattern of a mimetic, but its meaning and scope. Generally speaking, single forms also tend to represent a single action, such as a knock on a door, whereas reduplicative forms represent a repetitive or ongoing action, such as someone knocking on a door continuously. These semantic differences are illustrated in the following table:

<table>
<thead>
<tr>
<th>Single form</th>
<th>Reduplicative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>patan</td>
<td>pata-pata</td>
</tr>
<tr>
<td>‘a single knock or slamming sound’</td>
<td>‘continuous knocking’</td>
</tr>
<tr>
<td>girari</td>
<td>gira-gira</td>
</tr>
<tr>
<td>‘a bright flash of light’</td>
<td>‘flashing lights’</td>
</tr>
<tr>
<td>kyā (+glottal stop)</td>
<td>kyā-kyā</td>
</tr>
<tr>
<td>‘a loud scream’</td>
<td>‘loud crying or wailing’</td>
</tr>
</tbody>
</table>

Table 8: Semantic differences between single and reduplicative forms

As the table above shows, single forms represent instantaneous events, whereas reduplicative forms describe a continuous action. The following examples, which have been taken from the *jpTenTen* webcrawler corpus, illustrate how these mimetics are used in adverbial function:

(2) doa ga patan to shimaru
    door SBJ MIM QP close-PRS
    ‘The door slammed shut.’

(3) ame ga pata-pata to furu
    rain SBJ MIM QP fall-PRS
    ‘It is raining heavily.’

(4) neko no me ga girari to hikatta
    cat GEN eyes SBJ MIM QP shine-PAST
    ‘The cat’s eyes flashed (once).’

(5) taiyo ga gira-gira to kagayaku
    sun SBJ MIM QP shine-PRS
    ‘The sun is shining brightly.’

19 When it comes to mimetic expressions describing a state instead of an action or event, such as *fuwari* and *fuwa-fuwa*, both of which are translated as ‘soft’ or ‘fluffy’ in most dictionaries, there does not seem to be any difference in meaning between the single and reduplicative forms.
At first glance, it may look like the verbs in examples (2), (4) and (6) (shimaru ‘to close’, hikaru ‘to shine’ and odoroku ‘to be startled’) describe single events, whereas the verbs in examples (3), (5) and (7) (furu ‘to fall’, kagayaku ‘to shine’ and naku ‘to cry’) are used for continuous or repetitive actions. However, this is not necessarily the case, as shimaru (2) could still be used with the reduplicative form pata-pata if for instance the wind repeatedly opened and slammed a door shut, but may be combined with verbs such as tsuzuku (‘to continue’) in this case. The verb furu (3) is used almost exclusively with rain and other weather phenomena and can thus be considered an idiom. Hikaru (4) and kagayaku (5) are unspecified for duration and could occur both in the context of a single event (‘flash of light’) and an event with no clear start or ending point (‘shining light’). The same is true for naku (7), which can be used for a single cry or shout, as well as continuous crying or screaming. The only verb denoting a single event in this set is odoroku (6), as it is usually only possible to be startled once. Since most of the verbs used in the examples above are not specified for duration inherently, it seems plausible that they are specified by mimetic adverbs. For instance, the mimetics girari, gira-gira, kyā and kyā-kyā could also be combined with the verb suru (‘to make’) without any semantic change in terms of number of events and duration that is not already specified by the mimetic itself:

(8) neko no me ga girari to shita
cat GEN eyes SBJ MIMQP make-PAST
‘The cat’s eyes flashed (once).’

(9) taiyo ga gira-gira to suru
sun SBJ MIMQP make-PRS
‘The sun is shining brightly.’

(10) onna no ko ga kyā to shita
female GEN child SBJ MIMQP make-PAST
‘The girl let out a surprised scream.’
(11) aka-chan ga kyā-kyā to shite iru. 20
baby SBJ MIM QP cry-GER be-PRS
‘The baby is crying loudly.’

This is also true for semantically more specific verbs such as warau (‘to laugh’). The following examples contrast the different interpretations of the combination of the verb warau with the mimetic adverbs nikkori and niko-niko:

(12) [name] wa nikkori to warau
NAME TOP MIM QP laugh-PRS
‘X is smiling (once).’

(13) [name] wa niko-niko to warau
NAME TOP MIM QP laugh-PRS
‘X is smiling (continuously).’

Whereas nikkori describes the action of smiling once, niko-niko denotes continuous smiling or ‘beaming’. The verb warau, which is used in both examples, simply means ‘to laugh’, but without the mimetics nikkori and niko-niko, it is not clear whether the action of laughing is a single or continuous event. According to Komatsu et al. (1993) and Flyxe (2002), Japanese offers a relatively small vocabulary of verbs in comparison with languages such as English and mimetics are not only used to differentiate between single and continuous/repetitive events, but also to convey subtle differences in meaning. For instance, the semantic field of ‘to laugh’ includes verbs such as ‘to grin’, ‘to beam’, ‘to smirk’ and ‘to cackle’. In Japanese, however, many of these different nuances of ‘to laugh’ are expressed by [mimetic + warau]21, as in examples (12) and (13), which can be translated literally as ‘to laugh smilingly’.22 This shows that Japanese mimetics are not just a means to describe an event more vividly, graphically or iconically, but that they may specify verbs for duration and narrow their semantic range.

20 It should be noted here that while utterances with kyā / kyā-kyā (to) suru as shown in examples (10) and (11) are attested in the jpTenTen corpus, they are significantly less frequent than the most common construction with kyā / kyā-kyā (to) naku (examples 6 and 7) and may this not be regarded as idiomatic by all native speakers.
21 The verb hohoemu (‘to smile’) also exists and denotes laughing/smiling without sound.
22 It is also possible to create predicates by combining nouns and nominal adjectives with the verb suru (to do), such as benkyō suru (‘to do studying’ = ‘to study’).
As this thesis focuses on the grammatical usage of mimetics, the relationship between form and meaning only plays a marginal role. A more detailed discussion can be found in Akita and Tsujimura (2016), who have demonstrated sound-symbolic relationships between certain phonemes and meanings, in conjunction with links between phonological patterns and lexical aspect, specifically with regard to the number and duration of events, as briefly discussed in this section. The following section will explore the syntactic characteristics and functions of mimetics, which may be influenced by the morphological patterns presented in this chapter.

2.4 SYNTACTIC DISTRIBUTION

Japanese mimetics appear in various syntactic positions and can adopt the syntactic functions of nouns, (nominal) adjectives, verbs or adverbs. In colloquial speech, they may also be used as exclamations or interjections. Since mimetics as such cannot be inflected in Japanese, their syntactic function is determined by their position in the sentence and the particles used to connect them to other parts of speech. However, due to the vast vocabulary of mimetics in Japanese, which comprises around 4,000-6,000 words (Eschbach-Szabo 1992: 43), and the additional differences between dialects and individual native speakers, opinions vary greatly when it comes to defining clear lexical and structural boundaries that may apply in every possible context. This may lead to confusion among L2 learners of Japanese due to contradictory statements in dictionaries and textbooks, which becomes an obstacle to efficient language learning, as mimetics are part of every-day conversations in Japan and required for near-native level proficiency. Since there is no consensus on the grammatical usage of Japanese mimetics and examples given in dictionaries may be influenced by the editors’ own preferences, all utterances presented in this section have been collected from corpora, literature and media transcripts. These utterances may not reflect the grammatical preferences of all native speakers of Japanese, but rather highlight the changing grammatical usage of mimetics.
While Japanese mimetics may share distributional patterns with numerous parts of speech in Japanese, Hamano observes that “[t]wo grammatical categories of mimetic expressions form the core of the sound symbolic system. They are mimetic adverbs and mimetic nominal adjectives.” (1998: 12). This hypothesis is echoed by many Japanese authors, such as Kindaichi (1978) and Kita (1997). However, the categories ‘mimetic adverbs’ and ‘mimetic nominal adjectives’ are not mutually exclusive, as all mimetics can be used as adverbs (cf. section 2.1), while only some may act as nominal adjectives as well. The empirical data presented in chapter 3 suggests that the boundaries of these two grammatical categories of mimetic expressions may be fluid depending on the semantic and morphological characteristics of mimetics, as well as individual preferences of native speakers. The following sections are intended as an overview of the contemporary usage of Japanese mimetics in different syntactic roles and positions. Adverbial, attributive, nominal and predicative usage will be discussed on the basis of utterances collected from a variety of sources and different speech registers, as opposed to just dictionaries and secondary literature. If not otherwise stated, examples have been taken from the JpTenTen webcrawler corpus. Some utterances have been shortened for simplification purposes, with any such changes noted in the respective sections.

2.4.1 Adverbial usage

Mimetics are frequently used with the quotative particle to in adverbial function and in this case have often been described as a distinct class of “mimetic adverbs” (Hamano 1986/1998, Kindaichi 1978, Kita 1997). The particle to is normally used to quote utterances or mark indirect speech in Japanese (Coulmas 1986). The following examples contrast a direct quote (14) in Japanese with a parallel construction featuring the mimetic kachi-kachi (15):
(14) Hanako ga hai to iimashita
NAME SBJ yes QP say-POL-PAST
‘Hanako said “yes”.’

(15) kachi-kachi to iu
MIM QP say-PRS
‘make a “cracking” (sound)’

Mimetics can be used in adverbial function with all kinds of verbs, but *iu* (言う – ‘to say’) and *suru* (する – ‘to make’) are most common, with phonomimes also frequently occurring with *naku* (鳴く – ‘to cry’, mostly used for voices, including animal sounds) and *naru* (鳴る – ‘to sound’, rather used for inanimate objects). As shown in examples (14)-(15), *iu* is comparable to the English verb ‘to say’, but can be translated as ‘to make’ in onomatopoeic contexts (= to make a sound). *Suru* is used like the verb ‘to go’ or the colloquial expression ‘(be) like’ in English, e.g. …and then the car went BOOOM or she was like EEEEK in children’s language. Examples (16)-(17) show mimetics as adverbials (marked with *to* or unmarked) with *suru, naku* and *naru*.

(16) kanojo ga ira-ira shita
girlfriend SBJ MIM make-PAST
‘(My) girlfriend was irritated.’

(17a) inu ga wan-wan to naku
dog SBJ MIM QP cry-PRS
‘The dog is barking loudly.’

(17b) yubi no kansetsu ga pokiQ to naru
finger GEN joint SBJ MIM QP sound-PRS
‘The joints of (my) fingers are cracking.’

The same [[mimetic + *to*] + verb] construction is also possible with semantically more specific verbs such as *furu* (降る – ‘to fall’ [of precipitation]) and *aruku* (歩く – ‘to walk’), as examples (18) and (19) demonstrate.

---

23 The verb *naru* (鳴る - to cry) is not to be confused with the homophone *naru* (なる - to become; also discussed in this section).
(18) ame ga zā-zā to furu
rain  SBJ MIM  QP fall-PRS
‘It is raining heavily.’

(19) kodomo wa pata-pata to aruite kimasu ne
child  SBJ MIM  QP walk-GER come-POL-PRS right
‘The children always hurry towards (me), don’t they?’

Mimetics in adverbial function may also be marked by the particle *ni* which is also characteristic of a word class called “nominal adjectives”, which will be discussed in detail in section 2.4.2. Examples (20) and (21) show the adverbial usage of a mimetic vs. a non-mimetic nominal adjective, which are both marked by *ni*.

(20) boro-boro ni kowareta mono
MIM   KYDni break-PAST thing
‘thing(s) broken into pieces’

(21) kirei ni saku bara
beautiful KYDni blossom rose
‘a beautifully blossoming rose’

Examples (19) vs. (20) represent two different types of adverbial mimetics which Toratani (2007) defines as ‘manner mimetics’ (here: the manner of walking) and ‘resultative mimetics’ (here: the state of being broken). This distinction is made based on the assumption that “resultative mimetics are […] part of the predicating unit directly dominated by the nucleus node, and hence, are syntactically distinct from manner mimetics” (p. 314).

The particle *ni* may also occur in conjunction with verbs that express change, such as the resultative verb *naru* (なる – ‘to become’). However, strictly speaking [mimetic + *ni + naru*] constructions should not be interpreted as adverbial usage. According to Kishimoto (2014: 255) *naru* can take predicative complements, e.g. adjectives, and thus forms a complex predicate. Predicative usage of mimetics and examples with *naru* will be further illustrated in the corpus study in chapter 3.

As briefly mentioned in section 2.3.2, Japanese has a smaller set of verbs in comparison with English (Komatsu et al. 1993, Flyxe 2002) and many verbs are semantically underdifferentiated (Hirose 1981, Hamano...
1998), which is why mimetic adverbs are often used to narrow the semantic range of verbs such as *warau* (‘to laugh’).

(22)  [name] wa  niko-niko to  warau
   NAME TOP MIM QP laugh-PRS
   * ‘Hanako laughs smilingly’ = ‘Hanako smiles.’

(23)  majo ga  gera-gera to  waratte  iru
   witch SBJ MIM QP laugh-GER be-PRS
   * ‘The witch was laughing cacklingly.’ = ‘The witch was cackling.’

Mimetic adverbs also tend to “[narrow] the range of permitted verbs, enough so that the predicted verb may be omitted” (Hamano 1998: 12). The verbs in (22) and (23) may thus be omitted, as the mimetics are very specific.

According to Tamori and Schourup, all Japanese mimetics can be used as adverbs, with the exception of *bikkuri suru* (‘to be surprised’) and *gakkari suru* (‘to be disappointed’), which are always used with the verb *suru* (Tamori & Schourup 1999: 47). However, a quick search with the *jpTenTen* webcrawler corpus reveals that some speakers of Japanese disagree: There are approximately 300,000 hits for *bikkuri to* and 25,000 hits for *bikkuri to odoroku* (‘to be startled’) alone.

Tamori and Schourup (1999: 51-54) also divide mimetic adverbs into the same semantic categories as ‘normal’ (non-mimetic) Japanese adverbs (副詞 *fukushi*), namely adverbs of state (様態副 *yōtaifukushi*), resultative adverbs (結果副詞 *kekkafukushi*), adverbs of degree (程度副詞 *teidofukushi*) and adverbs of frequency (頻度副詞 *hindofukushi*).

Furthermore, Tamori and Schourup try to restrict mimetics with a certain morphological structure to certain particles or adverb types, but the anecdotal evidence provided may not be representative of all native speakers and speech registers. For this reason, the collection of empirical data including both written and spoken Japanese is essential in accounting for the adverbial usage of mimetics, which will be addressed in chapter 3.
2.4.2 Attributive usage

When it comes to the attributive usage of mimetics in Japanese, i.e. mimetics as adjective-like modifiers within a noun phrase, opinions vary greatly on the grammaticality of such constructions. Mimetics in attributive function show certain features that are characteristic of Japanese adjectives, which will be illustrated in detail in this section. As Miyagawa (1987) shows, there are two types of adjectives in Japanese: *keiyōshi* (KY), also called ‘true adjectives’ or ‘*i*-adjectives’, and *keiyōdōshi* (KYD), which are often translated as ‘nominal adjectives’ or ‘*na*-adjectives’.

Etymologically, *keiyōshi* are native Japanese adjectives, whereas the majority of *keiyōdōshi* are borrowed from Chinese and recently also from Western languages, an example of the latter being *jūshī* (‘juicy’; Yamakido 2005: 25). As Table 9 illustrates, *i*-adjectives are marked by the suffix –*i* and inflected for tense and negation.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ATTRIBUTIVE</th>
<th>PREDICATIVE</th>
<th>ADVERBIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>i</em>-ADJ</td>
<td>takai tatemono</td>
<td>tatemono ga takai</td>
<td>tatemono ga tatakau</td>
</tr>
<tr>
<td></td>
<td>high building</td>
<td>building SBJ high-PRS</td>
<td>sobiite iru iru</td>
</tr>
<tr>
<td></td>
<td>‘a high building’</td>
<td>‘The building is high.’</td>
<td>building SBJ high-GER be-PRS</td>
</tr>
<tr>
<td></td>
<td>oishikunai kēki</td>
<td>kēki ga oishikunai</td>
<td>o-kome ga oishiku takeru</td>
</tr>
<tr>
<td></td>
<td>delicious-NEG cake</td>
<td>cake SBJ delicious-NEG</td>
<td>rice SBJ delicious cook</td>
</tr>
<tr>
<td></td>
<td>‘an tasteless cake’</td>
<td>‘the cake is tasteless’</td>
<td>‘(lit.) to cook rice deliciously’</td>
</tr>
<tr>
<td></td>
<td>atsukatta hi hot-PAST day</td>
<td>hi ga atsukatta day SBJ hot-PAST</td>
<td>hi ga atsuku kanjita day SBJ hot feel-PAST</td>
</tr>
<tr>
<td></td>
<td>‘a day that was hot’</td>
<td>‘The day that was hot.’</td>
<td>‘the day felt hot’</td>
</tr>
<tr>
<td><em>na</em>-ADJ</td>
<td>shizuka na yoru quiet KYDna night</td>
<td>yoru ga shizuka da night SBJ quiet COP</td>
<td>shizuka ni utau quiet KYDni sing</td>
</tr>
<tr>
<td></td>
<td>‘a quiet night’</td>
<td>‘The night is quiet.’</td>
<td>‘to sing quietly’</td>
</tr>
<tr>
<td></td>
<td>kirei24 na bara beautiful KYDna rose</td>
<td>bara ga kirei da rose SBJ beautiful COP</td>
<td>kirei ni suru beautiful/tidy KYDni make</td>
</tr>
<tr>
<td></td>
<td>‘a beautiful rose’</td>
<td>‘The rose is beautiful.’</td>
<td>‘to clean up beautifully’</td>
</tr>
<tr>
<td></td>
<td>byōki na/no hito sick KYDna/GEN person ‘a sick person’</td>
<td>Hanako ga byōki da person SBJ sick COP</td>
<td>byōki ni mieru sick KYDni appear</td>
</tr>
<tr>
<td></td>
<td>‘a sick person’</td>
<td>‘Hanako is sick.’</td>
<td>‘to look poorly’</td>
</tr>
</tbody>
</table>

Table 9: Japanese adjectives

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24 *Keiyōdōshi* ending in –*i*, such as *kirei*, are sometimes used and inflected like *keiyōshi*. An interesting fact is that this is not only a mistake made by L1 and L2 learners of Japanese, but is also typical for certain dialects of Japanese. For instance, *kirei* is usually inflected as *kire-ku* instead of *kirei na/da* in the dialect spoken in and around Kyōto.
In contrast, *na*-adjectives are marked by *na* (and occasionally *no*) and cannot be inflected for tense or negation directly, but through the sentence-final copula or verb. According to Shirane (2005), *na* is a remnant of the Classical Japanese copula *nari*, which was in turn a contraction of the particle *ni* plus the existential verb *ari* (有り) in attributive function. Traditionally, both *i*-adjectives and *na*-adjectives in prenominal position (see Table 9) have been considered relative clauses, with –*i* and –*na* being analysed as the present tense form of the copula or a present tense marker (Kuno 1973; Shibatani 1978; Nishiyama 1999; Hoshi 2001; among many others).

This traditional view has been challenged by more recent studies, such as Yamakido’s (2005) PhD dissertation on *The Nature of Adjectival Inflection in Japanese*. Based on observations of Japanese L1 learners, dialectal variation and crosslinguistic comparisons, Yamakido (2005) argues that “prenominal adjectives in Japanese are not uniformly analyzable as hidden copular relatives” (p.68) and that cases of “genuine attributive adjectives” exist (p.80). She proposes the hypothesis that –*i* and –*na* may in fact be invariant (i.e. non-agreeing) case markers (p.96) which “link a noun with an attributive AP” (p. 111). While this hypothesis is certainly intriguing, there is no scholarly consensus on the syntactic interpretation of prenominal adjectives in Japanese to date (cf. Watanabe 2012; Shimoyama 2014). As the aim of this thesis is to document the diversity and changes in the grammatical usage of Japanese mimetics based on a small set of mimetic expressions, it is not within its scope to provide evidence for or against the interpretation of [ADJ + -*i/-na* + noun] constructions as relative clauses. For the purposes of this analysis, *na* will simply be referred to as a linker and glossed as KYDna when linking nominal (mimetic) adjectives to nouns, whereas only constructions following the pattern illustrated in examples 33a and 33b on pages 60-61 will be referred to as relative clauses.

The origins of the particle *no* are disputed (cf. Vovin 2005) as well, and while it has been linked to the Old Japanese copula *n-*, this thesis will follow Yanagida (2012) and gloss *no* as a genitive case marker GEN in Modern...
Japanese, since this allows for a wider interpretation\(^{25}\). The particle \textit{ni}, which has also been linked to the Old Japanese copula \textit{n-} (Vovin 2005) can serve as a dative and locative case marker for nouns (Sadakane & Koizumi 1995) and is tagged as \textit{KYDni} when marking nominal adjectives and mimetics functioning as adverbials or predicative complements.

Since mimetics in Japanese cannot be inflected, they are generally not used as \textit{keiyōshi}. However, there are a few exceptions to this rule, as noted by Tamori and Schourup (1999):


c| keba-keba → kebakebashii | toge-toge → togetogeshii | tado-tado → tadotadoshii |
| fancy | sharp (voice) | to totter |

(Tamori & Schourup 1999: 63)

These mimetics are inflected like “\textit{shii}-adjectives”, which are a subcategory of the Modern Japanese \textit{i}-adjectives and a remnant of the Classical Japanese \textit{shiku}-adjective class (Shirane 2005). Some of these mimetic \textit{shii}-adjectives can be traced back to the Nara Period, such as \textit{kira-kira} (‘glittering, shining’), which already appears in the \textit{Kojiki} (711-712 AD), the oldest surviving chronicle of Japanese history. The following example is taken from the story of \textit{Kaminaga-hime} (‘The princess with the long hair’).

\begin{quote}
(24) Sono katachi no kirakirashiki [koto] o medete […]
this figure GEN beautiful [-ness] ACC admire-GER
‘Admiring the beauty\(^{26}\) of her figure, […]’
\end{quote}

Here, \textit{kira-kira} is inflected like a \textit{shiku}-type adjective in attributive position. Three centuries later, in the \textit{Genji Monogatari} (‘The Legend of Prince Genji’, 11\textsuperscript{th} century), \textit{kira-kira} starts to appear with the quotative particle \textit{to}, although it is still frequently used like a \textit{shiku}-adjective:

\begin{quote}
(25) hito mo naku, tsuki no kao nomi kira-kira to shite […]
human even be-NEG moon GEN face only MIM QP make-GER
‘Not a soul was there, only the face of the moon [was] glittering’
\end{quote}

\textit{Genji Monogatari, part I, chapter III} (Abe 2008)

\(^{25}\) Some authors such as Uehara (2003) have suggested different interpretations of nominal adjectives taking \textit{no} vs. \textit{na} in some contexts. This hypothesis will be revisited in section 3.4.

\(^{26}\) Although \textit{kira-kira} can be translated as ‘glittering’ or ‘shining’ in Modern Japanese, it originally meant ‘beautiful’ and was either written in \textit{hiragana} or with the \textit{kanji}端正, which still carry the meaning ‘handsome’, but are read \textit{tansei}. 
Over the centuries, adverbial usage with *to* becomes increasingly frequent for *kira-kira*, whereas adjectival usage becomes less frequent. J. C. Hepburn’s Japanese-English dictionary, which was compiled during the Meiji Period in the second half of the 19th century, shows the transition of *kirakirashi(i)* from a *shiku*-type adjective to an *i*-adjective:

| KIRAKIRASHII, -KI-KU adj. Glittering; brilliant; beautiful. |

(Hepburn 1886/1980)

The attributive form *kirakirashiki* is still retained here, whereas the predicative dictionary form is now listed as *kirakirashii*, with the additional –*i* being the characteristic feature of *i*-adjectives.

In Modern Japanese dictionaries such as the *Nihon Kokugo Daijiten*, mimetic *i*-adjectives like *kirakirashi(i)* are still listed, but marked as archaic forms. Also, not all mimetic *i*-adjectives mentioned by Tamori and Schourup (1999) can be traced back to Classical Japanese, although this might simply be due to the limited set of written records available. On the other hand, mimetics found in Classical Japanese texts may not necessarily appear in Modern Japanese sources. Early mono- and bilingual dictionaries rarely included mimetics, and in particular onomatopoeia, as these expressions might have been considered too colloquial or not relevant for the intended audience, e.g. Dutch and Portuguese merchants in the case of Takata Masanori’s *Jiten Setsuyōshū* (1817). For this reason, it is important to consider a broad variety of literary sources and dictionaries in order to identify and trace mimetic *i*-adjectives throughout the history of the Japanese language.

As illustrated above, mimetics were frequently used as ‘true adjectives’ in Classical Japanese, but cannot be used as such in Modern Japanese, with
the exception of a few archaic forms. It is however possible to combine mimetics with i-adjectives to form a compound adjective:

<table>
<thead>
<tr>
<th>Compound adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>horo+ to being moved (to tears)</td>
</tr>
<tr>
<td>muzu-muzu feel itchy</td>
</tr>
<tr>
<td>hyoro-hyoro/hyoro+ to lanky</td>
</tr>
</tbody>
</table>

Table 10: Compound adjectives

(Tamori & Schourup 1999: 63-64)

Nevertheless, mimetics in Modern Japanese are much more frequently used like na-adjectives. As stated before, na-adjectives are not inflected, so their syntactic function is determined by particles/linkers, along with their position in the sentence. Table 11 gives a concise overview of regular keiyōdōshi and appropriate particles in attributive, adverbial and predicative function.

<table>
<thead>
<tr>
<th>KEIYŌDŌSHI (na-adjectives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>stem</td>
</tr>
<tr>
<td>kantan (simple)</td>
</tr>
<tr>
<td>kirei (beautiful)</td>
</tr>
<tr>
<td>byōki27 (ill)</td>
</tr>
<tr>
<td>jūshī (juicy)</td>
</tr>
</tbody>
</table>

Table 11: Syntactic functions of keiyōdōshi

The following three examples show keiyōdōshi in attributive, adverbial and predicative positions:

(27) kirei na bara beautiful KYDna rose ‘beautiful rose(s)’
(28) kirei ni saku bara beautiful KYDni blossom rose ‘beautifully blossoming rose(s)’

27 Byōki has been traditionally analysed as a noun (NKD), but nominal adjective-like usage is attested as well, see page 147.
Some mimetics can be used in a similar way as kētōdōshi. In fact, Hamano (1986: 30) makes the interesting observation that “the only difference between non-mimetic and the mimetic nominal adjectives is that the mimetics employ no as well as na before a noun; impressionistically, no seems to be used more frequently for mimetic nominal adjectives than na”. This hypothesis will be revisited in the corpus analysis in chapter 3.

The following examples illustrate the usage of fuwa-fuwa (‘fluffy’) in attributive, adverbial and predicative position:

(30) fuwa-fuwa na kumo
    MIM KYDna cloud
    ‘fluffy cloud(s)’

(31) rōrukēki ga fuwa-fuwa ni dekita
    Swiss.roll SBJ MIM KYDni finish-PAST
    ‘The Swiss roll came out really fluffy.’

(32) kumo ga fuwa-fuwa (da)
    cloud SBJ fluffy (COP)
    ‘the clouds (are) fluffy’

It is also possible to form a relative clause with a mimetic (+to) as an adverbial modifier to the verb of the relative clause. Relative clauses in Japanese follow the pattern illustrated in example (33a) taken from Murasugi (1991: 114). This alternative construction can be employed if the speaker does not wish to use a mimetic like a nominal adjective with na/no

Examples (33a) and (33b) show relative clauses without and with a mimetic in Japanese:

(33a) [NP [John ga tabeta] sakana]
      [LP [NAME SBJ e1 eat-PAST] fish,]
      ‘the fish that John ate’

28 See page 56 on the analysis of [MIM + na + noun] constructions as relative clauses with na as the attributive form of the copula da vs. na as an adjectival linker.
It is important to note here that to and other particles may be omitted, especially in spoken Japanese, resulting in unmarked adverbial or attributive mimetics.

Attributive usage with the light verb suru (‘to make, to do’) is also very common. According to Hamano, adverbial mimetics selecting shita or shite iru share some characteristics with verbs labelled as ‘the fourth class of Japanese verbs’ by Kindaichi (1950), with Nagashima (1965) coining the term ‘D-verbs’ which was adapted by Hamano as ‘mimetic D-Verbs’ (Hamano 1988: 42-43; see also Hamano 1998: 20). Examples for non-mimetic D-verbs presented by Hamano (1988) include niru (似る – ‘to be similar’), as in [niita katachi] (‘similar shape’, p. 143), vs. mimetic D-verbs such as [pika-pika shita iwashi] (‘shiny herring’, p. 142). Hamano (1998: 21) further observes that mimetic D-verbs and mimetic nominal adjectives are interchangeable in most cases. However, as the analysis of the empirical studies in chapters 4 and 5 will show, there is not only great variation between different types of mimetics, but also individual native speakers, as some seem to prefer nominal-adjective like attributive usage (example 30), whereas others tend to prefer relative clauses (example 33b) or mimetic D-verbs.

2.4.3 Nominal usage

Mimetics in Japanese are rarely used as nouns by adult native speakers and if so, they often refer to a newly introduced entity which possesses the quality of the mimetic in question, rather than being a nominalisation of the mimetic itself (e.g. fuwa-fuwa being the name of a regional dish with fluffy dumplings). In cases where mimetics are nominalised in this way, they are marked by the same particles and occupy the same position in a sentence as non-mimetic nouns in Japanese.
According to Tamori and Schourup (1999), young L1 learners of Japanese often nominalise phenomimes (giongo + giseigo) by using them for the entity that produces the sound:

(34) inu ga wan-wan to naku
    dog SBJ MIM QP cry-PRS
    ‘The dog is barking loudly.’

(35) boku wa kono wan-wan ga ichiban kawaii to omou
    I (male) TOP this bow-wow SBJ most QP cute think-PRS
    ‘I think this dog is the cutest.’

(Tamori & Schourup 1999: 59)

A similar example in English would be a child calling a cow a moo-moo.

Such nominalisations are referred to as ‘special nouns’ (単独名詞 tandokumeishi) by the authors. In rare cases, nominalisations by adult native speakers can be observed, such as in names of popular dishes like Shabu-shabu (‘hot-pot’), which refers to the sizzling sound of the dish being prepared.

A larger set of mimetic nouns consists of adverbial mimetics which were nominalised, most likely due to the colloquial omission of to:

<table>
<thead>
<tr>
<th>複合名詞・compound nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>noro-noro to unten suru very slowly QP driving do → noro-noro unten suru slow driving do → noro-noro unten ‘slow driving’</td>
</tr>
<tr>
<td>hiso-hiso to hanasu whisper QP speak → hiso-hiso hanasu whisper QP speak → hiso-hiso banashi ‘whispering’</td>
</tr>
</tbody>
</table>

(Tamori & Schourup 1999: 61-62)

Both compound nouns in Table 13 were created by omission of the quotative particle and the nominalisation of the verbs unten suru (→ unten, literally ‘driving + do’) and hanasu (→ hanashi), while the mimetics remain
unchanged. However, it is not clear whether the mimetics in these compound nouns are perceived as nouns themselves, or rather as e.g. adjectives, similar to English ‘goodwill’.

According to Hamano, there are two basic accent patterns found in mimetic nouns, either by analogy with mimetic adverbs or with mimetic nominal adjectives, e.g. initial stress in WAN-wan (‘woof-woof’) vs. accentless reduplicative forms like gara-gara (‘rattle’). There are also a few compound nouns made up of a mimetic plus a regular noun, such as bikkuri-bako (= bikkuri + hako, ‘surprise box’), which is the Japanese equivalent of a Jack-in-the-box (Hamano 1998: 52-54).

### 2.4.4 Predicative usage

Although mimetics cannot be inflected in Japanese, certain verbs or verbal suffixes can be combined with them. As illustrated in the previous sections, constructions such as [mimetic (+ to) + suru] are very common. Mimetics and light verbs such as suru (‘to make; to do’) form a complex predicate in this case (cf. Grimshaw & Mester 1988), which may serve as the main verb, or the predicate of an attributive clause modifying a noun. Tamori and Schourup consider the following [mimetic + suru] constructions as predicates:

<table>
<thead>
<tr>
<th>「する」動詞・suro-verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>hotto suru</td>
</tr>
<tr>
<td>to be relieved</td>
</tr>
</tbody>
</table>

*Table 14: Mimetics as suru-verbs*

(Tamori & Schourup 1999: 55)

Japanese mimetics can also be used as the stem or core of verbs and may be combined with common verb endings. One such example is the verb tsuku (つける – ‘to attach’), which can be attached to the mimetic gira (‘glaring’), as in giratsuku taiyō, the ‘glaring sun’. According to Hamano, tsuku also functions as a suffix, which is exclusively used for some, but not
all, mimetic words (1998: 56). Tamori and Schourup make a very interesting observation about the restrictive usage of tsuku, which is illustrated in table (6):

<table>
<thead>
<tr>
<th>「つく-」動詞・tsuku-verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>niya-niya → niyatsuku</td>
</tr>
<tr>
<td>smirk</td>
</tr>
<tr>
<td>niko-niko → *nikotsuku</td>
</tr>
<tr>
<td>smile</td>
</tr>
</tbody>
</table>

Table 15: Mimetics as tsuku-verbs
(Tamori & Schourup 1999: 57)

The authors observe that only mimetics with a negative connotation (‘smirk’; ‘flash brightly’) take tsuku, whereas mimetics with a positive connotation (‘smile’; ‘glitter’) do not. However, a larger data set compiled from sources other than Japanese literature may be necessary to verify this hypothesis.


<table>
<thead>
<tr>
<th>Other verb endings</th>
</tr>
</thead>
<tbody>
<tr>
<td>-datsu</td>
</tr>
<tr>
<td>ira-ira ↔ iradatsu</td>
</tr>
<tr>
<td>-meku</td>
</tr>
<tr>
<td>kira-kira ↔ kirameku</td>
</tr>
<tr>
<td>-kasu</td>
</tr>
<tr>
<td>boya-boy a ↔ boyakasu</td>
</tr>
<tr>
<td>-keru</td>
</tr>
<tr>
<td>yoro-yoro ↔ yorokeru</td>
</tr>
<tr>
<td>-mu</td>
</tr>
<tr>
<td>kuru-kuru ↔ kurumu</td>
</tr>
<tr>
<td>-geru/garu/gasu</td>
</tr>
<tr>
<td>koro-koro ↔ korogaru ↔ korogasu</td>
</tr>
<tr>
<td>-maru/meru</td>
</tr>
<tr>
<td>kuru-kuru ↔ kurumaru (intrans. ↔ kurumeru (trans.)</td>
</tr>
<tr>
<td>-ku/gu</td>
</tr>
<tr>
<td>hata-hata ↔ hataku</td>
</tr>
<tr>
<td>-reru/rasu</td>
</tr>
<tr>
<td>yura-yura ↔ yureru (intrans. ↔ yurasu (trans.)</td>
</tr>
<tr>
<td>-su</td>
</tr>
<tr>
<td>hiya-hiya ↔ hiyasu</td>
</tr>
</tbody>
</table>

Table 16: Mimetics with other verb endings
While many verbs seem to have mimetic origins, such as the ones in Table 15, it is not always clear what came first: the mimetic, which was turned into a verb by adding a verbal suffix, or the stem of the verb, which was turned into a mimetic. This raises the question whether these verbs are considered mimetics by all native speakers, since the source is not always evident and characteristic features such as reduplication are not present. However, since this thesis focuses on the changing grammatical usage of mimetics, its scope does not allow for a detailed analysis of the origin and perception of verbs with mimetic characteristics.

Summing up, mimetics in Japanese can fulfil a wide range of syntactic functions, although not every mimetic can be used like an adverb, nominal adjective, noun or verb. Also, not all mimetics appear in combination with all particles. Possible reasons for variation in the syntactic distribution will be addressed in the dictionary and corpus analysis in chapter 3.
3 THE GRAMMAR OF MIMETICS IN DICTIONARIES AND CORPORA

3.1 STATEMENT OF THE PROBLEM

Mimetics are an integral part of the Japanese language and used very commonly in everyday conversations and communications, as well as in more formal texts. They can function as adverbs, adjectives, nouns and predicates and appear in various syntactic positions, as illustrated in the previous chapter. However, when comparing the usage of mimetics in different written and spoken sources, as well as speech registers, it becomes apparent that the syntactic distribution of mimetics in Japanese varies greatly and certain expressions may not appear in all syntactic positions with all particles.

Whereas adverbial usage has been described as the common feature of most, if not all, mimetics (Hamano 1998: 12-15), attributive usage seems to be comparatively rare according to traditional dictionaries and grammars, such as the Nihon Kokugo Daijiten. Factors such as the morphological characteristics of the mimetic, the semantic context (including idioms and collocations) and individual preferences of native speakers may play a role, which will be discussed in greater detail in chapter 4. While there may be restrictions on the syntactic roles of certain mimetics or sets of mimetics, Japanese grammar does allow for adverbial, attributive, predicative (and rarely, nominal) usage in theory. The following list gives an overview of the most common syntactic constructions with mimetics in Japanese, which will form the grammatical basis of this analysis. See page 69 for examples.

Mimetic adverbs

A) \[\text{mimetic (+ to) + verb}_V \rightarrow \text{also used attributively as relative clauses}\]

---

29 Nominalisations of mimetics with the subject markers \text{wa} and \text{ga} have not been included in this list as these constructions are very rare (cf. section 2.4) and the data sources used in this analysis do not contain a sufficient number of utterances to make a judgement about the grammatical usage of mimetics as nouns.
Mimetic nominal adjectives

B) \([\text{mimetic} + \text{ni} + \text{verb}]_{\text{VP}} \rightarrow \text{resultative adverbial usage}\)

C) \([\text{mimetic} + \text{no} + \text{noun}]_{\text{NP}} \rightarrow \text{attributive usage}\)

D) \([\text{mimetic} + \text{na} + \text{noun}]_{\text{NP}} \)

E) \([\text{mimetic} + \text{copula}] \rightarrow \text{predicative usage}\)

Mimetic verbs

F) \([\text{mimetic} + \text{suru}]_{\text{VP}}\)

The above classification into mimetic adverbs, nominal adjectives and verbs follows Hamano (1998), Tamori & Schourup (1999) and Tsujimura (2005). A) shows the most common usage of mimetics in Japanese, an adverbial construction with the (optional) quotative particle to, which is generally used to quote utterances or paraphrase indirect speech (Coulmas 1986). The quotative particle to may also be replaced by te or omitted altogether, resulting in \([\text{mimetic} + \text{verb/adjective}]_{\text{VP}}\). This particular type of mimetic has also been described as a ‘manner mimetic’ (Toratani 2007).

It is also possible to form a resultative adverbial construction with the marker ni, in particular when in combination with verbs describing a change of state. While mimetics in constructions like B) have thus been labelled ‘resultative mimetics’ by Toratani (2007), this thesis will treat them as mimetic nominal adjectives as Hamano (1998) proposes. As discussed in section 2.4.2, ni can act as a dative case marker for nouns (glossed as DAT) and is often labelled as a particle in this context (e.g. Sadakane & Koizumi 1995), but has also been analysed as a remnant of the Old Japanese copula (Vovin 2005). When used to mark nominal adjectives, ni will be glossed as KYDni in this thesis.
As demonstrated in section 2.4.2, relative clauses can be created using the pattern in A), with the verb in prenominal position, i.e. [NP[mimetic (+to) + verb] noun):

(38) karada ga fuwa-fuwa uite iru yō na kanji  
body SBJ MIM float-GER be-PRS way KYDna feeling  
‘a feeling as if (my) body is floating’

Alternatively, the genitive case marker no in C) or the linker na in E) may be used to modify a noun with a mimetic (cf. Shirane 2005 and Yanagida 2012), similar to non-mimetic nominal adjectives. Like the quotative particle to, no and na may be omitted in colloquial speech.

Last but not least, mimetics can also occur in predicative position with the copula da/desu, as shown in F) and form predicate-like constructions with suru as in (E) (Hamano 1986/1998; Tamori & Schourup 1999; Tsujimura et al. 2005). While [mimetic + verb] constructions with common verbs such as iu (‘to say’) and naru (‘to become’) have have also been considered mimetic verbs by some authors (cf. section 2.4.4), it is not clear whether these collocations have been fully lexicalised as verbs in all cases. For this reason, the light verb suru is will serve as a dummy for other verbs here. Constructions with [mimetic + to + suru] will be grouped together with mimetic adverbials in A) and not automatically considered mimetic verbs, as to has been shown to be associated with a more expressive use of a mimetic (Hamano 1986/1998), which may hint at a lower degree of lexicalisation (see Tamori and Schourup 1999; Flyxe 2002; Akita 2013a, discussed further in chapter 5). The large size of the jpTenTen webcrawler corpus does not allow for a case by case analysis of each [mimetic + to + suru] construction.

The following examples, which have been taken from the jpTenTen webcrawler corpus, follow the grammatical patterns described in A)-F). The expression fuwa-fuwa (‘fluffy’) has been selected as illustration, since it can be used in all of the aforementioned syntactic roles according to the Nihon Kokugo Daijiten (2000/2002).

Mimetic adverbs
(39) kumo ga fuwa-fuwa to uite kita
cloud SBJ MIM QP float-GER come-PAST
‘The clouds were floating by like fluff.’

Mimetic nominal adjectives

(40) kēki ga fuwa-fuwa ni dekita
cake SBJ MIM KYDni finish-PAST
‘The cake came out really fluffy.’

(41) fuwa-fuwa no pankēki ga tanoshimeru kafe
MIM GEN pancake SBJ enjoy-POT-PRS cafe
‘a café in which (you) can enjoy fluffy pancakes’

(42) fuwa-fuwa na mono ga suki na hito desu
MIM KYDna thing SBJ dear KYDna person COP-PRS-POL
‘(X) is someone who really likes fluffy things.’

(43) kono sukōn wa fuwa-fuwa da
this scone SBJ MIM COP-PRS
‘This scone is really fluffy.’

Mimetic verbs

(44) atama ga fuwa-fuwa suru
head SBJ MIM make-PRS
Lit. ‘(My) head is floating (i.e. foggy).’

In example (39), the mimetic *fuwa-fuwa* is marked by the quotative particle *to*, which forms an adverbial construction in combination with the verb *uku* (浮く – ‘to float’). The alternative adverbial marker *ni* is shown in example (40), with the mimetic nominal adjective modifying the verb *dekiru* (出来る – ‘to finish; to accomplish’). In examples (41) and (42), *fuwa-fuwa* is directly linked to the noun with the genitive case marker *no* or the adjectival linker *na*, which is usually used to mark nominal adjectives or loanwords (Yamaki do 2005: 25). Example (43) shows the mimetic *fuwa-fuwa* in predicative position with the copula *da*, while (44) illustrates a predicate-like construction with the verb *suru*.

Although the grammatical patterns shown in examples (39)-(44) occur in both written and spoken Japanese, their relative frequency seems to depend on both the mimetic in question and the preferences of individual native speakers, as will be demonstrated by the empirical studies in chapter
4. Traditional monolingual dictionaries of Japanese, such as the *Nihon Kokugo Daijiten* (1972ff), the *Kōjien* (1955ff) or the *Daijirin* (1988ff), usually list mimetics as adverbs that are quoted with *to* and may be part of a relative clause, e.g. *[fuwa-fuwa to shita kēki]* (lit. ‘a fluffily made cake’). Only a fraction of mimetics are listed as adjectives or nouns that can be marked with the genitive particle *no* as shown in example (41). The most recent online edition of the *Nihon Kokugo Daijiten* (2000/2002) also includes a few example sentences showing adjectival usage with *na* as in example (42), whereas other dictionaries, such as the bilingual *Dictionary of Iconic Expressions in Japanese* (1996), seem to reject this grammatical pattern completely and opt for relative clauses or genitive-like constructions with *no* instead.

Although there is no apparent consensus on the grammatical usage of mimetics or certain sets of mimetics, recent changes in dictionaries, especially regarding attributive usage within NPs, could hint at an ongoing language change and/or changing attitudes towards the documentation of colloquial speech patterns not included in traditional dictionaries. In order to find evidence for such grammatical changes, consulting dictionaries alone is not sufficient, since they do not reflect all speech registers and speakers.

For this reason, a contrastive analysis with data from both literary and non-literary sources is essential to make a statement about the syntactic distribution of mimetics in contemporary Japanese. As a starting point for this analysis, the classification of mimetics in a selection of mono- and bilingual dictionaries with predominantly literary sources will be contrasted with data collected from a large web-based corpus with a variety of literary and non-literary sources.

3.2 METHODOLOGY AND DATA SET

The exact number of mimetic expressions in Japanese is difficult to determine due to dialectal variations and spontaneous creations in colloquial speech. For Standard Japanese, careful estimates by dictionary makers lie within the range of 4,000-6,000 words (Eschbach-Szabo 1992: 43), depending on whether morphological variants of the same mimetic (e.g.
fuwaQ / fuwa-fuwa / fuwari / funwari = soft; fluffy; airy) are counted separately. As the scope of this thesis does not allow for a grammatical analysis of all mimetic expressions in Japanese, a representative set of 20 mimetics has been chosen to demonstrate the changing grammatical usage of mimetic expressions. Table 17 lists all 20 mimetics in alphabetical order, with their respective semantic types and approximate translations in English.

As demonstrated in section 2.2 Semantic Classification, Japanese ideophones can be divided into **phonomimes**, i.e. expressions that imitate sounds or voices (擬音語 giongo; 擬声語 giseigo), **phonomimes**, which imitate the manner of an action or the physical state of items and entities (擬態 gitaigo), and **psychomimes**, which imitate physical or emotional sensations (擬情語 gijōgo) (Eschbach 1992: 43-44; Kakehi and Tamori 1993: iv). The semantic classification of the mimetics in this data set follows Eschbach-Szabo’s (1992) classification, while the semantic types have been determined based on the definitions given by Kakehi et al. (1996)\(^\text{30}\).

In Table 17, PHO indicates phonomimes (e.g. zā-zā, the sound of heavy rain), PHE indicates phonomimes (e.g. nikkori, smiling brightly) and PSY indicates psychomimes (e.g. gan-gan, a pounding pain). As previously noted, it is not always possible to assign a single semantic type to each mimetic, since the expression may be used both literally and metaphorically, such as with doki-doki, which describes the sound of a pounding heart, but also the feeling of excitement as a more abstract concept.

\(^{30}\) It is important to point out that some mimetics may have onomatopoeic qualities, but could also be used metaphorically to describe states or emotions, which is why dictionaries do not agree on their semantic classification.
Table 17: Set of mimetic expressions

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>SEMANTIC TYPE</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara-barra</td>
<td>PHO/PHE</td>
<td>scattered; various</td>
</tr>
<tr>
<td>boro-boro</td>
<td>PHE/PSY</td>
<td>crumbling; falling apart</td>
</tr>
<tr>
<td>doki-doki</td>
<td>PHO/PHE/PSY</td>
<td>pounding (heart)</td>
</tr>
<tr>
<td>funwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>funwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>gan-gan</td>
<td>PHO/PHE/PSY</td>
<td>pounding pain (head)</td>
</tr>
<tr>
<td>girari</td>
<td>PHE</td>
<td>a bright flash of light</td>
</tr>
<tr>
<td>hakkiri</td>
<td>PHE</td>
<td>clear</td>
</tr>
<tr>
<td>kira-kira</td>
<td>PHE</td>
<td>flashing; sparkling</td>
</tr>
<tr>
<td>kirari</td>
<td>PHE</td>
<td>a flash of light</td>
</tr>
<tr>
<td>nikkori</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>niko-niko</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>patan</td>
<td>PHO</td>
<td>a slam or knock</td>
</tr>
<tr>
<td>pata-pata</td>
<td>PHO</td>
<td>knocking; pitter-patter</td>
</tr>
<tr>
<td>pittari</td>
<td>PHE</td>
<td>perfect; fitting</td>
</tr>
<tr>
<td>sakari-sakari</td>
<td>PHO/PHE</td>
<td>crispy; crunchy</td>
</tr>
<tr>
<td>sara-sara</td>
<td>PHO/PHE</td>
<td>smooth; flowing</td>
</tr>
<tr>
<td>wan-wan</td>
<td>PHO</td>
<td>barking; bow-wow</td>
</tr>
<tr>
<td>zā-zā</td>
<td>PHO</td>
<td>pouring (rain, waterfall)</td>
</tr>
</tbody>
</table>

The mimetics in this data set were selected based on the following criteria:

I. Different phonological structure
II. Both single and reduplicative forms
III. Different suffixes (/RI/ or /N/)\(^{31}\)
IV. Different semantic types (phono-, pheno- and psychomimetic expressions)
V. Several expressions from the same semantic field
VI. Both common and uncommon expressions found in all data sources

\(^{31}\) Non-reduplicative mimetics ending in Ø (glottal stop) such as *pataQ* (‘BAM!’) have not been included in this data set, because they are predominantly used in emphatic utterances and thus did not appear in all sources used for this analysis, whereas the suffixes /RI/ and /N/ were present in all speech registers.
In accordance with six selection criteria above, this set comprises mimetics with different phonological and morphological characteristics. The word-initial consonants represented in this set are voiced and voiceless bilabial stops (*boro-boro, bara-barra, pata-pata, pataN, pittaRI*\(^{32}\)), voiced and voiceless alveolar fricatives (*zā-zā, sara-sara, saku-saku*), voiced and voiceless velar stops (*gan-gan, giraRI, kira-kira, kiraRI*), the labial fricative /ɾ/\(^{33}\) (*fuwa-fuwa, funwari, fuwari*), the nasal /n/ (*nikkori, niko-niko*), the alveolar stop /d/ (*doki-doki*), the glottal fricative /h/ (*hakkiri*), and the velar glide /w/ (*wan-wan*). Vowel alterations in the first and second syllable of the mimetic roots comprise /a/-/a/, /o/-/o/, /i/-/a/, /i/-/o/, /a/-/i/ and /u/-/a/.

While this selection could not cover the whole range of phonemes in mimetics due to the scope of this thesis, the set is sufficiently varied for a contrastive analysis of selected phonemes. Both single and reduplicative forms with the suffixes /N/ and /RI/ have been included, with pairs such as *pataN* (a single knock) vs. *pata-pata* (repeated knocking), as well as *kiraRI* (a flash of light) vs. *giraRI* (a glaring flash of light) being chosen due to the relationship between form and meaning, which may also have implications for their grammatical usage\(^{34}\).

As stated above, all three semantic types of mimetics are represented in this set, with phonomimes (e.g. *wan-wan*), phenomimes (e.g. *kirari*) and psychomimes (e.g. *gan-gan*) having not only different meanings, but being lexicalised to varying degrees with possible implications for their grammatical usage (cf. Tamori and Schourup 1999; Flyxe 2002; Akita 2013a). In addition, this set also includes expressions from related semantic fields, like *bara-barra* (`scattered’) vs. *boro-boro* (`falling apart’), as well as frequently used mimetics such as *doki-doki* (`pounding heart’) vs. rarer expressions such as *girari* (a glaring flash of light), based on the amount of total hits in the *jpTenTen* webcrawler corpus. Adverbials such as *hakkiri* (`clearly’) and *pittari* (`fittingly’), which are not labelled as mimetics by all

\(^{32}\) See section 2.3.1 for a discussion of obsolete phonemes retained in mimetics such as word-initial /p/.

\(^{33}\) Pronunciation may vary between /ɾ/ and /ɭ/ depending on the native speaker, cf. Frellesvig & Whitman (2004).

\(^{34}\) See section 2.3.2 for an overview of the semantic implications of reduplication and voicing in mimetics.
dictionaries, have also be included to see if they show a different usage compared to expressions labelled as mimetics by all dictionaries.

In order to give an overview of the contemporary grammatical usage of each mimetic in this set, a selection of seven dictionaries has been chosen (Table 18 on page 77). This representative set was selected to include both mono- and bilingual dictionaries with different target audiences (native speakers vs. learners of Japanese) and a variety of data sources. A detailed overview of the history and characteristics of each dictionary is given below. The grammatical usage of mimetics documented in these dictionaries will then be contrasted with the utterances found in a large web-based corpus.

The *Dai-ji-sen* was first published in 1995 by Shogakukan, with the aim of providing an alternative to the popular *Kojien* desktop dictionary by Iwanami. The original target audience were Japanese high school and university students, which is why the dictionary is comparatively compact, with encyclopaedia-like illustrations and diagrams. The most recent second edition, which was published in both traditional and electronic format in 2012, has over 268,000 entries, plus example sentences. As the dictionary was originally aimed at Japanese high school and university students, the selection of dictionary entries and their definitions tend to be quite conservative, in order to prepare students for central exams. This dictionary was chosen because of its specific target audience, which may limit the number of mimetics included in the dictionary, as well as their grammatical usage.

The first edition of the renowned *Nihon Kokugo Daijiten* (NKD), the Japanese equivalent to the *Oxford English Dictionary*, was published between 1972 and 1976, with the second edition following in 2000-2001. Since 2007, an online version of the NKD has been available to educational institutions and individual subscribers. With over 503,000 entries, the NKD is also the largest monolingual dictionary of Japanese. While the first edition relied on literary sources, the online version now includes additional examples for many entries, which seem to have been created by the editors,
as sources are not always listed. The NKD was chosen as a representative
dictionary for this analysis, as it is the largest monolingual Japanese
dictionary to date and gives an overview of both modern and historical
usage, including the earliest attested usage of each item.

Interestingly, mimetics are not necessarily marked as onomatopoeia or
ideophones, although the definition will certainly mention that they imitate
sounds or other sensory phenomena. Rather, entries for mimetics are
divided into word classes based on their grammatical usage and syntactic
roles as various parts of speech according to the editors’ judgement. As
adverbial usage with to is most common for mimetics (see section 2.4.1),
the NKD usually lists 副詞 (fukushi, ‘adverb’) as the principal lexical
category. If attributive usage with no or na, resultative adverbial usage with
ni, or predicative usage with da is attested, a further lexical category
labelled 形容動詞 (keiyōdōshi, ‘nominal adjectives’) may be added. In very
rare cases, mimetics may be used as nouns, but as these mostly refer to a
new entity possessing the quality of a certain mimetic (e.g. Fuwafiuwa being
a regional dish with fluffy dumplings), such usages will be neglected in this
analysis.

The Dictionary of Iconic Expressions in Japanese (DIE) by Hisao
Kakehi, Ihuhiro Tamori and Lawrence Schourup was published in 1996 and
is the most extensive bilingual mimetic dictionary to date. In the preface of
the DIE, Kakehi et al. define the usage categories of Japanese mimetics as
follows:

- adverbial usage with to (or ∅)
- resultative adverbial usage with ni
- frequency adverbial usage with no
- adjectival usage with no
- predicative usage with da
- verbal usages (e.g. with suru)

(Kakehi et al. 1996: XV)

35 See e.g. fuwa-fuwa, which includes new example sentences like 「ふわふわな布団」
(fuwa-fuwa na futon), with particles (here: na) that were not listed in previous editions.
However, the dictionary entries as such are not sorted according to usage categories, but semantic types (sound, manner, state, etc.), as well as meanings. It is also important to note here that the nominal adjective linker *na* is not included in this list and does not occur in the DIE for any entry. Kakehi et al. exclude the attributive usage of sound adverbials (*giongo* and *giseigo*) such as *wan-wan* (‘woof-woof’) in general (Kakehi et al. 1996: XV). A possible reason for this relatively conservative approach may be the data sources chosen for this dictionary, which mostly consist of Japanese literature written before the 1990s.

The *Japanese-English and English-Japanese Dictionary* (1888) by James Curtis Hepburn is the most important source for mimetics in pre-1900 Japanese. Earlier monolingual Japanese dictionaries, such as the *Hayabiki Setsuyoshu* (1757), the *Jiten Setsuyoshu* (1817) by Masanori Takada or the *Setsuyo Hayami Nijubiki* (1852) by Mitsuhisa Suzuki mostly consisted of *kanji* lists with readings, synonyms and occasionally short explanations, whereas mimetics and colloquial expressions were omitted altogether. Bilingual dictionaries published in the 1860s and during the Meiji Period (1868-1912), which marked the opening of Japan to the West, offered more detailed explanations, but mimetics were often neglected by Japanese authors. For instance, the *Eiwa Taiyaku Shuchin Jisho* (1866), an English-Japanese dictionary compiled by Hori Tatsunosuke and revised by Horikoshi Kamenosuke, seems to be avoiding mimetics at all cost, with the dictionary entries for ‘to scream’, ‘to shriek’ and ‘to screech’ simply being translated as 呼ぶ (yobu, ‘to shout’), although there were plenty of Japanese mimetics available which could have been used to differentiate between these semantic nuances. This changed with Hepburn’s *Japanese-English and English-Japanese Dictionary* (HEP), which includes a surprising number of mimetics, although these are still marked as colloquial. Most phonomimes, such as animal sounds, are not listed. Phonomimes such as *pika-pika* (‘glittering’), however, are numerous and often illustrated with example sentences created or transcribed by the editor. For this reason Hepburn’s *Japanese-English and English-Japanese Dictionary* is invaluable for an analysis of pre-1900 mimetic usage and classification.
<table>
<thead>
<tr>
<th>Dictionary</th>
<th>Acronym</th>
<th>Year</th>
<th>Editor</th>
<th>Type</th>
<th>Language</th>
<th>Entries</th>
<th>Audience</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDICT2</td>
<td>ED2</td>
<td>1991-present (2nd ed.)</td>
<td>Breen, Jim et al.</td>
<td>Modern Japanese</td>
<td>JP-EN</td>
<td>150,000</td>
<td>learners of Japanese</td>
<td>definitions and examples created by authors + Tanaka Corpus</td>
</tr>
<tr>
<td>Kenkyusha Waei Chujiten</td>
<td>KKS</td>
<td>2005 (5th ed.)</td>
<td>Kenkyusha</td>
<td>Modern Japanese</td>
<td>JP-EN, EN-JP</td>
<td>97,000</td>
<td>learners of English</td>
<td>definitions and examples created by authors</td>
</tr>
</tbody>
</table>

Table 18: List of dictionaries

---

36 Japanese Language Proficiency Test
The *Japanese Learner’s Dictionary* (JLD) was created by a team of linguists and Japanese language teachers at the University of Tsukuba, under the direction of Shingo Imai. Its target audience are learners of Japanese preparing for various levels of the “Japanese Language Proficiency Test” (JLPT). The underlying database is a combination of vocabulary required for the JLPT (~8,000 words), plus 23,000 entries taken from the EDR digital dictionary. As the target audience is very specific, the grammatical usage of mimetics is limited to what is actually required at different JLPT levels and marked as such. Most mimetics are simply defined as adverbs, with either [to + verb] or [no particle + suru]. This also highlights the limitations of the JLPT, which (at level 1) is supposed to certify near-native Japanese skills, but although mimetics are omnipresent in everyday conversations, only their most basic grammatical usage as adverbs with or without to is being tested. Nevertheless, the *Japanese Learner’s Dictionary* is an important data source because of this very specific target audience, which is why it was included in the following analysis.

*The Electronic Dictionary of Japanese* (EDICT/EDICT2) is based on a dictionary digitalisation project initiated by Jim Breen in 1991. With many authors contributing for nearly 15 years, the current number of entries in the second edition exceeds 150,000. As this dictionary is not based on literary sources and conservative grammars of Standard Japanese, but rather definitions and examples verified by native speakers of Japanese, it is comparatively progressive when it comes to the grammatical usage of mimetics, which provides a clear contrast to traditional dictionaries like the NKD.

The last dictionary, *Waei Jiten* by Kenkyusha, is a Japanese-English dictionary aimed at learners of English, but is widely used by learners of Japanese as well, particularly the electronic version based on the 5th edition published in 2005. However, as it is primarily a learner’s dictionary, it includes only a comparatively small number of colloquial expressions, which also limits the number of mimetics. If mimetics are listed, they are mostly labelled as adverbs, with examples following the most common [mimetic + to + verb] pattern. However, there are a few notable exceptions,
which will be discussed and contrasted with examples from other dictionaries in the following analysis.

In terms of parts of speech classification, the editors of the seven dictionaries introduced above have chosen different approaches tailored to their specific target audience(s). Most dictionaries for native speakers of Japanese (NKD, DJS, KKS) assign mimetics the part of speech membership corresponding to their grammatical usage in a particular context (e.g. adverb, nominal adjective, verb) and may optionally tag an expression as giongo/gitaigo etc. The DIE simply divides mimetics into sound vs. manner, while the part of speech membership can be derived from the definitions, translations and examples provided (e.g. [Kira-kira: M: the manner of sparkling; kira-kira suru – ‘to sparkle or shine’] = verb, p. 669-70). The JLD chooses a similar approach, but sound vs. manner are not stated as explicit semantic categories and can be found embedded into definitions instead (‘X imitates the sound of / describes the manner of.’). Among the dictionaries for learners of Japanese, only the ED2 clearly marks mimetic expressions as ‘MIM’ (in addition to adverb, nominal adjective, etc.), whereas the historical HEP’s classification is based on grammatical usage only. With the DIE being a specialised dictionary of iconic expressions, this does not have to be stated explicitly for every mimetic of course.

The corpus chosen for this contrastive analysis of the grammatical usage of mimetics is the jpTenTen corpus by Sketch Engine (Kilgarriff et al. 2004, 2014) compiled by Irena Srdanović et al. in December 2011 (Srdanović et al. 2013). Based on the SpiderLing software, developed by the Natural Language Processing Centre of Masaryk University, this webcrawler corpus comprises a data set of over 8 trillion words, which are tokenized and tagged by MeCab 0.98 + UniDic 2.1.0. The jpTenTen corpus was chosen for this analysis because of its large size and a wide variety of written sources, which include utterances made by native speakers from all age groups, genders, dialects, as well as educational and social backgrounds, who make regular use of the internet and are active in message boards, discussion forums, blogs and chat rooms. Since this webcrawler corpus also searches primary and secondary literature on platforms such as Google
Books, a broad spectrum of genres and speech registers can be taken into consideration.

It is important to mention at this point that utterances by L2 learners of Japanese may be included in this webcrawler corpus. However, with only 2.38 million foreigners residing in Japan as of 2016 against a total population of 127 million (Japan Times: March 7, 2017) and 3.65 million learners of Japanese globally (Japan Foundation 2016), any potential errors are likely to be statistically insignificant. In addition, with this corpus being webbased, a bias towards younger Japanese speakers seems likely at first glance. However, in contrast to most European countries, the age range of internet users in Japan is more evenly distributed, with the 65+ group still being very active online (Figure 5).

![Distribution of internet users in Japan](http://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h29/html/nc262120.html)

**Figure 5: Distribution of internet users in Japan by age group in 2016**

This is why a webcrawler corpus could be selected as a data source for this analysis, which aims to provide an overview of the grammatical usage of mimetics by the general public in present day Japan. The following sections will look at all mimetic expressions in the data set and their morphologically related forms in detail, with example sentences illustrating adverbial, attributive and predicative usage.

---

3.3 ANALYSIS

This section will give an overview of the grammatical usage of all 20 mimetics as attested in the selected dictionaries and the \textit{jpTenTen} webcrawler corpus (JTT). The definition(s) of each expression have been compiled by comparing and summarising the definitions given in the set of seven dictionaries presented in Table 18, whose varied target audiences and data sources assure that a broad range of denotations and connotations is captured. The syntactic characteristics of each of the 20 mimetics will then be compared and contrasted in section 3.4 to highlight similarities in the grammatical usage of mimetics in relation to their morphological structure and semantic type. A comparison of all mimetics and attested grammatical usage can be found in table 29 on page 126. If not otherwise stated, all examples have been taken from the JTT.

3.3.1 Bara-bara

\textit{Bara-bara} (‘scattered’, ‘disorganised’, ‘separately’) generally describes a state of disorganisation, with objects being scattered or broken into pieces. Interestingly, the mimetic is frequently used in crime novels and TV shows to describe the discovery of a corpse that has been chopped into pieces. \textit{Bara-bara} may also imitate the sound of small objects hitting a hard surface, making it both a phenomime and a phonomime according to the DIE. The syntactic distribution of this mimetic in the corpus covers adverbial, attributive and predicative functions, as the following examples illustrate. See section 3.2 for a detailed discussion of each grammatical pattern.

Mimetic adverb

(45) \text{ame} \text{ mo barra-barra to futte mairimashita} \\
\text{rain also MIM QP fall-GER come-POL-PAST} \\
\text{‘The rain was drizzling.’}
Mimetic nominal adjective

(46) kazoku ga bara-bara ni natte imasu
family SBJ MIM KYDni become be-POL-PRS
‘The family has fallen apart.’

(47) bara-bara no kami
MIM GEN sheets
‘Sheets of paper (that are) scattered everywhere.’

(48) bara-bara na ki ga suru
MIM KYDna feeling SBJ make
‘This seems chaotic/uncoordinated.’

(49) sūpā no yasai no saizu wa bara-bara desu
supermarket GEN vegetable GEN size TOP MIM COP-POL-PRS
‘Vegetables (sold) in supermarkets come in all kinds of sizes.’

Mimetic verb

(50) hanashi ga bara-bara shite iru
speech SBJ MIM make-GER be-PRS
‘(His or her) speech was incoherent.’

Bara-bara is among the few mimetics in this data set for which all large monolingual dictionaries allow prenominal attributive usage with the particles no and/or na, as shown in Table 19. Checkmarks ✓ indicate that the above construction is documented in the respective dictionary, while ✻ means that no examples have been found. In instances when the mimetic was defined as a member of a certain class (e.g. manner adverbial or nominal adjective), but no example with the above particle/linker was given, (✓) is used instead, as it is not clear if the editors would consider a particular construction illicit or simply did not provide examples.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + no + noun ]</th>
<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara-bara</td>
<td>DJSDKDHEPELD2KKS</td>
<td>DJSDKDHEPELD2KKS</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>boro-boro</td>
<td>DJSDKDHEPELD2KKS</td>
<td>DJSDKDHEPELD2KKS</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Table 19: Dictionary data for bara-bara*
One possible explanation for the usage of *bara-bara* as nominal adjective, rather than just being quoted iconically as a mimetic adverb, could be that this particular expression is very frequently used in both written and spoken Japanese and may thus undergo grammatical change faster than mimetics that are less frequent or only used in certain speech registers. This hypothesis is also supported by data retrieved from the JTT corpus, with *bara-bara* having over 100,000 hits in total and numerous examples for adverbial, attributive and predicative usage. However, some grammatical constructions are used more frequently than others, as the chart below demonstrates.

According to the JTT, *Bara-bar* is most frequently used with the adverbial particle *ni* and the verb *nar* (*to become*), such as in *[bara-bara ni nar*], and the copula. This may be due to semantic reasons, since *bara-bara* describes a state (*in pieces*). It is also frequently used attributively with the particles *no* and *na* (22% combined), but only comparatively rarely with the quotative particle *to* (5%) in the pattern [mimetic + QP + verb], which can appear in main clauses and in attributive clauses modifying a noun.
3.3.2 Boro-boro

Boro-boro (‘falling apart’, ‘dropping’, ‘torn’) is phonologically and semantically related to bara-bara (‘scattered’, ‘disorganised’, ‘separately’) which was discussed in the previous section. While semantically related, boro-boro tends to refer to the process of objects falling apart or falling down, such as a cookie crumbling in a person’s hand or teardrops rolling down a child’s face. Figuratively, boro-boro may also describe the state of being emotionally torn or worn down, which is why the expression can been classified as both a phenomime and a psychomime according to the definitions provided in the DIE.

With over 100,000 hits in total, boro-boro is about as common as bara-bara and shows a very similar syntactic distribution. However, the expressions are not grammatically identical, and may select different particles in idiomatic contexts.

**Mimetic adverb**

(51) ke ga boro-boro to ochite kimasu
    hair SBJ MIM QP fall-GER come-POL-PRS
    ‘(My) hair is falling out in clumps.’

**Mimetic nominal adjective**

(52) boku no kokoro wa boro-boro ni natte ita
    I GEN heart TOP MIM KYDni become-GER be-PAST
    ‘My (male) heart broke apart.’

(53) boro-boro no furui ie
    MIM GEN old house
    ‘an old, rundown house’

---

**Table 20: Dictionary data for boro-boro**

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + no + noun ]</th>
<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>boro-boro</td>
<td>DIS     NKD   DIE  HEP JLD ED2 KKS</td>
<td>DIS     NKD   DIE  HEP JLD ED2 KKS</td>
</tr>
<tr>
<td></td>
<td>✓       ✓      ✓   ✗   ✗   ✓      ✓</td>
<td>✓       ✓      ✓   ✗   ✗   ✓      ✓</td>
</tr>
</tbody>
</table>

---
(54) boro-boro na kōto o kite iru hito
MIM KYDna coat ACC wear-GER be-PRS person
‘a person wearing a shabby coat’

(55) kekka wa boro-boro desu
result TOP MIM COP-POL-PRS
‘The results are all over the place.’

**Mimetic verb**

(56) namida ga boro-boro shite imashita
tear SBJ MIM make-GER be-PAST
‘Tears were rolling down (his/her face).’

An overview of the relative frequency of adverbial, attributive and predicative usage as attested in the JTT is given in Figure 7.

![Figure 7: JTT data for boro-boro](image)

Like *bara-barara*, *boro-boro* is often combined with the particle *ni* and the verb *naru* and can be used prenominally with *no* and *na*. A possible explanation for these similarities might be the semantic field: both carry the meaning of something being ‘in pieces’, albeit in different contexts. This also explains the frequent usage of [mimetic + *ni* + *naru*], as it describes the process of falling to pieces, and [mimetic + copula], as both expressions describe a state (cf. Toratani 2007 on ‘resultative mimetics’). In order to
find out whether the frequency of *bara-barā* and *boro-boro* in every day usage also plays a role in their grammatical and pragmatic behaviour, they have to be analysed in contrast with other mimetics in this data set.

### 3.3.3 Doki-doki

Like *bara-barā* and *boro-boro*, *doki-doki* is a very frequently used expression with approximately 360,000 tokens in the JTT. According to the definitions in the selected dictionaries, particularly the DIE, *doki-doki* may describe the sound and manner of a pounding heart, as well as a feeling of excitement, which is why the semantic classification as a phono-, pheno- or psychomime depends on the semantic context. Due to specific semantics, *doki-doki* is most commonly used with the nouns *shinzō/kokoro* (‘heart’), *mune* (‘chest’) and *kanji/kandō* (‘feeling’).

**Mimetic adverb**

(57)  

| shinzō ga doki-doki to takanaru  
| heart SBJ MIM QP beat-PRS  

‘(My) heart is pounding.’

**Mimetic nominal adjective**

(58)  

| mune ga doki-doki ni natte tomaranai  
| chest SBJ MIM KYDni become-GER stop-NEG  

‘(My) heart started pounding non-stop.’

(59)  

| doki-doki no kandō  
| MIM GEN feeling  

‘a feeling of excitement’

(60)  

| doki-doki na kanji  
| MIM KYDna feeling  

‘a feeling of excitement’

(61)  

| sanka suru mae wa doki-doki datta  
| participation do before TOP MIM COP-PAST  

‘Before I participated, I felt very excited.’
Mimetic verb

(62) chotto doki-doki shita
    bit MIM make-PAST
    ‘(I) was a bit excited.’

Doki-doki on its own is very popular in romantic graphic novels for young adults, since it describes the pounding heart of a person in love very vividly. Prenominal usage with no or na is not attested in most dictionaries, with the exception of the ED2, whose examples have either been created by the authors or retrieved from the Tanaka Corpus\textsuperscript{38}. However, attributive clauses formed with a mimetic verb or adverb, like the one in (62) may be used to modify a noun instead.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + no + noun ]</th>
<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>doki-doki</td>
<td>DJ</td>
<td>K</td>
</tr>
</tbody>
</table>

\textit{Table 21: Dictionary data for doki-doki}

Nominal adjective-like usage is equally rare in the JTT corpus, with with doki-doki only being used prenominally with a particle in 5\% (no) and 2\% (na) of the cases respectively. Instead, doki-doki is often used with the verb suru (Figure 8), as shown in example (62).

\textsuperscript{38} The Tanaka Corpus (cf. Tanaka 2001) is an open-source corpus created by the late Prof Yasuhito Tanaka and his students at Hyogo University. It contains over 200,000 parallel Japanese-English example sentences which were later edited and linked to Jim Breen’s electronic dictionary of Japanese.
Doki-doki suru is an almost idiomatic expression with predicate-like characteristics and constitutes the most frequent grammatical patterns found in the JTT. This includes both adverbial constructions following the pattern [mimetic + suru] and attributive usages such as [doki-doki shita kanji]. Interestingly, this does not seem to be related to the overall frequency of doki-doki, since equally common mimetics like bara-barā and boro-boro are rarely used with the verb suru.

3.3.4 Fuwa-fuwa, funwari and fuwari

The three phenomimes fuwa-fuwa, fuwari and funwari are morphological variants of the stem form fuwa and can be translated as ‘fluffy’, ‘soft’, ‘floating’ or ‘airy’ depending on the semantic context. The reduplicative form fuwa-fuwa may be used adverbially, attributively and predicatively as previously demonstrated in section 3.1.

Mimetic adverb

(63) kumo ga fuwa-fuwa to uite kita
    cloud SBJ MIM QP float-GER come-PAST
    ‘The clouds were floating by like fluff.’
Mimetic nominal adjective

(64) kēki ga fuwa-fuwa ni dekita  
cake SBJ MIM KYDni finish-PAST  
‘The cake came out really fluffy.’

(65) fuwa-fuwa no pankēki ga tanoshimeru kafe  
MIM GEN pancake SBJ enjoy-POT café  
‘a café in which (you) can enjoy fluffy pancakes’

(66) fuwa-fuwa na mono ga suki na hito desu  
MIM KYDna thing SBJ dear KYDna person COP-POL-PRS  
‘(X) is someone who really likes fluffy things.’

(67) kono sukōn wa fuwa-fuwa da  
this scone SBJ MIM COP-PRS  
‘This scone is really fluffy.’

Mimetic verb

(68) kimochi ga fuwa-fuwa shite iru  
feeling SBJ MIM make-GER be-PRS  
‘(It) feels fluffy.’

In contrast to fuwa-fuwa, the variants funwari and fuwari are mostly used in adverbial function with the particles to or ni according to all dictionaries.

Mimetic adverb

(69) sakura no kaori ga funwari to kanjiru  
cherry.blossom GEN scent SBJ MIM QP feel-PRS  
‘There’s a gentle feel to the scent of the cherry blossoms.’

Mimetic nominal adjective

(70) soto wa sakkuri, naka wa funwari ni shiagemashita  
outside TOP MIM inside TOP soft-MIM KYDni finish-POL-PAST  
‘The outside (of the pastry) turned out crispy, the inside soft.’

(71) futon mo fuwari ni naru yō ni,  
futon also MIM KYDni become-PRS method LOC  
hoshitakute shikata nai da  
air.out-GER way be-NEG COP-PRS  
‘If you want a futon to become soft, you have to air it.’
Mimetic verb

(74) ke ga funwari shimasu yo
   hair SBJ MIM make-POL-PRS EMP
   ‘(Your) hair is so soft!’

(75) kami no ke ga fuwari shite iru
   head GEN hair SBJ MIM make-GER be-PRS
   ‘(X’s) hair is very soft.’

While prenominal usage with no or with na is rare, attributive usage with [mimetic (+to) + suru/shita/shite iru + noun] is possible:

(76) funwari to shita karui awa
    MIM QP make-PAST light foam
    ‘airy light foam’

(77) fuwari to shita tamagoyaki
    MIM QP make-PAST fried eggs
    ‘fluffy fried eggs’

Predicative usage with the copula da/desu however is commonly seen, as shown in examples (72) and (73).

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + no + noun ]</th>
<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>fuwa-fuwa</td>
<td>DJ S NK D H E P J L D E D K K S</td>
<td>DJ S NK D H E P J L D E D K K S</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>funwari</td>
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<td>DJ S NK D H E P J L D E D K K S</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>fuwari</td>
<td>DJ S NK D H E P J L D E D K K S</td>
<td>DJ S NK D H E P J L D E D K K S</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 22: Dictionary data for fuwa-fuwa, funwari and fuwari.

As Table 22 shows, attributive usage is only attested for fuwa-fuwa in all monolingual dictionaries and none of these three mimetic expressions can
be found in Hepburn’s bilingual dictionary published in 1888. This syntactic
distribution is echoed in the JTT, as illustrated in Figure 9.

![Figure 9: JTT data for fuwa-fuwa](image)

Similar to doki-doki, [mimetic + suru] constructions without the quotative
particle to are the most frequently attested usage for fuwa-fuwa in the JTT.
Surprisingly, this is followed by attributive usage with no rather than
adverbial constructions with to. The linker na is comparatively rare, but
does account for 6% of utterances.

Funwari and funwari are on the opposite side of the spectrum, with
adverbial usage with to being the most frequently found pattern, as shown in
figures 10 and 11. Like fuwa-fuwa, funwari is frequently used as funwari
soru as well, although interestingly, usage with to is more common.
Fuwari, on the other hand is a very clear case of near exclusive adverbial usage, with to being mandatory.

This apparent dichotomy of adverbial vs. attributive usage of mimetics from the same family raises the question whether reduplicative mimetics such as fuwa-fuwa, bara-bara, boro-boro and doki-doki might be more likely to be used with the genitive marker no or with the linker na than non-
reduplicative mimetics like *funwari* and *fuwari*. In addition, only *funwari* and *fuwari* are marked by the suffix /RI/, so a comparison with mimetics in this set ending in /N/ may provide further insights. However, these observations could be a coincidence at this stage and a comparison with other semantic groups of mimetics is necessary in order to investigate whether certain morphological characteristics may trigger a particular grammatical pattern.

An additional factor to consider at this point is the presence of mimetics in various media. As *fuwa-fuwa*, *fuwari* and *funwari* describe light textures, these expressions are often used to describe the consistency and taste of foods in recipes, cooking shows and commercials. The following examples have of *fuwa-fuwa* as a nominal adjective in prenominal and predicative position have been transcribed from the popular Youtube cooking channel *Cooking With Dog*[^39] which features recipes from all over Japan:

(78) Fuwa-fuwa no tamago to chikinraisu no kumiawase wa bacchiri desu.
MIM GEN egg and chicken.rice GEN combination TOP perfect COP-POL-PRS
‘The combination of fluffy eggs and chicken rice is perfect.’

(Omelette Fried Rice, 3 January 2009)

(79) Kyō wa fuwa-fuwa no suponji kiji ni tappuri no ichigo to namakūrīmu o hasanda kurisumasukēki desu.
today TOP MIM GEN sponge dough DAT plenty GEN strawberry and fresh.cream ACC fill-PAST Christmas.cake COP-POL-PRS
‘Today it’s Christmas cake, which is sponge dough filled with plenty of strawberries and whipped cream.’

(Christmas Cake, 15 December 2010)

Although the ingredients are simple, the dough is very fluffy.

(Match Roll Cake, Jan 13, 2013)

In addition to cooking shows, food advertisements, e.g. for bakery products and sweets, tend to make use of short attributive constructions to convey the soft texture of these foods, often omitting particles altogether, such as in *fuwa-fuwa donatsu*, the name of national chain FamilyMart’s own brand of doughnuts. Apart from being colloquial, shorter attributive constructions also catch the eye of the customer on posters or product packaging, while TV commercials are charged by screen time, which may also lead to companies favouring short catchphrases. This raises the question whether exposure to such advertisements in every-day life may influence and change the grammatical usage of mimetics by native speakers of Japanese over time, and whether only certain groups targeted by these adverts are affected (cf. Tanaka 2010). Chapter 4 will further explore this question on the basis of an online survey and interviews conducted with native speakers of different genders, age groups and social backgrounds.

### 3.3.5 Gan-gan

The mimetic *gan-gan* has been selected as a contrast to *doki-doki*, which seems semantically related at first glance, with both expressions referring to a pounding sound or physical sensation of (painful) pounding. Both mimetics may describe a pounding heart (cf. DIE), but *doki-doki* implies rapid beating and excitement, whereas *gan-gan* focuses on the volume of a loud, thumping sound, which is interpreted as negative in most cases. Like *doki-doki*, *gan-gan* cannot be classified straightforwardly as either a phonomime, phenomime or psychomime. Depending on the semantic context, it may describe 1) a loud thumping sound, such as repeatedly
hitting an object with a hammer, 2) performing an action at full speed and capacity (‘Bam-bam-bam!’), and 3) the feeling or sensation of pounding pain in a person’s head, heart or ears (NKD; DIE). The following examples compare the adverbial, attributive and predicative usage of gan-gan in different semantic contexts.

**Mimetic adverbs**

(81) atama ga gan-gan to hibikidasu
    head SBJ MIM QP reverberate-PRS
    ‘(My) head is pounding loudly.’

**Mimetic nominal adjective**

(82) mune ga gan-gan ni itamimasu
    chest SBJ MIM KYDni hurt-POL-PRS
    ‘I feel a pounding pain in (my) chest.’

(83) hitori de gan-gan no oto de hashittetara
    alone INST MIM GEN sound INST run-GER-be-PAST-SUB
    kimochi ii yo
    feeling good EMP
    ‘Running alone with the sound of (your feet) pounding (on the ground) is a great feeling.’

(84) zentai de ikioi gan-gan na kanji deshita
    overall INST force MIM KYDna feeling COP-POL-PAST
    ‘Overall, it was a very strong pounding feeling.’

(85) atama gan-gan da yo
    head MIM COP EMP
    ‘(My) head is pounding like crazy.’

**Mimetic verb**

(86) kyō wa futsukayoi de atama ga
    today TOP hangover COP-GER head SBJ
    gan-gan shite imashita
    MIM make-GER be-POL-PAST
    ‘I had a hangover today, so my head was pounding.’

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40 For a more detailed discussion of the relationship between psychomimetics and the perception of pain see Asano-Cavanagh (2016) and Iwasaki et al. (2007).
As shown in examples (81) and (83), *gan-gan* is often accompanied by verbs describing the perception of sound, such as *hibiku* (‘to echo’, ‘to reverberate’), or nouns like *oto* (‘sound’, ‘noise’) when it is used as a phonomime. When used as a phenomime or psychomime (82), however, common collocations include the nouns *shinzō/kokoro* (‘heart’), *atama* (‘head’) and *kanji* (‘feeling’), as well as verbs describing pain, such as *itamu* (‘to hurt’).

In terms of grammar, none of the dictionaries consulted for this analysis allow nominal adjective-like usage with *no/na*, as illustrated in Table 28 on page 123, and *gan-gan* is not listed in Hepburn’s historical dictionary. Nevertheless, some examples of attributive usage of *gan-gan* are attested in the JTT, which is why the pattern [*gan-gan* + *no/na* + noun] has been included here. Paradoxically, [*mimetic + no/na* + noun] constuctions with the semantically related *doki-doki* seem to be acceptable to a small number of dictionary editors (cf. Table 20), which may be due to the previously mentioned popularity of this mimetic in all speech registers, but especially in romantic fiction and graphic novels.

The syntactic distribution of *gan-gan* in the JTT supports predominantly adverbial usage as well with both *to* and *ni*, with the latter being the most frequently used particle due to the idiomatic usage of *gan-gan ni itamu*, as shown in example (77). Prenominal usage with *no* or *na* is much less frequent, but not as rare (or rather non-existant) as the selected dictionaries claim. Relative clauses are of course possible as well, particularly with *(to) iu* (‘to say’), which quotes *gan-gan* (here: phonomime) iconically in the example below.

(87) *gan-gan to iu* *oto* *ga hibikiwataru*

*MIM* QP say-PRS sound SBJ echo through-PRS

‘A thumping sound echoes through the place.’
Like futawa-futawa and doki-doki, gan-gan may be used with suru to form a predicate-like idiom meaning ‘to pound’ (pain) as in example (84), but not quite as frequently, with [to/ni + verb] being the most common usage in the JTT in this case.

### 3.3.6 Hakkiri and pittari

The expression hakkiri (‘clearly’) is not always classified as a mimetic in monolingual dictionaries, but is included in most dictionaries of mimetics in Japanese, including the Dictionary of Iconic Expressions in Japanese (1996). This seems to suggest that hakkiri must have originally been a mimetic expression or used to possess some mimetic characteristics. It is possibly related to the reduplicative mimetic haki-haki, which also means ‘clear’, while the suffix –RI is common in a subset of mimetics, as shown in section 2.3, but could be a coincidence here. Since hakkiri has no apparent onomatopoeic qualities and describes the state of an abstract idea, it has been classified as a phenomime in this analysis. Hakkiri, as well as pittari (‘perfect’, discussed below) were chosen for this data set to investigate whether there are differences in the grammatical usage of expressions that may not be considered mimetics by all native speakers.

*Hakkiri* is generally classified as an adverb and nominal adjective-like usage is not documented in any of the selected dictionaries. Combined with
the verbs *suru* and *iu*, often without the quotative particle *to*, *hakkiri suru* (*to make sth. clear*) and *hakkiri iu* (*to speak clearly*, *to put it bluntly*) have turned into predicate-like idioms and may be considered verbs (example 93). However, some examples of nominal adjective-like usage are attested in the JTT and have been included below.

**Mimetic adverb**

(88) hakkiri to seitsumei suru

MIM QP explanation make-PRS

‘to make an explanation in a clear way’

**Mimetic nominal adjective**

(89) imi ga hakkiri ni naru

meaning SBJ MIM KYDni become-PRS

‘The meaning becomes clear.’

(90) ichihayaku hakkiri no kekka ga hoshii

quickly MIM GEN results SBJ want

‘(I) want (to see) clear results quickly.’

(91) sadaka de wa nai no de, hakkiri na koto wa
definite COP-NEG because, MIM KYDna thing TOP

imasen

say-POT-POL-NEG

‘Since (it) is not definite, (I) cannot say anything for sure.’

(92) chigai wa hakkiri desu

difference TOP MIM COP-POL-PRS

‘The difference is clear.’

**Mimetic verb**

(93) docchi ka hakkiri shite kudasai

which QM MIM make-GER please

‘Make clear which one it is please.’

The predominantly adverbial usage of *hakkiri* according to the dictionaries in this set may be explained by the idiomatic nature of [*hakkiri* + verb + noun] constructions, which can be used in place of [*hakkiri* + na/no + noun].
Phrases such as *hakkiri wakaru hon* (‘clearly understandable book’, e.g. for students) and *hakkiri mieru moji* (‘clearly readable script’, e.g. for the elderly) have become popular choices for textbook titles, which may influence the target audiences of these books.

In the JTT, *hakkiri* is a very common expression (over 500,000 hits in total) and is often, used with *to* and (*to*) *soru*, both as an adverb and in a relative clause, which seems to conform with the previous dictionary definitions. However, while prenominal usage with *no* and *na* is comparatively less frequent in the JTT, it is not completely uncommon.

![hakkiri](image)

*Figure 13: JTT data for hakkiri*

Like *hakkiri* (‘clearly’), *pittari* (‘perfectly; fittingly’) has been included in this data set to test whether there is a difference in grammatical usage between easily recognisable mimetics and expressions that may not be considered mimetics by all native speakers. With the exception of the DIE and the ED2, *pittari* is not tagged as a mimetic in the dictionaries in this data set, but rather as a regular adverb. According to the ED2, it is related to the mimetic *pitaQ/pita-pita*, but it is unclear which form appeared first and
whether /RI/ is a mimetic suffix in this case. As the following examples demonstrate, *pittari* may be used as an adverb, adjective and predicate.

**Mimetic adverb**

(95) kono doresu wa pittari to niattemasu
    this dress TOP MIM QP fit-GER-be-POL
    ‘This dress fits (you) perfectly.’

**Mimetic nominal adjective**

(96) pittari ni suru
    MIM KYDni make-PRS
    ‘to do sth. perfectly’

(97) pittari no dansei
    MIM GEN man
    ‘the perfect man’

(98) pittari na basho o mitsuketa
    MIM KYDna place ACC find-PAST
    ‘(I) found the perfect place.’

(99) iro ga kurisumasu ni pittari desu
    colour SBJ Christmas LOC MIM COP-POL-PRS
    ‘This colour is perfect for Christmas.’

**Mimetic verb**

(100) S saizu wa pittari shite imasu
    S size TOP MIM make-GER be-POL-PRS
    ‘Size S fits (you) perfectly.’

As an alternative to *[pittari + na/no + noun]*, it is also possible to form a relative clause. The expression *[pittari + shita + noun]* has idiomatic qualities and is common in every-day speech, as well as in advertisements for clothing, and can be translated with the English adjective ‘perfect’, mirroring *[hakkiri + shita + noun]*.

(101) pittari shita kotoba
    MIM make-PAST word
    ‘fitting words’
The pattern in example (99), [X + ni + pittari + copula] is also used as an idiomatic expression in Japanese and is thus very common in the JTT as well (see Figure 14). Surprisingly, pittari is among the few mimetics in this data set for which nominal adjective-like usage with no or with na is attested in the larger monolingual dictionaries, as Table 23 shows.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[MIM + no + noun]</th>
<th>[MIM + na + noun]</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
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<td>×</td>
</tr>
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<td>✓</td>
</tr>
<tr>
<td>DIE</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>HEP</td>
<td>---</td>
<td>(✓)</td>
</tr>
<tr>
<td>JLD</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ED2</td>
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<tr>
<td>KKS</td>
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</tbody>
</table>

Table 23: Dictionary data for pittari

In the JTT, pittari occurs most frequently as a nominal adjective with no or na and with the copula in final position, with adverbial usage with the quotative particle to accounting for only 13% of instances.

At first glance, this seems to contradict the observation that non-reduplicative mimetics are more likely to be used adverbially. However, as stated above, pittari is not recognised as a mimetic by all dictionaries and native speakers due to its high degree of lexicalisation, which may account for its attributive usage being similar to that of nominal adjectives.
3.3.7 Kira-kira, kirari and girari

The phenomimes *kira-kira*, *kirari* and *girari* all describe visual effects of light. While *kira-kira* and *kirari* generally have a neutral or positive connotation, *girari* usually refers to an uncomfortably bright light. Both non-reduplicative forms *kirari* and *girari* denote a single flash of light, whereas the reduplicative *kira-kira* specifies repetitive flashing.\(^{41}\) Since *kira-kira*, *kirari* and *girari* are from the same semantic field, they select similar collocations, such as nouns that refer to light sources like *hikari* (‘light’), *hoshi* (‘stars’) and *taiyō* (‘sun’), and verbs like *hikaru* (‘to shine’) and *kagayaku* (‘to sparkle’). All three expressions are predominantly used as adverbs with *to* according to all dictionaries in which they are listed. A few utterances with *kira-kira*, *kirari* and *girari* as mimetic nominal adjectives are attested in the JTT and have been included in the examples below.

**Mimetic adverb**

(102) hoshi ga kira-kira to kagayaku
     star SBJ MIM QP sparkle-PRS
     ‘The stars are sparkling brightly.’

(103) kosei ga kirari to hikaru
     personality SBJ MIM QP shine-PRS
     ‘(Her) personality is shining through.’

(104) futatsu no me ga girari to hikatte iru
     two GEN eye SBJ MIM QP shine-GER be-PRS
     ‘X’s two eyes were flashing brightly.’

**Mimetic nominal adjective**

(105) ha ga kira-kira ni natta yo
     tooth SBJ MIM KYDni become-PAST EMP
     ‘(My) teeth became sparkly white!’

(106) hon o kirari ni wasureta
     book ACC MIM KYDni forget-PAST
     ‘I forgot the book in a flash.’

\(^{41}\) A reduplicative version of *girari*, namely *gira-gira* (brightly flashing lights) exists as well, but has not been included in this data set, because its distribution is very similar to *kira-kira* and *kirari* and would thus not be suitable for a contrastive analysis of mimetics in different speech registers.
(107) chotto dake yūhi girari ni narimashita
    bit only evening-sun MIM KYDni become-POL-PAST
    ‘The evening sun started shining a bit too brightly.’

(108) tsuru-tsuru kira-kira no hada
    MIM MIM GEN skin
    ‘smooth, glowing skin’

(109) kirari no omoi
    MIM GEN idea
    ‘a bright idea’

(110) asa girari no jiki
    morning MIM GEN season
    ‘the season in which mornings are bright’

(111) kirari na tanabata o sugosō
    MIM KYDna star-festival ACC enjoy-IMP-PRS
    ‘Let’s enjoy the bright lights of the star festival.’

(112) byōki ni makenaide, kirari na hibi o
    illness DAT lose-NEG-GER MIM KYDna days ACC
    sukoshi demo tanoshimitai
    little although enjoy-want
    ‘(I) would like to enjoy bright days at least a little without giving in to illness.’

(113) girari na keisei 3600 gata
    MIM KYDna Keisei 3600 series
    ‘the shiny Keisei 3600 (train) series’

(114) minna me ga kira-kira deshita
    everyone eye SBJ MIM COP-POL-PAST
    ‘Everyone’s eyes were sparkling.’

(115) nagareboshi kirari da
    shooting-star MIM COP-PRS
    ‘the shooting star is shining brightly’

(116) hisashiburi ni taiyō girari desu
    long-time DAT sun MIM COP-POL-PRS
    ‘The sun hasn’t been this bright in a long time.’

Mimetic verb

(117) hoshi ga kira-kira shite iru
    star SBJ MIM make-GER be-PRS
    ‘The stars are sparkling.’

As examples (114)-(116) show, all three mimetics can also appear in
predicative position with the copula. Kira-kira in predicative position is also
a popular choice in book and song titles, such as the song *kira-kira da to ka yume da toka* (‘Is it sparkling or a dream?’, 2015)\(^{42}\) by the fictitious girl band *Poppin’ Party* from the anime and manga series *BanG Dream*.

As noted before, prenominal usage with *no/na* has been excluded by all dictionaries in which the three mimetics are featured. *Girari* is missing in the KKS and Hepburn’s historical dictionary does not include any of the three mimetics. Interestingly, Hepburn lists *kirakirashii*, a *shii*-adjective, which can also be found in the NKD, but is marked as archaic here (cf. section 2.4 on *shii*-adjectives and the usage of *kirakirashii* in historical Japanese).

<table>
<thead>
<tr>
<th>MIMETIC</th>
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<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
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<td>DJS NKD DIE HEP JLD ED2 KKS</td>
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<td>x x x --- x x ---</td>
<td>x x x --- x x ---</td>
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<tr>
<td>kira-kira</td>
<td>DJS NKD DIE HEP JLD ED2 KKS</td>
<td>DJS NKD DIE HEP JLD ED2 KKS</td>
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<td>x x x --- x x x</td>
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<tr>
<td>kirari</td>
<td>DJS NKD DIE HEP JLD ED2 KKS</td>
<td>DJS NKD DIE HEP JLD ED2 KKS</td>
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<td></td>
<td>x x x --- x x x</td>
<td>x x x --- x x x</td>
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</tbody>
</table>

*Table 24: Dictionary data for kira-kira, kirari and girari*

In the JTT, *kira-kira* is predominantly used as an adverb, while mimetic verbs like *kira-kira suru* (‘to sparkle’, cf. example (115)), are also frequently found. However, in contrast to most dictionaries, attributive usage is not uncommon, although *no* is significantly more frequent than *na*. *Kira-kira* may constitute a special case, as it is frequently used in advertisements for skin and hair care products promising glowing skin and shiny hair to consumers. Similar to *fuwa-fuwa* (cf. section 3.3.4), [mimetic + *no/na* + noun] constructions, as illustrated in example (109), are common, with the particles *no/na* being omitted in some cases. This results in short catch phrases, which are customer friendly and save time and money for commercials on television (cf. Tanaka 2010). The empirical studies presented in chapter 4 will address a possible link between mimetics used in commercials and the contemporary grammatical usage of these mimetics by certain target audiences.

\(^{42}\) In this case, *kira-kira* is uncharacteristically used as a phononime and describes a ‘sparkling melody’ that the protagonist of this franchise heard in childhood and tries to recreate with her band.
Kirari, on the other hand, seems to behave like the previously discussed mimetics fuwari, funwari and hakkiri and is most frequently used as an adverb modifying verbs such as hikaru and kagayaku. Usage with suru is also very rare compared to kira-kira, as shown in Figure 16, and has thus not been included in the examples above.
Girari also shows a similar syntactic distribution in the JTT, with near 100% adverbial usage, as illustrated in Figure 17. This may be explained by the data sources in which girari mostly occurs, namely Japanese literature (DIE).

![Figure 17: JTT data for girari](image)

Taking into account all previous findings, the syntactic distribution of reduplicative forms, such as fuwa-fuwa and kirari, vs. single forms ending in /RI/, like funwari/fuwarai, kirari/girari and hakkiri seems to hint at morphological characteristics possibly influencing grammatical usage. Whereas the reduplicated form of these mimetics is more likely to occur in attributive position, single forms with the suffix /RI/ tend to serve as manner adverbs. However, it is not yet clear whether this is due to single vs. reduplicative forms or single forms vs. /RI/ suffix. A comparison between these findings and the grammatical usage of mimetics that are marked by the suffix /N/ to see if it triggers a similar grammatical pattern may be an avenue to explore. Moreover, the semantic type of a mimetic may also play a role, since gan-gan is rarely used attributively, especially when used as a phonomime, despite sharing the characteristic of reduplication with bara-bara, boro-boro, doki-doki, fuwa-fuwa and kira-kira, which are mostly phenomimes.
3.3.8 Niko-niko and nikkori

The following two mimetics, nikkori and niko-niko share the same root niko and a similar meaning (‘to smile brightly’). However, while nikkori describes the action of smiling once, the reduplicative form niko-niko denotes continuous smiling. The DIE notes that nikkori “has a literary flavour” (1996: 811). Both mimetics are used to add semantic specificity to the verb warau (‘to laugh’) by describing the manner of laughing, similar to gera-gera to warau (‘laughing loudly’) and niya-niya to warau (‘to grin’). Mimetics such as niko-niko, nikkori, gera-gera and niya-niya are often found in graphic novels as well to specify the manner of laughing of a character in addition to visual cues. Niko-niko even appears in the title of a manga for young girls called Niko-niko + Pun-pun (Nakashima 2014), referring to the two protagonists’ personalities, ‘smiley’ and ‘angry’.

In colloquial speech, to is often omitted and constructions like nikkori warau and niko-niko warau seem to form a single predicate-like unit. Interestingly, [mimetic + ni + verb] seems to be less common, probably due to the idiomatic nature of niko-niko/nikkori to warau, but niko-niko/nikkori ni naru and similar constructions are possible. Predicative usage with the copula da/desu is documented in the JTT and often follows the pattern X no kao ga niko-niko/nikkori da (‘There is a smile on X’s face.’). Both mimetics can be used with suru, while still describing the manner of laughing, such as in nikkori suru and niko-niko suru, which can also be translated as ‘smiling brightly once/continuously’.

There are no examples of attributive usage of either mimetic with no/na in any of the selected dictionaries, but rather of compound words such as niko-niko-gao (‘a smiley face’). The JTT, however, includes attributive constructions and nominal adjective-like usage with both mimetic expressions. An overview of the syntactic distribution of niko-niko and nikkori according to the JTT is illustrated in examples (118ff).
Mimetic adverb

(118) kokoro kara niko-niko to waratte ita
heart from MIM QP laugh-GER be-PAST
‘(He) was smiling from his heart.’

(119) me ga attara nikkori to hohoemu
eye SBJ meet-SUB MIM QP smile-PRS
‘(They) smile brightly when (their) eyes meet.’

Mimetic nominal adjective

(120) seigo sankagetsu no akachan mo niko-niko ni naru
postnatal three-months GEN baby also MIM KYDni become-PRS
‘Babies start smiling three months after birth.’

(121) [name]san ga nikkori ni natte,
NAME HON SBJ MIM KYDni become-GER
watashi mo nikkori ni narimashita
I also smiling-MIM KYDni become-POL-PAST
‘When [name] started to smile, I also started to smile.’

(122) niko-niko no kao
MIM GEN face
‘a smiley face’

(123) nikkori no mori
smiling-MIM GEN forest
‘forest of smiles’

(124) dare ni demo niko-niko na ko mo iru
who LOC ever smiling-MIM KYDna child also be-PRS
‘There are also children who just smile at everyone.’

(125) nikkori na kao shite yonde iru
smiling-MIM KYDna face make-GER read-GER be-PRS
‘(She is) reading with a smile on (her) face.’

(126) [name] wa itsumo niko-niko da ne
NAME TOP always MIM COP-PRS right
‘[Name] is always smiling, isn’t (she)?’

(127) minasan nikkori deshita
everyone MIM COP-POL-PAST
‘Everyone was smiling.’

---

43 Name of a day care centre for children with special needs in Tsukuba, Japan.
Mimetic verb

(128) akachan ga niko-niko shite iru
baby SBJ MIM make-GER be-PRS
‘The baby is smiling’

(129) onna no ko wa nikkori shimashita
female GEN child SBJ MIM make-POL-PAST
‘The girl flashed a smile.’

Similar to the selected dictionaries, the syntactic distribution of nikkori in the JTT also shows predominantly adverbial usage with to, plus [mimetic + suru] verbs, and only a few instances of attributive usage with no or na. Relative clauses as illustrated below are documented as well.

(130) niko-niko shita egao
MIM make-PAST smiley-face
‘a very smiley face’

(131) nikkori shite iru gazō
MIM make-GER be-PRS portrait
‘a smiling portrait’

As mentioned above, nikkori is used to specify the manner of laughing and is mostly used with the verbs warau and suru. Thus it is not surprising that adverbial usage with the quotative particle to is most common.

![Figure 18: JTT data for nikkori](image-url)
Niko-niko on the other hand shows a markedly different syntactic distribution. Although niko-niko is also frequently used as an adverb, in particular with the verb warau, attributive usage with the particle no is comparatively more common. The particle to is also more frequently omitted, with the phrase niko-niko suru becoming idiomatic for ‘to smile’, see the examples of mimetic verbs in (128) and (129).

![Figure 19: Niko-niko](image)

This may be further evidence for the hypothesis that the reduplicative forms of mimetics tend to occur in attributive position more often than mimetics ending in /RI/ (cf. section 3.3.7).

### 3.3.9 Patan and pata-pata

The onomatopoeia patan and pata-pata describe a knocking, flapping or slamming sound, with patan being used for a single ‘BAM!’, while the reduplicative form pata-pata implies continuous knocking. In colloquial Japanese, patan is often lengthened to pataan to emphasise the duration of a single resonating sound, while pata-pata can be repeated several times, for instance to express the continuous pitter-pattering of feet on a hard floor, as shown in example (135).
Mimetic adverb

(132) doa ga patan to shimatta
  door SBJ MIM QP close-PAST
  ‘The door slammed shut.’

(133) hara de pata-pata to tataku
  belly INST MIM QP hit-PRS
  ‘slap one’s belly’

Like all phonomimetic expressions previously discussed in this data set, *patan* and *pata-pata* are predominantly used as adverbs with *to*, while nominal adjective-like usage with *ni, na* or *no* is non-existent according to all selected dictionaries. *Patan* behaves similarly in the JTT, with adverbial usage with *to* being the most frequent pattern. There are very few examples of attributive usage with *no* or with *na* in this corpus, most of which turned out to be fragmented sentences from chatrooms and comment sections, which is why these utterances have not been included in the examples given above.

Similar to the previously discussed phenomimes, *patan* and *pata-pata* can be used expressively with the quotative particle *to* and the verb *iu* (‘to say’), both in main and in relative clauses.

(134) patan to iu oto ga ki ni natta
  MIM QP say-PRS sound SBJ mind LOC become-PAST
  ‘(I) was alarmed by a slamming sound.’

(135) pata-pata to aruku oto
  MIM QP walk-PRS sound
  ‘the pitter-patter sound of walking’

The overall distribution of *pata-pata* in the JTT is illustrated in Figure 20. If the previous hypothesis of reduplicative forms being more likely to be used attributively is correct, then the syntactic distribution of *pata-pata* should reflect this. However, attributive usage with *no* only accounts for 2% of all cases, while attributive usage with *na* is even more infrequent.
In contrast, as Figure 21 shows, *pata-pata suru* is significantly more common than the rare *patan suru*. In this respect the distribution of *pata-pata* vs. *patan* shows parallels to *kira-kira* vs. *kirari/girari* and *fuwa-fuwa* vs. *funwari/fuwari*.

The syntactic distribution of all previously discussed reduplicative vs. single forms points at two competing factors which may influence the grammatical usage of mimetics:
I.) **Semantic type:**
Phonomimes are predominantly used as adverbs, whereas phenomimes and psychomimes may occur in attributive position.

II.) **Morphological characteristics:**
Reduplicative forms are more likely to occur in attributive position than single forms ending in /RI/ or /N/.

Furthermore, factor I.) seems to trump factor II.), since attributive usage of *pata-pata* and *gan-gan* is exceedingly rare, despite their reduplicative form, with the exception of instances where *gan-gan* is used as a psychomime. The reduplicative phenomimes *fuwa-fuwa* and *kira-kira*, however, can appear in attributive position, whereas their non-reduplicative counterparts *funwari/fuwari* and *kirari/girari* are used as adverbs, which may indicate that factor II.) is at play here. However, the syntactic distribution of all mimetics in this data set needs to be compared to put this hypothesis to the test (cf. section 3.4).

### 3.3.10 Saku-saku

The phenomime *saku-saku* describes the crispy or crunchy consistency of food, making it a popular choice in cooking shows to give the viewers a better idea of the taste of a dish. It can be used for everything from crispy *katsu* (breaded fried meat) to crunchy vegetables. In terms of grammar, only the DIE provides examples for nominal adjective-like usage with *no*, while adverbial usage with the quotative particle *to* is possible according to all dictionaries. Adverbial, attributive and predicative usage is well documented in the JTT, as the following examples illustrate.

**Mimetic adverb**

(136) saku-saku to karoyaka na shokkan  
MIM QP light KYDna food-texture  
‘a crunchily light food texture’
Mimetic nominal adjective

(137) abura de ageru to saku-saku ni narimasu
    oil LOC fry QP MIM KYDni become-POL-PRS
    ‘Frying it in oil makes it crispy.’

(138) saku-saku no oishii reshipi
    MIM GEN delicious recipe
    ‘a crispy and delicious recipe’

(139) yokuchō tabete mo saku-saku na
    next-morning eat-GER even MIM KYDna
    kanji ga nokotte iru
    feeling SBJ remain-GER be-PRS
    ‘It still tastes crispy, even if you eat it the next day.’

(140) kakiage ga saku-saku desu
    fried.oyster SBJ MIM COP-POL-PRS
    ‘The fried oysters are crispy.’

Mimetic verb

(141) shokkan ga saku-saku shimasu
    food.texture SBJ MIM make-POL-PRS
    ‘The food texture is crispy.’

In the JTT, saku-saku is most commonly used adverbially, while no is selected over na when used as a nominal adjective.

---

Figure 22: JTT data for saku-saku
Predicative usage with the copula is also relatively frequent, which seems largely due to internet users describing various foods as “Saku-saku da!”.

The comparatively frequent usage of attributive constructions with \textit{no} may be due to the semantics of \textit{saku-saku}, which is considered to be predominantly a phonome according to the selected dictionaries. Its reduplicative morphological structure may also come into play, as the previously discussed reduplicative phonemes in this set were more likely to take \textit{no} or \textit{na} than single forms. A detailed comparison of all mimetics in this set which share these characteristics will be given in section 3.4.

Being very popular in various media, \textit{saku-saku} often appears in [mimetic + noun] constructions without \textit{na} or \textit{no}, similar to \textit{fuwa-fuwa} (section 3.3.4) and \textit{kira-kira} (section 3.3.7). Expressions such as \textit{saku-saku tempura} (‘crispy tempura’) are very common, with \textit{saku-saku} also being used metonymically in some cases, e.g. in \textit{saku-saku reshipi} (‘crispy recipes’). Phrases like the above have become almost idiomatic in food blog circles, which may influence the grammatical usage of this mimetic by certain target groups, as will be further explored in chapter 4.

### 3.3.11 Sara-sara

The mimetic \textit{sara-sara} is used as both a phonome, imitating a flowing, murmuring or rustling sound, and a phenome, to describe the appearance of loose or flowing objects and actions. Frequent collocations include the nouns \textit{mizu} (‘water’), \textit{ha} (‘leaves) and \textit{kami no ke} (‘hair’), as well as the verb \textit{nagareru} (‘to flow’). When used as a phonome, \textit{sara-sara} is mostly used as an adverb with \textit{to}. Nominal adjective-like usage with \textit{ni/na} can be seen in phenomimetic contexts. Predicative usage with the copula \textit{da/desu} is possible regardless of connotation.

**Mimetic adverb**

\begin{verbatim}
(142)  kawa no  mizu ga  sara-sara to nagareru
river GEN water SBJ MIM QP flow-PRS
‘The river is flowing smoothly.’
\end{verbatim}
Mimetic nominal adjective

(143) ketsueki sara-sara ni suru kusuri desu
blood MIM KYDni make-PRS medication COP-POL-PRS
‘It’s a medication that makes blood flow smoothly.’

(144) sara-sara no kami no ke ga hoshii
MIM GEN head GEN hair SBJ want
‘I wish I had smooth, flowing hair.’

(145) sara-sara na mizu no yō ni nagareru
MIM KYDna water GEN way DAT flow-PRS
‘to flow like swift-moving water’

(146) kami ga sara-sara desu
hair SBJ MIM COP-POL-PRS
‘(My) hair is smooth.’

Mimetic verb

(147) [product name] o tsukatte arainagashita ato kara
NAME ACC use-GER wash.out-PAST after from
kami ga sara-sara shite imashita
hair SBJ MIM make-GER be-POL-PRS
‘After washing out the product, the hair was really smooth.’

Nominal adjective-like usage with *no* or with *na* is attested in several dictionaries and mirrors the distribution of *saku-saku* (section 3.3.10).

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + no + noun ]</th>
<th>[ MIM + na + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>sara-sara</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 25: Dictionary data for sara-sara

In the JTT, *sara-sara* shows the most even syntactic distribution of all mimetics in this data set, which could be related to its semantic range as both a phonomime and a phenomime.
The relatively frequent attributive usage of *sara-sara* as a nominal adjective marked by *no* (and occasionally *na*) may be attributed to non-linguistic factors in this case: like *fuwa-fuwa*, *kira-kira* and *saku-saku*, *sara-sara* is popular in commercials, both as a phonomime describing the sound of drinking mineral water, and as a phenomime to advertise soft, flowing clothing and hair care products. As the catchphrases used in such advertisements may possibly influence grammatical judgement of some native speakers, these four mimetics have been chosen to investigate a possible relationship between the grammatical usage of mimetics and media exposure, which will be explored in chapter 4.

### 3.3.12 Wan-wan

The mimetic *wan-wan* which imitates the sound of a barking dog (‘woof-woof’) or the wailing sound of people crying is purely onomatopoeic and has thus been classified as a phonomime. While onomatopoeia like ‘woof-woof’ may be restricted to children’s language and graphic novels in English, *wan-wan* is used in every-day conversations in Japanese, with only the nominalisation of *wan-wan* (‘a woof-woof’ = ‘a dog’) being exclusively used by and around young children. This mimetic often collocates with the noun *ini* (‘dog’) and the verb *naku* (‘to cry’, ‘to sound’).
Mimetic adverb

(148) いぬが わん-わん と なく
    dog SBJ woof-woof-MIM QP cry-PRS
    ‘The dog is barking loudly.’

Like all pure phonomimes in this data set, wan-wan is almost exclusively used as an adverb with the quotative particle to, which both the dictionaries and the JTT agree on. In the JTT, wan-wan also occasionally appears as an idiomatic unit with the verb suru and could be classified as a mimetic verb. However, a closer look at the context of wan-wan suru (‘to woof’) reveals that this phrase is mostly limited to children’s books.

![Graph](image)

Figure 24: JTT data for wan-wan

3.3.13 ざ-ざ

Like wan-wan (‘woof-woof’, discussed in the previous section) ざ-ざ is purely onomatopoeic and consistently defined as a phonomime by all selected dictionaries. ざ-ざ mostly describes あめ (‘rain’) and thus often occurs in daily conversations about the weather. The adverbial construction with the quotative particle to is the most frequently attested usage in both the dictionaries and the JTT.
Mimetic adverb

\[(149) \text{ ame ga } \text{ zā-zā} \text{ to furu} \]
\[\text{rain SBJ MIM QP fall-PRS} \]
\[\text{‘The rain is pouring down.’} \]

Interestingly, quite a few instances of predicative usage of zā-zā with the copula appear in the JTT, with ame ga zā-zā da (‘The rain is pouring.’) being the most common example.

![Figure 25: JTT data for zā-zā](image)

As stated before, nominal adjective-like usage with no or na is very rare for both the previously discussed wan-wan and zā-zā. This particular syntactic distribution corresponds to patan, which is also a phonomime and rarely used as a nominal adjective. This may be further evidence for attributive usage being inhibited when a mimetic is predominantly sound-imitating. The possible influence of the semantic type of a mimetic on its grammatical usage will be explored in more detail in 3.4.
3.4 DISCUSSION

When comparing the grammatical usage of mimetics in the selection of dictionaries and the JTT, it is immediately evident that all mimetics in this data set are most commonly used as adverbs. This supports Hamano’s (1998) and Kakehi et al.’s (1996) hypothesis that mimetics are first and foremost manner adverbials and all mimetics can be used as adverbs, with or without particles depending on the respective mimetic and speech register. However, when it comes to constructions featuring *ni*, *na* or *no*, all of which are a characteristic of *keiyōdōshi* (nominal adjectives), discrepancies between the selected dictionaries and the syntactic distribution of mimetics in the JTT become apparent. This section will compare and contrast the findings presented in section 3.3.

A few general observations on the grammatical representation of mimetics in the seven selected dictionaries can be made at this stage: Hepburn only recognises adverbial usage with *to* and sometimes *ni*. Interestingly, he clearly labels *fuwa-fuwa* and *fuwari* as adjectives, although all examples he provides illustrate adverbial usage with *to*. As this only concerns two semantically and morphologically related expressions which are listed on the same page, and all other mimetics found in the dictionary are classified as adverbs, it is possible that this is an error or typographical error. Like Hepburn, the JLD does not provide examples for attributive usage at all, which is probably due to its target audience of learners of Japanese preparing for the JLPT, which does not require extensive knowledge on the usage of mimetics, even at level 1. Jim Breen’s EDIC targets learners of Japanese as well, but does not necessarily strive to prepare them for the JLPT, but rather to provide learners of all levels of proficiency with an online study resource, which is why a considerably broader range of mimetics and their grammatical properties is included. The KKS, which is aimed at learners of English, includes a wider range of grammatical constructions, but does not always agree with the DJS and NKD, which are mostly used by adult Japanese native speakers. As mentioned before, the DIE excludes attributive usage with *na* for all mimetics in the dictionary, but occasionally includes adverbial usage with *ni*.
and attributive usage with *no*. This may be due to examples being taken from 20\(^{th}\) century literature only, which may not include attributive constructions with *na*, which are generally perceived as more colloquial or young people’s speech. The NKD traditionally used to rely on literary sources as well, but the most recent online edition features examples seemingly made up by the editors as well, which includes a larger amount of attributive constructions, e.g. *fuwa-fuwa na futon* (‘a soft futon mattress’), for which no reference has been cited as of January 2017. This is reflected in the comparatively more progressive stance on *keiyōdōshi*-like usage, which will be discussed in detail below.

Despite these differences between individual dictionaries, some general conclusions about tendencies in the grammatical usage and lexical categorisation of mimetics can be drawn. This especially concerns Kakehi et al.’s (1996: XV) statement that genuine onomatopoeia are not used attributively, which certainly seems to be true for the phenomimes in this set, namely *doki-doki* (‘pounding’), *patan* (‘knock’), *pata-pata* (‘knocking’), *wan-wan* (‘woof-woof’) and *zā-zā* (‘pouring (rain)’).

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>[ MIM + <em>no</em> + noun ]</th>
<th>[ MIM + <em>na</em> + noun ]</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>doki-doki</em> (‘pounding’)</td>
<td>DJS</td>
<td>NKD</td>
</tr>
<tr>
<td>patan (‘knock’)</td>
<td>DJS</td>
<td>NKD</td>
</tr>
<tr>
<td><em>pata-pata</em> (‘knocking’)</td>
<td>DJS</td>
<td>NKD</td>
</tr>
<tr>
<td><em>wan-wan</em> (‘woof-woof’)</td>
<td>DJS</td>
<td>NKD</td>
</tr>
<tr>
<td><em>zā-zā</em> (‘pouring’)</td>
<td>DJS</td>
<td>NKD</td>
</tr>
</tbody>
</table>

*Table 26: The grammatical usage of selected phonomimes*

The only exception seems to be *doki-doki*, which may be used attributively according to the ED2. This may be due to its semantic classification, as it may either be judged as phonomime (imitating the sound of a pounding heart), a phenomime (describing the sensation of a pounding heart) or a psychomime (used metaphorically for feeling excited or being in love) according to the definitions in the dictionaries used for this analysis.
Although the general statement that attributive usage is less frequent than usage with the quotative particle to seems to be true for this data set, there are a few mimetics which can be used attributively with no or na according to some dictionaries:

<table>
<thead>
<tr>
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</thead>
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<td>DJS N KD J D E H P</td>
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<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>boro-boro</td>
<td>DJS N KD J D E H P</td>
<td>DJS N KD J D E H P</td>
</tr>
<tr>
<td>'crumbling'</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
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<td>DJS N KD J D E H P</td>
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</tr>
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<td>'flowing'</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
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</table>

*Table 27: The grammatical usage of selected phenomimes and psychomimes*

All mimetic expressions above are phenomimes (at least in some contexts, in the case of doki-doki ‘feeling excited’), and thus do not imitate sounds. As stated before, the general consensus seems to be that phonomimes are almost exclusively used adverbially, whereas pheno- and psychomimes may be used attributively as well. The mimetics selected for the table above are all phenomimes or psychomimes and have been categorised as nominal adjectives by at least one dictionary in each case, but there are several other non-mimetic expressions in the data set used for this analysis which are used as manner adverbials only. This raises the question why, out of those mimetics that are not phonomimes, some are used like nominal adjectives whereas others are predominantly used as manner adverbials. The semantic subtype of a mimetic expression seems to indicate a tendency towards certain grammatical patterns in contrast with other semantic subtypes, but when it comes to mimetics within the same semantic category, there may be other factors which determine their grammatical usage. For the purpose of better comparison, the following table gives an overview of the grammatical usage of mimetics as defined by each of the seven dictionaries.
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41 Listed as kirakirashii (Classical Japanese shii-adjective declension) in HEP.
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<td>DJS ✓ KKS ✓</td>
<td>DJS ✓ KKS ✓</td>
</tr>
<tr>
<td>zā-zā 'pouring'</td>
<td>DJS ✓ KKS ✓</td>
<td>DJS ✓ KKS ✓</td>
<td>DJS ✓ KKS ✓</td>
<td>DJS ✓ KKS ✓</td>
</tr>
</tbody>
</table>

Table 28: Comparison of mimetics in various dictionaries

- ✓ examples of adverbial / attributive constructions with the above particle / linker
- ✓ ✓ defined as adverb / adjective, but no examples with the above particle / linker
- ✗ no examples
- --- no dictionary entry
Another factor to consider is the frequency of usage of certain mimetics in every-day life, which will become more apparent in contrastive analysis of the data collected from the JTT. In addition, common expressions, idioms and collocations may also play a role. Sociolinguistic factors such as age and gender could be an important influence as well, which will be explored in the analysis of the empirical studies presented in chapter 4.

As the comparison of data from various mono- and bilingual dictionaries has indicated, there may be various linguistic and non-linguistic factors that influence the grammatical usage of mimetics and their representation in dictionaries. The most important conclusion which can be drawn from the previous analysis is that definitions and grammaticality judgments in dictionaries do not reflect the actual usage of mimetics in spoken Japanese. External factors such as different data sources and target audiences are likely to be responsible for discrepancies between dictionaries. Due to these differences and limitations, it is of course not possible to base an analysis of the contemporary usage of mimetics on dictionary data only. Although a few general tendencies have become apparent from comparing the grammatical representation of mimetics in various dictionaries, the following comparison with the data collected from the JTT will shed more light on morphological and semantic factors that may influence the syntactic distribution of the mimetics in this set. A detailed overview of the results of the corpus analysis is given in Table 29 on page 126-127. Note that the \textit{misc.} category mostly comprises mimetics not embedded into clauses, e.g. one-word descriptions of images or spontaneous exclamations.

While adverbial usage of mimetics is most common in the JTT as well, attributive usage is attested for several mimetics which were not listed as nominal adjectives in (most) dictionaries. As sections 3.3.1-3.3.13 have shown, all mimetics that are exclusively phonomimes in this set are less likely to be used attributively with \textit{no} or \textit{na}. Tamori and Schourup (1999) propose that phonomimes are lexicalised to a lesser degree than pheno- and psychomimes. In addition, the morphological structure of a mimetic may influence its grammatical usage as well, with most reduplicative mimetics in this set allowing attributive usage with \textit{no}/\textit{na}. 
<table>
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<tr>
<th>MIMETIC</th>
<th>TOTAL</th>
<th>MIM+to+V</th>
<th>MIM+ni+V</th>
<th>MIM+na+N</th>
<th>MIM+no+N</th>
<th>MIM+copula</th>
<th>MIM+suru</th>
<th>Misc.</th>
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<td>MIM+na+N</td>
<td>MIM+no+N</td>
<td>MIM+copula</td>
<td>MIM+suru</td>
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<td>&lt;1%</td>
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<td>45%</td>
</tr>
<tr>
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<td>65%</td>
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<td>2%</td>
<td>1%</td>
<td>2%</td>
<td>44%</td>
</tr>
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<td>341</td>
<td>565</td>
<td>10219</td>
</tr>
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<td>&lt;1%</td>
<td>3%</td>
<td>6%</td>
<td>&lt;1%</td>
<td>65%</td>
</tr>
<tr>
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<td>807</td>
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<td>24</td>
<td>95</td>
<td>183</td>
<td>22</td>
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</table>

Table 29: Syntactic distribution of mimetics in the JTT
Another tendency which has become apparent from the dictionary data in conjunction with the corpus study is that very frequently used mimetics (>100,000 tokens) select a greater range of particles and adopt various syntactic roles (cf. bara-bară vs. girări). With several mimetics in this set being popular in TV shows and advertisements, e.g. fuwa-fuwa, kira-kira, sara-sara, it is certainly worth exploring whether extra-linguistic factors such as the representation of certain mimetics in various media may also play a role, as the exposure to these mimetics could influence the grammaticality judgement of the respective target audiences. However, there is not enough evidence to pose a hypothesis at this stage.

A summary of all previously identified factors that may influence the grammatical usage of mimetics in Japanese is given below:

I.) **Semantic type:**
Phonomimes are predominantly used as adverbs, whereas phonomimes and psychomimes may occur in attributive position.

II.) **Morphological characteristics:**
Reduplicative forms are more likely to occur in attributive position than single forms ending in /RI/ or /N/.

Based on the analysis of individual mimetics in the previous section, two groups of mimetics with a comparable grammatical distribution can be identified. Group A comprises single forms with the suffixes /N/ and /RI/ covering all semantic types, as well as reduplicative phonomimes. These mimetics are mostly used as adverbs with the quotative particle to, but rarely with any particles typical for keiyadoshi (nominal adjectives), namely ni, na, no and the copula. This is further evidence for Kakehi et al.’s (1996) statement that ‘sound adverbials’ (onomatopoeia) are generally not used attributively. The single forms included in group A follow a similar pattern, which seems to prove the aforementioned hypothesis that single forms are less likely to be used as nominal adjectives than reduplicative forms.
Group A – predominantly adverbial mimetics:

<table>
<thead>
<tr>
<th></th>
<th>MIM+ to+V</th>
<th>MIM+ ni+V</th>
<th>MIM+ na+N</th>
<th>MIM+ no+N</th>
<th>MIM+ copula</th>
<th>MIM+ suru</th>
<th>Misc.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>25% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>10% 64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>funwari</td>
<td>74% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gan-gan</td>
<td>3% 4%</td>
<td>&lt;1% 1%</td>
<td>1% 1%</td>
<td>2% 89%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girari</td>
<td>72% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kirari</td>
<td>38% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>3% &lt;1%</td>
<td>&lt;1% 58%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nikkori</td>
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<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>6% 69%</td>
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</tr>
<tr>
<td>patan</td>
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<td>&lt;1% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
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<td></td>
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<tr>
<td>pata-pata</td>
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<td>&lt;1% &lt;1%</td>
<td>11% 48%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wan-wan</td>
<td>49% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>2% 1%</td>
<td>2% 44%</td>
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<tr>
<td>zō-zō</td>
<td>24% &lt;1%</td>
<td>&lt;1% &lt;1%</td>
<td>3% 6%</td>
<td>&lt;1% 65%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 30: Mimetics in group A

Group B only includes reduplicative forms, with the exception of *hakkiri* and *pittari*. All mimetics in this group are non-onomatopoeic. In contrast to Group A, these expressions are more likely to be used attributively. This may be due to their morphological structure, as reduplicative forms tend to be used in attributive position more frequently than single forms. The reason why *hakkiri* and *pittari* show a similar pattern, although they are single forms, may be due to their relatively high frequency in everyday speech and the fact that they are not labelled as mimetics in most monolingual dictionaries. In general, all mimetics in Group B are very common expressions, which provides further evidence for the hypothesis that the degree of frequency is linked to attributive usage. However, as the set of mimetics used for this analysis is comparatively small, it is necessary to collect and contrast empirical data from other sources as well.
Group B – mimetics used as nominal adjectives:

<table>
<thead>
<tr>
<th></th>
<th>MIM+ to+V</th>
<th>MIM+ ni+V</th>
<th>MIM+ na+N</th>
<th>MIM+ no+N</th>
<th>MIM+ COP</th>
<th>Misc.</th>
</tr>
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<tbody>
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<td>9%</td>
<td>7%</td>
<td>15%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>boro-boro</td>
<td>5%</td>
<td>33%</td>
<td>4%</td>
<td>12%</td>
<td>12%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>doki-doki</td>
<td>2%</td>
<td>&lt;1%</td>
<td>1%</td>
<td>3%</td>
<td>8%</td>
<td>46%</td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td>10%</td>
<td>2%</td>
<td>3%</td>
<td>15%</td>
<td>7%</td>
<td>16%</td>
</tr>
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<td>hakkiri</td>
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<td>13%</td>
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<td>32%</td>
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<td>5%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>niko-niko</td>
<td>7%</td>
<td>2%</td>
<td>&lt;1%</td>
<td>3%</td>
<td>6%</td>
<td>18%</td>
</tr>
<tr>
<td>pittari</td>
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<td>1%</td>
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<td>21%</td>
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<td>1%</td>
</tr>
<tr>
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<td>1%</td>
<td>5%</td>
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</tr>
<tr>
<td>saku-saku</td>
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<td>9%</td>
<td>3%</td>
<td>10%</td>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 31: Mimetics in group B

As stated previously, the misc. category mostly consists of unmarked mimetics. This includes spontaneous exclamations in chats and comment sections on social media (e.g. *Fuwa-fuwaaaa! – ‘So fluffy!’*), as well as brief image descriptions and blog titles. Since most of the mimetics in this category are not embedded into clauses, their syntactic function (e.g. predicative, but copula omitted) would have to be determined on a case by case basis, which is not feasible due to the large size of the JTT corpus. For this reason, expressions in this category will be excluded from the overall grammatical analysis.

Another point worth discussing is the alteration between *no* and *na* in attributive constructions, which seems to be arbitrary and random at first glance. Since attributive usage is rare in mimetics from group A, the analysis will focus on group B, which mostly contains non-onomatopoeic and reduplicative expressions:
The mimetics in this group can be divided into two subsets according to preferential usage of *no* or *na*:

**Group A1** (*no*): boro-boro; doki-doki; fuwa-fuwa; hakkiri; kira-kira; niko-niko; pittari; sara-sara; saku-saku

**Group A2** (*na*): boro-boro

As it turns out, the only mimetic in this set that is used more frequently with *na* than *no* is *boro-boro*, which seems counter-intuitive, as it shares many phonological, morphological and semantic characteristics with *bara-barā*. One possible explanation may be the popularity of the poem *Boro-boro na dachō* (‘The ragged ostrich’) Kōtarō Takamura (1883-1956) which has been part of secondary school and university education in Japanese language for many years (cf. Yamashita 1995).

This exception aside, all mimetics in group A were predominantly used with *no* when in attributive position. This seems to confirm Hamano’s (1986: 30) suspicion that mimetic nominal adjectives are more likely to be

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45 As briefly discussed in section 2.4.2, opinions may vary on the interpretation of [MIM + no/na + N] constructions as relative clauses/attributive clauses vs. no/na as genitive/adjective markers. However, due to the large size of the *jpTenTen* webcrawler corpus, it is not feasible to make case-by-case decisions and analyse examples individually.
used with *no* rather than *na*, while the opposite is true for non-mimetic nominal adjectives. This may be due to historical reasons, with *na* being a comparatively recently grammaticalised linker derived from the archaic copula *nari* (Shirane 2005), and usually used to mark nominal adjectives as well as foreign loanwords, as discussed in section 2.4.2. On the other hand, *no* can be traced back as a genitive particle for over 1000 years to the *Kojiki*. As Uehara (2003: 367ff) observes, there may be a difference in syntactic interpretation in some cases, with [nominal adjective + *no* + noun] constructions like *heïwa no kuni* being translated as “the land of peace” in English, while [nominal adjective + *na* + noun] in *heïwa na kuni* is interpreted as “peaceful land”. However, this does not explain why some native speakers seem to use *no* and *na* arbitrarily in the same [mimetic + noun] contexts, as the empirical studies in chapter 4 will show. At this stage, with dictionary and corpus data alone, it is not possible to propose hypotheses on the alternation between *no* and *na*, and this point will be addressed in later chapters when a greater variety of data sources has been introduced.

The aim of this section was to give an overview of the grammatical usage of Japanese mimetics in various syntactic positions. On the basis of examples retrieved from selected corpora and analysis of a representative set of 20 mimetics, the following grammatical patterns and tendencies became apparent:

I.) **Semantic type:**
Phonomimes are predominantly used as adverbs, whereas phenomimes and psychomimes may be used as nominal adjectives in attributive position marked by *no* or *na*.

II.) **Morphological characteristics:**
Reduplicative forms are more likely to occur in attributive position with *no* or *na* than single forms ending in /RI/ or /N/.

In addition, the following research questions arose in the course of the dictionary and corpus analysis:
FREQUENCY OF USAGE:
Are mimetics commonly used in every-day conversations more likely to take on a diverse range of syntactic roles?

MEDIA EXPOSURE:
Could the exposure to mimetics in various media influence the grammatical categorisation of mimetics in the mental lexicon of native speakers?

Summing up, although the initial hypotheses seem to be confirmed for this particular set of mimetics in the *jpTenTen* webcrawler corpus, further research with a larger and more varied data set is necessary to validate these claims. The online survey and interviews with Japanese native speakers presented in the following chapter will attempt to answer the question whether there are other, non-linguistic factors that influence the grammatical usage of mimetics, such as speech register, social differences or individual preferences.
4 ONLINE SURVEY

As demonstrated in chapter 3, there is no consensus on the syntactic distribution of mimetics in Japanese, in particular when it comes to attributive usage with the genitive particle no or the linker na. This often results in contradictory statements on the grammaticality of these constructions in dictionaries and textbooks, whose data sources (e.g. literary texts only) may not reflect the usage of mimetics in all speech registers. For this reason, an overview of the grammatical usage of mimetics cannot be given using dictionary data alone, but has to be supplemented with empirical data from a wider range of sources.

In chapter 3, results from a contrastive analysis of a selection of dictionaries with data collected from the jpTenTen webcrawler corpus indicated that there may be several different factors influencing the grammatical usage of mimetics, such as the morphological structure of a mimetic (reduplication vs. single forms; suffixes /RI/ and /N/) and the semantic type (onomatopoeia vs. other mimetics). However, although an internet based corpus study provides access to utterances by a wide demographic of native speakers, information on individual native speakers as the source of certain utterances is not traceable in most cases. Since sociolinguistic factors such as age and gender may influence grammatical usage of mimetics, it was necessary to find a complementary data source which reached a large audience, but would also yield data on the sociolinguistic background of selected native speakers. For this reason, an online survey and interviews with native speakers in Japan were chosen to gather empirical data on the grammatical usage of mimetics, with special focus on attributive constructions. The objectives, methodology and findings of the online survey and interviews will be presented in detail in chapters 4 and 5 respectively. The findings of both empirical studies will then be compared and evaluated in section 5.4.
4.1 OBJECTIVES AND METHODOLOGY

In order to provide an overview of the contemporary grammatical usage of mimetics in Japanese, two small pilot studies were conducted in Tokyo in August 2012. The participants, 15 native speakers of Japanese, were divided into two random groups who were presented with a written survey on 20 utterances containing mimetic expressions in various syntactic positions. Group A was asked to complete these sentences with particles/linkers of their choice, whereas Group B had to judge the grammaticality of various [mimetic + particle/linker] combinations using the same sentences. Preliminary results from these studies seemed to indicate that younger participants (<40 years) were more open to attributive constructions following the pattern [mimetic + na/no + noun] (cf. R1 and R2), while older native speakers opted for adverbial usage embedded in a relative clause, such as [mimetic + (to) shita + noun] (R3 and R4), as illustrated below.

(S1) 彼の目にきらり [...] 火花がひらめいたようだった。
    kare no me ni kirari [...] hanabi ga hirameita yō datta
    he GEN eye LOC MIM [...] firework SBJ flash-PAST manner COP-PAST
    ‘It looked like the bright fireworks were flashing in his eyes.’

(R1) 彼の目にきらりの火花がひらめいたようだった。
    kare no me ni kirari no hanabi ga hirameita yō datta
    he GEN eye LOC MIM GEN firework SBJ flash-PAST manner COP-PAST

(R1) 彼の目にきらりとしな火がひらめいたようだった。
    kare no me ni kirari na hanabi ga hirameita yō datta
    he GEN eye LOC MIM KYDna firework SBJ flash-PAST manner COP-PAST

(R3) 彼の目にきらりとした火花がひらめいたようだった。
    kare no me ni kirari to shita hanabi ga hirameita yō datta
    he GEN eye LOC MIM QF make-past firework SBJ flash-PAST manner COP-PAST

(R4) 彼の目にきらりした火花がひらめいたようだった。
    kare no me ni kirari shita hanabi ga hirameita yō datta
    he GEN eye LOC MIM make-PAST firework SBJ flash-PAST manner COP-PAST
However, two major technical issues were highlighted in these pilot studies: Firstly, since Group A could insert any grammatical marker or verb of their choice, this sometimes led to adverbial constructions with the [mimetic + to] modifying the sentence-final verb, although the mimetic occurred prenominally (R5, note the different interpretation). For this reason, answers varied greatly and results could not be compared directly.

\[ \text{彼の目にきらりと火花がひらめいたようだった。} \]
\[ \text{kare no me ni kirari to hanabi ga hirameita yō datta} \]
\[ \text{he GEN eye LOC MIM QP firework SBJ flash-PAST manner COP-PAST} \]
\[ \text{‘It looked like the fireworks were flashing brightly in his eyes.’} \]

The second issue arose in Group B, who had to judge the grammaticality of the same sentences. A scale of 1 (‘inappropriate’) to 6 (‘appropriate’) was provided, but most participants opted for 3-4 points in all sentences and seemed reluctant to provide a definitive answer. Due to these issues, the concept of both surveys had to be re-evaluated to yield concrete and comparable results. In addition, a wider audience and a greater number of participants were needed to validate or disprove the preliminary findings on possible sociolinguistic influences, such as age and gender, on the grammatical usage of mimetics.

Ethical approval for an online survey with native speakers of Japanese was granted by the School of Arts, Languages and Cultures of the University of Manchester on 2 September 2013. From March to September 2014, a revised survey was launched online using the Proprofs’ software. In order to prevent search engines and bots from falsifying the results, the survey could only be reached via a direct link and did thus not show up in any internet searches. Participants were recruited via email through university networks and were invited to participate in a survey on “The contemporary usage of Japanese”, without specific details on mimetics, in order to avoid influencing their grammatical choices. Before taking the survey, participants were informed that any answers and personal data

\[ \text{46 <http://www.proprofs.com/}> \]
provided would only be used for statistical purposes and could not be traced back to individuals. Furthermore, consent could be withdrawn at any time and participants could skip questions if they did not know the answer or preferred not to provide an answer. Copies of the invitation letters and online consent forms can be found in appendix A of this thesis.

The aim of this interactive survey is to give an overview of the grammatical usage of mimetics in contemporary Japanese, with special focus on attributive and prenominal usage, which – as the contrastive analysis in chapter 4 has shown – may be a relatively recent, or at least underrepresented, phenomenon. The online survey is based on the same set of 20 mimetics that has been introduced in section 3.2.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>SEMANTIC TYPE</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara-bara</td>
<td>PHO/PHE</td>
<td>scattered; various</td>
</tr>
<tr>
<td>boro-boro</td>
<td>PHE/PSY</td>
<td>crumbling; falling apart</td>
</tr>
<tr>
<td>doki-doki</td>
<td>PHO/PHE/PSY</td>
<td>pounding (heart)</td>
</tr>
<tr>
<td>funwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>gan-gan</td>
<td>PHO/PHE/PSY</td>
<td>pounding pain (head)</td>
</tr>
<tr>
<td>girari</td>
<td>PHE</td>
<td>a bright flash of light</td>
</tr>
<tr>
<td>hakkiri</td>
<td>PHE</td>
<td>clear</td>
</tr>
<tr>
<td>kira-kira</td>
<td>PHE</td>
<td>flashing; sparkling</td>
</tr>
<tr>
<td>kirari</td>
<td>PHE</td>
<td>a flash of light</td>
</tr>
<tr>
<td>nikkori</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>niko-niko</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>patan</td>
<td>PHO</td>
<td>a slam or knock</td>
</tr>
<tr>
<td>pata-pata</td>
<td>PHO</td>
<td>knocking; pitter-patter</td>
</tr>
<tr>
<td>pittari</td>
<td>PHE</td>
<td>perfect; fitting</td>
</tr>
<tr>
<td>sakasaku</td>
<td>PHO/PHE</td>
<td>crispy; crunchy</td>
</tr>
<tr>
<td>sara-sara</td>
<td>PHO/PHE</td>
<td>smooth; flowing</td>
</tr>
<tr>
<td>wan-wan</td>
<td>PHO</td>
<td>barking; bow-wow</td>
</tr>
<tr>
<td>zā-zā</td>
<td>PHO</td>
<td>pouring (rain, waterfall)</td>
</tr>
</tbody>
</table>

Table 3: Set of mimetics (survey)

As participants were only informed that the survey would focus on “The contemporary usage of Japanese”, without specifying the grammatical usage of mimetics, utterances containing mimetics were randomly mixed with utterances containing the following distractors:
Table 3: List of distractors (survey)

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>WORD CLASS</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ōki</td>
<td>KEIYÖDÖSHI, KEIYÖSHI</td>
<td>big</td>
</tr>
<tr>
<td>kirei</td>
<td>KEIYÖDÖSHI</td>
<td>beautiful</td>
</tr>
<tr>
<td>jūshī</td>
<td>LOANWORD</td>
<td>juicy</td>
</tr>
<tr>
<td>hyōki</td>
<td>KEIYÖDÖSHI; NOUN</td>
<td>sick; illness</td>
</tr>
<tr>
<td>ereganto</td>
<td>LOANWORD</td>
<td>elegant</td>
</tr>
<tr>
<td>raburabu</td>
<td>LOANWORD</td>
<td>lovey-dovey</td>
</tr>
<tr>
<td>ninki</td>
<td>KEIYÖDÖSHI; NOUN</td>
<td>popular; popularity</td>
</tr>
<tr>
<td>genki</td>
<td>KEIYÖDÖSHI</td>
<td>healthy; cheerful</td>
</tr>
<tr>
<td>shizuka</td>
<td>KEIYÖDÖSHI</td>
<td>quiet</td>
</tr>
<tr>
<td>chāmingu</td>
<td>LOANWORD</td>
<td>charming</td>
</tr>
</tbody>
</table>

The above distractors are mainly made up of keiyōdōshi (‘nominal adjectives’ or ‘na- adjectives’) and English loanwords (adjectives), with a few also being classified as keiyōshi (‘true adjectives’ or ‘i-adjectives’) and nouns by the Nihon Kokugo Daijiten. These lexemes were chosen because they 1) can all occur in prenominal position and 2) are used with the attributive particles no and na and/or the verb suru, similar to mimetics. Participants were presented with 30 utterances (20 mimetic, 10 non-mimetic), which contained a mimetic or distractor in prenominal position, with the modifying particle or verb being omitted (marked by square brackets). While 20 mimetics and 20 distractors would have been ideal, a short trial with native speakers of Japanese in Manchester resulted in complaints about survey duration or participants not finishing the task, which is why the decision had to be made to reduce the number of distractors. All utterances in this survey were retrieved from the jpTenTen corpus and were only minimally altered when necessary, e.g. due to orthographical mistakes or length, but no grammatical changes were made.

It is important to note at this point that mimetics may be spelled with either hiragana (ひらがな), a syllabic script used for native Japanese words, or katakana (カタカナ), a syllabic script used for foreign loanwords or as a means of emphasis, similar to bold print or underlining in English texts. As Daulton (1999: 14) observes, loanwords such as tabako (‘tobacco’), initially written as katakana タバコ, have been integrated into the Japanese lexicon to the point that the hiragana spelling たばこ has become the norm. It is
conceivable that the spelling of mimetics in *katakana vs. hiragana* may also be a reflection of their integration into the Japanese lexicon (i.e. the degree of lexicalisation). However, personal preferences may also play a role and depending on the medium, such as graphic novels or advertisements, a deliberate choice might be made to put emphasis on a mimetic by using *katakana* instead of *hiragana*. The small set of 20 mimetics in this study was selected to represent different phonological, morphological and semantic characteristics rather than different spelling conventions, so it cannot provide sufficient evidence regarding the role of orthography in the lexicalisation of mimetics. However, as the choice of script for the mimetics in this survey might potentially influence their lexical perception by native speakers, and it is not possible to predict their personal preferences for each expression, the decision was made to leave the utterances retrieved from the JTT unchanged in terms of spelling. This resulted in 25% *katakana* and 75% *hiragana* spellings. The transcriptions and glosses of all fill-in-the-blank tasks in this survey are provided on the following pages and have been marked as either distractors (D) or mimetics (M). The spelling of each mimetic with either *hiragana* (H) or *katakana* (K) is noted on the right. Mimetics and distractors are emboldened here for clarification purposes, but were not highlighted in the actual survey queries.

(D₁) 大き [...] パフェをたべました。
 ōki [...] pafe o tabemashita
big [...] sundae ACC eat-POL-PAST
‘I ate a big ice cream sundae.’

(M₁) 私はザーザー […] 雨の音が好きです。                 K
watashi wa zā-zā […] ame no oto ga suki desu
I TOP MIM […] rain GEN sound SBJ like COP-POL-PRS
‘I like the sound of pouring rain.’

(M₂) イギリス人がはっきり […] 英語を話します。               H
igirisujin ga hakkiri […] eigo o hanashimasu.
England people SBJ MIM […] English ACC speak-POL-PRS
‘English people speak clearly understandable English.’

(D₂) 今日はきれい[…]日ですね。
kyō wa kirei […] hi desu ne
today TOP beautiful […] day COP-POL-PRS right
‘Today is a beautiful day, isn’t it?’
140

(M3) 心臓のドキドキ [...] 音が聞こえます。
shinzō no doki-doki [...] oto ga kikōemasu
heart GEN MIM [...] sound SBJ hear-POL-PRS
'I can hear the pounding sound of (my) heart.'

(M4) ふわり [...] 布団で気持ちよく眠りました。
fuwari [...] futon de kimochi yoku nemurimashita
soft [...] Futon LOC feeling well sleep-POL-PAST
'I slept really well on this soft mattress'

(D3) 青森のジューシ [...] りんごが一番好きです。
Aomori no jūshī [...] ringo ga ichiban suki desu
PLACE.NAME GEN juicy [...] apple SBJ one.number like COP-POL-PRS
'The juicy apples from Aomori are my favourite.'

(M5) 空がきらきら [...] 星でいっぱいでした。
sora ga kira-kira [...] hoshi de ippai deshita
sky SBJ MIM [...] star INST full COP-POL-PAST
'The sky was full of twinkling stars.'

(M6) 隣家のわんわん [...] 犬がうるさいです。
tonari no ie no wan-wan [...] inu ga urusai desu
neighbour GEN house GEN MIM [...] dog SBJ noisy COP-POL-PRS
'The yapping dog in the house next door is really noisy.'

(M7) 赤ちゃんのにっこり [...] 笑顔が可愛いですね。
akachan no nikkori [...] egao ga kawaii desu
baby GEN MIM [...] face SBJ adorable COP-POL-PRS right
'The smiley face of that baby is adorable, isn’t it?'

(D4) おかげさまで病気 [...] おばあちゃんが元気に
okagesama de byōki [...] obāchan ga genki ni
thankfully COP-GER sick [...] grandma SBJ healthy KYDni
なりました。
narimashita
become-POL-PAST
'Thankfully, my sick grandma is well again.'

(M8) 空にふわふわ [...] 雲が浮かんでいます。
sora ni wa fuwa-fuwa [...] kumo ga ukande imasu
sky LOC TOP MIM [...] cloud SBJ float-GER be-POL-PRS
'Fluffy clouds are floating in the sky.'

(M9) 太陽のぎらり [...] 光が目に痛かった。
taiyō no girari [...] hikari ga me ni takatta
sun GEN glaring [...] light SBJ eye LOC painful-POL-PAST
'The glaring light of the sun hurt my eyes.'
(D3) 花子がエレガント [...] ドレスを着ます。
Hanako ga ereganto [...] doresu o kimasu
NAME SBJ elegant [...] dress ACC wear-POL-PRS
‘Hanako is wearing an elegant dress.’

(M10) 頭にがんがん [...] 痛みを感じました。
atama ni gan-gan [...] itami o kanjimashita
head LOC MIM [...] pain ACC feel-POL-PAST
‘I felt a pounding pain in my head.’

(M11) ぱたん [...] ドアの音で起こされました。
patan [...] doa no oto de okosaremashita
slamming [...] door GEN sound at startle-POL-PAST
‘I got startled at the sound of the slamming door.’

(D6) 東京では、二人で手をつないで
Tokyō de wa, futari de te o tsunaide
Tokyo LOC two INST hand ACC hold-GER
ラブラブ [...] カップルがよく見られます。
rabu-rabu [...] kappuru ga yoku miraremasu
loveydovey [...] couple SBJ often see-PASS-POL-PRS
‘In Tokyo you often see couples in love holding hands.’

(M12) 友達の誕生日パーティーで、たくさんの
tomodachi no tanjōbi pātī de, takusan no
friend GEN birthday party LOC a.lot GEN
にこにこ [...] 顔の写真を撮りました。
niko-niko [...] kao no shashin o tori mashita
MIM [...] face GEN photo ACC take-POL-PAST
‘I took photos of a lot of happy faces at my friend’s birthday party.’

(M13) 夏の朝のきらり [...] 日差しが
natsu no asa no kirari [...] hizashi ga
summer GEN mornin GEN MIM [...] sunrays SBJ
窓からつくいている。
mado kara tsuguide iru
window from pour.into-GER be-PRS
‘The bright rays of sunlight on a summer’s morning are pouring through the window.’

(D7) 一番人気 [...] アイドルは誰だと思いますか。
ima ichiban ninki [...] aidoru wa dare da to omoimasu ka
now one.number popular [...] idol TOP who COP-PRS QP think-POL-PRS QM
‘Who do you think is the most popular celebrity right now?’
(M14) 学生の時、古いぼろぼろ [...] アパート
gakusei no toki, furui boro-boro [...] apāto
student GEN time old MIM [...] flat
に住んでいました。
ni sunde imashita
LOC live-GER be-POL-PAST
‘When I was a student, I used to live in a really old shabby flat.’

(M15) 後ろからぱたぱた [...] 足音が聞こえる。
ushiro kara pata-pata [...]
behind from MIM [... foot.sound SBJ hear-POT-PRS
‘Behind me I could hear the pitter-patter sound of footsteps.’

(D8) 麻美ちゃんは元気 [...] 子ですね。
Asami chan wa genki [...]
NAME DIM SBJ cheerful [... child COP-POL-PRS right
‘Little Asami is a really cheerful child, isn’t she?’

(M16) 冷やしそばは暑い日にぴったり [...] 食事です。
hiyashi soba wa atsui hi ni pittari [...]
chilled Soba SBJ hot day LOC MIM [... meal COP-POL-PRS
‘Cold soba noodles are the perfect dish for a hot day.’

(M17) サラサラ [...] 髪がほしいです。
sara-sara [...]
MIM [...] hair SBJ want COP-POL-PRS
‘I would love to have smooth hair.’

(D9) 毎日学校から帰ったら、静か [...] 音楽を
mainichi gakkō kara kaetta, shizuka [...]
gakkō from come.home-PAST-TEMP quiet [... music ACC
‘Every day, when I get home from school, I listen to soft music while doing my homework.’

(M18) 今日は暑いけど、ふんわり [...] 風が
kyō wa atsui kedo, funwari [...]
today TOP hot although, MIM [... wind SBJ
fuite kimochi ii
blow-GER feeling good
‘Although it’s hot today, the soft breeze is making it feel pleasant.’
とても美味しいサクサク天ぷらの作り方は簡単です。

田中さんは本当にチャーミング人です。

イギリスに留学した時年齢も国籍もバラバラ人たちと友達になりました。

Each of these sentences was presented on a new slide, with the following instructions given to the participants at the beginning of the survey.47

あまり深く考えず、直観的に次の質問に答えてください。

リストからあなたにとってもっともふさわしいと思う語を選んで、[.....]に入れてください。リストに適切な語がないと思う場合は、「そのほか」を選んでください。また、何もいらないと思う場合は[X]を選んでください。

An example of the survey layout is given below, using sentence (D1).

47 Without thinking too much, please answer the following questions spontaneously. Please select the expression that seems most appropriate to you from the drop-down list and insert it into the empty brackets. In case you do not judge any of the expressions given in the list as appropriate, please select “other”. And if you think that nothing has to be inserted at all, please select [X].
Participants could choose one of the following options from the drop-down list:

- *no*  
- *na*  
- *to iu*  
- *to suru*  
- *to shite iru*  
- *to shita*  
- *suru*  
- *shite iru*  
- *shita*  
- *other (その他)*  
- *X* 

As the pilot study had shown that letting participants fill in the blanks with whichever particle/linker/verb they preferred resulted in different syntactic interpretations, a fixed list of options was chosen for this survey to ‘force’ participants to use attributive constructions. While participants were able to choose “other” to indicate they were not happy with any of choices in the drop down list, they were not given the option to fill in alternatives by hand, as this might have resulted in participants inserting the quotative particle *to*, causing the mimetic to modify the clause-final verb instead of the noun. As this survey focused on the attributive usage of mimetics in prenominal position, the above measures were taken to prevent participants from creating such adverbial constructions.
After completing all 30 sentences, participants were asked to provide the following personal information:

- gender
- age range in decades
- prefecture of birth
- prefecture of residence
- residence in other countries of more than 3 months
- mother tongue
- occupation (free form)

This information was collected to determine whether any sociolinguistic factors (e.g. gender, age, dialect, sociolect) might have influenced the grammatical choices made by individual participants.

4.2 PARTICIPANTS

With 159 attempts and on average 150 answers to each question, the survey managed to collect data from a representative number of native speakers from 27 different prefectures, with Osaka (13%), Tokyo (12%) and Kanagawa (8%) being the main areas of residency. The majority of participants were in the 20-40 age range, followed by under 20s and over 40s, with only a handful of participants over 60 years of age:

![Figure 27: Survey demographics (age)](image-url)
In terms of gender, 66% of participants were female, as opposed to 34% male participants:

![Gender ratio chart]

**Figure 28: Survey demographics (gender ratio)**

As invitations for this survey were distributed through university networks in Japan, the majority of participants (60%) were university students, lecturers and researchers, as well as their families and friends. However, the remaining 40% of participants had various social backgrounds, with a wide range of current occupations:

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>NUMBER OF PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>university students and staff</td>
<td>91</td>
</tr>
<tr>
<td>employees, civil servants, part-time workers</td>
<td>25</td>
</tr>
<tr>
<td>not specified</td>
<td>6</td>
</tr>
<tr>
<td>housewives</td>
<td>4</td>
</tr>
<tr>
<td>unemployed</td>
<td>4</td>
</tr>
<tr>
<td>self-employed</td>
<td>3</td>
</tr>
<tr>
<td>designers (web, advertising)</td>
<td>3</td>
</tr>
<tr>
<td>company managers</td>
<td>2</td>
</tr>
<tr>
<td>engineers</td>
<td>2</td>
</tr>
<tr>
<td>medical doctors</td>
<td>2</td>
</tr>
<tr>
<td>English teachers</td>
<td>2</td>
</tr>
<tr>
<td>school teachers (primary + secondary)</td>
<td>2</td>
</tr>
<tr>
<td>musicians and singers</td>
<td>2</td>
</tr>
<tr>
<td>editor</td>
<td>1</td>
</tr>
<tr>
<td>interpreter</td>
<td>1</td>
</tr>
<tr>
<td>illustrator</td>
<td>1</td>
</tr>
<tr>
<td>curator (art gallery)</td>
<td>1</td>
</tr>
</tbody>
</table>

*Table 35: Survey participants*
Since the majority of participants were academics, most of them had spent at least 3 months abroad, with English speaking countries being listed as the most common destinations. However, all participants were native speakers raised and currently working in Japan, which is why any statistically significant influence of time spent abroad is unlikely.

4.3 RESULTS AND DISCUSSION

This section will present and analyse the statistical results of the online survey, while taking into account the morphological and semantic characteristics of each mimetic, as well as the gender, age, dialect and social background of the participants. The results of the survey showed a diverse range of possible attributive constructions, which varied greatly depending on the respective mimetic. Surprisingly, there was also some variation in the set of distractors, most of which are clearly defined parts of speech.

Although the nouns, adjectives and nominal adverbs in this set were only used as distractors in this study, some of them yielded unexpected results and are worth commenting on in relation to the attributive usage of adjectives with no or na in general. Whereas most native Japanese keiyōdōshi (e.g. ninki – ‘popular’) and also English adjectives as loanwords (e.g. chāmingu – ‘charming’) are predominantly used with na in attributive function, some may function as nouns as well, such as hyōki and ninki, which study participants also frequently used with the genitive marker no (cf. section 2.4.2). This seemingly arbitrary alternation between na and no is also typical for some mimetics, such as bara-bara and boro-boro, as the corpus analysis in section 3.4 has demonstrated. So far, no conclusive explanation has been found as to why some expressions, both mimetic and non-mimetic, are used with both markers, other than the influence of a few collocations and idioms, as well as subtle differences in meaning in select cases (Uehara 2003), which can however not explain the na and no alternation in spontaneous utterances.

Another interesting finding is the grammatical usage of the loanword rabu-rabu (literally ‘love-love’). It is predominantly used with na, but was
also used with no by 13% of participants and is the only distractor in this set which can take the verb suru (‘to do’), forming a predicate-like construction similar to many mimetics. A possible explanation could be that rabu-rabu is interpreted as mimetic-like by some native speakers due to its reduplicative structure. However, a more detailed study on the grammatical behaviour of reduplicative loanwords vs. native mimetics would be necessary to put this hypothesis to the test. Table 36 gives an overview of the syntactic distribution of all distractors in this survey. Participants who skipped the question (no answer) have not been included in the overall percentages.

<table>
<thead>
<tr>
<th>distractor</th>
<th>no</th>
<th>na</th>
<th>to iu</th>
<th>to suru</th>
<th>to shite iru</th>
<th>suru</th>
<th>shite iru</th>
<th>shita</th>
<th>5</th>
<th>1</th>
<th>other</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>byōki sick</td>
<td>90</td>
<td>1</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>3</td>
<td>2</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>chāmingu charming</td>
<td>---</td>
<td>150</td>
<td>100%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>9</td>
</tr>
<tr>
<td>ereganto elegant</td>
<td>---</td>
<td>149</td>
<td>99%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>8</td>
</tr>
<tr>
<td>genki healthy</td>
<td>1</td>
<td>1%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>3</td>
<td>2</td>
<td>2%</td>
<td>8</td>
</tr>
<tr>
<td>jūshī juicy</td>
<td>---</td>
<td>146</td>
<td>97%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>9</td>
</tr>
<tr>
<td>kirei beautiful</td>
<td>---</td>
<td>137</td>
<td>92%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>11</td>
<td>1</td>
<td>1%</td>
<td>10</td>
</tr>
<tr>
<td>ninki popular</td>
<td>119</td>
<td>79%</td>
<td>27</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>5</td>
<td>3</td>
<td>---</td>
<td>8</td>
</tr>
<tr>
<td>ōki big</td>
<td>---</td>
<td>130</td>
<td>88%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>17</td>
<td>12</td>
<td>---</td>
<td>12</td>
</tr>
<tr>
<td>raburabu lovey-dovey</td>
<td>19</td>
<td>13%</td>
<td>19</td>
<td>---</td>
<td>---</td>
<td>1</td>
<td>---</td>
<td>---</td>
<td>16</td>
<td>10</td>
<td>1%</td>
<td>9</td>
</tr>
<tr>
<td>shizuka quiet</td>
<td>---</td>
<td>133</td>
<td>89%</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>9</td>
</tr>
</tbody>
</table>

*Table 36: Survey results (distractors)*

In contrast to the relatively fixed grammatical distribution of the distractors in Table 36, the set of 20 mimetics shows a much more diverse range of constructions, as illustrated in Table 37. In section 3.4, the following tendencies concerning the attributive usage of mimetics were identified on the basis of corpus data:

---

48 The adjective ōki is one of the rare cases which may be used as both a ‘true adjective’ by adding the inflection –i, or as nominal adjective with the linker na, which explains why 12% of participants selected ‘other’.
• phonomimes are less likely to be used attributively with *no* or *na* than other mimetics

• reduplicative mimetics are more likely to take *no* or *na* than single forms ending in /RI/ or /N/

In addition, the following research questions were posed:

• Do mimetics which are frequently used in every day speech also tend to take on a wider range of syntactical functions?

• Are mimetics that are popular in various media (e.g. advertisements, cooking shows) like *fuwa-fuwa* (‘fluffy’), *kira-kira* (‘sparkling’) and *saku-saku* (‘crispy’) more likely to be used prenominally, with or without the attributive particles *no*/*na*?

These initial findings and research questions can only partially be confirmed by the survey results.

As Table 37 shows, the most commonly chosen constructions for the majority of mimetics followed the pattern [mimetic + (to) suru/shite iru/shita + noun] which Hamano (1986/1998) labelled mimetic D-verbs, following Kindaichi (1950) and Nagashima (1965). Nominal adjective-like usage, including attributive constructions with *no* or *na*, was much less frequent in comparison with the corpus data. This may be due to the structure of the survey, which provided a fixed set of constructions to choose from, and by choosing a certain particle or verb, participants do not necessarily exclude other grammatical usages, but rather opt for the most appropriate construction. Despite encouraging participants to be spontaneous and to provide their own opinion, it is still possible that ‘grammatically correct’ answers were provided, meaning that participants chose the answer they judged as dictionary standard, i.e. predominantly adverbial usage and mimetic D-verbs modifying nouns instead of nominal adjective-like usage, as discussed in section 3.4.
<table>
<thead>
<tr>
<th>Mimetic</th>
<th>No responses</th>
<th>yes responses</th>
<th>no answer</th>
<th>% of total</th>
<th>% no answer</th>
<th>% yes responses</th>
<th>% no answer</th>
<th>% yes responses</th>
<th>% no answer</th>
<th>% yes responses</th>
<th>% no answer</th>
<th>% yes responses</th>
<th>% no answer</th>
<th>% yes responses</th>
<th>% no answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara-baras scattered</td>
<td>34</td>
<td>115</td>
<td>9</td>
<td>23%</td>
<td>77%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>boro-boro crumbling</td>
<td>99</td>
<td>42</td>
<td>9</td>
<td>66%</td>
<td>28%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>7</td>
<td>5%</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>dokidoki pounding</td>
<td>1</td>
<td>32</td>
<td>3</td>
<td>70%</td>
<td>30%</td>
<td>9</td>
<td>6%</td>
<td>3</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
<td>58</td>
<td>39%</td>
<td>18</td>
<td>12%</td>
</tr>
<tr>
<td>funwari fluffy</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>6%</td>
<td>5%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>19</td>
<td>13%</td>
<td>22</td>
<td>15%</td>
</tr>
<tr>
<td>fuwari fluffy</td>
<td>6</td>
<td>1</td>
<td>9</td>
<td>3%</td>
<td>7%</td>
<td>128</td>
<td>85%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>5</td>
<td>3%</td>
<td>7</td>
<td>5%</td>
</tr>
<tr>
<td>gan-gan pounding</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>6%</td>
<td>9%</td>
<td>46</td>
<td>31%</td>
<td>39</td>
<td>26%</td>
<td>5</td>
<td>3%</td>
<td>12</td>
<td>8%</td>
<td>25</td>
<td>17%</td>
</tr>
<tr>
<td>girari flashing</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>2%</td>
<td>7%</td>
<td>127</td>
<td>85%</td>
<td>4</td>
<td>3%</td>
<td>1</td>
<td>1%</td>
<td>28</td>
<td>19%</td>
<td>12</td>
<td>8%</td>
</tr>
<tr>
<td>hakkiri clearly</td>
<td>9</td>
<td>1</td>
<td>9</td>
<td>6%</td>
<td>9%</td>
<td>41</td>
<td>28%</td>
<td>3</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
<td>21</td>
<td>14%</td>
<td>56</td>
<td>38%</td>
</tr>
<tr>
<td>kira-kira flashing</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>1%</td>
<td>3%</td>
<td>139</td>
<td>92%</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>6</td>
<td>3%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>nikkori smiling</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1%</td>
<td>3%</td>
<td>3</td>
<td>1%</td>
<td>5</td>
<td>2%</td>
<td>7</td>
<td>5%</td>
<td>13</td>
<td>9%</td>
<td>54</td>
<td>36%</td>
</tr>
<tr>
<td>niko-niko smiling</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>1%</td>
<td>3%</td>
<td>2</td>
<td>1%</td>
<td>22</td>
<td>14%</td>
<td>1</td>
<td>1%</td>
<td>17</td>
<td>11%</td>
<td>59</td>
<td>39%</td>
</tr>
<tr>
<td>patan knocking</td>
<td>133</td>
<td>2</td>
<td>105</td>
<td>88%</td>
<td>1%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>18</td>
<td>12%</td>
<td>8</td>
<td>5%</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td>pittari perfectly</td>
<td>59</td>
<td>1</td>
<td>40</td>
<td>47%</td>
<td>1%</td>
<td>3</td>
<td>2%</td>
<td>2</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>8</td>
<td>5%</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>saku-saku crispy</td>
<td>44</td>
<td>32</td>
<td>44</td>
<td>29%</td>
<td>21%</td>
<td>30</td>
<td>20%</td>
<td>3</td>
<td>2%</td>
<td>5</td>
<td>3%</td>
<td>32</td>
<td>21%</td>
<td>32</td>
<td>21%</td>
</tr>
<tr>
<td>sara-sara flowing</td>
<td>29</td>
<td>19</td>
<td>29</td>
<td>19%</td>
<td>37%</td>
<td>21</td>
<td>14%</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>6</td>
<td>3%</td>
<td>29</td>
<td>19%</td>
</tr>
<tr>
<td>wan-wan woof-woof</td>
<td>30</td>
<td>20</td>
<td>30</td>
<td>20%</td>
<td>1%</td>
<td>4</td>
<td>2%</td>
<td>2</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
<td>105</td>
<td>70%</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>zā-zā pouring</td>
<td>3</td>
<td>96</td>
<td>3</td>
<td>2%</td>
<td>64%</td>
<td>1</td>
<td>1%</td>
<td>7</td>
<td>5%</td>
<td>6</td>
<td>4%</td>
<td>1</td>
<td>1%</td>
<td>29</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 37: Survey results (mimetics)

However, several mimetics in this set show a similar behaviour in both the corpus study and the online survey, first and foremost bara-baras (‘scattered’) and boro-boro (‘crumbling’). In both data sets, these mimetics were most commonly used attributively with no or na (compare Table 29 on page 126). As hypothesised in section 3.4, the overall frequency of these mimetics in everyday speech may lead to a higher degree of lexicalisation.

---

49 Participants who chose not to answer a question (“no answer”) have not been included in the overall percentages.
which may in turn correlate with a wider syntactic distribution. With over 100,000 tokens in total in the JTT, these two mimetic were among the most frequently used expressions in this set. However, it is too early to draw a definite conclusion at this stage and this hypothesis will be revisited when the data collected from interviews with native speakers has been taken into account (section 5.4). In terms of the alternation of no vs. na, the survey results did confirm the findings of the corpus study: when used attributively as a nominal adjective, bara-barabara is more likely to take na, whereas boro-boro is more frequently used with no:

![Figure 29: Bara-barabara and boro-boro: corpus vs. survey](image)

While the survey data was of course limited to fixed [mimetic + ? + N] constructions and the corpus contains a wide range of constructions, as well as sources ranging from websites, newspaper articles and books to online chats, the similarities in the distribution of no vs. na are worth investigating further.

The mimetics fuwa-fuwa (‘fluffy’), kira-kira (‘flashing; sparkling’), pittari (‘perfectly’), saku-saku (‘crispy’) and sara-sara (‘flowing; smooth’) were also used as nominal adjectives by more than 5% of survey participants, albeit not as frequently as bara-barabara and boro-boro. No major differences regarding the distribution of no vs. na in the corpus and survey data were found, as Figures 30-34 show.
Figure 30: Fuwa-fuwa: corpus vs. survey

Figure 31: Kira-kira: corpus vs. survey

Figure 32: Pittari: corpus vs. survey
There are several possible explanations for nominal-adjective like usage with *no/na* in these cases, one of them being the popularity of some of these mimetics in various media and advertisements. As discussed in section 3.3, *saku-saku* is often used in cooking shows, which are very popular in Japan, to describe the texture of foods such as in *saku-saku na tempura* (‘crispy Tempura’\(^{50}\)). An example from the Youtube channel *Cooking with Dog* is given in (150).

---

\(^{50}\) breaded and deep-fried vegetables and seafood
(150) saku-saku no tonkatsu to supraishi na kare ga
  MIM GEN cutlet and spicy KYDna curry SBJ
  yoku machi shite oishii desu
  well match make-GER delicious COP-POL
  ‘Crispy cutlet and spicy curry go very well together.’

(Katsu Curry, 4 October 2008)

Sara-sara, on the other hand, is used in advertisements and product names to describe flowing water or hair, for instance sara-sara no kami (‘smooth hair’). It may also occur as [MIM + N], as in this TV commercial by the cosmetics brand SOFINA advertising their moisturiser Very Very Fresh Water:

(151) sara-sara hada, sara-sara paudā
  MIM skin MIM powder
  ‘smooth skin, smooth powder’
(SOFINA)

Kira-kira is an equally popular mimetic in advertisements and can often be found in shampoo or makeup commercials with no, na or no grammatical marker at all. These constructions are also picked up in customer reviews or by bloggers, as example (152) illustrates, which was retrieved from the cosmetics blog COSMECLIP and part of a demonstration of a highlighting face powder:

(152) akarui kira-kira na hada de o-dekake shiyō
  bright MIM KYDna skin INST HON-go.out do-IMP
  ‘Let’s go out with bright, shiny skin.’
(Cosmeclip, 17 April 2018)

Paradoxically, kira-kira was most frequently used with mimetic D-verbs, i.e. [MIM + suru/shite iru/shita + N], cf. section 2.4.2, which was a general trend observed in this survey, cf. Table 37. There are a few instances of attributive usage with no/na and a closer look at the demographics that selected no reveals that there is a higher female : male ratio, as shown in Figure 35. The Y-axis hereby indicates the number of participants who chose attributive usage, whereas th X-axis displays different age groups.
Figure 3: Demographics for the attributive usage of kira-kira

Na on the other hand was only selected by a young male under 20 and a 30-39 year old female. [kira-kira + shita + N] was selected by 11 participants of all ages with a near equal female : male ratio of 6 : 5. The different syntactic distribution of saku-saku and sara-sara vs. kira-kira may be explained by their collocations in the examples chosen for this survey:

(M₁₉) totemo oishii saku-saku [ ] tempura no
very delicious MIM [ ] Tempura GEN
tsukurikata wa kantan desu
recipe TOP simple COP-POL
‘The recipe for delicious crispy tempura is really easy.’

(M₁₇) sara-sara [ ] kami ga hoshī desu
MIM [ ] hair SBJ want COP-POL-PRS
‘I would love to have smooth hair.’

(M₃) sora ga kira-kira [ ] hoshi de ippai deshita
sky SBJ MIM [ ] star INST full COP-POL-PAST
‘The sky was full of twinkling stars.’

The utterances chosen for saku-saku and sara-sara and their collocations tempura and kami are typically found in advertisements, cooking shows and online blogs on food and cosmetics, which often make use of short attributive constructions. This might explain the comparatively high rate of
[mimetic + na/no + noun] constructions, because native speakers of all ages are exposed to these media in daily life. *Kira-kira* is equally popular in the advertisement industry, but surprisingly attributive usage with *no/na* was only preferred by 11 participants. Attributive constructions with *[kira-kira + shitaka + noun]* were significantly more common than attributive usage with *no/na* in this survey.

This can be explained by the choice of collocations in example (M5), namely the noun *hoshi* (‘star’). *Hoshi* is a) not likely to be used in the cosmetics industry, where *[na/no/X + noun]* is common, and b) may remind participants of the popular children’s song *kira-kira boshi* (‘Twinkle, twinkle little star’), which may account for the selection of *[kira-kira + shitaka + hoshi]* in this case. Also, while collocations with ‘hair’ or ‘skin’ are likely to be interpreted as attributing a state, the on-and-off flashing of stars, i.e. twinkling, would rather be interpreted as an action. In addition, *kira-kira* was also the only mimetic out of these three expressions to be written in *hiragana*, while *saku-saku* and *sara-sara* are written in *katakana* and thus stand out compared to the rest of the utterance, which is also a common means of emphasis in advertisements.

In terms of phonomimes vs. phenomimes and psychomimes, the survey data seems to confirm the hypothesis that phonomimes predominantly occur as adverbs due to a lesser degree of lexicalisation and a higher degree of iconicity (cf. Tamori and Schourup 1999; Flyxe 2002; Akita 2013a). The phonomimes *patan*, *pata-pata*, *wan-wan* and *zā-zā* were all predominantly used as adverbs within a relative clause, in particular with the verb *iu* (‘to say’) which is comparable to the English *go* in utterances such as *The dog goes woof-woof* in that it indicates the sound-imitating nature of these four mimetics. A relatively large number of participants also selected ‘other’ (*の他*), which could mean that they would not normally use these phonomimes in prenominal position, especially in the case of *wan-wan*, as shown in Table 38.

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51 The mimetics *doki-doki* and *gan-gan*, which may be used as phonomimes in some contexts, have been excluded from this comparison, as the utterances chosen for this survey clearly indicate phenomimetic usage.
Zā-zā is the only mimetic in this group that was used in a direct attributive construction by three participants, all of whom were young women under 40 years of age. As most participants who selected attributive usage with na/no for kira-kira were predominantly female with a peak incidence in the under 40s group as well, this raises the question whether age and/or gender may play a role in terms of judging nominal adjective-like usage as grammatical. Another mimetic with predominantly adverbial and occasional attributive usage in this data set is fuwa-fuwa (Table 41 and Figure 31). Usage with no was relatively evenly distributed in terms of age and gender, as Figure 36 illustrates. The slightly higher female ratio may be explained by the demographics of this survey in general, with two thirds of the participants being female. In addition, most participants were also under 60 years of age, with the 30-39 age group being the largest demographic.
Attributive usage with *na* on the other hand seems more common in young females, with the two male participants being residents of Kanagawa and Kyoto respectively, rather than Tokyo and Osaka, the prefectures where the majority of study participants live (Figure 37).

However, as the number of participants who used *fuwa-fuwa* attributively in this survey is very small, and all genders and age groups are not equally represented in this data set, the influence of sociolinguistic factors on the
grammatical usage of mimetics will be revisited in the analysis of the interviews with native speakers in Japan presented in chapter 5.

In conclusion, the results of the online survey showed that the grammatical usage of the mimetics in this data set is very diverse. The hypotheses posed as a result of the corpus study in section 3.4 could only be partially confirmed, which may be due to the limited choice of options presented to the survey participants and the choice of collocations, some of which are idiomatic. In addition, due to the majority of the participants being university staff and students, it was not possible to investigate whether the occupation and level of education of individual native speakers may influence their grammatical usage of mimetics. However, the both the corpus study and the online survey managed to confirm the observation that mimetics in Japanese are predominantly used as adverbs, while certain mimetics (e.g. bara-bara, boro-boro, saku-saku and sara-sara) may also be used attributively with no or na. This may indicate that some native speakers interpret these expressions as nominal adjectives rather than adverbs, or both. Sociolinguistic factors such as age and gender also seem to play a role, in particular in conjunction with the influence of media on specific target audiences. These hypotheses will be put to the test in the following section, which discusses findings from interviews with native speakers on the grammatical usage of mimetics in various syntactic functions.
5 INTERVIEWS

The online survey with 159 native speakers confirmed that Japanese mimetics are generally used as adverbs, while some frequently used expressions, such as *bara-bar* and *boro-boro*, may display a wider range of syntactic functions, including nominal adjective-like usage. In addition, mimetics that are popular in various media, such as *saku-saku* and *sara-sara*, were also found in attributive function in certain contexts. While the data sample of attributive usage with *no/na* in this survey is comparatively small, it did show a tendency towards attributive usage in the younger population, with young women selecting constructions popular in commercials for cosmetic products, which make use of the same collocations that were chosen for the survey (e.g. *sara-sara + hair*). Mimetics used in other popular media, such as *saku-saku* (e.g. *saku-saku + tempura*) did not display a gender or age bias.

However, the percentage of attributive usage with *no/na* was much smaller in the online survey compared to the previously conducted corpus study with the *jpTenTen* webcrawler corpus. This may be due to the nature of the fill-in-the-blank task, which meant that survey participants were presented with fixed mimetic + noun combinations, some of which may be considered idiomatic collocations. As individual preferences for the grammatical usage of mimetics, as well as their collocations, may vary, the results of the online survey might not reflect the active usage of mimetics by all participants. Due to the nature of the online survey, which could be taken anonymously without the researcher being present, it was also not possible to exclude external influences, such as other people being present or the usage of dictionaries and Google to complete the tasks. Taking all these limitations into account, a more active and personal approach was considered, which led to the next phase of this study in the form of interviews with native speakers in Japan.
5.1 OBJECTIVES AND METHODOLOGY

Ethical approval for interviews with native speakers of Japanese was granted by the School of Arts, Languages and Cultures of the University of Manchester on 4 July 2014. Thanks to a very generous fieldwork grant by the Great Britain Sasakawa Foundation, it was possible to conduct a series of interviews in Tokyo, Japan, from 11-23 September 2014. Participants were recruited via email through university networks in Tokyo, with interviews taking place in public places, such as university campuses and cafeterias. The same set of 20 mimetics (Table 39) that was used as a basis for the previous dictionary analysis, corpus study and online survey, also provided the framework for guided interviews with native speakers.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>SEMANTIC TYPE</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara bara</td>
<td>PHO/PHE</td>
<td>scattered; various</td>
</tr>
<tr>
<td>boro-boro</td>
<td>PHE/PSY</td>
<td>crumbling; falling apart</td>
</tr>
<tr>
<td>doki-doki</td>
<td>PHO/PHE/PSY</td>
<td>pounding (heart)</td>
</tr>
<tr>
<td>funwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>gan-gan</td>
<td>PHO/PHE/PSY</td>
<td>pounding pain (head)</td>
</tr>
<tr>
<td>girari</td>
<td>PHE</td>
<td>a bright flash of light</td>
</tr>
<tr>
<td>hakkiri</td>
<td>PHE</td>
<td>clear</td>
</tr>
<tr>
<td>kira-kira</td>
<td>PHE</td>
<td>flashing; sparkling</td>
</tr>
<tr>
<td>kirari</td>
<td>PHE</td>
<td>a flash of light</td>
</tr>
<tr>
<td>nikkori</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>niko-niko</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>patan</td>
<td>PHO</td>
<td>a slam or knock</td>
</tr>
<tr>
<td>pata-pata</td>
<td>PHO</td>
<td>knocking; pitter-patter</td>
</tr>
<tr>
<td>pittari</td>
<td>PHE</td>
<td>perfect; fitting</td>
</tr>
<tr>
<td>saku-saku</td>
<td>PHO/PHE</td>
<td>crispy; crunchy</td>
</tr>
<tr>
<td>sara-sara</td>
<td>PHO/PHE</td>
<td>smooth; flowing</td>
</tr>
<tr>
<td>wan-wan</td>
<td>PHO</td>
<td>barking; bow-wow</td>
</tr>
<tr>
<td>zā-zā</td>
<td>PHO</td>
<td>pouring (rain, waterfall)</td>
</tr>
</tbody>
</table>

*Table 39: Set of mimetics (interviews)*

The letter of invitation informed participants that interviews would be conducted for a research project on the “Contemporary usage of Japanese”, without specifically mentioning the grammar of mimetics to prevent
potential participants from researching these expressions prior to the interviews. Participants were also sent a consent form informing them about the nature of the study, audio recordings, measures to ensure anonymity and the collection of personal data such as age, gender and occupation for statistical purposes. All consent forms were signed by the interviewee and the researcher at the beginning of each interview, before any audio recordings were made. Consent was then confirmed verbally on the audio recording. Copies of the letter of invitation and the consent form in Japanese and English can be found in Appendix B of this thesis.

At the beginning of the interviews, participants were informed that the topic would be the usage of mimetics in Standard Japanese and provided with the opportunity to withdraw their consent or skip questions at any point. The interviews consisted of two phases:

**Phase I:** Small talk to “break the ice” and activate the participants’ vocabulary of mimetics by priming them with a discussion of mimetics in general. Discussion questions included the following:

- What do you think is a ‘mimetic’ (terms onomatope, giongo and gitago used in Japanese)?
- Can you give an example of a mimetic?
- Is there a mimetic you use/see often or that you really like?

**Phase II:** Using the set of 20 mimetics in Table 39, participants were asked to provide an example sentence for each mimetic.

In contrast to the online survey, no distractors were used in the interviews and participants were primed by a short discussion of mimetics in general, without referring to their grammatical properties. As the fill-in-the-blank task in the survey did not necessarily reflect the preferred grammatical usage of mimetics by individual native speakers due to fixed word order and pre-selected collocations, the choice was made to ask for spontaneous examples of mimetics within a sentence instead. Allowing participants to produce spontaneous utterances with mimetics instead of judging the
grammaticality of utterances of other native speakers may provide a better
glimpse into their mental lexicon and their classification of mimetics. In
order to avoid priming by other participants in group interviews, any
examples provided after the researcher and/or the interviewees commented
on the contents of an utterance were not included in the final results, as the
grammatical choice may have been biased. The following sections will give
an overview of the demographics of the survey participants and present the
results of 22 interviews with native speakers of Japanese.

5.2 PARTICIPANTS

While one-on-one interviews would have been preferable to prevent
linguistic priming by other participants, some participants were reluctant to
be interviewed on their own, which is why several interviews were
conducted in pairs, in addition to one interview with three participants.
However, this also provided the opportunity to compare the utterances of
participants of different genders, age groups and social backgrounds directly,
and encourage discussion on the grammatical usage of mimetics. All in all,
22 participants (P) were interviewed in the course of 13 interviews, as
detailed below.

(1) P1 (m, 23, student) + P2 (f, 23, student)
(2) P3 (f, 20, student) + P4 (m, 20, student)
(3) P4 (m, 29, unemployed) + P5 (f, 34, real estate agent)
(4) P7 (f, 73, Haiku poet) + P8 (f, 72, professor of German)
(5) P9 (m, 67, pensioner) + P10 (f, 65, housewife)
(6) P11 (f, 28, PhD student of German) + P12 (f, 28, PhD student of German)
(7) P13 (f, 53, librarian)
(8) P14 (f, 19, student) + P15 (f, 19, student)
    + P16 (f, 20, student)
(9) P17 (m, 19, student)
(10) P18 (f, 18, student)
(11) P19 (m, 20, student)
(12) P20 (m, 59, professor of Drama Studies)
(13) P21 (m, 29, PhD student of German) + P22 (f, 29, MA student of German)
With 8 male and 14 female participants, the gender ratio of 36% vs. 64% is comparable to the online survey. However, the age distribution is more varied, with a greater number of participants over the age of 50 and a peak in the 20-29 age range, due to most participants being university students.

![Age distribution](image)

*Figure 38: Interview demographics (age)*

In terms of dialects, the majority of participants identified as speakers of Standard Japanese, with only P5 (from Aichi), P7 (from Hokkaido), P10 (from Nagasaki), P20 (from Yamagata) and P21 (from Nagasaki) identifying as dialect speakers to some degree, with all participants using Standard Japanese as a lingua franca in daily life. In terms of intonation, only P7’s and P20’s accent patterns audibly differed from Standard Japanese.

### 5.3 RESULTS AND DISCUSSION

The grammatical usage of mimetics by the 22 interviewees was very diverse and showed a wider syntactic distribution of mimetics compared to the results of the online survey presented in chapter 4. An overview of the syntactic roles of all 20 mimetics as used by the study participants is given
in Table 40. Detailed participant data, as well as transcriptions and translations of all examples provided can be found in Appendix B.

<table>
<thead>
<tr>
<th>Word Form</th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + suru</th>
<th>ni + verb</th>
<th>X + verb</th>
<th>X + iu</th>
<th>X + suru</th>
<th>no + noun</th>
<th>na + noun</th>
<th>X + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
</tr>
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<td>15</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>1</td>
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<td></td>
<td></td>
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<td>1</td>
<td>3</td>
<td>4</td>
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<td></td>
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<td></td>
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<td>3</td>
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<td></td>
<td>1</td>
<td>3</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>gan-gan</td>
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<td></td>
<td>13</td>
<td>6</td>
<td></td>
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<td>12</td>
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<td>5</td>
<td>11</td>
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<td></td>
<td>2</td>
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<tr>
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<td>6</td>
<td>11</td>
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<td></td>
<td>1</td>
<td>3</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>pittari</td>
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<td>6</td>
<td>2</td>
<td>1</td>
<td></td>
<td>7</td>
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<td></td>
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<td></td>
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<tr>
<td>saku-saku</td>
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<td></td>
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<td>9</td>
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<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
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<td>3</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>wan-wan</td>
<td>4</td>
<td></td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

*Table 40: Syntactic distribution (interviews)*

The grammatical patterns in the examples provided by the study participants can be summed up as follows:
Mimetic adverbs

[MIM (+ to) + verb] → also used attributively as relative clauses

Mimetic nominal adjectives

[MIM + ni + verb/adjective] → resultative adverbial usage
[MIM + no + noun] attributive usage
[MIM + na + noun] attributive usage
[MIM + noun] predicative usage

Mimetic D-verbs

[MIM (+ to) + suru53]  

An overview and detailed explanation of the above constructions can be found in section 3.1.

If a participant did not come up with an example, wanted to skip a question or provided an example after another participant had commented on the content or grammaticality of an utterance, this was noted as no answer. If technical difficulties, background noise or the pronunciation of the participant interfered with the recording or transcription of utterances, this was marked as not recorded.

While the grammatical usage of mimetics in the interviews varied greatly depending on the expression and the native speaker, there were some very clear cases as well, such as doki-doki, as illustrated in Table 40. In all examples provided, doki-doki was used with suru, forming the idiomatic, predicate-like construction doki-doki suru ('to be excited', 'to be nervous', 'to have butterflies'). This is in line with the data collected from the JTT,

52 includes all forms of the copula (da, datta, desu, deshita, de, etc.)
53 includes all forms of the verb suru (shite, shita, shimasu, saseru, sareru, etc.)
which documented this particular grammatical usage in 77% of cases. Examples provided by the participants included the following:

(153) suteki na josei ni atte doki-doki shita  
      gorgeous KYDna woman DAT meet-GER MIM make-PAST  
      ‘When I met that gorgeous woman, I got butterflies.’

(154) ashita kekka happyō de doki-doki suru  
      tomorrow result speech COP-GER MIM make-PRS  
      ‘(I) have got to do (my) final presentation tomorrow,  
       so (I am) really nervous.’

(155) shinzō ga doki-doki suru  
      heart SBJ MIM make-PRS  
      ‘(My) heart is pounding.’

_Doki-doki suru_ was generally used to describe a feeling of excitement, with common collocations being _shinzō/kokoro_ (heart), _mune_ (chest) or _kanji_ (feeling), all of which were frequent collocations in the JTT as well. These findings raise the question whether _doki-doki suru_ may be considered a phrasal verb in the mental lexicon of Japanese native speakers, comparable to the examples provided by Tamori & Schourup (1999: 55, cf. section 2.4.4, page 62), such as _bata-bata suru_ (‘to flap’). However, an answer to this question cannot be provided at present due to the limited data set in this study.

The semantically related expressions _bara-barā_ and _boro-boro_ were predominantly used like nominal adjectives with the marker _ni_, as they often act as complements of verbs indicating change, e.g. _naru_ (‘to become’). Interestingly, _boro-boro_ was used in predicative function with the copula more frequently than _bara-barā_, as shown in Table 40. Participants often pointed to objects around them that were ‘scattered’ (_bara-barā_) or ‘broken’ (_boro-boro_), resulting in utterances such as the following, which were provided by a university librarian, who was fed up with students not putting books back into the right shelves.
It took a lot of effort to sort these books and now they are all over the place again.'

'(I am) exhausted and (my) body and mind are shattered.'

As it turned out, several of the younger participants under age 30 were avid readers of crime fiction, and correspondingly gave gory descriptions of body parts, as illustrated in examples (158) and (159).

'It is a murder case with dismembered bodies.'

'dismembered bodies / body parts all over the place'

The collocations *bara-barasatsujin* and *bara-barashitai* have developed idiomatic character due to their popularity in crime fiction and TV shows, which may explain the incidence of [bara-baranoun] constructions in both the JTT data and the interviews, although this grammatical pattern does not seem to extend to other collocations not related to crime.

Another very clear case is the mimetic *girari*, along with *fuwari*, both of which were judged as limited to written Japanese by most participants. Out of the 22 participants, 18 could not come up with a spontaneous example of their own without "sounding unnatural" and thus skipped the question. In the few instances that examples for *girari* and *fuwari* were provided, both expressions were used adverbially with *to*, as shown in examples (160) and (161).

'The feather is dancing/ floating softly.'
The eyes are glaring (menacingly).'

The phonologically and semantically related expressions funwari, fuwa-fuwa, kira-kira and kirari demonstrated a more flexible grammatical usage than fuwari and girari, as Table 41 illustrates.

<table>
<thead>
<tr>
<th></th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + sum</th>
<th>ni + verb</th>
<th>X + verb</th>
<th>X + iu</th>
<th>X + sum</th>
<th>no + noun</th>
<th>ni + noun</th>
<th>X + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>funwari</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td></td>
<td></td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>kira-kira</td>
<td>1</td>
<td></td>
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<td>11</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kirari</td>
<td>11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 41: Interview data for funwari, fuwa-fuwa, kira-kira and kirari*

Like fuwari and girari, funwari and kirari were predominantly used with the quotative particle to and the verb suru, as in examples (162) and (163).

(162) sentakugo no taoru wa funwari to shite iru  
*after.wash GEN towel TOP MIM QP make-GER be-PRS*  
‘Freshly washed towels are so fluffy.’

(163) kirari to shita kangae  
*MIM QP make-PAST idea*  
‘a bright idea’

Mimetics in the [MIM + to + suru] constructions as in example (163) may be interpreted as complements rather than adverbials and have also been analysed as mimetic D-verbs (Kindaichi 1950, Nagashima 1965, Hamano 1986/1998, cf. section 2.4.2).

One instance of attributive usage without any particles was recorded for funwari:

(164) funwari shifon kēki  
*MIM chiffon cake*  
‘soft chiffon cake’
In this case, the immediate environment might have influenced the grammatical usage of *funwari*, as the interview with P11 took place in a café, with other customers eating various types of cake. This also resulted in *fuwa-fuwa* being used attributively with *no*, as example (165) shows.

(165) fuwa-fuwa no kēki
    MIM GEN cake
    ‘soft/bouncy cake’

In contrast to *fuwari*, *funwari*, *girari* and *kirari*, the reduplicative forms *kira-kira* and *fuwa-fuwa* showed a markedly different syntactic distribution in the interviews compared to the corpus and survey data, both of which recorded predominantly adverbial usage.

<table>
<thead>
<tr>
<th></th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + sum</th>
<th>hi + verb</th>
<th>X + verb</th>
<th>X + iu</th>
<th>X + sum</th>
<th>no + noun</th>
<th>ha + noun</th>
<th>X + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>fuwa-fuwa</td>
<td></td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kira-kira</td>
<td>1</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 42: Interview data for fuwa-fuwa and kira-kira*

While not as clear-cut as *doki-doki*, both *fuwa-fuwa* and *kira-kira* were predominantly used with *suru* in the interviews, and in case of *kira-kira*, with verbs like *hikaru* and *kagayaku* (cf. section 3.3.7), without being marked by the quotative particle *to*[^54], as examples (166) and (167) demonstrate.

(166) hoshi ga kira-kira shite iru
    SBJ MIM make-GER be-PRS
    ‘The stars are sparkling.’

(167) nuigurumi wa fuwa-fuwa shiteru
    TOP MIM make-GER-be-PRS
    ‘The stuffed toy is really fluffy.’

[^54]: The omission of *to* may be a grammatical choice, but is also very common in colloquial Japanese. In addition, depending on the social status of the interviewee in relation to the researcher, a more or less formal speech register might have been chosen.
While not provided as spontaneous examples, several participants mentioned \([kira-kira + noun]\) collocations, such as \(kira-kira boshi\), the title of the popular song “Twinkle, twinkle little star”. P2 also reported seeing the catchphrase \(kira\,gami\) (‘shiny hair’) in commercials and on shampoo packaging.

The mimetics \(saku-saku\) and \(sara-sara\), which can frequently be found in commercials and on product packaging as well, showed a similar syntactic distribution in the interviews (Table 43).

<table>
<thead>
<tr>
<th></th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + sum</th>
<th>X + verb</th>
<th>X + iu</th>
<th>X + sum</th>
<th>no + noun</th>
<th>mm + noun</th>
<th>X + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>saku-saku</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sara-sara</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 43: Interview data for saku-saku and sara-sara

Participants often used \(saku-saku\) to describe the texture of food, while \(sara-sara\) depicts the flowing nature of water, sand or hair. Grammatically, again adverbial usage with \(suru\) was most common, although a few instances of attributive usage were recorded.

(168) \(saku-saku\) na \(kukkī\)  
\(\text{MIM}\) \(\text{KYDna}\) cookie  
‘a crispy cookie’  
\(\text{P15}\)

(169) \(sara-sara\) na \(kami\)  
\(\text{MIM}\) \(\text{KYDna}\) hair  
‘smooth hair’  
\(\text{P16}\)

Interestingly, irrespective of grammatical usage, the noun \(kukkī\) was the most frequently used lexical item in collocation with \(saku-saku\) by younger native speakers under 40, with ‘cookie’ being a relatively recent English loanword that may not be part of the vocabulary of the older generation. Participants of all age groups associated ‘hair’ and ‘skin’ with \(sara-sara\), which may be a reflection of the language used by the cosmetics industry, or vice versa.
The phonomimes in this data set – *patan, wan-wan* and *zā-zā* – were almost exclusively used as adverbs, providing further evidence for the hypothesis that phonomimes are less lexicalised than phenomenomes and psychomimes, and thus limited in their syntactic roles (cf. Tamori and Schourup 1999; Flyxe 2002; Akita 2013a, among others).

<table>
<thead>
<tr>
<th></th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + suru</th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + suru</th>
<th>iu + verb</th>
<th>iu + suru</th>
<th>iu + noun</th>
<th>na + noun</th>
<th>iu + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>patan</em></td>
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<td>1</td>
<td></td>
<td></td>
<td></td>
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<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>wan-wan</em></td>
<td>4</td>
<td>8</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>zā-zā</em></td>
<td>7</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Table 44: Interview data for *patan, wan-wan* and *zā-zā*

In addition, *wan-wan* and *zā-zā* are very limited in their collocations, as these expressions are almost exclusively used to describe a barking dog/a wailing person and pouring rain, respectively.

(170) *INU ga wan-wan naku* \[ P12 \]
dog SBJ MIM cry-PRS
‘The dog is making woof-woof.’

(171) *AME ga zā-zā furu* \[ P2 \]
rain SBJ MIM fall-PRS
‘The rain is pouring down.’

This stands in contrast to common expressions like *hakkiri* and *pittari*, which are often tagged as adverbials by standard monolingual dictionaries (see section 3.3.6) and were not recognised as mimetics by most study participants, with the exception of P11 and P12, who made the connection to *haki-haki* after wondering about the origins of *hakkiri*. Both mimetics demonstrated a wider range of syntactic roles compared to the phonomimes in this data set (cf. Table 45).
Table 45: Interview data for hakkiri and pittari

<table>
<thead>
<tr>
<th></th>
<th>to + verb</th>
<th>to + iu</th>
<th>to + suru</th>
<th>ni + verb</th>
<th>X + verb</th>
<th>X + iu</th>
<th>X + suru</th>
<th>no + noun</th>
<th>na + noun</th>
<th>X + noun</th>
<th>copula</th>
<th>no answer</th>
<th>not recorded</th>
<th>total</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>5</td>
<td>11</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>17</td>
</tr>
<tr>
<td>pittari</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

One instance of attributive usage with no was recorded for pittari, as example (172) shows.

(172) pittari no hyōgen da

MIM GEN expression COP-PRS
‘It is a fitting expression.’

In general however, attributive usage with no or na was very rare, even for highly lexicalised mimetic expressions. For this reason, it is not possible to comment on the alternation between the genitive marker no and the linker na on the basis of the interview data, while certain trends were identified in the corpus analysis and online survey in sections 3.4 and 4.4, respectively. These trends will thus be summarised and evaluated in chapter 6.

In terms of single vs. reduplicative forms, the interview data confirmed that reduplicative forms that are not phonomimes are indeed more likely to adopt a wider range of syntactic roles. Gan-gan and doki-doki seem to break with this trend at first glance, however taking into account that they possess both phonomimetic and phenomimetic characteristics depending on the context, they may occupy a different place in the mental lexicon of Japanese native speakers. Pata-pata is a borderline case, with a wider syntactic distribution than other phonomimes, which may be due to the mimetic being a very commonly used expression in daily life, leading to a higher degree of lexicalisation.

Based on the findings presented in this section, the following categories of mimetics in this data set may be established:
A) Limited syntactic distribution, predominantly adverbial usage

- phonomimes
- single forms with a low degree of lexicalisation\textsuperscript{55}

= fuwari/funwari (‘fluffy, soft’), kirari (‘flash’), girari (‘bright flash’), patan (‘knock’), wan-wan (‘woof-woof’), zā-zā (‘pouring (rain)’)

B) Wider syntactic distribution, predicate-like usage with occasional instances of attributive usage with no/na

- phonomimes
- reduplicative mimetics with a high degree of lexicalisation

= bara-baru (‘scattered’), boro-boro (‘crumbling’), fuwa-fuwa (‘fluffy, soft’), kira-kira (‘flashing’), saku-saku (‘crispy’), sara-sara (‘smooth, flowing’)

These preliminary categories will be reevaluated in chapter 6, which summarises and contrasts the findings of the dictionary analysis, corpus study, online survey and interviews.

\textsuperscript{55} based on the average frequency of usage in the JTT
6 THE CHANGING GRAMMATICAL USAGE OF MIMETICS IN JAPANESE

The aim of this thesis is to give an overview of the contemporary grammatical usage of Japanese mimetics, define criteria for their restrictive usage in different contexts and trace a possible language change in recent years. The following five research questions, presented in section 1.1, acted as the pillars of this empirical study:

(I) What is the syntactic distribution of mimetics in various speech registers?

(II) Do the morphological or semantic characteristics of individual mimetics or groups of mimetics influence their grammatical usage?

(III) Are there any extra-linguistic factors that may influence the grammatical usage of mimetics?

(IV) Has the grammatical usage of mimetics undergone any change in recent years? Is this change universal or limited to certain populations?

(V) Taking the findings from (I)-(IV) into account, can mimetics in Japanese be categorised as a separate part of speech?

In order to answer these questions, data was collected from a selection of seven dictionaries, a web-based corpus, an online survey and interviews with native speakers. In the course of this analysis, it became clear that a multitude of factors may influence the grammatical usage of mimetics in Japanese.

This research study began with a contrastive literature review of the grammatical usage and typology of mimetics in Japanese and ideophones in general, which revealed an ongoing linguistic debate with discrepancies and
gaps in previous research, while also offering exciting opportunities for further studies. Taking into account all scholarly perspectives presented in this literature review, the following preliminary definition of mimetics was established:

**Japanese mimetics are expressions that trigger an emotional response, often described as a ‘feeling of vividness’ by native speakers, who are culturally conditioned to perceive an iconic relationship between form and meaning. All mimetic expressions in Japanese can function as adverbs and may be used in combination with the quotative particle to.**

This working definition provided the theoretical framework for all further investigation. Due to the large amount of mimetics in Japanese, a representative set of 20 expressions was chosen as the basis for four separate studies.

A comparison of data collected from a set of seven dictionaries marked the beginning of this research project and revealed discrepancies in types of usage that were deemed grammatical and the categorisation of mimetics as different parts of speech depending on the dictionary and its data sources. While older dictionaries, such as Hepburn’s 1888 Japanese-English dictionary, rarely listed mimetics to begin with, traditional monolingual dictionaries like the *Nihon Kokugo Daijiten* gradually evolved from quoting mimetics from literary sources only to including more recent colloquial usage with the digitalisation of the dictionary in the year 2000. Dictionaries specialising on mimetics, such as the *Dictionary of Iconic Expressions in Japanese* (1996), also took a more conservative approach, while learners’ dictionaries and textbooks often focused on the most common usage of mimetics as adverbs or simply presented them as exclamations without any grammatical context. The dictionary comparison illustrated the lack of consensus on the syntactic roles and typology of mimetics, with the exception of adverbial usage, which all seven dictionaries consider possible for all mimetics (also see Hamano 1998).

The results of this dictionary analysis were then contrasted with data collected from the *jpTenTen* webcrawler corpus, which featured a broader range of sources. By observing the syntactical distribution of the set of 20
mimetics in the JTT, several grammatical tendencies were identified, which resulted in the following preliminary hypotheses:

I.) **Semantic type:**
Phonomimes are predominantly used as adverbs, whereas phenomimes and psychomimes may be used as nominal adjectives in attributive position marked by *no* or *na*.

II.) **Morphological characteristics:**
Reduplicative forms are more likely to occur in attributive position with *no* or *na* than single forms ending in /RI/ or /N/.

In addition to these findings, the following research questions were identified in the course of the dictionary and corpus analysis:

**FREQUENCY OF USAGE:**
Are mimetics commonly used in every-day conversations more likely to take on other syntactic roles?

**MEDIA EXPOSURE:**
Could the exposure to mimetics in various media influence the grammatical categorisation of mimetics in the mental lexicon of native speakers?

With attributive usage of mimetics in particular being a topic of debate and yielding contradictory results depending on the data source, an online survey with native speakers was chosen as the next step of this analysis. The answers provided by 159 participants only partially confirmed the findings of the corpus study, but managed to highlight possible sociolinguistic factors such as age and gender, which might influence the grammatical usage of mimetics in conjunction with their morphological and syntactic characteristics.

In order to put these four preliminary hypotheses to the test, interviews with 22 native speakers were conducted in Japan. The syntactic distribution of mimetics in the examples provided by the participants was comparable to the results of the corpus study, with the exception of attributive usage, which was less frequent in the interviews. On the basis of these findings, two different groups of mimetics in this data set were identified:
Group A:
Limited syntactic distribution, predominantly adverbial usage
- phonomimes
- single forms with a low degree of lexicalisation

Group B:
Wider syntactic distribution, predicate-like usage with occasional instances of attributive usage
- phenomimes and psychomimes
- reduplicative mimetics with a high degree of lexicalisation

It was also discovered that mimetics which share linguistic features of both groups A and B may not neatly fit into either category, which especially concerns mimetic expressions that cannot be straightforwardly classified as either phonomimes or phenomimes/psychomimes and may thus occupy a different place in the mental lexicon of Japanese native speakers. In terms of sociolinguistic factors as a possible influence on the grammatical usage of mimetics, the interviews provided some limited evidence for an age and gender bias. The popularity of mimetics such as *kira-kira* (‘sparkling’), *sara-sara* (‘smooth’) and *fuwa-fuwa* (‘fluffy’) in various media was proposed as an additional element that may potentially influence their grammar.

It was found that various external factors may have triggered a shift in the grammatical usage of certain mimetics, which may still be in its early days, but could potentially change the grammatical usage of mimetics in Japanese in the near future. The following sections will summarise and contrast the core findings of all empirical studies (section 6.1.1-4), discuss their implications for the grammar and typology of mimetics in Japanese (section 6.2), and identify further research opportunities (section 6.3).

6.1 FINDINGS

As shown in sections 3.4 and 4.3, the corpus and survey data revealed that all 20 mimetics included in the data set (Table 46) were predominantly used
as mimetic adverbs and mimetic D-verbs in attributive function. This is in line with the reviewed literature and all dictionaries consulted for this study.

<table>
<thead>
<tr>
<th>MIMETIC</th>
<th>SEMANTIC TYPE</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>bara-barabar</td>
<td>PHO/PHE</td>
<td>scattered; various</td>
</tr>
<tr>
<td>boro-boro</td>
<td>PHE/PSY</td>
<td>crumbling; falling apart</td>
</tr>
<tr>
<td>doki-doki</td>
<td>PHO/PHE/PSY</td>
<td>pounding (heart)</td>
</tr>
<tr>
<td>funwarir</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>fuwari</td>
<td>PHE</td>
<td>fluffy; soft; floating</td>
</tr>
<tr>
<td>gan-gan</td>
<td>PHO/PHE/PSY</td>
<td>pounding pain (head)</td>
</tr>
<tr>
<td>girari</td>
<td>PHE</td>
<td>a bright flash of light</td>
</tr>
<tr>
<td>hakkiri</td>
<td>PHE</td>
<td>clear</td>
</tr>
<tr>
<td>kira-kira</td>
<td>PHE</td>
<td>flashing; sparkling</td>
</tr>
<tr>
<td>kirari</td>
<td>PHE</td>
<td>a flash of light</td>
</tr>
<tr>
<td>nikkori</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>niko-niko</td>
<td>PHE</td>
<td>smiling brightly</td>
</tr>
<tr>
<td>patan</td>
<td>PHO</td>
<td>a slam or knock</td>
</tr>
<tr>
<td>pata-pata</td>
<td>PHO</td>
<td>knocking; pitter-patter</td>
</tr>
<tr>
<td>pittari</td>
<td>PHE</td>
<td>perfect; fitting</td>
</tr>
<tr>
<td>saku-saku</td>
<td>PHO/PHE</td>
<td>crispy; crunchy</td>
</tr>
<tr>
<td>sara-sara</td>
<td>PHO/PHE</td>
<td>smooth; flowing</td>
</tr>
<tr>
<td>wan-wan</td>
<td>PHO</td>
<td>barking; bow-wow</td>
</tr>
<tr>
<td>zā-zā</td>
<td>PHO</td>
<td>pouring (rain, waterfall)</td>
</tr>
</tbody>
</table>

Table 46: Set of mimetics investigated in all empirical studies

However, when it came to nominal adjective-like usage with the genitive marker no or the linker na in the corpus and survey data, only a subset of mimetics were used attributively in a statistically relevant number of utterances (>5%).

In contrast, participants producing spontaneous utterances in the interviews only rarely selected examples with no/na, or no marker at all, and those were usually limited to idioms like bara-barabar (no) satsujin (‘a murder case with dismembered bodies’), a popular expression in crime fiction. The immediate environment may have also played a role in terms of items available for description and events happening in the background, e.g. fuwa-fuwa no kēki (‘a bouncy cake’) in a café vs. shorin ga bara-barabar ni natte shimatta (‘The books are all over the place now!’) in a library. For this reason, the interviews could not provide enough evidence for the previously posed hypotheses on morphological and semantic factors influencing
attributive usage. In addition, with only 22 interview participants and the nature of the task being the spontaneous production of utterances containing a mimetic, it is not possible to derive quantitative data from this study. For these reasons, the interview results will be excluded from any statistical evaluation in this chapter. Figures 39 and 40 illustrate the relative percentage of attributive usage with no and na in the JTT corpus and the online survey respectively.

**Figure 39: Attributive usage with no/na in the JTT**

**Corpus data**

- pittari (31%)
- fuwa-fuwa (19%)
- bara-bar (17%)
- boro-boro, hakkiri (15%)
- sara-sara (13%)
- kira-kira, saku-saku (6%)
- doki-doki (4%)
- niko-niko, zā-zā (3%)
- kirari, wan-wan (2%)
- gan-gan, girari, funwari, fuwari, nikkori, patan, pata-pata (<1%)

**Survey data**

- bara-bar (99%)
- pittari (97%)
- boro-boro (94%)
- sara-sara (56%)
- saku-saku (50%)
- fuwa-fuwa (11%)
- kira-kira (7%)
- niko-niko (3%)
- zā-zā (2%)
- doki-doki, fuwari, nikkori (<1%)
  [funwari, gan-gan, girari, hakkiri, kirari, patan, pata-pata, wan-wan]

*Figure 40: Attributive usage with no/na in the online survey*
Survey participants who skipped a question and did not provide any answer at all (rather than selecting ‘other’) have not been included in the total amount of answers given. It is of course important to note that the corpus study looked at all attested grammatical usages, while the survey participants were faced with a prenominal fill in the blank task [MIM + ? + N] and their answers may have been influenced by frequent collocations and idiomatic usage. For this reason, a direct comparison of frequencies is not possible, however general trends can be observed. Possible semantic and morphological triggers will be reviewed in the following section.

6.1.1 Morphological and semantic characteristics

The set of 20 mimetics chosen for this analysis contained 12 reduplicative forms and 8 single mimetics, of which 7 were marked by the suffix /RI/ and one by /NI/, cf. Table 46. According to the corpus data, 8 mimetics were used attributively with no/na in over 5% of cases, 6 of which were reduplicative forms: fuwa-fuwa, kira-kira, bara-barâ, boro-boro, hakkiri, pittari, saku-saku and sara-sara. With the exception of hakkiri, participants in the online survey selected the same subset of mimetics for attributive usage with no/na in over 5% of utterances. As stated before, frequencies are not directly comparable due to the nature of the fill-in-the blank task with [MIM + ? + N] constructions in the survey, but the general trend towards attributive usage with no/na for individual mimetics or mimetic + noun combinations is worth exploring further.

It is immediately apparent that the majority of mimetics used attributively with no/na in both data sets are reduplicative forms. Pittari - and hakkiri in the corpus data – are single mimetics, but lexicalised, i.e. conventionalised, to a degree that most of the standard dictionaries such as the NKD and DJS list both expressions as regular adverbs. Only the DIE and the ED2 refer to their mimetic origins and reduplicative forms pita-pita and haki-haki. They may thus be treated differently from true mimetics in the mental lexicon of Japanese native speakers.
Interestingly, there are also several reduplicative mimetics in this set which were only rarely used like nominal adjectives in either study, if at all: *doki-doki*, *gan-gan*, *niko-niko*, *pata-pata*, *wan-wan* and *zā-zā*. *Pata-pata* (‘knocking’), *wan-wan* (‘woof-woof’) and *zā-zā* (‘sound of heavy rain’) are pure phonomimes which according to Tamori and Schourup (1999), Flyxe (2002) and Akita (2013a) show a higher degree of iconicity and a lower degree of lexicalisation than phenomines and phonomimes. This may account for their more limited syntactic distribution compared to the mimetics listed in Figure 40, which are predominantly phenomimes and psychomimes (cf. Table 46).

*Doki-doki* (‘pounding heart’) and *gan-gan* (‘pounding pain’) are mixed cases which may describe feelings like excitement and pain, but also physical pounding and in the case of *gan-gan*, brisk walking. While it was not possible to filter different semantic interpretations in the corpus study due to the large size of the webcrawler corpus, the fill-in-the blank task in the survey was more specific. *Doki-doki* modified the noun *oto* (‘sound’), turning it into a phononime, while *gan-gan* modified the noun *itami* (‘pain’), leading to a psychomimetic interpretation. Nevertheless, neither data set provided a significant number of attributive constructions with *no/na*, with adverbial usage and mimetic D-verbs with the light verb *suru* (‘to make/do’) being the most frequently attested grammatical usages. It can only be hypothesised that these expressions are not clearly defined as phono-, pheno- or psychomimes in the mental lexicon of native speakers and may thus belong to several semantic classes simultaneously. In addition, external factors such as the popularity of some mimetics in TV shows and graphic novels may come into play as well, with e.g. *doki-doki* being very popular in manga (Occhi 1999).

*Niko-niko* (‘smiling’), just as the single form *nikkori*, was also rarely used attributively with *no/na* in both data sets. As discussed in section 2.4.1, Japanese has a smaller set of verbs in comparison with English (Komatsu et al. 1993, Flyxe 2002) and many verbs are semantically underdifferentiated (Hirose 1981, Hamano 1998). *Niko-niko* narrows the semantic range of the verb *warau* (‘to laugh’) to ‘to smile’ and is also frequently used as a mimetic verb with the light verb *suru*. While some instances of attributive
usage with *no/na* have been documented in the corpus (cf. Figure 39) and idiomatic expressions such as *niko-niko egau* (‘a smiley face’) exist, the main purpose of this mimetic seems to be the differentiation of the verb *warau* and it is thus not surprising that it is rarely used as a nominal adjective despite its reduplicative form.

When comparing pairs of mimetics such as *fuwa-fuwa* vs. *funwari/fuwari* (‘fluffy; soft; floating’) and *kira-kira* vs. *kirari* (‘flashing light’) the hypothesis that reduplicative forms are more likely to be used attributively with *no/na* seems to hold as well, as neither *funwari/fuwari* nor *kirari* were used like nominal adjectives in a significant amount of cases in either study. On the other hand, *pata-pata* and *patan* were rarely used with *no/na*, but these expressions are phonomimes and their relatively higher degree of iconicity may come into play here. Another factor to take into account in further studies is the difference in meaning between reduplicative and single forms. As discussed in section 2.3.2, reduplicative mimetics tend to imply repetitive or continuous actions/events, while single forms represent single actions, e.g. *kira-kira* often being translated as flashing or sparkling, while *kirari* describes a single flash.

No striking difference was found between the pair *kirari* and *girari*, with *girari* having a more negative connotation of a glaring flash, as voiced consonants often imply a stronger or louder sensation or sound (e.g. *hyū-hyū* – ‘the sound of blowing wind’ vs. *byū-byū* – ‘the sound of howling wind’).

Similarly, no difference in grammatical usage between single forms with the suffix /RI/ vs. /N/ was found, despite all mimetics ending in /RI/ being phonomimes, while the only mimetic ending in /N/, *patan*, is a phonomime. However, this finding may be a coincidence and a larger set of mimetics needs to be contrasted to pose any hypotheses on the semantic characteristics of single forms.

Based on the above findings, the hypotheses on reduplication and semantic classification influencing the grammatical usage seem to run true, at least for this small set of mimetics. The following sections will discuss additional factors that may influence the syntactic distribution of mimetics in Japanese and propose opportunities for further research.
6.1.2 Frequency of usage

The corpus analysis presented in sections 3.3 and 3.4 identified several mimetics with a comparatively high incidence of nominal adjective-like usage, such as *bara-bar* ('scattered'), *boro-boro* ('crumbling'), *fuwa-fuwa* ('fluffy'), *hakkiri* ('clear') and *pittari* ('perfect'). These mimetics also happened to be among the most frequently attested expressions in the JTT corpus. However, the analysis in chapter 3 did not take into account the survey results presented in chapter 4, which are essential to test the preliminary hypothesis that frequency of usage may correlate with a wider syntactic distribution. As stated before, a direct statistical comparison is not possible due to the restrictions of the online survey, but general trends can be observed. Table 47 contrasts attributive usage with *no/na* in the corpus and survey data compared to the total number of hits in the corpus. This also includes the category marked as ‘misc.’ in the corpus analysis, which was primarily made up of mimetics without any grammatical markers and spontaneous exclamations (compare Table 29 on page 126).

<table>
<thead>
<tr>
<th>Ranked by frequency from high to low</th>
<th>[MIM + no/na + N] - corpus -</th>
<th>[MIM + no/na + N] - survey -</th>
</tr>
</thead>
<tbody>
<tr>
<td>hakkiri</td>
<td>15%</td>
<td>N/A</td>
</tr>
<tr>
<td>pittari</td>
<td>31%</td>
<td>97%</td>
</tr>
<tr>
<td>doki-doki</td>
<td>4%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>kira-kira</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>niko-niko</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>gan-gan</td>
<td>&lt;1%</td>
<td>N/A</td>
</tr>
<tr>
<td>bara-bar</td>
<td>17%</td>
<td>99%</td>
</tr>
<tr>
<td>fuwa-fuwa</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>boro-boro</td>
<td>15%</td>
<td>94%</td>
</tr>
<tr>
<td>sara-sara</td>
<td>13%</td>
<td>56%</td>
</tr>
<tr>
<td>funwari</td>
<td>&lt;1%</td>
<td>N/A</td>
</tr>
<tr>
<td>saku-saku</td>
<td>6%</td>
<td>50%</td>
</tr>
<tr>
<td>nikkori</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>kirari</td>
<td>2%</td>
<td>N/A</td>
</tr>
<tr>
<td>fuwari</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>wan-wan</td>
<td>2%</td>
<td>N/A</td>
</tr>
<tr>
<td>pata-pata</td>
<td>&lt;1%</td>
<td>N/A</td>
</tr>
<tr>
<td>z chú-z chú</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>girari</td>
<td>&lt;1%</td>
<td>N/A</td>
</tr>
<tr>
<td>patan</td>
<td>&lt;1%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Table 47: Attributive usage with no/na vs. total frequency in corpus data*
As Table 47 shows, frequently used mimetics such as *bara-bar* a, *boro-boro*, *pittari*, *fuwa-fuwa* and *kira-kira* were also used with *no/na* in a significant number of cases in both the corpus and survey data. However, while the mimetics *doki-doki*, *gan-gan* and *niko-niko* also rank highly in terms of frequency, they are rarely used as nominal adjectives. This may be due to their semantic classification and scope, as discussed in the previous section.

Interestingly, most non-reduplicative mimetics and phonomimes are not only less likely to be used attributively with *no/na*, but they are also found in the bottom half of the frequency ranking. The exceptions here are again *hakkiri* and *pittari*, which are not tagged as mimetics (anymore) in most dictionaries. Phonomimes ranking lower in terms of frequency in the corpus may be due to their comparatively higher degree of iconicity and lower degree of lexicalisation (cf. Tamori & Schourup 1999, Akita 2013a).

Being a webcrawler corpus, the JTT includes transcriptions of spoken utterances, e.g. from newspaper interviews, but a large speech-based corpus may yield more examples of phonomimes and thus more conclusive results.

The mimetic *saku-saku* (‘crispy’) seems to break the general trend as a reduplicative form with attested nominal adjective-like usage in both data sets while being in the bottom half of the total frequency ranking. This may be explained by its comparatively limited range of contextual uses: *saku-saku* describes the texture of food and is commonly used in food reviews, recipes and cooking shows, with the latter not being included in the webcrawler corpus. Mimetics such as *bara-bar* a (‘scattered’) have a much broader denotation and can describe a variety of items, events and entities, ranging from papers scattered on a desk to dismembered bodies after a murder spree (cf. section 3.3.1). This wider semantic range may explain the comparatively high frequency in the corpus data.

Summing up, there seems to be a general trend of attributive usage with *no/na* for mimetics frequently attested in the corpus data. However, other factors such as the size of the set of 20 mimetics, the limitations of the webcrawler corpus and the semantic range of individual mimetics need to be taken into account as well. The results of this small study may thus serve as a starting point for a more in-depth analysis with a larger and more varied data set.
6.1.3 Sociolinguistic factors and the media

The participants of the online survey and interviews were asked to provide personal data such as age, gender, dialect and occupation in order to gain insights into any sociolinguistic factors that may affect the grammatical usage of mimetics. While no significant differences were found concerning dialect and occupation, age and gender seemed to play a role in the attributive usage of a few select mimetics, namely *kira-kira* (‘sparkling’) and *fuwa-fuwa* (‘fluffy’). An analysis of the answers provided showed that 8 women vs. 3 men used *kira-kira* with *no/na*, while 11 women and 5 men used *fuwa-fuwa* with *no/na* (section 4.3, figures 35-37). Women up to their 40s made up the majority of this sub-group. Attributive usage with mimetic D-verbs on the other hand did not show any age or gender bias for any of the 20 mimetics in this data set. While only two instances of a gender bias could be identified, sociolinguistic factors and their influence on the grammatical usage of mimetics are certainly worth exploring further.

The comparatively broad semantic range and popularity of the mimetics *kira-kira* and *fuwa-fuwa* may also come into play here. Sparkly and fluffy things may be stereotypically associated with young women and as discussed in section 3.4, *kira-kira* is often found in advertisements by the cosmetic industry which specifically targets young women. The usage of mimetics in advertisements often differs markedly from the usage attested in dictionaries, which may be due to time and space constraints favouring short attributive constructions. This may result in unusual grammatical patterns and neologisms making their way into the mental lexicon of certain target groups. The very bouncy *fuwa-fuwa donatsu* by the Japanese convenience store chain Family Mart are one example of short attributive usage vs. [*fuwa-fuwa shita donatsu*].

Participants in the interviews mentioned similar cases. P2 (23 years old, female) reported having seen the compound noun *kiragami* (‘shiny hair’) in adverts and on posters in a local beauty salon. This was much to the surprise and disagreement of her interview partner P1 (23 years old, male). P4 (20, male) on the other hand reported seeing *girari* in boys’ manga, where it often describes a gleaming sword, while P3 (20, female) found the mimetic
very unusual and would not use it in a conversation. While this is only anecdotal evidence, it hints at a possible gender bias for some mimetics and could be investigated further in interviews with a larger number of native speakers for a quantitative rather than qualitative analysis.

Other mimetics in this set which are popular in advertisements included sara-sara (‘smooth; flowing’) and saku-saku (‘crispy’). Both were used attributively with no/na in the corpus and survey data, while no instances of attributive usage with saku-saku were recorded in the interviews, likely due to the small number of participants and the nature of the task. Neither mimetic showed a gender bias when used attributively with no/na, which may be explained by their denotation. While sara-sara is used in the cosmetic industry to describe smooth hair and skin (cf. section 3.3.11), it may also be used to describe flowing water and is a very common mimetic in general (see previous section). Saku-saku often appears in cooking shows, which are one of the most popular programmes in Japan in all gender and age groups\(^56\).

In conclusion, this study could only provide limited evidence for the influence of sociolinguistic factors and the usage of mimetics in various media on the grammatical categorisation of these expressions in the mental lexicon of Japanese native speakers. But despite its limitations, this study is one of the first taking sociolinguistic factors into account at all and will hopefully encourage more research in this area.

6.1.4 The alternation between no and na

An incidental finding of this study which was not anticipated in its original aim and scope is the alternation between no and na in attributive constructions. The initial findings from the corpus study seemed to confirm Hamano’s (1986/1998) impression that mimetics are more frequently used with no rather than na, while the opposite is true for non-mimetic nominal adjectives. Uehara (2003) observed differences in interpretation for non-\(^56\) Compare Aoyama (1999) and Stalker (2016) for a more detailed discussion of food and gender in various media.
mimetic nominal adjectives, with the genitive marker no often being translated as ‘N of N’ in English, while attributive constructions with the linker na are interpreted as ‘ADJ N’. However, Uehara also acknowledged semantic “fuzziness” in many cases (p. 371) and concluded that nominal adjectives are a prototype category based on diachronic data (p. 398).

The corpus study did largely confirm that mimetics are more likely to take no than na. However, bara-bara (‘scattered’) was predominantly used with na in attributive position in both the corpus and the survey data (compare tables 29 and 37). In contrast, survey participants selected na over no for sara-sara (‘smooth; flowing’) and pittari (‘perfectly’). The interview data did not provide enough examples for nominal adjective-like usage to allow for a quantitative analysis.

It is surprising that even with a fill-in-the blank task as in the online survey participants disagreed on the preferred choice of a [MIM + ? + N] construction in a fixed semantic and syntactic environment. This raises the question whether native speakers are aware of the syntactic differences between attributive constructions with no vs. na and whether the choice may just correspond to personal preferences in combination with extra-linguistic factors such as the usage of a mimetic in popular media. However, an answer to this question would have to be based on an empirical study specifically targeting the alternation between no and na in mimetics vs. non-mimetic nominal adjectives.

6.2 IMPLICATIONS

The findings of this research study raise several questions concerning the grammatical usage and typology of mimetics in Japanese. While early attempts to categorise mimetics as either adverbs, nominal adjectives and verbs (cf. Hamano 1986/1998, Kita 1997) provided linguists with a working model for further research, the findings of this study indicated a more fluid classification within the mental lexicon of Japanese native speakers. More recent publications such as Tsujimura’s (2017) intriguing paper on the
grammatical usage of mimetics in poetry have also advocated for a more flexible approach.

Japanese dictionary makers approach the question of parts of speech from various different angles. The makers of the *Nihon Kokugo Daititen* (2000) have “solved” the problem by listing mimetics as various parts of speech, such as adverbs, nominal adjectives, verbs and rarely nouns, with example sentences provided under each header. *The Dictionary of Iconic Expressions* (1996), on the other hand, does not attempt to assign parts of speech to mimetics to begin with and rather categorises them based on their semantic type (sound vs. manner), with different grammatical patterns (e.g. [mimetic + *ni]*) listed for each. This often leads to confusion among learners of Japanese and may constitute an obstacle to efficient language learning. This small study, among many other larger studies published in recent years, will hopefully serve as a motivation for dictionary and textbook editors to consider different approaches to improve the learning experience of learners of Japanese. As discussed in the introduction of this thesis, existing usage guides for L2 learners also mainly focus on the most commonly attested adverbial usage or isolated mimetics used as exclamations. This covers the very basics, but does not illustrate the actual syntactic distribution of mimetics, especially in spoken language. By introducing learners to the whole range of possible grammatical functions, effective language learning and achieving near-native level fluency could be facilitated. In addition, more studies following Nakaishi et al. (2014) and Iwasaki (2016) are needed to determine if an L1 specific approach may be worth considering in the development of learning materials.

The lexicalisation of mimetics is another topic of debate, with Tamori & Schourup (1999), Flyxe (2002) and Akita (2013a) promoting an inverse relationship between the degree of iconicity of mimetics and their degree of lexicalisation, i.e. conventionalisation, with phonomimes being considered as the most iconic expressions. This view is challenged by Toratani (2015), who convincingly argues that this model has its limitations and does not apply to all mimetics in all syntactic and semantic contexts. This thesis has found evidence for both sides of this debate, by identifying several tendencies in the grammatical usage of a small set of mimetics, while also
noting exceptions that do not fit into the narrow confines of a semantic classification model based on the degree of iconicity. The results of the empirical studies presented in the literature reviewed in this paper seem to vary greatly depending on the choice of mimetics and data source. While each study contributes further material to the linguistic discourse on the grammar of mimetics in Japanese, the question of parts of speech membership may only be answered by combining these research efforts and sharing empirically collected data from a multitude of sources. Possible starting points for further research on semantic factors will be suggested in section 6.3.

While the results and scope of this thesis do not allow for generalisations on the grammar and part of speech membership of mimetics in Japanese, I would like to propose a more flexible approach to the categorisation of mimetics as parts of speech. While assigning mimetics the part of speech membership corresponding to their grammatical usage in a particular context is a valid theoretical approach, less frequent usages (i.e. non-adverbial) and non-literary sources are often not fully represented in practice. With sociolinguistic factors and popular media possibly having an impact on the grammatical usage of mimetics by certain groups of native speakers, further research in this area could provide dictionary makers with evidence for including certain grammatical patterns, but marking them as e.g. colloquial, dialect or sociolect to better reflect the diverse usage of mimetics in Japanese.

6.3 FURTHER RESEARCH

Mimetics in Japanese have been a topic of great interest in recent linguistic discourse, which has given rise to a debate on their grammatical usage. The aim of this thesis was to contribute further material to the general discussion of the grammar of mimetics by collecting data from dictionaries, corpora and empirical studies. While this contrastive analysis identified a multitude of factors that might influence the grammatical usage of mimetics, not all research avenues could be pursued due to the limited data set and scope of
this thesis. This section will discuss further research opportunities, which may shed light on the grammatical usage of mimetics in Japanese.

The lexicalisation of mimetics (cf. section 2.1.1) has been a topic of great interest in recent years, cf. Tamori & Schourup (1999), Flyxe (2002) and Akita (2013a). One possible indicator of the degree of lexicalisation of a mimetic that was briefly mentioned in this thesis is the choice of script, namely Hiragana (used for native Japanese words) or Katakana (used for loanwords and emphasis). As the *jpTenTen* corpus could not reliably distinguish mimetics written in the two scripts, it was not possible to investigate correlations between the grammatical usage of a mimetic and its visual appearance. As individual preferences may also play a role, an empirical study on the usage of Hiragana and Katakana in utterances containing mimetics may be a further topic to explore, for instance in the form of a handwritten survey, which prompts participants to produce example sentences using a preselected set of mimetics.

In this respect, the ‘iconicity’ of mimetics described by many 20th century authors has also been questioned by more recent studies such as Dingemanse et al. (2016) who propose that ideophones combine arbitrariness and iconicity in varying proportions. In terms of the perception of mimetics in general and their place in the mental lexicon, neuroimaging studies as conducted by Lockwood and Tuomainen (2015) have created exciting new research possibilities in the field of psycho- and neurolinguistics. As discussed in section 2.1, the authors’ ERP investigations showed a marked increase of the P2 wave in response to ideophones vs. arbitrary adverbs. This may be linked to the often described but not quantifiable feeling of “vividness” when hearing mimetic expressions. This is especially intriguing in the context of synaesthesia, a rare variety of sensory processing in humans, which has been linked to the acquisition of iconic language (Cuskley and Kirby 2013, among others). In

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57 *Event-related potentials*: “EEG changes that are time locked to sensory, motor or cognitive events that provide safe and noninvasive approach to study psychophysiological correlates of mental processes.” (Sur and Sinha 2009)

58 *P2 waveform*: “The positive deflection peaking around 100-250 msec after the stimulus.” (Sur and Sinha 2009)

59 Synaesthesia is found in a small percentage of the general population who “report extraordinary sensations of colours, tastes, shapes, eating” when exposed to a variety of sensory stimuli (Simner 2012: 1-2).
order to investigate the “iconicity” of mimetics vs. their degree of
textualisation, grammatical judgement tasks could be undertaken while
fMRI imaging is performed to contrast P2 wave levels in response to
mimetics vs. non-mimetic parts of speech in identical syntactic
environments. This may offer a glimpse into the mental lexicon of
individual native speakers and provide further material for the general
debate on the grammar and typology of mimetics in Japanese.

One interesting observation from the interviews with native speakers
which did not fall within the scope of this thesis was related to prosody. In
instances when particles and markers were omitted in adverbial
constructions and mimetic D-verbs, e.g. [N + ga + MIM + verb], some
speakers stressed the mimetic, while others took a short break (0.2-0.5 sec.)
inbetween the mimetic and the verb, or both. As participants were prompted
to produce spontaneous utterances with a given mimetic, this is not
comparable to a naturally flowing conversation and some speakers might
have stressed the mimetic expression (un)intentionally. Nevertheless, it is
worth investigating whether the classification of a mimetic in the mental
lexicon of native speakers may manifest itself in different prosody and
provide answers as to whether individual [MIM + verb] combinations are
fully idiomaticised as verbs. Spoken corpora and transcriptions of
spontaneous utterances, e.g. on TV shows, could replace interviews in this
case.

While this study did not find any evidence for variation in the
grammatical usage of mimetics between Japanese dialects, phonological and
morphological characteristics of mimetics in various dialects have been
researched by authors such as Kawahara (2006) and Hamano (2008). As the
phonological and morphological structure of the mimetics investigated in
this thesis has been shown to influence their grammatical usage in certain
contexts, it would be interesting to explore and directly contrast dialectal
varieties of the same mimetic and its preferred grammatical usage by dialect
speakers.

In conclusion, this study has opened up several potential avenues for
further research on the grammatical usage of mimetics, including the impact
of orthography, sound symbolism and neurological perception, prosodical
variation, as well as sociolinguistic factors and popularity of mimetics in media highlighted in the previous sections in this chapter. While very small, this study hopes to encourage other researchers in the field to approach the topic of mimetics in Japanese from different and unconventional angles.
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招待状
調査への協力のお願い

読者の皆様、

博士論文の研究にご協力お願い申し上げます。現在の日本語の使い方についてお伺います。日本語母語話者の言語力を研究するために、オンライン調査を行いたいと思います。この調査の結果は研究目的以外に使用することもありません。

今回の調査の内容と目的についてもっと詳しく知りたかったら、以下のリンクをクリックしてください。

<LINK NO LONGER VALID>

ご不明な点がございましたら、または調査の結果のコピーをいただいたら、お気軽にお連絡ください。

マライケ・ハーマン
マンチェスター大学人文科学部日本学
mareike.hamann@postgrad.manchester.ac.uk
Dear reader,

I would like to ask for your assistance with my PhD research project about the contemporary usage of the Japanese language. I am conducting an online survey with Japanese native speakers, which will take approximately 15 minutes. The results of this survey will be used for research purposes only.

If you would like to find out more about the content and purpose of this survey, please click on the following link:

<Link No Longer Valid>

If you have any further questions or would like to receive a copy of the results of this survey, please do not hesitate to contact me.

Mareike Hamann

THE UNIVERSITY OF MANCHESTER
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調査への協力のお願い

- 同意書 -

関係者各位、

博士論文の研究にご協力をお願い申し上げます。日本語の使い方についてお伺いします。あまり深く考えず、直観的に調査の質問に答えてください。

今回の調査の答えは統計的に処理し、個人が特定される形でデータを収録することはありません。また、研究目的以外にデータを使用することもありません。調査のご協力は任意ですので、質問への返答をご希望されない場合には、お答えにならなくても結構です。なお、アンケートの所要時間は約15分です。

調査への参加をご希望する場合には、「次」をクリックしてください。

よろしくお願い申し上げます。

マライケ・ハーマン
Dear reader,

I would like to ask for your assistance with my PhD research project about the contemporary usage of the Japanese language. Please answer the following survey questions spontaneously without thinking about your answers too much.

The answers collected in this survey will be analysed statistically and no personal information that might identify the participants will be recorded. The data gathered in this study will be used for research purposes only. Participation in this survey is voluntary. If you prefer not to answer any of the questions, please feel free to skip it. The survey will take approximately 15 minutes.

If you wish to participate in this survey, please click on [NEXT].

Thank you very much for your time.

Mareike Hamann
Appendix B - Interviews

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招待状
調査への協力のお願い

読者の皆様、

博士論文の研究にご協力お願い申し上げます。現在の日本語の使い方についてお伺います。日本語母語話者の言語力を研究するために、インタビューを行いたいと思います。このインタビューの結果は研究目的以外に使用することもありません。

今回の調査の内容と目的についてもっと詳しく知りたかったら、メールに添付した準備書類を読んでください。

ご不明な点がございましたら、または調査の結果のコピーをいただいたら、お気軽にご連絡ください。

どうぞよろしくお願いします。

Mareike Hamann

The University of Manchester
School of Arts, Languages and Cultures
East Asian Studies Department

mareike.hamann@manchester.ac.uk
Dear Sir or Madam,

I would like to ask for your assistance with my PhD research project about the contemporary usage of the Japanese language. I will be conducting interviews with Japanese native speakers in September 2014 in Tokyo, Japan. By participating in this study, you could contribute valuable data to linguistic research on the usage of contemporary Japanese.

If you would like to know more about this study and how the data collected from these interviews will be used, please read the attached participant information sheet and consent form. If you would like to participate in this study or have any further questions, please do not hesitate to contact me.

Yours faithfully,

Mareike Hamann

The University of Manchester
School of Arts, Languages and Cultures
East Asian Studies Department

mareike.hamann@manchester.ac.uk
「現代の日本語の使用に関する調査」

同意書

本同意書に調印する前に、事前通知の案内文をお読みください。ご不明な点がございましたら、研究者に問い合わせください。インタビューにご参加いただける場合にのみ、以下の同意書を調印してください。

1. 今回のインタビューへの参加はボランティアであること、また、理由を通知せずに、いつでも参加を取り下げることが可能であることを理解しています。

2. インタビューがボイス・レコーダーで録音されることを理解しています。

3. インタビューの匿名使用に同意します。

4. 会話のデータや個人情報に関わるデータなどは全て匿名化され、その上で研究上公開または他の研究者にも閲覧されることに同意します

この調査への参加を同意します。

<table>
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The contemporary usage of spoken Japanese

CONSENT FORM

Before signing the consent form below, please read the participant information sheet and do not hesitate to ask the researcher if you have any questions or concerns. If you would like to participate in this study, please complete and sign the consent form below.

<table>
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<tr>
<td>1. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to any service.</td>
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<td>2. I understand that the interviews will be audio-recorded.</td>
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<td>3. I agree to the use of anonymous quotes.</td>
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<td>4. I agree that any data collected will be anonymised. The results of this study may be published and passed to other researchers.</td>
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I agree to take part in the above project.

Name of participant
Signature
Date

Name of researcher
Signature
Date
Participant data and examples

P₁ (interviewed together with P₂)

Gender: male
Age: 23
Occupation: student + working part-time
Born in: Tokyo
Lives in: Chiba
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

minna bara-barada kaimono suru
everyone COP-GER shopping do-PRS
‘Everybody does their shopping separately.’

BORO-BORO

kaban ga boro-boro ni natte shimatta
bag SBJ MIM KYDni become-GER end.up-PAST
‘(My) bag (here) is already in pieces.’

DOKI-DOKI

saikin ne, doki-doki suru
recently right MIM make-PRS
‘(I have been) excited recently.’

FUNWARI

pan ga funwari da
bread SBJ soft COP-PRS
‘The bread is soft.’

FUWA-FUWA

*no example given

FUWARI

*would not actively use fuwari
GAN-GAN

gan-gan ikō
MIM go-IMP
‘Let’s get going!’

GIRARI

*would not actively use girari, rather gira-gira

KIRA-KIRA

*no example given

KIRARI

me ga kirari to hikatta
eye SBJ MIM QP shine-PAST
‘His/her eyes flashed.’

HAKKIRI

hakkiri iu
MIM say-PRS
‘say sth. clearly’

PITTARI

fuku ga pittari niatteru
clothes SBJ MIM fit-GER-be-PRS
‘(Your) clothes fit nicely.’

NIKO-NIKO

ano ko wa itsumo niko-niko shiteru
this child TOP always MIM make-GER-be-PRS
‘(P_2) is always smiling.’

NIKKORI

nikkori to warau
MIM QP laugh-PRS
‘to smile (once)’

PATA-PATA

ashi wa pata-pata da
foot TOP MIM COP-PRS
‘feet are (making a) pitter-patter (sound)’
PATAN

*no example given

SAKU-SAKU

saku-saku no okashi
MIM GEN sweet
‘crispy sweets’

SARA-SARA

sara-sara no kami no ke
MIM GEN head GEN hair
‘flowing hair’

WAN-WAN

inu ga wan-wan naku
dog SBJ MIM cry-PRS
‘The dog is making woof-woof.’

ZA-ZÂ

ame ga zâ-zâ to furu
rain SBJ MIM QP fall-PRS
‘The rain is pouring down.’
P₂ (interviewed together with P₁)

Gender: female
Age: 23
Occupation: student + working part time
Born in: Tokyo
Lives in: Kyoto
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

shūshoku shite minna bara-baran ni natte shimatta
first.job do-GER everyone MIM KYDni become-GER end.up-PAST
‘Everyone ended up in different places when they started working.’

BORO-BORO

tatemono ga boro-boro da
building SBJ MIM COP-PRS
‘(This) building is falling apart.’

DOKI-DOKI

ashita wa ano ko ga dēto aru kara, doki-doki suru
tomorrow TOP this child SBJ date have-PRS because MIM make-PRS
‘(P₁) has got a date tomorrow, that’s why (he’s) excited.’

FUNWARI

kono ba mecha funwari shiteru
this place totally MIM make-GER-be-PRS
‘This place is really cozy.’ (referring to her cushioned chair)

FUWA-FUWA

*not recorded

FUWARI

*would not actively use fuwari

GAN-GAN

atama ga gan-gan suru
head SBJ MIM make-PRS
‘(My) head is pounding.’
GIRARI

*would not actively use girari, rather gira-gira

HAKKIRI

hakkiri iu
MIM say-PRS
'say sth. clearly'

KIRA-KIRA

taiyō ga kira-kira shiteru
sun SBJ MIM make-GER-be-PRS
'The sun is glistening.'

KIRARI

hoshi ga kirari to hikatta
star SBJ MIM QP shine-PAST
'The stars sparkled.'

PITTARI

fuku ga pittari shi sugiteru
clothes SBJ MIM make exceed-GER-be-PRS
'The clothes fit too tightly.'

NIKO-NIKO

niko-niko to warau
MIM QP laugh-PRS
'to smile'

NIKKORI

nikkori to warau
MIM QP laugh-PRS
'to smile (once)'

PATA-PATA

uchiwa o pata-pata suru
fan ACC MIM make-PRS
'to make flapping sounds with a fan'

PATAN

doa ga patan to shimaru
door SBJ MIM QP close-PRS
'The door slams shut.'
SAKU-SAKU

saku-saku no kukkan
MIM GEN cookie
‘a crispy cookie’

SARA-SARA

kawa ga sara-sara nagare
river SBJ MIM flow-PRS
‘the river flows smoothly’

WAN-WAN

inu ga wan-wan naku
dog SBJ MIM cry-PRS
‘The dog is making woof-woof.’

ZÅ-ZÅ

ame ga zå-zå to furu
rain SBJ MIM QP fall-PRS
‘The rain is pouring down.’
$P_3$ (interviewed together with $P_4$)

**Gender:** female  
**Age:** 20  
**Occupation:** student  
**Born in:** Okayama  
**Lives in:** Okayama  
**Native speaker** Yes  
**Dialect:** Okayama

**Examples:**

**BARA-BARA**

kazoku ga bara-baranî natte shimau  
family SBJ MIM KYDni become-GER end.up-PRS  
‘The family is all over the place.’

**BORO-BORO**

tabeteru kukkî boro-boro to kuzurete shimau  
eat-GER-be-PRS cookie MIM QP crumble-GER end.up-PRS  
‘The cookie crumbled to bits.’

**DOKI-DOKI**

shinzō ga doki-doki suru  
heart SBJ MIM make-PRS  
‘(My) heart is pounding.’

**FUNWARI**

*not recorded

**FUWA-FUWA**

*not recorded

**FUWARI**

*not recorded

**GAN-GAN**

atama ga gan-gan hibiku  
head SBJ MIM echo-PRS  
‘(My) head is pounding.’
GIRARI

* would not actively use girari

HAKKIRI

hakkiri to shita koe
MIM QP make-PAST voice
‘a clear voice’

KIRA-KIRA

juwerurī ga kira-kira shiteru
jewellery SBJ MIM make-GER-be-PRS
‘(Her) jewellery is sparkling.’

KIRARI

* would not actively use kirari

NIKKORI

* would not actively use nikkori

NIKO-NIKO

niko-niko shiteru
MIM make-GER-be-PRS
‘to smile’

PATAN

* no example given

PATA-PATA

* no example given

PITTARI

pittari au
MIM fit.together-PRS
‘to fit together perfectly’

SAKU-SAKU

kukkī ga saku-saku shiteru
cookie SBJ MIM make-GER-be-PRS
‘The cookie is crispy.’
SARA-SARA

kami ga  sara-sara shiteru
hair  SBJ MIM  make-GER-be-PRS
‘hair is flowing/smooth’ (pointing at researcher)

WAN-WAN

inu ga  wan-wan tte yondari  suru
dog  SBJ MIM  QP call-PAST.etc. make-PRS
‘The dog is barking loudly.’

ZÄ-ZÄ

zā-zā desu
MIM  COP-POL-PRS
‘It (is) noisy.’ (referring to the sound of an old TV)
P₄ (interviewed together with P₃)

Gender: male
Age: 20
Occupation: student
Born in: Tokyo
Lives in: Tokyo
Native speaker: Yes
Dialect: Standard Japanese (parents speak Nagoya dialect)

Examples:

BARA-BARA

nanika ga bara-bara ni natte shimau
something SBJ MIM KYDni become-GER end.up-PRS
‘Something ends up all over the place.’

BORO-BORO

kono fuku boro-boro ni nacchatta
this cloth MIM KYDni become-GER-end.up-PAST
‘These clothes ended up falling apart.’

DOKI-DOKI

mune ga doki-doki suru
chest SBJ MIM make-PRS
‘(My) chest is pounding.’ = ‘I am excited.’

FUNWARI

*not recorded

FUWA-FUWA

*not recorded

FUWARI

*not recorded

GAN-GAN

gan-gan iku
MIM go-PRS
‘to walk briskly’
GIRARI

* would not actively use girari

HAKKIRI

hakkiri shiteru
MIM make-GER-be-PRS
‘making sth. clear’

KIRA-KIRA

hoshi ga kira-kira shiteru
star SBJ MIM make-GER-be-PRS
‘The stars are sparkling.’

KIRARI

* would not actively use kirari

NIKKORI

* would not actively use nikkori

NIKO-NIKO

ano hito niko-niko shiteru
this person MIM make-GER-be-PRS
‘This person is smiling.’

PATAN

*no example given

PATA-PATA

ashioto ga pata-pata to iu koto desu ne
foot.sound SBJ MIM QF say thing COP-POL-PRS right
‘It’s about feet making a pitter-patter sound, right?’

PITTARI

pittari de
MIM COP-GER
‘being fitting/perfect’

SAKU-SAKU

*no example given
SARA-SARA

nanika ga sara-sara shiteru
something SBJ MIM make-GER-be-PRS
‘Something is flowing.’

WAN-WAN

*no example given

ZĀ-ZĀ

zā-zā to furu
MIM QP fall-PRS
‘(The rain) is pouring down.’
P_5 (interviewed together with P_6)

| Gender: | male |
| Age: | 29 |
| Occupation: | unemployed |
| Born in | Aichi |
| Lives in: | Aichi |
| Native speaker | Yes |
| Dialect: | Aichi |

Examples:

BARA-BARA

kami o bara-bara ni [not recorded] imasu
hair ACC MIM KYDni [not recorded] be-POL-PRS
'(X’s) hair is straightened.'

BORO-BORO

sponji ga boro-boro to kuzureru
sponge SBJ MIM QP fall.apart-PRS
'The sponge is falling apart.'

DOKI-DOKI

mune ga doki-doki shiteru
chest SBJ MIM make-GER-be-PRS
'(My) chest is pounding.' = 'I am excited.'

FUNWARI

*no example given

FUWA-FUWA

fuwa-fuwa shita taueru
MIM make-PAST towel
'a fluffy towel'

FUWARI

*would not actively use fuwari, rather funwari

GAN-GAN

gan-gan iku
MIM go-PRS
'to walk briskly'
GIRARI

*would not actively use girari

HAKKIRI

mune ga hakkiri shiteru
breast SBJ MIM make-GER-be-PRS
‘to stand up properly’

KIRA-KIRA

hoshi ga kira-kira hikaru
star SBJ MIM shine-PRS
‘The stars are sparkling/shining brightly.’

KIRARI

kirari to hikaru
MIM QP shine-PRS
‘to shine brightly’; ‘to flash once’

NIKKORI

*no example given

NIKO-NIKO

niko-niko warau
MIM laugh-PRS
‘to smile’

PATAN

*no example given

PATA-PATA

pata-pata futon o tataku
MIM futon ACC beat-PRS
‘to beat a futon (to remove dust)’

PITTARI

fuku ga pittari da
cloth SBJ MIM COP-PRS
‘These clothes fit (you).’
SAKU-SAKU

saku-saku susumu
MIM proceed-PRS
‘to proceed smoothly (with a task)’

SARA-SARA

suna ga sara-sara to koboreru
sand SBJ MIM QP overflow-PRS
‘The sand is flowing down smoothly.’

WAN-WAN

*not recorded

ZĀ-ZĀ

*not recorded
$P_6$ (interviewed together with $P_5$)

**Gender:** female  
**Age:** 34  
**Occupation:** real estate agent  
**Born in:** Tokyo  
**Lives in:** Tokyo  
**Native speaker** Yes  
**Dialect:** Standard Japanese

**Examples:**

**BARA-BARA**

junban ga bara-bara da  
order SBJ MIM COP-PRS  
'The order (sequence) is messed up.'

**BORO-BORO**

kono [not recorded] boro-boro da  
this [not recorded] MIM COP-PRS  
'This [?] is in pieces.'

**DOKI-DOKI**

kokoro wa doki-doki shiteru

**FUNWARI**

*no example given

**FUWA-FUWA**

o-futon fuwa-fuwa da  
HON.futon MIM COP-PRS  
'The futon is really soft.'

**FUWARI**

*would not actively use fuwari, rather funwari

**GAN-GAN**

atama ga gan-gan suru  
head SBJ MIM make-PRS  
'(My) head is pounding.'
GIRARI

*would not actively use girari

HAKKIRI

ano hito wa iken ga hakkiri shiteru
this person TOP opinion SBJ MIM make-GER-be-PRS
'This person has very clear opinions.'

KIRA-KIRA

kawa ga kira-kira shiteru
skin SBJ MIM make-GER-be-PRS
'(Her) skin is glowing.'

KIRARI

kirari to hikatteru
MIM QP shine-GER-be-PRS
'to flash brightly (once)'

NIKKORI

*no example given

NIKO-NIKO

niko-niko shiteru
MIM make-GER-be-PRS
'to smile'

PATAN

laputopu o patan to tojiru
laptop ACC MIM QP shut-PRS
'to shut one’s laptop with a bam'

PATA-PATA

pata-pata hashiru
MIM run-PRS
'to run with light steps'

PITTARI

ano hito wa kono basho ni pittari da
this person SBJ this place LOC MIM COP-PRS
'This person really fits in this place.'
SAKU-SAKU
kono kurakkā ga saku-saku shiteru
this cracker SBJ MIM make-GER-be-PRS
‘This cracker is crispy.’

SARA-SARA
kami ga sara-sara shiteru
hair SBJ MIM make-GER-be-PRS
‘(Her) hair is flowing smoothly.’

WAN-WAN
*not recorded

ZĀ-ZĀ
*not recorded
P_7 (interviewed together with P_8)

Gender: female
Age: 73
Occupation: Genji Monogatari scholar; Haiku poet
Born in: Hokkaido
Lives in: Tokyo
Native speaker: Yes
Dialect: Standard Japanese (with a slightly northern intonation)

Examples:

BARA-BARA

bunsho bara-baranî shite
document MIM KYDni make-GER
‘to scatter papers all over the place’

BORO-BORO

kono hon wa nagaku tsukatte ite mo boro-boro da
this book TOP long use-GER be-GER even MIM be-PRS
‘I have been using this book for a long time and it’s falling apart.’

DOKI-DOKI

suteki na josei ni atte doki-doki shita
gorgeous KYDna woman DAT meet-GER MIM make-PAST
‘When I met that gorgeous woman, I got butterflies.’

FUNWARI

*no example given

FUWA-FUWA

fuwa-fuwa shita kangae
MIM make-PAST idea
‘a fickle idea’

FUWARI

fuwari to chakuchi suru
MIM QP landing make-PRS
‘to land softly’ (referring to airplanes)
GAN-GAN

oto  ga  gan-gan to urusai
sound  SBJ  MIM  QP  noisy
'(This) pounding sound is annoying.’ (referring to construction work outside)

GIRARI

*would not actively use girari

HAKKIRI

hakkiri  sasete  /  hakkiri  shinai  /  hakkiri  shita
MIM  make-IMP  /  MIM  make-NEG  /  MIM  make-PAST
‘make it clear’ / ‘not making it clear’ / ‘made clear’

KIRA-KIRA

kira-kira  hikaru
MIM  shine-PRS
‘to sparkle’

KIRARI

kirari  to  shita  kangaee
MIM  QP  make-PAST  idea
‘a bright idea’

NIKKORI

nikkori  suru
MIM  make-PRS
‘to smile (once)’

NIKO-NIKO

niko-niko  te  warau
MIM  QP  laugh-PRS
‘to smile’

PATAN

patan  da
MIM  COP-PRS
‘BAM!’ (referring to books falling from the shelves during the earthquake in March 2011)
PATA-PATA

o-sōji o suru surippā ga pata-pata yakamashii
HON.cleaning ACC do-PRS slipper SBJ MIM noisy
‘When (I am) cleaning, (my) slippers make are a noisy pitter-patter sound.’

PITTARI

pittari da
MIM be-PRS
‘(It) is fitting.’

SAKU-SAKU

kono ringo wa saku-saku shite oishii
this apple TOP MIM make-GER delicious
‘This apple is crunchy and delicious.’

SARA-SARA

kami ga sara-sara to iu toka
hair SBJ MIM QP say-PRS etc.
‘Like, hair is flowing, etc.’

WAN-WAN

wan-wan naku
MIM cry-PRS
‘to bark loudly’

ZĀ-ZĀ

zā-zā furu
MIM fall-PRS
‘to pour down’ (referring to rain)
P_8 (interviewed together with P_7)

**Gender:** female  
**Age:** 72  
**Occupation:** retired German Studies professor  
**Born in** Tenshin (China)  
**Lives in:** Tokyo  
**Native speaker** Yes  
**Dialect:** Standard Japanese

**Examples:**

BARA-BARA

niku o bara-barai ni shiteru  
meat ACC MIM KYDni make-GER-be-PRS  
‘cutting meat into pieces’

BORO-BORO

kimochi ga boro-boro ni natte shimau  
feeling SBJ MIM KYDni become-GER end.up-PRS  
‘Feelings end up being hurt.’

DOKI-DOKI

*no example given

FUNWARI

o-futon wa funwari da  
HON.futon TOP MIM COP-PRS  
‘The futon is soft.’

FUWA-FUWA

fuwa-fuwa shita kimochi  
MIM make-PAST feeling  
‘fickle feelings’

FUWARI

fuwari to tonde ita  
MIM QP fly-GER be-PAST  
‘It was floating.’
GAN-GAN

gan-gan hibiku
MIM echo-PRS
‘to make a pounding sound’

GIRARI

*would not actively use girari

HAKKIRI

*no example given

KIRA-KIRA

kira-kira shiteru
MIM make-GER-be-PRS
‘to sparkle’

KIRARI

kirari to hikatta
MIM QP shine-PAST
‘(It) was shining brightly’

NIKKORI

nikkori suru
MIM make-PRS
‘to laugh (once)’

NIKO-NIKO

niko-niko to warau
MIM QP laugh-PRS
‘to smile’

PATAN

patan to iu oto
MIM QP say-PRS sound
‘a slamming sound’

PATA-PATA

*no example given
PITTARI
pittari no hyōgen da
MIM GEN expression COP-PRS
‘a fitting expression’

SAKU-SAKU
nashi ga saku-saku ka na
nashi.pear SBJ MIM QM probably
‘Nashi pears are probably crunchy.’

SARA-SARA
sara-sara nagareru
MIM flow-PRS
‘to flow smoothly’

WAN-WAN

*no example given

ZĀ-ZĀ
ame ga zā-zā to furu
rain SBJ MIM QP fall-PRS
‘The rain is pouring down.’
P_9 (married to P_10, interviewed together)

**Gender:** male
**Age:** 67
**Occupation:** pensioner
**Born in:** Tokyo
**Lives in:** Tokyo
**Native speaker:** Yes
**Dialect:** Standard Japanese

**Example:**

**BARA-BARA**

kangaekata ga bara-bara desu
way.of.thinking SBJ MIM COP-POL-PRS
‘(X’s) way of thinking is incoherent.’

**BORO-BORO**

watashi no bōshi wa boro-boro desu
I GEN hat TOP MIM COP-POL-PRS
‘My hat is falling apart.’

**DOKI-DOKI**

*no example given*

**FUNWARI**

*no example given*

**FUWA-FUWA**

fuwa-fuwa na futon desu
MIM KYDna futon COP-POL-PRS
‘(This) is a soft futon.’

**FUWARI**

*no example given*

**GAN-GAN**

gan-gan iku
MIM walk-PRS
‘to walk briskly’
GIRARI

*would not actively use girari

HAKKIRI

hakkiri iimasu
MIM say-POL-PRS
'say sth. clearly'

KIRA-KIRA

*no example given

KIRARI

*would not actively use kirari

NIKKORI

nikkori shiteru
MIM make-GER-be-PRS
'to smile (once)'

NIKO-NIKO

niko-niko shiteru kawaii ne
MIM make-GER-be-PRS cute right
'It looks cute when (X is) smiling.'

PATAN

*no example given

PATA-PATA

*no example given

PITTARI

doa o pittari ni shimenasai
door ACC MIM KYDni close-IMP
'Close the door completely please.'

SAKU-SAKU

saku-saku taberu
MIM eat-PRS
'making crunching noises while eating'
SARA-SARA

kami ga sara-sara shiteru
hair SBJ MIM make-GER-be-PRS
‘(X’s) hair is smooth’

WAN-WAN

*would not actively use wan-wan (judged as children’s language)

ZÄ-ZÄ

suido ga zā-zā nagasu
tap.water SBJ MIM flow
‘The water from the tap is flowing out smoothly.’
P_{10}(married to P_9, interviewed together)

Gender: female
Age: 65
Occupation: housewife
Born in: Nagasaki
Lives in: Tokyo
Native speaker: Yes
Dialect: Nagasaki/Standard Japanese

Examples:

BARA-BARA

omocha ga barabara da

toy SBJ MIM COP-PRS

‘The toys are all over the place.’ (referring to her grandson’s toys)

BORO-BORO

wakamono ga jinsu ga boro-boro da

young.people SBJ jeans SBJ MIM COP-PRS

‘Young people have these tattered jeans.’

DOKI-DOKI

mune ga doki-doki suru

chest SBJ MIM make-PRS

‘(My) chest is pounding.’ = ‘I am excited.’

FUNWARI

umō ga funwari to ochite kuru

feather SBJ MIM QP fall-GER come-PRS

‘The feather is falling down softly.’

FUWA-FUWA

kushon ga fuwa-fuwa da

cushion SBJ MIM COP-PRS

‘(This) cushion is really soft.’

FUWARI

*no example given
GAN-GAN

gan-gan semeru
MIM attack-PRS
‘pounding someone (with fists)’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri inasai
MIM say-IMP
‘Say it clearly.’

KIRA-KIRA

kurisumasu no kazari ga kira-kira shiteru
Christmas GEN decoration SBJ MIM make-GER-be-PRS
‘The Christmas decorations are sparkling.’

KIRARI

hoshi ga kirari to hikaru
star SBJ MIM QP shine-PRS
‘The stars are shining brightly.’

NIKKORI

nikkori shiteru ano ko
MIM make-GER-be-PRS this child
‘This guy/girl is smiling brightly.’

NIKO-NIKO

niko-niko shiteru hito
MIM make-GER-be-PRS person
‘a smiling person’

PATAN

doa o patan to shimeru
door ACC MIM QP shut-PRS
‘sling a door shut’

PATA-PATA

surippā de pata-pata to arukanaide kudasai
slipper INST MIM QP walk-NEG-IMP please
‘Please stop pitter-pattering around in your slippers.’
PITTARI
kappuru wa pittari kutsuite iru
couple TOP MIM stick.together-GER be-PRS
‘This couple is glued together.’

SAKU-SAKU
tempura wa saku-saku shite oishii
tempura TOP MIM make-GER delicious
‘(These) tempura are crispy and delicious.’

SARA-SARA
kami ga sara-sara shiteru
hair SBJ MIM make-GER-be-PRS
‘(X’s) hair is smooth.’

WAN-WAN
*would not actively use wan-wan (judged as children’s language)

ZÂ-ZÂ
ame ga zâ-zâ to furimasu
rain SBJ MIM QP fall-POL-PRS
‘The rain is pouring down.’
$P_{11}$ (interviewed together with $P_{12}$)

Gender: female
Age: 28
Occupation: PhD student + working part time
Born in: Saitama
Lives in: Saitama
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

[not recorded] ga bara-bara ni naru
[not recorded] SBJ MIM KYDni become-PRS
'(something) is scattered/in pieces'

BORO-BORO

fuku ga boro-boro ni naru
cloth SBJ MIM KYDni become-PRS
'(The) clothes are falling apart/in tatters.' (spoken at the same time as $P_{12}$)

DOKI-DOKI

shinzō ga doki-doki suru
heart SBJ MIM make-PRS
'(My) heart is pounding.' = 'I am excited.'

FUNWARI

funwari shifon kēki
MIM chiffon cake
'soft chiffon cake'

FUWA-FUWA

fuwa-fuwa no kēki
MIM GEN cake
'soft/bouncy cake'

FUWARI

*no example given
GAN-GAN

atama ga gan-gan suru
head SBJ MIM make-PRS
‘(My) head is pounding.’

GIRARI

girari to hikatta
MIM QP shine-PAST
‘(the light) was glaring’

HAKKIRI

hakkiri shita koe
MIM make-PAST voice
‘a clear voice’

KIRA-KIRA

ano ko wa kira-kira shiteru
this child TOP MIM make-GER-be-PRS
‘This guy/girl is dazzling.’

KIRARI

kirari to hikaru
MIM QP shine-PRS
‘to shine brightly’

NIKKORI

nikkori warau
MIM laugh-PRS
‘to smile (once)’ (spoken at at same time as P12)

NIKO-NIKO

niko-niko warau
MIM laugh-PRS
‘to smile’

PATAN

patan to akeru
MIM QP open-PRS
‘to open with a bam’
PATA-PATA

pata-pata hashiru
MIM run-PRS
‘to run making a pitter-patter sound’

PITTARI

pittari to kutsuku
MIM QP stick.together-PRS
‘to stick/fit together perfectly’

SAKU-SAKU

saku-saku shite iru
MIM make-GER be-PRS
‘to make crunching noises’ (referring to chewing food)

SARA-SARA

sara-sara no kami no ke
MIM GEN head GEN hair
‘smooth, flowing hair’ (first said na, then corrected herself)

WAN-WAN

inu ga wan-wan hoeru
dog SBJ MIM bark-PRS
‘The dog is barking loudly.’

ZĀ-ZĀ

ame ga zā-zā furu
rain SBJ MIM fall-PRS
‘The rain is pouring down.’
$P_{12}$ (interviewed together with $P_{11}$)

**Gender:** female

**Age:** 28

**Occupation:** PhD student + working part time

**Born in:** Kumamoto

**Lives in:** Tokyo

**Native speaker** Yes

**Dialect:** Standard Japanese

**Examples:**

BARA-BARA

bara-bara satsujin jiken desu

MIM murder case be-POL-PRS

‘a murder case with dismembered bodies’

BORO-BORO

fuku ga boro-boro ni naru

cloth SBJ MIM KYDni become-PRS

‘The clothes are falling apart/in tatters.’

(spoke at the same time as $P_{12}$)

DOKI-DOKI

mune ga doki-doki suru

chest SBJ MIM make-PRS

‘(My) chest is pounding.’ = ‘I am excited.’

FUNWARI

*no example given

FUWA-FUWA

fuwa-fuwa no nuigurumi

MIM GEN stuffed.toy

‘a fluffy stuffed toy’

FUWARI

fuwari to hane ga mau

MIM QP feather SBJ dance-PRS

‘The feather is dancing/floatiing softly.’
GAN-GAN

gan-gan tataku
MIM beat-PRS
‘to pound on sth.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri saserō
MIM make-IMP
‘Make it clear!’

KIRA-KIRA

kira-kira hikaru
MIM shine-PRS
‘to sparkle’

KIRARI

*no example given

NIKKORI

nikkori warau
MIM laugh-PRS
‘to smile (once)’ (spoken at the same time as P₁₁)

NIKO-NIKO

niko-niko egao
MIM smiley.face
‘a smiley face’

PATAN

patan to tojiru
MIM QP shut-PRS
‘to slam shut’

PATA-PATA

pata-pata hataku
MIM slap-PRS
‘to slap’
PITTARI

ano tokei wa jikan pittari da
that watch TOP time MIM COP-PRS
“That watch is very accurate.’

SAKU-SAKU

kono shigoto wa saku-saku susumeru
this work TOP MIM proceed-PRS
‘This (kind of) work gets done quickly.’

SARA-SARA

o-kawa ga sara-sara nagareru
HON.river SBJ MIM flow-PRS
‘The river is flowing smoothly.’

WAN-WAN

inu ga wan-wan naku
dog SBJ MIM cry-PRS
‘The dog is barking loudly.’

ZÄ-ZÄ

ame ga zä-zä furu
rain SBJ MIM fall-PRS
‘The rain is pouring down.’
P_{13}

Gender: female
Age: 53
Occupation: librarian
Born in: Tokyo
Lives in: Tokyo
Native speaker: Yes
Dialect: Standard Japanese

Examples:

**BARA-BARA**

sekkaku seiri shita no ni
with.effort sorting make-PAST although
shorin ga bara-baran ni natte shimatta
book.collection SBJ MIM KYDni become-GER end.up-PAST
'It took a lot of effort to sort these books and now they are all over the place again.'

**BORO-BORO**

tskarete ni mo koroko mo boro-boro da
exhaust-GER body also heart also MIM COP-PRS
'(I am) exhausted and (my) body and mind are shattered.'

**DOKI-DOKI**

suteki na hito ni atte doki-doki shichatta
amazing KYDna person LOC meet-GER MIM make-GER-end.up-PAST
'When (I) met this amazing person, I got butterflies.'

**FUNWARI**

funwari to shita yōfuku
MIM QP make-PAST Western.clothes
'soft/light clothes'

**FUWA-FUWA**

kono futon wa fuwa-fuwa da
this futon TOP MIM COP-PRS
'This futon is really soft.'

**FUWARI**

*no example given*
GAN-GAN

gan-gan semete
MIM attack-GER
‘pounding (with fists)’

GIRARI

girari to hikaru
MIM QP shine-PRS
‘to glare brightly’

HAKKIRI

atama ga boyaaa shite ita toki
head SBJ spaced.out make-GER be-PRS time
kōhī toka nonde hakkiri shite kita
coffee etc. drink-GER MIM make-GER come-PAST
‘When my head wasn’t working anymore, I drank a coffee and it became clear again.’

KIRA-KIRA

hoshi ga kira-kira matataiteru
star SBJ MIM twinkle-GER-be-PRS
‘The stars are twinkling.’

KIRARI

me ga kirari to hikaru
eye SBJ MIM QP shine-PRS
‘The eyes are flashing brightly.’

NIKKORI

nikkori warau
MIM laugh-PRS
‘to smile (once)’

NIKO-NIKO

niko-niko shita egao
MIM make-PAST smiley.face
‘a smiley face’

PATAN

hon toka patan to taoreru
book etc. MIM QP tumble.down-PRS
‘Books etc. are tumbling down.’
PATA-PATA

pata-pata to shita
MIMQP make-PAST
‘made a pitter-patter sound’ (referring to walking barefoot)

PITTARI

yōfuku nanka no saizu ga pittari da
Western.clothes somehow GEN size SBJ MIM COP-PRS
‘The size of these clothes is perfect.’

SAKU-SAKU

nashi toka tabete saku-saku shita
nashi.pear etc. eat-GER MIM make-PAST
‘When eating a Nashi pear, it made crunching noises.’

SARA-SARA

sara-sara to kawa ga nagareru
MIMQP river SBJ flow-PRS
‘The river is flowing smoothly.’

WAN-WAN

wan-wan to inu ga naku
MIMQP dog SBJ cry-PRS
‘The dog is barking loudly.’

ZĀ-ZĀ

ame ga zā-zā to futte iru
rain SBJ MIMQP fall-GER be
‘The rain is pouring down.’
\( P_{14} \) (interviewed together with \( P_{15} \) and \( P_{16} \))

**Gender:** female  
**Age:** 19  
**Occupation:** student + working part time  
**Born in:** Tokyo  
**Lives in:** Tokyo  
**Native speaker:** Yes  
**Dialect:** Standard Japanese

**Examples:**

**BARA-BARA**

[not recorded] bara-bara ni oite aru  
[not recorded] MIM KYDni put-GER be-PRS  
‘It has been put all over the place.’

**BORO-BORO**

fuku ga boro-boro da  
cloth SBJ MIM COP-PRS  
‘The clothes are falling apart/in tatters.’

**DOKI-DOKI**

sensei ga kirei dakara doki-doki suru  
teacher SBJ beautiful COP-PRS.because MIM make-PRS  
‘(I) have butterflies, because (my) teacher is beautiful.’

**FUNWARI**

mono ga sawatta kanji funwari da  
thing SBJ touch-PAST feeling MIM COP-PRS  
‘that soft feeling when touching something’

**FUWA-FUWA**

*no example given

**FUWARI**

*would not actively use *fuwari
GAN-GAN

gan-gan semeru, basu toka
MIM push-PRS bus etc.
‘to push aggressively (past people), on the bus etc.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri shiteru
MIM make-GER-be-PRS
‘making sth. clear’

KIRA-KIRA

hoshi ga kira-kira shiteru
star SBJ MIM make-GER-be-PRS
‘The stars are sparkling.’

KIRARI

*no example given

NIKKORI

*no example given

NIKO-NIKO

*no example given

PATAN

*no example given

PATA-PATA

ashioto ga pata-pata da
foot.sound SBJ MIM COP-PRS
‘the pitter-patter sound of footsteps’

PITTARI

pittari yorisō
MIM be.close-IMP
‘Let’s cuddle!’
SAKU-SAKU

*no example given

SARA-SARA

sara-sara hea
MIM hair
‘smooth hair’

WAN-WAN

*no example given

ZĀ-ZĀ

ame ga zā-zā furu
rain SBJ MIM fall-PRS
‘The rain is pouring down.’
P_{15} (interviewed together with P_{14} and P_{16})

**Gender:** female  
**Age:** 19  
**Occupation:** student + working part time  
**Born in** Saitama  
**Lives in:** Tokyo  
**Native speaker** Yes  
**Dialect:** Standard Japanese

**Examples:**

**BARA-BARA**

bara-barā shitai  
MIM body  
‘dismembered bodies’

**BORO-BORO**

boro-boro kobosu  
MIM shed.tears-PRS  
‘to shed big drops of tears’

**DOKI-DOKI**

mune wa doki-doki suru  
chest TOP MIM make-PRS  
‘My chest is pounding.’ = ‘I am excited.’

**FUNWARİ**

*no example given

**FUWA-FUWA**

*no example given

**FUWARİ**

fuwari te uiteru  
MIM QP float-GER-be-PRS  
‘floating softly’
GAN-GAN

atama ga  gan-gan suru
head  SBJ MIM  make-PRS
‘(My) head is pounding.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri shiteru  seikaku
MIM  make-GER-be-PRS personality
‘a very straightforward personality’

KIRA-KIRA

tsume ga  kira-kira shiteru
nail  SBJ MIM  make-GER-be-PRS
‘(My) nails are sparkling.’ (P_{15} is wearing glittery nail varnish)

KIRARI

*no example given

NIKKORI

*no example given

NIKO-NIKO

*no example given

PATAN

*no example given

PATA-PATA

*no example given

PITTARI

jikan pittari da
time  MIM  COP-PRS
‘The time fits perfectly.’
SAKU-SAKU

saku-saku na κukkī
MIM KYDna cookie
‘a crispy cookie’

SARA-SARA

sara-sara na hada
MIM KYDna skin
‘smooth skin’

WAN-WAN

*no example given

ZĀ-ZĀ

*no example given
P₁₆ (interviewed together with P₁₄ and P₁₅)

Gender: female
Age: 20
Occupation: student + working part time
Born in: Tokyo
Lives in: Tokyo
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

tokei o bara-bara ni suru
time ACC MIM KYDni make-PRS
‘to mess up the time’

BORO-BORO

kaban ga boro-boro ni naru
handbag SBJ MIM KYDni become-PRS
‘The handbag is falling apart.’

DOKI-DOKI

kinchō shite doki-doki suru
nervousness make-GER MIM make-PRS
‘When (I am) nervous, (my heart) is pounding.’

FUNWARI

*no example given

FUWA-FUWA

nuigurumi wa fuwa-fuwa shiteru
stuffed.toy TOP MIM make-GER-be-PRS
‘The stuffed toy is really fluffy.’

FUWARI

*would not actively use fuwari
GAN-GAN

gan-gan ikō
MIM go-IMP
‘Let’s get going!’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri monogoto iu
MIM thing say-PRS
‘to make a clear statement’

KIRA-KIRA

*no example given

KIRARI

*no example given

NIKKORI

nikkori warau
MIM laugh-PRS
‘to smile (once)’

NIKO-NIKO

itsumo niko-niko shiteru
always MIM make-GER-be-PRS
‘(X is) always smiling.’

PATAN

doa ga patan te shimaru
door SBJ MIM QP close-PRS
‘The door slams shut.’

PATA-PATA

pata-pata to hashiru
MIM QP run-PRS
‘to run with a pitter-patter sound’

PITTARI

*no example given
SAKU-SAKU

saku-saku susumeru
MIM proceed-PRS
‘to proceed quickly’

SARA-SARA

sara-sara na kami
MIM KYDna hair
‘smooth hair’

WAN-WAN

inu ga wan-wan hoeru
dog SBJ MIM bark-PRS
‘The dog is barking loudly.’

ZĀ-ZĀ

*no example given
Gender: male
Age: 19
Occupation: student
Born in Kanagawa
Lives in: Tokyo
Native speaker Yes
Dialect: Standard Japanese

Examples:

BARA-BARA
bar-a-bara ni kaisan suru
MIM KYDni breakup do-PRS
‘to break up completely’

BORO-BORO
tsu-karete boro-boro da
exhaust-GER MIM COP-PRS
‘(I am) shattered, because I am exhausted.’

DOKI-DOKI
ashita kekka happyō de doki-doki suru
tomorrow result speech COP-GER MIM make-PRS
‘(I) have got to do a presentation tomorrow, so (I am) really nervous.’

FUNWARI
kono hanashi wa funwari shite iru
this story TOP MIM make-GER be-PRS
‘This story is really nice.’

FUWA-FUWA
kono Kushon wa fuwa-fuwa shite iru
this cushion TOP MIM make-GER be-PRS
‘This cushion is really soft.’

FUWARI
fuwari to chakuchi suru
MIM QP landing do-PRS
‘to make a soft landing’ (referring to an airplane)
GAN-GAN

atama ga gan-gan suru
head SBJ MIM make-PRS
‘(My) head is pounding.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri to mieru
MIM QP see-POT-PRS
‘to be clearly visible’

KIRA-KIRA

kira-kira boshi
MIM star
‘twinkling star’

KIRARI

*no example given

NIKKORI

*no example given

NIKO-NIKO

niko-niko egao
MIM smiley.face
‘a smiley face’

PATAN

ita ga patan to taoreru
board SBJ MIM QP tumble.down-PRS
‘The board comes tumbling down.’

PATA-PATA

hataki de pata-pata suru
feather.duster INST MIM make-PRS
‘to wag around with the feather duster’
PITTARI

pittari kutsuku
MIM stick.together-PRS
‘to stick/fit together perfectly’

SAKU-SAKU

kono kukkī wa saku-saku shite iru
this cookie TOP MIM make-GER be-PRS
‘This cookie is really crispy.’

SARA-SARA

suna ga sara-sara shite iru
sand SBJ MIM make-GER be-PRS
‘The sand is flowing (down).’

WAN-WAN

inu ga wan-wan naku
dog SBJ MIM cry-PRS
‘The dog is barking loudly.’

ZĀ-ZĀ

ame ga zā-zā furu
rain SBJ MIM fall-PRS
‘The rain is pouring down.’
P_18

**Gender:** female
**Age:** 18
**Occupation:** student
**Born in** Tokyo
**Lives in:** Tokyo
**Native speaker** Yes
**Dialect:** Standard Japanese

**Examples:**

**BARA-BARA**

pazuru ga bara-bara ni naru
puzzle SBJ MIM KYDni become-PRS
'The puzzle is breaking up into pieces.'

**BORO-BORO**

kukkī ga fukuro no naka de boro-boro ni naru
cookie SBJ bag GEN inside in MIM KYDni become-PRS
'The cookies are crumbling to bits inside the bag.'

**DOKI-DOKI**

shiranai hito ni atte doki-doki suru
unknown person DAT meet-GER MIM make-PRS
'Meeting a stranger makes (me) nervous.'

**FUNWARİ**

*no example given*

**FUWA-FUWA**

yakitate no pan wa fuwa-fuwa shiteru
freshly.baked GEN bread TOP MIM make-GER-be-PRS
'Freshly baked bread is really fluffy.'

**FUWARİ**

hana kara fuwari to no i ga suru
flower from MIM QP scent SBJ make-PRS
'There is a light scent coming from the flower.'
GAN-GAN
ue kara gan-gan oto ga suru
above from MIM sound SBJ make-PRS
‘There is a pounding sound coming from above.’

GIRARI
girari to me ga hikaru
MIM QP eye SBJ shine-PRS
‘The eyes are glaring (menacingly).’

HAKKIRI
iken wa hakkiri shite iru
opinion TOP MIM make-GER be-PRS
‘(This) opinion is very clear.’

KIRA-KIRA
hoshi ga kira-kira hikatte imasu
star SBJ MIM shine-GER be-POL-PRS
‘The stars are shining brightly.’

KIRARI
hōseki ga kirari to hikaru
gem.stone SBJ MIM QP shine-PRS
‘The jewellery is flashing brightly.’

NIKKORI
nikkori to warau
MIM QP laugh-PRS
‘to smile (once)’

NIKO-NIKO
niko-niko to warau
MIM QP laugh-PRS
‘to smile’

PATAN
tobira ga patan to tojiru
doors SBJ MIM QP close-PRS
‘The doors close with a bam.’

PATA-PATA
*not recorded
PITTARI
mado o pittari shimeru
window ACC MIM shut-PRS
‘to shut the window completely’

SAKU-SAKU
kukkī wa saku-saku shimasu
cookie TOP MIM make-POL-PRS
‘The cookie is really crispy.’

SARA-SARA
suna ga sara-sara to ochiru
sand SBJ MIM QP fall-PRS
‘The sand is flowing down.’

WAN-WAN
inu ga wan-wan to hoeru
dog SBJ MIM QP bark-PRS
‘The dog is barking loudly.’

ZĀ-ZĀ
ame ga zā-zā to furu
rain SBJ MIM QP fall-PRS
‘The rain is pouring down.’
P_{19}

Gender: male
Age: 20
Occupation: student + working part-time
Born in: Kanagawa
Lives in: Kanagawa
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

bara-bara ni bunkai sareta
MIM KYDni do-PASS-PAST
‘disassembled completely’

BORO-BORO

boro-boro ni natta yōfuku
MIM KYDni become-PAST Western.clothes
‘clothes that are falling apart’

DOKI-DOKI

mensetsu ni ite doki-doki shita
MIM KYDni make-PAST
‘(I) was really nervous when (I) went for a job interview.’

FUNWARI

sentakugo no taoru wa funwari to shite iru
after.wash GEN towel TOP MIM QP make-GER be-PRS
‘Freshly washed towels are so fluffy.’

FUWA-FUWA

kono omuretsu ga fuwa-fuwa shite iru
this omelette SBJ MIM make-GER be-PRS
‘This omelette is soft.’

FUWARİ

*no example given
GAN-GAN

atama ga gan-gan itai
head SBJ MIM painful
‘(My) head is pounding painfully.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri to shaberinasai
MIM QP speak-IMP
‘Speak clearly please.’

KIRA-KIRA

kira-kira to kagayaite iru
MIM QP shine-GER be-PRS
‘to shine brightly/to sparkle’

KIRARI

*no example given

NIKKORI

nikkori to waratta
MIM QP laugh-PAST
‘(X) smiled (once)’

NIKO-NIKO

niko-niko to warau
MIM QP smile
‘to smile’

PATAN

patan to taoreta
MIM QP collapse-PAST
‘It collapsed with a bam.’

PATA-PATA

pata-pata to habataku
MIM QP flap.wings-PRS
‘to flap wings’
PITTARI

pittari to shita yōfuku
MIM QP make-PAST Western.clothes
‘perfectly fitting clothes’

SAKU-SAKU

saku-saku susumeru
MIM proceed-PRS
‘to proceed quickly’

SARA-SARA

sara-sara to shita suna
MIM QP make-PAST sand
‘smoothly flowing sand’

WAN-WAN

wan-wan to naita
MIM QP cry-PAST
‘barked loudly’

ZĀ-ZĀ

zā-zā ame ga futte iru
MIM rain SBJ fall-GER be-PRS
‘The rain is pouring down.’
P20

Gender: male  
Age: 59  
Occupation: university professor (German Studies)  
Born in: Yamagata  
Lives in: Tokyo  
Native speaker: Yes  
Dialect: Yamagata/Standard Japanese

Examples:

BARA-BARA

[not recorded] bara-baraninaru
[not recorded] MIM KYDni become-PRS
‘to be scattered’

BORO-BORO

isogashikute kyōin seikatsu demo boro-boro da
be.busy-GER lecturer life even MIM be-PRS
‘Being a busy lecturer my life is all over the place.’

DOKI-DOKI

daigaku de eigo de puresentēshon suru toki ni
university in English INST presentation make-PRS time LOC
hajimaru mae doki-doki shimasu
begin-PRS before MIM make-POL-PRS
‘When (I am) doing presentations in English at university, (I) always get really nervous before.’

FUNWARI

kumo ni funwari to note tabi shitai naa
cloud LOC MIM QP ride-GER voyage make want so
‘Wouldn’t you want to float away on a cloud?’

FUWA-FUWA

fuwa-fuwa to shita
MIM QP make-PAST
‘fluffy’
FUWARI

[not recorded] fuwari to [not recorded] agaru
[not recorded] MIM QP [not recorded] rise-PRS
‘fluffy […] rise’

GAN-GAN

gan-gan ganbaru
MIM make.an.effort-PRS
‘to plough through’

GIRARI

girari to hikaru
MIM QP shine
‘to flash (once)’

HAKKIRI

hakkiri to hatsuon shite kudasai
MIM QP pronunciation make-GER please
‘Speak clearly please.’

KIRA-KIRA

kira-kira kagayaite iru
MIM shine-GER be-PRS
‘to shine brightly/to sparkle’

KIRARI

kirari to kirameku
MIM QP sparkle
‘to flash brightly’

NIKKORI

*no example given

NIKO-NIKO

niko-niko suru
MIM make-PRS
‘to smile’

PATAN

patan to shimeru
MIM QP close-PRS
‘to slam shut’
PATA-PATA

pata-pata sōji o suru
MIM cleaning ACC do-PRS
‘to beat sth. to clean it’

PITTARI

kono hyōgen wa pittari da
this expression TOP MIM COP-PRS
‘This expression is fitting.’

SAKU-SAKU

taberu to saku-saku shinaide
eat-PRS TEMP MIM make-NEG
‘Don’t make crunching noises when eating.’

SARA-SARA

kami mo sara-sara de[su]
hair also MIM COP[-POL]
‘Hair is also “smooth”.’

WAN-WAN

atama wan-wan suru
head MIM make-PRS
‘(My) head is exploding.’

ZĀ-ZĀ

ame ga zā-zā furu
rain SBJ MIM fall -PRS
‘The rain is pouring down.’
P₂₁ (interviewed together with P₂₂)

**Gender:** male
**Age:** 29
**Occupation:** PhD student + working part time
**Born in** Nagasaki
**Lives in:** Kanagawa
**Native speaker** Yes
**Dialect:** Nagasaki/Standard Japanese

**Examples:**

BARA-BARA

bara bara satsujin jiken
MIM murder case
‘a murder case with dismembered bodies’

BORO-BORO

boro boro no zōkin
MIM GEN dust.cloth
‘a dust cloth in shreds’

DOKI-DOKI

shinzō ga doki-doki suru
heart SBJ MIM make-PRS
‘(My) heart is pounding.’

FUNWARI

*no example given

FUWA-FUWA

*no example given

FUWARI

fuwari te mono ga ukanderu
MIM QP thing SBJ float-GER-be-PRS
‘Things are floating around softly.’
GAN-GAN

atama ga gan-gan suru
head SBJ MIM make-PRS
‘(My) head is pounding.’

GIRARI

*would not actively use girari

HAKKIRI

hakkiri hanasu
MIM speak-PRS
‘to speak clearly’

KIRA-KIRA

hoshi ga kira-kira shite iru
star SBJ MIM make-GER be-PRS
‘The stars are sparkling.’

KIRARI

kirari to hikaru
MIM QP shine-PRS
‘to flash (once)’

NIKKORI

*no example given

NIKO-NIKO

kyō wa niko-niko shite iru
today TOP MIM make-GER be-PRS
‘(X) is smiling today.’

PATAN

patan to shimeru
MIM QP close-PRS
‘to slam shut’

PATA-PATA

pata-pata to aogu
MIM QP fan-PRS
‘to flap a fan’
PITTARI

jikan pittari ni kuru
time MIM KYDni come-PRS
‘to arrive exactly on time’

SAKU-SAKU

kono kukkī sake-saku shiteru
this cookie MIM make-GER-be-PRS
‘This cookie is really crispy.’

SARA-SARA

sara-sara hea
MIM hair
‘smooth hair’

WAN-WAN

kodomo ga wan-wan naku
child SBJ MIM cry-PRS
‘Children wail loudly.’

ZĀ-ZĀ

zā-zā futte kita
MIM fall-GER come-PAST
‘(The rain) came pouring down.’
P_{22} (interviewed together with P_{21})

Gender: female
Age: 29
Occupation: MA student + working part time
Born in: Kanagawa
Lives in: Kanagawa
Native speaker: Yes
Dialect: Standard Japanese

Examples:

BARA-BARA

kami o bara-bara ni suru
hair ACC MIM KYDni make-PRS
‘to mess up one’s hair’

BORO-BORO

*no example given

DOKI-DOKI

shinzō ga doki-doki suru
heart SBJ MIM make-PRS
‘(My) heart is pounding.’

FUNWARI

*no example given

FUWA-FUWA

*no example given

FUWARI

*no example given

GAN-GAN

atama ga gan-gan itai
head SBJ MIM painful
‘(My) head is pounding painfully.’
GIRARI
*would not actively use girari
HAKKIRI
*no example given
KIRA-KIRA
*no example given
KIRARI
*no example given
NIKKORI
*no example given
NIKO-NIKO
*would not actively use girari
PATAN
*no example given
PATA-PATA
*no example given
PITTARI
*no example given
SAKU-SAKU
*no example given
SARA-SARA
*no example given
WAN-WAN
*no example given
ZÄ-ZÄ

*no example given