## Japanese Mimetics as Prenominal Modifiers: The Distribution of Accented and Accentless Mimetics

Miyuki Kamiya

Doctor of Philosophy
University of York
Language and Linguistic Science

September 2018

#### **Abstract**

This thesis investigates the grammatical properties and functions of Japanese mimetics when they are used as prenominal modifiers. I focus on the cases where mimetics modify nouns with physical referents. I argue that mimetic-*na* (M-*na*) should be considered neither ungrammatical nor less acceptable than other modifiers, contrary to suggestions in the previous literature. Looking at different grammatical markers combined with a mimetic, I demonstrate that M-*na* gives rise to a situation-descriptive reading, that mimetic-*sita* (M-*sita*) denotes a characterizing property and that mimetic-*no* (M-*no*) denotes a defining property, in Roy's (2013) terms. The thesis includes examples in French, Russian and Spanish to illustrate these three different interpretations.

As for the syntactic structures of mimetic modifiers, I demonstrate that M-na is a tensed clausal modifier, while M-sita is a tenseless attributive modifier, following Hamano (1986, 1988, 1998). More specifically, I claim that M-sita is an AP. I provide evidence showing that M-na is tensed (allowing a temporally anchored interpretation), whereas M-sita disallows tensed interpretations. There is currently no consensus about the grammatical status of M-no. Based on the distributions of mimetic and non-mimetic words presented in this thesis, I suggest that M-no can be marked by either the genitive or the copula.

Each of the modifiers enters into a stacking structure when they occur together. I show that semantics associate with structural positions, and argue that mimetic modifiers appear in the order of M-na, M-sita, M-no in a hierarchical structure.

This thesis sheds light on the various grammatical properties of mimetics in relation to their prosody. In broad agreement with previous research, I claim that accentless mimetics, as in M-na and M-no, denote an abstract quality, while I argue that M-sita (which involves an accented mimetic) denotes a physical concrete property. I consider the bare accented mimetics to be somewhat verb-like.

## **Contents**

Abstract	2
Contents	3
Lists of Tables and Figures	9
Acknowledgments	11
Author's Declaration	13
Chapter 1. Grammatical Functions of Japanese Mimetics	14
1.1. Introduction	14
1.2. Japanese Mimetics	15
1.2.1. Definition of Japanese Mimetics	15
1.2.2. The Basic Linguistic Properties of Mimetics in Japanes their Basic Grammatical Functions	se and 16
1.3. The Research Domain and Aims of this Thesis	23
1.4. Accented and Accentless Forms	26
1.5. The Distribution of Accented Mimetics and Accentless Mime Verbs	etics with 32
1.5.1. Accented and Accentless Mimetics and their Semantics Relation to their Prosodic Properties (Hamano, 1988; Kindaio	
1.5.2. The Distribution of (Accented and Accentless) Mimeti- Predicative Copular Form	cs with the
1.5.3. The Semantics/Syntactic Categories of Mimetic Words Relation to their Prosodic Properties	and their 39
1.6. Mimetics as Prenominal Modifiers	43
1.6.1. Two Prenominal Forms of Mimetics (Hamano, 1986, 1 1998)	988,
1.6.2. Prenominal Form M-sita (Hamano 1986, 1988, 1998)	45
1.6.3. Trends in Previous Research: the Morphological Select Accentless Mimetics between M-na and M-no	tion of 49
1.6.4. Summary and Key Points of Research Questions	53
1.7. Methodology	54
A. Data Collection	54
B. Grammaticality Judgements and Justification	59
B1: From Initial Observations to Kamiya (2016b)	59

B2: Kamiya (2016c) to Kamiya (2017a)	61
(i): Information about the Informants	61
(ii): Information about the Process of Gathering Information	ation
	62
B3: Summary and Additional Information	63
C. Information Gathered from Japanese Native Speakers	63
C1: Corresponding to the Stage B1	64
(C1-1)	64
(C1-2)	65
(C1-3)	66
C2: Corresponding to stage B2	67
(C2-1) huwahuwa-na vs. huwahuwa-no	68
(C2-2) The Use of the Three Markers with <i>hokuhoku</i>	69
(C2-3) The Use -na vsno and Different Mimetics (wit Head Noun: 'skin')	h the 71
(C2-4) torotoro-na vs. torotoro-no	71
C3: Summary	72
1.8. Summary	73
Chapter 2. The Mimetic-na Form versus the Mimetic-sita Form	74
2.1. Introduction	74
2.2. The Diagnosis: the Temporal Adjunct	74
2.3. Mimetics in Multiple Modification	75
2.3.1. The Distribution of Multiple Mimetics in Prenominal Positionand Generalisations	on 76
2.3.2. Implications of the Distributions of the M- <i>na</i> Form in Multi Modification	ple 81
2.4. The Grammatical Functions of -na and -sita as in M-na and M-sita	a 83
2.4.1. Grammatical Status of -na: the Case of Non-Mimetic Words	s 84
2.4.2. The Grammatical Status of ta: M-sita as a Tenseless Modific	er87
2.4.2.1. M-sita tenseless versus M-sita preterite	87
2.4.2.2. Grammatical Status of ta in the Literature	88
2.4.2.3. Morphological Forms of Mimetics for the Resultative Interpretation and Other Interpretations	92
2.4.3. The Semantics of the Two Modifiers (M-na vs. M-sita) in Relation to Prosody	95
2.5. Summary	97

_	3. The Three tic Considerat	e Interpretations of Non-Verbal Predicates: Cross-	98
Ü	3.1. Introduct		98
		ion to Roy's (2013) Three-Way Distinction	98
		tial Observations of Distinctions between the M-na Form	and 98
	3.2.2. Ro	y's (2013) Three-Way Distinction	101
	3.3. Three Kir (2013)	nds of Interpretations in the Copular Sentence in French: I	Roy 102
	3.3.1. The	e Defining Sentence versus the Characterizing Sentence	102
	3.3.2. The Sentence	e Characterizing Sentence versus the Situation-Descriptive	e 105
	3.3.3. Cat	tegorial Status of the Non-Verbal Predicate in French	106
	3.3.4. On	tology of "Property" and "State-Descriptive": Milsark (19	976) 109
	3.4. The Situa Interpretation	tion-Descriptive Interpretation versus the Defining-Prope in Russian	rty 111
	3.4.1. Ru	ssian Adjectives: Two Forms of Adjectives	112
		3.4.1.1. The Basic Morphosyntax of Russian Adjectives	112
		3.4.1.2. Agreement: The Long-Form Adjective versus the Short-Form Adjective (Roy 2013)	e 113
		3.4.1.3. The Pragmatics of the Short Form: Siegel (1976)	a) 114
	3.4.2. The Russian	e Short-Form and the Situation-Descriptive Reading in	115
		3.4.2.1. Roy's Situation-Descriptive Interpretation in Rus Short-Form Adjectives	ssian 116
		3.4.2.2. The Use of Short-Form Adjective: Timberlake (2004)	117
	3.4.3. De	fining Property versus Non-Essential Property in Russian	118
		3.4.3.1. Non-Verbal Predicates in Nominative Case versu Instrumental Case	ıs 118
		3.4.3.2. Transiency: the Defining Property versus the Permanent Property (Ionin & Matushansky, 2002)	120
		3.4.3.3. Nominative-Marked Predicates versus Instrumer Marked Predicates: Krasovitsky et al. (2008) and Timber (1986, 2004)	
	3.4.4. The	e Three-Way Distinction in Russian	125
		3.4.4.1. Short Form versus Nominative (Long) Form: Timberlake (2004)	126

	3.4.4.2. Summary of Roy's Three-Way Distinction in Russian	127
	orther Russian Data in Support of Roy's Three-Way Dist Key Distribution in the Investigation of M-na and M-no	
	3.4.5.1. Situation-Descriptive Interpretation versus De Property Interpretation: Short Form versus Long Form Nominative Case	_
	3.4.5.2. Long Form in the Nominative Case versus Lo Form in the Instrumental Case: Defining Interpretation versus Characterizing Interpretation	-
3.5. The Situ estar versus	ation-Descriptive Sentence in Spanish: Two Copular Va ser	riants, 130
3.6. Summar	y of French, Russian and Spanish	132
Chapter 4. The Mim	netic-na Form versus the Mimetic-no Form	134
4.1. Introduc	tion	134
4.2. The Imp	lication of the Distribution of M-no in Multiple Modific	ation
		134
4.3. The Dist	cinctions between M-na and M-no	135
4.3.1. Na	ative Speaker Observation: M-na versus M-no	135
4.3.2. Th	ne M-na Form: The Situation-Descriptive Reading	138
	ne Morphological Alternation between <i>na</i> and <i>no</i> with ess Mimetics	143
	ne Case of Acceptability of M-na Increased: the Situatio ive Interpretation	n- 145
4.3.5. Th	ne M-no Form: the Defining-Property Interpretation	147
4.3.6. To	oratani (2018): <sup>9</sup> M- <i>na</i> versus M- <i>no</i>	148
	ne Semantics of M-no in Relation to Prosody (continued on 2.4.3)	from 149
4.4. The Theo	oretical Implications of the Distribution of *[M-no M-no	a N] 149
4.4.1. Cł	haracteristic (prenominal) versus Occasion (post-nomina	al) 150
4.4.2. M	ultiple Adjectives in Prenominal Position in English	153
	estriction in the Multiple Modification of Japanese Mimo M-na N]	etics: 156
4.5. The Imp M-sita N]	lications of the Distribution of [M-sita M-no N] and ???[	M- <i>no</i> 158
4.5.1. Th	ne Implication of M-no in [M-sita M-no N]	158
	Domain Somewhere Low in Multiple Modification of Newords: the Material Reading (Watanabe, 2012)	Von- 159

	4.6. Summary and Proposal: the Ordering of the Three Forms: M-na, M	
	sita and M-no	161
_	r 5. The Grammatical Properties of the Three Prenominal Forms of se Mimetics	164
_	5.1. Introduction	164
	A: Mimetic Modifiers (remaining issues)	165
	5.2. Summary of Proposal and Cinque (2010)	165
	5.2.1. Summary of Proposal	165
	5.2.2. The Syntactic Size and Height of Prenominal Modifiers: Cinc (2010)	que 166
	5.3. M-sita versus M-no: the Investigation of the Low Domain	167
	5.3.1. M-sita versus M-no: Hamano (1988)	167
	5.3.2. Modification by Noun: investigation of M-no	169
	5.3.3. The Implications of *[M-site M-no N]: no as GEN	172
	5.3.4. The Grammatical Status of M-no in the Low Domain	176
	5.4. Investigation of the High Domain	178
	5.4.1. X-de X-no N: no as the Copula	178
	5.4.2. The Implication of M-de M-no N: no as the Copula	181
	5.4.3. The Ordering of [M-sita M-na N]	183
	5.5. Summary	184
	B: Mimetic Modifiers versus Non-Mimetic Modifiers	184
	5.6. Mimetics as Prenominal Modifiers versus Non-Mimetic Modifiers	184
	5.6.1. Structural Constraints: the Low Acceptability of Non-Mimetano as an Outer Modifier	ic- 185
	5.6.2. Less Constrained Word Order in Multiple Modification	188
	5.6.3. Mimetics as Prenominal Modifiers in Comparison to Non-Mimetic Modifiers	192
	5.6.3.1. The Distribution of Prenominal Modifiers in Relation to Semantics and their Structural Constraints	192
	5.6.3.2. Discussion (i): Accentless Mimetics versus Acce Mimetics	nted 193
	5.6.4. Can M-sita Really Be an Attributive Modifier?	196
	5.6.4.1. The Closed Class of Rentaisi	196
	5.6.4.2. M'- <i>sita</i> versus Genuine Adjectives (A- <i>i</i> ) and Oth Forms of – <i>sita</i>	er 200
	5.6.4.3. The Implication of the Discussion on <i>Rentaisi</i>	203
	5.6.5. Discussion (ii): Bare Accented Mimetics as in M'-sita	203

	5.6.6. Mimetic Modifiers versus Non-Mimetic Modifiers in a Stac Structure	eking 204
	5.6.7. Summary and Conclusion	205
	5.7. Distribution of M-na (and M'-to-sita) with Abstract Nouns	206
	5.8. Summary and Concluding Remarks on the Three Prenominal Form with Japanese Mimetics	ns 210
Chapte	r 6. Conclusions	213
	6.1. Summary, Conclusions and Contributions: Prenominal Form of Mimetics	213
	6.2. Summary: Cross-linguistic Comparisons	215
	6.3. Summary and Conclusions: Japanese Mimetics in Conjunctive-Li Modification	ke 21 <i>6</i>
	6.4. Future Research	218
	6.4.1. Discussion (i): Further Considerations on the Frame of [M-na N] and [M'-site M'-sita N] (ii, Type A versus ii, Type B in Table	
	6.4.2. Discussion (ii): The Implication of the Pause Insertion	222
Abbrev	iations	225
Referen	ices	227

## **Lists of Tables and Figures**

### **Tables**

Table 1.1: Mimetics and Non-Mimetic Words in Relation to their Reference	16
Table 1.2: The Location of Accent of Three-mora Nouns: Examples from Haraguchi (1999, p. 6, (8))	30
Table 1.3: The Location of Accent of Four-mora Words: Examples from Vance (1987, p. 78)	30
Table 1.4: The Semantic Contrast of Unaccented Verbs and Accented Verbs in Two-mora Words from Vance (1987, p. 87)	30
Table 1.5: The Semantic Contrast of Unaccented Verbs and Accented Verbs in Three-mora Words from Vance (1987, p. 87)	30
Table 1.6: The Semantic Contrast of Unaccented Adjectives and Accented Adjectives from Vance (1987, p. 87) and Kawahara (2015, p. 465, (28a))	) 30
Table 1.7: The Contrast of Unaccented Words and Accented Words across Categories	31
Table 1.8: Selection of Preverbal Morphemes: Accented Mimetic versus Accentless Mimetic	34
Table 1.9: Basic Semantics of Reduplicated Mimetics (Accented versus Accentless) and their Grammatical Markers (Copula)	42
Table 1.10: Syntactic Functions of Accented Mimetics versus Accentless Mimetics in Relation to the Selection Grammatical Markers	of 43
Table C1-1: The Distribution of M1-na/no/sita M2-na/no/sita N	64
(Table C1-2: Continued from Table C1-1)	65
Table C1-3: The Distribution of M1-de/site M2-na/no/sita N	66
Table C2-i: List of Occupations of my Informants (Native Speakers of Japanese)	67
Table C2-1: The Use of -na/-no with huwahuwa 'soft-fluffy' and Two Different Head Nouns	68
Table C2-2: The Distribution of the Use of M-na with Various Head Nouns	69
Table C2-3: The Use of -na/-no with subesube or kasakasa when the Head Noun Is the Same 'skin'	71
Table C2-4: The Difference between the Use of -na and -no	71
Table C3-i: The Information on the Use of Comments from my Informants in (C2)	72
Table C3-ii: The Information on the Use of Comments from Other Occasions than (C1)	72

Table 2.1: The Distribution of Japanese Mimetics in Prenominal Position	80
Table 2.2: Descriptive Implications of Distributions of Multiple Mimetics in Prenominal Position	83
Table 3.1: Non-Verbal Predicates in French Copular Sentences (Roy, 2013)	104
Table 3.2: Categorial Status of French Non-Verbal Predicates in the Copular Sentence	108
Table 3.3: Modified Definition of Roy's Situation-Descriptive Sentence for the Sake of my Argument	111
Table 3.4: The Distribution of the Copular Case in Relation to Tense	121
Table.3.5: Predicative (Short) Form versus Nominative (Long) Form (Timberlake's 2004, p. 296, Table 5.5, emphasis added)	, <i>my</i> 126
Table 3.6: Three Kinds of Semantics in Relation to a Morphological Form in Russian (Roy, 2013)	127
Table 3.7: The Cross-Linguistic Relationship between the Grammatical Form and the Interpretation: Roy's (2013) Three-Way Distinction	133
Table 4.1: The Distribution of Mimetics in Multiple Modification: the Stacking Structure [M1 [M2 N]]	134
Table.4.2: The Ordering of M-na, M-sita and M-no in Multiple Modification (Stacking Structure)	162
Table 5.1: The Ordering of Prenominal Modifiers with a Pause (Stacking Structures)	177
Table 5.2: Examples of Rentaisi (Examples drawn from Martin, 1975, p. 747)	198
Table 5.3: The Grammatical Properties and Functions of the Three Prenominal Modifiers with Japanese Mimetics	211
Table 6.1: Mimetic Modifiers: Semantics of Mimetics in Relation to their Prosodic Properties	214
Table 6.2: Syntactic Structures of Mimetic Modifiers in Relation to Roy (2013)	216
Table 6.3: Two Types of the Conjunctive-Like Modification Frames of Mimetics $\neq$ [M1 [M2 N]]	217
Figures	
Figure 4.1: The Ordering of Mimetic Modifiers in the Hierarchical (Stacking) Structure	162
Figure 5.1: The Ordering of Mimetic Modifiers in a Stacking Structure in Relation to Semantics, Height an of Modifiers	d Size 165
Figure 5.2: Structural Constraints on Mimetic Modifiers	192
Figure 5.3: Structural Constraints on Non-Mimetic Modifiers	193

#### Acknowledgments

Firstly, I would like to thank my supervisor Professor Peter Sells for agreeing to supervise me with the three forms of Japanese mimetics and for always providing useful comments on my work. My thanks also go to my TAP member Professor Dunstan Brown for his insightful comments on my work as well as offering useful reading suggestions. I would also like to express my gratitude to Professor Bjarke Frellesvig for creating a very welcoming environment while I was conducting my doctoral research at the Research Centre for Japanese Language and Linguistics at the University of Oxford as a visiting research student. I also appreciate the Great Britain Sasakawa Foundation for awarding a Sasakawa Japanese Studies Postgraduate Studentship to me and supporting a part of my doctoral programme.

I would like to thank all of my informants who provided their grammatical judgements for the examples I formed. I would like to acknowledge Yuko Nishita, Yusuke Wakazawa and Kazuki Inoue, for the conversations that we had about Japanese. I am grateful to Yasutada Sudo for his comments on my work and kind words of encouragement, including academic advice. I would also like to acknowledge Masaharu Shimada and Akiko Nagano for their encouraging comments on my work. I appreciate the academic advice that I received from Takako Nonaka and Professor Tom Stoneham for my PhD.

I would like to thank Georgina Brown for caring about me/my PhD. I am grateful to John Blechl, Matt Day and Jon McGovern for the conversations that we had at different stages of my PhD. I would also like to acknowledge my other colleagues Grace Wenling Cao, Sarah Kelly and Sehrish Shafi for their clarification on my questions about phonetics and phonology. My thanks also go to Professor Susan Pintzuk, my first lecturer of syntax at York, and Norman Yeo for answering my questions about syntax as my syntax tutor. I thank Professor Masaya Ike-uchi for understanding that I would like to study at York and for supporting the idea. I would like to express my gratitude towards Emeritus Professor Shuji Chiba (Tsuda College,

Tokyo, Japan), who first led me to be interested in syntax and to pursue linguistics.

I wish I could tell my late father that I ended up coming to York and have written a PhD thesis; I am glad that I can still say thank you to my mother. Finally, I would like to express my heartfelt thanks to Laurence Mann for making me stay positive at the very last moment of my writing-up period.

#### **Author's Declaration**

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been previously presented for an award at this, or any other, University. All sources are acknowledged as References.

In this thesis, I have included the work presented in the following published paper:

Kamiya, M., 2017. Non-tensed attributive modifiers in Japanese: Japanese mimetics as prenominal modifiers. In L. Zidani-Eroglu, M. Ciscel, & E. Koulidobrova, eds. *Proceedings of the 12th Workshop on Altaic Formal Linguistics (WAFL12). MIT Working Papers in Linguistics vol.* 83. Cambridge, MA: MITWPL, pp. 139-149.

# Chapter 1 Grammatical Functions of Japanese Mimetics

#### 1.1. Introduction

This thesis investigates the grammatical properties and functions of three prenominal forms of Japanese mimetics, namely mimetic-*na*, mimetic-*no*, and mimetic-*sita*.

Chapter 1 illustrates the grammatical functions of Japanese mimetics and provides an understanding of their grammatical properties. Chapter 2 examines the mimetic-*na* form and the mimetic-*sita* form. Chapter 3 explains the three kinds of semantics in French, Russian and Spanish, largely by reviewing Roy (2013), and illustrates how each of the three kinds of semantics relate to their grammatical forms. Chapter 4 discusses the semantics of the mimetic-*na* form and the mimetic-*no* form. It demonstrates that the semantic distinctions between the two forms constrain their positions in the hierarchical structure when they co-occur, and also proposes the ordering of the three modifiers. Chapter 5 examines the mimetic-*sita* form and the mimetic-*no* form. In addition, the chapter provides a finer understanding of the grammatical properties of mimetics both in isolation and when they appear in the modifier forms. Chapter 6 summarises the findings of the examinations and concludes the discussion.

Firstly in Section 1.2, I explain what mimetics are, including their basic linguistic properties and grammatical functions. In Section 1.3, I then define the research area of this thesis. In Section 1.4, I illustrate the differences between accented and accentless mimetics. In Section 1.5, I investigate how the prosodic properties of mimetics affect their other grammatical properties. In most cases, mimetics appear with various grammatical markers. I demonstrate how mimetics, both accented and accentless, perform grammatical functions by taking on these grammatical markers. In Section 1.6, I review the work of Hamano (1986, 1988, 1998) because this thesis builds on some of her findings. I also highlight matters that have not been investigated in previous research and specify the main research questions of this thesis. In Section

1.7, I explain my data sources, including descriptions of the method for collecting examples and data, and offering an account of how the grammatical judgements were made.

#### 1.2. Japanese Mimetics

In this section, I explain the definition of Japanese mimetics before illustrating their basic linguistic properties and their basic grammatical functions.

#### 1.2.1. Definition of Japanese Mimetics<sup>1</sup>

Japanese has a large inventory of sound-symbolic words, commonly called mimetics/mimetic words (Hamano, 1986). Sound-symbolic words involve "the direct linkage between sound and meaning" (Hinton, Nichols & Ohala, 1994, p. 1), and the relationship between the sound-symbolic form and its meaning is not always arbitrary (Kita, 2008; Nuckolls, 1999). Although they are "conspicuously underdeveloped" in European languages (Nuckolls, 1999, p. 225), sound-symbolic words are, in fact, typologically widespread across numerous languages.

For example, the following languages all have sound-symbolic words: Pastaza Quechua in South America (Nuckolls, 1996), Nez Perce, which is a native American language (Aoki, 1994), some indigenous languages of Australia described by Alpher (2001), Japanese (Hamano, 1986, 1998), Korean (Kim, 1977; Park, 2009), and Cantonese, which is a Yue dialect of Chinese (Bodomo, 2006). African languages are particularly well known for their rich inventories of sound-symbolic words, referred to as ideophones. Doke (1935, p. 118) first defined them as "a vivid representation of an idea in sound" for Bantu languages. Ideophones include both onomatopoeic expressions and "synesthetic expressions" (Beck, 2007, p. 2).

Japanese mimetics are not that different from these sound-symbolic words in other languages. Kindaichi (1978) states that the relationship between a Japanese mimetic word and its referent/reference is not arbitrary. Traditionally, Japanese mimetic words fall into two subclasses (Kita, 1997; Tamori & Schourup, 1999). The first subclass

<sup>&</sup>lt;sup>1</sup> This section is mostly extracted from Kamiya (2015b).

<sup>&</sup>lt;sup>2</sup> Hamano (1986, 1988, 1998) investigates the various grammatical properties (e.g. syntactic, morphological, phonotactic and accentual) of mimetic words, as well as the formal characteristics of the sound-symbolic system.

represents sounds produced by human beings or animals. They also express sounds created by the motion of inanimate objects (e.g. *katakata/gatagata* 'clattering' or 'wobbly'). These onomatopoeic words, which directly imitate sound in nature, usually fall into the subclass traditionally called *giongo* 'sound mimetics/sound-mimicking words' in Japanese (Hamano, 1986; Kita, 1997; Tamori & Schourup, 1999). Such sound-imitative words, however, form only a small subset of Japanese mimetics (Hamano, 1986; Kita, 2008). The second and larger subclass more abstractly describes a manner or state of a referent (e.g. *korokoro/gorogoro* 'the manner of a small/large object rolling', *pikapika* 'shiny', *kirakira* 'sparkling'). Words in this subclass can also refer to perceptual experiences (e.g. *betobeto* 'sticky', *tikutiku* 'stingingly') and psychological states (e.g. *wakuwaku* 'excited'). This second subclass of words is traditionally called *gitaigo* (Asano, 1978), which translates as 'manner mimetics' (Kita, 1997; Tamori & Schourup, 1999) or 'mode-mimicking words' (Hamano, 1986, 1998). The important characteristic of words in this subclass is that they are synaesthetic expressions (Akita, 2010; Shibatani, 1990).

## **1.2.2.** The Basic Linguistic Properties of Mimetics in Japanese and their Basic Grammatical Functions

Japanese has four lexical strata, namely native Japanese, Sino-Japanese, foreign and mimetic (Kageyama & Kishimoto, 2016). A typical mimetic dictionary (Ono, 2007) contains 4,500 words. Kakehi, Tamori and Schourup (1996a, 1996b) provide examples with many English translations. An intrinsic property of mimetics is that the relationship between a mimetic expression and the sound, sense or feeling that it represents is not arbitrary (cf. Subsection 1.2.1):

Non-mimetic words	Referent	Arbitrary
Mimetic words	i) sound	non-arbitrary
	ii) sense and feeling	non-arbitrary

Table 1.1: Mimetics and Non-Mimetic Words in Relation to their Reference

If we think about the English language, it is straightforward to distinguish onomatopoeic expressions, such as *ding-dong* and *tick-tock*, from non-onomatopoeic words. The examples in (1) show how English onomatopoeic

16

<sup>&</sup>lt;sup>3</sup> The term *gizyoogo* for mimetic words expressing "bodily-sensational or emotional experience" is also used (Akita, 2017, p. 21) (e.g. Kindaichi, 1978; Martin, 1975; Shibatani, 1990).

expressions correspond to Japanese ones:

(1) a.		tick-tock	[English]	tiku-taku	[Japanese]
	b.	beep	[English]	pii	[Japanese]
	c.	peep-peep	[English]	pii-pii	[Japanese]

For instance, Hamano (1998, p. 7, fn. 2) states that the English example of onomatopoeia *tick-tock* is realised as *tiku-taku* in Japanese. The mimetic *pii*, presented in (1b), typically represents the high-pitched sound made by a whistle or refers to an electronic sound, and this is much the same as what the English onomatopoeic word *beep* expresses. One of the distinctive phonetic/phonological properties of mimetic words is that /p/-initial words are allowed (e.g. *pikapika* 'shiny', *pitipiti* 'lively'): usually Japanese does not permit /p/-initial words, unless the words are loanwords of Indo-European origin (cf. Hamano, 1998; Nasu, 2015) (e.g. *pazyama* 'pyjamas', *pan* 'bread'). Obviously, there is no sense to native speakers that these mimetic words (*pikapika*, *pitipiti*), including *pii-pii* in (1c), are foreign words. /p/-initial mimetic words are actually rather common in Japanese (cf. Hamano, 1998; Nasu, 2015).

The examples presented in (2) briefly show how a segment affects the semantics of a mimetic word:<sup>4</sup>

- (2) a. pan 'the sound of a toy gun;
  clapping hands flatly with fingers stretched out;
  striking a board with a flat object such as a hand or a book'
  (Hamano, 1998, p. 77, (37))
  - b. ban 'the sound of a gun'(Hamano, 1998, p. 70, (19e)); 'bang'
  - c. ton 'hitting a drum; tapping on the shoulder'

(Hamano, 1998, p. 70, (19c))

- d. pon "tapping on the shoulder'
- e. tin 'produced by hitting a small bell or triangle'

(Hamano, 1998, p. 70, (19d))

<sup>&</sup>lt;sup>4</sup> Hamano (1988, 1998) uses {N} for the stem-final nasal. I simply write 'N' as 'n' for two reasons: first, the core examples I use for my investigation do not contain {N} and, second, the phonetic details are out of the domain of this thesis (see Hamano 1986, 1998).

f. pin 'striking a string (and producing a high-pitched sound);
stretching a cloth/string/rope/fishing line;
a stiff moustache;
a tense atmosphere or sharpness of sensation/intuition'

(Hamano, 1998, p. 76, (35))

Kindaichi (1978) states that voiced and unvoiced consonants affect the semantics of mimetic words. Most of the examples presented in (2) begin with unvoiced consonants; voiced consonants such as g/, z/, d/ and b/ express heaviness, a large size and dirtiness, while unvoiced ones express the opposite. For instance, if we compare pan in (2a) to ban in (2b), ban represents a stronger, louder or more powerful meaning than that represented by pan; the voiced consonant represents heaviness (e.g. the heavier sound a real gun produces (2b) versus the sound a toy produces (2a)).

The mimetic words do not necessarily only represent sounds but also more abstractly express a sense (e.g. (2c), (2d), (2f)). Mimetics expressing sense also have different semantics depending on the segment: the mimetics *ton* in (2f) and *pon* (2d) express senses (or sounds) which are triggered by two objects lightly touching one another, while their voiced counterpart, *don*, expresses a sense triggered by much larger objects hitting one another heavily. This is one of several such characteristics that cause mimetics to be considered as sound-symbolic.<sup>5</sup>

One of the distinctive morphophonological properties of these sound-mimicking words is that they often appear in the reduplicated form, as shown in (3)-(4). The reduplicated forms of mimetics are used in the following contexts:

(3)Hiyoko-ga pii-pii naku. chick-NOM mim cry 'The chick peeps.' (Hamano, 1998, p. 71, (23b), emphasis added) (4) a. doa-o ton-ton(-to) tataku. door-ACC mim hit 'Knock on the door in a reasonably gentle manner.'

-

 $<sup>^{5}</sup>$  See Hamano (1986, 1998) for more on the sound-symbolic system of Japanese mimetics in Modern Japanese.

b. doa-o **don-don**(-to) tataku.

door-ACC mim hit

'Knock on the door making the sound bang bang!'; 'Bang on the door'

The grammatical effect of the reduplication is to symbolise "the continuous or stative nature of an event or property" (Hamano, 1998, p. 38).<sup>6</sup> The mimetic *pii*, as in *pii-pii*, typically represents the high sound made by a whistle or refers to an electronic sound, as explained in (1); *pii-pii* mimics the continuous sounds that small birds produce, as well as *tyun(-tyun)* "chirping of a small bird such as a sparrow" (Hamano, 1998, p. 70, (19h)). The mimetic word *ton*, as in *ton-ton*, represents the sound typically produced while hitting the hard surface of an object like a door in (4a) (see (2c) as well), whereas *don*, as in *don-don* 'bang bang', presented in (4b), can express a heavier and louder sound.

Another point to be drawn from the examples in (3) and (4) is that mimetics optionally take the particle *to* in order to appear with a verb (see (5) for a grammatical effect of the use of *to* with mimetics). As for the grammatical status of *to* appearing with a mimetic, Hamano and other recent studies on the grammar of Japanese mimetics (Akita, 2017; Akita & Tsujimura, 2016; Hamano, 1986, 1998; Toratani, 2017, 2018) treat it as a quotative, and I will simply follow them with respect to the use of mimetics appearing in this environment.<sup>7</sup>

Mimetics that do not represent sounds may also be reduplicated, as follows:

\_

<sup>&</sup>lt;sup>6</sup> See Akita and Tsujimura (2016, p. 142, (17)) for more examples showing the contrast of the aspectual properties between reduplicated and non-reduplicated mimetic words. See Akita (2017) for a summary of the previous research on the aspectual effects of mimetics and Murasugi and Nakatani (2003) for the aspectual properties of mimetics from a child language acquisition point of view. See Akita and Tsujimura (2016, p. 142, (17)) for more examples showing the contrast of the aspectual properties between reduplicated and non-reduplicated mimetic words.

<sup>&</sup>lt;sup>7</sup> On *to* see Table 1.8, as well.

```
'comfortably warm'
                                               (Hamano, 1998, p. 13, (3))
     kira-kira(-to)
                       mabusii
c.
                       very bright
     mim
     'to glimmer and be blinding'
                                               (Hamano, 1998, p. 13, (3))
d.
     tiku-tiku-(-to)
                       itai
     mim
                       painful
      'painful with pricking pains'
                                               (Hamano, 1998, p. 13, (3))
```

These mimetics optionally take the particle *to* in front of a verb, as in the case of sound-mimicking words (cf. (4), (5)). The preverbal use of mimetics is often considered an adverbial use (e.g. Akita, 2009, 2017; Akita & Tsujimura, 2016; Hamano, 1986, 1988, 1998; Tamori & Schourup, 1999; Toratani, 2006, 2017), and Hamano (1986) refers to such words as mimetic adverbs. Hamano (1998, p. 13) states that "in general, a quotative particle is obligatory with more colloquial, more iconic mimetic adverbs and optional with less colloquial, more conventional mimetic adverbs". The examples in (5b)-(5d) show that mimetic-(*to*) also appears with (*i*-ending) adjectives, modifying them.

There are cases where the morphological support of *to* with a sound mimetic word, as in (6), is obligatory:

(6) Tanuki-no onaka-ga pan-**to** haretu-sityatta.

badger-GEN stomach-NOM mim explosion-ended up

'The badger's stomach blew open with a (short) bang.'

(Hamano, 1998, p. 72, (28a), my emphasis)

According to Hamano, *to*-insertion here is obligatory for phonological reasons (e.g. to form a prosodic word; see Hamano's (1998, p. 31) syllable trees). One of the important phonological properties of the Japanese mimetics with which this thesis deals is that mimetics interact with prosody (cf. Hamano, 1986, 1988, 1998; Kageyama, 2007; Kindaichi, 1978; Murasugi, 2017; Toratani, 2017). Below, I briefly illustrate how stress or accent is assigned to mimetics, reviewing Hamano (1998).

Japanese is a pitch-accent language (cf. Section 1.4). Hamano (1998, p. 32, my

emphasis) states that "accent in Japanese is associated with a syllable and maximally appears once in a prosodic word as a pitch fall". In the examples below, the accent is indicated as //, following the convention in Hamano (1988) (for the semantics of the examples see (1c), (2f) and (5b)):

```
(7) a. pii'-pii
```

- b. pii'-pii(-to)
- (8) a. pin'-pin
  - b. pin'-pin(-to)
- (9) a. po'ka-poka
  - b. pi'ku-piku

(Hamano 1998, p. 32, (41a), (42); p. 38, (52))<sup>8</sup>

In Section 1.4, I define terms such as 'stress' or 'accent', and I explain how accent works in general in Japanese, including the explanation of accented and accentless forms. Here, I present examples with the same phonological structures as the examples of mimetics that this thesis examines, as well as showing their prosodic properties. Hamano (1998, p. 32) states that "the location of accent in mimetic adverbs is predictable". To be more specific, "the leftmost heavy (or the leftmost super-heavy) syllable attracts accent in mimetic adverbs" (Hamano, 1998, p. 32) (e.g. (7), (8)). She also argues that "if there is no heavy syllable in a prosodic word, the accent falls on the leftmost light syllable" (e.g. (9)). The majority of examples that this thesis investigates fall into the phonological patterns shown in (9) (i.e. CVCV-CVCV). There seem to be cases where the "the accent of a heavy syllable phonetically shifts to the end of the syllable", for instance as in /pin pin-to/ (from (8b)), if "such forms are used in extremely expressive contexts" (Hamano, 1998, pp. 32-33). The phonological analysis of these cases is out of the domain of this thesis (see Chapter 2 in Hamano (1998) for more details on her phonetic and phonological analysis), but nevertheless, I am briefly mentioning this prosodic pattern because a similar pattern is observed in some of Hamano's examples that I present in Subsection 1.5.1 (i.e.

-

<sup>&</sup>lt;sup>8</sup> Hamano uses the caret /^/ in Hamano (1998) to indicate accent, while she uses // in Hamano (1988). For the sake of consistency in this thesis, I adopt Hamano's (1988) convention because the 1998 version does not explicitly indicate accent in the examples that this thesis carefully examines (see the examples in (10) and my description of them as well as the examples in (11) in Section 1.3).

(17a) and (18a)).

Hamano (1998, p. 9) states that "an accent is marked only where it is relevant to [her] discussion". Thus, no accents are indicated in Hamano's original examples presented below, but the location of the accents presented in (10) certainly follows the case of (9) – for instance, *bu*'*ra-bura*(*-to*) and the other two mimetics in (10), must, in fact, be accented:

In the following, I briefly explain the basic and relatively well-documented semantic nature of (accented) mimetics in relation to their adverbial functions, followed by nonmimetic lexical verbs. Mimetics frequently appear with verbs; they function as preverbal modifiers with or without to. In Japanese, there are not many native Japanese verbs other than aruku (shown above) which denote the simple motion of walking. The semantics of such a (semantically light) verb can be supplemented by (the semantic richness of) mimetics; they appear in front of the main (motion) verb, as shown in (10) (cf. Hamano, 1998). In English, verbs themselves can express various kinds of simple motion. For instance, verbs such as 'plod', 'strut', 'waddle', 'shuffle' and 'swagger' express more detailed manners of movement than the basic motion of walking. However, this is not necessarily the case with Japanese verbs (cf. Kindaichi, 1978; Shibatani, 1990). Similarly, to describe different degrees of tear production, mimetics, such as mesomeso, wanwan and sikusiku are used with the simple verb naku 'to cry'(e.g. mesomeso naku 'weep', wanwan naku 'howl' and sikusiku naku 'whimper') (Shibatani, 1990, p. 155). This semantic function of mimetic words follows Doke's (1935, p. 118) definition of ideophones – "a vivid representation of an

<sup>9</sup> The mimetics presented in (3)-(6) must be accented, as well.

Ī

idea in sound", as stated in Section 1.1. In many cases, the combination of a mimetic and a verb is thus predictable, as Tsujimura (2017, p. 117) states:

*Kirakira* is typically a descriptor for something that is shining, such as stars and diamonds, and we most commonly expect the mimetic to co-occur with verbs of light emission like *hikaru* 'shine' and *kagayaku* 'sparkle'.

I presented the instance in which *kirakira* modifies the following adjective with the meaning of 'bright' in (5c). Mimetic words seem to be semantically well-attached to main verbs (and adjectives, e.g. (5b)-(5d)). Such mimetics also appear with various nouns.

#### 1.3. The Research Domain and Aims of this Thesis

This thesis examines the distribution of mimetics in prenominal position. In this section, I define the research domain of this thesis and explain the three main points that this thesis investigates.

The mimetic *zarazara* appears prenominally, and it modifies the following noun *kami* 'paper' with the morphological support of either *sita* or *no*:

```
(11) [Prenominal Forms of Mimetics]
```

a. za'ra-zara" sita kami 'coarse paper'

b. zara-zara no kami 'coarse paper'

(Hamano, 1988, p. 144, (42a, b))

Hereafter, I shall refer to morphemes attaching to mimetics as 'grammatical markers' or 'supporting morphemes'. Hamano (1988, p. 149, fn. 2; 1998, p. 9) defines the pitch fall (word accent), indicated by //, as the phonemic pitch, and this is the crucial grammatical feature for our discussion. Henceforth, a mimetic with a pitch fall (i.e. pitch accent; cf. Section 1.4) is referred to as an accented mimetic, whereas one without is referred to as an accentless mimetic (in Hamano's terms) or unaccented mimetic. In the next section, I will explain the types of prosody (pitch pattern), and provide an account of accented and accentless forms, illustrating this with cases of non-mimetic words. As a brief observation, Hamano's examples seem to suggest that

there may also be another pitch fall, indicated by /"/, what she calls an "intonational pitch fall", before the following morpheme if a mimetic is accented. This phenomenon is beyond the scope of this thesis; what is crucial to observe in my discussion is that each of the (bare) mimetics in (11a) and (11b) are segmentally homophonous, but the one in (11a) is accented, while the one in (11b) is unaccented.

One of the main arguments of this study is that the (accentless) reduplicated mimetic can take the prenominal form of the copula na, as presented in (12c)-(15c) (cf. Chapters 2, 4, 5):

(12)	a.	ku'takuta-sita	zubon	'rumpled trousers' 10
		mim(accented)	trousers	
	b.	kutakuta-no	zubon	'rumpled trousers'
		mim(accentless)-COP/GEN		
	c.	kutakuta- <b>na</b>	zubon	(See 1.6.3, Chapters 2, 4)
		mim(accentless)-COP		
		(Kam	iya, 2015a; K	amiya, 2015b, accent added)
(13)	a.	ku'syakusya-sita	syatu	'crumpled shirt'
		mim(accented)	shirt	
	b.	kusyakusya-no	syatu	'crumpled shirt'
		mim(accentless)-COP/GEN		
	c.	kusyakusya- <b>na</b>	syatu	(See 1.6.3, Chapters 2, 4)
		mim(accentless)-COP		
(14)	a.	hu'wahuwa-sita	pai	'soft, fluffy pie'
		mim(accented)	pie	
	b.	huwahuwa-no	pai	'soft, fluffy pie'
		mim(accentless)-COP/GEN		
	c.	huwahuwa- <b>na</b>	pai	(See 1.6.3, Chapters 2, 4)
		mim(accentless)-COP		
(15)	a.	sa'kusaku-sita	pai	'crispy pie'
		mim(accented)	pie	

<sup>10</sup> My thanks go to Marilyn Vihman for her suggesting this translation to me based on my description of the phrase presented at a first-year doctoral seminar at the University of York.

24

b. sakusaku-no pai 'crispy pie'

mim(accentless)-COP/GEN

c. sakusaku-**na** pai (See 1.6.3, Chapters 2, 4)

mim(accentless)-COP

In the literature, mimetics are considered ungrammatical (or not preferable) in the -na form, or mimetic-na is considered less acceptable than mimetic-sita and mimetic-no (cf. Subsection 1.6.3). There are also cases where mimetics in the -na form are not even listed in dictionaries (e.g. Kakehi et al, 1996a; Kakehi et al, 1996b). In the realm of non-mimetic words, nominal adjectives (a subclass of adjectives in Japanese; cf. Chapter 2) usually combine with na, which is the prenominal form of the copula, to function as modifiers (e.g. kooka-na syatu 'expensive shirt', gooka-na doresu 'gorgeous dress', kookyuu-na pai 'fancy (posh, excellent) pie').

First, this thesis investigates the grammatical functions of the mimetic-na form (henceforth abbreviated to M-na), by comparing them to those of the mimetic-sita form (henceforth M-sita), as well as comparing them to those of the mimetic-no form (henceforth M-no). I focus on the examination of cases where mimetics modify nouns with physical referents (cf. Section 1.6 for the detailed discussion). As for the use of M-sita and M-no, these two forms – particularly in (11) as well as in the above cases – are treated as interchangeable in Hamano (1998). In Section 1.6, I review Hamano (1986, 1988, 1999) to explain the grammatical properties of M-sita and M-no – particularly with regards to the idea that the M-sita form is an adjective-like modifier (an attributive form). The use of the -no form with mimetics is well known, while there is no consensus on the grammatical status of no, as in mimetic-no. It is treated either as a copula (Nishiyama, 1999; Sells, 2017; Toratani, 2018) or as a genitive marker (Akita & Tsujimura, 2016). In this thesis, I demonstrate that no, as in mimeticno, could be both. However, this decision cannot feasibly be made until Chapter 5 because detailed examination is necessary in order to draw this conclusion. I will also offer an account of the finer grammatical properties of the M-sita and M-no forms in Chapter 5.

Second, when it comes to the grammatical properties of mimetics, the relevant topic is categories of bare mimetics. By 'bare mimetics' I mean mimetics in isolation

without any supporting morphemes (such as -sita and -no in the examples above, as well as -to, mentioned earlier). <sup>11</sup> The question of whether mimetics should be assigned to categories (Sells, 2017) or "whether a mimetic stem or base has an inherent or independent category" (Akita & Tsujimura, 2016, p. 148, fn. 5) has been an ongoing discussion since Kita (1997) and Tsujimura (2001), as Toratani (2018) notes. Determining the precise labels of lexical or syntactic categories of bare mimetics (if they have any) is not the main goal of this thesis. Rather, I examine how the prosodic properties of mimetics (i.e. accented versus accentless) affect their other grammatical properties (in Section 1.5). This helps to determine the grammatical properties/functions of the three prenominal forms of mimetics investigated. This thesis aims to offer a finer understanding of (bare) mimetics.

Third, I extend the discussion of how the grammatical functions proposed in this thesis could relate to the non-mimetic system in Chapter 5 (i.e. the question of whether the three interpretations proposed could be extended into the non-mimetic system). However, it should be noted that neither the investigation of non-mimetic words nor the comparison of mimetic and non-mimetic words *per se* is the primary purpose of this thesis. Secondarily, I present distributions of non-mimetic words – in order to understand the grammatical properties of bare mimetics and to identify the grammatical functions of the three prenominal forms of mimetics.

Finally, this thesis is not designed as an experimental study. The grammatical judgements could have relied only on my native intuition, but I also asked informants for their judgements to help substantiate and clarify my own judgements. I provide information about the source of the examples and data that this thesis uses as well as other related information in Section 1.7.

#### 1.4. Accented and Accentless Forms

Since the three prenominal forms of mimetics that this thesis is primarily concerned with involve two prosodic patterns, secondarily I investigate the prosodic properties of bare mimetics. In this section, I illustrate what the accented and the accentless forms of non-mimetic Japanese words are. For this purpose, I explain how Japanese 'accent'

<sup>&</sup>lt;sup>11</sup> The use of the terms 'bare' and 'bare mimetic' is found in Akita (2017) and Murasugi (2017).

works in general.

Firstly, for the purposes of my discussion in this thesis, I shall explain terminology related to the topics of prosody in general, such as pitch, tone, accent and suprasegmentals, mostly following Yip (2002) and Ladefoged (2006). <sup>12</sup> First, segments, namely consonants and vowels, form syllables (Ladefoged, 2006). Second, suprasegmentals are features that superimpose on the syllables; "the principal suprasegmental features are stress, length, tone and intonation", including "variations in stress and pitch" (Ladefoged, 2006, p. 23, 243). Suprasegmental features "can affect single segments as well as whole syllables" (Ladefoged, 2006, p. 23). Pitch is "an auditory property that enables a listener to place it on a scale going from low to high, without considering its acoustic properties" (Ladefoged, 2006, p. 24). According to Yip (2002), 'tone' is a linguistic term, while 'pitch' could also be used in other contexts, like in music.<sup>13</sup>

Secondly, as for the use of the term 'accent', Japanese is known as a pitch-accent language (cf. Frellesvig, 1998, 2010; Kubozono, 2015, 2018; Ladefoged, 2006; Tsujimura, 2007; Vance, 1987; Wells, 2006). Ladefoged (2006, pp. 260-261, my emphasis added) describes stress, tone and pitch-accent languages as follows:

It is clear that Chinese is a tone language, in which the meaning of a word is affected by the pitch, and that English is not, [...]. The "tones" in English sentence do not affect the meaning of the individual words, although they may affect the meaning of the phrase or sentence. English has stress contrast [...] Japanese is a more striking case of a language that is in some ways between a tone language and a stress language. Words in Japanese have an accent on a particular syllable in much the same way that English words have one or more stresses. In Japanese, the accent is invariably realized as a high pitch, so that Japanese is often called a pitch-accent language.

<sup>&</sup>lt;sup>12</sup> I am grateful to Sam Hellmuth and Marina Cantarutti for indicating to me that terms such as 'tone' and 'accent' could be used in various ways depending on the authors. In this section, I use direct quotes in most places in order to keep the authors' choices of these terms in their original statements. I am also grateful to Sarah Kelly and George Bailey for their discussions with me in understanding the areas of phonetics and phonology more precisely.

<sup>&</sup>lt;sup>13</sup> The perception of pitch and tone is in fundamental frequency (Igarashi, 2018; Kawahara, 2015; Ladefoged, 2006; Yip, 2002).

It is also necessary to explain how 'accent' works in general in Japanese. It is generally agreed that "the accent patterns of isolated Japanese words can be represented by specifying which moras carry high pitch and which moras carry low pitch" (Vance, 1987, p. 78). Pitch accent in Japanese is "fundamentally a word-level property"; it does not signal a focused constituent (Kawahara, 2015, p. 446). The whole accentual system throughout Japan is complex (Kawahara, 2015). In fact, Shibatani (1990, p. 177) states that "Japanese dialects show a great deal of variation in their accentual system" (cf. Frellesvig, 1998; Haraguchi, 1999; Kubozono, 2018). For the purpose of the discussion in this thesis, I will explain the basic nature of the pitch-accent system of Tokyo Japanese, as is required to understand what accented and accentless mimetics are.

The most significant characteristic of the pitch-accent system of Tokyo Japanese is that it is "sensitive to a pitch fall: processing words with an abrupt pitch fall as accented and those without it as unaccented" (Kubozono, 2018, p. 161). Within that system, "pitch fall functions as the distinctive phonetic feature of pitch accent" (Kubozono, 2018, p. 161). (See also Frellesvig (2010, p. 210).) In order to illustrate how accent actually works with non-mimetic words in Tokyo Japanese, I present Haraguchi's (1999, p. 5) analysis of the accent patterns of the form *kaki*, which can correspond to three different meanings<sup>15</sup>:

```
(16) a. ka'ki (-ga)
o' o (o): initial-accented H L (L)
oyster (-NOM)
b. kaki' (-ga)
o o' (o): final-accented L H (L)
```

<sup>&</sup>lt;sup>14</sup> The distinctions between syllable and mora need to be explicitly explained when it comes to the topics of Japanese phonology (Shibatani, 1990). For instance, in Tokyo Japanese, while the pitch changes at mora boundaries (Shibatani, 1990), the syllable is the unit that carries the accent (Frellesvig, 1998; Shibatani, 1990) (see the upcoming paragraph). All syllable boundaries are mora boundaries, but not vice versa (Kubozono, 1999) (e.g. 'Tokyo': too.kyoo (two syllables): to-o-kyo-o (four moras) (Kubozono, 1999, p. 31, 1); 'amazon': a.ma.zon (three syllables): a-ma-zo-n (four moras) (Kubozono, 1999, p. 31, 1); 'big': oo.kii (two syllables): o-o-ki-i (four moras) (Shibatani, 1990, p. 159). This matter does not change any analysis of this, but for the sake of clarity I mention this because some authors that I mention in Subsection 1.5.3 use the term 'mora'.

<sup>&</sup>lt;sup>15</sup> Yip (2002) refers to Japanese as an accentual language. The characteristic of the accentual languages (e.g. Japanese, Serbo-Croatian and some types of Dutch) is that they "have lexical tones, but what makes them special is that these languages have only a small numbers of contrasting tones (usually only one or two)" (Yip, 2002, p. 4).

```
fence (-NOM)

c. kaki (-ga)
o o (o): unaccented L H (H)
persimmon (-NOM)
(where the diacritic mark (') indicates that the immediately preceding syllable (o) has an accent.)
```

In his analysis, H stands for high, as in high pitch, while L stands for low, as in low pitch. According to Haraguchi (1999, p. 5), the "H tone of the HL melody is associated with the accent" in Tokyo Japanese. If we look at (16a) and (16b) and compare them to (16c), the accent is marked with diacritics between the mora with H and the mora with L. We observe that /kaki/ in (16b) exhibits the same melody as that in (16c), i.e. LH, (indicated in bold by me). However, once the particle ga attaches to the word kaki as shown in (16b) and (16c), it becomes obvious that the accent patterns in each of the whole sequences are not identical (i.e. /kaki'ga/ versus /kakiga/) (Haraguchi, 1999).<sup>16</sup> It is thus considered that there is an underlying contrast in accent pattern between (16b) and (16c), and this contrast is associated with different semantics, namely 'fence' and 'persimmon'. In total, there is a maximum of three accent patterns in two-mora words (e.g. ha'si HL 'chopsticks', hasi' LH 'bridge' and hasi LH 'edge', where these last two words are disambiguated by the presence of a following particle, as in (16)). Here, it is important to understand that the example in (16c) is a case of an unaccented word (a word beginning with LH), particularly for us to be able to understand the difference between accented mimetics and unaccented mimetics (accentless in Hamano's term). With respect to pitch accent, it should be noted that lexical contrast is triggered by i) "presence or absence" of pitch accent and ii) "if present, location" (Kawahara, 2015, p. 447). (See also Frellesvig (1998) for two dimensions of accent.)

More than half of the nouns in Standard Tokyo Japanese are unaccented (Haraguchi, 1999). Another example of an unaccented word is presented in the leftmost column in the following table:

<sup>&</sup>lt;sup>16</sup> The nominative particle is considered a prosodically neutral particle (Frellesvig, 1998, p. 199).

Unaccented	Initial-accented	Second-accented	Third-accented
sakura (-ga)	ka'rasu (-ga)	koko'ro (-ga)	otoko' (-ga)
LHHH	HLLL	LHLL	LHHL
'cherry'-Nom	'crow'-Nom	'heart'-Nom	'man'-Nom

Table 1.2: The Location of Accent of Three-mora Nouns: Examples from Haraguchi (1999, p. 6, (8))

Vance's examples, presented in the leftmost columns in Table 1.3, show that verbs can also be unaccented:

Unaccented	Initial-accented	Second-accented	Third-accented
hazimeru	za'razara	tate'mono	sirabe'ru
LHHH	HLLL	LHLL	LHHL
'begin'	'rough'	'building'	'investigate'

Table 1.3: The Location of Accent of Four-mora Words: Examples from Vance (1987, p. 78)17

The word in the rightmost columns in Table 1.3 is an example of an accented verb.

Not only nouns but also verbs and adjectives (with the same segments) exhibit lexical contrast by the presence of a pitch accent, as shown in Tables 1.4, 1.5 and 1.6:

<b>Unaccented verbs</b>	Accented verbs
naru	na'ru
LH	HL
'cry'	'become'

Table 1.4: The Semantic Contrast of Unaccented Verbs and Accented Verbs in Two-mora Words from Vance (1987, p. 87)

<b>Unaccented verbs</b>	Accented verbs
hareru	hare'ru
LHH	LHL
'swell'	'to clear up'

Table 1.5: The Semantic Contrast of Unaccented Verbs and Accented Verbs in Three-mora Words from Vance (1987, p. 87)

<b>Unaccented adjectives</b>	Accented adjectives
atui	atu'i
LHH	LHL
'thick'	'hot'

Table 1.6: The Semantic Contrast of Unaccented Adjectives and Accented Adjectives from Vance (1987, p. 87) and Kawahara (2015, p. 465, (28a))

-

<sup>&</sup>lt;sup>17</sup> Regarding the presentation of pitch accent, to clarify, wherever this thesis uses / a'/ (cf. fn. 8; Section 1.3), Vance (1987) uses /á/, while Kawahara (2015) uses /a'/ (diacritic).

The following table shows that lexical contrast triggered by pitch accent is observed across categories<sup>18</sup>:

<b>Unaccented words</b>	Accented words
turu [V] 'to hang'	tu'ru [N] 'crane'
kaeru [N] 'frog'	ka'eru [V] 'to return'
aoi [N] 'mallow'	ao'i [A] 'blue'

Table 1.7: The Contrast of Unaccented Words and Accented Words across Categories

The unaccented *turu* is a verb ('hang'), while the accented *turu* is a noun, a type of bird. In the second row, the unaccented word is 'frog', while the accented one is 'return'. The pair of words in the third row shows that the lexical contrast is observed in nouns and adjectives. In Standard Tokyo Japanese, "most pairs of words that contrast in pitch accent show a contrast between the accented and unaccented patterns", and 14 percent of all such pairs of words are segmentally homophonous (Kubozono, 2018, p. 159).

Mimetics in segmentally homophonous pairs also exhibit two accent patterns, namely accented mimetics and unaccented (accentless) mimetics (cf. Hamano, 1998; Kindaichi, 1978). Here is what Vance (1987, pp. 78-79, my emphasis added) observes about the properties of prosody in the case of (accented) mimetics (see also Table 1.3):

If a certain decrease in pitch from one mora to the next is due to downdrift, the change from H to L in the first two moras of a word like /za'razara/ (HLLL) must be a significantly steeper drop [...]. Representation in terms of H and L seems to make intuitive sense to native speakers of standard Japanese.

First, as for the accent of the mimetic *zarazara*, Vance indicates that this accent observed in mimetic words is intuitively obvious to native speakers of Tokyo Japanese, and I agree with this (see also Section 1.5). Second, the mimetic could also be unaccented as presented in (11). Henceforth, the accent (if present) will be indicated

<sup>&</sup>lt;sup>18</sup> In English, word stress alternates categories (cf. Ladefoged, 2006; Wells, 2006; Yip, 2002): e.g. //permit/ versus /per/mit/, /'content/ versus /con'tent/.

<sup>&</sup>lt;sup>19</sup> The accents of my mimetic examples are judged based on my own Tokyo (Standard) Japanese. There should be no sociolinguistic factors that possibly affect my accent pattern because all my family members were born and raised in Tokyo, and I have only lived in Tokyo.

with ['] in my own examples, following Hamano (1988) and Haraguchi (1999). For examples drawn from other authors, I will retain their presentations of mimetics, including their accents, in their original form.

#### 1.5. The Distribution of Accented Mimetics and Accentless Mimetics with Verbs

One of the important grammatical properties of mimetic words that Kindaichi (1978) first mentions and Hamano (1988) demonstrates is that their prosodic features have a relation to their morphosyntactic/semantic properties. Kageyama (2007, p. 30) shows that "mimetic words fall into two groups" in relation to their accent patterns. Following Kageyama (2007), the prosodic properties of mimetics have received attention in recent studies (e.g. Murasugi, 2017; Toratani, 2018). In this section, I illustrate how mimetics alternate their semantics by pitch accent. I also show how bare mimetics select supporting morphemes depending on whether mimetics are accented or unaccented. In addition, I examine how accent might affect category. This section provides a finer understanding of the grammatical properties – particularly semantics – of (bare) mimetics.

# 1.5.1. Accented and Accentless Mimetics and their Semantics in Relation to their Prosodic Properties (Hamano, 1988; Kindaichi, 1978)

Hamano (1988) provides clear examples of where a mimetic word (followed by one of the supporting morphemes) changes meaning depending on its prosodic properties, as shown in (17) and (18):

(17)	a.	kan kan" to	tataku	[accented]
		mim(adverb)	hit	
		'to hit with the sound of	kan kan'	
	b.	kan-kan ni	naru	[accentless]
		mim(nominal adjective)	become	
		'to get angry'		
(18)	a.	pan pan" to	tataku	[accented]
		mim(adverb)	hit	
		'to hit with the sound of	pan pan'	
	b.	pan-pan ni	naru	[accentless]
		mim(nominal adjective)	become	

'to stretch out'
(Hamano, 1988, p. 135, (1)-(2), information added in square brackets)

In (17a) and (18a), both *kan* and *pan* mimic the sound that they refer to in the sense given in Subsection 1.2.2. For instance, *kan* represents "the resonating sound of a bell" (Hamano, 1998, p. 70, (19a)), and the sound of church bells (e.g. 'ding-dong' in English) is often expressed by *kan-kan*. According to Hamano (1988, p. 135), in the reduplicated forms, "prosodic pitch falls between a mimetic word ending with a long syllable and the quotative *to*", which is marked in this instance with /"/; I retain her style of presentation. Here, the location of the accent of the accented mimetics in (17a) and (18a) is not the main issue (see my account of the example (8) in Subsection 1.2.2). It is only neccessary to understand that *kan-kan* and *pan-pan* (followed by *-ni*) in (17b) and (18b) are accentless in the sense given in Section 1.4, while the mimetics in (17a) and (18a) are accented. The striking fact is that accented mimetics express sound, while accentless mimetics do not. Hamano (1986, pp. 32-33) states that accentless mimetics "indicate abstract qualities rather than ongoing action or sounds". Such mimetic words are considered as nominal adjectives, or "mimetic nominal adjectives" in Hamano's (1986, 1988, 1998) terms.

Kindaichi (1978, p. 22, the translations, accent and emphasis added by me) observes that mimetics can have different accent patterns:

a. Tu'ruturu yoku suberu.
mim(accented) well slip
lit. 'Something slips well.' (It (a surface) is very slippery.)
b. Atama-ga hagete turuturu-ni natta.
head-NOM becoming-bald mim(accentless) became
'The head became shiny as it went bald.'

He also states that the mimetic word could be treated as an adverb in (19a) and as a nominal adjective in (19b), and considers each to be different inflectional forms of the same word, since the two mimetics have related meanings. In the rest of this section, I will carefully examine whether prosodic properties trigger any other distinctions in the behaviour of mimetics. It is, in fact, not easy to provide the accurate semantics of

turuturu in isolation, partially because the combination of the mimetic and the following verb is typical (see also my quote from Kageyama (2007, p. 31) in Subsection 1.5.3 and from Tsujimura (2017, p. 117) in Subsection 1.2.2). The semantics of turuturu could be explained in the following way: the accentless mimetic could refer to the shiny-slippery quality, as in the head was shiny and slippery because it went bald, while, roughly speaking, accented tu'ruturu describes the manner in which something slips in the given context (i.e. the manner of motion or movement).

It is important to observe that accentless mimetics, in which the sound interpretation is not realised, take the morpheme ni in (17b), (18b) and (19b). As for the grammatical status of ni, I simply treat ni as an adverbial form, following previous research (e.g. Akita & Tsujimura, 2016). On the other hand, accented mimetics consistently reject ni, as shown in (20):

(20) Morphological selection of accented mimetics with the verb 'become'

a. \*tu'ruturu **ni** naru.

b. \*pan'pan **ni** naru.

c. \*kan'kan **ni** naru.

Accented mimetic	[sound, manner of a motion]	to optional (see also 1.2.2)	
i) Mimetic Adverb (cf. (10), (17a), (18a), (19a))			
Accentless mimetic	[abstract quality]	with ni	
ii) Mimetic Nominal Adjectives (cf. (17b), (18b), (19b))			

Table 1.8: Selection of Preverbal Morphemes: Accented Mimetic versus Accentless Mimetic

What Hamano's study (1998) suggests is that the prosodic properties of mimetics affect their morphological selection and semantics to some extent. For my analysis, it matters whether mimetics are accented or accentless. To summarise, while accented mimetics seem to associate with 'sound' or 'manner of a motion', accentless mimetics seem to associate with 'abstract quality'. Further examination and identification of the grammatical status of *to* (and *ni*) as appears in Table 1.8 is out of the domain of this

# **1.5.2.** The Distribution of (Accented and Accentless) Mimetics with the Predicative Copular Form

In this section, I examine how accented and accentless mimetics select supporting morphemes, and specifically how they combine with verbs. I demonstrate that accentless mimetics combine well with the copular verb. I also illustrate that the semantic distinctions of bare mimetics are triggered by the presence or absence of the accent.

Hamano (1986, 1998) argues that mimetics can drop verbs (i.e. verb ellipsis) "in expressive contexts", and "for such cases, the quotative particle is also left out" (Hamano, 1998, p. 14):

(21) Retasu pari-pari, kyuuri pori-pori.

lettuce mim cucumber mim

'[We munch away at] crisp lettuce and crunchy cucumber.'

(Hamano, 1986, p. 17, (2-6)a)

There are two points that I would like to discuss in this example. The first question is what kinds of verbs can be elided from the mimetics there. The second issue regards the semantics assigned by the above contruction.

Firstly, there are three kinds of verbs, namely the main verb, the light verb and the copular verb, that could be elided in (21). If the elided verb were a main verb, I would intuitively read the mimetic word as /pa'ri-pari/ or /po'ri-pori/, even if pitch accents were not explicitly marked. Accented mimetics are compatible with main verbs as well as the light verb, as shown in (22a), (22b), (23a) and (23b):

-

<sup>&</sup>lt;sup>20</sup> See Shibagaki (2013) for the mimetic-*ni* form. See Akika (2009, 2017) and Toratani (2006, 2017) for the syntactic function of the mimetic-*to* form (i) in the preverbal position.

In the prenominal use of mimetics, there are also cases where the use of *to* seems preferable to not using it. I will show examples (as the topic will have some relevance to the research domain of this thesis, though it is not its primary focus) in Chapter 5. See Section 5.7 for further observations and discussion.

- (22) The construction: <u>accented mimetic with a main verb</u>
  - 'Somebody eats lettuce/cucumber with a crunchy sound.'
  - a. Retasu-o **pa'ri-pari taberu**.

lettuce.ACC 'eat'

b. Kyuri-o **po'ri-pori taberu**.

cucumber.ACC 'eat'

- c. \*Retasu-o pari-pari taberu.
- d. \*Kyuri-o pori-pori taberu.
- (23) The construction: <u>accented mimetic with a light verb</u>

'Somebody eats lettuce/cucumber.'

a. Retasu-o pa'ri-pari suru.

lettuce.ACC 'do'

b. Kyuri-o **pa'ri-pari suru**.

cucumber.ACC 'do'

- c. \*Retasu-o pari-pari suru.
- d. \*Kyuri-o pari-pari suru.

On the other hand, (22c), (22d), (23c) and (23d) show that accentless mimetics do not fit into these constructions. As demonstrated in (24a) and (24c), accentless mimetics have to be followed by the copula:

- (24) The construction: accentless mimetic with a copular verb
  - 'The lettuce/cucumber is crispy/crunchy.'
  - a. Retasu-ga **pari-pari da**.

lettuce.NOM COP

- b. \*Retasu-ga pa'ri-pari da.
- c. Kyuri-ga **pori-pori da**.

cucumber.NOM COP

d. \*Kyuru-ga pa'ri-pari da.

If the mimetics in (21) are accentless, the elided verb in (21) has to be the copula (cf. (24a/24c) vs. (24b/24d)). In my discussion, it is crucial to understand that accentless mimetics are compatible with the copular verb; the example in (24) shows that accentless mimetics denote a quality of the noun (subject marked in the nominative

case) in the copular construction.

The second point of discussing Hamano's example (21) is to examine possible semantics assigned by various constructions where mimetics appear (e.g. (22), (23), (24)). Hamano (1998, p. 124) also translates the sentence presented in (21) into "I eat crisp lettuce and cucumbers with a crunching sound" (my emphasis added) elsewhere. This translation and the other one in (21) convey well the general semantics of mimetics as well as the context being used. However, in my discussion, the two interpretations such as "I eat lettuce and cucumber with a crunchy sound" and "I eat crispy lettuce (or crunchy cucumber)" are fundamentally different with respect to the semantic distinction between the accented mimetic and the accentless mimetic. My understanding is that the sound interpretation (or the sound-movement-related interpretation or the manner of a movement interpretation) is assigned by the construction in which accented mimetics appear (e.g. (22)), while the abstract quality interpretation (or the stative interpretation) is assigned by the construction in which accentless mimetics appear (e.g. (24)).

Now I shall explain the semantics of mimetics in isolation. For instance, there are two possible semantics for *paripari* (followed by grammatical markers and without indication of accent) found in Kakehi et al. (1996b, p. 885, emphasis added by me, without indication of the accent):

- (25) a. a repeated cracking or splitting **sound** made when crunching something crisp in the mouth, or tearing a stiff, thin material, such as cellophane or ice
  - b. the **state** of a thin material being crisp or very stiff

My strong intuition is that /pa'ri-pari/ associates with a sense of some sort of movement (or manner of motion), which actually produces/creates the sound, whereas the accentless mimetic /pari-pari/ denotes a quality (i.e. the crispy quality) or a state/condition. My semantic description of the accented mimetic /pa'ripari/ here is consistent with (25a), while the accentless mimetic may express a stative condition, as Kakehi et al. suggest (see (25b)). In short, I claim that the absence of the accent is correlated with the sense of being more still (as in still water) or motionless from

accentless mimetics, whereas accented mimetics do not trigger such a sense.

Returning to Hamano's original example in (21), each of the mimetics with the semantics explained above could be intergrated into the following constructions, as shown in (26a) and (26b). Words with strikethrough are words that are elided:

(26) Verb ellipsis (from (21))

a. Retasu<del>-o</del> **pa'ripari** <del>taberu</del>

lettuce(-ACC) accented-mim (main lexical verb 'eat')

Semantics of (a) in (25)

Sentence: 'Somebody is **eating** lettuce **with** a crunching **sound**.'

Accented bare mimetic: movements or a manner of the (related)

motion with sound

b. Retasu<del>ga</del> paripari-da.

lettuce(-NOM) accentless-mim(-COPULAR VERB)

Semantics of (b) in (25)

Sentence: 'The lettuce is **crispy**.'

Accentless bare mimetic: the quality (or condition)

It is certainly possible for mimetics to have two different meanings, even without any supporting morphemes in the subject-predicate construction above — **as long as mimetics bear an accent or lose an accent**. In other words, segmentally homophonous mimetics in isolation contrast their semantics by pitch accent. To be more specific, accented mimetics associate with the sound-movement-related interpretation (in bold (26a)), whereas accentless mimetics associate with the quality or condition of the referent (in bold (26b)). This means that a prosodic property of the mimetic (in isolation), namely pitch accent, surely contributes to its semantics. To summarise, the distribution suggests that accented mimetics are compatible with main verbs or light verbs, while accentless mimetics are compatible with copular verbs (cf. (22)-(24), (26)).

Thus, I conclude that the prosodic properties of (bare) mimetics are at least a determining factor in the supporting morphemes that they select, as well as in their semantics.

# 1.5.3. The Semantics/Syntactic Categories of Mimetic Words and their Relation to their Prosodic Properties

In this subsection, I demonstrate how the accents of mimetics may further affect their syntactic categories by reviewing previous research: this helps us to consider possible grammatical categories (or a grammatical category) of bare mimetics.

In Kageyama (2007), four categories, namely adverbial, verbal, adjectival and nominal, are assigned to mimetic words depending on the supporting morphemes that bare mimetics take, as shown in (27a), (27b), (27c) and (27d), respectively:

(27)	a.	Nodo-ga	ga'ra-gara	suru.	[Verbal]	
		throat-NOM	mim	do		
		'My throat fee	ls irritated.'			
	b.	Iwa-ga	ga'ra-gara to	kuzureta.	[Adverbial]	
		boulder-NOM	mim	broke		
		'Large boulder	s came rumbl	ing down.'		
	c.	Eigakan-wa	gara-gara	da.	[Adjectival]	
		theatre-TOP	mim	COP		
		'The theatre is	almost empty	<b>.</b> ,		
	d.	Akatyan-ni	gara-gara-o	ageta.	[Nominal]	
		baby-DAT	mim-ACC	gave		
		'I gave the bab	y a rattle.'			
			(Kageyama,	2007, p. 31, (5)	), accents added by me)	
(28)	a.	*Nodo-ga	garagara	suru.	(cp. (27a))	
			mim	do		
	b.	*Iwa-ga	garagara to	kuzureta.	(cp. (27b))	
			mim	broke		
	c.	*Eigakan-wa	ga'ragara	da.	(cp. (27c))	
			mim	COP		
	d.	*Akatyan-ni	ga'ragara-o	ageta.	(cp. (27d))	
			mim	gave		

Kageyama (2007, p. 30) highlights the fact that "phonologically, mimetic words exhibit different accentual patterns depending on their syntactic function. In standard

Japanese, mimetic words fall into two groups as regards the placement of accent". 21 As shown in (27), what he calls "adverbial mimetics" and "verbal mimetics" are both accented, whereas what he calls "adjectival mimetics" and "nominal mimetics" are accentless (Kageyama, 2007, p. 30).<sup>22</sup> It should be noted that the distributional pattern of accented and accentless mimetics in Kageyama's examples in (27) and in the ones I discuss in (22)-(24) are the same. That is, accented mimetics are consistently incompatible with the copular verb da, whereas accentless mimetics combine well with the copular verb. The semantics of the mimetic garagara in isolation are not described in Kageyama (2007, p. 31) because he states that "it will be extremely difficult to infer these meanings only from the constructions the mimetic words appear in". This is partially the point of my examination in this chapter – I have clearly explained the semantics of bare mimetics by using Hamano's example in (21), in particular from the viewpoint of how mimetics in isolation alternate their semantics using pitch accent. Kageyama's examples could be explained as follows: the accented mimetic garagara refers to the sound you typically hear when you gargle.<sup>23</sup> I emphasise that it is necessary for the mimetic to have the pitch accent to give rise to this interpretation, and I claim that with the accent, garagara certainly triggers a sense of some sort of movement or manner of motion as well as the sound interpretation. Sounds and motions could be related to each other. Tsujimura (2017, my emphasis), in fact, argues that a sound could actually be produced/created by a motion (involving one or more objects, with the motion leading to physical contact). Without a pitch accent, the unaccented mimetic /garagara/ in (27c) expresses emptiness.<sup>24</sup>

-

<sup>&</sup>lt;sup>21</sup> The accent is not explicitly indicated in Kageyama (2007, p. 31, (5)), so I have added pitch accent to his examples, presented in (27). Murasugi (2017, p. 133) also refers to the same example to show the accent falls on the first mora, whereas the other two mimetics are unaccented (cf. the following paragraph). I have also explained that this pitch fall appearing in mimetic words is obvious to native speakers of Tokyo Japanese, by referring to Vance (1987) (cf. Section 1.4). Thus, it is not a problem for me to specify and add the accent to Kageyama's examples.

<sup>&</sup>lt;sup>22</sup> It might be worth noting that Kageyama states "accented mimetics have "three or more" variations in tonal pattern in Kageyama's Kansai dialect (e.g. LHLL or HLLL (adverbial, verbal), LLLH (adjectival), HHHH (nominal)) (Kageyama, 2007, p. 30. fn. 3). As for the characteristics of the melodic system in Japanese, Haraguchi (1999), for instance, describes (Mandarin) Chinese as a four-melody system, namely H, L, HL and LH, while the Kansai-type (e.g. Osaka) dialect is a two-melody system (i.e. HL, LHL) and the Old Kyoto dialect is a three-melody system (Haraguchi, 1999, p. 5, (7a), (7c)). See Shibatani (1990) for variations in dialects and Frellesvig (1998) for phonological variations of Central Japanese to contrast with Tokyo Japanese.

<sup>&</sup>lt;sup>23</sup> Kakehi et al. (1996a, p. 371) state that the mimetic *garagara* could also refer to "a loud rattling sound made by turning, rolling, falling, or other movement of relatively hard, heavy objects", again without indication of the accent.

<sup>&</sup>lt;sup>24</sup> Kakehi et al. (1996a, p. 373) state that *garagara* refers to "the state in which an enclosed or bounded area is virtually empty" without indication of the accent.

Murasugi (2017, p. 132, emphasis added by me) similarly assumes that *GAtyagatya* suru refers to "an **action that yields a sound when something is moved** in a nongentle manner", following Tsujimuara:

Here, I retain the authors' presentation of accents: (29a) is an accented mimetic and (29b) is an unaccented mimetic. What I would like to argue regarding the semantics of the mimetic here is that /ga'tyagatya/ (i.e. (29a)) independently expresses "the clattering or rattling sound made by relatively thin metallic or ceramic objects coming together repeatedly" (Kakehi et al., 1996a, p. 353, the accent added by me). The accent is, again, necessary in order for the mimetic to have the 'sound-related (verb-like) movement' interpretation. The accent is unnecessary for a bare mimetic to give rise to the stative interpretation. The distributional patterns of mimetics in (29)-(30) are consistent with what I have demonstrated so far, which leads us to a generalisation as follows: accented mimetics cannot take the copula da, whereas accentless mimetics cannot take the light verb suru and are instead compatible with the copula. I assume that the stative-like semantics allow the accentless mimetic to appear with the copula (cf. Murasugi's translation in (29b): 'be messy').

As for the grammatical effect of the accent, Murasugi (2017, pp. 132-133) argues that the accent triggers the semantics of dynamicity, in agreement with Kageyama (2007), as follows:

Verbal and adverbial mimetics express their semantic dynamicity by imposing an accent on the first mora. In contrast, adjectival and nominal mimetics, which denote static concepts, are accentless.

Akita and Tsujimura (2016, p. 144) also describe the semantic distinction between accented mimetics and accentless mimetics as "[+dynamic]" versus "[-dynamic] (i.e. state)". <sup>25</sup> The table below summarises the (subtle but significant) semantic distinctions between accented and accentless mimetics suggested by previous research and my observations:

Mimetic[Pitch Accent]	Semantics	Copula
Accented Mimetics	sound/movement-related, sense of movement	*
	dynamic [+]	
Accentless Mimetics	abstract quality, stative condition,	OK
	dynamic [-] sense of being 'still' or motionless	

Table 1.9: Basic Semantics of Reduplicated Mimetics (Accented versus Accentless) and their Grammatical Markers (Copula)

I conclude that segmentally homophonous mimetics change their semantics by pitch accent. The general pattern is that accented mimetics are associated with some sort of movement, including manner of motion, or a sound. On the other hand, segmentally homophonous mimetics do not retain these semantics if they lack accent. Accentless/unaccented mimetics tend to abstractly describe a quality of the referent or refer to a stative condition. My observation follows the fundamental idea in Hamano's definition of the semantics of mimetics; that is, accentless mimetics (mimetic nominal adjectives in her terms) do not express ongoing action or sounds. For my analysis of prenominal modifiers – particularly the mimetic-*na* form – it is important to understand that accentless mimetics permit the copular verb in the subject-predicate construction, whereas accented mimetics do not (cf. Subsection 1.5.3).

-

<sup>&</sup>lt;sup>25</sup> Although only Akita and Tsujimura (2016) place the pitch accent in C'VCV-CVCV for accented mimetics, the location of accent does not change my analysis.

Here is the summary of the grammatical functions of the mimetics when appearing with grammatical markers, as suggested by previous research.

Mimetic	Pitch Accent	Grammatical Markers	Syntactic Function
Reduplicated mimetic	+	(to) preverbally	adverb
Reduplicated mimetic	+	suru [light verb]	verb
Reduplicated mimetic	-	ni preverbally	nominal adjective
Reduplicated mimetic	-	da [copula predicative]	adjectival
Reduplicated mimetic	-	ga/o [case markers]	noun

Table 1.10: Syntactic Functions of Accented Mimetics versus Accentless Mimetics in Relation to the Selection of Grammatical Markers

Hamano (1998, p. 52) seems to "interpret mimetic nominal adjectives as conventionalized derivations of mimetic adverbs rather than as their inflectional variations". As for the grammatical category (or categories) of (bare) mimetics, I extend my discussion of this in Chapters 5 and 6.

#### 1.6. Mimetics as Prenominal Modifiers

In the rest of this thesis, I examine the distribution of mimetics in prenominal position. To begin, I explain how mimetics combine with grammatical markers in order for them to function as prenominal modifiers. I largely review Hamano (1986, 1988, 1998) and shed light on her discussion of the semantic type of the head noun in prenominal modification of mimetics. Firstly, I explain the general use of M-sita and M-no, following Hamano (1986, 1998), and I also explain her view of the use of M-sita. I then provide an overview of the use of M-no and M-na. Most importantly, I present the views of other authors on the M-na form.

#### **1.6.1.** Two Prenominal Forms of Mimetics (Hamano, 1986, 1988, 1998)

In this subsection, I illustrate how a mimetic appears in prenominal position, and functions as a modifier, using *zarazara* as an example.

First of all, we saw an instance of accented *zarazara* in Table 1.3 (cf. Vance, 1987, pp. 78-79). There are two different grammatical markers found in prenominal modification with mimetics:

(31)a. za'ra-zara sita kami 'coarse paper' zara-zara no kami 'coarse paper' COP/GEN

(from (11))

As shown in (31a), the morpheme(s) si(-)ta attaches to the accented mimetic, and the whole sequence of mimetic-sita modifies the following noun. The significant grammatical properties of the mimetic-sita form are that sita is "semantically almost vacuous" and tenseless, and that it forms an "adjective-like mimetic modifier" (Hamano, 1988, pp. 141-142; Kamiya, 2017b; cp. Kageyama, 2007). This thesis argues that M-sita is an attributive form/modifier in the sense that it does not function as a predicative form, as well as arguing that ta is tenseless and semantically vacuous, in contrast to sita 'did', which is the preterite of the light verb suru 'do' (cf. Chapter 2).

As shown in (31b), the morpheme no attaches to the accentless mimetic, which is called the 'mimetic nominal adjective' by Hamano. In other words, accentless mimetics take no to modify the noun, while accented mimetics take sita. The phenomenon that accented mimetics and accentless mimetics do not combine with the same grammatical markers in prenominal position is consistent with what I have shown in the case of mimetics appearing in preverbal position (cf. Section 1.5).

For the prenominal position of mimetics, Hamano defines two kinds of semantics. The possible two categories suggested for mimetic words (in prenominal usage) are as follows:

> In the above, both categories appear before the same nouns, and they are interchangeable; there are many more such cases. Nevertheless, a closer inspection of the two categories proves that there do exist cases where the two categories are either exclusive or contrastive. Certain nouns appear only with one or the other; or before certain nouns the two categories mean distinctively different things. In such cases, mimetic D-verbs invariably relate to animate objects, movements, or concrete physical properties, while mimetic nominal adjectives relate to inanimate objects, stative conditions, or abstract ideas. [...] Generally speaking, nominalized forms of verbs indicating 'actions' are modified by mimetic

D-verbs rather than mimetic nominal adjectives. (Hamano, 1998, p. 21, emphasis added by me)<sup>26</sup>

There are two important points in her statement. First, Hamano's definition indicates that a grammatical property of the head noun somehow affects the semantics of the modifier. Thus, I pay attention to the semantic types of head nouns when mimetics participate in prenominal modification. Second, in a distribution like (31), the two categories, namely what she calls the 'mimetic D-verb' (M-sita) and 'mimetic nominal adjective' (M-no), are interchangeable.<sup>27</sup>

The accentless mimetic *zarazara* expresses a non-smooth quality of the object, whereas the accented mimetic gives us a sense of some sort of movement, which presumably is closely associated with the sound that the related motion could create. In addition, I argue that the accented mimetic has more dynamicity (cf. Table 1.9) – as if we were actually touching the surface of the paper. In this section, I argue that the semantics of M-*sita*, which contains the bare accented mimetic, denote a "physical **concrete** property" of the referent, borrowing Hamano's terms (with my emphasis). I continue to consider that the bare unaccented mimetic, which the mimetic-*no* form contains, denotes, in contrast, an **abstract** quality of the referent (again borrowing Hamano's terms, with my emphasis). I use terms such as 'property' and 'quality' interchangeably, but it could be argued that the semantic contrasts of bare mimetics triggered by the pitch accent are still retained (e.g. 'concrete' versus 'abstract', as in physical concrete property and abstract quality, respectively) (see Subsections 2.4.3 and 4.3.7).

#### 1.6.2. Prenominal Form M-sita (Hamano 1986, 1988, 1998)

In this subsection, I examine distributions of the two prenominal forms that Hamano (1986, 1998) presents in order to explain the use of M-sita. I also highlight how the

<sup>&</sup>lt;sup>26</sup> This is first stated in Hamano (1988, p. 144), and "invariably" is added into the 1998 version, suggesting that the semantic distinction seems rigid for certain cases.

<sup>&</sup>lt;sup>27</sup> Hamano refers to the mimetic-*sita* form as a D-verb by adapting Nagashima's (1976) terminologies that he uses for some non-mimetic verbs. As shown in Table 1.10, *suru* (the light verb 'do') attaches to accented mimetics, and *sita* is canonically the preterite of *suru* (i.e. 'did'). Thus, accented mimetics followed by *sita* would look as if they are verbs (and I assume that this is where she adapts the term D-verb from Nagashima, see Chapter 2 for more details). However, one of the points of this thesis is that the whole modifier functions as an "adjective-like modifier" in her terms. In agreement with her, I investigate this issue in Chapter 2, where I present my analysis of M-*sita*. Some of the issues will also be discussed in Chapter 5.

semantics of the head nouns may affect the use of prenominal forms. In the following examples, Hamano claims that only the use of M-no is grammatical, whereas she considers the use of M-sita ungrammatical:

```
(32)
                                          'wrinkled paper'
             kusya-kusya no
                              kami
                                          'shabby coat'
         b.
             yore-yore no
                              kooto
         c.
             gusyo-gusyo no syatu
                                          'drenched dress'
         d.
             gusya-gusya no
                              omuretu
                                          'sloppy omelette'
             giri-giri no
                               zikan
                                          'close timing'
         e.
         f.
             bara-bara no
                              iken
                                          'different opinions'
                                             (Hamano, 1988, p. 146, (34), (35))
```

Hamano (1998) argues that nouns referring to static objects as in (32a)-(32d), or abstract nouns as in (32e) and (32f), can only be modified by mimetic nominal adjectives. She (1998, pp. 22-23) claims that the nouns in (32) are unable to be modified by M-sita because the head nouns are not "animate objects". Here, I understand that the type of head noun matters to her arguments – for instance, it matters whether the head noun denotes an animate or an inanimate object.

As Hamano argues, abstract nouns, such as 'time' and 'opinion', cannot be modified by M-sita:<sup>28</sup>

Hamano (1998, p. 22, 20a/28g) considers \*yore-yore sita kooto 'shabby coat' and \*kusya-kusya sita kami 'wrinkled paper' to be ungrammatical, and claims that a noun denoting a static object, such as coat, dress, omelette and paper in (34), has to be modified by nominal adjective mimetics. However, I observe that accented mimetics

-

 $<sup>^{28}</sup>$  I present cases where accented mimetics, followed by sita, appear in front of abstract nouns with the morpheme to in Chapter 5.

followed by sita can actually modify a head noun like the examples just listed:

(34) a.		yo're-yore sita	kooto	'shabby coat'
	b.	gu'syo-gusyo sita	syatu	'drenched dress'
	c.	gu'sya-gusya sita	omuretu	'sloppy omelette'
	d.	ku'sya-kusya sita	kami	'wrinkled paper'

I, in contrast to Hamano, argue that accented mimetics followed by *sita* can modify nouns with a physical referent. In fact, we have already considered a case in which the accented mimetic followed by *sita* adequately modifies 'paper' in Hamano's example presented at the beginning of this section: *za'razara-sita kami* 'coarse paper' (cf. (31)).

I consider the semantics of M-sita to be 'physical concrete property'. I observe that the accented mimetic /ku'sya-kusya/ followed by sita is particularly grammatical in prenominal modification; M-sita can certainly modify the inanimate object 'shirt', which is a concrete noun that has a physical referent, as shown in (35):

In such a case, the accented mimetic must take *sita*; it cannot combine with *no*, as shown in (35a). Similarly, the accentless mimetic /kusya-kusya/ combines with *no*, whereas it is incompatible with *sita*, as shown in (35b) (see also (31)). However, the fact that accented mimetics and accentless mimetics select different grammatical markers should not now be surprising because of what we saw in the distributional patterns of accented and accentless mimetics in relation to their morphological selections.

The common feature among the head nouns in (34) and (35) is that they are all concrete nouns denoting inanimate objects. If the M-sita form can relate to "physical concrete properties" as Hamano's definition says (cf. my quote of Hamano in 1.6.1),

it is not strange for M-sita to modify nouns with a physical referent, like 'shirt', because nouns with physical referents can, in principle, have such a property (essentially expressed by the accented mimetic word). Thus, it should not only be accentless mimetics (contained in the M-no form) that are able to modify an inanimate object, such as coat, dress, shirt or paper.

As for the M-sita form, Hamano (1998, p. 23) claims that "the sense of 'movement' induces the use of a mimetic D-verb" (the M-sita form) because "ordinarily stative [static] objects" may be mobile under certain circumstances. I agree with Hamano in that the 'mobility' of the modified noun is the important concept to understand the distributional patterns of mimetics in prenominal position (cf. Subsection 1.6.3).<sup>29</sup>

Hamano's idea in (36a) is that when the head noun is associated with movement, M-sita should be used rather than the nominal adjective mimetic in (36c) (i.e. the accentless mimetic followed by no prenominally is considered to be ungrammatical). I agree that (36a) is grammatical and that the accented mimetic /gu'ragura/ itself triggers a sense of movement (cf. Section 1.5, Table 1.10). However, M-sita in (36a) neither denotes an action conducted in the past nor gives rise to a past tense interpretation – even if sita is usually the past tense form of the light verb suru (see (61b) in Chapter 2 for an example of sita 'do.PAST'). It just means 'wobbly chair' (attributive meaning) (cp. (36a) and (36b)).

Similarly, *ku'sya-kusya-sita syatu* in (35a) neither means 'shirt that was crumpled' nor 'the shirt that crumpled'. It means 'crumpled shirt'. Even if the accented mimetic /ku'sya-kusya/ triggers a sense of 'movement' (cf. Table 1.9), the whole

<sup>&</sup>lt;sup>29</sup> According to Beth Levin, as for the concept of a type of word referring to things that potentially move, it could be termed 'motile'. I would like to thank Peter Sells for asking her to clarify whether such a notion exists and its terminology (see further discussion in Subsection 1.6.3 and Section 1.7).

sequence of M-sita denotes neither actions nor movements. What is important is that it denotes a 'physical concrete property'. In Chapter 2, I extend the discussion of this issue and provide evidence to argue that the M-sita form is the tenseless attributive (adjective-like) modifier, following Hamano (1986, 1988, 1998).

The two prenominal forms M-sita and M-no are treated almost as interchangeable (particularly in (31)) in previous research. In Chapter 5, I provide a finer understanding of grammatical properties and functions of the two modifiers.

### 1.6.3. Trends in Previous Research: the Morphological Selection of Accentless Mimetics between M-na and M-no

In this subsection, I show that M-no is widely accepted, while M-na is considered less acceptable than M-sita and M-no (and not much attention has been paid to the use of the M-na form) in previous research. The accented mimetic takes sita, and no cannot attach to the accented mimetic. In contrast, unaccented mimetics are incompatible with -sita, and they take no in prenominal position to modify the noun (and ni preverbally; cf. Tables 1.8, 1.10). Crucially, such mimetics denote an abstract quality, following Hamano (1986). As for the grammatical markers which combine prenominally with accentless mimetics (what Hamano calls mimetic nominal adjectives), Hamano states (1988, p. 136):

The mimetics employ no as well as na; impressionistically, no seems to be used more frequently for mimetic nominal adjectives than na.

In fact, no mimetic dictionaries list the -na form (as far as I am aware, e.g. Kakehi et al., 1996a; Kahehi et al., 1996b; Ono, 2007; Yamaguchi, 2003) (cf. 1.3). Kageyama (2007) also lists M-no and M-sita as prenominal forms but does not include M-na. It has been over thirty years since Hamano (1986) first investigated the distribution of mimetic words functioning as prenominal modifiers by taking different morphemes. The use of mimetics in Japanese might have changed over that time. The latest studies on the grammar of Japanese mimetics decided no longer to exclude the -na form (Akita & Tsujimura, 2016; Akita, 2017; Sells, 2017). However, the tendency in the literature is to claim that M-na is still not preferred, but the reasons for this, as well as the possible grammatical functions of the M-na form, have not been fully investigated.

In Shibagaki (2013), the -na form is considered either less grammatical or ungrammatical:

```
(37) a.
            ??/*karakara-na
               mim
               'very dry'
            ??/*gudenguden-na
      b.
               mim
               'very drunk'
            ??/*garigari-na
      c.
               mim
              'very thin'
                             (Shibagaki, 2013, p. 74, emphasis added by me)
      d.
            <sup>?</sup>pikapika-na
              mim
              'shiny'
      e.
            <sup>?</sup>dorodoro-na
              mim
              'muddy'
                             (Shibagaki, 2013, p. 85, emphasis added by me)
```

He does not specify the head noun which M-na is intended to modify in his examples presented above, so we do not know whether a grammatical property of the mimetic prevents it from taking na or whether the whole sequence cannot modify a certain noun.

Takezawa (2016, p. 481) considers M-na an ungrammatical form, though the information about the accent is not specified.

c. hetoheto-no/\*na sensyu
exhausted player

(Takezawa, 2016, p. 481, (37a)-(37c), my translation added to (a))

Takezawa claims that the mimetics in (38) belong to the category of nouns; thus he argues that they cannot take *na*. I will not discuss whether or not I agree with Takezawa's grammatical judgement. What might be more important to observe in Takezawa's example is that the nouns found in the distribution where M-*na* is treated as ungrammatical in Takezawa's example all refer to things that potentially move (cf. Subsection 1.6.2).

The presentation of Toratani's (2018) examples indicate that accentless mimetics take *no* rather than *na* (cf. (39)-(41); her glossing):

(39) a. turuturu no yuka
mim COP.ATT floor

'slippery floor'
b. 'turuturu na yuka

(Adapted from Toratani, 2018, p. 207, (2c), my emphasis added)

She does not accept M-na as a fully grammatical form because it sounds "colloquial" to her.<sup>30</sup>

There are two matters that I would like to shed light on in the following statement from Toratani's (2018, p. 207, my emphasis added):

The unaccented reduplicated mimetics (e.g. *turuturu* 'being slippery') occur in some of the same environments as nouns [N] and adjectival nouns [AN], although semantically, **they are adjectival in that they express a state**. [...] In the predicate position, the unaccented reduplicated mimetic is accompanied by the copula *da* as in [(41a)]. This follows the pattern of N such as *ki* 'tree' and AN such as *gooka* 'gorgeous', both of which require *da*. Similarly, as a complement of *naru* 'become', the mimetic requires *ni*, following the pattern of

<sup>&</sup>lt;sup>30</sup> This comment is from a personal communication at the NINJAL (National Institute for Japanese Language and Linguistics) conference on Japanese mimetics in 2016 (see (B1) in Section 1.7).

both N and AN (see [(41b)]). In contrast, the mimetic in the prenominal position follows the pattern of nouns, requiring *no* to modify the head noun (see [(40a)]). **The AN's pattern,** which usually requires *na* (see [(40b)]), seems less acceptable, though an Internet search indicates the form with *na* is also used, albeit much less frequently (see Uehara (1998) for the similar characteristic displayed by non-mimetic ANs).

- (40) a. ki no/\*na yuka [N]
  wood COP.ATT floor
  'wooden floor'
  - b. gooka \*no/na yuka [AN]gorgeous COP.ATT floor'gorgeous floor'

(Adapted from Toratani, 2018, p. 207, (2c), (2d))

- (41) a. Kore-wa turuturu (/ki/gooka) da. [N/AN] this-TOP mim (/wood/gorgeous) COP.NON-PAST 'This is slippery (/wood/gorgeous).'
  - b. Turuturu (gooka/mizu) ni natta. [N/AN]
     mim (gorgeous/water/) COP.ADV became
     'It becomes smooth (gorgeous/water).'

(Toratani, 2018, p. 207, (2a), (2b))

First, Toratani's (2018) observation about the semantics of the accentless stem is consistent with what I have argued so far. That is, the accentless mimetic expresses an adjectival meaning (e.g. 'abstract quality' in Hamano's (1986, 1988, 1998) terms; 'stative condition' in Table 1.9) and is unlikely to be associated with a motion or a manner of motion (cf. Tables 1.8-1.10). Second, as demonstrated in Toratani's examples in (39b), (40) and (41), there is a category called nominal adjective (or adjectival noun depending on the literature) in Japanese, and it takes *na*, which is the prenominal form of the copula (see (40b) and Chapter 2 (2.4.1) for nominal adjectives). Toratani (2018) shows that the use of the *-na* form (*turuturu-na*) is questionable in comparison to the use of the *-no* form (*turuturu-no*), as in (39), even if the accentless mimetic *turuturu* on its own has an adjectival meaning, as she clearly states (compare with (40b), (41a) and (41b)).

Here, I must raise the question of what grammatical condition prevents the accentless mimetic with an adjectival meaning from appearing with *na*. Accentless mimetics (with the meaning of abstract quality) usually combine well with copulas (cf. examples in (27), (28) and Tables 1.9, 1.10). In some cases, non-mimetic words (nominal adjectives) take *na* and *no*, and Uehara (1998) shows that the two forms assign different semantics:<sup>31</sup>

Uehara (1998, p. 121) claims that the morphological selection here is determined by the quality of the lexical semantics of a root to some extent: "when the polysemous nominal *heiwa* profiles a property 'peaceful', it takes *na* and when it profiles a thing 'peace', it takes *no*". He also suggests that these morphemes, namely *na* and *no*, help the whole sequence to assign different semantics as well. If non-mimetic nominal adjectives can alternate *na* with *no*, we would expect mimetic nominal adjectives (in Hamano's terms)/accentless mimetics to take on *na*.

#### 1.6.4. Summary and Key Points of Research Questions

In cases where mimetics link to the head noun with *sita*, *no* or *na*, it is worth posing the following research questions:

Is M-na grammatical or ungrammatical?

Why is M-*na* less preferred than M-*no*, or why is the use of M-*na* considered ungrammatical?

-

<sup>&</sup>lt;sup>31</sup> This material is from Kamiya (2016a).

What are the semantics of M-na?

In this thesis, I investigate the grammatical functions of the third form, M-na, by

comparing it to those of M-no and M-sita: M-na versus M-sita (Chapter 2) and M-na

versus M-no (Chapter 4).

1.7. Methodology

In this section, I describe in detail the method used for gathering data and making

grammaticality judgements on the structures in which mimetics occur.

The organisation is as follows: the first part of this section describes my data sources,

including the specification of examples (i.e. mimetics appearing in the different forms

of modifiers). Here, I will explain how I created these examples as part of the process

of gathering data. The second part of this section explains how I decided on

grammaticality judgements as well as providing justification for them. In this part, I

provide information about my informants (see B1 and (i) in B2). The third part of this

section provides the information gathered from my informants.

A. Data Collection

The examples of mimetics used in this thesis have two kinds of source.

The first source is examples found in other authors' work. These examples are

presented mainly in Chapter 1 in order to familiarise readers with the use of mimetics,

particularly from the perspective of how they appear in a given grammatical

construction. The data in Hamano (1998, p.10), the primary literature source for this

thesis, "come from a wide variety of sources such as ordinary conversation, TV and

radio broadcasting, personal letters, advertisements, literary sources, magazines,

cookbooks, and children's books".

The second source is my own examples, coming from the natural use of mimetics in

daily life (similar to Hamano above). A set of the examples is:

'shiny shirt'

ki'rakira-sita syatu

54

kirakira-no syatu

kirakira-na syatu $\rightarrow$  the main form for examination in this thesis

In terms of the nature of these original examples, there are several important points to clarify. I created several different combinations of mimetics and head nouns for examination. In this section, I provide the specifications for my examples.

To begin with, I provide a brief overview of the structures in which the mimetics occur for the sake of the methodology section:

The Structures in which the Mimetics Occur in Prenominal Position

[M-sita N]

 $[M-no\ N]$ 

[M-*na* N]

In order to put a mimetic (abbreviated to M) and a noun (abbreviated to N) in a combination together, I took the following points into consideration.

Firstly, in respect to the head noun (N), Hamano's (1998, p. 21) definition indicates that a grammatical property of the head noun somehow affects the semantics of the modifier, as I stated in Subsection 1.6.1. Thus, I pay attention to the semantic types of the head nouns when mimetics participate in prenominal modification.

Next, Takezawa's (2016) examples imply that the use of *na* with mimetics may not be possible if the head nouns denote animate objects (or objects that have the potential to move) (cf. (38c)/(38b), (38a)) in 1.6.3). In this thesis, I investigate whether or not M-*na* can modify different semantic types of nouns (e.g. concrete nouns and abstract nouns). In particular, I examine whether M-*na* could modify inanimate objects on the assumption that M-*na* is ungrammatical with an animate modified head noun.

When it comes to M-sita (one of the two forms widely recognised as the prenominal forms of mimetics, cf. Section 1.6), Hamano considers that the semantics of M-sita associate with 'movement', whereas I explain that M-sita denotes a physical concrete **property** of a referent in 1.6.2 (see (35) for my discussion of the example ga'tagata-

sita tukue 'wobbly desk'). In the examples where I suggest 'physical concrete property' for M-sita, head nouns have physical referents (e.g. 'shirt', as in ku'syakusya-sita syatu 'crumpled shirt', cf. (35) in 1.6.2).

In short, there are two important points with respect to the (general) semantic class of head nouns. First, M-na may not necessarily be ungrammatical with inanimate objects. Second, the semantics of M-sita with a head noun do not only associate with 'movement'. Putting these two conditions together, for examination in this thesis, head nouns are fixed as nouns with a physical referent. In addition, they have no potential to move by themselves (i.e. they are inanimate objects): e.g. 'shirt', 'futon', 'pie' and 'rice'.

Next, I divided a modifier (e.g. M-na) into two parts, namely the bare mimetic (M) and a grammatical marker (e.g. na). For M, I chose a combination in which a bare mimetic can remain semantically coherent with the following noun (N) that it modifies. In other words, I chose a bare mimetic with the meaning of a quality that the head noun can easily or normally have. For this mimetic, I also chose other head nouns that may not usually have the quality expressed by the mimetic. I made this decision in order to examine the possible effect of semantic incompatibility, in addition to the combinations where the semantic relationship between the mimetic and head noun was coherent. I did this with the assumption that mimetics may prefer their semantics to be coherent with their modifier. Recall that when accented mimetics modify the following verb, the semantics of the mimetic are generally coherent with the verb that it modifies (cf. Subsection 1.2.2). Each of the three supporting morphemes *sita*, *no* and *na* were then added to the mimetic that appears in front of the noun, which gives us three options, [M-sita N], [M-no N] and [M-na N].

The part of my method used for gathering examples, explained in this section so far, is summarised as follows:

#### (A1) Single Mimetics as Prenominal Modifiers

[M-sita N]
[M-no N]
[M-na N]

The head noun (N): a noun with a physical referent

The relationship between the mimetic (M) and the head noun (N): semantically coherent and incoherent

I paid attention to the relationship (e.g. semantic or syntactic) between the head noun and the modifier (i.e. the mimetic followed by the grammatical marker). The purpose was to specify the grammatical function of M-na, as in [M-na N].

In addition to the cases where a mimetic was used as a single modifier, I examined how mimetics behave if **two mimetics** participate in prenominal modification (i.e. multiple modification). I created further examples in the following ways:

#### (A2) Multiple Mimetics as Prenominal Modifiers

- a. I chose two mimetics that semantically sat well with each other and were coherent with a head noun (M1 M2 N).
- b. I then inserted (underlined) the supporting morphemes of each of the two mimetics: [M1-x M2-y N].
- c. An example: ki'rakira-sita kusyakusya-no syatu 'shiny crumpled shirt'.

During the process in (A2, b), I noticed that some phrases sounded particularly odd depending on the combinations of grammatical markers that followed the mimetics.

For example, the whole phrase sounds extremely odd if each of the two mimetics are followed by the same grammatical markers. In my judgement, [M1-na M2-na N] is impossible. Moreover, [M1-no M2-no N] is intuitively impossible to use as a complex modifier. Similarly, [M1-sita M2-sita N] is impossible. It is very clear to me that none of the three combinations are possible. Curiously enough, I noticed that [M1-no M2-na N] is also impossible (i.e. ungrammatical).

I systematically created all the combinations of modifiers to examine what was happening with each of the combinations. There should be nine possible combinations – 3 (grammatical markers for M1) multiplied by 3 (grammatical markers for M2):

	M1	M2
i	-no	-sita
ii	-no	-no
iii	-no	-na
iv	-sita	-sita
V	-sita	-no
vi	-sita	-na
vii	-na	-sita
viii	-na	-no
ix	-na	-na

(A3): Process of Creating the Frames of Multiple Modification for Mimetics (I)

According to my initial observations and judgement (as stated earlier), none of (ii), (iii), (iv) and (ix) are grammatical, which is shown by light shading in (A3). In the next section B, I will offer an account of and justification for how I treated them.

Furthermore, I noticed that other grammatical markers such as *de* and *site* are possible for M1, but that the semantics triggered by these two particles are clearly different. Similar to the process I explained above, there are six possible combinations of two grammatical markers with *de* and *site*:

M1	M2
-de	-sita
	-no
	-na
-site	-sita
	-no
	-na

(A4): Process of Creating the Frames of Multiple Modification for Mimetics (II)

There seemed also to be some restrictions on this type of prenominal modification, (II).

For the sake of identifying the grammatical properties of the M-na form, I further investigated the structures (in (I)/(A3) and (II)/(A4)) where two mimetics with grammatical markers modify a head noun – in addition to the use of mimetics as a single modifier (described in (A1)). In this thesis, the main focus of the examination is type (I). The purpose of examining type (II) is explained in Chapter 5.

#### B. Grammaticality Judgements and Justification

In this section, I describe how the grammaticality judgements were made for the constructions where one or two mimetics occur, and offer justification for these grammaticality judgements. For the sake of clarity, I divide the whole process into two parts/stages, and the descriptions of each stage (B1 and B2) will be presented in chronological order.

#### **B1: From Initial Observations to Kamiya (2016b)**

I assumed that M-na is a grammatical form because I would certainly say kasakasana hada 'dry skin' (to describe my skin). From my point of view, I needed to identify
why kasakasa-na hada 'dry skin' would have to be considered ungrammatical by
some researchers (see the key points of the research questions of the thesis in 1.6.4).
I also noticed that M-na sounds particularly appropriate if the temporal adverbial ima
'now' appears with it (e.g. ima (masani) huwahuwa-na keeki 'fluffy cake' with '(right)
now'). With these two particular examples, I was in no doubt about my intuition and
was confident in my judgement that M-na is grammatical. <sup>32</sup> In addition to the
examination of M-na, I noticed that M-sita cannot occur with the temporal adverbial
ima 'now', and I was extremely confident that this observation, as well as my
judgement of the example above, was correct.

In fact, these observations were accepted at two conference presentations: on M-sita at WAFL (the 12<sup>th</sup> Workshop on Altaic Formal Linguistics) in 2016 (i.e. Kamiya,

<sup>&</sup>lt;sup>32</sup> Two other examples *kutakuta-na zubon* 'rumpled trousers' (cf. Kamiya, 2015a; Kamiya 2015b) and *kusyakusya-na syatu* 'creased shirt' in Section 1.3 also seemed grammatical to me.

2016b)<sup>33</sup> and on M-*sita* and M-*na* at an international conference on mimetics at the National Institute for Japanese Language and Linguistics (NINJAL) in 2016 (i.e. Kamiya, 2016c). I present my own observations and ideas for these examples with my analysis of their distribution at the beginning of the next chapter (see Section 2.2) when I begin the investigation of the M-*na* form.

I asked two other native speakers of Japanese, who are specialists in the language (one is a semanticist, one is a clerk of (the supreme) court), for their grammaticality judgements – in order to ensure that my initial observations (described in the last part of Section A) were valid. While I was confident in my intuition, I decided to involve other individuals in this part of the examination because there is no literature to which I could refer and compare in terms of grammaticality judgements. Since their judgements were consistent with my initial judgement (see (C1-1)-(C1-3)), I considered the distributional patterns to be correct and summarised these observations as a generalisation (cf. (45)-(50), Table 2.1 in Chapter 2).

As a next step, I proposed this generalisation of the data at an international conference on mimetics at NINJAL in 2016 (i.e. Kamiya, 2016c) (with the materials mentioned previously). The data accompanying my observations were accepted in the presentation. One of the primary purposes of the use of this data (the purpose of the presentation at NINJAL) was for me to claim that M-na should not be considered less acceptable than M-no and M-sita. This occasion served for consulting opinions from a wider audience (e.g. whether people would agree or disagree) on the use of M-na. As a result, I gathered the following information at the conference.

There was general agreement with the grammaticality judgements of the data from the audience, including linguists who specialised in Japanese mimetics. There were approximately fifteen people who came to my presentation (poster), including the examples presented in Chapters 2 and 5 (Sections 2.2, 5.4), and the environment was one where everybody could talk freely about their opinions.<sup>34</sup> First, it was only

<sup>-</sup>

<sup>&</sup>lt;sup>33</sup> At WAFL (Kamiya, 2015b), I received two comments on non-mimetic words from two linguists (see fn. 38 and fn. 95). There were no comments from the other fifteen (approximately) in the audience, but there were also no disagreements with the grammaticality judgements on the structure in which M-sita occurs.

<sup>&</sup>lt;sup>34</sup> Hamano (as a guest speaker) came to my poster presentation (oral presentations are only given by guest speakers). She only asked if I had a handout of my poster presentation that she could take with her.

Toratani (personal communication, December 18, 2016) who questioned the use of M-*na* by saying to me that she did not like the -*na* form because **it sounds colloquial**. In fact, she argues against the use of M-*na* in comparison to M-*no* in her later work (i.e. Toratani, 2018), as I mentioned in Subsection 1.6.3 ((39)-(41)). (See Chapters 4, 5 (4.3.6, 5.6.3.2) for my arguments.) Second, as for the possible use of M-*na* in comparison to M-*no*, I received two comments from two members of the audience at the conference (presented in Subsection 3.2.1). In total, I received three comments on the possible use of M-*na*, and there were no more comments gathered at the conference. Additionally, one of the anonymous reviewers (of the conference) provided a comment agreeing with the grammaticality judgement on M-*na* as well as encouraging my suggestion for a possible grammatical function of M-*na*.

Thus, in order to proceed with this doctoral research at that point (December 2016), I considered the data and the grammaticality judgements to be valid. The data and generalisation of the distributional patterns where two mimetics co-occur with a head noun are presented in Chapter 2 (i.e. (45)-(50) and Table 2.1) and Chapter 6 (i.e. Table 6.3). The point is that they are considered solid enough to make an analysis from by themselves.

#### **B2: Kamiya (2016c) to Kamiya (2017a)**

As an outcome of the conference (Kamiya, 2016c), I asked myself the question of why M-na sounds colloquial to a native speaker. Moreover, if the M-na form sounds colloquial, it does not necessarily mean that M-na is ungrammatical. Thus, in order to specify why native speakers do or do not use M-na (i.e. identifying the grammatical functions of M-na; see 1.6.4 for the key points of my research questions), I presented the examples that I created with my method (explained in Section A) to several native speakers (information on individuals is provided below in (i)). In (ii). I provide further information of how grammaticality judgements were made of these examples and of how comments were collected from other native speakers of Japanese.

#### (i): Information about the Informants

The examples created based on (A1) were shown to eleven native speakers, all educated people (see Table C2-i in Section C2). Six were living and were educated in Japan, and five were living in the UK for higher education or work at the time when I

spoke to them. Due to practical limitations, it was not possible to recruit all eleven people and show all the examples to them at the same time. Sets of examples were instead shown to two to four native speakers at a time and in some cases seven speakers were involved (see (C2-1), (C2-3), (C2-4) and (C2-2), respectively). I asked informants for a small number of grammaticality judgements, ensuring the burden placed on them was kept to a minimum. I discussed the judgements individually through personal communication: this was in the form of face-to-face communication either in York, England or in Tokyo, Japan, while I was temporarily back home, or emails, text messages and online messages. For the purpose of data protection compliance (GDPR) and safeguarding, personal information about the individuals will not be given. Instead, additional information on individuals (i.e. their occupation) will be shown in aggregate in Table C2-i.

#### (ii): Information about the Process of Gathering Information

The point that I carefully observed was how my informants chose one form over the other two or how they excluded one of the three (M-na, M-no, M-sita). In particular, I observed that there were cases where speakers reacted to certain conditions of the examples. I also observed what the reasons were for their decisions. If the native speakers were able to provide any insight in addition to their grammaticality judgements with respect to the use of certain forms, I mention this during my discussion and integrate it into my analysis in Chapter 4 (in 4.3.1, 4.3.2, 4.3.3 and 4.3.5). In addition, I include this informally gathered information in Section C2 with some brief information about the informants and the distribution of the grammaticality judgements made by them. Note that it is not the case that I chose only specific comments. There were several cases where I received no comments from the informants (see Tables C2-1 to C2-4, Table C3-i and Table C3-ii).

I made my analysis of my own examples with the information gathered from my informants. My proposal about the three readings for the three prenominal forms (M-sita, M-no, M-na) (presented in Chapter 4) were presented at the 2017 annual meeting of the Language Association of Great Britain (LAGB) (i.e. Kamiya, 2017a). The purpose of the presentation was to validate my data and my proposals. I also presented some of the distributional patterns drawn from Table 2.1 (presented in Section 4.4) at the conference. One morphologist and one syntactician (both Japanese native

speakers) strongly agreed with my proposals, including the grammaticality judgements and my informants' comments.<sup>35</sup> Since I received broad agreement with my informants' grammaticality judgements on the structures in which the mimetics occur (presented in Chapter 4), I considered them to be valid.

#### **B3: Summary and Additional Information**

To sum up, the grammaticality judgements of the core examples (with my observations) were broadly agreed with by third parties (at the three conferences). Thus, I consider that the data are solid enough to allow syntactic/semantic analysis. The data is presented in Chapters 2 to 4 (and a part of Chapter 5: Section 5.4) with my observations and analysis. In Chapter 5 (and a part of Chapter 4: Sections 4.4 and 4.5), I offer the syntactic theoretical account for the empirical part of this study.

Moreover, since I first formed this generalisation, I have been able to improve the descriptions of the distributional patterns in Table 2.1 – due to further comments received at two subsequent occasions. One was an informal discussion after my talk at the LAGB conference in 2017 at the University of Kent. Another was informally given in 2017 at the University of York (see (C1-2) for their comments).

#### C. Information Gathered from Japanese Native Speakers

In this section, I provide the contents of the information gathered from my informants.

The first part of the section contains the information gathered from them using the method explained in B (see B1 and B3). This section includes three tables. Each of the tables (Tables C1-1 to C1-3) shows the distribution of the two mimetics when appearing with various grammatical markers (see (A3) and (A4)).

The second part contains the information gathered from my informants using the method explained in B (see B2 and B3). This section includes five tables in total. The first table relates to information on the informants. The other four tables are named as

<sup>&</sup>lt;sup>35</sup> There was one more native speaker of Japanese (PhD student) at the conference (at my presentation) – there were three Japanese people in total at the conference. At my talk (to approximately ten people) at the conference, I found the use of Spanish examples (i.e. (113)-(115) in Section 3.5) useful in order to explain the semantic function of M-na to speakers of other languages (e.g. a Spanish linguist, University of Oxford).

Table C2-1, Table C2-2, Table C2-3 and Table C2-4, depending on the examples being shown to the informants.

The third part presents two tables in order to demonstrate that comments have been choosen without regard for the speaker's ability.

# C1: Corresponding to the Stage B1 (C1-1)

	(a)	(1) M1- M2-	(2) M1- M2-	(3) M1- M2-
(b)				
i	-no -sita			
ii	-no -no	***	***	***
iii	-no -na	***	***	***
iv	-sita -sita	***	***	***
V	-sita -no			
vi	-sita -na			
vii	-na -sita			
viii	-na -no	?	?	?
ix	-na -na	***	***	***

Table C1-1: The Distribution of M1-na/no/sita M2-na/no/sita N

- (1) M1, M2: huwahuwa 'soft-fluffy', sakusaku 'crispy' with pai 'pie'
- (2) M1, M2: pikapika 'shiny', tuyatuya 'glossy' with okome 'rice' 36
- (3) M1, M2: kusyakusya 'crumpled' kirakira 'sparkling' with syatu 'shirt'
- e.g. (1)+(vi)=kusyakusya-sita kirakira-na syatu 'crumpled shiny shirt'

The table describes the distribution of grammaticality for the nine combinations of two mimetics (a) followed by two grammatical markers (b). Under the table, the three sets of combinations of the two mimetics are listed. The method of how the two mimetics, namely M1 and M2, were chosen (see (A2)), as well as how the combinations of grammatical markers were decided in the way shown in (i)-(ix) in the above table (see (A3)), are explained in Section A. In example (3), the mimetics are shown in bold and the grammatical markers are underlined.

-

<sup>&</sup>lt;sup>36</sup> Strictly speaking, *okom*e refers to rice that is uncooked, but it also refers to rice that is cooked. In this thesis, some of my examples involve the meaning where 'rice' will be or has been cooked; for simplicity, I will translate *okome* as 'rice'.

The symbols used in the above table mean as follows:

- \*: judged ungrammatical by one individual
- ?: judged either grammatical in some circumstances or possible but not preferred by one individual

(e.g. \*\*\*: judged ungrammatical by three individuals)

The grammaticality judgements were given by three individuals (a semanticist, a clerk of the supreme court and myself). (See B1 and B3 for justification, including my own initial observations.) This examination was conducted in 2016 (cf. B1).

Lastly, look at the shaded cell marked with '?' in Table C1-1. This indicates one comment on this combination offered by one of the two individuals during the examination explained above. This information is presented in Section 4.4 (4.4.3) with my analysis.

(C1-2)

	(a)	(1) M1- M2-	(2) M1- M2-	(3) M1- M2-
(b)				
i	-no -sita			
ii	-no -no	***	***	***
iii	-no -na	***	***	***
iv	-sita -sita	***	***	***
V	-sita -no			
vi	-sita -na			
vii	-na -sita			
viii	-na -no	?	?	?
ix	-na -na	***	***	***

(Table C1-2: Continued from Table C1-1)

This table presents the additional information on the use of two different grammatical markers with two mimetics, which was offered by three people who were different from the two individuals involved in (C1-1) on subsequent occasions (cf. B3). Light shading indicates there were comments that I received from these three individuals. The details are presented in the following two paragraphs.

First, in respect to (i) in the table above, two individuals (informant no. 7 appearing in B2 and a morphologist) said that M1-no, as in M1-no M2-sita, should accompany

a pause for the whole phrase to be perfectly grammatical (with a pause the phrase sounds much more natural than without), or M1 should take on -de without a pause. These two pieces of information (making the same point) were given in 2017 at the University of York and the University of Kent (i.e. two subsequent occasions mentioned mentioned in B3). These pieces of information are added to Section 2.3 (2.3.1), and my syntactic analysis of this observation is presented in Section 5.3 (5.3.4).

Second, another piece of information (i.e. the combination of (3) and (v) indicated in light shading) was offered by an individual (PhD student) during an informal conversation in 2017. This information is presented in Section 4.5 (4.5.1) with my analysis. The purpose of this conversation was to prepare for my oral presentation (i.e. Kamiya, 2017a) in order to double-check whether he would agree or disagree with my data and observations.

#### (C1-3)

	(a)	(1) M1- M2-	(2) M1- M2-	(3) M1- M2-
(b)				
i	-de -sita			
ii	-de -no			
iii	-de -na			
iv	-site -sita			
V	-site -no	***	***	***
vi	-site -na			
vii	-site -sita			

Table C1-3: The Distribution of M1-de/site M2-na/no/sita N

- (1) M1, M2: huwahuwa 'soft-fluffy', sakusaku 'crispy' with pai 'pie'
- (2) M1, M2: pikapika 'shiny', tuyatuya 'glossy' with okome 'rice'
- (3) M1, M2: kusyakusya 'crumpled' kirakira 'sparkling' with syatu 'shirt'

The table describes the distribution of grammaticality for the six combinations of two mimetics and two grammatical markers, formed from (b) and (a) (see (A2) and (A4) for more details). The grammaticality judgements were made by the two individuals involved in (C1-1)-(C1-3) as well as myself in 2016 (see B1).

It is worth noting that three people, including myself, judged the combination of 'M-site M-no' to be ungrammatical. I would say that 'M-site M-no' does not sound correct,

while one of the three individuals described it as follows: "M-no does not sit well in M-site M-no N". I present my syntactic analysis of the ungrammaticality in Chapter 5 (5.3).

Although the type of structure in which two mimetics occur shown in the above table is not the main object of the examination, this distributional pattern is mentioned in Chapter 5 (5.3, 5.4) in order to identify the grammatical status of *no*, as in M-*no* (the research domain of this thesis, cf. Section 1.3). In addition, I briefly discuss the distributional pattern presented in the above table in Section 6.3 and present it as a part of the supporting evidence for my main claim (that M-*na* should neither be considered ungrammatical nor less acceptable).

#### **C2:** Corresponding to stage **B2**

The first table, presented below, shows the occupation of my informants, native Japanese speakers, to whom I spoke in 2017:

Occupation
Academic
Non-academic (clerk of court)
Non-academic (civil service)
Non-academic (artist and instructor)
Non-academic (English teacher)
PhD student
PhD student
PhD student
Masters student
High-school student
Retired

Table C2-i: List of Occupations of my Informants (Native Speakers of Japanese)

Each of the informants has been numbered from 1 to 11, and these numbers appear in each of the five tables in (C2-1)-(C2-4) (see also (i) in B2). However, to ensure anonymity, occupations are not matched to other informant data.

If I received extra comments from these individuals, then the cells (related to the use of each form) are lightly shaded in (C2-1)-(C2-4).

(C2-1) huwahuwa-na vs. huwahuwa-no

huwa	huwa			Comments
			huton 'futon'	
Informant no.				
1	-na	OK	OK	Used in 4.3.1
	-no	OK	OK	
2	-na	OK	OK	The distinction is
	-no	OK	OK	clearer in 'futon'.
3	-na	OK	OK	N/A (see Table C2-2)
	-no	OK	OK	

Table C2-1: The Use of -na/-no with huwahuwa 'soft-fluffy' and Two Different Head Nouns

The table describes whether the use of -na and/or -no is accepted by three native speakers of Japanese in two sets of examples. In the two examples, the head nouns are different from one another, namely 'cake' and 'futon', for the same mimetic huwahuwa 'soft-fluffy'.

The three individuals (with numbers, indicated in the leftmost column, from Table C2-i above) answered whether it was acceptable for them to use each of the forms (e.g. huwahuwa-na keeki 'soft-fluffy cake', huwahuwa-no huton 'fluffy futon').

No cases were observed where the use of M-na was rejected in the two sets among the three individuals. Another observation is that the possible semantic distinction between huwahuwa-na and huwahuwa-no seems describable (cf. informant 1). On the other hand, the semantic distinction between huwahuwa-na and huwahuwa-no ('soft-fluffy') seems less noticeable (less recognisable or even indescribable) when the head noun is 'cake' (cf. informants 1, 2 and 3).

This information (my observations) explained here is presented in Subsection 4.3.1 ((116), (117)) with my analysis.

(C2-2) The Use of the Three Markers with hokuhoku

hokuhoku Informant		zyagaimo 'potato'	korokke 'croquette'	kabotya 'pumpkin'	ninniku 'garlic'	Comments
2	-sita					
	-no					
	-na			?	?	Used in 4.3.2
3	-sita -no				?	Used in 4.3.2 and see ii (p. 70)
	-na					below for another comment by informant 3
4	-sita					
	-no					
	-na				?	Used in 4.3.2
5	-sita					
	-no					Used in 4.3.2
	-na					
6	-sita					See fn. 73
	-no					
	-na					
7	-sita					Accent in M-
	-no					sita pointed out
	-na					
11	-sita					Accent in M-
	-no					sita pointed out
	-na					

Table C2-2: The Distribution of the Use of M-na with Various Head Nouns

The table shows the distribution of whether the use of M-na is accepted by Japanese native speakers in various examples in comparison to their use of M-no and M-sita.

In each example, the same mimetic (*hokuhoku* 'soft-flaky quality'; for a more detailed account of the semantics, see Subsection 4.3.2) is used, but the head nouns are different, namely 'potato', 'croquette', 'pumpkin' and 'garlic'. The four sets of examples were shown to seven native speakers of Japanese (informants 2, 3, 4, 5, 6, 7 and 11).

Seven individuals answered whether it was acceptable for them to use each of the examples listed in the above table. '?' found in Table C2-2 indicates the examples where the informants were questioned about the use of a combination or the examples

for which they made some comments.

The rightmost column records any comments given by the informants. If there were, they have been treated in the following ways:

- i. Comments (from informants no. 2, 4, 5) indicated in light shading are presented in 4.3.2.
- ii. One of the two comments from informant no. 3 indicated in dark shading is used in the discussion in Chapter 5 (5.7): "I would use *huwahuwa-na* definitely with *syokkan* 'mouth-feel', and with *syokkan*, I would definitely say *huwahuwa-to-sita syokkan*" (with the speaker's emphasis).
- iii. The comments about accent from informants 7 and 11 (without shading) are *not* presented in Chapter 4 because a phonological account of this matter is given in Chapter 1. For the sake of clarity, it should be noted that the observation here is consistent with what has been explained in previous research (cf. Vance (1987, pp. 78-79) in Section 1.4).
- iv. A comment (from informant no. 6) appears in fn. 73 (Section 4.5.1).

Overall, there were no objections to the use of M-sita in the above examples. One instance was observed where a native speaker questioned the use of M-no. As for the use of M-na, there were three cases where native speakers made comments on its use.

The information (my observations) explained here is presented in Subsection 4.3.2 ((118)-(122)) with my analysis.

## (C2-3) The Use *-na* vs. *-no* and Different Mimetics (with the Head Noun: 'skin')

haa	Comments			
Informant no.		subesube 'smooth'	kasakasa 'dry'	
7	-na -no	no preference	no preference	Does not care about the distinction
8	-na	preferred		
	-no	possible	preferred	Used in 4.3.3
9	-na	preferred		
	-no		preferred	

Table C2-3: The Use of -na/-no with subesube or kasakasa when the Head Noun Is the Same 'skin'

The table presents the distribution of how M-na and M-no are used by three Japanese native speakers. The two sets of examples, where the same head noun 'skin' appears with different mimetics, namely *subesube* 'smooth' and *kasakasa* 'dry', were shown to three of my informants (no. 7, 8, 9). They answered whether they had a preference for one over the other.

No rejection of M-*na* was observed. What is more important to observe is that the three people used the two forms differently. One individual (no. 7) said "I do not care about the selection of M-*na* and M-*no* when it comes to skin", while two individuals (no. 8 and 9) had some preferences. The comment from one of the two individuals who had some preferences (no. 8) is presented in Subsection 4.3.3 ((123), (124)) with my analysis. The other observations explained here are also presented.

(C2-4) torotoro-na vs. torotoro-no

had	da 'egg'		Comments/reasons
Informant no.		torotoro 'runny'	
8	-na		Used in 4.3.5
	-no	more delicious	
10	-na	more delicious	Used in 4.3.5
	-no		

Table C2-4: The Difference between the Use of -na and -no

The table presents the answer to the question of whether an egg described by one form would be considered more delicious than another egg described by the other form. This question was asked to (only) two people, because I judged that their comments were sufficient to inform my observation and analysis for the examples.

The information is presented in Subsection 4.3.5 ((126)) with my analysis.

#### C3: Summary

In summary, as for grammaticality judgements, I used several pieces of information given by my informants. I also used the information given by other native Japanese speakers (explained above).

The following tables summarise the distribution of the existence of comments from each of my informants and the other native speakers. The two tables show that the comments were equally used for my analysis without undue selection on my part:

Informant	Sections where comments	
	from my informants are used	
1	4.3.1	
2	4.3.1	
3	4.3.2, 5.7	
4	4.3.2	
5	4.3.2	
6	4.5.1 (fn. 73)	
7	4.3.3	
8	4.3.3, 4.3.5	
9	N/A	
10	4.3.5	
11	N/A	

Table C3-i: The Information on the Use of Comments from my Informants in (C2)

People who provided comments	Sections where comments are used
Audience (B1)	3.2.1
Audience (B1)	3.2.1
Audience (B2)	2.3, 5.3.4
7	2.3, 5.3.4
PhD student	4.5.1

Table C3-ii: The Information on the Use of Comments from Other Occasions than (C1)

Tables C3-i and C3-ii show that it is *not* the case that a weighting was given according to the speaker's ability (see also tables C2-1, C2-2, C2-3 and C2-4). N/A in Table C3-i indicates that the informant provided no further commentary on the example(s).

For the sake of clarity, it is worth noting that people who provided comments were

from various backgrounds – non-academic, PhD student, Masters student and high-school student, and people who did not provide comments were also in various occupations, such as academics, PhD students, non-academic people and retired people.

Throughout this thesis, I show that speakers' ability (e.g. someone may be good at explaining their intuitions explicitly in an informative way) is not the determining factor for the supporting ideas or evidence of my arguments. It is important to understand what determines speakers' decisions on the use of forms (e.g. selection of grammatical markers or the interpretations that speakers intend to convey). I investigate what linguistic factors affect their decisions if several forms are available.

#### **1.8. Summary**

In this chapter, in Sections 1.2 to 1.6, I provided an overview of the basic grammar of Japanese mimetics. In particular, in Sections 1.4 and 1.5, I showed what accented mimetics and accentless mimetics are, and how the prosodic properties of these mimetics affect their semantics. In Sections 1.5 and 1.6, I also illustrated how accented and accentless mimetics take on grammatical markers in order to appear in various grammatical constructions. In Sections 1.3 and 1.6, I highlighted the prenominal use of mimetics and one of the three prenominal forms of mimetics that have not been investigated in previous research. In Sections 1.6 and 1.7, I defined the research domain of this doctoral thesis and provided the methodology for my doctoral research.

# Chapter 2 The Mimetic-na Form versus the Mimetic-sita Form

#### 2.1. Introduction

Previous literature (including mimetic dictionaries) does not contain the mimetic-na form (M-na), which means that the grammatical functions of the M-na form have been neglected (cf. Chapter 1). In this chapter, I argue that M-na is a tensed clausal modifier, while the mimetic-sita form (M-sita) is a tenseless attributive form. In Section 2.2, I demonstrate that M-na allows the temporal interpretation, whereas M-sita does not. In Section 2.3, I provide distributional evidence showing that the grammatical properties of M-na differ from those of M-sita and M-no. In Section 2.4, I illustrate how the two grammatical markers -na and -ta combine with non-mimetic words, and I argue that -na helps a M-na form to function as the tensed clausal modifier, while -ta is tenseless and helps M-sita to be an attributive form. In this section, I also explain how word prosody (i.e. accented versus accentless mimetics) interacts with the different modifier constructions (with -na and -sita) in relation to their semantics. This chapter provides the first empirical description of the grammatical behaviour of these forms, M-na and M-sita, for the sake of comparison. It also supports the claim that M-na is not an ungrammatical form.

#### 2.2. The Diagnosis: the Temporal Adjunct

In this section, I examine the grammatical properties of the morphological sequences of M-na and M-sita for the sake of comparison. Once temporal adverbials are employed with these phrases as a diagnosis, their different grammatical properties become observable.

Kakehi et al. (1996b) state that the mimetic *kusyakusya* followed by a grammatical marker refers to the state of being crumpled (without the accent on the mimetic being marked). Roughly speaking, the mimetic refers to the physical condition the entity (e.g. shirt) is in when followed by the morphemes *na* or *sita*, as shown in (43):

'a crumpled shirt' (43)(\*ima) ku'syakusya-sita syatu a. now mim shirt b. ima (masani) kusyakusya-na syatu (right) now shirt mim (44)'a soft, fluffy pie' hu'huwa-sita (\*ima) pai a. now mim pie ima (masani) b. huwahuwa-na pai

mim

(right) now

(Data from Kamiya, 2016c, accents added)

pie

Here, the use of temporal adjuncts allows us to clearly distinguish the nature of one form from the other. The data in (43b) and (44b) demonstrate that M-na is compatible with temporal adjuncts (e.g. *ima* (*masani*) '(right) now'). The M-na form can refer to a condition that the entity (head noun) is **currently** in with the temporal adverbial *ima*. For instance, in (44b), the pie is currently in a condition where it has a 'fluffy' quality. However, this is not the case with M-sita. As shown in (43a) and (44a), M-sita is incompatible with the temporal adverbial *ima* 'now'.

The contrast observed in (43) and (44) suggests that the M-*na* form has a grammatical function that the M-*sita* form does not have. This would also mean that the M-*sita* form should denote a different meaning to 'a condition that the entity is currently in'. As for the semantics of M-*sita*, I suggested the notion of 'physical concrete property' in Chapter 1. In the next section, I demonstrate further that the grammatical properties of M-*na* and M-*sita* cannot be identical.

#### 2.3. Mimetics in Multiple Modification

In this section, I present novel data where multiple mimetics participate in modification followed by prenominal morphemes, such as *sita*, *no* and *na*. Mimetics can participate in what I shall term 'multiple modification' – as long as they are followed by different morphemes (cf. data (45)-(47) from Kamiya (2016c); (48)-(51) adapted from Kamiya (2016c)).

In 2.3.1, I provide a generalisation of the distributional patterns of mimetics in multiple modification. In 2.3.2, I present distributional facts showing that different grammatical properties of these two forms are reflected in their syntactic behaviour in multiple modification.

# 2.3.1. The Distribution of Multiple Mimetics in Prenominal Position and Generalisations

The following three tables, (45)-(47), illustrate how two mimetics, followed by *na*, *sita* and/or *no*, are distributed in prenominal modification. For the sake of simplicity in this subsection, I provide the simplest translation for each of the mimetic words. For the rest of the thesis, our discussion and my analysis largely depend on the distribution of mimetics in multiple modification. Thus, I refer to these distributions not only in this section but also in other chapters and only explain the relevant distributions in each discussion.

As shown in (a)-(c) of each table, multiple mimetics cannot function as modifiers if the two different mimetics are followed by the same morpheme (in bold in (45)-(47)): M-na M-na, M-sita M-sita and M-no M-no are all ungrammatical.

	(45) Head noun: pai 'pie'					
	Mimetic 1: huwahuwa 'fluffy'; Mimetic 2: sakusaku 'crispy'					
	Mimetic 1 Mimetic 2 pai: 'fluffy crispy pie'					
a.	*huwahuwa- <b>na</b> sakusaku- <b>na</b> pai					
b.	*hu'wahuwa- <b>sita</b> sa'kusaku- <b>sita</b> pai					
c.	*huwahuwa- <b>no</b> sakusaku- <b>no</b> pai					
d.	huwahuwa-na sa'kusaku-sita pai	e.	hu'wahuwa-sita sakusaku-na pai			
f.	<sup>?</sup> huwahuwa-na sakusaku-no pai	g.	*huwahuwa-no sakusaku-na pai			
h.	hu'wahuwa-sita sakusaku-no pai	i.	<sup>???</sup> huwahuwa-no sa'kusaku-sita pai			

	(46) Head noun: kome 'rice'					
	Mimetic 1: pikapika 'shiny'; Mimetic 2: tuyatuya 'glossy'					
	Mimetic 1 Mimetic 2 rice 'shiny glossy rice'					
a.	. *pikapika- <b>na</b> tuyatuya- <b>na</b> okome					
b.	*pi'kapika- <b>sita</b> tu'yatuya- <b>sita</b> okome					
c.	*pikapika-no tuyatuya-no okome					
d.	pikapika-na tu'yatuya-sita okome	e.	pi'kapika-sita tuyatuya-na okome			
f.	<sup>?</sup> pikapika-na tuyatuya-no okome	g.	*pikapika-no tuyatuya-na okome			
h.	pi'kapika-sita tuyatuya-no okome	i.	<sup>???</sup> pikapika-no tu'yatuya-sita okome			

	(47) Head noun: syatu 'shirt'					
	Mimetic 1: kusyakusya 'crumpled'; Mimetic 2: kirakira 'shiny'					
	Mimetic 1 Mimetic 2 syatu 'a crumpled shiny shirt'					
a.	*kusyakusya- <b>na</b> kirakira- <b>na</b> syatu					
b.	*ku'syakusya- <b>sita</b> ki'rakira- <b>sita</b> syatu					
c.	*kusyakusya- <b>no</b> kirakir- <b>no</b> syatu					
d.	kusyakusya-na ki'rakira-sita syatu	e.	ki'rakira-sita kusyakusya-na syatu			
f.	kusyakusya-na kirakira-no syatu	g.	*kusyakusya-no kirakira-na syatu			
h.	ku'syakusya-sita kirakira-no syatu	i.	<sup>???</sup> kirakira-no ku'syakusya-sita syatu			

In (45)-(47), the outer modifier [Mimetic 1] scopes over the constituent containing the

inner modifier [Mimetic 2] and the head noun: [M1 [M2 N]]. This syntactic structure is called a 'stacking structure'. Mimetic 1 modifies the head noun with a quality expressed by Mimetic 2. For example, *ku'syakusya-sita kirakira-no syatu* in (47h) roughly means 'crumpled shiny shirt'. At this stage of the discussion, I will avoid translations such as 'a shiny shirt which is crumpled' because this syntactic structure, namely the relative clause, would allow the modifier to assign the (present) tense (by the syntactic function of the functional head T). The whole point of this investigation is to identify whether the syntactic structures of each of the three modifiers are 'a crumpled shirt' or 'a shirt which is crumpled'.

The generalisation of the distributions of mimetics in multiple modification shown in (45)-(47) is summarised as follows:

- I. The same morpheme cannot support mimetics in multiple modification.
- II. M-no M-na results in ungrammaticality with no exceptions. The combination of the M-no form and the M-na form is always ungrammatical in this order.
- III. M-no M-sita is not ungrammatical, but not fully acceptable either. It is always marked.
- IV. M-na M-no is usually grammatical, but is sometimes slightly marked.
- V. M-sita M-no is always grammatical, and it can be easily recognised as such. M-sita M-na and M-na M-sita are both grammatical, and the judgement is straightforward.

These tendencies are consistent even if the position of the mimetics is swapped. For 'shiny crumpled shirt', for instance, both \*kusyakusya-no kirakira-na syatu in (47g) and \*kirakira-no kusyakusya-na syatu in (50g) are ungrammatical. Compare (45) to (48), as well as (46) to (49) and (47) to (50):

	(48) Head noun: pai 'pie'					
	Mimetic 1: sakusaku 'crispy', Mimetic 2: huwahuwa 'fluffy',					
	Mimetic 1 Mimetic 2 pai 'crispy fluffy	pie'				
a.	a. *sakusaku- <b>na</b> huwahuwa- <b>na</b> pai					
b.	*sa'kusaku- <b>sita</b> huwahuwa- <b>sita</b> pai					
c.	*sakusaku- <b>no</b> huwahuwa- <b>no</b> pai					
d.	sakusaku-na hu'wahuwa-sita pai	e.	sa'kusaku-sita huwahuwa-na pai			
f.	sakusaku-na huwahuwa-no pai	g.	*sakusaku-no huwahuwa-na pai			
h.	sa'kusaku-sita huwahuwa-no pai	i.	<sup>???</sup> sakusaku-no hu'wahuwa-sita pai			

	(49) Head noun: kome 'rice'					
	Mimetic 1: tuyatuya, 'glossy', Mimetic 2: pikapika 'shiny'					
	Mimetic 1 Mimetic 2 rice 'glossy shiny	rice	,			
a.	a. *tuyatuya- <b>na</b> pikapika- <b>na</b> okome					
b.	*tu'yatuya- <b>sita</b> pi'kapika- <b>sita</b> okome					
c.	*tuyatuya- <b>no</b> pikapika- <b>no</b> okome					
d.	tuyatuya-na pi'kapika-sita okome	e.	tu'yatuya-sita pikapika-na okome			
f.	(?)tuyatuya-na pikapika-no okome	g.	*tuyatuya-no pikapika-na okome			
h.	tu'yatuya-sita pikapika no okome	i.	<sup>???</sup> tuyatuya-no pi'kapika-sita okome			

	(50) Head noun: syatu 'shirt'				
	Mimetic 1: kirakira 'shiny', Mimetic 2: kusyakusya 'crumpled',				
	Mimetic 1 Mimetic 2 syatu 'shiny crumpled shirt'				
a.	*kirakira- <b>na</b> kusyakusya- <b>na</b> syatu				
b.	*ki'rakira- <b>sita</b> ku'syakusya- <b>sita</b> syatu				
c.	*kirakira- <b>no</b> kusyakusya- <b>no</b> syatu				
d.	kirakira-na ku'syakusya-sita syatu	e.	ki'rakira-sita kusyakusya-na syatu		
f.	<sup>?</sup> kirakira-na kusyakusya-no syatu	g.	*kirakira-no kusyakusya-na syatu		
h.	ki'rakira-sita kusyakusya-no syatu	i.	<sup>???</sup> kirakira-no ku'syakusya-sita syatu		

The frames in which mimetics appear as multiples, presented in (45)-(50), are summarised in the following table:

[N	[M1 [M2 N]]: Stacking Structure				
	Frame	Generalisation			
a.	M1-sita M2-no N	V			
b.	M1-sita M2-na N				
c.	<sup>???</sup> M1-no M2-sita N	III			
d.	*M1-no M-na N	II			
f.	M1-na M2-sita N	V			
h.	(?)M1-na M-no N	IV			

Table 2.1: The Distribution of Japanese Mimetics in Prenominal Position

### 2.3.2. Implications of the Distributions of the M-na Form in Multiple Modification

In this subsection, I discuss the implications of the distribution of mimetics in multiple modification. In particular, I claim that M-na must have a different grammatical property from M-sita based on the distributional patterns where two mimetics, followed by na, sita, or no, occur together prenominally.

When either of the two forms, namely M-na and M-sita, appears to the left of the M-no form, their different behaviour is apparent:

M-sita can appear without causing any problems and is always grammatical in this position, but M-na cannot freely appear in the same position. The implication of the distributional pattern in (51) is that the grammatical properties of the M-na form must differ from those of the M-sita form. However, this should not be surprising given that these two modifiers exhibit different behaviour with a temporal modifier (cf. Section 2.2). [M-na [M-no N]] sometimes requires clarification of its semantics. What I argue is that a different grammatical property of M-na and M-sita, arguably semantic, is indeed reflected in their syntactic behaviour in multiple modification.

The distributional pattern of (a) and (c) in (52) shows that the M-na form under the M-no form (i.e. (a): \*[M-no [M-na N]]) is always ungrammatical, whereas the M-sita form under the M-no form (i.e. (c): [M-no [M-sita N]]) is not ungrammatical:

(52)	
a.*M-no M-na	b. M-sita M-na
c. ???M-no M-sita	d. M-na M-sita

Again, the implication is that the M-na form and the M-sita form must have different grammatical properties to one another. On the other hand, the M-na form and the M-sita form can swap their structural positions when they co-occur in modification, and the M-na form and the M-sita form do not constrain each other (cf. (b)/(d)). The whole

distribution in (52) suggests that the grammatical properties of M-no must be different from those of M-na and M-sita (cf. (a)/(c) versus (b)/(d)).

The distribution in (53) suggests that the M-*na* form seems to have some restrictions with the co-occurrence of the M-*no* form (but not with the M-*sita* form):

(53)	
a. M-na M-sita	c. M-sita M-na
b. <sup>(?)</sup> M-na M-no	d.*M-no M-na

The M-na form is always grammatical over the M-sita form (cf. a: [M-na [M-sita N]]), but this is not the case if it appears over M-no (cf. b: [M-na [M-no N]]). If we look at the right column, we again observe that the distribution of M-na is restricted with the use of M-no (cf. (d)). The M-na form under the M-no form always results in ungrammaticality, whereas the M-na form can always appear under the M-sita form (cf. (c)). Given that the occurrence of M-na in multiple modification is free with respect to M-sita, it might be the case that some grammatical property of M-no is restricting the distribution of M-na and M-no, or vice versa. Another possibility is that the M-na form has a function which the M-sita form does not have (i.e. compatibility with the temporal interpretation), resulting in some constraints on its syntactic position with M-no. For now, we can minimally conclude that the distribution of M-na is highly restricted with M-no. We can assume that some aspect of either (or both) of the two forms results in some constraint in multiple modification. I examine this further in Chapter 4.

Finally, the distribution of M-na is actually less restricted than M-no in multiple modification. In (54), the distributional pattern of (a) and (c) shows that M-na has no problem with the occurrence with M-sita, regardless of their relative positions:

(54)	
a. M-na M-sita	c. M-sita M-na
b. ???M-no M-sita	d. M-sita M-no

However, this is not the case with the M-no form: (b) and (d) show that the M-no form

is always grammatically acceptable under the M-sita form (cf. d: [M-sita [M-no N]], but not vice versa.

Here is a summary of the four observations about the distributions mentioned in this section:

No.	Distribution		Implication
(51)	OKM-sita M-no (?)M-na M-no		M-na differs from M-sita
(52)	*M-no M-na ???M-no M-sita	M-sita M-na M-na M-sita	M-na differs from M-sita M-no is different from M-na and M-sita
(53)	M-na M-sita <sup>?</sup> M-na M-no	M-sita M-na *M-no M-na	M-na is restricted with M-no (but not with M-sita)
(54)	M-na M-sita <sup>???</sup> M-no M-sita	M-sita M-na M-sita M-no	M-na is less restricted than M-no

Table 2.2: Descriptive Implications of Distributions of Multiple Mimetics in Prenominal Position

We can conclude, first, that the grammatical properties of M-*na* must differ from those of M-*sita* (cf. (51), (52)). Second, the grammatical properties of M-*na* must differ from those of M-*no* as well, though this is observable only when each of the two forms appears above the position of M-*sita* (cf. (54)). In terms of the distribution of M-*na*, it exhibits some restrictions with the occurrence of M-*no*, but not with M-*sita* (cf. (53)). The M-*no* form seems sensitive in multiple modification to the position in which it appears (cf. (54)).

#### 2.4. The Grammatical Functions of -na and -sita as in M-na and M-sita

In this section, I investigate the grammatical status of *na* and *(si-)ta*, and explain how these components determine the syntactic structure of the two modifiers.

In Subsections 2.4.1 and 2.4.2, I explain the grammatical function of -na and -ta when appearing with non-mimetic words, and I argue that na helps the (accentless) mimetic to be a tensed modifier (i.e. M-na: clausal modifier), while ta (tenseless), as in sita, helps the accented mimetic to be a tenseless modifier (i.e. M-sita: attributive form). In Subsection 2.4.3, I summarise the semantics of the two modifiers.

#### 2.4.1. Grammatical Status of -na: the Case of Non-Mimetic Words

The prenominal morpheme *na* attaches to a non-mimetic word, the category of which is called the nominal adjective, often abbreviated to NA (or it is referred to as the adjectival noun, depending on the author, cf. Subsection 1.6.3). Adjectives in (Modern) Japanese fall into two classes, which are referred to as i) *keiyoo-si* 'adjectives' and ii) *keiyoo-doo-si* (lit. 'adjectival verbs') in traditional Japanese grammar. In the literature, these two classes are often referred to as i) true adjectives/genuine adjectives and ii) nominal adjectives/adjectival nouns, respectively. The focus in this chapter is the second class (nominal adjectives), and I will discuss genuine adjectives in Chapter 5.

The morpheme *na* is the prenominal form of the copula, and it is said that *na* can either form an attributive modifier or introduce a relative clause (Nishiyama, 1999; Yamakido, 2005), as shown in (55a):

(55) [Nominal Adjective]

a. sizuka-**na** yoru

quiet-(be.PRES) night

'a night that is quiet' or 'a quiet night' (Nishiyama, 1999)

b. sizuka-datta yoru

quiet-be.PAST night

'a night that was quiet' (Nishiyama, 1999)

In (55b), with regards to the grammatical status of *ta*, *ta* (attaching to the copula *da*) is the preterite here in (55b). The syntactic structure of NA-*datta* is considered to be a clausal modifier, as Nishiyama's translation in (55b) suggests.

On the other hand, Ogihara (2015, p. 48, fn. 14) states that "it is unclear what -na does" in the following context:

(56) kenkoo-na hito
healthy-COP person
'a healthy person' (Ogihara, 2015, p. 48, (29c))

(56) is an example in which a non-mimetic word (NA) appears prenominally by taking -na.

Descriptively speaking, however, with regards to the prenominal morphemes that this thesis addresses, M-*na* and M-*sita* clearly contrast in their temporal status as modifiers. That is, -*na* is tensed (cf. Section 2.2). Thus, we will need a syntactic structure which reflects the contrasting grammatical properties of M-*na* and M-*sita* in this respect.

For the case of non-mimetic words, there could be two syntactic structures for X-na, as Yamakido (2005, p. 96 (2a)-(2b)) proposes. Yamakido's idea is that NA-na covertly contains the present tense morpheme. This suggests that the modifier is at least a TP (Yamakido treats the whole modifier as a CP). In such a case, the modifier must have the functional head T so that the modifier can express the present (or non-past) tense, as her gloss indicates:

- (57) [NA-na] N
  - a. TP or CP with the functional head T(ense)e.g. sizika-na umi 'sea that is quiet'
  - b. AP (Adjectival Phrase) without the functional head T e.g. *sizuka-na umi* 'quiet sea'

My point is that at least with mimetics, M-na is best accounted for if M-na is assumed to be TP-like (57a). I also adopt Ogihara's (2015) (similar) idea of the 'phonetically empty present tense morpheme' for my analysis of M-na, which he proposes for his analyses of ta (cf. 2.4.2.3). Yamakido (2005) suggests that the prenominal phrase, sizuka-na, is an AP, and this idea, which underlies my proposal that M-sita is an AP (a simple attributive modifier), originates from Yamakido (2005, p. 96, (2b)), shown in (57b). Hence for mimetic modifiers, I partially follow her ideas in (57): I will propose that M-na is a tensed clausal modifier and that M-sita is an AP (tenseless phrasal modifier). For convenience, I refer to the tensed clausal modifier as TP.

It is possible for (accentless) mimetics to give rise to the past tense interpretation when followed by the past tense form of the copula:

(58) huwahuwa-dat**ta** pai mim(accentless)-COP.PAST pie 'a pie which was soft and fluffy.'

In Chapter 1 (e.g. Tables 1.9, 1.10), I showed that it is accentless mimetics that combine with the copula *da*. The past tense interpretation is assigned by the preterite *ta* attaching to the copula *da* in much the same way that non-mimetic nominal adjectives do (cp. (55b)). The syntactic structure of NA-*datta* is considered to be a clausal modifier, as Nishiyama's translation in (55b) suggests.

The whole morphological sequence M(accentless)-*datta* is certainly tensed because it allows a temporal adjunct like *kinoo* 'yesterday', as shown in (59):

- (59) a. kinoo kusyakusya-datta syatu yesterday mim-COP.PAST shirt 'a shirt, which was crumpled yesterday'
  - b. kinoo huwahuwa-datta paiyesterday mim-COP.PAST pie'a pie, which was soft and fluffy yesterday'
- (60) a. ima kusyakusya-na syatu (=(43b))

  now mim-COP.TENSED shirt

  'a shirt, which has a crumpled quality at the time in question.'
  - b. ima huwahuwa-na pai (=(44b))
    now mim-COP.**TENSED** pie

    'a pie, which has a soft, fluffy quality at the time in question.'

In much the same way as M-datta in (59), (60) demonstrates that the whole morphological sequence M-na also allows the temporal adjunct/tense adverbial. The fact that the modifier is compatible with the temporal adjunct shows that the whole modifier mimetic-na is surely tensed even without being overtly marked by a canonical tense morpheme. I claim that M-na should have the functional head T so that the modifier can accommodate tense and is compatible with tense adverbials. Thus, I shall treat M-na as a clausal modifier, and the modifier should be tensed (as present/non-past).

#### 2.4.2. The Grammatical Status of ta: M-sita as a Tenseless Modifier<sup>37</sup>

In this subsection, I examine the grammatical status of *ta* in non-mimetic and mimetic words. I provide further empirical data to support my claim and Hamano's (1988, p. 142; 1998, p. 19) claim that *sita* is "a grammatical construction of adjective-like mimetic modifiers and tenseless".

#### 2.4.2.1. M-sita tenseless versus M-sita preterite

In terms of the grammatical status of *ta*, *ta* is usually a preterite, as is observed in (55b), (58) and (59). I claim that *ta* in M-sita in (43a) and (44a), in contrast, expresses neither past nor non-present. I also follow Hamano's idea that this sita is "semantically almost vacuous" in the sense that it cannot mean either "conducted" or "accomplished" (Hamano, 1998, p. 18). sita often/normally functions as 'did' in its other uses.

The examples in (61) are cases where prenominal *ta* with a verbal stem produces the past tense interpretation:

- (61) a. (kinoo) soba-o tabe**ta** Victoria yesterday noodle-ACC eat-PAST 'Victoria, who ate noodles (yesterday)'
  - b. (kinoo) benkyoo(-o)sita Hannahyesterday study(ACC)-do.PAST'Hannah, who studied (yesterday)'
  - c. (kinoo) kooen-o(/de) bu'rabura-sita Hannah
     yesterday park-at mim-do.PAST
     'Hannah, who went for a wander in the park (yesterday)'

As shown in (61a) and (61b) respectively, a native Japanese verb with *ta* and a Sino-Japanese word with the light verb '*sita*', which is the past form of the non-past *suru*, allows the temporal adjunct *kinoo* 'yesterday'. The example in (61c) shows that a mimetic with *sita* also produces the expected past tense interpretation; the mimetic-*sita* allows the temporal adverbial *kinoo* 'yesterday' in much the same way that non-mimetic verbal predicates do. In all three cases, time is certainly anchored in the past,

<sup>&</sup>lt;sup>37</sup> This section is largely based on Kamiya (2015b, 2016b, 2017b).

and the whole modifier including ta therefore is tensed.

However, *ta* does not produce the expected past interpretation in the following environment:

The accented mimetics followed by *sita* can neither mean 'a pie that had the *huwahuwa* quality/property (yesterday)' nor 'a pie that was soft, fluffy (yesterday)'. Neither do they mean 'a shirt that was crumpled (yesterday)' nor 'a shirt that crumpled (yesterday)'. They mean 'crumpled shirt' or 'fluffy pie'. Furthermore, M-*sita* is incompatible with the temporal adverbial *ima* 'now', which was possible with M-*na* (cf. e.g. (60)). This means that the modifier form M-*sita* is not tensed in the present tense. Similarly, M-*sita* does not allow the temporal adverbial *kinoo* 'yesterday', suggesting that the modifier is not tensed in the past tense, either.

The fact that M-*sita* consistently disallows the tensed interpretation suggests that the modifier including *ta* can neither refer to the past nor the present. Thus, I claim that the modifier M-*sita* is tenseless, as the modifier is unable to specify a point in time (cp. (59), (60)). I claim that M-*sita* should have a different syntactic structure from M-*na* – presumably without the functional head T.

#### 2.4.2.2. Grammatical Status of ta in the Literature

In non-mimetic words, there are cases where *ta* could be ambiguous in prenominal position (e.g. Kindaichi, 1955; Martin, 1975; Miyagawa, 2011; Ogihara, 2004, 2015).

Verbal stems marked by ta have been considered ambiguous between the past interpretation, the non-past interpretation and the resultative interpretation, as shown in (64a) and (65a) (see also Ogihara (1998) for more detailed distinctions). Such verbal predicates can take an argument (e.g. an accusative-case marked argument or a nominative-case marked argument), as shown in (64b)/(64c) and (65b)/(65c):

(64) a. yude-ta tamago [boil-PAST] egg 'the egg which (I) boiled' (eventive reading) 'the boiled egg' (stative reading) (Miyagawa, 2011, p. 1278, (49)) b. Tamago-ga yudatta/ru. [Pred] boil.PAST/boil.NON-PAST egg-NOM 'The egg has been boiled.'/'The egg will be boiled.' Tamago-o yudeta. [Pred] egg-ACC boil.PAST (65)magat-ta supun bend-PAST spoon 'bent spoon' [Pred] b. Supun-ga magatta/ru. bend-PAST/NON-PAST spoon-NOM 'The spoon bent/will bend.' [Pred] Supun-o mageta. spoon-ACC bend-PAST 'I bent the spoon.' (66)bakage-ta situmon absurd question '(an/the) absurd question' (Hamano, 1988, p. 142, (18)) \*Situmon-ga bakage-ta/ru. [Pred] question-NOM absurd-PAST/NON-PAST 'The question is/was absurd.' (67) sugure-ta a. gakusya excellent academic '(an) excellent academic' b. \*Gakusya-ga sugure-ta/ru [Pred]

academic-NOM became great/become great 'an academic becomes/became excellent.'

In contrast, the verbal stems ending with *ta*, presented in (66b) and (67b), do not produce the expected past tense interpretation in prenominal position. These cannot be used predicatively in the simple tense form, and they are grouped as the "Fourth Verbal Class" in Kindaichi (1950).<sup>38</sup> In our discussion, we only need to understand how *ta* interacts with tense depending on different (verbal) stems.

There is a case in which M-sita cannot be used predicatively and ta exhibits different temporal interpretations between two types of M-sita. When the whole sequence mimetic(accented)-sita is used predicatively in (68a), ta in sita in prenominal position produces the expected past interpretation, as shown in (68b):

(68) a. Hannah-ga bu'rabura-sita/suru.
Hannah-NOM mim(accented)-did/do.
'Hannah goes/went for a wander.'
b. bu'rabura-sita Hannah (=(61c))
mim(accented)-did Hannah
'Hannah, who went for a wander'

In contrast, M(accented mimetic) with *sita* cannot be used predicatively, as shown in (69) and (70):

(69) hu'wahuwa-sita pai 'soft and fluffy pie' (=(63))

a. \*Pai-ga hu'wahuwa-sita/suru. [Pred]
pie-NOM mim(accented)-did/do

b. \*Pai-o hu'wahuwa-sita. [Pred]

<sup>38</sup> I thank Mark Baker for his comments on this material at a conference (Kamiya, 2016b): he suggests that the examples I presented ("Fourth Verbal Class" in Kindaichi (1950) marked by *ta* prenominally) appear to be adjectives. Verbs grouped as the "Fourth Verbal Class" require another morpheme *te-iru* to function as a predicate (e.g. *bakage-te-iru*). Regarding the grammatical status of *te-iru*, various analyses are suggested in the literature (e.g. Jacobsen, 2018; Kagayama, 2018; Kusumoto, 2003; Ogihara, 1998; Teramura, 1984).

See 2.4.2.3 for the function of the morphological form of M-si-te-ita, where ta is a preterite. See also (216) in 5.6.4.2, where I provide an idea of how differently tense may manifest itself in the syntactic structures of various modifier forms in the case of mimetic modifiers.

```
pie-ACC
                            mim(accented)-did
(70)
            ku'syakusya-sita syatu 'crumpled shirt'
                                                    (=(62))
                                                            [Pred]
            *Syatu-ga
                            ku'syakusya-sita/suru.
      a.
            shirt-NOM
                            mim(accented)-did/do
            'a shirt crumpled.'
      b.
            *Syatu-o
                            ku'syakusya-sita.
                                                            [Pred]
            shirt-ACC
                            mim(accented)-did
```

As I demonstrate in (69) and (70), M-sita, which does not allow a temporal adjunct, does not have the predicative use, and I have claimed that M-sita is a tenseless attributive form. The behaviour of the mimetics in (69) and (70) is parallel to that of non-mimetic words in (66) and (67). The grammatical properties of M-sita are shared with those of the non-mimetic words in the "Fourth Verbal Class" in Kindaichi, as Hamano (1986) observes. Hamano refers to it as a "D-verb", by following Nagashima (1976) (cited in Hamano (1986, p. 41)), and she names M-sita, as in (69), the "mimetic D-verb" in her discussion.

On the other hand, Kageyama (2007) claims that ta, as in M-sita, denotes a resultative and he denies Hamano's treatment of M-sita. However, it is obvious that hu'wahuwa-sita 'soft and fluffy' (or light, fluffy) in (69) does not trigger a resultative reading. It is slightly tempting to consider ku'syakusya-sita 'crumpled' in (70) as having the resultative reading because we can easily imagine the related event which has caused the entity to be in its current condition. I demonstrate below how the resultative reading should be assigned in relation to the morphology of the modifier of the mimetics, supporting the claim that M-sita denotes a 'property' rather than giving rise to the resultative interpretation.

When the non-mimetic verbal stem marked by *ta* in (64) and (65) is interpreted with the resultative meaning, the whole modifier allows a temporal adjunct, as shown in (71):

```
(71) a. ima yudeta tamago
now boiled egg
'an egg that is now boiled'/'an egg which (I) boiled just now' (=(64))
```

b. kinoo yudeta tamago
yesterday boiled egg
'an egg which was boiled yesterday.'
'an egg which (I) boiled yesterday'

There is an event (e.g. boiling) which can lead an initially uncooked egg to the condition of being cooked/boiled. In such a context, verbal predicates followed by ta allow the temporal adjunct. However, ta combining with mimetic(accented)-si does not exhibit the same grammatical properties as the verbal stems followed by ta in (71), in the sense that only the latter allows the temporal adjunct. Regardless of whether the tense is non-past, resultative or past, ta in (61), (64) and (65) is tensed, and may also be used predicatively. In contrast, mimetic(accented)-sita consistently disallows a temporal adjunct, and M-sita cannot be used predicatively, either (cf. (62), (63), (69), (70)). Thus, I claim that ta, as in M-sita, is tenseless, in order to contrast it with tensed ta, and M-sita is an attributive modifier (lacking the predicative form).

# 2.4.2.3. Morphological Forms of Mimetics for the Resultative Interpretation and Other Interpretations

If the modifier M-sita needs to refer to a property that the head noun had in the past, M-sita requires further morphological support. For the accented mimetic followed by si, the past tense reading is possible only if te mediates between si and ita 'be.PAST', as shown in (72) and (73):

- (72) 'a condition in which a referent had the (physical concrete) property denoted by the (accented) mimetic at a point in the past.'
  - a. hu'wahuwa-si-**te**-i-<u>ta</u> keeki mim(accented)-*si*-**GER**-be.<u>PAST</u> cake 'a cake which **was** soft and fluffy'
  - b. **kinoo**(-wa) hu'wahuwa-si-**te**-i-<u>ta</u> keeki yesterday(-TOP) mim(accented)-*si*-**GER**-be.<u>PAST</u> cake 'a cake which **was** soft and fluffy **yesterday**'
- (73) 'a condition in which a referent had the (physical concrete) property denoted by the (accented) mimetic at a point in the past.'
  - a. ku'syakusya-si-**te**-i-<u>ta</u> syatu

mim(accented)-si-GER.be.<u>PAST</u> shirt 'a/the shirt which **was** crumpled'

(Adapted from Kamiya, 2017b, p. 147 (21))

b. **kinoo**(-wa) ku'syakusya-si-**te**-i-<u>ta</u> syatu yesterday(-TOP) mim(accented)-*si*-**GER**-be.PAST shirt 'a shirt which **was** crumpled **yesterday**'

Following Jacobsen (2018), I divide the morphological sequence of *siteiru/siteita* into te-i-ru/ta, and following Kageyama (2018), I shall treat te (as in te-iru/ita) as a gerund. If the morphemes te and i intervene between si and ta, ta has the past tense interpretation. I present forms containing -te- only for the purpose of demonstrating that ta, as in M-sita, is tenseless in clear contrast to te combined with tensed ita(/iru). Providing a full analysis of te is not the purpose of my discussion.

Kamiya (2017b) discusses how *-te-ita(iru)* interacts with the temporal interpretation. For instance, modifiers consisting of a mimetic (accented-*si*) followed by *te-ita(/ru)* are compatible with a tensed adverbial, *kinoo* 'yesterday' (cp. tenseless: M(accented)-*sita*). In (62) and (63), *ta*, as in M-*sita*, does not have the resultative reading. If we need to say that a shirt has a crumpled quality as a result of a related event, the clearest way to express the resultative meaning is as follows:

- (74) [Resultative]
  - a. Syatu-o kusyakusya-ni-sita/natta.
     shirt-ACC mim(accentless)-made/became
     '(I) made a shirt crumpled.'
  - b. (ima) kusyakusya-ni-sita/natta syatu
     now mim(accentless)-made/became shirt
     'a shirt, which I made crumpled'/'a shirt, which became crumpled'

I have already shown that *ni* can follow the accentless mimetic (cf. Subsection 1.5.1, Table 1.8). The accentless mimetic ('an abstract quality' (cf. Table 1.8)) followed by *ni* then combines with *sita* 'made' or *natta* 'became', where *ta* is clearly tensed. Here, *sita* (underlined) in this context is certainly different from type of *sita* that this thesis has been investigating (the 'semantically vacuous' one in Hamano's terms). In fact,

the whole modifier M(accented)-*sita* in (74b) allows the temporal adjunct. Thus, I conclude again that the modifier M(accented)-*sita* in (62) and (63) assigns neither the past tense nor the non-past tense.

It does not matter whether canonical ta is a preterite or aspectual morpheme because ta, as in M-sita, is simply tenseless. Regarding the grammatical status of ta with non-mimetic words and the related formal analysis of the prenominal modifier, various analyses are suggested in previous research (e.g. Kusumoto, 2001; Ogihara, 2004, 2015; Otoguro, 2015). Traditionally, it has been debated whether the verbal suffix ta appearing with non-mimetic verbal stems (e.g. in (64)/(65)-(66)/(67)) is tenseless or not. Ogihara (2004) proposes that a -ta marked modifier is a Modifier Phrase, but this is rejected by Ogihara (2015). As Miyagawa (2011, p. 1278, fn. 20) notes, both alternatives are possible, but there has been **no agreement** on the treatment of ta in the literature:

it is possible—probably likely—that the adjective also has a simple Adjective Phrase projection (e.g. Yamakido, 2000). It is possible that a purely stative unaccusative verb may also have something similar, such as a Modifier Phrase as proposed by Ogihara (2004).

On the other hand, Ogihara (2015, p. 53, fn. 20, the original author's emphasis), in fact, leaves two possibilities of the adnominal modifier: "**some** Japanese adnominal modifiers with no overt tense bears [sic] the empty present tense -  $\phi$  PRESENT, not all".

For the case in which *ta* does not have a preterite reading, Ogihara (2015, p. 49) claims that *ta* should be considered to have an adjectival reading, in the sense that *ta* "refers to a property that the entity in question has (or had) at the time in question". I emphasise that the semantics of *ta* here should/could be treated as a tensed interpretation in the sense that the property in question is temporally anchored (i.e. a quality/property that an entity has at a given time). Ogihara (2015) assumes that the morpheme *ta* that produces adjectival readings is an aspectual morpheme homophonous with the preterite *ta* (or the resultative *ta*). More importantly, he (2015, p. 51) claims that *ta* should be tensed (non-past) by proposing the existence of "a phonetically empty present tense morpheme", which can introduce a clausal modifier.

Descriptively speaking, however, with regards to the prenominal morphemes that this thesis addresses, M-na and M-sita clearly contrast in their temporal status as modifiers. Based on the contrasts we have observed in this chapter, na, as in M-na, is certainly tensed in much the same way as modifiers such as M-datta, M-siteita, M-nisita are tensed.

As for the syntactic structure of these tensed modifiers in the past tense, modifiers are relative clauses. I claim that M-sita is a tenseless phrasal modifier so that the temporal value of M-na (tensed in the present) and M-datta, M-siteita and M-nisita (tensed in the past) can contrast with that of M-sita (cf. e.g. (47a), (48a)). I shall borrow Ogihara's (2015) idea that "the phonetically empty present tense morpheme" triggers the tensed (non-preterite) interpretation, and then apply the idea of "the phonetically empty present tense morpheme" to my analysis of na (as in the M-na form) – because it is a tensed form. That is, a phonetically empty morpheme follows na so that the whole (clausal) modifier can accommodate tense and allow the temporally anchored interpretation (see also (57) in 2.4.1 for my account of Yamakido (2005)).

# 2.4.3. The Semantics of the Two Modifiers (M-na vs. M-sita) in Relation to Prosody

In Section 1.5, I demonstrated the prosodic properties of accented and accentless mimetics. In this subsection, I explain how word prosody interacts with the different modifier constructions (*-sita* and *-na*) in relation to their semantics.

The modifier of the M-na form contains the accentless mimetic. In Chapter 1, I illustrated that the accentless mimetic relates to an abstract quality (cf. Table 1.9). We know that accentless mimetics combine with copulas (cf. Tables 1.9, 1.10) – so accentless mimetics with the meaning of an abstract quality should, in principle, allow na, the prenominal form of the copula. In Section 2.4, I argued that M-na is a tensed clausal modifier with the functional head T so that the modifier can allow the temporally anchored interpretation (underlined below):

#### (75) Semantics of M(accentless)-na

[M-na]<sub>TP</sub> N: an **abstract** quality M that an/the entity N has <u>at a given time</u>.

This (tensed) interpretation is triggered by the support of -na, and the accentless mimetic in isolation expresses an abstract quality.

On the other hand, I argued that M-sita denotes a 'physical concrete property' (cf. Section 1.6):

#### (76) Semantics of M(accented)-sita

[M-sita]<sub>AP</sub> N: a physical **concrete** property of N

In this chapter, I argued that M-sita is a tenseless attributive (adjective-like) modifier. I demonstrated that ta does not associate with tense (the modifier M-sita disallows the temporal interpretation). As for the internal structure (properties) of M-sita, the semantics of an accented mimetic in isolation are somewhat verb-like due to the presence of the accent, and the accent also triggers dynamicity (cf. Table 1.9). Regarding ta, Kindaichi (1955) states that V-ta, where ta is not aspectual, is used to denote the adjectival meaning. It seems that accented mimetics – with verb-like properties – end up being adjective-like modifiers through the support of sita or ta (see Chapter 4 (4.3.3) and Chapter 5 (5.6.4) for further discussion on M-sita).

From a prosodic viewpoint, I suggest that 'concreteness', as in 'physical **concrete** property', can contrast with 'abstractness', as in '**abstract** quality' (see (75) and (76)). I consider that the semantic effects of the use of accent are retained in the whole modifier, so that the two modifiers can further contrast their semantics by the presence/absence of the accent (cf. Subsection 1.6.1).

In the next chapter, I will adopt Roy's (2012) notions of 'reporting a condition' and 'situation-descriptive' to my analysis of the M-na form. A property/quality that an entity has at a given time will be regarded as a 'condition'. I will establish my definition of 'condition' by addressing Milsark (1976) and Roy (2013), and provide precise definitions of 'condition' and 'property'. These two notions are fundamentally different in determining the syntax of modifiers (cf. Chapter 4), while I treat 'property'

and 'quality' interchangeably (cf. Subsection 1.6.1).

#### **2.5. Summary**

In this chapter, I compared the grammatical properties of M-na to those of M-sita. To begin with, in Section 2.2, I demonstrated that the temporal adjunct can contrast tense in the two modifiers: M-na is compatible with a tensed interpretation, whereas M-sita is not. Contrary to the general understanding that M-na is considered ungrammatical or less preferable than M-sita and M-no (cf. Chapter 1), in Section 2.3, I demonstrated that the distribution of M-na is less restricted than that of M-no when two mimetic modifiers occur together. I also demonstrated that M-no seems particularly restricted in multiple modification by the position in which it appears. Based on the two pieces of evidence given in Section 2.2, in Section 2.4 (Subsection 2.4.1), I argued that M-na is a clausal modifier containing the functional head T. As for M-sita, in Subsection 2.4.2, I argued that it is an adjective-like attributive modifier, following Hamano (1986, 1988, 1998). In Subsection 2.4.3, I also explained the semantics of M-na and M-sita in relation to prosody.

#### Chapter 3

#### The Three Interpretations of Non-Verbal Predicates: Cross-Linguistic Consideration

#### 3.1. Introduction

In this chapter, I introduce what I call 'Roy's (2013) three-way distinction' to our discussion. Roy proposes three kinds of interpretation based on the distribution of non-verbal predicates in the copular sentence in French, and she adopts the three-way distinction for Russian, Spanish and Irish. Only her approach to non-verbal predicates in cross-linguistic copular sentences allows us to fully and clearly express the semantic distinction between M-*na* and M-*no* forms in the next chapter.

In Section 3.2, I present initial observations for M-na and M-no (cf. B2 in Section 1.7) in order to show why other approaches cannot adequately explain them. In Section 3.3, I deal with Roy's French data to illustrate what the three interpretations are. In Section 3.4, I investigate Russian data to define and establish one of the two notions that Roy proposes. In Section 3.5, I briefly present Spanish data, following Roy. It is crucial to completely understand the relationship between grammatical forms and the three semantic interpretations in Russian and Spanish in this chapter because this knowledge enables us to better understand the observations about M-na and M-no in the next chapter.

#### 3.2. Introduction to Roy's (2013) Three-Way Distinction

In this section, I briefly present initial observations for M-na and M-no in order to show why I employ Roy's three-way distinction in this thesis.

# **3.2.1.** Initial Observations of Distinctions between the M-*na* Form and the M-*no* Form

My impression is that the difference between M-na and M-no is not as subtle as the one we have previously seen between M-na and M-sita (cf. Chapter 2). Native speakers seem to have a sense that each of the two phrases in (77) and (78) convey different meanings:

```
'soft, fluffy pie'
(77)
              huwahuwa-na
                                pai 'pie'
      a.
      b.
                                pai 'pie'
              huwahuwa-no
                                                (cf. (14) in Section 1.3)
(78)
              'crumpled shirt'
              kusyakusya-na
                                syatu 'shirt'
      a.
              kusyakusya-no
                                syatu 'shirt'
                                                 (cf. (13) in Section 1.3)
      b.
```

My intuition that the two forms have different meanings is even stronger in (78) than in (77) (see (80), (81)), but it is still not easy for native speakers to understand and convey what each of the two forms really mean.

Why do native speakers select *na* (e.g. *kusyakusya-na syatu*) when they have other options? When do they actively select *no* (e.g. *kusyakusya-no syatu*), despite M-*no* being a grammatical form that has more constraints than the other two forms in multiple modification (cf. Subsection 2.2.3)? Sells (2017) also notes that there must be some factors that determinine/affect speakers' morphological selection. I observe that native speakers certainly feel that M-*na* and M-*no* have different meanings in some combinations of head noun and mimetic (cf. C2 in Section 1.7, Section 4.3). This seems to suggest that the relationship between a head noun and a mimetic within a modification might affect speakers' morphological selection.

Applying temporal adverbs effectively demonstrates the different grammatical properties between M-*na* and M-*sita*, as presented in Section 2.1. Unfortunately, it does not effectively show whether or not M-*no* allows the temporal interpretation. Here is one of the examples where the temporal adverb is neither compatible nor incompatible with M-*no*:

(79)		'crumpled shirt'			
	a.	ima (masani)	kusyakusya- <b>na</b>	syatu	(=(43b))
		(right) now	mimetic	shirt	
	b.	*ima	ku'syakusya- <b>sita</b>	syatu	(=(43a))
		now	mimetic	shirt	
	c.	<sup>??</sup> ima (masani)	kusyakusya- <b>no</b>	syatu	
		(right) now	mimetic	shirt	

As seen in Chapter 2, a different grammatical value between M-na and M-sita is observable when a temporal adverb is applied to the examples. However, when the same adverb is applied to M-no, as shown in (79c), the whole sequence does not express quite the same meaning as the form in (79a), though it does not result in complete ungrammaticality, either, as in (79b). Therefore, we can only conclude that the function of M-no differs from both M-sita and M-na somehow, but there must be some distinct grammatical property which does not make M-no completely unacceptable with one of the temporal interpretations.

In the next example, M-no is compatible with a different (temporal) adverb *itumo* 'always':

(80)	itumo	kusyakusya-no	syatu
	always	crumpled(M)	shirt
(81)	(itumo)	kusyakusya <b>-na</b>	syatu
	always	crumpled(M)	shirt

The example in (80) was given by a native speaker in order for her to contrast the semantics of [M-no N] with [M-na N] modified by 'now' (cf. B1 in Section 1.7). It is certainly true that *kusyakusya-no syatu* can refer to a shirt which always has the crumpled quality, and it is tempting to assume that M-no denotes a permanent property or inherent property. However, the situation is not so straightforward. Another native speaker says that he would use 'always' with M-na because (he does not iron his shirts, so) his shirt is always *kusyakusya* 'crumpled', as shown in (81) (cf. B1). The shirt which always has the crumpled quality (i.e. permanent property) is described as *kusyakusya-na syatu*. This is problematic. If M-no were to denote the permanent property only, then this definition would contradict the second speaker's use of the M-na form. A speaker selects na (the M-na form) in order to refer to a stable/permanent property of his shirt. Thus, I argue the speakers' morphological selections between na and no are not determined by distinctions such as temporary property versus permanent property, or transient property versus stable property (see Section 3.4. (3.4.5.1) for a further discussion on these notions in Russian).<sup>39</sup> We therefore need

-

 $<sup>^{39}</sup>$  If the discussion sounds confusing, that is to be expected. The whole point of presenting these readers' comments 100

another criterion for my analysis.

#### 3.2.2. Roy's (2013) Three-Way Distinction

In this subsection, I explain why I need to employ Roy's three-way distinction, providing a brief overview of Roy's (2013) study and its relevance to this thesis.

Roy (2013) proposes that non-verbal predicates give rise to three different interpretations in copular sentences, depending on the syntactic environment in which they appear. Her idea comes from "the more traditional aspectual distinction between individual-level and stage-level predicate" (Roy, 2013, p. 36).<sup>40</sup> If we carefully observe cross-linguistic data, we see "the situation is, however, certainly more complicated" (Roy, 2013, p. 29). In fact, a simple binary distinction, such as permanent property versus temporary property, is not effective for my analysis, as I argued in the previous section.

Roy crucially observes three distinct semantics in copular sentences in French. As to the lexical categories of the predicates Roy (2013) deals with, they are mostly nominal and adjectival predicates. Recall that accentless mimetics, appearing in M-na and M-no, similarly have a non-verbal property (cf. Subsections 1.2.4, 1.2.6). Furthermore, M-sita is adjective-like (cf. Sections 1.6, 2.4). The three prenominal forms of

-

is to show how confusing the use of the terms permanent/temporary property could be in our discussion.

<sup>&</sup>lt;sup>40</sup> The terms 'stage-level' and 'individual-level' have been used since Carlson (1977), where "a three-level hierarchy among the entities in the model – stages, objects, and kinds" is introduced (Carlson, 1977, p.154). Here, I note that Carlson clearly distinguishes *stages* from *objects* and *kinds* in that *objects* and *kinds* "are individuals". In terms of adjectival predicates, Carlson (1977, p. 154) states that adjectives such as *drunk* or *available* refer to "stages of individuals", while other adjectives (e.g. *intelligent* or *large*) refer to "individuals (objects and kinds)".

The notion of "stage-level" and "individual-level" predicate are well-known and often discussed in the literature. Roughly speaking, it is widely understood that stage-level predicates denote transitory properties of an entity, while individual-level predicates denote permanent or generic properties of an entity (Chierchia, 1995; Kratzer, 1995; Schmitt, 1992). According to Kratzer (1995), this version is not very different from Kratzer (1988). The examples drawn from Kratzer (1995, p.125) are:

<sup>(</sup>I) a. I am sitting on this chair.

b. I have brown hair.

The predicate *on this chair* in (Ia) expresses a "very transitory property" of the person, but *brown hair* in (Ib) is not (Kratzer, 1995, p. 125). In terms of adjectival predicates, Chierchia (1995, p. 177) states that adjectives like *drunk* and *sick* are the stage-level predicate, expressing "'transient' or 'episodic' qualities" (e.g. *being drunk*, *being sick*, the stage-level interpretation). In terms of the individual-level predicate, Chierchia (1995) summarises six important features characterizing the individual-level predicate discussed in the literature. For "stable stativity", which is one of the six criteria for a predicate to be individual-level, Chierchia (1995, p. 177) points out that it is not always straightforward to decide whether or not a state is transient (e.g. transient or stable). Although he concludes that this issue would not be a problem for most cases, it does matter in my argument for the case of Japanese. Thus, I do not employ these terms for my analysis of M-na, M-no and M-sita.

mimetics need a clear semantic definition, and Roy (2013) has a three-way distinction regarding non-verbal predicates. Thus, I consider the domain of Roy (2013) to be close enough to adopt for this thesis. For the analysis of M-*na*, M-*no* and M-*sita*, we must capture the three kinds of semantics Roy first proposes.

# 3.3. Three Kinds of Interpretations in the Copular Sentence in French: Roy (2013)

In this section, I illustrate what the three interpretations are, adapting Roy's French data.

#### 3.3.1. The Defining Sentence versus the Characterizing Sentence

I begin with the distinction between the 'defining sentence' and 'characterizing sentence' as it is straightforward to understand in French. First, observe the minimal pair in (82) involving French non-verbal predicates and the copular verb *être*:

#### (82) a. **Defining Sentence:**

Raymond est un acteur.

#### b. Characterizing Sentence:

Raymond est <u>acteur</u>.

(Roy, 2013, p. 39, (4a); p. 38, (3b), underlining added by me)

- (83) a. Hugh Grant is an actor.
  - b. \*Hugh Grant is actor.

French nominals allow bare NPs (e.g. (82b)) unlike English in the same context, as shown in (82b). According to Roy, the two predicates, namely *un acteur* and *acteur*, give rise to very similar interpretations. More specifically, Roy (2013, p. 38) states that both of the meanings relate to "the attribution of the property *be an actor* to the individual denoted by the subject Raymond". Therefore, she assumes that both sentences in (83) have predicational structures.

On the other hand, she claims that each of the two copular sentences receives different interpretations: the two forms have different functions. Sentence (83a) can be an answer to the question, *qui est Raymond?* 'who is Raymond?', whereas it cannot

answer the question, *qu'est Raymond?* 'what does/is Raymond?' <sup>41</sup> In contrast, sentence (83b) involving a bare N cannot be the answer to the former question (i.e. *who is Raymond?*) but can answer the latter (i.e. *what does/is Raymond?*). Based on these observations, Roy (2013, p. 39) proposes, first, that the non-article variant (e.g. *acteur:* bare N) expresses "a simple property attribution", and second, that the article variant (e.g. *un acteur*) has a function of identifying or defining an individual. She argues that one needs to distinguish them, although these two copular sentences are both kinds of what she calls "attributive predication".

The distinction between the two variants, namely nominals with or without the indefinite article, is even more observable when the copular verb appears in the past tense (e.g. *était*), as shown in (84):

(84) a. Paul était un médicin/un ivrogne. (Roy, 2013, p. 39, (5))

b. Paul était médicin/ivrogne. (Roy, 2013, p. 39, (6))

'Paul was a doctor/a drunkard.'

According to Roy, nominals with the indefinite article in the past tense can trigger the "lifetime effect" (cf. Musan, 1995). More specifically, the sentence (84a) entails that Paul is now not alive; the sentence (84b) does not. What sentence (84b) means is that Paul does not hold the property denoted by the predicate (i.e. bare N) anymore, but there is no lifetime effect. It is clear that two forms of non-verbal predicate, namely *be article N* and *be bare N*, result in different semantics in French. Following her observations, I argue that it is reasonable to set (at least) two variations among copular sentences in French: Roy refers to the former form (e.g. (82a), (84a)) as the 'defining sentence' and the latter (e.g. (82b), (84b)) as the 'characterizing sentence'.

To be precise, I quote her definition of what interpretation each sentence type receives because the definition leads me to argue possible interpretations of the three prenominal forms of Japanese mimetics:

Characterizing and defining sentences are two different types of attributive predication. [...] The former relates to the

<sup>&</sup>lt;sup>41</sup> The examples are drawn from Roy (2013, p. 38, (3)).

ascription of a property to an individual, in the way one normally thinks about attributive predication. The latter involves a defining property, i.e., a property salient enough to "define" an individual as a particular member of a class of individuals.

Situation-descriptive sentences are distinguished from the other two types in that they do not ascribe a property to an individual, but instead describe situations (Roy, 2013, p. 35).

In the next subsection, I explain what Roy means by "situation-descriptive", as this notion is fundamental to explaining the semantics of M-na in Chapter 4. Returning to the data in (82a) and (82b), being an actor is considered a property of Raymond in (82b); however it is not simply one of the properties that Raymond could possibly have, it is the most important property for us to be able to identify Raymond.

For the other two sentence types I offered in this subsection, the syntactic environment that non-verbal predicates appear in and the assigned semantics are summarised as follows:

	i) The category of the predicate		
	ii) The position of predicate and predication type		
	iii) Diagnostics		
	iv) Semantics		
Defining	i) Nominals	ii) Post-copular	
sentence	with the indefinite article	Attributive predication	
	iii) Can answer who is?		
	(Lifetime effect in the past tense)		
	iv) The non-verbal predicate denotes the defining preparty of		
	iv) The non-verbal predicate denotes the defining property: a		
	property that is salient enough to define an individual as a particular member of a class of individuals.		
CI			
Characterizin	i) Nominals	ii) Post-copular	
g sentence	without the article:	Attributive predication	
	(Bare Ns)		
	ii) Can answer to what does/is X?		
	(No lifetime effect observed)		
	iv) The non-verbal predicate denotes a property:		
	The ascription of a property to an individual		
	i rrry		

Table 3.1: Non-Verbal Predicates in French Copular Sentences (Roy, 2013)

# **3.3.2.** The Characterizing Sentence versus the Situation-Descriptive Sentence

In this subsection, I explain how the situation-descriptive sentence and the characterizing sentence are different. The semantics assigned by each of the two variants as in (85) can be very similar, but I show that they (i.e. the defining sentence versus the characterizing sentence) are not identical, following Roy (2013).

Defining sentence: 'Paul is a sick person/a patient.'

b. Paul est **malade**. (Roy, 2013, p.72, (115))

Characterizing sentence: 'Paul is sick.'

In (85a), the property, *sick*, is the salient property to define Paul. The copular sentence, involving *être* followed by the nominal with the indefinite article *un*, receives the defining interpretation. One of the diagnostics to identify the characterizing sentence is that it can answer *what is X?*-type questions, and sentence (85b) answers such a question. To repeat Roy's proposal, it assumes that the characterizing sentence is an attributive predication and that a property denoted by the bare nominal *malade* following the copula (i.e. the property of *being sick*) is predicated of Paul. However, Roy (2013) argues that it is not the only possible reading for the predicate to have.

For the other case, sentence (85b) can simply "report a situation in which Paul is experiencing sickness", and can also answer *what is going on?*, as shown in (86a) (Roy, 2013, p.73):

- (86) a. Qu'est-ce qui se passe? Paul est malade.
   What is going on? Paul is sick: the situation-descriptive sentence
   (Roy, 2013, p. 73, (118))
  - b. Qu'est-ce qui se passe Paul (\*\*il) est malade.
     What is going on? Paul is sick.
     (Roy, 2013, p. 73, (119))

(87) a. Qu'est-ce qu'il a Paul? – Paul est malade.

What is wrong with Paul? – Paul is sick: the characterizing sentence

(Roy, 2013, p. 72, (117))

b. Qu'est-ce qu'il a Paul? – Paul (il) est malade.What is wrong with Paul? – Paul is sick.

(Roy, 2013, p. 73, (120))

According to Roy, when *Paul est malade* is an answer to *what is wrong with Paul?* (other than *what is Paul?* discussed earlier) as shown in (87a), the sentence receives the characterizing interpretation. Although Roy is aware (86a) and (87a) do not look very different, she observes that clitic doubling of the subject (in (86b) and (87b)) is not allowed under the situation-descriptive reading (in (86b)). Therefore, she argues that the situation-descriptive sentence must be distinguished from the characterizing one, and inevitably differs from the defining one.

#### 3.3.3. Categorial Status of the Non-Verbal Predicate in French

Further empirical data (in French) observed by Roy suggests that the three-way distinction (i.e. defining, characterizing and situation-descriptive) is valid. Roy (2013)'s study helps us better understand the possible categorical status of Japanese mimetics as well.

Roy (2013) presents data suggesting that (bare) nominals cannot appear in a situation-descriptive sentence. In (88), the use of a bare nominal is not adequate to answer the question *what is going on outside?*, which is a diagnostic for the situation-descriptive sentence. The data in (88)-(90) is drawn from Roy (2013, p. 73-74, (121), (127), (122) and (123), respectively):

- (88) Qu'est-ce qui s'est passé dehors?
  - 'What is going on outside?'

Paul est ivre-A: the situation-descriptive sentence

- 'Paul is drunk.'
- \*Paul est ivrogne-bare N
- 'Paul is [a] drunkard.'
- (89) Qu'est-ce qu'est Paul? what.is.it that.is Paul?
  - what.is.it that.is I auf
  - 'What is Paul?'
  - i) Paul est ivre-A: the characterizing sentence

- ii) Paul est ivrogne-<sub>bare N</sub>: the characterizing sentence
- (90) Paul est **ivrogne**, mais là (exceptionnellement) <u>il n'est pas **ivre**</u>.

  Paul is a drunkard, but in this situation exceptionally he isn't drunk<sup>42</sup>.

  [The characterizing reading], [the situation-descriptive reading]

In contrast, as the sentence in (89b) and the first conjunct of sentence (90) show, bare nominals can appear in a copular sentence under the characterizing reading remember that Roy uses the what is X?-type question as a diagnostic for identifying the characterizing sentence. Also, there is no option for the first conjunct of sentence (90) and (89ii) to have the defining interpretation because the nominal *ivrogne* does not take the indefinite determiner. Notably, (89) shows that adjectives can appear in the same frame that bare nominals appear in and can receive the characterizing interpretation (e.g. *ivre* is a property of Paul). It might be the case that French bare Ns and adjectives share a similar grammatical value or feature (cf. (89i), (89ii)); however, these two predicates can certainly give different interpretations (see the second conjunct in (90) and compare it with (89i)). Roy states that "the second conjunct is a clause describing a state or situation" (Roy, 2013, p. 74, emphasis added); the predicate in the second conjunct of sentence (90) is not a (bare) nominal but is adjectival. In other words, adjectival predicates can serve (for the whole sentence) to express a 'condition' that the individual is in 43, rather than denote a property of an individual. The sentences (89) and (90) demonstrate that the distinction between the characterizing sentence and the situation-descriptive sentence is necessary for French copular sentences.

To confirm that Roy's claims are correct in determining three classes among French copular sentences, I present Roy's data that clearly demonstrate the contrast between defining and situation-descriptive sentences. I also quote her account:

(91) Ce n'est pas une urgence, mais c'est urgent. (Roy, 2013, p. 74, (124))

<sup>&</sup>lt;sup>42</sup> Roy's (2013, p. 74, my emphasis added) original translation is "Paul is a drunkard, but **there** exceptionally he isn't drunk." Thank you to Peter Sells for the suggestion of the modified translation in the gloss.

<sup>&</sup>lt;sup>43</sup> For the interpretation of (90), Roy (2013, p. 74) argues "the property to be *a drunkard* can be a characterizing one for the subject Paul, while the state of *being drunk*" does not hold for the subject at the moment of the utterance". Though I am of her view of distinguishing *property* from *situation/state*, I come back to the terminology issue and set my own definition in Subsection 3.2.4.

'It is not an emergency, but it is urgent.'

The interpretation of the adjective *urgent* must be distinct from that of a defining predicate, as expressed by *une urgence*. [...] Here, specifically, while the state expressed by *urgent* can hold in a particular situation, the defining property 'is an emergency' does not necessarily hold for the subject *ce* 'it' as well. [...] Predicational copular sentences reporting a situation must be distinguished from both the characterizing and defining sentences.

Roy's examples in this section show that the categorial status of predicates may differ among the three types of copular sentence. I emphasise that it is significant to have the situation-descriptive sentence as an option in copular sentences.

I summarise the categorial status of non-verbal predicates found in French copular sentences reported by Roy below, keeping all her terminology for now in Table 3.2:

Sentence type	Interpretation that the copular sentence receives	Category of the non-verbal predicate found in the sentence
<b>Defining sentence</b>	Ascribe a property:	Nominal with the
	A property that is salient enough to	indefinite article
	identify the individual.	
	Attributive predication	
Characterizing	Ascribe a property	Bare N, A
sentence	Attributive predication	
Situation-	Describe or report a state or situation	$A^{44}$
descriptive sentence	Predicational-copular sentence	

Table 3.2: Categorial Status of French Non-Verbal Predicates in the Copular Sentence

The different syntactic categories of non-verbal predicates result in different interpretations. Observe the contrast in the categorial status of two predicates across two clauses in (90). However, if it were only the category of the non-verbal predicate that determined which of the three interpretations applies, what determines the distinction between (89i) and the second conjunct of (90)? Putting the question

 $<sup>^{\</sup>rm 44}$  I do not include PP (Prepositional Phrase) as Roy does because it is not relevant in analysing my Japanese data. 108

differently, are the grammatical functions of the copular être in (89ii) and in the second conjunct of sentence (90) identical in the environment where the string "être adjective" receives two different interpretations? If the copula être has a single function to create the attributive predication and receive the characterizing interpretation, how can we possibly have the situation-descriptive one with an adjectival predicate?

I agree with Roy that it is necessary to have a type of copular sentence where nonverbal predicates give rise to the "situation-descriptive" interpretation. I also agree that "situation-descriptive" sentences should be strictly distinguished from the other two copular sentence types – probably syntactically (e.g. clitic doubling of the subject under the situation-descriptive reading is not allowed in (86b)).

#### 3.3.4. Ontology of "Property" and "State-Descriptive": Milsark (1976)

In this subsection, I define 'state-descriptive' so as to distinguish it from 'property', because understanding these concepts is a fundamental step for my analysis of M-na, M-no and M-sita. I introduce my own terminology into the discussion. I am changing Roy's terminology slightly for the sake of consistency in my argument, but this change does not affect Roy's meaning. Roy (2013) crucially claims that the situationdescriptive sentence differs from the characterizing sentence and defining sentence because the former reports "a state or situation", while predicates found in the latter sentence type ascribe "a property" of the entity referred to. I set my definition of 'property' and 'condition' in relation to Roy's (2013) phrase "report a state or situation" by mostly following Milsark (1976). More specifically, I define that non-verbal predicates found in situation-descriptive sentences express a 'condition' that an entity is in. This definition with the notion of 'property' versus 'condition' supplements the conclusion about the semantics of M-na and M-sita that is drawn by the contrast of these two forms in relation to their compatibility with a temporal adjunct.

The distinction between predicates, involving the notion of 'property' and 'condition', is observable, in fact, in syntactic structure. Milsark (1976) observes some significant restrictions on (semantic types of) nonverbal predicates in English existential sentences. Milsrak (1967, p. 131) argues that "no NP predicated by a property adjective can appear in ES" (existential sentence): for instance, "\*there are people tall" in contrast to "there are people sick" (Milsark, 1967, p. 130, (108h), (108g)). More

examples of those predicates (PREDs) given by Milsark (1967, p. 128, (100)) are as follows: "PREDs permitted in ES" are "sick, drunk, hungry, stoned, tired, closed, alert, open, closed, [and] naked", while "PREDs not permitted in ES" are "boring, crazy, intelligent, beautiful", as well as shape and color terms. What is relevant to my discussion is that Milsark refers to the former group of predicates as "state-descriptive" predicates and to the latter as "property" predicates. He defines "property predicates" and "state-descriptive" as follows:

It would be of great value at this point to be able to point out some independent criteria for telling the difference between state-descriptive and property predicates. The best I can do is suggest some tendencies and rules of thumb, plus an imprecise definition or two. **Properties are those facts about entities which are assumed to be, even if they are not in fact, permanent,** unalterable, and in some sense possessed by the entity, **while states are conditions which are, at least in principle, transitory,** not possessed by the entity of which they are predicated, **and the removal of which causes no change in the essential qualities of the entity.** (Milsark, 1976, p. 129, my emphasis added)

It is not always straightforward to decide whether a predicate expresses a permanent or transient property predicated of an entity. However, if we follow Milsark's idea, the situation is less complicated. A 'property' still can belong to an entity no matter what 'state/condition' it is in. 'Conditions' are transient in principle. Even if the entity is in a specific condition, being in this condition does not affect other qualities or properties that the entity has. For instance, take the adjective kind. If someone, John, is kind by nature and kind is 'a property' of John, he may have other properties that we can characterise him by (e.g. funny, lazy), although it does not matter. Though he is usually a kind person, it is possible for him to be harsh in a certain environment or condition (i.e. "a state or situation" in Roy's terms). However, we do not want harsh to be considered as a property that characterises John (i.e. the characterizing interpretation). Moreover, we do not want harsh to be a salient property that defines John (i.e. the defining interpretation). The adjective harsh is a predicate such that it expresses a 'condition' that John is (currently) in. Even if I employ the term 'condition', this does not significantly change Roy's account: John is in a situation where he is being harsh to somebody for a certain reason, and the (whole) copular sentence involving a predicate expressing 'condition' describes the 'situation'. Milsark clearly notes that "states are conditions", so it is no problem to use Milsark's terms 'state-descriptive' or 'condition' in order to discuss what semantics are assigned under the "situation-descriptive sentence", which is Roy's term:

The situation-descriptive sentence (i.e. state-descriptive sentence) is such that adjectives following the copular verb express a condition that an entity is currently in. This sentence type does not have "attributive predication" in Roy's term; it simply reports a situation or describes a condition that the referent is in.

Table 3.3: Modified Definition of Roy's Situation-Descriptive Sentence for the Sake of my Argument

Milsark (1976, p. 129) also claims that what affects the decision between the two distinctions, namely property and state-descriptive (condition), is that "the judgments are dependent on facts of the world and one's conception of them". Such a concept can be visible in Russian due to the morphological richness of its adjectival forms (cf. Section 3.4).

### **3.4.** The Situation-Descriptive Interpretation versus the Defining-Property Interpretation in Russian

I emphasise that Roy's (2013) claim, particularly about the Russian non-verbal predicate construction regarding her three-way distinction, is vital for the analysis of M-na, M-no and M-sita. Crucially, the distinction between the situation-descriptive reading and the other two sentence types, namely the defining reading and the characterizing reading, is grammaticalised in the language by means of the short form/long form of adjectives. Recall that this is not the case with French (cf. Subsections 3.3.2, 3.3.3 and Table 3.2). Thus, in this section, I demonstrate how the situation-descriptive reading is assigned in Russian – this helps us to understand the M-na form.

In addition, I demonstrate how the form relates to the defining-property reading in a language that does not have definite/indefinite articles. I understand that the concept of the defining property originates from Russian (cf. Ionin & Matushansky (2002) in 3.4.3.2). Crucially, I confirm what the defining property is and set the firm definition of 'defining property' for the sake of my analysis of M-no for the rest of the thesis.

Russian adjectives are helpful in the sense that a set of Russian examples (cf. (110)) directly leads us to a solution of the semantic puzzle between M-na and M-no in the next chapter, where I present empirical data and my observations. The characteristics of Russian adjectives allow me once again to argue that M-sita should be the attributive form in Chapter 4.

To begin with, in 3.4.1, I illustrate the grammatical properties of short-form adjectives and long-form adjectives. In 3.4.2, I focus on the use of short-form adjectives in relation to a situation-descriptive reading. In 3.4.3, I deal with the two variations of the long form in order to confirm the definition of the defining property in the context of Russian.

#### 3.4.1. Russian Adjectives: Two Forms of Adjectives

In this subsection, I present the basic grammatical properties of long-form adjectives and short-form adjectives in Russian.

#### 3.4.1.1. The Basic Morphosyntax of Russian Adjectives

Russian adjectives may appear in two different morphological forms, namely the long-form adjective and the short-form adjective (abbreviated to LF and SF, respectively). Siegel (1976a, p. 10) states that "every qualitative adjective may be said to have both forms, although one or the other may rarely or never be used, due to semantic considerations".<sup>45</sup> One constraint on the distribution of Russian adjectives is shown in (92) and (93):

See Siegel (1976a) for the analysis. According to Timberlake (2004, p. 289), the semantic fields of adjectives preferring the short form are measure, attitude, manner of characterisation, modality, perception, evaluative, diminutive, variable conditions and modal adjectives. In Subsection 3.4.2, I discuss the characteristics of semantics assigned by the short form. As to the short form's inability to function as a relational adjective, I deal with the notion of the relational adjective in 5.3.2, where I present my analysis of M-no.

112

<sup>&</sup>lt;sup>45</sup> In Russian, it is not the case that all adjectives have the short form (Halle & Matushansky 2006, fn. 2). For instance, a class of adjectives, sometimes called relational adjectives, does not have short forms (Siegel 1976a, p. 15, fn. 4). On the other hand, there is a case where an adjective appears only in the short form:

<sup>(</sup>II) a. Prostranstvo beskonečno (SF)
b. \*Prostranstvo beskonečnoe (LF)
(Babby, 1973, p. 360, (23a), (23b))

'She is (a) smart (person/one).'

b. Ona umn-a. (SF)
she.NOM smart-FEM.SG

'She is smart.'

(93) a. [umn-aja devuška]<sub>NP</sub> (LF)

smart-FEM.SG.NOM girl-FEM.SG.NOM

b.  $*[umn-a devuška]_{NP}$  (SF)

smart-FEM.SG girl-FEM.SG.NOM

(Adapted from Babby, 1973, p. 101, (1))

Long-form adjectives can be used both predicatively and attributively, as shown in (92a) and (93a) respectively. As Roy (2013) notes, the pronominal expression *one* is usually found in translations for long-form adjectives. Since Babby (1973) and Siegel (1976b) propose that a null head noun is hidden in the predicative position, long-form adjectives are considered to "modify an (extended) NP" (Halle & Matushansky, 2006, p. 353). In other words, long-form adjectives are always said to be attributive even in the predicative position (Matushansky, 2008). Short-form adjectives, in contrast, "function only as predicates of copular sentences" (in modern Russian) (Halle & Matushansky, 2006, p. 353). Thus, short-form adjectives do not occur in the prenominal position (cf. (93b)). Another morphosyntactic difference between the two forms of adjectives is that long-form adjectives are marked for case (cf. Halle & Matushansky, 2006). <sup>47</sup> These morphosyntactic characteristics are relevant to understand the semantics (i.e. three kinds of interpretations) of the Russian non-verbal construction as proposed by Roy (2013).

# 3.4.1.2. Agreement: The Long-Form Adjective versus the Short-Form Adjective (Roy 2013)

Short-form adjectives and long-form adjectives show different agreement in number with the (second-person plural) pronoun vy when used to express politeness (Babby,

113

<sup>&</sup>lt;sup>46</sup> Present tense is not overtly expressed in Russian non-verbal constructions. The basic information on tense with regards to the topic is briefly presented in fn. 55.

<sup>&</sup>lt;sup>47</sup> In Russian, adjectives obligatorily agree in number, gender, and case with the noun they modify. The **long form** has the following forms: sg nom msc, sg nom fem, sg nom neut, sg acc msc, sg acc fem, sg acc neut, sg gen msc, sg gen fem, sg gen neut, sg dat msc, sg dat fem, sg dat neut, sg instr msc, sg instr fem, sg instr neut, sg loc msc, sg loc fem, sg loc neut, pl nom, pl acc, pl gen, pl dat, pl instr, pl loc. The **short form** only has sg fem, sg neut, sg msc and pl. I thank Nina Radkevich and Dunstan Brown for providing me with such detailed information.

#### 1975; Siegel, 1976a):

The long form shows agreement in number with the referent (antecedent) of the pronoun (e.g. (94a)), whereas the short form agrees with the number of the grammatical subject vy (the second-person plural) (e.g. (95b)), rather than the antecedent. The fact that short-form adjectives must appear in the plural in the polite context implies that short-form adjectives do not pick out the referent.<sup>48</sup>

#### 3.4.1.3. The Pragmatics of the Short Form: Siegel (1976a)

According to Matushansky (2000), the issue of the semantic contrast between the long-form adjective and the short-form adjective still remains an unanswered question. Traditionally, it is considered that long-form adjectives denote a permanent property of the subject, whereas short-form adjectives denote a temporary state or property of the subject (also often referred to in the literature as a transient property) (cf. Babby, 1973).

To begin with the investigation into the semantic distinctions between M-na and M-no, I present Siegel's (1976a) insightful observation regarding the use of the short-

<sup>&</sup>lt;sup>48</sup> In terms of the morphological formation of the short form, Roy (2013, p. 117) states "the short forms can be created from the long forms by dropping the ending and replacing it by  $\emptyset$  (msc.), a (fem.), o (neuter), or y (plural). Another distinction of grammatical properties between the short form and the long form is that y marks plural in the short form of adjectives. I thank Nina Radkevich for clarifying my question about short forms.

form adjective:

115

Siegel (1976a, p. 12) states that her informant interpreted (96b) thus: "Oleg is just plain generally intelligent (you can tell by looking at him)." I emphasise that the part of the interpretation by looking at him is crucial to our discussion because this follows/supports Roy's term "situation-descriptive". Siegel's informant described or reported what he saw (i.e. the situation) by means of the short-form use. Thus, I support Roy's (2013) claim that the situation-descriptive interpretation is assigned by the short-form adjective in Russian. In contrast, for Siegel's informant, (96a) means "Oleg must have somehow actively shown himself to be an intelligent something". The semantic distinction of (96a) and (96b) could be explained by Milsark's (1976) definition of 'property' versus 'condition' (cf. Subsection 3.3.4). Whatever the semantic distinctions denoted by the two forms here are, we know that native speakers understand the distinction "uniquely in any given utterance" (Siegel, 1976a, p. 12).

Before I present examples in which the short-form adjective and the long-form adjective (in the nominative case) clearly assign different semantics in 3.4.5.1, I continue to examine the grammatical functions/properties of Russian short-form adjectives, as it helps us to then straightforwardly understand the distinction.

#### 3.4.2. The Short-Form and the Situation-Descriptive Reading in Russian

The distinction between the situation-descriptive reading and the other two sentence types, namely the defining reading and the characterizing reading, is grammaticalised in the language by means of short-form/long-form adjectives, as I stated at the beginning of this section. Recall that this is not the case with French (cf. Subsections 3.2.2, 3.2.3). In Subsection 3.4.2, I exemplified the grammatical properties of the

short-form adjective, partially because it helps us to understand the grammatical behaviour of M-na.

# 3.4.2.1. Roy's Situation-Descriptive Interpretation in Russian Short-Form Adjectives

Following Wade (1992) and Borras and Christian (1971), Roy (2013, p. 118) states that long-form adjectives usually denote inherent characteristics or denote a property that can identify the individual. Following Wade (1992, pp. 173-174), Roy (2013, p. 118) argues that short-form adjectives have a function of referring to "specific contexts or circumstances". I present Roy's (2013, p.118, (3)-(6)) examples of Russian adjectives appearing in both the short form and the long form as follows:

I particularly agree with Roy's (2013, p. 119) claim that short-form adjectives can "describe states or situations". I also agree with Roy's (2013, p. 119) claim that long-form adjectives in the nominative denote the defining interpretation. For example, in (97a) and (98a), *burnaja* 'turbulent' and *golodnym* 'hungry' are properties of the subject. Roy's point about the interpretation of (97a) and (98a) is that property is not merely a property, but a defining property in that the property is salient enough to identify the subject in Roy's terms. On the other hand, the two adjectives in the short

form in (97b) and (98b) do not have a function of identifying the individual; rather, they describe the situation. Roy states that short-form adjectives cannot relate to (pro-)nominals and argues that short-form adjectives (which have a predicative use only) give rise to the situation-descriptive interpretation.

#### 3.4.2.2. The Use of Short-Form Adjective: Timberlake (2004)

Regarding the use of the short form, Timberlake (2004, p. 291) states "[w]hen an adjective is specified by a circumstance or perceiver, as in [(99)], the predicative form is almost obligatory (97% in one count)":

(99) Ona nedovol'n-a (SF)/\*nedovol'n-aja (LF) i she.NOM dissatisfied-FEM.SG/dissatisfied-FEM.SG.NOM and Olg-oj, i knižk-oj.
Olga-FEM.SG.INSTR and book-FEM.SG.INSTR
'She's dissatisfied -- with Olga and with her book.'

(Adapted from Timberlake, 2004, p. 291, (67))

In other words, the speaker needs to participate in the event (be in the situation) when the short form is selected in (99). The observation here is consistent with what Roy (2013) claims (i.e. the situation-descriptive reading).

Roy clearly demonstrates how the situation-descriptive sentence should be different from the characterizing sentence in French, and I present an example suggesting that a Russian non-verbal predicate behaves similarly to French:

(100) On iz tex, kto ne možet byt' syt-ym<sub>(LF)</sub>,
he.NOM from those who NEG can be.INF full-MSC.SG.INSTR
kogda golodn-y<sub>(SF)</sub> drugie.
when hungry-PL others
'He is the kind of person that cannot be full when others go hungry.'

(Adapted from Timberlake 2004, p. 291, (71), my emphasis)

(101) Paul est ivrogne-bareN, mais là (exceptionnellement) il n'est pas ivre-A

Paul is drunkard but there exceptionally he NEG.is not drunk

'Paul is a drunkard, but now (exceptionally) he isn't drunk.'

The sentence in (100) shows that the two non-verbal predicates, namely *full* and *hungry*, in bold in the example, denote different semantics by means of the morphological form (i.e. long-<sub>INSTR</sub> form versus short form). Timberlake (2004, p. 291) states that the short form is used for "properties which themselves are the consequences of other situations". <sup>49</sup> The contrast in semantics between the two predicates in Russian is also observed in the French example in (101). The predicate in the first conjunct gives rise to the characterizing interpretation, whereas the predicate in the second conjunct gives rise to the situation-descriptive interpretation (cf. Subsections 3.3.2, 3.3.3). The sentence in (100), in contrast to the sentence in (101), supports Roy's claim about the Russian long-form adjective marked in the instrumental case in relation to the semantics (i.e. the characterizing property to contrast with the situation-descriptive property).

#### 3.4.3. Defining Property versus Non-Essential Property in Russian

In Subsection 3.4.2, I examined the short form. In this subsection, I focus on the long form when marked in the nominative case. I also present examples of the long form marked in the instrumental case so that we can observe the distinction between the two forms and can understand the nominative-marked long form better. This section aims to firmly establish the definition of 'defining property' for the sake of the analysis of the M-no form in Japanese.

### 3.4.3.1. Non-Verbal Predicates in Nominative Case versus Instrumental Case

Roy (2013, p. 127) states that the distributional pattern of long-form adjectives (underlying nominal) patterns with (overt) nominals. Russian nouns and adjectives in predicative position bear case which alternates between nominative and instrumental (cf. Ionin & Matushansky, 2002; Krasovitsky, Long, Baeman, Brown & Corbett, 2008; Matushansky, 2000; Roy, 2013; Timberlake, 1986, 2004):

\_

<sup>&</sup>lt;sup>49</sup> Regarding the use of the short form in (100), Timberlake (2004, p. 291) reports that "in such explicit contexts, the predicative form was selected regularly in a pilot study with half a dozen young educated speakers".

(102) a. Mari byl-a umn-aja.

Mari.FEM.SG.NOM be.PST-FEM.SG clever-FEM.SG.NOM

'Mari was intelligent.' (A.LF-nom)

b. Mari byl-a umn-oj.

Mari.FEM.SG.NOM be.PST-FEM.SG clever-FEM.SG.INSTR

'Mari was intelligent.' (A.LF-instr)

(Adapted from Roy 2013, p. 127, (33))<sup>50</sup>

(103) a. On byl- $\varnothing$  vrač.

he.NOM be.PST-MSC.SG doctor.MSC.SG.NOM

'He was a doctor.'

b. On byl-Ø vrač-om.

he.NOM be.PST-MSC.SG doctor.MSC.SG.INSTR

'He was a doctor.'

(Krasovitsky et al., 2008, p. 100, (1a) and (1b))

The semantics of predicate nouns and adjectives in relation to case-marking are extensively discussed in the literature (cf. Ionin & Matushansky, 2002; Krasovitsky et al., 2008; Nichols, 1981; Roy, 2013; Røed, 1966; Timberlake, 1986, 2004). Krasovitsky et al. (2008, p. 101) state that predicate nouns select the instrumental case when denoting "non-typical" properties, whereas the nominative case tends to be associated with the "permanent-property" reading.<sup>51</sup> According to Krasovitsky et al. (2008, p. 101, my emphasis), "Røed (1966) distinguished between nouns denoting **essential** permanent **properties** of a subject," and "those denoting **non-essential** temporary **properties**".<sup>52</sup> These statements suggest that Russian predicate nouns concern the relationship between the subject and themselves, and the distinctions are indicated by (alternating) case. The implication is that the language seems sensitive to whether a (non-verbal) predicate denotes essential or non-essential properties of the

<sup>&</sup>lt;sup>50</sup> As I show in (96), Siegel (1976a) reports that the adjective *intelligent* has two forms and that *intelligent* in the short form contrasts in its semantics with that in the long form (in the nominative case) (see also Morzycki (2016, pp. 32-33)). Roy then points out that *intelligent* in the long form can take the instrumental case as well. Whatever semantics are assigned by each of the three forms, namely *intelligent*-SF, *intelligent*-LF.nom, and *intelligent*-LF.instr, it is important to note that there is a lexical item appearing in the three distinct (morphological) forms in Russian.

<sup>&</sup>lt;sup>51</sup> They report that this (general) pattern has been observed since Old Russian.

<sup>&</sup>lt;sup>52</sup> Since the work of Røed (1966) is written in German, I quote the point from Krasovitsky et al. (2008, p. 100).

subject.

# **3.4.3.2.** Transiency: the Defining Property versus the Permanent Property (Ionin & Matushansky, 2002)<sup>53</sup>

Similarly, Ionin and Matushansky (2002) discuss several effects of case alternation in Russian nominal predicates. They employ the term 'defining property' in their discussion and argue that nominative-marked nominal predicates denote the defining property (in Russian).<sup>54</sup> I also follow Ionin and Matushansky (2002) and Roy (2013): the defining property is neither a permanent (intransient) property nor a transient property. Although it is commonly understood that the nominative case-marking is associated with the permanent-property reading, Ionin and Matushansky (2002) and Roy (2013) do not necessarily agree with the general view. Their evidence comes from the following data:

It is possible for a predicate (with a transient property) to be marked in the nominative even if "Cinderella did not remain a peasant for her entire life" (Ionin & Matushansky, 2002) (e.g. (104a)). If predicates in the nominative case do not denote the permanent property of the subject, what do they do?

The following data from Ionin and Matushansky (2002, p. 7) strongly suggest that the nominative case gives rise to the defining-property reading:

<sup>53</sup> I am grateful to Ora Matushansky for letting me have their unpublished manuscript.

\_

<sup>&</sup>lt;sup>54</sup> Ionin and Matushansky (2002) observe that the defining interpretation is also found in French; the reading is triggered by (the presence of) the indefinite article (cf. Subsection 3.4.2).

'Pushkin was a son of a nobleman.'

b. Puškin byl synom dvorjanina.

Pushkin was son.INSTR nobleman.GEN

'Pushkin was a son of a nobleman.'

(Ionin & Matushansky, 2002, p. 7)

Ionin and Matushansky (2002) state (105a) "implies that the only relevant thing about Pushkin is that he was a son of a nobleman".<sup>55</sup> For the example in (105a), Roy (2013,

Matushansky (2000) and Ionin and Matushansky (2002) demonstrate that Russian copular predicates bear either the instrumental or nominative case and that the selection differs depending on tense. The following examples are drawn from Matushansky (2000, p. 297, (15b) and (15b')) and Ionin and Matushansky (2002, (1)), respectively:

- (III) a. Margarita byla/0 studentka.
  Margarita was/0 student.NOM
  - 'Margarita was/is a student.'
  - b. Margarita byla/budet studentkoj.
     Margarita was/will-be student.INSTR 'Margarita was/will be a student.'
- (IV) a. Puškin velikij poèt.
  Pushkin great.NOM poet.NOM
  'Pushkin is a great poet.'
  b. \*Puškin velikim poètom.

Pushkin great.INSTR poet.INSTR
Pushkin is a great poet.

As is also mentioned in Roy (2013, p. 127, fn. 53), the present tense is compatible only with the nominative-marked predicates (see (IIIa/b) and (IVa/b)). As shown in (IVb), marking a (non-verbal) predicate in the present tense with instrumental case results in ungrammaticality (contrast this with (IIIb)). Matushansky (2000) states that instrumental case-marking is the default for the future tense.

The relationship between the instrumental case-marking predicate and tense is also discussed in Krasovitsky et al. (2008) and Timberlake (2004) and Following Nichols (1981), Krasovitsky et al. (2008. p.100) state that "the preference for the instrumental with predicate nominals is greater in the future tense than in the past (in the present the instrumental with predicate nominals is ungrammatical)". What this means is that variation can or should be available in the past tense (Krasovitsky et al., 2008; Nichols, 1981). As Krasovitsky et al. (2008) point out, the option for case is nearly only available between the nominative and instrumental in the past tense (see the distribution so far, e.g., (102), (103), (104), (105), (106), (107) and (109)). Matushansky (2000) and Ionin and Matushansky (2002) report that the distribution of the nominative-marked (predictive) predicates is more restricted than the instrumental-marked predicates in the past tense (see (109)).

The relationship between tense and the copular case in Russian are briefly summarised as follows:

(V) NOM: Present>**Past**>(Future) INSTR: Future>**Past**>\*Present

The following table is from Matushansky (2000, p. 289, Table 1):

Instrumental Nominative		Nominative
Past	Default	Highly restricted
Present Ungrammatical The only possible option		The only possible option
Future	Default	Strongly dispreferred or ungrammatical

Table 3.4: The Distribution of the Copular Case in Relation to Tense

121

<sup>&</sup>lt;sup>55</sup> According to Ionin and Matushansky (2002), this effect is not observed in the present tense. I present basic tense information in relation to case-marking in the Russian non-verbal predicate construction to supplement the appearance of tense in the Russian examples. Observe that most examples of the instrumental-marked long form and the nominative-marked long form appear in the past tense.

p. 130) also argues that the nominative case is not appropriate because "Pushkin was not primarily known as the son of a nobleman, and it is thus not a defining property of him." It makes sense even to non-native speakers that the nominative case is not appropriate in the context of (105). Alternatively, it is reasonable to assume that instrumental-marked non-verbal predicates denote a **non-essential** property of an individual. The contrast of the acceptability in (105a) and (105b) suggests Russian non-verbal predicates require two semantic variations. Thus, I employ the term 'non-essential property' in the discussion in order to distinguish it from the 'defining property'. Roy's term of the 'characterizing sentence' is adequate for the instrumental-marked non-verbal predicate construction, where predicates denote a non-typical/essential property of the subject, while nominative-marked (non-verbal) predicates denote the **defining property** (i.e. the defining sentence).

Roy (2013) presents an interesting argument supporting her claim that non-verbal predicates in the nominative case denote the defining property:

(106) a. Puškin byl-∅ velik-ij poet.

Pushkin be.PST-MSC.SG great-MSC.SG.NOM poet.MSC.SG.NOM<sup>56</sup>

'Pushkin was a great poet.'

(Adapted from Roy, 2013, p. 130, (39b))

b. Puškin byl-Ø velik-im poet-om.
Pushkin be.PST-MSC.SG great-MSC.SG.INSTR poet.MSC.SG.INSTR
'Pushkin was a great poet.'

(Ionin & Matushansky, 2002, (4b))

Roy (2013, p. 130) argues that it is possible for the predicate *great* to be marked nominative in (106a) (in contrast with (105a)); it is clear that *great poet* is a defining property of the individual in (105). For (106a), Ionin and Matushansky (2002) report that the instrumental case is also possible, as shown in (106b), by raising a question of what the differences between the nominative-marked predicate and the

\_

Roy (2013, p. 130, (39b)) presents the gloss of 'poet' in (106a) as GEN. However, Ionin and Matushansky (2002, (4a)) present it as NOM. Although this is not the main point of the discussion here, to clarify, I employ Ionin and Matushansky (2002) to my discussion. I thank Nina Radkevich for clarifying the grammatical status of the example.

instrumental-marked predicate are.

Roy's distinction can answer Ionin and Matushansky's (2002) question. In Roy's terms, the sentence in (106b) where the non-verbal predicate is marked in the instrumental case is the characterizing sentence. That is, *great poet* is a **non-essential property** of Pushkin. If this is right, a predicate marked in the instrumental case in (105b) is also a characterizing sentence, where a *son of nobleman* is not a defining property but a non-essential property of Pushkin. Then this accounts for the fact that the instrumental case is appropriate in (105b) in contrast to (105a).

Ionin and Matushansky (2002, (6)) present the example in (107) where the instrumental case is possible for a predicate with "a property that is not (and cannot be) transient":

(107) 'Jesus was the son of God.'

a. Iisus byl syn božij

Jesus was son.NOM God-adj.NOM

b. Iisus byl synom bož'im.

Jesus was son.INSTR God-adj.INSTR

My point here is not that I am arguing against the general viewpoint of the Russian linguistics literature. Rather, I support Ionin and Matushansky's (2002) claim that the "[d]efining property and transience are not two sides of the same coin". For instance, their example in (105b) clearly shows that there are predicates that are "non-transient and yet not defining properties".

Although Ionin and Matushansky (2002) and Roy (2013) do not provide detailed interpretations for (104a) and (104b) – if we follow their claims so far – it is possible to assume that 'poor peasant' is a non-essential property or non-typical property of Cinderella with instrumental case-marking in (104b), whereas 'poor peasant' is the defining property of Cinderella with nominative case-marking in (104a).

To summarise, I support Roy's claim that the long-form adjective in the nominative case denotes the defining property and that the defining property is not a synonym of

the permanent property. The characterizing property is different from the defining property because the characterizing property simply characterises a referent and does not identify the individual as a particular member of a class of individuals.

# 3.4.3.3. Nominative-Marked Predicates versus Instrumental-Marked Predicates: Krasovitsky et al. (2008) and Timberlake (1986, 2004)

In the literature on Russian, the concept of the defining property is well-discussed and seems well-established. Timberlake (2004, p. 291) states that "the nominative (long) form presents the subject as instantiating an essence and the property as a necessary rather than an accidental one", and this is not very different from Ionin and Matushansky (2002) and Roy's (2013) definition of nominative-marked predicates.

According to Timberlake (2004, p. 290), the nominative case is used when the predicate describes an individual "as a token of a type":

In addition, what matters with the nominative case selection is "whether the characteristic holds or not, not under what conditions or to what degree it holds" (Timberlake, 2004, p. 290). Timberlake (1986, p. 142, my emphasis) similarly defines that non-verbal predicates in the nominative case indicate that "a state holds without giving any indication that the state represents a change in the situation over time or a departure from expectations".<sup>57</sup> This viewpoint helps us to understand the use of M-no better in Chapter 4.

In contrast, the instrumental case can be termed temporal as it is typically found in a "temporal sequence in relation to other events in the text, and is central to the narrative line"; however, it is important to note that "this sense of the instrumental is not purely

<sup>&</sup>lt;sup>57</sup> I do not employ Timberlake's (2004) terminology "descriptive nominative" to my analysis of the long-form adjective in the nominative because the term can be confused with Roy's terminology "situation-descriptive", which is used for short-form adjectives.

temporal, but has some modal flavor, as well" (Timberlake, 1986, p. 142). This follows the terms 'characteristic property' or 'non-essential property'. Krasovitsky et al. (2008) also report that the instrumental triggers the modal meaning in the subjunctive clause:

The data in (109a) and (109b) clearly show that the nominative case and the instrumental case are used in different contexts, and such uses of the instrumental case in (109b) are referred to as modal instrumental in Krasovitsky et al. (2008). Understanding that these viewpoints exist in Russian help us to understand what would possibly affect the speakers' choice of multiple forms in Japanese (e.g. Section 4.2).

#### 3.4.4. The Three-Way Distinction in Russian

In this subsection, I illustrate possible criteria that may affect speakers' morphological selections. The idea provides us with better understanding of observations about M-na and M-no in the next chapter as to how my informants determine their morphological selection.

<sup>&</sup>lt;sup>58</sup> As the translation indicates, *frantsuz* is treated as a noun. Thanks to Nina Radkevich for the clarification.

#### 3.4.4.1. Short Form versus Nominative (Long) Form: Timberlake (2004)

This section deals with criteria for the selection of the forms between the short form and the nominative-marked long form, proposed by Timberlake (2004):

	Predicative ("short") form	Nominative ("long") form
Subject entity	defined individual	token of type or defined individual
Property	manifested by degrees, opposed to other possible properties or values of the property	manifested in binary (either-or) fashion
Time-worlds	accidental property, which is potentially different depending on circumstances	necessary property, which holds at any time, in any circumstance
Speaker	property observable by any speaker	judgement of current speaker
Context	property interacts with (conflicts with, causes, is caused by, exists despite) other states or events	no attention to interaction with other properties
Register	mark of written register, less frequent in speech	mark of colloquial register

Table.3.5: Predicative (Short) Form versus Nominative (Long) Form (Timberlake's 2004, p. 296, Table 5.5, my emphasis added)

His use of the term 'property' is not necessarily equivalent to my definition, but this is not the main issue of this section. My main purpose in introducing Timberlake's framework to our discussion is understanding that several criteria (e.g. context) can determine speakers' morphological choices in a language.

The specific points of Timberlake's ideas relevant to Japanese data are as follows. First, the long form in the nominative case is associated with a token of a type as shown in the first line. Second, the short form is able to contrast the property of the entity with other properties, whereas the nominative (long) form does not tend to interact with other properties. The nominative (long) form seems to have the function of focusing a property of a referent as if the property is the only property the speaker can identify with regards to the referent. In this respect, Timberlake's (2004) framework does not contradict Roy's analysis of the nominative-marked long-form adjective in Russian (i.e. the 'defining property' interpretation).

#### 3.4.4.2. Summary of Roy's Three-Way Distinction in Russian

I summarise Roy's three-way distinction in Russian (my terminology in bold) in Table 3.6:

Sentence-type	Semantics	Morphological f	orm
Situation- descriptive	Describing or reporting a situation ( <b>Condition</b> )	Short-form adjec (Predicative only	
Defining	Property-denoting ( <b>Defining property</b> )	Long-form (Attributive) adjectives  Predicate nouns	Marked in the nominative case
Characterizing	Property-denoting (Non-essential property)		Marked in the instrumental case

Table 3.6: Three Kinds of Semantics in Relation to a Morphological Form in Russian (Roy, 2013)

For the sake of clarity, I apply the term 'condition' to the situation-descriptive interpretation (cf. Subsection 3.3.5). In this section, I also employ the term 'non-essential (or non-typical) property' for the characterizing interpretation in order to distinguish it more directly from the defining interpretation.

### 3.4.5. Further Russian Data in Support of Roy's Three-Way Distinction and the Key Distribution in the Investigation of M-na and M-no

In this subsection, I present Russian examples summarising the points that have been discussed in this entire section and that are significant for my analysis of Japanese data. The distribution I present in the following section is particularly relevant in understanding the semantic distinction between M-na and M-no.

# 3.4.5.1. Situation-Descriptive Interpretation versus Defining-Property Interpretation: Short Form versus Long Form in the Nominative Case

I present data to support Roy's claim that short-form adjectives denote the situation-descriptive reading, whereas long-form adjectives in the nominative case denote the defining property of the referent. The adjective *protivnyj* 'nasty/unpleasant' appears in both long form and short form, and the two forms are certainly used in different

contexts:59

(110) a. Izjum protiv**nyj.** 

raisins nasty/unpleasant.LF.NOM

'Raisins are nasty.' ("I hate them!")

b. Izjum protiv**en.** 

raisins nasty/unpleasant.SF

'The raisins are nasty.' (In a context where a person likes raisins but these ones are not good because they have rotted/soured (or they are old).)

I propose the sentence in (110a) is the defining sentence, while the sentence in (110b) is the situation-descriptive sentence, in Roy's terms. It could be argued that *protivnyj* (i.e. the long form) is a permanent property of raisins, while *protiven* (i.e. the short form) is a non-permanent property (or a temporary state) of raisins. However, I argue the adjective *protivnyj* 'nasty/unpleasant' appearing in the long form denotes a defining property of the raisins. A native speaker selects the nominative-marked long form to convey the idea that she hates raisins – because the "unpleasant/nasty" quality is salient enough for her to identify this individual property (nasty) as the defining property of raisins (for her).<sup>60</sup>

I emphasise the native speaker, in contrast, intuitively uses the short form to refer to/**describe a situation** where raisins have a nasty or unpleasant quality (see (110b) in contrast with (110a)). Siegel's (1976a) informant also used the short form when a quality (e.g. *intelligent*) was observable (e.g. by looking) (cf. (96) in 3.4.1.3). Here, what my informant does is describe a situation – by selecting the short form – where raisins have a nasty quality. She reports a condition of raisins, in other words. <sup>61</sup> Observe that she said these raisins have gone off; so she selects the short form to show

<sup>&</sup>lt;sup>59</sup> I greatly appreciate Nina Radkevich for providing me with the data and for her interpretations of each of the two forms. The conversation about the behaviour of Russian adjectives with her led me to consider the possible semantic distinction between M-na and M-no.

<sup>&</sup>lt;sup>60</sup> Under this reading, the use of the 'overt COP.PAST.LF.instr' form is not possible. As for the short form, the native speaker is inclined not to use the COP.PAST form, though she says that the difference between the form in (110b) and the overt copular form is subtle.

<sup>&</sup>lt;sup>61</sup> I agree with Roy's (2013, p. 119, my emphasis) statement that "short-form adjectives are used to describe **states** or situations". For the sake of my argument and mainly for the sake of consistency, I use the term **condition** and the situation-descriptive reading as defined in Subsection 3.3.4.

that she does not mean that she hates raisins (cf. (110a)). I argue the short form *protiven* can describe a situation where raisins have gone off, so that they have an unpleasant, nasty quality; that is, the raisins are in a bad condition (i.e. we are reporting a condition).

These observations might sound too personal to adopt in this analysis. However, following Lomtev (as cited in Krasovitsky et al., 2008, p. 102), Krasovitsky et al. (2008, p. 102) argue "morphological choices are determined not by the mere properties of predicates, but rather by the way speakers view these properties". <sup>62</sup> Also, these observations do not contradict what Timberlake (2004) argues (cf. Table 3.5).

Thus, I conclude that Russian short-form adjectives can denote the situation-descriptive reading, while long-form adjectives can denote the defining property of the individual when marked with the nominative case. As Roy claims, the distinction between the two readings is overtly/morphologically marked in Russian. I assume that the speakers' viewpoint is an important factor in determining morphological selection, following Krasovitsky et al. (2008) and Timberlake (2004). The findings of this section allow me, finally, to propose the semantic distinction between M-na and M-no for the rest of the thesis (see Section 4.2).

# 3.4.5.2. Long Form in the Nominative Case versus Long Form in the Instrumental Case: Defining Interpretation versus Characterizing Interpretation

Roy (2013, p. 121) presents examples in which the adjective *ill* appearing in the long form can be marked as either nominative or instrumental:

(111) a.	?Ejo	mat'	byl-a	bol'na-ja. (LF)
	her	mother	be.PST-FEM.SG	ill.FEM.SG. <b>NOM</b>
b.	Ejo	mat'	byl-a	bol'n-oj. (LF)
	her	mother	be.PST-FEM.SG	ill.FEM.SG. <b>INSTR</b>
'Her mother was ill.'				

<sup>&</sup>lt;sup>62</sup> In terms of Lomtev's statement, since it is in Russian, I rely on Krasovitsky et al. (2008).

I asked a native speaker whether these two sentences were grammatical. The answer was that both are grammatical, but she felt that (111b) is slightly better than (111a); she said (111a) requires some context. Otherwise, the native speaker felt that (111a) is somewhat odd. My informant's comments match the distributional facts presented in the literature: the appearance of nominative-marked predicates is more restricted than the instrumental (Matushansky, 2000). For instance, my informant says in (111a), the use of the nominative-case marked predicate is fine to answer the question of why she did not come. The native speaker also says that she would use (111a) to mean that "her mother was disabled" (or similarly that she had some sort of chronic condition). Here, I assume that the *ill* quality could be treated as the defining property of the individual. Timberlake's (2004, p. 295) definition of the long-form nominative might explain better the second comment of the informant; "the (long) nominative presents the subject as an entity that embodies a necessary property – an essence – unconditionally".

### 3.5. The Situation-Descriptive Sentence in Spanish: Two Copular Variants, *estar* versus *ser*

Roy (2013) presents further Russian data supporting her decision not to employ 'transiency/permanency' as a determining criterion for her three-way distinction:

To repeat the traditional view on the semantics of short-form adjectives, they are often related to transient meaning. Nevertheless, *dead* is neither a temporal property nor a temporal state. Is that a permanent property of the subject? Or is it a transient property of the subject? It may be simpler if we use Roy's term 'situation-descriptive'; it is not wrong to say that the predicate reports **a condition** of the subject or **describes a situation** in (112).

Roy argues that the three interpretations are also observed in Spanish copular sentences. The characteristics of Spanish copular sentences are that there are two

copula variants in the language. It is well-documented that in Spanish non-verbal predicates select *estar* or/and *ser* according to the grammatical property of predicates (e.g. stage-level, individual-level; cf. fn. 40) (cf. Schmitt, 1992). Roy (2013) proposes that the situation-descriptive reading is assigned when predicates select *estar*. In Spanish, the predicate *dead* only selects *estar*:

Needless to say, the semantics assigned by the construction is 'condition' (cf. (112)).

63 Some predicates can appear with both variants, as shown in (114):<sup>64</sup>

(114) Lizzie {es/está} guapa.   
Lizzie {
$$ser_{3SG}/estar_{3SG}$$
} pretty   
'Lizzie is {in essence/circumstantially} pretty.'   
(Valenzuela et al., 2015, p. 271, (6))

For instance, *guapa* 'pretty' with *ser* means that Lizzie is characteristically pretty, whereas *guapa* 'pretty' with *estar* means that she is "circumstantially" pretty. The predicate cannot mean that she is pretty by nature if *guapa* appears with *estar*.

Roy's data suggest that the selection of *estar* involves speakers' perception (Roy, 2013; Valenzuela et al., 2015):

(115)	a.	La nieve	es	fría.
		The snow	ser. <sub>3SG</sub>	cold
		'Snow is cold.'		
	b.	La nieve	está	fría.
		The snow	estar. <sub>3SG</sub>	cold

<sup>&</sup>lt;sup>63</sup> Thanks to María F. Muradás-Taylor for providing me with this information on Spanish. I am also grateful to Míriam Aguilar and Eloi Puig Mayenco for helping me understand how Spanish copulas basically work and for confirming whether I correctly understood the Spanish data.

<sup>&</sup>lt;sup>64</sup> Some adjectives (e.g. *inocente* 'innocent') only combine with ser (cp. muerto 'dead' in (112)).

'The snow is cold.'

(Roy, 2013, p. 144, (8a), (8b))

For the use of *estar* in (115b), Roy (2013, p. 144, fn. 58) notes that *la nieve está* "only commits the speakers to the truth of the statement 'snow is cold' for the moment of the sensation". Valenzuela et al. (2015, p. 272) similarly state that *estar* is preferred for "a specific interpretation of the sentential subject" and "a perceptual report". We also saw that the short form in Russian is used in a similar way for perceptual reports (cf. 3.4.2.2). As Roy (2013) claims, the semantic distinction between the situation-descriptive interpretation and the other two interpretations (defining and characterizing) is overtly marked by a certain form in Russian and Spanish. In Chapter 4, I present my observations about my informants' selections of M-na: their choice of *na* is similar to the use of the Russian short form and Spanish *estar* that I have demonstrated in this chapter.

#### 3.6. Summary of French, Russian and Spanish

I present the summary of the discussion in this chapter in Table 3.7.

Semantics	Roy's definition: the predicate ascribes a defining property to the		
	referent. Defining property: 'A property that is salient enough to		
	define an individual as a particular member of a class of		
	individuals.'		
Forms	French: Indefinite variant		
	Russian: N and long-form A + nominative case		
	Spanish: ser (COP) + indef. article variant		
ii. C	haracterizing sentence		
Semantics	The predicate ascribes a property to the referent: non-essential		
	property (Roy's definition modified).		
Forms	French: Bare variant, A		
	Russian: N and long-form A + instrumental case		
	Spanish: ser (COP) + bare variant		
iii. Si	iii. Situation-descriptive sentence		
Semantics	The predicate reports a condition or describes a situation that the		
	referent is in (Roy's definition modified, cf. Table 3.3).		
Forms	French: A (P.P)		
	Russian: Short-form A		
	Spanish: estar (COP) + A (or P.P)		
	I .		

Table 3.7: The Cross-Linguistic Relationship between the Grammatical Form and the Interpretation: Roy's (2013) Three-Way Distinction

As Roy (2013) claims, the distinction between the defining and the characterizing interpretations is marked in both languages: nominals with or without the indefinite article in French and non-verbal predicates (the long-form adjective and predicate nouns) in the nominative or instrumental case in Russian. English non-verbal predicates are ambiguous between the two readings because they are not morphologically or syntactically distinguished (Ionin & Matushansky, 2002). According to Ionin and Matushansky (2002), the defining interpretation is also assigned by means of the indefinite article in Haitian Creole, mirroring what is found in French. Since I adopt the notion of the defining property in my argument regarding Japanese, it is important to examine the origin of the defining property – that is, Russian (cf. Ionin & Matushansky, 2002; Roy, 2013). In the next chapter, I argue that M-no assigns the defining-property.

i.

**Defining sentence** 

### Chapter 4 The Mimetic-na Form versus the Mimetic-no Form

#### 4.1. Introduction

In this chapter, I investigate the grammatical functions of the M-*na* form to compare them with those of M-*no*. In Chapter 2, I demonstrate that M-*na* can appear in multiple modification as often as the other two forms, M-*no* and M-*sita*, despite the fact that previous literature is unwilling to accept the M-*na* form (cf. Subsection 1.6.3). In Section 4.2, I briefly discuss the distribution of the M-*no* form in multiple modification to recall that M-*no* exhibits more constraints than the other two forms. Consequently, two general questions follow: (a) under what circumstances do native speakers prefer M-*na* over M-*sita* or M-*no*, and (b) are there any grammatical properties that affect native speakers' morphological selections of the three forms? Based on the observation presented in Section 4.3, I claim that the M-*na* form denotes a 'situation-descriptive reading', while the M-*no* form denotes a 'defining-property reading', in Roy's (2013) terminology. In Sections 4.4 and 4.5, I demonstrate that these different proposed semantics are reflected in their structural position in multiple modification. In Section 4.6, I propose that the ordering of the three forms in a stacking structure is M-*na*, M-*sita* and M-*no*.

#### 4.2. The Implication of the Distribution of M-no in Multiple Modification

In Section 2.3, I briefly mentioned that M-no is sensitive to the position in which the form appears in multiple modification. The whole distribution indicates that the grammaticality tends to worsen or the acceptability tends to be lower when M-no participates in multiple modification (cf. (b), (e), (f) in Table 4.1):

a	M-na M-sita	b	??? M-no M-sita
c	M-sita M-na	d	M-sita M-no
e	*M-no M-na	f	(?)M-na M-no

Table 4.1: The Distribution of Mimetics in Multiple Modification: the Stacking Structure [M1 [M2 N]]

Overall, M-no exhibits more restrictions with M-na than with M-sita (cf. (a/b), (a/c) versus (e/f)). In particular, multiple modification results in ungrammaticality when M-

*na* and M-*no* appear together (cf. (e)). It is only the frame of [M-*sita* [M-*no* N]] that permits M-*no* to participate in multiple modification without causing any problems in grammaticality.

The question to ask is why M-no is so sensitive to its structural position in multiple modification. Sections 4.4 and 4.5 examine the frames of [M-na M-no N] versus \*[M-no M-na N] and [M-sita M-no N] versus [M-no M-sita N] respectively, and I show how the semantic properties of modifiers could constrain the structural positions of the two modifiers, by addressing cases of English adjectives and cases of non-mimetic prenominal modifiers in Japanese.

#### 4.3. The Distinctions between M-na and M-no

In Chapter 2, I argued that a mimetic forms an attributive (non-tensed) modifier when followed by *sita*. I also showed that mimetic-*na* is a tensed clausal modifier because the whole phrase can accommodate tense-related adverbials. In this section, I address the question of which linguistic properties determine speakers' morphological choices between *na* and *no* (cf. Chapter 1 (1.6.4)). I investigate if there are any environments where one of the two forms is preferred over the other by examining the distribution of M-*na* and M-*no*.

For the examination, I present various kinds of distributions. The examples presented in the following subsections were formed using the method explained in Section 1.7 (see (A1), B2 and B3). In each subsection, I refer to the comments given by individuals (see Table C2-i, Tables C2-1 to C2-4 and Table C3-i) with my analysis while presenting my observations.<sup>65</sup> It should also be noted that the total number of people to whom I spoke differs in each subsection (see B2, C2 in Section 1.7).

#### 4.3.1. Native Speaker Observation: M-na versus M-no

As far as I am aware, there are no observations about the semantic distinctions between M-na and M-no in the literature. To begin with, in this subsection, I present a distribution, suggesting that the semantics of M-na must differ from those of M-no

135

<sup>&</sup>lt;sup>65</sup> The core observations in this section were presented in Kamiya (2017a) with some of the data in this section (cf. B2, B3 in Section 1.7).

(cf. (C2-1) in Section 1.7).

In (116) and (117), a mimetic modifies two different head nouns, namely 'cake' and 'futon'. The mimetic *huwahuwa* expresses a sense of lightness and softness; the translation of the mimetic can be different depending on the head noun, but it roughly means 'light and fluffy' or 'airy'. The translations I provide below only give an idea of what these phrases roughly mean:

(116) 'soft and fluffy cake"/"cake which is soft and fluffy'

a. huwahuwa-**na** keeki

M(accentless)-PRE.COP.TENSED cake

b. huwahuwa-**no** keeki

M(accentless)-COP/GEN cake

(117) 'soft and airy futon'/'futon, which is soft and airy'

a. huwahuwa**-na** huton

M(accentless)-PRE.COP.TENSED futon

b. huwahuwa-**no** huton

M(accentless)-COP/GEN futon

As for grammaticality judgements, three individuals (out of three) judged that the mimetics are grammatical with both na and no. Here, I report that one of the three individuals intuitively said that M-na huton and M-no huton in (117a) and (117b) definitely mean something different, while he felt that the two forms in (116a) and (116b) do not give rise to significantly different interpretations. As for the other two individuals, one of them also felt that M-na huton and M-no huton in (117a) and (117b) somehow have (very different) meanings (although there were no further descriptions provided by this individual regarding the set of four examples shown to her).

For the use of M-na, one individual (informant no. 1 in (C2-1)) said "I should be in a situation where I was experiencing the softness and lightness" – for example, by touching the futon or bouncing on the futon – when the mimetic *huwahuwa* was

<sup>&</sup>lt;sup>66</sup> There has been no agreement in the literature about whether *no* appearing with mimetics is the genitive marker or the prenominal form of the copula (cf. Section 1.3). The grammatical status of *no* neither determines the point of the argument nor changes the main points of the discussion in this chapter. See Chapter 5 (5.3, 5.4) for my analysis.

followed by *na*. As established previously, similar semantics were observed in Spanish and Russian in Chapter 3 ((115) and 3.4.2.2, respectively). Thus, I consider that M-*na* assigns the situation-descriptive reading in Roy's terms.

With respect to the use of M-no, on the other hand, the individual said that the futon must have a 'soft and fluffy' quality when huwahuwa is followed by no. There may have been a point in time where the futon was flat, but it does not matter when and how the referent acquired the huwahuwa quality – as long as we know the referent has that quality. What I observe here is that the informant's description about his use of M-no in (117b) is very similar to the use of the nominative-marked long-form adjective in Russian. First, Timberlake (2004, p. 296, my emphasis) states that the nominative-marked long form assigns "a necessary property, which holds at any time in any circumstance" (cf. Table 3.5). Second, Roy (2013) claims that the nominative long form denotes the defining property (cf. Chapter 3). Thus, I consider that M-no assigns the defining-property reading in Roy's terms. That is, the quality expressed by the accentless mimetic, namely 'softness', is a property – more specifically the defining property – of the futon.

Here, I must highlight one of the important points of Roy's claims – the situation-descriptive reading greatly differs from the other two readings in that the former reports a situation, whereas the latter ascribes a property (cf. Tables 3.2, 3.6, 3.7).

In order to identify and establish the semantics assigned by M-na and M-no, I shall pay attention to the following (cf. Subsections 1.6.4, 3.2.1):

Why did some of my informants feel that M-na has different semantics from M-no in (117), but not in (116)?

What grammatical condition enables speakers to feel the distinction between M-na and M-no in (117) more clearly than in (116)?

My assumption is that a relationship between the head noun and the mimetic is one of the factors affecting speakers' morphological choice between *na* and *no*. In the next subsection, I present a distributional pattern in which speakers' preference of the use of M-*na* varies depending on the head nouns with which it appears.

#### 4.3.2. The M-na Form: The Situation-Descriptive Reading

In this subsection, I argue that M-na denotes the situation-descriptive interpretation. I present four sets of examples, including two cases where the use of M-na was considered **less natural** than the other two forms by native speakers (cf. (C2-2) in Section 1.7), and explain why this is the case.

In (118)-(121), I provide broad translations only to give an idea of what the phrases roughly mean, and note that these translations do not necessarily reflect the syntactic structure of each of the phrases:

(118) 'potato, which (is from the oven and) has a soft-flaky quality'

a. hokuhoku-**na** zyagaimo

soft-flaky-PRE.COP.TENSED potato

b. hokuhoku-**no** zyagaimo

soft-flaky-COP/GEN potato

(119) 'croquette, which (is fresh from the oven and) has a soft-flaky quality'

a. hokuhoku-**na** korokke

soft-flaky-PRE.COP.TENSED croquette

b. hokuhoku-**no** korokke

soft-flaky-COP/GEN croquette

(120) 'pumpkin, which has a soft-flaky quality'

a. <sup>?</sup>hokuhoku-**na** kabotya

soft-flaky-PRE.COP.TENSED pumpkin

b. hokuhoku-**no** kabotya

soft-flaky-COP/GEN pumpkin

(121) 'garlic, which has a soft-flaky quality'

a. <sup>??</sup>hokuhoku-**na** ninniku

soft-flaky-PRE.COP.TENSED garlic

b. <sup>?</sup>hokuhoku-**no** ninniku

soft-flaky-COP/GEN garlic

The mimetic hokuhoku (presented here) refers to the texture of a food containing

starch, such as potatoes, when they are cooked.<sup>67</sup> These are slightly moist, being neither watery nor dry. They are firm yet soft and must not be soggy. This combination of characteristics is considered pleasant, and *hokuhoku* is typically used to indicate an optimal balance of these characteristics in texture. The cooking method which results in the food acquiring the *hokuhoku* quality does not matter (e.g. boiling or baking). Bread can also be *hokuhoku* when it is fresh from the oven. Since the mimetic *hokuhoku* is accentless in (118)-(121), *hokuhoku* in isolation expresses an abstract quality from a prosodic viewpoint (cf. Chapter 1).

As observed in (118)-(121), it is possible for *hokuhoku* to select *na*, but the acceptability of the use of M-*na* in (120a) and (121a) is lower than in (118a) and (119a) (cf. (C2-2). This observation suggests that the contrast in acceptability of the mimetic-*na* form varies depending on the head noun. Compare (120a) and (121a) with (118a) and (119a): *hokuhoku* can adequately follow *na* when the head noun is 'potato' or 'croquette', but cannot when the head noun is 'pumpkin' or 'garlic'. What prevents speakers from selecting *na* with 'pumpkin' or 'garlic' in (120a) and (121a) (cf. Subsection 1.6.4)?

Two informants out of seven felt that the use of na in (120a) and (121a) is not perfectly adequate because they could not visualise or imagine a scene where pumpkin or garlic are being hokuhoku (e.g. soft-flaky). With the head noun kabotya 'pumpkin' in (120a) in particular, one informant (no. 2 in (C2-2)) asked "in what situation can a pumpkin be hokuhoku?" Her knowledge about pumpkins is that they have a hard texture, and she was unsure how a pumpkin could possibly be cooked to be in a condition where it has a hokuhoku quality. Since she was not sure in what situation a pumpkin could be hokuhoku, she hesitated to select na when the head noun was pumpkin (i.e. hokuhoku-hokuh

What these observations suggest is, first, that speakers consider the relationship between the head noun and the given mimetic when *na* follows a mimetic. Second,

139

\_

 $<sup>^{67}</sup>$  The definition of *hokuhoku* is drawn from Kindaichi (1978, p. 305) and is translated into English by me.

speakers tend to reject the M-na form when they cannot imagine a situation where the referent is in the condition that has the quality expressed by the given mimetic. Readers may wonder why my informants asked these questions when the head noun is something like *pumpkin* or *garlic*, given that potatoes obviously need to be cooked to be in the condition of being *hokuhoku*. However, it does not matter what speakers know about the referent and it does not even matter whether the speakers' knowledge about the referent is correct. What is important is that my informants consider how the referent (e.g. pumpkin or garlic) can be in a condition of being hokuhoku to select na. This observation implies that the M-na form does not give rise to the defining-property reading because the questions asked by my informants (how a referent can be in the condition expressed by the mimetic) are not the type of questions corresponding to the defining-property reading (cf. Chapter 3 (3.3.1-3.3.3 and Table 3.1)). In Chapter 3 (3.3.4), I explained that Milsark strictly distinguishes the semantic notion of 'property' from that of 'condition'. I also provided my revised definition of Roy's situation-descriptive sentences: they report a situation or describe a condition that the referent is in (cf. Table 3.3). To conclude, I claim that with *na*, a mimetic does not ascribe a property to a referent, but describes (or reports) a condition that the **referent is in** at a given time (i.e. the situation-descriptive reading).

The next question is what determines speakers' morphological selection of *no*. My suggestion is that the M-*no* form assigns a property, or more specifically the defining property, to the referent (e.g. (117b) in 4.3.1). As for the use of *no* with *korokke* 'croquette' in (119b), one of the seven informants wondered whether *korokke* has the *hokuhoku* quality (cf. informant no. 5 in (C2-2)). The informant did eventually accept the *hokuhoku-no korokke* because it certainly has the *hokuhoku* property ('fresh from the oven'). What this informant confirmed here is that if the entity can have the property; it does not matter how the entity can acquire this quality or how the entity reaches this condition. The way she determined the morphological choice of *no* is similar to the way one individual used M-*no* in (117b).

Similarly, with the head noun *garlic* in (121b), another informant (no. 3 in (C2-2)) asked "what is *hokuhoku no ninniku*?". Since this informant did not think that garlic

has the *hokuhoku* quality, she did not select *no* for *hokuhoku* with the head noun *garlic*. In other words, the informant asked "what M-*no* is" to decide whether to select *no* (in contrast to the case of M-*na*; see the texts in bold in the above paragraph). I argue that this fact suggests that the M-*no* form gives rise to the defining reading.<sup>68</sup>

As for the marking of lower acceptability shown in (121), one informant (out of seven) did not prefer the use of *no*, but this does not matter for my argument or invalidate my claim. I argue instead that the relationship between the head noun and the mimetic is an important factor for speakers in selecting between *na* and *no*. The acceptability of each of the forms differs depending on the individuals' knowledge of the world, and what I argue here follows Milsark's (1976, p. 129) statement: "the judgements are dependent on facts of the world and one's conception of them" (cf. Subsection 3.3.4).

To summarise, for the semantics of M-no, I claim that a mimetic ascribes the defining property to the referent when followed by no.

Thirdly, in terms of the semantics of M-sita, I propose that M-sita simply ascribes a property to a head noun. In the examples presented in (122), I observe that the use of M-sita does not trigger any of the questions asked during the selection of na or no (questions such as 'how the referent can be in a condition where it has a quality expressed by the mimetic' and 'what the M-no noun is') (cf. (C2-2) in Section 1.7):

(122) a. ho'kuhoku-sita zyagaimo

soft-flaky<sub>ATT</sub> potato

'potato, which has the soft-flaky quality'

b. ho'kuhoku-sita korokke

soft-flaky<sub>ATT</sub> croquette

'croquette, which has the soft-flaky quality'

c. ho'kuhoku-sita kabotya

The important point here is that 'what M-no is' used by some informants is not a type of question corresponding to the situation-descriptive interpretation (cf. Section 3.3). In the following subsections – in particular in 4.3.3 and 4.3.5 - I demonstrate that M-no gives rise to the defining-property interpretation.

soft-flaky<sub>ATT</sub> pumpkin

'pumpkin, which has the soft-flaky quality'

d. ho'kuhoku-sita ninniku soft-flaky<sub>ATT</sub> garlic

'garlic, which has the soft-flaky quality'

Observe that *hokuhoku* can adequately participate in modification with each of the head nouns, including *pumpkin* and *garlic*, when followed by *sita* (cf. (C2-2) in Section 1.7).<sup>69</sup> It was straightforward for all of the five informants to accept the M-sita form in (122), unlike in the cases of M-na and M-no in (118)-(121). I assume that the relationship between the head noun and the mimetic does not matter when *sita* participates in the modification. These observations seem to suggest that the grammatical function of the M-sita form must differ from the other two forms. I claim that M-sita is the most acceptable form in (122) because the form is the semantically least specific/restricted among the three forms. It is neither a quality that the referent only has at the time in question nor a property that is salient enough to define the individual. M-sita simply denotes a non-essential, characterizing property of the referent.

Importantly, Roy clearly distinguishes the situation-descriptive sentence from the other two sentence types in both the syntactic and semantic senses. In terms of the syntactic properties of M-sita, I argued that M-sita is a (non-tensed) attributive modifier in Chapter 2. We also know that M-na is definitely not an attributive form (cf. Chapter 2). In Chapter 2, I suggested that "the semantics of M-na are that the head noun has a quality described by the mimetic at a given time" (cf. (75)), and I treat this definition as a synonym of the term 'condition' and Roy's (2013) term 'situation-descriptive'. For the characterizing-property interpretation, it is the attributive form that gives rise to it in Russian and Spanish (cf. Table 3.6 for Russian, Tables 3.2, 3.7 for other). Thus, it is reasonable to consider assigning the semantics of M-sita (the attributive form) to the characterizing-property interpretation (to contrast with the situation-descriptive interpretation), as long as we are certain of the clear syntactic

 $^{69}$  Once again, note that these rough translations in (122) do not reflect the syntactic structure of [M-sita N].

142

distinction between M-sita and M-na.

To summarise, I propose that M-sita, the attributive form, assigns the characterizing interpretation: M-sita ascribes **a** property of the referent, in Roy's sense, and this property is a non-essential property of the referent (cf. Subsection 3.4.3). Since ho'kuhoku-sita is not a defining property, M-sita does not "define an individual as a particular member of a class of individuals", in Roy's terms (cf. Table 3.1).

Moreover, this idea remains consistent with my claim about the semantics of M-sita in Chapters 1 and 2 – I argued that from a prosodic viewpoint, M-sita, including the accented mimetic, expresses 'a physical concrete property' (cf. (76) in Chapter 2)). The idea is that 'characterizing property' and 'physical concrete property' are not very different from one another because both refer to a property.

Below, I continue to investigate the distribution of M-na and M-no in order to identify finer distinctions between the two forms.

### **4.3.3.** The Morphological Alternation between *na* and *no* with Accentless Mimetics

In this subsection, I present an observation which helps to identify what determines the speakers' morphological selection of *no* rather than *na* (cf. (C2-3)).

In the following example, two out of three individuals straightforwardly selected *na*:

(123) 'skin with a/the *subesube* 'smooth' quality'

a. subesube-**na** hada 'skin'

b. subesube-no hada 'skin'

In (123a) and (123b), broadly speaking, *subesube* expresses a smooth quality of the skin (accentless mimetics express an abstract quality; cf. Chapter 1). Here, even if the option of *no* was available, two individuals (nos. 8, 9) selected (preferred) *na* over *no*. On the other hand, one of the three individuals (no. 7) did not have any preference in respect to his use of *-na* and *-no*. (He did not care whether *-na* or *-no* was better in (123) and (124), cf. (C2-3) in Section 1.7). This observation suggests there must be

some linguistic properties that make a native speaker intuitively select *na*. For the selection of *no*, one of the three said that it was possible to select *no* as long as the knowledge that the skin had a smooth quality was shared by the interlocutors. I emphasise that we are again observing comments about knowledge. The criteria for the morphological selection of *no* seem extremely similar to those for the morphological selection of the nominative long form in Russian proposed by Timberlake (2004) (cf. Table 3.5).

The speakers' morphological selection changes if the given mimetic changes. With *kasakasa* (accentless, expressing a 'dry/rough' quality or 'dry-roughness') in (124), two individuals preferred the use of *no* in contrast to their use of *na* in (123):

- (124) 'skin with a/the dry-rough quality'
  - a. kasakasa-na hada 'skin'
  - b. kasakasa-**no** hada 'skin'

Recall that they actively chose *na* for *subesube* 'smooth' with skin in (123). The observation that speakers alternate *na* with *no* depending on the mimetic would be odd if M-*na* were either ungrammatical or always less acceptable. Here, I would rather consider that the morphological selection is determined by the relationship between the head noun and the given mimetic, and that the judgement depends on speakers' knowledge about the world (see Chapter 3 (3.4)).

From my point of view, in (123) and (124) above, both *na* and *no* combine with each of the two mimetics *kasakasa* 'dry' and *subesube* 'smooth' with no problems. I would not say that any of them are ungrammatical or less acceptable forms. My personal *choice* is that I instinctively selected *no* because *kasakasa* 'dryness' is the defining property of my skin. I have had eczema since I was very little, so I always have dry skin. In other words, the property *kasakasa* is salient enough to identify the individual (myself). In (123), I did not select *no* with *subesube* to describe or refer to my skin because the smooth quality cannot ever be the defining property of my skin due to my eczema. If I had a smooth quality, my skin would be in a specific (e.g. better) **condition**, and for this interpretation to describe such a condition, the use of *na* would be appropriate. Similarly, in (124), if *na* was selected, the intended interpretation

would be different from the defining-property interpretation and M-na would assign the situation-descriptive reading. *Kasakasa-na hada* means that the skin has the *kasakasa* quality at the time in question. In other words, the skin is in a condition of being dry. It should be noted that a similar choice by an individual between the two forms was observed in Russian (see (110) in Chapter 3 for a speaker's use of short form versus nominative-marked long form).

I consider that some people (e.g. two individuals out of three mentioned in this subsection) preferred the use of the M-na form in (123) because they did not consider the *subesube* 'smooth' quality as a defining property of their skin. M-na was actively selected because the mimetic means to describe the quality that the referent has at the time in question. This supports the idea that na is selected as a means of reporting a condition (i.e. it is situation-descriptive). (See also (75) in Chapter 2.)

Therefore, to summarise, I propose that *na* serves to describe/report a condition of the referent when following the accentless mimetic (i.e. the situation-descriptive interpretation, in Roy's terms). In contrast, *no* serves to ascribe a property to the referent – more specifically the defining property that is salient enough to define the individual, in Roy's terms, when following an accentless mimetic. As for M-*sita*, it is the attributive form, and it simply ascribes a property to the referent (i.e. a characterizing property, in Roy's terms).

## 4.3.4. The Case of Acceptability of M-na Increased: the Situation-Descriptive Interpretation

In the following subsections, I provide further data and observations on the speakers' morphological selections. In this subsection, I claim that the acceptability of M-na can increase if speakers are actually in a situation where they experience the quality expressed by a given mimetic. The observations presented in this subsection and in the following subsection support my claim that M-na is situation-descriptive and cast doubt on the traditional view that M-na is unconditionally less acceptable than the other two forms.

Here is an example in which the sequence of 'M-na N' does not sound perfectly adequate independently, but the use of M-na can sound totally natural in a specific

context:

#### (125) puripuri-**na** ebi 'shrimp' or 'king prawn'

It is difficult to translate *puripuri* into English. In (125), the mimetic describes the feeling in your mouth when you eat very fresh king prawns. The accentless *puripuri* could be described as 'squidgy', 'elastic' or 'springy' when used with shrimp. For my argument, the translation or the precise semantics of the bare mimetic are not important because the point of discussing this example is to understand what determines speakers' morphological selection of *na*. There might be a slight sense that *na* does not sound quite right in the phrase. For instance, native speakers would naturally select *no* or *sita*, namely *puripuri no ebi* or *puripiri sita ebi*, if they meant to refer to an entity with the (or a) *puripuri* quality. However, it is absolutely fine to select *na* if we actually **experience** the *puripuri* quality and describe it.

Imagine that we are sitting at a table in a restaurant and we are served shrimp. We are impressed or pleased with the (very good) condition of the shrimp, which is higher than our expectations. The morphological selection of *na* is appropriate because it means to give rise to the situation-descriptive reading; *puripuri-na ebi* can report such a situation. The observation in (117a) also suggests that perceptual experience triggers the speaker's morphological selection of *na*. The same phenomenon is observed in Spanish when speakers select *ser* over *estar* (i.e. the situation-descriptive reading, cf. Section 3.5). Roy (2013, p. 144) states that the use of *ser* "must report the perception of the speaker" (see also Section 3.4 (3.4.2.2) for the Russian short form).

On the other hand, the phrase *puripuri-no ebi* is typically found on a menu (an illustrated board outside a restaurant).<sup>70</sup> I assume the use of the M-no form is more adequate when the quality expressed by a mimetic is supposed to refer to an objective

<sup>&</sup>lt;sup>70</sup> As for the morphological selection of *no*, *huwahuwa no keeki* 'soft and light, fluffy cake' in (116b) would also be found on the menu in a cafe.

In contrast, apparently, the use of the M-na form is found in recipes. I appreciate a comment from Eva Schulze-Berndt, in a personal communication, whose student Mareike Hamann examined the use of Japanese mimetics for her doctoral thesis. I argue that the use of M-na in recipes is appropriate in that recipes usually give us instructions of what condition an entity (e.g. food) is supposed to be in during the process of cooking. What a recipe does is describe a situation while someone is cooking, or recipes report a condition of the food that has been cooked. Either way, the focus of recipes is not usually the 'properties' of the ingredients.

quality of the referent. Alternatively, it could be the case that M-no is used to express a token type similar to the use of the nominative long form in Russian (cf. Table 3.5). If no is selected, the *puripuri* quality could be considered as the objective one, so that the (good) quality is guaranteed to customers.

In the next subsection, I provide further evidence for the claim that the quality expressed by M-no is not merely an objective, but rather the defining, property of the referent in Roy's terms.

#### 4.3.5. The M-no Form: the Defining-Property Interpretation

In this subsection, I present a distribution of M-na and M-no, suggesting that M-no denotes the defining property, in contrast to the use of M-na (cf. (C2-4) in Section 1.7). In order to identify finer semantic distinctions between the two forms, M-na and M-no, I asked two individuals (nos. 8, 10) which eggs, expressed by either *torotoro-na* or *torotoro-no* ('runny'), they would expect to taste more delicious, based on the assumption that the two forms must denote different semantics (cf. 4.3.2-4.3.4):

(126) 'runny egg'a. torotoro-na tamagob. torotoro-no tamago

First, I observed that when *no* participates in modification by following the mimetic, both of the individuals had a strong sense of the quality expressed by the mimetic (*torotoro* 'runny') being almost the only property of the egg, or that they felt strongly that *torotoro* was the distinctive feature of the egg. In Roy's terms, the *torotoro* quality was salient enough to define the individual; that is, *torotoro* was the defining property of the egg. The same phenomenon was observed in (124b): *no* was selected to combine with the mimetic (e.g. *kasakasa* 'dry') to be the defining property of the referent (e.g. skin).

Second, with the M-na form, one of the two informants said that "the egg could have qualities other than *torotoro*" (no. 10). This observation is not surprising if we recall

our discussion on the property/condition distinction in Subsection 3.3.4.<sup>71</sup> If *na* serves to report the condition the egg is in – more specifically a condition where the egg has a *torotoro* quality – it is not the only quality that the egg possibly has. The referent could still have other qualities, contrasting with the defining reading, where *torotoro* is the salient property defining the egg. Whether these two individuals prefer one or the other depends on what kind of eggs they prefer to eat. Here, I claim that this phenomenon observed in Japanese is not strange at all if we recall the specific case of the choice between the long form marked in the nominative case (the defining-property interpretation) and the short form (situation-descriptive) made by an individual, a native speaker of Russian (cf. (110) in Section 3.4 (3.4.5.1)).

#### 4.3.6. Toratani (2018): <sup>?</sup>M-na versus M-no

In this subsection, I argue that M-na should not be treated as a less acceptable form than M-no (see Chapter 1 (1.3, 1.6.3) for the general view in the literature).

The examples presented in (127) are drawn from Toratani (2018), where the use of the M-na form is considered less acceptable than M-no:

(127)	a.	turuturu-na	yuka
		slippery-quality.COP.	floor
	b.	turuturu-no	yuka
		slippery-quality.COP.ATT	floor

(From (39) in 1.6.3)

Roughly speaking, the mimetic *turuturu* expresses a 'slippery' quality of the head noun. As long as we are aware that the (accentless) mimetic expresses an 'abstract quality' due to its prosodic properties (i.e. by the absence of the accent), the finer semantics of *turuturu* are unnecessary information for my argument. What is more important about the distribution of mimetics in (127) (and in general) is the use of M-na form. I claim that *turuturu-na yuka* sounds completely acceptable. I argue that this is an example of the situation-descriptive reading, in Roy's (2013) sense. That is, the

-

<sup>&</sup>lt;sup>71</sup> Being lazy (i.e. 'condition' or 'situation-descriptive') does not affect the other 'properties' of an individual (e.g. a *kind* person could be in a condition where he or she is *being lazy*, but that does not change the property of the person i.e. 'kind') (cf. Subsection 3.3.4).

speaker is reporting the condition of the floor: the floor has the *turuturu* quality at the time in question. In contrast, *turuturu-no* gives rise to the defining property of the floor (i.e. the *turuturu* quality is a salient property of the floor which defines the individual as a particular member of a class of individuals). I argue that M-na really should not be treated as less acceptable or ungrammatical by default. It needs the right situation or context to be used, as its name suggests (i.e. situation-descriptive, cf. (4.3.1)-(4.3.5)).

# 4.3.7. The Semantics of M-no in Relation to Prosody (continued from Subsection 2.4.3)

In Section 4.3, I argued that M-no denotes the 'defining property' in contrast to the situation-descriptive reading assigned by M-na. In this subsection, I explain how word prosody interacts with one of the three modifier constructions, M-no.

M-sita, which contains the accented mimetic, expresses a **concrete** property (with dynamicity) due to the prosodic effect (the accent) (cf. Chapter 1), whereas the accentless mimetic, as in M-no, expresses an **abstract** quality. Beyond the prosodic properties, both M-no and M-sita ascribe properties to the head nouns, but the difference is that M-no denotes the *defining* property of the entity, while M-sita denotes a (non-essential, characterizing) property of the entity.

When it comes to M-na, the accentless mimetic contained therein expresses an **abstract** quality. With the support of -na, M-na gives rise to a situation in which a head noun has an **abstract** quality (expressed by M) at a given time (cf. Subsection 2.4.3).

In the next section, I provide syntactic evidence showing that the structural position of the modifier contributes to the semantics of the modifier.

#### 4.4. The Theoretical Implications of the Distribution of \*[M-no M-na N]

I have provided a descriptive account of the semantics of M-na, M-no and M-sita in a single modifier use. One of the distinctive characteristics of the distribution of mimetics as mixed multiples is that \*[M-no M-na N] is the only combination which always results in ungrammaticality. In this section, I discuss the theoretical 149

implications of the distribution of \*[M-no M-na N] to contrast it with [M-na M-no N].

I demonstrate that the semantics of M-na and M-no, 'condition', as in reporting a condition (i.e. situation-descriptive), and 'property', as in defining property, respectively, constrain their structural positions. More specifically, I argue that M-na should appear in a relatively high position in the syntactic hierarchical structure in multiple modification. The evidence comes from the syntactic distribution of English adjectives (see 4.4.1, 4.4.2).

#### **4.4.1.** Characteristic (prenominal) versus Occasion (post-nominal)

In this subsection, to begin with, I show cases where the structural position of modifiers affects their semantics (or vice versa) in English. First, I review Bolinger's (1967) study on the relationship between the semantics of English adjectives and their structural positions, namely prenominal and post-nominal positions. In 4.4.2, I also review Larson's (1998) study on the semantic effects of the ordering of English adjectives in prenominal position. These two works are particularly relevant to understand the cause of the ungrammaticality in \*[M-no M-na N].

Bolinger's (1967) study illustrates that the syntactic environment in which adjectives appear seems to have some relationship with their interpretation:

(128) The only river that is navigable is to the north (ambiguous).

(Bolinger, 1967, p. 3)

The sentence in (128) is ambiguous between those two interpretations. The adjective *navigable* in the predicative position can refer either to "the class of rivers" or "the temporary states of rivers" (Bolinger, 1967, p. 3). Importantly, when the adjectives appear in different positions, the ambiguity does not remain:

- (129) a. The only **navigable** river (unambiguously characteristic)
  - b. The only river **navigable** (unambiguously 'occasional')

The adjective *navigable* in the attributive position (i.e. 129a) characterises the river, whereas it refers to "the temporary state" if appearing in the post-nominal position

(i.e. 129b) (Bolinger, 1967, p. 4). This means that the adjective *navigable* cannot refer to the temporary state/occasion in prenominal position. It also means that English adjectives express something else other than an 'attribute' of the modified head noun in the post-nominal position.

The same phenomenon is observed with another adjective. The examples in (130) are also from Bolinger (1967, p. 4). The semantic contrast associated with the syntactic position of the adjective is again as shown in (130):

- (130) a. The **visible** stars were Aldebaran and Sirius (inherently visible).
  - b. The stars **visible** were Aldebaran and Sirius (visible on that occasion).

When the adjective *visible* appears in the attributive position (i.e. 130a), it denotes a property in the sense that these stars are "inherently visible" (Bolinger, 1967, p. 4). In contrast, this 'inherent property' reading is not found in the post-nominal position (i.e. star visible in (130b)). The adjective *visible* in the post-nominal position expresses what can been seen in a specific environment (e.g. "a cloudy night", in Bolinger's terms). Bolinger defines this interpretation as "occasion".

Similarly, in (131b), the adjective *straight* in the post-nominal position does not express a characteristic of the whisky:

- (131) a. **Straight** whisky is a product, so characterized by its label.
  - b. Whisky **straight** is a drink, readied for the occasion.

(Bolinger, 1967, p. 4)

When appearing in the post-nominal position, the adjective *straight* describes an 'occasion' such as when the whisky is served without adding any ice or water. In contrast, in (131a), the adjective in the attributive position "characterizes" the head noun; it expresses a "property" of the whisky. Bolinger's claim that adjectives in the attributive position **characterise** their head noun suggests that these adjectives do not seem to refer to an **occasion** in the attributive position. However, these adjectives refer to an 'occasion' if appearing in positions other than the attributive position – for example in the post-nominal position.

Importantly, Bolinger (1967, p. 9) states: "if an adjective names a quality that is too fleeting to characterise anything, it is restricted (with that meaning) to the predicative, or to post-adjunct, position". Further examples from Bolinger (1967, p. 9) illustrate the semantic contrast in adjectives, triggered by their syntactic position. In (132c), the adjective *ready* appears in the post-nominal position – not in the attributive position – to mean that the material is in a condition suitable to be shipped:

- (132) a. \*the ready man
  - b. The man is ready.
  - c. The materials **ready** will be shipped.

(Bolinger, 1967, p. 9, (2))

Needless to say, *ready* is not an 'attribute' (property) of the material. The adjective *ready* does not mean to express a 'property' (attribute) of the man in (132b), so *ready* does not (cannot) appear in the attributive position, as shown in (132a) (Bolinger, 1967). The adjective rather describes an 'occasion' by appearing in the predicative position, as shown in (132b).

In the next example, Bolinger (1967, p. 13) states that *mad* cannot express a "temporal anger" because this non-attributive meaning cannot be expressed in the attributive position.

(133) The man was mad.the mad man (and thence the madman) in the sense 'insane'The man was temporarily mad with anger.

He argues that this is why an adjective like *mad* is not observed in the attributive position to mean 'angry'. Bolinger's study demonstrates that if predicates (adjectives) express a non-attributive meaning – which is an 'occasion' in his terms – they need to appear in either the predicative position or post-nominal position.

Bolinger's examples illustrate that an adjective seems to be associated with different semantics depending on the syntactic position in which it appears, and this is the crucial point in my analysis of \*[M-no M-na N].

#### 4.4.2. Multiple Adjectives in Prenominal Position in English

Based on Bolinger's (1967) study, Larson (1998, p. 12) claims that the distance between the head noun and an adjective in a syntactic structure triggers different semantics for the adjective. The example I draw from Larson in this subsection may look quite similar to the ones from Bolinger. However, Larson discusses the construction in which the semantic effect of two adjectives specifically appears in prenominal position, and his view of this construction is directly relevant to understanding why the ordering of M-no M-na results in ungrammaticality.

Here is a part of Larson's (1998, pp. 11-12) statement:

In his 1967 examination of adjectival constructions, Bolinger notes that pre- and post[-]nominal adjectives show an interesting difference in interpretation. The prenominal As show what he calls "characterizing" reading; they attribute a stable property to the noun; by contrast, post-nominal adjectives attribute transitory properties. So, for example, *visible stars* in [(134a, i)] is most naturally read as referring to those stars whose intrinsic brightness makes them visible to the unaided eye – stars of magnitude 5 or brighter on the standard astronomical scale. By contrast, *stars visible* in [(134a, ii)] is understood to refer to those stars that happen to be visible at present, **observing conditions being what they are**:

(134) a. i. the visible stars
(include Capella, Betelgeuse, and Sirius)
ii. the stars visible

[...] The difference is truth conditional. On a night where clouds obscure some portion of the sky, [(134a, i)], might well be true and (134a, ii), false at the very same time (emphasis added by me).

These authors use slightly different terms to explain the semantic contrast. While Bolinger (1967) uses the term "temporary adjectives" for adjectives referring to an "occasion", Larson (1998) uses terms such as "stable property" and "transitory property" to express the semantic contrast of a predicate observed by Bolinger (1967)

In (135a), *visible* appears both prenominally and post-nominally (i.e. visible stars **visible**). (135a) means that "the inherently visible stars **that happened to be visible** at **the moment** include Capella" (Larson, 1998, p. 12).

- (135) a. The visible stars **visible** include Capella.
  - b. The **visible** visible stars include Capella.

Bolinger (1967) originally proposed the semantics found in the post-nominal position (cf. (130a)), and most importantly, Larson (1998) presents example (135), illustrating that these semantics are also available in prenominal position in English. Larson (1998) claims that what *visible* as an outer modifier in (135b) expresses (prenominally) is the same as what *visible* expresses in the post-nominal position (i.e. 135a). In terms of the multiple occurrence of *visible* in (135b), Larson (1998, p. 12) argues that we intuitively know that the adjective *visible* closer to the noun denotes an "inherent property", while the other *visible* in (135b), which appears further from the head noun, refers to "a condition being what they are". What this means is that the adjective can also refer to a condition (or 'occasion', in Bolinger's terms) in prenominal position if the modifier is the outer modifier.

Bolinger himself raises the question of how temporary a temporary adjective must be for the attributive position to reject it, and his answer to this question is that "there is obviously no measure for this" (Bolinger, 1967, p. 10). My solution is to employ Roy's (2013) term 'the situation-descriptive' (reporting a condition) and Milsark's term condition/situation-descriptive (cf. Chapter 3) instead of 'temporary property'. The underlying ideas of Bolinger's 'occasion' and Roy's 'situation-descriptive' are, in fact, not very different. Larson refers to the semantics denoted by the outer modifier as a 'condition', as well.

The condition reading is also found in the post-nominal position or the predicative position. Larson and Takahashi (2007, p. 101) claim that "the difference of domain yields the difference of order, and the corresponding semantics". In other words, the semantic distinctions between the two prenominal modifiers seem to be triggered by

their different syntactic positions. This idea is confirmed by the following examples from Larson (1998, p. 12, (23)):

- (136) a. The **invisible** visible stars include Capella.
  - b. \*The visible invisible stars include Capella.

In (136a), the outer modifier (in bold) refers to a 'condition', while the inner modifier denotes a 'property' of the head noun *star*. Larson (1998, pp. 12-13) states that (136a) can correctly assert "the intrinsically visible stars that happen to be invisible at the moment include Capella", whereas (136b) is supposed to mean "the intrinsically invisible stars that happen to be visible at the moment include Capella", and this is not appropriate (thus resulting in an unacceptable phrase).

To summarise, Bolinger (1967) and Larson's (1998) studies strongly suggest that an adjective expresses different semantics depending on its position. Larson's (1998) claim about the relationship between the semantics of an adjective and its syntactic position (in English) is summarised in (137) and (138):

(137)	a.	a. Prenominal position: [A1 (condition) [A2 N]]			(=(136a))
	b. Post-nominal position: N A (condition)				(cf. (135))
(138)		Adjective 1	Adjective 2	Head noun	
		[Condition]	[Property]		(cf. (136a))
		*[Property]	[Condition]		(cf. (136b))
		[Outer modifier]	[Inner modifier]		

What is really important to understand is that the occasion (condition) reading is observed in a position slightly more distant from the head noun (i.e. an outer modifier, cf. (137a), (138)):



An adjective expresses a condition in prenominal position as long as the position is relatively high (i.e. A1) (e.g. 'visible visible star' in (135b)), while the structural 155

position A2 doesn't associate to 'condition' (cf. Larson, 1998). An adjective expresses a 'property'/'attribute' or a 'condition', depending on its position in the syntactic hierarchical structure, and this is a crucial point for my analysis of the distribution of the M-na form in the next subsection.

## **4.4.3.** Restriction in the Multiple Modification of Japanese Mimetics: \*[M-no M-na N]

In this subsection, I discuss the theoretical implications of the ungrammaticality of \*[M-no M-na N]. Below, I show that the distributional pattern shown in (138) in the previous subsection is parallel to \*[M-no M-na N] and [M-na M-no N]. The basic idea is that since M-na is a modifier such that the semantics are 'a condition'/'situation-descriptive', M-na occurs in a relatively high position (A1) in multiple modification like (138) and (139) above.

Accentless mimetics in isolation express an abstract quality, and if an accentless mimetic is followed by na, the entire modifier form can refer to a condition, i.e. a quality that the head noun holds at a point in time (cf. Chapter 2). This is considered the tensed or temporal interpretation (cf. Chapter 2). In order to understand the semantic distinction between M-na and M-no, I have proposed that the M-na form, as a single use of the modifier, assigns the situation-descriptive reading, while the M-no form assigns the (defining) property of the head noun (cf. Section 4.3).

Using the format of (139), I assume that M-na structurally should be located in a relatively high position within the frame of multiple modification – at least higher than no, as described in (140).

#### (140) Stacking Structure: [M1 [M2 N]]

i) M-na M-no N
[Condition] [(Defining) Property]

A1 in (137), (138) and (139)  $\rightarrow$  M-na in (i)

(141) tuyatuya 'glossy', pikapika 'shiny'

- i) **tuyatuya-na** pikapika-no okome 'rice' (cf. (49f))
- ii) \*pikapika-no tuyatuya-na okome 'rice' (cf. (46g))

Sometimes, the distribution of [M-na M-no N] can be slightly marked (cf. Section 2.3). [M-na M-no N] in (141, i) is interpretable if the outer modifier *tuyatuya-na* expresses a quality which the head noun definitely has at the time of the utterance (cf. (C1-1) in Section 1.7). The semantics of M-na found in this relatively high position suggest that M-na permits the temporal interpretation. The M-na form in a single modifier use is compatible with the temporal interpretation – it is able to specify a quality that the entity has at the time of the utterance (i.e. a condition that the entity is currently in). However, once the modifier is swapped with the lower modifier *pikapika-no*, the ordering of the modifiers then results in ungrammaticality, as shown in (141, ii). Here, I argue that the grammatical behaviour of the two modifiers M-na and M-no is parallel to what we observed in Larson's examples of English in (136) (and (138)).

At this stage of our discussion, I thus assume the structural relationship between Mna and M-no is as follows:

$$(142)$$
 M-na  $[...$  M-no  $[...$ N $]$ 

In the next section, I examine the possible structural position of M-no in multiple

modification.

## **4.5.** The Implications of the Distribution of [M-sita M-no N] and <sup>???</sup>[M-no M-sita N]

In this subsection, I investigate two frames of multiple modification, [M-sita M-no N] and <sup>???</sup>[M-no M-sita N], and discuss the implications of these two distributional patterns. As for the structural constraints of M-no in multiple modification (cf. Section 2.3), I examine the distribution of non-mimetic words followed by -no, and I argue that M-no should appear closest to the head noun.

#### 4.5.1. The Implication of M-no in [M-sita M-no N]<sup>72</sup>

The ordering of M-sita M-no is the only environment in which the M-no form can appear without causing any problems in multiple modification (cf. Table 2.1). When M-no appears in a lower syntactic position than the attributive modifier M-sita, M-no denotes the material reading in this position (cf. (C1-2) in Section 1.7):

# (143) 'shiny crumpled shirt' ki'rakira-sita **kusyakusya-no** syatu [Material]

The mimetic *kusyakusya* roughly means 'crumpled', and *kirakira* roughly means 'shiny'. The head noun has these two qualities (expressed by the two mimetics). It is straightforward to understand that the outer modifier scopes over the constituent containing the inner modifier and the head noun: [*kirakira-sita* [*kusyakusya-no syatu*]] (i.e. a shirt with the *kusyakusya* 'crumpled' quality has the *kirakira* 'shiny' quality/property). *kusyakusya-no* in this example is understood to be the material of the shirt, meaning that an accentless mimetic can refer to a 'material' if it is followed by *no* in the lower position within multiple modification (cp. (144) for the case in which accentless mimetics followed by *-na* refer to a 'condition'). <sup>73</sup> In fact, this is not the only instance of M*-no* assigning the material reading. The comment of

<sup>&</sup>lt;sup>72</sup> I wish to show my appreciation to Masaharu Shimada and Bjarke Frellesvig, whose comments directly led me to consider the grammatical properties of M-*no* in the frame of [M-*sita* [M-*no* N]] in depth. I am also grateful to Akiko Nagano and Masaharu Shimada for their useful comments on material in Kamiya (2017a).

<sup>&</sup>lt;sup>73</sup> Informant 6 suggested that *kusyakusya-sita syatu* (crumpled shirt) could indicate a shirt which has a crumpled design (cf. (C2-2) in Section 1.7).

Hamano's (1988) informant suggests that M-no may assign the material reading: *pikapika* (roughly speaking 'shiny'), as in *pikapika-no iwasi* 'sardine', sounds like a material the sardine is made of – more specifically metal (or a metallic substance) – thus *pikapika no iwasi* is judged as ungrammatical by Hamano (see Chapter 5 for a more detailed discussion).

More importantly, I claim that this material reading is not available if the mimetic is followed by *na*, even in the same or a similar syntactic environment (i.e. the surface position):

In (144), the accentless *kusyakusya* ('crumpled') cannot be understood to be a material when followed by *na* even when it is in the same structural position as M-*no* (the case of the accentless mimetic followed by *no*, cf. (143)).

In the next subsection, I argue that the syntactic position of M-no should be the closest to the head noun.

## **4.5.2.** A Domain Somewhere Low in Multiple Modification of Non-Mimetic Words: the Material Reading (Watanabe, 2012)

In this subsection, I demonstrate that a modifier denoting the material reading appears in the closest position to the head noun in the case of non-mimetic words. Watanabe (2012, p. 508) claims that there is an ordering restriction among modifiers expressing "nationality/origin and material" in Japanese. The following examples and glosses are drawn from Watanabe (2012, p. 508, (18), (19)):

(145)	a.	tiri-no	kin-no	kubikazari
		Chile-GEN	gold-GEN	necklace
	b.	*kin-no	tiri-no	kubikazari
		'Chilean gold neck	lace'	
(146)	a.	hokuoo-no	ki-no	isu

A non-mimetic word followed by *-no* expresses the material of the head noun, and its structural position is restricted. Neither the nationality modifier nor the origin modifier can intervene between the material modifier and the head noun. The modifier expressing material, such as *kin-no* 'golden' and *ki-no* 'wooden', must appear in the closest position to the head noun, as shown in (145a/146a), contrasting with (145b/146b).

In terms of the grammatical status of -no, as in these examples, Watanabe (2012) glosses it as the genitive marker just to separate it from the clear instance of the linker no. In Japanese, as Watanabe (2012) states, a modifier expressing nationality, material or origin does not take any adjectival inflectional endings; it instead takes -no (and the roots of these modifiers are nouns; see (145) and (146)).

As for the ordering of the two forms M-sita and M-no, it is important to observe that M-sita M-no is always grammatical, but not vice versa (cf. Section 2.3, and see Chapter 5 for further discussion):

(147) a. 
$$M$$
-sita<sub>ATT</sub>  $M$ -no  $N$   
b. ??? $M$ -no  $M$ -sita<sub>ATT</sub>  $N$ 

In this section, I have focused on the examination of the distribution where M-no occurs in a lower position than the attributive modifier M-sita (because the grammaticality of M-no is the most stable in this position, as I mentioned at the beginning of this chapter). I observe that the grammatical behaviour of the M-no form is somewhat similar to material modifiers such as kin-no 'golden' and ki-no 'wooden' in (145) and (146). The idea that I adopt here is that the position of M-no in the frame of [M-sita M-no N] could really be low in multiple modification – as low as the non-mimetic modifier with the meaning of 'material' (cf. (145), (146)). I claim that the position is the lowest among the three modifiers and closest to the head noun.

### 4.6. Summary and Proposal: the Ordering of the Three Forms: M-na, M-sita and M-no

In this section, I propose that the ordering of the three forms is M-na, M-sita, M-no.

First, I suggest that M-no appears in the closest position to the head noun. The material reading is found in the closest position to the head noun in non-mimetic words (cf. Section 4.4.2), so we would expect the M-no with the meaning of a material to behave in the same way, as shown in (148):

If the semantics of M-no are understood to be a material, it is possible to consider that the modifier functions as a property-denoting modifier in a very broad sense. We would expect an inner modifier M-no, as in (147a), to be located somewhere low in the structure – lower than M-sita.

Second, M-na can assign the condition reading in a relatively high position, which is above M-no (cf. (140), (141), (142)):

In addition, the ordering of M-no M-na is, in fact, ungrammatical (cf. Table 2.1, e.g. 141, ii). This really means that M-no needs to be low, as shown in (149). Thus, even though the (surface) position of M-na in (144) looks the same as M-no in examples like (143), the underlying positions of M-na and M-no should not be the same in multiple modification.

We now need to decide the position of M-sita in relation to the position of M-na and M-no. In Chapter 2, I argued that the grammatical values of M-na and M-sita are not the same (e.g. tensed clausal modifier versus tenseless phrasal modifier). M-na gives rise to the condition (i.e. situation-descriptive) reading, and modifiers with the meaning of 'condition' appear as the outer modifier in English (cf. Section 4.4). I have

claimed that M-*sita* (the attributive form) is tenseless and does not allow the temporal interpretation (cf. Chapter 2). In this sense, M-*sita* does not denote a 'condition'. I propose a possible order of the three modifiers as follows:

<b>Prenominal Modifiers</b>	M-na	M-sita	M-no	N
Semantics	[Condition]	[Property]		
		(M-no definin	g property)	

Table.4.2: The Ordering of M-na, M-sita and M-no in Multiple Modification (Stacking Structure)

M-sita and M-no both ascribe a property to the referent, but M-no is more specific in that M-no denotes a defining property. A defining property is a property that is salient enough to define an individual as a particular member of a class of individuals (Roy, 2013) (cf. 3.3.1, 3.4.3.2). On the other hand, M-sita does not have this semantic function; it simply ascribes a property (i.e. (non-essential) characterizing property; cf. (122) in Subsection 4.3.2).

The ordering of the three modifiers shown in Table 4.2 is represented in a syntactic tree diagram as follows:

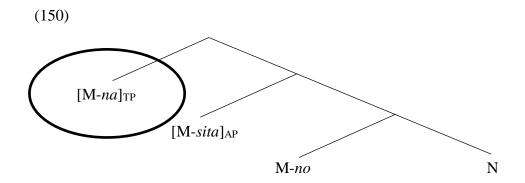


Figure 4.1: The Ordering of Mimetic Modifiers in the Hierarchical (Stacking) Structure

The idea is that the condition (situation-descriptive) reading is associated with a high position (circled), while broadly speaking the property reading is associated with positions lower than M-na in the syntactic hierarchical structure shown above (cf. (140)).

As for the (internal) syntactic structure of modifiers appearing in each position in 150, I argue that M-na is the (tensed) clausal modifier, while M-sita is a (tenseless) attributive modifier (cf. Section 2.4).

In Chapter 5, I introduce Cinque's (2010) analysis of the syntax of adjectives into my discussion in order to support my proposals. I will finally show the finer distinctions between M-no and M-sita.

#### Chapter 5

## The Grammatical Properties of the Three Prenominal Forms of Japanese Mimetics

#### 5.1. Introduction

This chapter provides a deeper understanding of the grammatical properties of the three forms of mimetics (i.e. bare mimetics and their grammatical markers).

In the first part of this chapter (Sections 5.2, 5.3), I illustrate how the grammatical properties of M-*sita* and M-*no* may differ, demonstrating their different distributional patterns in multiple modification. In Section 5.2, firstly, I summarise my claim about mimetic modifiers. I then introduce Cinque to our discussion in order to support my claim. There is no consensus on the analysis of the grammatical status of *no*, as in M-*no* (cf. Chapter 1). I present data suggesting that *no*, as in M-*no*, is either the genitive marker or the copula (cf. Sections 5.3, 5.4 (5.3.3, 5.4.2)). In order to draw this conclusion, it is necessary to examine another multiple modification frame, which (semantically) produces a conjunctive effect. As for the ordering of the three modifiers, I propose that M-*na*, M-*sita* and M-*no* is the basic order in stacking structures (cf. Section 4.6). I will show how the remaining issue of the ordering of ????[M-*no* M-*sita* N] and [M-*sita* M-*na* N] is solved (cf. Sections 5.3, 5.4 (5.3.4, 5.4.3)). I summarise the discussion in Section 5.6.

In the second part of this chapter, Part B (Section 5.6 on), I extend my discussion to address the issue of how the mimetic system contrasts with non-mimetic modifiers in relation to the contrasts proposed (i.e. situation-descriptive, property-defining, characterizing). I suggest how the proposed ideas are extended to non-mimetic modifiers, and discuss what grammatical properties could possibly be specific to mimetic modifiers/mimetics. In Section 5.7, I will briefly present a case where M-na is compatible with other semantic types of head nouns.

In Section 5.8, I provide a summary of this chapter and conclude the discussion of this thesis.

#### A: Mimetic Modifiers (remaining issues)

#### 5.2. Summary of Proposal and Cinque (2010)

To begin with, I shall return to my claim about mimetic modifiers in 5.2.1. In order to support my claim, and for the sake of further analysis, I introduce Cinque (2010) to our discussion in 5.2.2.

#### 5.2.1. Summary of Proposal

I have argued that the three forms of mimetics appear in the order of M-na, M-sita and M-no. As for the syntactic structures of the modifiers, I argued that M-na must be a clausal modifier (the syntactic structure should at least be TP), while M-sita is an attributive modifier, the syntactic structure of which is AP. With respect to the semantics of each form, I argued that M-na gives rise to a situation-descriptive interpretation, while M-sita ascribes a (characterizing) property to a head noun, to use Roy's (2013) terms. M-no denotes the defining property, again in Roy's terms. The examination of the grammatical status of no, as in M-no, has been reserved for this chapter.

The tree diagram in (151) illustrates how prenominal modifiers appear in a hierarchical structure when modifiers include mimetics:

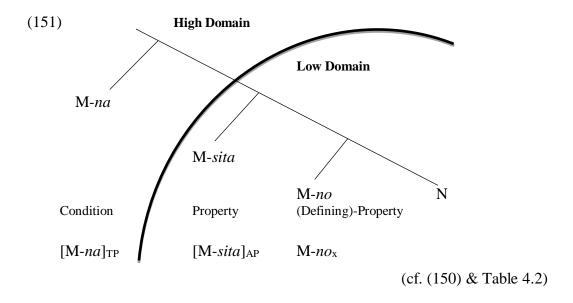


Figure 5.1: The Ordering of Mimetic Modifiers in a Stacking Structure in Relation to Semantics, Height and Size of Modifiers

First, the grammatical status of *no*, as in M-*no*, is indicated as x above. I address this 165

issue in Sections 5.3-5.4. In addition, I show that M-no and M-sita are not interchangeable and explain the distinction between the grammatical properties of the two forms. In order to support my claim illustrated in (151), in the next subsection, I introduce Cinque's (2010) idea about the syntax of adjectives. There, I introduce two terms that I shall call 'high domain' and 'low domain', indicated in bold in (151).

The second important point in (151) is the idea laid out in the syntactic tree diagram. That is, the semantics associate with structural positions. This idea will be crucial when it comes to the discussion about non-mimetic modifiers in Section B.

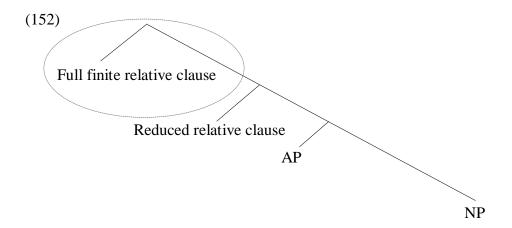
## **5.2.2.** The Syntactic Size and Height of Prenominal Modifiers: Cinque (2010)

In Chapter 4, I claimed that the ordering of the three modifier forms of mimetics in multiple modification is M-na, M-sita, M-no. This idea depends on the different semantics found in specific syntactic positions of English adjectives appearing as multiples, as in Larson (1998) (cf. Subsection 4.4.2). Cinque (2010) examines adnominal modifiers, mainly in English, Italian, Chinese and some other European languages, including Russian and German. In this section, I briefly review his proposals about the syntactic size of adnominal modifiers in relation to the structural position (the height) at which modifiers appear.

Cinque's (2010, p. 63 (14)) idea about the syntactic position of prenominal modifiers in the hierarchical structure is summarised in (152). What I would like to borrow from Cinque (2010) is his idea that the full finite (restrictive) relative clause appears in the high position (in bold) within the proposed syntactic structure. Among relative clauses, the position in which the (full) finite relative clause appears is much higher than the positions for APs – higher than other types of relative clauses, such as participial AP reduced relative clauses (Cinque, 2010, pp. 62-63):<sup>74</sup>

\_

<sup>&</sup>lt;sup>74</sup> Cinque's (2010, p. 25) assumption is that relative clauses (including reduced relative clauses) merge into "the specifier position above another projection hosting direct modification APs". I will not necessarily use the term "direct modification" (e.g. Cinque, 2010; Watanabe, 2012, 2017) in our discussion because the issue of whether a modifier is a direct modifier or an indirect modifier is out of the scope of this thesis. Instead it is important for my argument to consider the distance between the head noun and the modifier and to understand the relationship between the syntactic size and position of the modifier and the semantics assigned by each of the modifiers.



I refer to the position where the full finite relative clause appears as the 'high domain' (circled). The syntactic property of the finite relative clause is that the modifier has the functional head T.

On the other hand, when it comes to the positions where APs may appear, Cinque (2010) assumes that these positions are relatively close to the head noun (NP); the highest position of APs is assumed to be lower than the position where reduced relative clauses may appear. For the purpose of this thesis, I refer to the domain in which APs appear as the 'low domain'.

#### 5.3. M-sita versus M-no: the Investigation of the Low Domain

The two forms M-*sita* and M-*no* have been considered as interchangeable since Hamano (1986) (cf. Section 1.6). Thus, I investigate M-*no* by comparing it to M-*sita*.<sup>75</sup> In this section, I demonstrate that the two forms certainly exhibit different syntactic behaviours in multiple modification, and briefly discuss how the grammatical functions and properties of M-*no* may possibly differ from those of the attributive modifier M-*sita* (cf. Subsections 5.3.1, 5.3.2). At the end of this section (i.e. Subsection 5.3.3), I will finally be able to answer one of the remaining issues, which is the grammatical status of *no*, as in M-*no* (cf. Section 1.3).

#### 5.3.1. M-*sita* versus M-*no*: Hamano (1988)

Firstly, I present Hamano's (1988) data implying that M-sita and M-no may not

-

<sup>&</sup>lt;sup>75</sup> In Subsection 4.3.7, I provide a brief account of the semantic distinctions between M-sita and M-no from a prosodic viewpoint of mimetics.

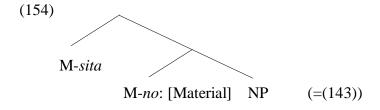
necessarily be interchangeable.

I agree with her grammaticality judgements in (153): (153a) sounds grammatical, while (153b) sounds much worse than (153a). Hamano (1988, p. 148, my emphasis) explains the reason for the ungrammaticality in (153b) as follows:

Because [a] nominal adjective is used instead of a mimetic D-verb, [(153b)] sounds as if the sardines were either **made of metal and polished or stuffed and greased.** One native speaker, when he heard the expression, reacted to it by bursting into laughter as he said, "There is no such thing!"

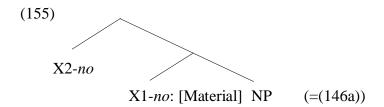
Strikingly, Hamano's statement suggests that *pikapika-no* yields the material reading.

Here, I indicate that this is consistent with the reading of M-no, observed in the frame of [M-sita M-no N]:



ki'rakira-sita kusyakusya-**no** syatu
shiny crumpled shirt
'shiny crumpled shirt' where the 'crumpled' quality is understood to belong
to the material of the shirt (cf. 4.5.1)

As shown in Chapter 4, in terms of the structural position in which the X-no.<sub>GEN</sub> modifier may appear, Watanabe (2012) claims that X-no with the meaning of a material must appear in the closest position to the head noun in the case of non-mimetic words (e.g. *ki-no*/wood-GEN 'wooden', cf. (146)). There is a parallel here between (154) for mimetic modifiers and Watanabe (2012)'s proposal for the structure of non-mimetic modifiers (see (155)):



In the next section, I introduce the notion of so-called 'relational adjectives' into our discussion and explain their grammatical properties — as it helps us better understand the grammatical functions and properties of the M-no form (e.g. kusyakusya-no 'crumpled' in contrast to an attributive, ku'syakusya-sita 'crumpled').

#### 5.3.2. Modification by Noun: investigation of M-no

In this subsection, I explain the grammatical properties of so-called 'relational adjectives'. The notion of the relational adjective is discussed in Nikolaeva and Spencer (2013) as well as Nagano (2016) (for the case of non-mimetic Japanese modifiers).<sup>76</sup>

Nikolaeva and Spencer (2013, p. 221) use the term "modification-by-noun" to refer to the type of modification where words do not denote "a property" but rather "a referential object". Nikolaeva and Spencer (2013, pp. 222-223) assume that two nouns express a "contextually determined relation". I quote their account for "modification-by-noun":

Many languages do not allow a noun to modify another noun directly and so we find a variety of morphosyntactic encoding strategies being developed in order to express dependencies

<sup>&</sup>lt;sup>76</sup> According to Spencer (2019), English is not the best example to give of relational adjectives.

They further state that it is difficult to identify whether the first noun is a noun or an adjective in the noun-noun compound construction, for instance 'London' as in 'London bus'.

of the kind 'Noun 1 which bears some relation to Noun 2'. A popular strategy is to turn a noun into a word which has the grammatical properties of an adjective. We will call such denominal adjectives 'relational adjectives'.

According to them, -*n*- in Russian relational adjectives, of which examples are shown below in (156), is semantically vacuous ("as general as in English noun-noun compounds") but "expresses some pragmatically defined relation between the head noun and its modifier" (e.g. "relation of material"):<sup>78</sup>

```
(156) a. moločnyj
derived from moloko 'milk'
'made of milk'
b. moločnyj zavod
(see above) kombinat
'milk factory'
```

What I highlight from Nikolaeva and Spencer (2013, p. 223) is that "Relational adjectives in Russian do not normally occur as predicates and lack so-called 'short forms'". In Chapter 4, I argued that the semantic distinction between M-na and M-no is very similar to the distinction observed between Russian short-form adjectives and long-form adjectives marked in the nominative case. If Russian relational adjectives have a grammatical feature that is somehow incompatible with the short form, it would not be very strange for M-no to behave as if it were a relational adjective. Nikolaeva

A typical example is knižnyj magazine 'book shop', where kniz- is the palatalized allomorph of the root knig- 'book' found before suffixes such as -n-, while -yj is an agreement affix.

In Timberlake (2004, p. 290), words such as *brown, Swedish, cloudy* and *two-roomed* are listed as adjectives preferring long forms (words of semantic classes are "substance, other substance, and relational"). These words, except *two-roomed*, all include *-yj: koričnev-yj* (sg.msc) 'brown', *švedsk-ij* (sg.msc) (*-ij* is a phonologically conditioned allomorph of *-yj* 'Swedish'; I thank Nina Radkevich for clarifying this and double-checking these examples for me), and *oblačn-yj* (sg.msc) 'cloudy'.

Nagano (2016) claims that nationality (and *origin, shape/size, colour, type/kind, possession* etc.) denoting modifiers are relational adjectives (e.g. (157b)). In Japanese, words expressing the same meaning as these Russian words take *no* prenominally, e.g. *tyairo-no* 'brown', *sueeden(jin)-no* 'Swedish' and *kumori-no* 'cloudy'. The impression is that some of the Japanese nouns appearing in X-nogen seem to (semantically) correspond to some of "adjectives preferring general (long) form" in Timberlake's (2004, p. 290) terms. In Japanese, *nogen* is also used for inalienable possession (e.g. Tsunoda (1996): *aoi-me-no syoozyo 'a blue-eyed girl'*; Tsujioka (2002) treats *no*, as in *aoime-no syoozyo 'a blue-eyed girl'*, as the genitive).

<sup>&</sup>lt;sup>78</sup> In terms of Russian morphemes -n- and -yj, Nikolaeva and Spencer (2013, p. 223) state:

and Spencer (2013, p. 224, my emphasis) further state that "a noun used as an attributive modifier will lose some of its canonical properties, in particular, its referentiality".

Japanese lacks "denominal adjectives of nationality/origin and material" (Watanabe 2012, p. 507) (cf. Chapter 4 (4.5.2)). Nagano (2016, p. 42) similarly claims that Japanese "does not possess derivational affixes for relational adjectives" and "this dearth of derivational morphology is compensated for by systematic use of genitive forms in Japanese". Some examples of relational adjectives presented in Nagano (2016, p. 52, (22a), (23a)) are presented in the following:

The genitive marker *no* mediates between the base noun and the modifying noun, as shown in (157).

In terms of positions in which relational adjectives may appear, Nagano claims that a modifier with the meaning of a material should appear in the closest position to the head noun, as presented by the following English example shown in (158):

```
(158) a. big wooden table
b. *wooden big table
(Nagano, 2016, p. 44, (2b))
(159) a. vintage wooden table
b. wooden vintage table
```

In (159), a native speaker of English slightly prefers the ordering of 'vintage wooden table', although he also accepts 'wooden vintage table'. If native speakers of English

have a preference for one over the other and the two kinds of ordering are both acceptable, this would suggest that the modifiers 'big' and 'vintage' cannot have identical grammatical properties to their inner modifiers, for instance 'wooden'. What may the grammatical properties of the modifiers, preferring the position immediately before the head noun in multiple modification (e.g. wooden), have in common? In Japanese, *no* mediates between the base noun *ki* 'wood' and the modified noun *tukue* 'desk': *ki-no tukue* 'wooden desk'. Nagano's (2016, p. 44) idea is that "in modifying a noun, the derivative requires strict adjacency to the modified noun in a unique position". In fact, Watanabe (2012) demonstrates that the material-denoting modifier (e.g. *ki-no* 'wood-<sub>GEN</sub>') must appear in that position (cf. (145a), (146b) in Subsection 4.5.2).

In summary, nouns seem to function as (attributive) modifiers, where the noun seems to lose its referentiality (cf. Nikolaeva & Spencer, 2013). Nikolaeva and Spencer (2013, p. 223) also state that the modifying noun "characterizes the head noun by narrowing down the range of possible referents that may qualify as the specified". For the sake of simplicity in our discussion, I would like to assume that the fundamental idea of the 'defining' property reading, proposed for M-no based on Roy (2013) and Ionin and Matushansky (2002), (cf. Chapter 3 (3.4.3.2)), is not very different from the function which expresses specified quality in their terms.<sup>80</sup>

#### 5.3.3. The Implications of \*[M-site M-no N]: no as GEN

In this section, I present distributions suggesting that *no*, as in M-*no*, is the genitive marker. The evidence comes from the distributional pattern of non-mimetic genuine adjectives. I demonstrate that accentless and accented mimetics exhibit a similar distributional pattern to non-mimetic genuine adjectives.

First of all, the attributive modifier M(accented)-sita can follow M(accented)-site

172

<sup>&</sup>lt;sup>79</sup> In Italian and Spanish, the PP modifier is used (e.g. 'table of wood', often referred to as a 'post-nominal' modifier) for the same meaning as 'wooden table'. In Russian, the modifier with the meaning of expressing *wooden* is listed under adjectives preferring the long form (cf. Timberlake, 2004, p. 290, Table 5.3). In Mandarin Chinese and Norwegian, two nouns, namely a noun denoting 'wood' and another noun denoting 'table', form a compound to mean 'wooden table'.

<sup>&</sup>lt;sup>80</sup> 'Defining property' is a property that is salient enough to define an individual as a particular member of a class of individuals (Roy, 2013) (cf. Chapter 3 (e.g. 3.6)).

prenominally:

The different syntactic frames trigger different semantics. It is semantically obvious that the syntactic frame of [M-site M-sita N] produces a conjunctive effect: a deep-fried chicken has two qualities, namely 'soft' and 'crispy'. Syntactically speaking, M-site does not form a stacking modifier. It is crucial to understand that M-site, shown in (160) and (161), does not scope over the following mimetic and its head noun:

(161)		Lit. 'a soft (and) c	rispy chicken'	$\neq$ [M1 [M2 N]]	
	a.	hu'wahuwa- <b>site</b>	sa'kusaku-sita	karaage	(=(160))
		soft-fluffy-GER	crispy	fried chicken	
	b.	sa'usaku- <b>site</b>	hu'wahuwa-sita	karaage	
		crispy-GER	soft-fluffy		
	c.	hu'wahuwa-site	sakusaku-na	karaage	
		soft-fluffy-GER	crispy		
	d.	sa'kusaku-site	huwahuwa-na	karaage	
		crispy-GER	soft-fluffy		
	e.	*hu'wahuwa-site	sakusaku- <b>no</b>	karaage	
	f.	*sa'kusaku-site	huwahuwa- <b>no</b>	karaage	

The most important fact to observe here is that M-no results in ungrammaticality in this construction, and this again suggests that the grammatical properties of M-no must differ from those of M-sita.

I will briefly demonstrate that the distribution of mimetics shown above patterns with genuine adjectives (see (166)). To begin with, we need to understand that there is a subtle difference between the morphological formation of the accented mimetics and that of genuine adjectives (i-ending, abbreviated to A). Adjectival stems appear with ku, and we observe that te attaches to A-ku, as shown in (162a) and (163b):

(162) i) Genuine adjective in Japanese: takai 'high'

a. taka**ku-**te

high

- ii) Genuine adjective in Japanese: utukusii 'beautiful'
  - b. utukusiku-te

beautiful

- (163) Mimetics (accented): hu'wahuwa-si(-te)/(-ta) 'soft-fluffy'81
  - a. \*hu'wahuwa**ku**-te
  - b. \*hu'wahuwasi**ku**-te

Notice that the accented mimetic (followed by *si*) directly takes *te*, unlike non-mimetic genuine adjectives.<sup>82</sup>

Genuine adjectives take on the following morphological forms in a modifier construction, of which the semantic effect is conjunctive:

There are two points about the distributional pattern of genuine adjectives in this type of construction. The first point is that the conjunction *sosite* 'and' can optionally

<sup>81</sup> See Section 5.6.4 for further discussion.

<sup>&</sup>lt;sup>82</sup> The data I show in (162) and (163) suggest that the grammatical properties of *hu'wahuwa-si* seem somewhat different from *utukusi* in (162b). In Chapter 2, I assumed that M'-*sita* (AP) should include some verbal properties due to the grammatical properties of (accented) bare mimetics (cf. Subsection 2.4.3). See Section B for further discussion.

appear. Second, and crucially, Ike-uchi (2003) shows that genuine adjectives do not enter into a conjunctive structure if the inner modifier is marked in the genitive as shown in (165) (cp. (164)). When it comes to the coordination structure, "true coordination in the prenominal position generally requires stricter categorial sameness", though the effect may not necessarily be identical in the predicative coordination structure (Ike-uchi, 2003, p. 106). This means that the syntactic frame in (165) results in ungrammaticality because DP cannot syntactically be coordinated with AP.

With or without *sosite* 'and', *te* can attach to the adjectival stem A-*ku*, as I show in (166a), and the semantic effect remains the same as that in (166):

(166)utukusiku-te (sosite) hito a. yasasii beautiful-GER kind person 'a beautiful and kind person'/'a beautiful (and) kind person' \*usukusiku-**te** (sosite) sinzu-**no** namida beautiful-GER pearl-GEN teardrop 'a beautiful and teardrop of pearl'

In the construction in (166a), (the first conjunct) *utukusiku-te* similarly does not scope over the following constituent including *yasasii* and the head noun. The genitive-marked noun (i.e. *sinzyu-no namida*), shown in (166b), again results in ungrammaticality in this construction.

On the other hand, if *te* does not mediate the two modifiers, the outer modifier, *utukusii* 'beautiful' (*utukusi*, followed by *i*) enters into the stacking modification. If *utukusi* is followed by *i*, then the outer modifier can scope over the constituent containing the head noun and the genitive-marked noun:

```
(167) Stacking structure:

[utukusii [sinzyu-no namida]]

beautiful pearl GEN teardrop

'a beautiful teardrop of pearl'/'a teardrop of pearl, which is beautiful'

(example drawn from Ike-uchi, 2003, p. 143 (5A.21))
```

The distribution in (166) suggests that genitive-marked nominal predicates result in ungrammaticality if the outer modifier should be a conjunct by taking te (cp. (167) vs. (166b). In other words, genitive no does not allow conjunction with te.

To summarise, accented mimetics marked by *site* exhibit a very similar distributional pattern to the case of non-mimetic words (genuine adjectives). M-no results in ungrammaticality in the predicate with *te*:

If *no*, as in M-*no* in (168b), were to be genitive, the ungrammaticality is expected because the frame is almost parallel to the frame in (168a). The distribution suggests that the genitive-marked noun causes ungrammaticality. I conclude this subsection by stating that accentless mimetics can be marked in the genitive.

#### 5.3.4. The Grammatical Status of M-no in the Low Domain

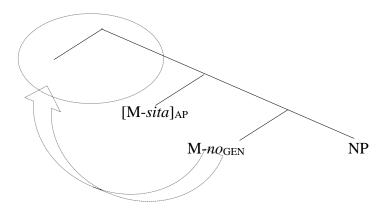
Returning to M-no in stacking structures, the ordering of M-sita M-no is always grammatical, but not vice versa (cf. Chapter 2 (2.3.1)). It seems possible to improve grammaticality by pause insertion, as shown in (169b) (cf. (C1-2) in Section 1.7):<sup>83</sup>

I will discuss the pause insertion shown in (c) in Section 6.4 (6.4.2). For now, I suggest that the ordering of M-no M-sita is raised from M-sita M-no by using a pause. These

-

<sup>&</sup>lt;sup>83</sup> Otherwise, native speakers intuitively change no into de – which is an inflectional form of the copula – to make the phrase perfectly grammatical (cf. (C1-2) in Section 1.7).

ideas are presented in a syntactic structure as follows:



To summarise, my proposal for the ordering of the three prenominal modifiers of mimetics is shown with the additional information on the grammatical status of -no, as in M-no, as follows:

High Domain	Low Domain		
$[M-na]_{TP}$	[M-sita] <sub>AP</sub>	M-nogen	N
condition	property		
(situation-descriptive)			
M-no,			

Table 5.1: The Ordering of Prenominal Modifiers with a Pause (Stacking Structures)

Here, I once again highlight the fact that M-no as the outer modifier exhibits structural constraints (i.e. <sup>???</sup>M-no M-sita, \*M-no M-na, cf. Subsection 2.3.1 and Table 2.1). If we also go back to Hamano's data in (153), the outer phrase marked by no is ungrammatical. The mimetic pikapika typically takes no, e.g., pikapika-no kutu 'shiny shoes', which is one of the most common examples of the use of mimetics. Thus, it is definitely not the case that the accentless mimetic pikapika and the morpheme no are ungrammatically combined. It must be syntactic conditions resulting in the ungrammaticality in (153b) rather than semantic oddness.

In the next section, I continue with the investigation of the grammatical status of Mno (which may appear in what I call the high domain, see Table 5.1).

#### 5.4. Investigation of the High Domain

For the sake of my discussion, I named a syntactic position in which full finite relative clauses appear as the high domain at the beginning of this chapter (Section 5.2). In this section, I focus on the modifiers of which the syntactic structure is the relative clause – particularly the syntactic environment where a relative clause occurs with another phrase, namely -de, prenominally. For this construction, I carefully examine how and which of the two modifiers can allow the temporally anchored interpretation (triggering the clausal structure with the functional head T(ense), so that the modifier can associate with tense).

#### 5.4.1. X-de X-no N: no as the Copula

The grammatical status of the prenominal morpheme *no* (the various uses of *no*) has been thoroughly investigated by many linguists (e.g. Kitagawa & Ross, 1982; Murasugi, 1991; Nishiyama, 1999), and this thesis does not aim to reconsider the grammatical status of *no* with non-mimetic words. For the purpose of this thesis, I claim that we need two kinds of *no* for M-*no*: that is, to borrow Nagano's (2016, p. 61) quote from Morita (2013), "linking *no*" and "predicative *no*". I treat the former like the genitive marker, following Nagano (2016) and Watanabe (2012). <sup>84</sup> In this subsection and the following subsection, I argue that the grammatical status of *no*, as in M-*no*, could also be the copula.

First of all, the prenominal form of the copula *no* (cf. Shibatani, 1990; predicative, in Nagano's terms) is often used in the way (171) shows:

(171) a. rekutyaraa-no Tom lecturer-COP.NONPAST Tom 'Tom, who is a lecturer.'
b. bengosi-no Tom

This example is cited in Frellesvig (2010, p. 94, (78)). In (I), the first *no* is the genitive marker, while the second *no* is one of the forms of the inflected copula. It is important to understand that the second *no* (the inflected copula) is neither the non-finite copula form (infinitive) nor introduces the small clause (Frellesvig, 2010).

178

<sup>&</sup>lt;sup>84</sup> This distinction goes back to the observation of two kinds of *no* in Old Japanese:

<sup>(</sup>I) purepye-no satwo-no asuka old-house-GEN village-COP Asuka 'Asuka which is the village of my old house.'

lawyer-COP.NONPAST Tom 'Tom, who is a lawyer.'

(172) a. bengosi-de rekutyaraa-no Tom lawyer-COP lecturer-COP.NONPAST

'Tom, who is a lawyer and a lecturer'
b. rekutyaraa-de bengosi-no Tom lecturer-COP lawyer-COP.NONPAST

'Tom, who is a lecturer and a lawyer.'

The modifier can occur together with the de-marked phrase as shown in (172). The two words either marked with -de or -no are replaced with one another, as shown in (172). In this construction, the whole modifier (semantically) produces a conjunctive effect: the head noun has two qualities (e.g. professions). Secondly, the minimal pair in (173) shows that -de has a temporal referent:

(173) X-de Y-no DP

X: the head of the Department, Y: supervisor

a. gakubutyoo-de suupaabaizaa-**no** Dunstan [True]

COP -COP.NONPAST

b. gakubutyoo-de suupaabaizaa-**no** Peter [False]

COP -COP.NONPAST

'DP, who is X (the head of the Department) and Y (a supervisor)'

Both modifiers are grammatical, but (173b) is false because Peter currently does not serve in the position of head of department, while Dunstan does (i.e. (173a) is true). Descriptively speaking, it is *gakubucyoo-de* that results in falsehood in (173b) due to tense. This means that the [X-de Y-no] modifier includes the functional head T. The observation further suggests that the functional head T (presumably in Y-no) is likely to scope over *de*.

X-de can also combine with Y-datta: datta, where ta is the preterite, is the past form of the copula, as shown in (174):<sup>85</sup>

-

<sup>85</sup> The form of *datta* is also used predicatively.

(174) bengosi-datta Jim lawyer-COP.PAST 'Jim, who was a lawyer'

(175) rekutyaraa-de bengosi-dat**ta** Jim [Ambiguous] lecturer-COP lawyer-COP.PAST

- i. Jim, who was a lecturer and a lawyer
- ii. Jim, who is currently a lecturer and was a lawyer before.

The resulting construction shown in (175) turns out to be ambiguous. As shown in (175ii), there is a case in which X-de can refer to the current time despite the fact that the main clause *bengosi-datta Jim* anchors the time in the past.<sup>86</sup> This means that X-de for the interpretation in (175ii) would have to adjoin to a TP, where T [PAST] does not scope over X-de, under the reading in (175ii).

Regardless of the syntactic analysis of the internal structure of this construction, the point is that (the main clause in the right side) Y-*datta* independently functions as a finite relative clause (cf. (174), above).

We observed ambiguous phrases in (175). However, if the first conjunct accompanies a pause, no ambiguity remains, as shown in (176):

(176) rekutyaraa-de, bengosi-datta Jim (cp. (175)) lecturer-COP lawyer-COP.PAST

- i. Jim, who is currently a lecturer and was a lawyer before
- ii. ii. Jim, who was a lecturer and a lawyer [with pause, not available]

The pause with X-de only gives rise to the (176i) reading, meaning that the structure of (176) should be same as that of (175ii) (the structure where the functional head T does not scope over the X-de phrase). Whatever the syntactic analysis may be, at least X-de is a constituent, bracketed as [X-de] (as it can move independently). In addition,

-

<sup>&</sup>lt;sup>86</sup> Here, I use the term 'current time' only in a descriptive sense. Various tense effects in various contexts (e.g. tense phenonema in embedded contexts or adjunct clauses) are extensively examined by Ogihara (1996) and Kusumoto (1999): "English has an SOT rule but Japanese does not" (Ogihara, 1996). See their formal semantic analysis of Japanese tense in relation to tense morphemes. I am grateful to Yasutada Sudo for drawing my attention to both Ogihara and Kusumoto's studies on Japanese tense in the early stages of my doctoral study.

the observation may possibly mean that XP followed by a pause can merge/adjoin to TP. Otherwise, for the interpretation (175i), [X-de] appears inside of the main (finite relative) clause [Y-datta.PAST], in which the T(ense) adequately scopes over [X-de]. (i.e. in the high domain).

#### 5.4.2. The Implication of M-de M-no N: no as the Copula<sup>87</sup>

I showed that X-de, as in [X-de Y-no N], has a temporal component, leading to descriptions which can be judged as true or false at the time of utterance (cf. (173)). Accentless mimetics can link with de, as shown in (177), and they can fit in the frame of [X-de Y-no N] presented in (173):

- (177) a. huwahuwa-de sakusaku-no karaage
  mim(fluffy)-COP mim(crispy)-COP.NONPAST fried chicken
  'fried chicken which has a *huwahuwa* 'soft and fluffy' quality and a

  sakusaku 'crispy' quality'
  - tuyatuya-de subesube-no hada
     mim(glossy)-COP mim(smooth)-COP.NONPAST skin
     'skin which has a glossy quality and a smooth quality'

The semantics triggered by this modifier construction are very similar to, or the same as, (172). Under this construction, *no*, as in M-*no*, should be the copula.<sup>88</sup>

Further evidence comes from the following distributional fact:

(178)		The distribution of COP				
	a.	bengosi-de	rekutyaraa-no	Tom	(=(172))	
		lawyer-COP	lecturer-COP	Tom		
		'Tom, who is a lawyer and a lecturer.'				
	b.	*bengosi-no	rekutyaraa-no	Tom	(cp. (179))	
		lawyer-COP	lecturer-COP	Tom		
(179)		The distribution of	of GEN			
	a.	Tyomusukii-no	gengogaku-no	hon		

<sup>&</sup>lt;sup>87</sup> Subsections 5.4.1 and 5.4.2 were presented at a conference (Kamiya, 2016c).

-

<sup>&</sup>lt;sup>88</sup> M-no can seem to allow temporal adjuncts to some extent (see (79)-(81)).

		Chomsky-GEN	linguistics-GEN	book
		'the linguistics book of Chomsky'		
	b.	*Tyomusukii- <b>de</b>	gengogaku-no	hon
		Chomsky-COP	linguistics-GEN	book
(180)	a.	sansatu- <b>no</b>	gengogaku-no	hon
		three-cl(GEN)	linguistics-GEN	book
		'three books of lin	iguistics'	
	b.	*sansatu- <b>de</b>	gengogaku-no	hon
		three-cl	linguistics-GEN	book
		'three books of lin	iguistics'	

The genitive-marked noun and the copula-marked noun distinctively contrast their distributional patterns when two noun phrases occur together. First, as for the multiple occurrences of *no*, two of the genitive-marked phrases can occur together (e.g. (179a)/(180a)), while the copula-marked phrases cannot (e.g. (178b)). Second, **the genitive-marked phrase does not alternate** *no* **with** *de* (e.g. (179)/(180); see (181a/b)), while the copula-marked phrase does (e.g. (178)).

In Section 2.3, I demonstrated that two mimetics cannot take on the same grammatical markers (viz. \*'huwahuwa-no sakusaku-no karaage' 'soft-fluffy crispy chicken'). Therefore, (177) patterns with (179) – the distribution suggests that the copula is available for a mimetic to fit in if it needs to.

Here is the summary of the distributional patterns of non-mimetic words that I have presented in this section:

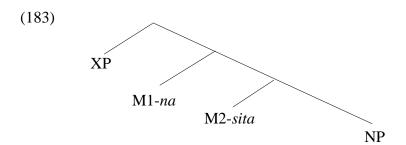
The distribution suggests that no in Y-no cannot host the frame of [X-de Y-no N] if it

is in the genitive. The fact that accentless mimetics can appear in this frame suggests that it is possible for the accentless mimetics to take on the copula no. This probably means that M-no, appearing in the high domain, can be a finite relative clause, headed by the copula in principle (see Table 5.1 and the second conjuncts in (177)).

#### 5.4.3. The Ordering of [M-sita M-na N]

In Sections 5.3 (5.3.3) and 5.4 (5.4.1, 5.4.2), I examined prenominal constructions which semantically produce the conjunctive effect with -te/-de.89 The purpose was to identify the grammatical status of no, as in M-no. In this subsection, I address the last remaining issue on the ordering of multiple modifiers in the *stacking* structure.

I propose that 'M-na M-sita' is a basic word order. In a similar way to the one that I showed in (170), I assume that M-sita can in fact appear higher than in the position of M-na, indicated as XP below:



- [M2-sita N]]: **basic order** (unmarked order) (cf. (151)) [M1-na
- [M2-sita [M1-na N]]: fronting (marked order)<sup>90</sup> b.

<sup>90</sup> The semantic distinctions due to the ordering of these two modifiers, [M-na M-sita N] and [M-sita M-na N], are so subtle that it is difficult to distinguish the semantics triggered by one of the two frames over the other (e.g. (e) versus (d) in (45)-(50) in Chapter 2). In order to have a better understanding of the syntactic/semantic relationship between these two frames, for each of the two mimetics I have chosen two mimetic words, namely subesube 'smooth' and tuyatuya 'glossy', which are typically used to describe skin:

(II)	a.	subesube-na	tu'yatuya- <b>sita</b>	hada
		smooth	glossy	skin
	b.	tu'yatuya- <b>sita</b>	subesube-na	hada
		glossy	smooth	skin
	c.	tuyatuya- <b>na</b>	su'besube-sita	hada
		glossy	smooth	skin
	d.	su'besube- <b>sita</b>	tuyatuya- <b>na</b>	hada
		smooth	glossy	skin

There is a (much) clear(er) sense to native speakers that the outer modifier (M'-sita) scopes over the inner modifier (M-na) in (IIb) and (IId), to compare with (d) versus (e) in (45)-(50). The semantic effect produced by each of 183

<sup>&</sup>lt;sup>89</sup> See Table 6.3 (in Section 6.3) for a summary of the distribution.

It is not very easy to capture and describe the semantic distinctions between the two frames, shown in (183a) and (183b). However, I can at least conclude that the ordering of the two modifiers, M-na and M-sita is relatively free. Instead it is important to remember that the distribution of M-no is highly restricted (i.e. \*M-no M-na, \*??\*M-no M-sita).

I will return to these (significant) observations found among the prenominal forms of mimetics when it comes to the contrasts between the mimetic system and non-mimetic modifiers in Section B (e.g. 5.6.2).

#### 5.5. Summary

In Section A, I argued that *no*, as in M-*no*, is headed by either GEN or COP. In order to draw this conclusion, different modifier constructions from stacking structures were used to diagnose the grammatical status of *no* (see Section 6.3 for more on conjunctive-like constructions). I also showed how M-*sita* and M-*no* differ (e.g. (153), (161)). I also explained that the ordering of 'M-*no* M-*sita*' and 'M-*na* M-*sita*' is raised from the basic word order (i.e. M-*na*, M-*sita*, M-*no*) (cf. (183)).

#### **B:** Mimetic Modifiers versus Non-Mimetic Modifiers

#### 5.6. Mimetics as Prenominal Modifiers versus Non-Mimetic Modifiers

In this section, I will once again focus on stacking structures, and examine the behaviour of non-mimetic modifiers in order to compare them to the behaviour of mimetics. In particular, I examine how non-mimetic modifiers show the contrasts that I have proposed for the three prenominal forms of mimetics (i.e. situation-descriptive, characterizing property, defining property).

There are two key points in the discussion. First, the idea was that the three semantics are associated with the structural positions in which each of the three modifiers appear (cf. (151)). For instance, modifiers with the material meaning appear in the closest

these two syntactic frames in (II), namely [M-na M-sita N] and [M-sita M-na N], is not necessarily identical. What this observation suggests is that the grammatical properties of the two modifiers, M-na and M-sita, cannot be identical. (If they were interchangeable, we should not feel that the stacking effect is stronger in (IIb/d) than in (IIa/c)). See Subsections 5.6.2 and 5.6.3 for an observation about non-mimetic modifiers and its related discussion.

position to the head noun in both mimetic and non-mimetic words (cf. Chapter 4 (4.5.1, 4.5.2)). Second, two modifiers of mimetics are relatively free in the combinations of M-na and M-sita, while the distribution of M-no is highly constrained (cf. Chapter 2 (Tables 2.1, 2.2)). What I show here in Section B is that the contrasts identified between mimetic modifiers are observed between non-mimetic modifiers, and where there are differences, it seems that the specific grammatical properties of M-sita are the reason.

The organisation of this section is as follows: in 5.6.1, I show structural constraints on non-mimetic modifiers in relation to their semantics in multiple modification (stacking structures). In 5.6.2, I present cases where combinations of two non-mimetic modifiers are relatively free. In 5.6.3, I explain how my proposals could possibly extend beyond the mimetic system. Here, I discuss the grammatical properties of accentless mimetics and accented mimetics in comparison to non-mimetic words. In 5.6.4, I re-examine whether M-sita could really be an attributive modifier by referring to a notion of rentaisi (adnouns in Martin's (1975) terms). In 5.6.5, I highlight and illustrate the distributional constraints on the reduplicated forms. In 5.6.6, I extend the discussion to the comparison of the grammatical properties of mimetic and non-mimetic words and I conclude the discussion of Section 5.6 in 5.6.7.

## **5.6.1.** Structural Constraints: the Low Acceptability of Non-Mimetic-*no* as an Outer Modifier

In this subsection, I highlight cases where X-no as the outer modifier is highly restricted. I will show that this is observed in both mimetic and non-mimetic words (abbreviated to N.M henceforth).

To begin with, I explain how some semantics are associated with structural positions among non-mimetic modifiers. As for the positional constraints of (non-mimetic) prenominal modifiers, Shibatani and Kageyama (2017, p. xxi, with my emphasis) state:

The order of prenominal modifiers, however, is regulated by the iconic principle of placing to the head noun those modifiers that have a greater contribution in **specifying the nature and type of the referent.**  Their statement suggests that structural positions associate to semantics. To be more specific, the syntactic condition of a modifier being close to the head noun triggers certain semantics: "specifying the nature or type of the referent". The combinations of modifiers that Shibatani and Kageyama (2017, p. xxi, (7)-(11)) use are N.M-no and N.M-i. For the sake of simplicity, I shall avoid showing further data involving N.M-i because [N.M-i N.M-no N] is not the main focus of this thesis. They argue that N.M-no, occurring close to the head noun, specifies the nature and type of the referent. Alternatively, I illustrate these points by presenting examples of N.M-na and N.M-no as it is more directly relevant to the research domain of this thesis.

Watanabe's (2012) data demonstrate that N.M-no<sub>GEN</sub> tends to be unstable if it must function as the outer modifier.

```
(184) a. sizuka-na yuki-no hi
quiet<sub>NA</sub> snow-GEN day
'a quiet snowy day'
b. *yuki-no sizuka-na hi
(Watanabe, 2012, p. 508, (17a) and (17b), my emphasis added)
```

The noun *yuki* 'snow' marked by the genitive *no* occurs in a closer position to the head noun; note that **the genitive-marked noun** cannot appear in a higher position than the *na*-marked modifier in (184b).

There are further cases where N.M-no again results in ungrammaticality if it appears in a higher position than N.M-na:

```
(185) a. sizuka-na getuyoo-no asa
quiet<sub>NA</sub> Monday morning
a quiet Monday morning
b. *getuyoo-no sizuka-na asa
```

*Getuyoo-no* 'Monday' is not interpretable if it appears in the position indicated in bold in (185b).

N.M- $no_{GEN}$  with the material meaning is also ungrammatical in the same syntactic environment as (184) and (185):

The phrase also exhibits the same constraints with another N.M- $no_{GEN}$ . The data again suggest that the modifiers with the material meaning must appear in the closest position to the head noun.

In the next example, N.M-no embodies the head noun, and the phrase with these semantics also exhibits the same positional constraint:

	[Eı	mbodiment]			
(187)		heiwa- <b>no</b> kui	ni		(=(42b))
		'the country	of peace'		
(188)		<b>ziyuu-no</b> kur	ni		
		'country of li	iberty'		
(189)	a.	yuumei-na	heiwa-no	kuni	(from (187))
		famous	peaceful	country	
	b.	*heiwa-no	yuumei-na	kuni	
(190)	a	sizuka-na	ziyuu-no	kuni	(from (188))
		quiet	free	country	
	b.	*ziyuu-no	sizuka-na	kuni	

What I mean by 'embody' or 'embodiment' is that Switzerland could be an instance of 'the country of peace' in that the idea of *peace* or the quality *peace* represents the country. Similarly, the USA could be expressed by the idea of *liberty* or the quality of *liberty*. These examples are not the main point of the discussion. The point is that X- $no_{GEN}$  consistently exhibits the positional constraints.

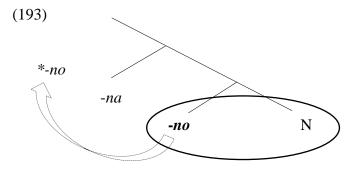
The constraint found in (184)-(190) is summarised as follows:

The semantics found among the N.M-no forms whose structural position is restricted are 'weather', 'material' and 'embodiment'.

In the case of mimetics, I have showed that M-no always results in ungrammaticality if it appears in a higher position than M-na.

For the semantics of such modifiers, I have treated the 'defining property' and the 'material reading' as a similar semantic group (i.e. a specified quality), referring to Nikolaeva and Spencer (2013) (cf. Subsection 5.3.2).

To summarise, neither [N.M-no N.M-na N] nor [M-no M-na N] are grammatical. The distributional pattern is shown in the syntactic tree diagram as follows:



The X-no modifiers which seem to be strictly required to be adjacent to the head noun (indicated by a circle) **neither** associate to 'situation-descriptive' **nor** to 'characterizing property'.

#### 5.6.2. Less Constrained Word Order in Multiple Modification

In this subsection, I focus on a distributional pattern where the word order of prenominal modifiers is relatively free (cf. Watanabe, 2017, p. 784).

First of all, -na ending nominal adjectives as well as genuine adjectives (ending in -i) can occur together in multiple modification. In addition, the ordering of these two modifiers is relatively free:

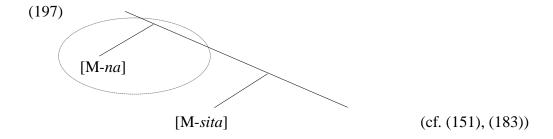
(194) 'a famous big clock/watch'		g clock/watch	,	
	a	yuumei- <b>na</b>	ooki- <b>na</b>	tokei
		famous	big	clock/watch
	b.	ooki- <b>na</b>	yuumei- <b>na</b>	tokei
		big	famous	clock/watch
(195)		'a beautiful c	lever woman'	
	a.	utukusi-i	kasiko- <b>i</b>	zyosei
		beautiful	clever/wise	woman
				(Sawada, 1993, p. 65, (136b)) <sup>91</sup>
	b.	kasiko- <b>i</b>	utukusi- <b>i</b>	zyosei
		clever/wise	beautiful	woman
(196)		'a beautiful c	lever woman'	
	a.	kirei- <b>na</b>	kasiko- <b>i</b>	zyosei
		beautiful	clever-wise	woman
	b.	kasiko-i	kirei- <b>na</b>	zyosei
	υ.	Kusiko I	MH CI III	250001

The important observation here is that the semantic distinctions triggered by the different ordering are too subtle to decide which one is unmarked. If we are able to identify the semantic distinctions between two word orders (shown in (a) and (b)) and describe them in an informative way, then we could conclude that the ordering is relatively free. What is important to understand in this thesis is that the distributional patterns of M-na and M-sita are somewhat similar to those of N.M-na and N.M-i.

In my proposal for mimetics, M-na and M-sita are relatively free, in that both orderings 'M-na M-sita' and 'M-sita M-na' are perfectly adequate and grammatical (cf. Chapter 2 (V in Subsection 2.3.1)):

-

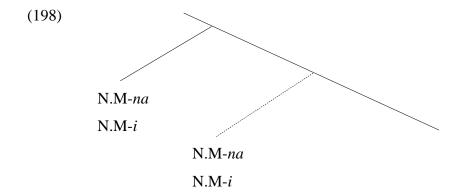
<sup>&</sup>lt;sup>91</sup> The original example uses *onna* rather than *zyosei* for 'woman'.



Impressionistically, the latter order, M-sita M-na, seems to be the marked one, based on my observations presented in fn. 90. However, this observation only helps me to argue that M-na and M-sita are not identical. Without further detailed examination – perhaps a formal experiment – I am not able to decide whether the ordering of these modifiers, particularly among non-mimetics, is free *or* relatively free. However, this is not a problem for discussion in this thesis. The significant point is that the string of the two modifiers in each of the combinations (of non-mimetics and mimetics) is not as strongly tightened as the string of both 'M1-na M2-no' and 'N.M1-na N.M2-no' is. They are *highly* constrained, in that 'X2-no X1-na' results in ungrammaticality.

The use of temporal adjuncts only enables us to observe the distinctions between M-na and M-sita (cf. Chapter 2 (2.2)). Otherwise, the semantic distinctions between the two forms are subtle (cf. 2.2). The semantic distinctions between them are not as explicit as those between M-na and M-no. In my analysis, the behaviour of M-na is best understood as the tensed clausal modifier, while M-sita contrasts its grammatical properties with M-na, in that M-sita never allows temporally anchored interpretations (i.e. it is an attributive modifier). The idea is that the circled syntactic domain above M-sita associates to a situation-descriptive (condition) reading in my proposals for mimetics (cf. (151)).

I assume that the non-mimetic adjectives are distributed in the following way:



We are not able to determine how the contrast, namely 'situation-descriptive' and 'characterizing property', could best map onto the syntactic structure above. First, the syntactic structures of adjectives (nominal adjectives N.M-*na* and genuine adjectives N.M-*i*) are a matter for debate in the literature (cf. 2.4.2.3). Second, further detailed examination of the finer semantics of these forms is necessary in order to identify their syntactic position in relation to semantics. For instance, it will matter what each modifier really means in (194)-(196): (194a) versus (194b).

As for the semantic contrast, identified among three forms of mimetics, it is possible to say that N.M-*na* could ambiguously be associated with both 'situation-descriptive' and 'characterizing property':

a. heiwa-na kuni
peaceful<sub>NA</sub> country
'peaceful country': i) property ii) situation-descriptive
b. ziyuu-na kuni
free<sub>NA</sub> country
'free country': i) property ii) situation-descriptive

Both *heiwa-na* 'peaceful' and *ziyuu-na* 'free' can surely simply denote a quality/property (i.e. 'characterizing property'), and this is very much expected because they are nominal adjectives. It is also possible to interpret *heiwa-na* and *ziyuu-na* as a situation-descriptive reading. Without strictly identifying the contrast, it is enough to understand that the semantics assigned by the N.M-*na* form are definitely not a 'specified quality', including a 'defining property'. (In Subsection 5.6.1, I

demonstrated that N.M-no located in the lowest position – for instance, *heiwa-no kuni* 'the country of peace', *ziyuu-no kuni* 'the country of liberty' – cannot precede N.M-na.)

### **5.6.3.** Mimetics as Prenominal Modifiers in Comparison to Non-Mimetic Modifiers

In this subsection, I summarise the distribution of mimetic and non-mimetic modifiers in prenominal modification from the viewpoint of their structural constraints. In 5.6.3.1, I explain how the contrasts (situation-descriptive, characterizing property and defining property) identified among the three prenominal forms of mimetics could possibly be extended to non-mimetic modifiers. In 5.6.3.2, I argue that accentless mimetics are very similar to non-mimetic words.

## **5.6.3.1.** The Distribution of Prenominal Modifiers in Relation to Semantics and their Structural Constraints

In my claim about mimetics, three semantics are associated with three structural positions. First, the highest position associates with a situation-descriptive reading (condition, allowing the temporally anchored interpretation). Second, the other two domains associate with property readings. The circled lowest position, where M-no appears, associates with a defining property. The structural constraint among three modifiers is that M-no is unlikely to appear as high as M-na (situation-descriptive reading). These ideas are summarised in the syntactic diagram as follows:

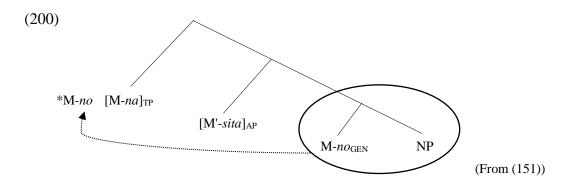


Figure 5.2: Structural Constraints on Mimetic Modifiers

The structure shown in (200) is drawn from (151) with the addition of what has been discussed in this chapter; i.e. the accent indicated, *no* glossed and the structural constraints on M-*no* shown). In short, there are three syntactic domains, namely high,

mid and low, associating with 'situation-descriptive' (condition), 'characterizing property' and 'defining property', respectively.

In the case of non-mimetic modifiers, firstly, we found the same constraint between N.M-na and N.M-no forms. I have demonstrated that N.M-no modifiers also do not sit well in a relatively high position when appearing with N.A-na modifiers. N.M-no has the function of specifying the referent, appearing in the lowest position (circled) in (201). These observations are briefly summarised in the syntactic tree diagram as follows:

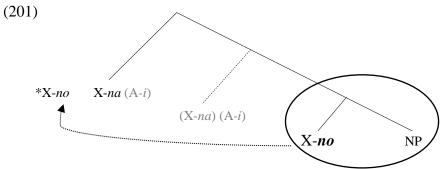


Figure 5.3: Structural Constraints on Non-Mimetic Modifiers

Since we saw the same behaviour (i.e. semantic contrasts and structural constraints) among both mimetics and non-mimetic modifiers, I use X for N.M-no and N.M-na so that the observations are more generalised. Next, I have shown another similarity between the three prenominal forms of mimetics and non-mimetic modifiers. The ordering of the two modifiers which do not occur in the 'lowest domain' is free. Moreover, the characteristic of these modifiers is that the semantic distinctions between these modifiers are subtle or not very explicit in both mimetics and non-mimetic modifiers.

One form out of the three forms of mimetics is an attributive modifier, appearing in the 'mid domain', shown in (200), whereas the syntactic structures of Japanese adjectives (-na ending and -i ending, shown in (201)) are a matter for debate in the literature. M'-sita may not necessarily behave identically to non-mimetic modifiers. I will re-examine the grammatical properties of M'-sita in Subsection 5.6.4.

#### 5.6.3.2. Discussion (i): Accentless Mimetics versus Accented Mimetics

In this subsection, I discuss the grammatical properties of mimetics, bare accentless 193

mimetics and accented mimetics for the sake of comparison to non-mimetic words.

My understanding is that accentless mimetics are more or less the same (or the same) as non-mimetic words. On the other hand, it seems to me that accented mimetics leave some more questions as to what the grammatical properties of bare accented mimetics are. In this subsection, I discuss the grammatical properties of bare accentless mimetics compared to non-mimetic words.

Non-mimetic words *ziyuu* 'free'/'liberty' take on *-na* and *-no* (cf. (40) in Chapter 1). This is somewhat similar to accentless mimetics. Accentless mimetics take on *-no* and can take on *-na* — whatever their lexical categories (i.e. whether they are nominal nouns or nouns). Toratani (2018) takes a position that accentless mimetics should not take *-na* by arguing that the distribution of accentless mimetics shares a pattern with nouns (cf. Chapter 1):

- (202) Non-mimetic words: i) ki<sub>N</sub> 'wood', ii) gooka<sub>NA</sub> 'gorgeous'
  - a. The predicative form of noun and nominal adjective
    - i) kin-dacop
    - ii) gooka<sub>NA</sub>-da<sub>COP</sub>
  - b. The prenominal form of noun and nominal adjective
    - i) ki<sub>N</sub>-no yuka 'wooden floor'/\*ki<sub>N</sub>-na yuka
    - ii) gooka<sub>NA</sub>-na 'gorgeous floor'/\*gooka<sub>NA</sub>-no yuka

(Toratani, 2018, cf. (40))

- (203) The accentless mimetics *turuturu* 'slippery' (a slippery quality)
  - a. The predicative form of *turuturu*

b. The prenominal form of *turuturu* 

```
turuturu<sub>N</sub>-no/^{?}turuturu-na yuka 'floor' (=(202b, i))
(Toratani, 2018, cf. (41a), (41b))
```

I have argued that mimetics followed by X-no can give rise to a material reading in both cases of non-mimetic words and mimetics (cf. Chapter 4 (4.5.2)). It is also possible to consider that ki-no (as in ki-no yuka in 202, b, i) is the material of the floor. In this respect, accentless mimetics may as well function as nouns (cf. (145), (146)),

as Toratani (2018) argues.

While I can agree with her view, it cannot mean that accentless mimetics are less acceptable with the -na form. First of all, accentless mimetics express an abstract quality (due to their prosodic properties, cf. Chapter 1). Such semantics should really allow for them to take on -na. Furthermore, the point of my claim was that the use of the -na form is certainly adequate with an appropriate context (cf. Chapter 4):

(204) OK turuturu-na yuka: situation-descriptive (cp. (203b))

You are describing a situation where the floor has a shiny quality (abstract quality triggered by the accentless mimetic).

Toratani (personal communication, December, 18, 2016, cf. Section 1.7) told me that the use of -na sounds colloquial to her, and her comments actually support my claim about M-na: i.e. that situation-**descriptive** readings or **reporting** a condition ought to sound colloquial. There is no sense that the abstract quality expressed by the accentless *turuturu* is understood to be the material of the floor, as in *turuturu-na yuka* in (204).

In short, the prenominal forms of accentless mimetics, namely M-na and M-no, exhibit almost the same distributional patterns and constraints as non-mimetic modifiers (whether they are nouns or nominal adjectives).

As for the comparison of mimetics and non-mimetic words, Hamano (1998, p. 20) states:

the use of mimetic forms as nominal adjectives occupies an even more conventionalized range of this continuum than their use as mimetic D-verbs.

Hamano investigates other forms of accented mimetics involving other particles, for instance *to*, so "even more" or "this continuum" refers to other forms, as well as the three forms that this thesis has examined. "The use of mimetics forms as nominal adjectives" corresponds to the use of accentless mimetics (cf. Table 1.10), while "their use as mimetic D-verbs" is the forms of accented mimetics. What the quotation means 195

is that the forms of accentless mimetics are more conventionalised than those of accented mimetics, particularly M-sita. This is where I do not necessarily consider the grammatical properties of accented mimetics to be identical to non-mimetic words (for more discussion, see 5.6.5).

#### 5.6.4. Can M-sita Really Be an Attributive Modifier?

I have argued that M'-*sita* is a non-clausal modifier. In this subsection, I focus on the re-examination of the grammatical status of M'-*sita*. The organisation of this subsection is as follows: 5.6.4.1 deals with a lexical category called *rentaisi* in Japanese traditional grammar. 5.6.4.2 presents the comparison between M-*sita* and genuine adjectives as well as other -*sita* forms. 5.6.4.3 summarises the implication of the discussion in 5.6.4.

#### 5.6.4.1. The Closed Class of *Rentaisi*

I re-examine the grammatical properties of M'-sita, which I treat as an attributive modifier.

It is generally understood that Japanese adjectives are relative clauses (cf. Chapter 2). Separate from these, there is a class of words referred to as *rentaisi* in traditional grammar, or "adnominals"/"adnouns" in Martin's (1975, pp. 742-747) terms. Martin (1975, p. 745, (2)) states that "certain words do not appear except when directly adnominal; these are called ADNOUNS (or prenouns)". The typical examples of words classed as *rentaisi* are *koona* 'like this'/'this sort of' and *iwayuru* 'so-called'. Deictic words also fall into this class (Martin, 1975). There are words from *rentaisi* on which I would like to shed light. These are (i) *kono* 'this', *sono/ano* 'that', (ii) *hyonna* 'strange, awkward' *ookina* 'big' and (iii) *tai-sita* 'immense, important, serious, very', *bakageta* 'foolish' (Martin, 1975, p. 745, (2b), (2f), (2a, 2e), respectively). The morphemes in bold are relevant to our discussion in relation to the syntactic structures of prenominal modifiers. <sup>92</sup>

In order to provide my perspective on M'sita (as an attributive modifier) in relation to rentaisi, I will first briefly explain the syntactic environment in which rentaisi appear.

-

<sup>92</sup> Rentaisi end in -ga, -no, -na, -ta/da, -ru.

While determiners do not follow adjectives in English, non-mimetic words classed as *rentaisi* (in bold) can follow (genuine) adjectives (ending in -*i* underlined) (Sawada, 1993, p. 85):

```
(205)
                'the kind man'
                the
                       kind
                               man
        a.
        b.
                *kind the
                               man
(206)
                'the smelly town due to the smell of the fish'
               sono
                         sakana-kusa<u>i</u>
                                          uramati
               the
                         fish-smelly
                                          town
        b.
                sakana-kusa<u>i</u>
                                sono
                                          uramati
                fish-smelly
                                 the
                                          town
                                                  (Sawada, 1993, p. 85, (66), (67))
```

The labels of the syntactic projections are not the main issue here, but it is important to gain familiarity with the syntactic properties of *rentaisi*.

Similarly, *ano* 'that' follows *ooki-na* with a meaning of 'big'. That is, a *rentaisi* follows another *rentaisi*, and the ordering of these two is free:

In the -na ending words presented in (207), ooki-na 'small' is classed as rentaisi as well as tiisa-na 'small' because neither of them appear in the predicative copular forms:

Meaning of adnouns	The -na form of 'adnouns' (rentaisi)	The predicative form with copula (adverbial)
big	ooki-na tokei 'watch'	*ooki-da (/ni)
small	tiisa-na tokei 'watch'	*tiisa-da (/ni)
funny	okasi-na hanasi 'story'/hito 'one'	*okasi-da (/ni)
strange	hyon- <b>na</b> koto	*hyon-da (/ni)

Table 5.2: Examples of Rentaisi (Examples drawn from Martin, 1975, p. 747)

It appears that N.M-*na* classed as *rentaisi* (adnouns in Martin's terms) is an attributive modifier. <sup>93</sup> In the case of M-*na*, in contrast, I have argued that it is a tensed clausal modifier. In fact, the accentless mimetics do take on -*da* and -*ni* (e.g. *huwahuwa-da/ni* 'soft-fluffy', cf. Chapter 1). This suggests that M-*na* differs from N.M-*na* classed as *rentaisi* in a traditional Japanese grammar sense, and is consistent with my claim about the M-*na* form.

I have claimed that M'-sita is an attributive modifier (adjective-like attributive modifier, where ta is semantically almost vacuous, in Hamano's terms, cf. Chapter 1 (1.6.1)). The evidence was the distribution of the non-mimetic words gakageta 'foolish/stupid' and sugureta (fundamentally the words that fall into Kindaichi's (1950) Fourth Verbal Class) (cf. (66), (67) in Chapter 2 (2.4.2.2)). I have demonstrated that both M-sita and V-ta lack predicative forms (cf. Chapter 2). Martin (1975, p. 747) indeed considers bakage-ta as rentaisi:

The words *bakageta* 'foolish', *gebita* 'vulgar', *akireta* 'disgusting', and *kawatta* 'different, unusual' are common one-word epithets derived from intransitive verbal predicates; such epithets need not be separately listed as adnouns.

As a comparison to *hu'wahuwa-sita*, I would also like to discuss the morphological shape of another word *tai-sita* (classed as *rentaisi*):

\_

<sup>&</sup>lt;sup>93</sup> The adnoun *hyon* 'strange' in the fourth line of Table 5.2 above does not take on -*i*, while other adnouns can function as regular adjectives, appearing with -*i*. In contrast to words classed as *rentaisi*, these regular adjectives "are not limited to attributive position" (see (214) for examples of genuine adjectives) (Martin, 1975, p. 747).

- (208) Adnouns (Martin, 1975, p. 747, (2f)) tai-sita 'immense, very, serious'
- (209) Prenominal Forms of Accented Mimetics

  hu'wahuwa-sita 'soft-fluffy' [Attributive Modifier]

Intuition probably does not tell us immediately that these two words are similar due to their semantics. However, morphosyntactically, M'sita shares similarities with taisita.

First, they take on the same morphological forms as shown in (210) and (211):

- (210) tai-site 'immense, very, serious'; "adverb" (Martin, 1975, p. 747, (2f))
- (211) *hu'wahuwa-site* 'soft-fluffy' in the gerund form

  (See 5.3.3 for discussion on prenominal use)

Second, neither allows predicative forms, as shown in (212b) and (213b):

(212) Rentaisi: tai-sita

tai-sita mono/yatu/hito

'great thing/person (casual term)/person'

- a. Suga-wa tai-sita yatu/hito-da. [Att]

  Mr. Suga-TOP great<sub>ATT</sub> person, one-COP.PRED
  - 'Mr. Suga a great person/one.'
- b. i) \*Hito-ga/-wa tai-sita. [Pred]

person-NOM/TOP great<sub>ATT</sub>

ii) \*Suga-ga/-wa tai-sita. [Pred]

Mr. Suga-NOM/TOP great<sub>ATT</sub>

(213) The prenominal form of accented mimetics: hu'wahuwa-sita

#### hu'wahuwa-sita hito

'fluffy person/one' [metaphoric]

=His attitude is not stable and reliable.

- a. Suga-san-wa hu'wahuwa-sita hito-da. [Att]
  - Mr. Suga-TOP fluffy<sub>ATT</sub> person/one-COP.PRED
- b. i) \*Hito-ga/-wa hu'wahuwa-sita. [Pred]

person-NOM/TOP fluffy<sub>ATT</sub>

ii) \*Suga-san-ga/-wa **hu'wahuwa-sita**. [Pred]

Mr. Suga-NOM/TOP fluffy<sub>ATT</sub>

Rentaisi tai-sita 'great' can modify hito 'one (person)', and hu'wahuwa-sita can also modify hito 'one (person)', as shown in (212a) and (213a). The semantics of hu'wahuwa-sita hito could be a metaphoric expression to describe what the person is like — in other words, to characterise the person to whom we are referring (i.e. a characterizing property). Here, it does not mean that Mr. Suga physically has a soft-fluffy property, but rather means that he is not down to earth. It is similar to say "she is bubbly" in English in the sense that the person is not physically producing bubbles. (212) and (213) seem to suggest that the morphosyntactic behaviour of rentaisi tai-sita and hu'wahuwa-sita is not very different. I conclude that ta or sita as in M'-sita should be treated as a part of rentaisi.

# **5.6.4.2.** M'-sita versus Genuine Adjectives (A-i) and Other Forms of -sita In this subsection, I compare morphosyntactic properties of M-sita to those of genuine adjectives and other -sita forms. Adjectives in Modern Japanese have two subclasses,

adjectives and other -*sita* forms. Adjectives in Modern Japanese have two subcia and genuine adjectives (i-ending) are one of them.  $^{94}$ 

In (Modern) Japanese, genuine adjectives end in -i for non-past tense. Nishiyama (1999) treats the morpheme /k/ as the copula (i.e. a head of [pred. cop] in his formal analysis of adjectives. I understand that k comes from the adjectival copula presented in Frellesvig (2010, p. 234, Table 8.7). The copula (underlined) supports tense so that ta, as in utukusikatta, is unambiguously tensed as past (in bold):

(214) Genuine Adjective 'beautiful' for non-past

. utukusi<u>i</u> [Predicative/Prenominal]

NON.PAST

a. Yooku-wa utukusi<u>i</u>. [Predicative]

York-TOP beautiful

<sup>&</sup>lt;sup>94</sup> The other class is nominal adjectives, inflectional endings of which used to be *-nari* and *-tari*. The copulas, namely *-nar-*, *-tar-* and *-kar-* (adjectival copula), are often referred to as secondary conjugations of the copula (Frellesvig, 2010, p. 234).

'York is beautiful.'

b. utukusi<u>i</u> mati [Prenominal]

beautiful town

'a beautiful town'/'a town that is beautiful'

(215) Genuine Adjective 'beautiful' for past

utukusi-katta [Predicative/Prenominal]

#### COP.PAST

a. Mati-ga utukusi<u>ka</u>tta. [Predicative]

town-NOM beautiful.COP.PAST

'The town was beautiful.'

b. utukusi-<u>ka</u>tta mati [Prenominal]

beautiful.COP.PAST town

'a town that was beautiful'

The -i form and katta forms are used both prenominally and predicatively. Traditionally, adjectives are considered to be clausal modifiers (e.g. non-finite clauses), while Yamakido argues that Japanese adjectives are not all relative clauses (see my quote from Miyagawa (2011) in 2.4.2.3 for this issue).

In the case of mimetics, accented mimetics can be tensed, appearing in the *-te-iru/ta* forms:

(216) Accented mimetics followed by -si for tensed and tenseless forms

a. hu'wahuwa-si-te-ita pai [PAST]

M(accented)-si-GER-be.PAST pie

'a pie which was soft-fluffy' (cf. (72))

b. hu'wahuwa-si-te-iru pai [NON.PAST]

M(accented)-si-GER-be.NON.PAST pie

'a pie which is soft-fluffy'

c. hu'wahuwa-si**ta** pai [Attributive Modifier]

M(accented)(-si-)ATT pie

'a soft-fluffy pie' (characterizing property)

The semantics of the M'-si-te-iru form in (216b) could be understood as follows: it

does not matter whether the referent usually has the *huwahuwa* 'fluffy' property, but it certainly does at the time in question. It is possible to consider this interpretation to be situation-descriptive (in the context where M'sita attributively denotes a (characterizing) property of the referent).<sup>95</sup>

The contrast of the ungrammaticality in (217b) (and 217a/c) and (215) implies that the grammatical properties of the accented mimetics (either with or without -si) and *utukusi* are not necessarily identical:

```
(217) Accented mimetics with adjectival copula
```

```
a. *hu'wahuwa-<u>ka</u>tta pai 'fluffy pie'
```

b. \*hu'wahuwasi-<u>ka</u>tta pai 'fluffy pie' (cp. (215))

c. \*hu'wahuwasita-katta pai 'fluffy pie'

Neither hu'wahuwa nor hu'wahuwa-si can take on  $\underline{katta}$  (cp. (215)). I have also demonstrated that the accented mimetics followed by -si directly take on  $te_{GER}$  in the environment where genuine adjectives must take on  $\underline{ku}$  (so that te can attach to the adjectival stem) (cf. (162) and (163)).

There is another instance of the prenominal -sita form of non-mimetic words.<sup>96</sup>

blue-eye.ACC girl

'a girl with blue eyes'/'a girl who has blue eyes'

b. \*Syoozyo-ga aoi-me-o sita. [Predicative]

girl.NOM blue-eye.ACC did

c. aoi-me-no syoozyo

blue-eye.GEN girl

'a blue-eyed girl'/'a girl with blue eyes' (inalienable possession)

<sup>&</sup>lt;sup>95</sup> I thank Satoshi Tomioka for his comment on my materials at WAFL (Kamiya, 2016b); he suggested that *magatta miti* and *magatteiru miti* 'bending road' are equivalent to him. An examination of the V-*te-iru* form (non-mimetic modifier) and the identification of the possible semantic contrast between V-*te-iru* and V-*ta* is out of the scope of this thesis.

<sup>&</sup>lt;sup>96</sup> This material is from Kamiya (2015b).

It is obvious that *ta*, as in *o-sita*, neither associates to the past nor is it aspectual. *Sita* does not function as the predicative form either (cp. *benkyoo(-o-)sita*<sub>PAST</sub> 'studied' in (61b) in Chapter 2). However, given that the accusative case is assigned to *aoi-me* 'blue-eye', as in *aoi-me* o *sita*, I do not consider it to be an attributive modifier.

To summarise, from a morphosyntactic viewpoint, the *-ta* ending, including *sita*, classed as *rentaisi* appears to most closely relate to the *-sita* form of accented mimetics (M'*sita*).

#### 5.6.4.3. The Implication of the Discussion on Rentaisi

One of the questions would then be whether or not the *na*-marked modifier in (194), (198) and (201) could be an AP in the way I treat M'-*sita* as an AP. One possibility that we could assume is that non-mimetic words classed as *rentaisi*, such as *ooki-na* 'big' and *tiisa-na* 'small' (see Table 5.2), may appear in the 'mid domain', in much the same way M'-*sita* does (see (194a), (200), (201)). For this issue, I suggest that further detailed examination of N.M-*na* with N.M-*i* (e.g. the finer semantics of N.M-*na* in multiple modification, the distributional patterns of N.M-*i* with N.M-*no*) will probably help to develop a better syntactic analysis of the two domains indicated by a dotted line in (201) (e.g. N.M-*i* as a non-finite clause, as is often said). According to Cinque (2010), modifiers could be reduced relative clauses (cf. fn. 74). I will leave further investigation for the future.

#### 5.6.5. Discussion (ii): Bare Accented Mimetics as in M'-sita

In this subsection, I conduct the final examination of the grammatical properties of accented mimetics.

Martin (1975, p. 755) states that "many (but not all)" reduplicated monosyllables and disyllables from classical Chinese are considered to be mimetics. One of the typical examples is *doodoo* 'splendid', which Martin (1975, p. 749) classified into the group of "distributional limited adjectival nouns". For what Martin refers to as adjectival

nouns, the reduplicated adjectival noun doodoo takes on taru<sup>97</sup>:

(219) [Nominal Adjective/Adjectival Noun]

<u>doodoo</u>-taru taikaku

reduplicated physique

'a splendid physique' (Martin, 1975, p. 755)<sup>98</sup>

What I argue here is that accented mimetics differ from reduplicated adjectival nouns. Crucially *sita* does not attach to *doodoo*, while the accented mimetics do take on *sita* (or *si*):

(220) [Nominal Adjective/Adjectival Noun]

\*doodoo-sita (from (219))

(221) [Prenominal form of the accented mimetic]

hu'wahuwa-sita

Thus, I do not consider accented mimetics to be identical to reduplicated adjectival nouns.

In addition, the morphological distributional patterns of genuine adjectives suggest that the grammatical properties of accented mimetics differ from those of genuine adjectives (cf. 5.6.4.2). When it comes to the grammatical properties of accented mimetics, my understanding is that bare accented mimetics are rather verb-like (cf. Chapter 2 (2.4.3), Chapter 1). One thing I indicate is that bare accented mimetics can primarily represent sounds, and the sound could be created by a motion (cf. Chapter 1 (1.5.1-1.5.3)).<sup>99</sup>

## **5.6.6.** Mimetic Modifiers versus Non-Mimetic Modifiers in a Stacking Structure

In this final subsection, I would like the focus of discussion to move from the single

<sup>98</sup> For clarity, *doodoo* is romanised as *doudou* in Martin (1975).

-

<sup>&</sup>lt;sup>97</sup> See (233) for futher discussion.

<sup>&</sup>lt;sup>99</sup> Among segmentally homonymous non-mimetic words, the pitch accent is observed within the same lexical category and across lexical categories (cf. Chapter 1 (1.4)). Pitch accent can contribute to change category, but also associate with different semantics within the same lexical category (see Tables 1.4-1.7 for non-mimetic words and see Section 1.5 for mimetics, Hamano (1998) and Kindaichi (1978)). I will leave a discussion of this issue for the future.

modifier to the distributional patterns of two prenominal modifiers once again.

The final point that I must highlight is that the same morpheme cannot host mimetics in multiple modification, while it can host non-mimetic words:

```
(222)
          [Mimetics]
          *M-na
                    M-na
                             N
          (e.g. *kirakira-na kusyakusya-na syatu 'shiny crumpled shirt': (50))
      b. *M'-sita M'-sita
                             N
          *M-no
                   M-no
                             N
      C
                                                       (cf. Chapter 2(2.3.1))
          [Nominal Adjective]
(223)
          N.M-na N.M-na N
          (e.g. OKooki-na yuumei-na tokei 'big famous clock': (194))
(224)
          [Genuine Adjective]
                   N.M-i
          N.M-i
          (e.g. OKutukusi-i kasiko-i zyosei 'beautiful clever woman': (195))
```

Neither *kirakira-na kusyakusya-na syatu* nor *kirakira-sita kusyakusya-sita syatu* is grammatical (see Section 1.7 for one of my initial observations). Contrary to this distributional pattern of mimetics, *ooki-na yuumei-na tokei* 'big famous clock' is grammatical, as shown in (223). Genuine adjectives also appear together in multiple modification, as shown in (224) (see (198) for a tree diagram). In fact, the combination shown in (223/194) and (195) is rather common in the use of non-mimetic modifiers.

In short, NA modifiers and genuine adjectives can stack, while mimetic modifiers cannot seem to stack if two mimetics carry the same grammatical markers. Further investigation of this distributional constraint I shall leave for the future.

#### 5.6.7. Summary and Conclusion

In Section 5.6, I argued that the contrast identified between mimetic modifiers *is* observed between non-mimetic modifiers. However, due to the non-consensus about the syntactic properties of non-mimetic modifiers, for instance the syntactic properties

of nominal adjectives (cf. Ogihara (2015) and (56) in Chapter 2), it is not possible to provide a full account of how the proposed three interpretations map onto non-mimetic modifiers. In the mimetic system, I consider M'-*sita* as an attributive modifier. I argued that M'-*sita* should be treated as *rentaisi* in the Japanese traditional grammar sense (cf. 5.6.4). However, if there is anything that does not extend beyond the mimetic system, I consider that the grammatical properties of accented mimetics (as in M'-*sita*) could be a potential reason. The accented mimetics primarily express sounds, and this raises a question of whether sounds are nouns, adjectives, adverbs or verbs. I also note that the grammatical properties of M' (as in M'*sita*) might be mimetic-specific (cf. (220), (221)).

#### 5.7. Distribution of M-na (and M'-to-sita) with Abstract Nouns

As the last point of the examination, I focus on grammatical relationships between the head noun and the semantic element of the prenominal modifier. This is one of the points to which I pay attention throughout the thesis. This thesis has examined the distribution of mimetics appearing with concrete nouns with a physical referent (cf. Section 1.7). In this subsection, I present cases where M-na appears with abstract nouns.

As Hamano suggests, (e.g. Hamano (1998, p. 21) in Chapter 1 (1.6.1)), mimetics may select different morphemes depending on the semantic type of the head nouns. First of all, accented mimetics take on *to-sita* in (225), and it is obvious that 'mouth-feel' is not the type of noun that has a physical referent:

(225) [Head noun: Abstract Noun]

a. huwahuwa-na syokkan mim(soft/fluffy quality) mouth-feel
 b. hu'wahuwa-to-sita syokkan mim(soft/fluffy quality) mouth-feel

There are two remarks to be made about the distribution of mimetics here. Some people intuitively select *na* if the head noun is *syokkan* 'mouth-feel' with (the

accentless) *huwahuwa* (cf. (C-2) in Section 1.7).<sup>100</sup> Moreover, *to-sita* is chosen rather than *-sita* when the head noun does not have a physical referent (e.g. 'mouth-feel') (cf. (C-2)). This implies that the distributional pattern of mimetics may differ depending on the semantic type of the head nouns (see Section 1.6 for a related discussion).

In the case of non-mimetic words, *to* tends to appear with abstract nouns, like *taido* 'attitude', *kakkoo* 'gesture' and *hyoozyoo* 'expression':

The syntactic structure of the prenominal phrases below in (227) is almost parallel to that in (226), as Hamano's translation in (227) suggests (i.e. *to iu*: 'indicate that' in (227) or 'say that' in (226)):

```
a. [[dame] to iu] kakkoo
no-good gesture
'the gesture [indicating that [it did not go well]].'
b. [[ansin sita] to iu] hyoozyoo
relief do.PAST expression
'the facial expression [that indicates that [he/she was relieved]].'
(Hamano, 1998, p. 141, (14a), (14b), brackets added by me)
```

Here, I would like to highlight Saito's (2018) idea that the outer bracketed phrases in (226) and (227) explain the content of the head noun. For the type of prenominal modification with *to-iu*, Saito (2018, p. 2) treats *to*, as in *toiu*, as the complementizer. For the sake of the discussion in this subsection, I borrow his idea that *to-iu* can introduce the clausal complement and focus particularly on the semantics that such a

Based on one of the two comments by Informant 3 (who prefers to use huwahuwa-na with syokkan (cf. ii in (C2-2)), I informally asked a few more other people whether they would do the same; they straightforwardly selected na.

structure yields.

The prenominal elements including mimetic words also describe the content of the head (abstract) noun in Saito's terms:

The observation here is that to iu and to sita seem to appear in this grammatical context.

It appears that the relationship between the head noun and the prenominal elements that I present in (226)-(229) and (225) corresponds to that in (230):

In (230), the prenominal [X-na] explains the content of the head (abstract) noun, and it is possible for the phrase in (230) to be translated as "a proof (which says) that someone is healthy", whereas the phrase in (231) does not yield this syntactic structure – particularly if we compare (230, i) with (231, i). The prenominal element [kenkoo-na] looks like a complement of the head noun (230). That is, the prenominal element

describes the content of the head (abstract) noun (e.g. syooko 'proof') (cp. (231)).

For the case of mimetics (followed by na) in (225a), I consider the prenominal element to describe the content of the head (abstract) noun:

(232) [Abstract noun with M-na]

huwahuwa-na syokkan

M(soft-fluffy/soft-fluffiness)-COP.TENSED<sub>NONPAST</sub> mouth-feel

'the mouth-feel such that you feel the huwahuwa quality'

(=(225a), translation added)

I note that the relationship between the prenominal element including the mimetic with *na* and the head (abstract) noun in (232) differs from what we have seen in Chapters 2 and 4. The example in (232) shows that M-*na* is compatible with an abstract noun, as well.

When it comes to abstract nouns, the reduplicated word *doodoo* in (233b), roughly meaning 'confident' (or it could be 'confidence'), appears below with the noun *taido* 'attitude', but necessarily takes on *to*:<sup>101</sup>

(233) a. doodoo **to** sita taido (cp. (219)) confident $_{NA}$  reduplicated attitude

Toratani (2017, p. 43, figure 3.4) proposes the classification of  $to/\phi$ -marked mimetics: adjunct (omissible) versus non-adjunct (inomissible). If we assume that the prenominal elements in (230), (227), (228) and (229) are complements of the head nouns, *to* may serve for the whole clause/phrase to be a complement of the head noun (unless it serves in the category of the root). I assume that *to*, appearing in the construction (225b), may appear for a syntactic (e.g. Toratani, 2017) rather than a phonological reason (cf. Subsection 1.2.2).

The data in Akita and Tsujimura (2016, p. 21, accent added) also indicate that the prenominal element tends to involve *to* when the head nouns are abstract nouns: *hu'wahuwa-(to)-sita kimoti* 'attitude'. Further identification is not possible in this thesis because further detailed examination of *to* with mimetics is necessary, and it is not within the scope of the thesis.

In the case of non-mimetic words, Matsumoto (2018, p. 481) investigates the construction in which the abstract (head) nouns are modified by a prenominal clause: "content elements are described in the modifying clause". She discusses three types of content nouns, namely 'communication', 'thoughts and feelings', and 'abstract concept' (e.g. hanasi 'story', ki 'feeling', and kuse 'habit') in this construction.

209

<sup>&</sup>lt;sup>101</sup> I note that the morphological support of *to* seems preferred in certain constructions, for instance (225b).

b. \*doodoo sita taido (from (220) cp. (219)) confident<sub>NA</sub> reduplicated attitude

Here, the data in (233) show that *doodoo* cannot take on *sita*, again suggesting that *doodoo* differs from accented mimetics – I have already argued that M (accented mimetic), as in M'-*sita*, differs from *doodoo* in 5.6.5 (cf. (219), (220), (221)). This is consistent with my understanding that accented mimetics are somewhat verb-like – the grammatical properties of accented mimetics are unlike Nominal Adjectives (see Martin's term "distributional limited adjectival nouns" in 5.6.5). Again, I will leave further investigation of accented mimetics for the future.

## **5.8.** Summary and Concluding Remarks on the Three Prenominal Forms with Japanese Mimetics

In this chapter, I provided further theoretical accounts for the descriptive parts of my data, observations and analysis presented in Chapters 2, 3 and 4. At the end of Chapter 4, I showed that semantics associate with structural positions (e.g. Bolinger, 1967; Larson, 1998). In Part A, I adapted Cinque (2010) to my proposal about Japanese mimetic modifiers, and showed that the ordering of the three modifiers of mimetics is supported by Cinque's (2010) work about the syntax of adjectives.

In Part B, I examined both mimetic modifiers and non-mimetic modifiers for the sake of the comparison, and explained how the semantic contrast proposed for mimetic modifiers is observed among non-mimetic modifiers. The crucial idea for the analysis was that semantics associate with structural positions (see 5.6.1, 5.6.2 and 5.6.3 (summary)).

I also provided my understanding of the grammatical properties of accentless and accented mimetics in detail from a perspective of the comparison of mimetics and non-mimetic Japanese words (see 5.6.1, 5.6.2).

Here, I summarise the grammatical properties of the three forms of mimetics:

a.	Head Noun: Concrete Nouns			
	(Noun with physical referent that has no potential to move by itself)			
b.	Situation-Descriptive	Characterizing Property	Defining Property	
c.	M-na	M-sita	M-no	
d.	Condition	Non-Essential Property	Defining Property	
e.	Accentless Mimetic	Accented Mimetic	Accentless Mimetic	
	+natensed copula	+(si)taattributive	+nogen	
f.	Tensed clausal modifier	Tenseless Phrasal	(Relational	
	with T	Modifier	adjective-like)	
		<b>AP</b> /Attributive form		
g.	<sup>OK</sup> Temporal adjunct	*Temporal adjunct	<sup>?</sup> Temporal adjunct	

Table 5.3: The Grammatical Properties and Functions of the Three Prenominal Modifiers with Japanese Mimetics

In this thesis, I examined cases where the head nouns are all concrete nouns. Moreover, I focused on the type of nouns that have physical referents and have no potential to move by themselves (see (a) in the table above). The purpose of setting this linguistic condition was to investigate how M-na can possibly function as a prenominal modifier (cf. Chapter 1 (1.6, 1.7)). The three interpretations shown in (b) the table above are adapted from Roy (2013) to my analysis of mimetic modifiers shown in (c) (cf. Chapter 3). The semantics shown in (d) are paraphrases of those in (b). In addition, it should be noted that I used 'quality' and 'property' interchangeably in this thesis. Most importantly, 'condition/situation-descriptive' is fundamentally different from 'property' in my analysis. To make a point of this, I referred to Milsark (1976) in Chapter 3. I also referred to Ionin and Matushansky (2002) in Chapter 3 (3.4.3.2) and Nikolaeva and Spencer (2013) in Subsection 5.3.2 in order to explain the semantic notion of 'defining property'.

Moving to the other half of Table 5.3, I argued that M-na gives rise to the situation-descriptive reading (i.e. condition: an entity has a quality at a given time) throughout the thesis. I demonstrated that the characteristic of the modifier is its compatibility with temporal modification shown in (g). Given the fact that the tensed adverbial can modify M-na, I claimed that M-na should accompany the functional head T which can host tense (shown in (e) and (f)); such a structure should allow the modifier to be

temporally anchored. I claimed that M-*sita* is the attributive form based on its inability to be the predicative form (cf. Subsections 2.4.2, 5.6.4). In addition, I demonstrated that M-*sita* is tenseless, based on Hamano (1986, 1988, 1998) (cf. Subsection 2.4.2). I have argued that M-*sita* is an AP.

As for the grammatical status of M-no, it is treated as an attributive modifier in Hamano (1998), and there are no suggestions for the distinctions between M-no and M-sita (besides Hamano, 1998, p. 21). In this chapter (in 5.3.1), I showed that M-sita and M-no are not interchangeable. Furthermore, I explained how M-no may differ from M-sita, referring to Spencer (2013) (in 5.3.2). There was no consensus about the grammatical status of no, as in M-no, in the literature. In Sections 5.3 and 5.4, I showed that no, as in M-no, can be marked as either genitive or (tensed) copula.

#### Conclusions

In this final chapter, I provide the summaries and conclusions of the investigation of this thesis. These will be given in Sections 6.1 to 6.3. Based on my conclusions, I highlight further research topics in Section 6.4.

#### 6.1. Summary, Conclusions and Contributions: Prenominal Form of Mimetics

This thesis investigated the grammatical properties and functions of Japanese mimetics when they are used as prenominal modifiers. The thesis examined the three prenominal forms of mimetics, namely M-no, M-sita and M-na. This thesis also aimed to offer a finer understanding of mimetics in their own right.

Firstly, I shall return to the main research questions of this thesis. The main research questions are:

Is M-na grammatical or ungrammatical?

Why is M-na less preferred than M-no, or why is the use of M-na considered ungrammatical?

What are the semantics of M-*na*?

(cf. Chapter 1 (1.6.3))

In this thesis, I demonstrated that M-na is grammatical, contrary to the general trend in the literature. I provided various distributional patterns of M-na as evidence in Chapters 2, 4 and 5. I focused on cases where the head nouns are concrete nouns that refer to immobile objects. I claimed that M-na gives rise to the situation-descriptive reading and that M-na is grammatical, when used in appropriate contexts (cf. Chapter 4). If several options (forms) are available for speakers to use, I argued that the choice might be different depending on the speaker (e.g. their knowledge of the world). I also showed that this phenomenon is not Japanese-specific (cf. Chapter 3).

Secondly, I examined the internal properties of mimetic modifiers. This thesis sheds light on the prosodic properties of bare mimetics. I investigated how prosodic 213

properties of accented mimetics and accentless mimetics affect other grammatical properties based on the findings of previous research. I illustrated how prosody interacts with the semantics of bare mimetics, grammatical markers of mimetics and lexical categories in Chapter 1. In addition, I have offered an account of how word prosody interacts with the different modifier constructions (with *-sita*, *-no* and *-na*) (cf. Subsections 2.4.3, 4.3.7). These points are summarised in the following table:

M-na		$M+na_{\text{TENSED}} \rightarrow [\text{Condition}]$
M-no		Tensed interpretation
(M: accentless mimetics)	Abstract quality	$M+no \rightarrow [Property]$
	1 7	(Defining Property)
M'-sita	Physical concrete property	Tenseless interpretation
(M: accented mimetics)	[Dynamicity]	

Table 6.1: Mimetic Modifiers: Semantics of Mimetics in Relation to their Prosodic Properties

Once again, I treat 'quality' and 'property' as interchangeable in my analysis. Crucially, the pitch accent associates with semantic effects in my analysis of accented and accentless mimetics. The absence of the accent associates with the 'abstract quality', whereas the pitch accent triggers dynamicity and the 'physical concrete property' in the modifier form (of the accented mimetics). It is the grammatical marker *na* that hosts the tensed interpretation (i.e. condition/situation-descriptive reading). *na* can syntactically accommodate T(ense). I conclude that the semantics of 'M-*na* N' is that N has an abstract quality, described by an accentless mimetic, at a given time: for instance, *kusyakusya-na syatu* is a shirt that has a crumpled quality at a given time (cf. Chapter 2 (2.4.3)).

Thirdly, the use of M'-*sita* and M-*no* are widely acknowledged in the literature. However, there are no suggestions in respect to the distinction between M-*sita* and M-*no* except for Hamano (1998, p. 21) (cf. Subsection 1.6.1). In this thesis, I showed that M-*sita* and M-*no* are not necessarily interchangeable when the head nouns are immobile objects (cf. Chapters 4 and 5, e.g. (153), (161) and Subsection 4.3.7). Then, I illustrated the grammatical properties and functions of M-*na* by comparing them to those of M'-*sita* (Chapter 2) and to those of M-*no* (Chapter 4). The summary of the findings of these investigations was given in Chapter 5 (5.8). One of the main claims

of this thesis was that M'-*sita* is a tenseless phrasal modifier (attributive modifier, AP) (cf. Chapters 2, 5).

Finally, I extended the examination to non-mimetic modifiers. For this examination, the main idea was that semantics associate with syntactic positions (cf. Chapter 4). In Japanese, the three mimetic modifiers may enter into a stacking structure. I argued that the order of stacking of the three modifiers is M-na, M-sita, M-no in a hierarchical structure (cf. Chapter 4 (4.6)). To support my claim, I referred to Cinque's (2010) work about the syntax of adjectives in Chapter 5. In Section 5.6, I concluded that the semantic contrast proposed for mimetic modifiers (namely characterizing property, defining property and situation-descriptive reading) is applicable to non-mimetic modifiers. I then highlighted some syntactic issues for the future in 5.6.3.1, 5.6.4.3 and 5.6.6. Furthermore, I argued that accentless mimetics taking -na and -no are similar to non-mimetic words in 5.6.3.2, yet mimetics are not exactly identical to nonmimetic words in the sense that the relationship between a referent and a mimetic word is not arbitrary (cf. Chapter (1.2)). I consider that some grammatical properties of accented mimetics could be mimetic-specific: for instance, I highlighted the fact that accented mimetics primarily express sounds (cf. Chapter 1). In Subsection 5.6.7, I raised the following questions:

Does a sound have a lexical category?

If so, are sounds nouns, adjectives, adverbs or verbs?

My idea was that accented bare mimetics are somewhat verb-like (e.g. (76); Chapters 1, 2 and 5). In Subsection 5.6.5, I also illustrated what lexical categories are unlikely to qualify as accented mimetics. As for further identification of the grammatical properties of accented mimetics with respect to lexical categories, this subject merits further research.

#### **6.2. Summary: Cross-linguistic Comparisons**

In this thesis, I adapted Roy (2013) to my analysis of the semantics of mimetic modifiers in Japanese (see Chapter 3 and Section 5.8). In this section, I provide a summary of the grammatical forms triggering the three semantics (namely situation-descriptive reading, characterizing-property and defining property) cross-

#### lingustically:

Mimetic modifie	The use of grammatical	
	forms in cross-linguistic	
		copular sentences
M-na	Tensed clausal modifier	Russian: Short form
Situation-descriptive	na=tensed COPULA	Spanish: estar (cp. ser)
interpretation		French: Clitic doubling
	( <sup>OK</sup> Temporal adjunct)	of the subject disallowed
M'-sita	Attributive form/AP	Russian and Spanish:
<b>Characterizing-property</b>		Attributive form
(non-essential property)		
interpretation	(*Temporal adjunct)	
M-no	no=GEN	French and Spanish: the
<b>Defining-property</b>		use of (indefinite) article
interpretation		Russian: Long form <sub>NOM</sub>

Table 6.2: Syntactic Structures of Mimetic Modifiers in Relation to Roy (2013)

Firstly, three kinds of semantics are indicated in bold in Table 6.2. The double line after the second row has been chosen to represent Roy's (2013) distinction between the situation-descriptive reading and the other two property interpretations. Secondly, one of Roy's significant claims is that the situation-descriptive reading is grammaticalised in Russian and Spanish (underlined) (Roy, 2013) (cf. Chapter 3). Roy's idea is that the grammatical forms triggering the situation-descriptive reading are syntactically different from the other two forms. In Japanese, I argued that M-na is a tensed clausal modifier, while M-sita is the attributive form, and is tenseless. The third point is that attributive forms trigger a characterizing-property reading in Russian and Spanish. It might be worth mentioning that Long form<sub>INSTR</sub> (for the characterizing-property reading in Russian) is incompatible with the present tense (cf. Chapter 3, fn. 55).

## 6.3. Summary and Conclusions: Japanese Mimetics in Conjunctive-Like Modification

In this section, I summarise the discussion of conjunctive-like modification and

discuss its implications. I addressed this construction type for the identification of the grammatical status of *no*, as in M-*no*, in Chapter 5 (Part A). The distribution is summarised in the table below:

Type A	Type B			
(i) M1-de M2-no <sub>COP</sub> N (cf. 5.4.1)	(i) *M'1-site M2-no <sub>GEN</sub> N (cf. 5.3.3)			
(ii) M1-de M2-na N (cf. 1.7)	(ii) M'1-site M2-na N (cf. 5.3.3)			
(iii) M1-de M'2-sita N (cf. 1.7)	(iii) M'1-site M'2-sita N (cf. 5.3.3)			
Semantically, the frame triggers the conjunctive-like effect.				
Syntactically, we do not know whether the two modifiers have the coordination				
structure in the strict sense that the two XPs are identical.				

*Table 6.3: Two Types of the Conjunctive-Like Modification Frames of Mimetics ≠ [M1 [M2 N]]* 

Firstly, I have claimed that it is *not* the case that M-*na* is ungrammatical or less acceptable (than other forms) by default. It is in fact M-*no* that exhibits more constraints both in stacking structures and conjunctive-like constructions (see Type B (i) in Table 6.3 and see Tables 4.1, 2.1, as well). Moreover, M-*na* also appears in the same environment as M'-*to-sita* (cf. Section 5.7). Regardless of the syntactic analysis of these constructions, I conclude that it would be unfair for -*na* to be judged inferior to -*no* and -*sita* in supporting mimetics prenominally.

Secondly, it has been demonstrated that different syntactic frames trigger different semantics. These two types of constructions are similar in that they do not have stacking structures. However, I have a sense that the semantic effects triggered by each of the A types and the B types are not quite identical. In the above table, I thus classified the conjunctive-like constructions into two subclasses, namely Type A and Type B. The possible differences between the two frames are briefly described in the following syntactic structures, using brackets:

There are cases regarding the grammatical function of -te and -de with non-mimetic words, where te and de are often considered to have the same status (cf. Iida & Sells,

2008). With mimetics though, I do not have strong evidence showing that the constructions involving *te* and *de* yield exactly the same syntactic structure and give rise to exactly the same semantics in this thesis. Descriptively speaking, I feel that [M1-*de* M2-*no* N] is rather different from [M'1-*site* M'2-*sita* N] (see more observations in the next section). The examination of these constructions involving - *te* and -*de* is beyond the domain of this thesis. When it comes to the grammatical status of -*te* and -*de*, various analyses, containing complex predicates, are given in previous research as well as questions as to what the syntactic structure of *te/de* would be (e.g. Iida & Sells, 2008; Iwasaki, 2017; Nakatani, 2016; Nishiyama, 2012; Ohori, 1992; Shibatani, 1990, 2018; Takezawa, 2016). Thus, further syntactic analysis of the constructions shown in Table 6.3 will have to be left for the future.

One motivation of this research was to investigate the grammatical function of M-na. This thesis focused on its grammatical behaviour in stacking structures, and I did not find a case in which M-na functions as an attributive modifier. The next question will be whether M-na ever functions as an attributive modifier. In the next section, I will briefly present some examples of what I call conjunctive-like modification so that we can see the issues more clearly.

#### 6.4. Future Research

In this final section, I suggest further research questions for the future.

# 6.4.1. Discussion (i): Further Considerations on the Frame of [M-de M-na N] and [M'-site M'-sita N] (ii, Type A versus ii, Type B in Table 6.3)

In this subsection, I discuss the constructions that I call conjunctive-like modification. The purpose of the subsection is to state possible research areas for the future. It should be noted that the discussion will move onto syntactic structures which have not been the primary focus of this thesis.

To begin, I present my observations to show why I refer to constructions with *te/de* as conjunctive-like. The basic semantic effect of the constructions involving *te/de* is that the head noun has two qualities. For instance, the examples presented below roughly mean that a/the chicken has two qualities, namely 'fluffy' and 'crispy':

(235) 'a fried chicken with the fluffy quality and the crispy quality'

a. huwahuwa-de sakusaku-na karaage
M1'soft-fluffy' M2 'crispy' deep-fried chicken
b. hu'wahuwa-site sa'kusaku-sita karaage (=(160))

M'1'soft-fluffy' M'2'crispy' deep-fried chicken

Accentless mimetics can link with -de, as shown in (235a). However, my intuition is that the semantics triggered by the frame of [M1-de M2-na N] differ from those of [M1-site M2-sita N]. For instance, I have a strong sense that the two mimetics linked by -de in (235b) are somehow more strongly combined (e.g. a combined quality) than those in (235a). In contrast, it is not so clear whether the two qualities are actually combined by -te. I discuss the [M1-de M2-na N] construction first and then discuss [M'1-site M'2-sita N].

What I mean by a 'combined quality' is explained as follows. It is usually considered that *to* (underlined) is a nominal connector which "requires both conjuncts to be strictly nominal" (Nishiyama, 2012, p. 9). In (236a), there are two referents (i.e. DPs) to which nominal predicates refer, whereas there are **two qualities** to which the accentless mimetic linked with -*de* refers in (236b):<sup>102</sup>

- (236) X1: aizin 'lover', X2: hisyo 'secretary'
  - a. [X1 <u>to</u> X2]: aizin-<u>to</u>-hisyo: two people [2DPs]
    - i) #Ano hito omosiroi yo ne.'That person/he/she is interesting, isn't he/she?'
      - ii) Ano hito tati omosiroi yo ne.
      - 'These people/they are interesting, aren't they?'

There are two people to which the whole sequence *aizin-to-hiryo* refers, i.e. 'a lover <u>and</u> a secretary'.

b. [X1 *de* X2]: aizin-**de**-hisyo [2 qualities]

aizin-de-hisyo refers to two qualities, and the whole sequence cannot refer to two people, namely a lover and a secretary (see also (172),

-

 $<sup>^{102}</sup>$  This may be somewhat similar to the case of French bare nominal predicates: unlike the indefinite variant, bare Ns trigger the characterizing property reading in the copular sentence (cf. Table 3.1)

The implication of the above minimal pair is that the syntactic categories of the coordinated items may differ in cases where they are coordinated by *to* or with *de*.

As shown in (237), accentless mimetics fit in the frame of [X1-de-X2] (as already shown in (235a) and (177)). The semantic effect triggered by the frame is very similar to the semantics explained in (236):

Strikingly, my informants' comments suggest that M-na can also give rise to the attributive reading when -de participates. <sup>104</sup> In the context shown in (237a/b), some people described M-na as "zokusei", which is translated as 'attribute'. How can M-na possibly assign semantics other than 'situation-descriptive'? I have claimed that M-na assigns the situation-descriptive reading (i.e. condition; an entity has a quality at a given time) in stacking structures. Given that the tensed adverbial can modify M-na, I argued that M-na should accompany the functional head T which can host tense. Such a structure allows the modifier to be temporally anchored. How can na support the whole sequence of M1-de M2 and give rise to readings other than the situation-descriptive reading? What is the grammatical function of na in such an environment? The next question will be: what is the syntactic structure of -na that gives rise to the

<sup>103</sup> As well as *na* and *no*, *sita* can also host this syntactic frame (cf. C1 in Section 1.7).

<sup>104</sup> These comments were provided by the informant (2) and another speaker on other occasions to the ones which I fully described in Section 1.7.

-

property reading involving -de?

I have suggested that M1 and M2 could possibly express 'a combined quality' with - de (cf. 236b). I also suggest that the [X1-de X2-na N] construction may associate with predication, including the small clause construction. As for the semantics that we observe in (235b), the property reading could be triggered by the syntactic small clause structure (e.g. Sportiche, Koopman & Stabler, 2014). However, it is not the case that na with non-mimetic words constructs a small clause (cf. Yamakido, 2005), as far as I am concerned. Takezawa (2016) argues that X-de is depictive when X is both a non-mimetic word and a mimetic word. As for the function of -ni and -de, Sells (2017, p. 14, my emphasis) states:

Shibagaki (2013) made a preliminary investigation of other adverbial uses, where the mimetic potentially combines with **non-finite forms of the copula, such as** ni **or** de. These forms typically also combine with an NA or an N, to make **a clausal-internal modifier**. Ni-forms have uses as resultative secondary predicates, and de-forms have uses as depictive secondary predicates. Shibagaki noted that only certain subclasses of mimetics can be used as resultative secondary predicates with ni, and there are no mimetics which seem to be able to function as depictives (with de). Usuki and Akita (2015, p. 117) take up this last point, arguing that depictives should be stative secondary predicates, but that adverbial mimetics are necessarily dynamic.

The [M1-de M2-na N] construction may be an instance where accentless mimetics (which do not have dynamicity) may also function as depictive secondary predicates or what Usuki and Akita (as cited in Sells, 2017, p. 14) call "stative secondary predicates".

Returning to the constructions involving -te (i.e. Type B in Table 6.3), the translation would be something like 'soft and crispy chicken' for the example presented in (235b)

-

Takezawa (2016, p. 483) treats ni as the infinitive form of the copula and de as a postposition.

with the structure as in (238):

(238) M'site M'sita N (cf. (234b); Table 6.3, Type B, iii) 
$$[V-_{GER}]_{XP} \quad [M'sita]_{AP}$$

Descriptively speaking, it is not certain whether the coordinator actually intervenes between the two modifiers (cp. (166), (237)). However, at the same time, M'-site does not scope over M'-sita, either. From a semantic viewpoint, the structure described in (246) yields the meaning that the head noun has both properties/qualities, namely M'site and M'sita, but I do not neccesarily feel that 'M'site M'sita' gives rise to a combined quality interpretation in the sense that 'M-de M-na' and 'M-de M-no' may do.

The root of each of the modifiers includes the accented mimetic, so the two modifiers may be close enough to participate in a coordination structure in a strict sense. I will label the modifier M'-site as XP and leave further investigation for the future (see (238)). In addition, what I would be interested in is identifying the syntactic structure of the B type (the conjunctive-like construction with -te presented above) in relation to the conjunctive construction of non-mimetic genuine adjectives. The question would be how different – or not – the syntactic structure of the conjunctive-like modification in which the accented mimetics participate would be from that of non-mimetic words.

### 6.4.2. Discussion (ii): The Implication of the Pause Insertion

Finally, I discuss the use of a pause and suggest some future research topics. The construction that I discuss is once again a stacking structure.

Watanabe (2012) presents cases where the outer modifiers accompany a pause. Strikingly, his data suggest that with a pause, the *no*-marked modifier can be an outer modifier of the *na*-marked modifier:<sup>106</sup>

\_

<sup>&</sup>lt;sup>106</sup> For the sake of consistency, I have added a hyphen to the na-marked modifier (e.g.  $chiisana \rightarrow tiisa-na$ ). The romanization in Watanabe's data (2012) has been changed. In Watanabe (2017) no is treated as a linker, and further investigation is beyond the scope of this thesis (there is no reason stated for the change in Watanabe (2017)).

```
'a small wooden case'
(239)
             tiisa-na
                           ki-no
                                        kabin
       a.
             small
                           wood-GEN
                                        vase
             ??ki-no
       b.
                           tiisa-na
                                        kabin
              wood-GEN
                          small
                                        vase
             ki-no,
                           tiisa-na
                                        kabin
       c.
              wood-GEN
                          small
                                        vase
                     (Watanabe, 2012, p. 507, (14a), (14b), (16a), my emphasis)
(240)
              'a small Chinese vase'
       a.
             tiisa-na
                               tyuugoku-no
                                               kabin
             small
                               china-GEN
                                               vase
             ??tyuugoku-no
                               tiisa-na
       b.
                                               kabin
             china-GEN
                               small
                                               vase
             tyuugoku-no,
                               tiisa-na
                                               kabin
       c.
              china-GEN
                               small
                                               vase
```

As we have seen, N.M-no is low in acceptability if it contains the genitive marker no and is forced to appear in a higher position (than the original position) as the outer modifier. The no-marked modifier strictly requires the pause to precede N.M-na, as shown in (239c) and (240c) (compare with (239b) and (240b)). I emphasise that this phenomenon is exactly the same as the one we observed in the case of mimetics. M-no accompanies a pause with M'-sita:

(Watanabe, 2012, p. 507, (15a), (15b), (16b))

(241)		Pause Insertion			
	a.	M-no,	[M'-sita] <sub>AP</sub>	N	(cf. (169b/c))
	b.	N.M-no,	N.M-na	N	(cf. (239b/c), (240b/c))

The subtle (but significant) distinction between the non-mimetic modifiers and mimetics is in the forms of the inner modifiers. Non-mimetic words take -na, whereas the form of mimetics is M'-sita, which I claim is an attributive form. In other words, what follows the pause is the attributive modifier in the case of mimetic modifiers.

In fact, when the accentless mimetic is marked with the genitive and is forced to

appear in a relatively high position, this environment results in ungrammaticality:

(242) a. \*M-no M-na N (cf. Table 2.1)  
b. \*[M-no<sub>GEN</sub>] [[M-na]<sub>TP</sub> 
$$<$$
t> N]

If (242b) were correct, in which M-*no* has been fronted from the position marked by <t>, the question would be what the grammatical status of the two modifiers of non-mimetic words is in (242b). As for the grammatical status of M-*no* with a pause in (241a) (see Table 5.1), the copular *no* is available for accentless mimetics (cf. Section 5.4). It is possible to consider the M-*no* as a relative clause headed by the copula.

Based on Watanabe (2012), Watanabe (2017) discusses the possible syntactic effects of phonological phenomena, namely lowering of pitch (e.g. phrasal phonology), among non-mimetic modifiers. Larson and Takahashi (2007) also observe pause insertion and discuss its possible effects (e.g. the ordering restriction on TP modifiers appears to be cancelled), but unfortunately they do not present examples for these cases. In the case of mimetics, a similar phenomenon is observed (see also my observation on one case of non-mimetic words in (176)) as shown in (241a). As Watanabe (2017) states, it may be worth planning a formal experiment, first, in order to confirm whether or not pitch lowers, and second to consider the possible syntactic effect of pause insertion in multiple modification (if it is confirmed).

## **Abbreviations**

A adjective
ACC accusative
ADV adverb

AP adjectival phrase
AN adjectival noun

ATT attributive COP copula

CP complementizer phrase

C/V consonant/vowel

DAT dative
FEM feminine
GEN genitive
GER gerund
H/L high/low

INSTR instrumental

LF/SF long form/short form

M/MIM mimetic

MSC masculine

NEG negative

NEUT neuter

N noun

NA nominal adjective

N.M non-mimeticNOM nominativeNP noun phrase

PL plural

PP prepositional phrase

PRE COP prenominal form of the copula

PRED predicative

PRES present

PST past

SG singular

T tense

3SG third person singular

TOP topic

TP tense phrase

V verb

VP verb phrase

\* ungrammatical

# unacceptable

? questionable acceptability

### References

- Akita, K. (2009). A grammar of sound-symbolic words in Japanese: Theoretical approaches to iconic and lexical properties of mimetics. Doctoral dissertation. Kobe University.
- Akita, K. (2010). Gradient integration of sound symbolism in language: Toward a crosslinguistic generalization. In Y. Takubo (Ed.), *Japanese Korean Linguistics*, vol. 17 (pp. 217-230). Stanford: CSLI Publications.
- Akita, K. (2017). Grammatical and functional properties of mimetics in Japanese. In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics:*\*Perspectives from structure, acquisition, and translation (pp. 20-34). New York: Routledge Studies in East Asian Linguistics.
- Akita, K. & Tsujimura, N. (2016). Mimetics. In T. Kageyama & H. Kishimoto (Eds.), Handbook of Japanese lexicon and word formation (pp. 133-160). Boston/Berlin: De Gruyter Mouton.
- Alpher, B. (2001). Ideophones in interaction with intonation and the expression of new information in some indigenous languages of Australia. In F. K. E. Voeltz, & C. K. Hatz (Eds.) *Ideophones* (pp. 9-24). Amsterdam: Blackwell Publishing.
- Aoki, H. (1994). Symbolism in Nez Perce. In J. J. Ohala, L. Hinton & J. Nichols (Eds.), *Sound symbolism* (pp. 15-22). Cambridge: Cambridge University Press.
- Asano, T. (Ed.). (1978). *Kionggo/gitaigo jiten* [Dictionary of Mimetics]. Tokyo: Kadokawa.
- Babby, L. H. (1973). The deep structure of adjectives and participles in Russian. Language, 49(2), 349-360.

- Babby, L. H. (1975). *A transformational grammar of Russian adjectives*. Netherlands: Mouton.
- Beck, D. (2007). What to do with the ideophones? A problem in lexical classification from upper Necaxa Totonac. In L. Wanner (Ed.), *Selected lexical and grammatical issues in the meaning-text theory* (pp.1-41). Amsterdam: John Benjamins.
- Bodomo, A. (2006). The structure of ideophones in African and Asian languages: The case of Dagaare and Cantonese. In J. P. Hutchison & D. A. Worman (Eds.), Selected Proceedings of the 35th Annual Conference on African Linguistics: African Languages and Linguistics in Broad Perspectives (pp. 203-213). Somerville, MA: Cascadilla Proceedings Project.
- Bolinger, D. (1967). Adjectives in English: Attribution and predication. *Lingua*, 18, 1-34.
- Borras, F. M. & Christian, R. F. (1971). *Russian syntax: Aspect of modern Russian syntax and vocabulary* (2nd ed.). Oxford: Oxford University Press.
- Carlson, G. (1977). *Reference to kinds in English*. Doctoral dissertation. University of Massachusetts Amherst.
- Chierchia, G. (1995). Individual-level predicates as inherent generics. In G. N. Carlson & F. J. Pelletier (Eds.), *Generic book*. Chicago: University of Chicago Press.
- Cinque, G. (2010). *The syntax of adjectives: A comparative study*. Cambridge and London: The MIT Press.
- Doke, C. M. (1935). *Bantu linguistic terminology*. London: Longmans, Green.
- Frellesvig, B. (1998). Accent, word tone and metatony in central Japanese. *Onin Kenkyuu* [Phonological Studies], 1, 195-202.

- Frellesvig, B. (2010). *A history of the Japanese language*. Cambridge: Cambridge University Press.
- Halle, M. & Matushansky, O. (2006). The Morphophonology of Russian adjectival inflection. *Linguistic Inquiry*, vol. 7, no. 3, summer, 351-404.
- Haraguchi, S. (1999). Accent. In N. Tsujimura (Ed.), *The handbook of Japanese linguistics* (pp. 1-30). Oxford: Blackwell Publishers.
- Hamano, S. (1986). *The sound-symbolic system of Japanese*. Doctoral dissertation. University of Florida.
- Hamano, S. (1988). The syntax of mimetic words and iconicity. *The Journal of the Association of Teachers of Japanese*, 22/2, 135-149.
- Hamano, S. (1998). *The sound-symbolic system of Japanese*. Stanford and Tokyo: CSLI Publications and Kuroshio Publishers.
- Heine, B. (1997). *Possession. cognitive sources, forces, and grammaticalization*. Cambridge: Cambridge University Press.
- Hinton, L., Nichols, J. & Ohala, J. J. (1994). *Sound symbolism*. Cambridge: Cambridge University Press.
- Igarashi, Y. (2018). Intonation. In Y. Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 181-201). Cambridge: Cambridge University Press.
- Iida, M. & Sells, P. (2008). Mismatches between morphology and syntax in Japanese complex predicates. *Lingua*, 118, 947-968.
- Ike-uchi, M. (2003). *Predication and modification A minimalist approach*. Tokyo: Liber Press.
- Ionin, T. & Matushansky, O. (2002). Encasing the time: Temporal effects on Russian predicative case. Unpublished paper presented at the 33th of meeting of the

- North East Linguistics Society (NELS 33), November 8-10. Massachusetts Institute of Technology, USA.
- Iwasaki, N. (2017). Use of mimetics in Motion event descriptions by English and Korean learners of L2 Japanese: Does language typology make a difference? In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics: Perspectives from structure, acquisition, and translation* (pp. 193-218). New York: Routledge Studies in East Asian Linguistics.
- Jacobsen, W. M. (2018). Tense and aspect. In Y. Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 332-356). Cambridge: Cambridge University Press.
- Kageyama, T. (2007). Explorations in the conceptual semantics of mimetic verbs. In B. Frellesvig, M. Shibatani & J. C. Smith (Eds.), *Current issues in the history and structure of Japanese* (pp. 27-82). Tokyo: Kuroshio.
- Kageyama, T. (2018). Events and properties in morphology and syntax. In Y.Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 222-246). Cambridge: Cambridge University Press.
- Kageyama, T. & Kishimoto, H. (Eds.). (2016). *Handbook of Japanese lexicon and word formation*. Boston/Berlin: Walter de Gruyter (Mouton).
- Kakehi H., Tamori I. & Schourup L. (1996a). In W. Winter & R. A. Rhodes (Eds.), Dictionary of iconic expressions in Japanese A-J. Berlin/New York: Mouton de Gruyter.
- Kakehi H., Tamori I. & Schourup L. (1996b). In W. Winter & R. A. Rhodes (Eds.), Dictionary of iconic expressions in Japanese K-Z. Berlin/New York: Mouton de Gruyter.
- Kamiya, M. (2015a). The Categorisation and distribution of Japanese mimetics.

  Unpublished paper presented at the 10th Newcastle upon Tyne Postgraduate

- Conference in Linguistics, March 20. University of Newcastle, UK.
- Kamiya, M. (2015b). Categorisation and distribution of Japanese mimetics: Japanese mimetics as prenominal modifiers: *sita* as an attributive marker. Unpublished paper submitted to the Department of Language and Linguistic Science for Confirmation of Enrolment. University of York, UK.
- Kamiya, M. (2016a). Japanese mimetics as prenominal modifiers: The case of tenseless *sita*. Unpublished paper presented at the East Asian Linguistic Seminar, March 1. University of Oxford, UK.
- Kamiya, M. (2016b). Non-tensed attributive modifiers in Japanese. Unpublished paper presented at the 12th Workshop on the Altaic Formal Linguistics (WAFL 12), May 12-15. University of Central Connecticut, USA.
- Kamiya, M. (2016c). The Japanese mimetics as prenominal modifiers: The implication of the distribution of stative mimetics. Unpublished paper (poster) presented at National Institute for Japanese Language and Linguistics (NINJAL) International Symposium, December 17-18. NINJAL, Japan.
- Kamiya, M. (2017a). The implication of the three prenominal forms of Japanese mimetics. Unpublished paper presented at the Linguistics Association of Great Britain (LAGB) Annual Meeting 2017, September 5-7. University of Kent.
- Kamiya, M. (2017b). Non-tensed attributive modifiers in Japanese: Japanese mimetics as prenominal modifiers. In L. Zidani-Eroglu, M. Ciscel & E. Koulidobrova (Eds.), *Proceedings of the 12th Workshop on Atlantic Formal Linguistics (WAFL12), MIT Working Papers in Linguistics*, vol. 83 (pp. 139-149). Cambridge, MA: MITWPL.
- Kawahara, S. (2015). The phonetics of *sokuon*, or geminate obstruents. In H. Kubozono (Ed.), *Handbook of Japanese phonetics and phonology* (pp. 43-77). Berlin/Boston/Munich: Walter de Gruyter.

- Kim, K. (1977). Sound symbolism in Korean. Journal of Linguistics, 13(1), 67-75.
- Kindaichi, H. (1950). Kokugo dooshi no ichi-bunrui [A classification of Japanese verbs]. *Gengo Kenkyuu*, 15, 48-63.
- Kindaichi, H. (1955). Nihongo dooshi no tensu to asupekuto [Tense and aspect of Japanese Verbs]. Nagoya Daigaku Bungakubu Kenkyuu Ronbunshuu, 4, 63-90.
- Kindaichi, H. (1978). Giongo/gitaigo gaisetsu [Overview of mimetic words]. In T. Asano (Ed.), *Giongo/gitaigo jiten* [Dictionary of mimetics] (pp. 3-25). Tokyo: Tadokawa.
- Kita, S. (1997). Two-dimensional semantic analysis of Japanese mimetics. *Linguistics*, 35, 379-415.
- Kita, S. (2008). World-view of protolanguage speakers as inferred from semantics of sound symbolic words: A case of Japanese mimetics. In N. Masataka (Ed.), *The origins of language: Unraveling evolutionary forces* (pp. 25-38). Tokyo: Springer.
- Kitagawa, C. & Ross, C. (1982). Prenominal Modification in Chinese and Japanese. *Linguistic Analysis*, 9, 19-53.
- Krasovitsky, A., Long, A., Baerman, M., Brown, D. & Corbett, G. G. (2008). Predicate nouns in Russian. *Russian Linguistics*, 32, 99-113.
- Kratzer, A. (1995). Stage-level and individual-level predicates. In G. N. Carlson & F.J. Pelletier (Eds.), *Generic book* (pp. 125-175). Chicago: University of Chicago Press.
- Kratzer, A. (1988). Stage-level and individual-level predicates. In M. Krifka (Ed.), *Genericity in natural language* (pp. 247-284). University of Tübingen.
- Kubozono, H. (1999). Mora and Syllable. In N. Tsujimura (Ed.), *The handbook of* 232

- *Japanese linguistics* (pp. 31-61). Oxford: Blackwell Publishers.
- Kubozono, H. (2015). Introduction to Japanese phonetics and phonology. In H.Kubozono (Ed.), *Handbook of Japanese phonetics and phonology* (pp. 1-40).Berlin/Boston/Munich: Walter de Gruyter.
- Kubozono, H. (2018). Pitch accent. In Y. Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 154-180). Cambridge: Cambridge University Press.
- Kusumoto, K. (1999). *Tense in embedded contexts*. Doctoral dissertation. University of Massachusetts Amherst.
- Kusumoto, K. (2001). The semantics of non-past -ta in Japanese. In M. C. Cuervo (Ed.), Formal Approaches to Japanese Linguistics, 3 (pp.163-180). Cambridge, MA: Department of Linguistics and Philosophy, Massachusetts Institute of Technology, USA.
- Kusumoto, K. (2003). The semantics of *-teiru* in Japanese. In P. M. Clancy (Ed.), *Japanese Korean Linguistics*, vol. 11 (pp. 367-380). Stanford: CSLI Publications.
- Ladefoged, P. (2006). A course in phonetics (5th ed.). London: Thomson.
- Larson, R. (1998). Events and Modification in Nominals. In D. Strolovitch & A.Lawson (Eds.), *Proceedings from Semantics and Linguistic Theory* (SATL)VIII. Ithaca: Cornell University.
- Larson, R. & Takahashi N. (2007). Order and interpretation in prenominal relative clauses. In M. Kelepir & B. Ozturk (Eds.), *Proceedings of the Workshop on Atlantic Formal Linguistics II, MIT Working Papers in Linguistics*, vol. 54 (pp. 101-120). Cambridge, MA: MITPL.
- Martin, S. E. (1975). *A reference grammar of Japanese*. New Haven: Yale University Press.

- Matsumoto, Y. (2018). Clausal noun modification. In Y. Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 463-484). Cambridge: Cambridge University Press.
- Matushansky, O. (2000). The instrument of inversion: instrumental case in the Russian copula. In R. Billerey & B. Lillehaugen (Eds.), *Proceedings of the 19th West Coast Conference on Formal Linguistics (WCCFL19)* (pp. 101-115). Somerville, MA: Cascadilla Press.
- Matushansky, O. (2008). On the attributive nature of superlatives. *Syntax*, 11:1, April 2008, 26-90.
- Milsark, G. L. (1976). *Existential sentences in English*. Doctoral dissertation. Temple University.
- Miyagawa, S. (2011). Genitive subjects in Altaic and specification of phase. *Lingua*, 121, 1265-1282.
- Morita, C. (2013). The morphology and interpretations of gradable adjectives in Japanese. *English Linguistics*, 30, 243-268.
- Morzycki, M. (2016). *Modification*. Cambridge: Cambridge University Press.
- Murasugi, K. (1991). Noun phrases in Japanese and English: A study in syntax, learnability and acquisition. Doctoral dissertation. University of Connecticut.
- Murasugi, K. (2017). Mimetics as Japanese root infinitive analogues. In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics: Perspective from structure, acquisition, and translation* (pp. 131-147). New York: Routledge Studies in East Asian Linguistics.
- Murasugi, K. & Nakatani, T. (2013). Three pieces of acquisition evidence for the v-VP frame. *Nanzan Linguistics*, 1, 1-19.
- Musan, R. (1995). On the temporal interpretation of noun phrases. Doctoral 234

- dissertation. Massachusetts Institute of Technology.
- Nagano, A. (2016). Are relational adjectives possible cross-linguistically? The case of Japanese. *Word Structure*, 9.1, 42-71.
- Nagashima, Y. (1976). Fukugoo-dooshi-no koozoo [The structure of compound verbs]. In T. Suzuki (Ed.), *Nihongo kooza* 4: *Nihongo no goi to hyoogen* (pp. 63-104). Tokyo: Taishuukan.
- Nakatani, K. (2016). Complex predicates with *-te* gerundive verbs. In T. Kageyama & H. Kishimoto (Eds.), *Handbook of Japanese lexicon and word formation* (pp. 387-424). Boston/Berlin: Walter de Gruyter (Mouton).
- Nasu, A. (2015). The phonological lexicon and mimetic phonology. In H. Kubozono (Ed.), *Handbook of Japanese phonetics and phonology* (pp. 253-288). Berlin/Boston/Munich: Walter de Gruyter.
- Nichols, J. (1981). Predicate nominals. A partial surface syntax of Russian. *University* of California Publications in Linguistics, 97. Berkeley: University of California Press.
- Nikolaeva, I. & Spencer, A. (2013). Possession and modification A perspective from canonical typology. In D. Brown, M. Chumakina & G. G. Corbett (Eds.), *Canonical morphology and syntax* (pp. 66-98). Oxford: Oxford University Press.
- Nishiyama, K. (1999). Adjectives and the copulas in Japanese. *Journal of East Asian Linguistics*, 8, 183-222.
- Nishiyama, K. (2012). Japanese verbal morphology in coordination. Unpublished paper presented at Workshop on Suspended Affixation, October 26-27. Cornell University.
- Nuckolls, J. B. (1996). Sounds like life: Sound-symbolic grammar, performance, and cognition. New York: Oxford University Press.

- Nuckolls, J. B. (1999). The case for sound symbolism. *Annual Review of Anthropology*, 28, 225-252.
- Ogihara, T. (1996). *Tense*, attitude, and scope. Netherlands: Kluwer Academic Publishers.
- Ogihara, T. (1998). The ambiguity of the *-teiru* form in Japanese. *Journal of East Asian Linguistics*, 7, 87-120.
- Ogihara, T. (2004). Adjectival relatives. Linguistics and Philosophy, 27, 557-608.
- Ogihara, T. (2015). Relative tense in relative clauses. *Journal of Japanese Linguistics*, vol. 31, 33-56.
- Ohori, T. (1992). *Diachrony in clause linkage and related issues*. Doctoral dissertation, University of California, Berkeley. USA.
- Ono, M. (ed.) (2007). *Giongo/gitaigo 4500 Nihongo onomatope jiten* [Dictionary of Mimetics 4500]. Tokyo: Shoogakkan.
- Otoguro, R. (2015). Tense morphology and argument structure alternations: An analysis of prenominal modifiers in Japanese. Unpublished paper presented at the Linguistics Association of Great Britain (LAGB) Annual Meeting 2015, September 16-18. University College London.
- Park, C. B. (2009). Vowel harmony as anti-faithfulness effect: Implication from nonconcatenative morphology in Korean ideophones. In Y. Takubo (Ed.), *Japanese Korean Linguistics*, vol.16. (pp. 217-231). Stanford: CSLI Publications.
- Røed, R. M. (1966). Zwei Studien über den prädikativen Instrumental im Russischen (Avhandlinger utgitt av Det Norske Videnskaps-Akademi i Oslo. II: Hist.-Filos. Klasse. NY Serie, 12). Oslo: Universitetsforlaget.
- Roy, A. I. (2013). Non-verbal predication: Copular sentences at the syntax-semantics 236

- interface. Oxford: Oxford University Press.
- Saito, H. (2018). Grammaticalization as decategorization. Unpublished paper presented at the 20th Diachronic Generative Syntax Conference (DiGS20), June 16-21. University of York.
- Sawada, H. (1993). *Siten to syukansei: Nitieigo zyodoosi no bunseki* [View and subjectivity: the analysis of modal verbs in Japanese and English]. Tokyo: Hituji Syoboo.
- Schmitt, C. (1992). *Ser* and *estar*: A matter of aspect. In K. Broderick (Ed.), *Proceedings of the 22<sup>nd</sup> meeting of the North East Linguistics Society* 22 (*NELS 22*) (pp. 411-425). Amherst: University of Massachusetts, GLSA Publications.
- Sells, P. (2017). The significance of the grammatical study of Japanese mimetics. In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics:*\*Perspective from structure, acquisition, and translation (pp. 7-19). New York:

  Routledge Studies in East Asian Linguistics.
- Shibagaki, R. (2013). *Analysing secondary predication in East Asian language*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Shibatani, M. (1990). *The languages of Japan*. Cambridge: Cambridge University Press.
- Shibatani, M. (2018). Nominalization. In Y. Hasegawa (Ed.), *The Cambridge handbook of Japanese linguistics* (pp. 432-462). Cambridge: Cambridge University Press.
- Shibatani, M. & Kageyama, T. (2017). Introduction to the handbook of Japanese language and linguistics. In M. Shibatani, S. Miyagawa & H. Noda (Eds.), *Handbook of Japanese syntax* (pp. vii-xxxiii). Boston/Berlin: Walter de Gruyter.
- Siegel, E. M. (1976a). *Capturing the adjective*. Doctoral dissertation. University of 237

- Massachusetts Amherst.
- Siegel, E. M. (1976b). Capturing the Russian adjective. In B. H. Partee (Ed.), *Montague grammar* (pp. 293-309). New York: Academic Press.
- Sportiche, D., Koopman, H. & Stabler, E. (2014). *An introduction to syntactic analysis and theory*. Oxford: Wiley Blackwell.
- Spencer, A. (2019). Participles. Departmental Colloquium, May 8. The Department of Language and Linguistic Science. York: University of York.
- Takezawa, K. (2016). Inflection. In T. Kageyama & H. Kishimoto (Eds.), *Handbook of Japanese lexicon and word formation* (pp. 459-487). Boston/Berlin: Walter de Gruyter (Mouton).
- Tamori, I. & Schourup, L. (1999). Onomatope [Onomatopoeia]. Tokyo: Kuroshio.
- Teramura, H. (1984). *Nihongo no sintakkusu to imi* 2 [Japanese Syntax and Semantics]. Tokyo: Kuroshio Publisher.
- Timberlake, A. (1986). The semantics of case in Russian predicate complements. Russian Linguistics, 10, 137-165.
- Timberlake, A. (2004). A reference grammar of Russian. Cambridge University Press.
- Toratani, K. (2006). On the optionality of *to*-marking on reduplicated mimetics in Japanese. In T. J. Vance & K. Jones (Eds.), *Japanese Korean Linguistics*, 14 (pp. 415-422). Stanford: CSLI Publications.
- Toratani, K. (2017). The position of *to*/φmarked mimetics in Japanese sentence structure. In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics: Perspective from structure, acquisition, and translation* (pp. 35-72). New York: Routledge Studies in East Asian Linguistics.
- Toratani, K. (2018). Semantics and Morphosyntax of Mimetics. In Y. Hasegawa (Ed.),

- The Cambridge handbook of Japanese linguistics (pp. 202-221). Cambridge: Cambridge University Press.
- Tsujimura, N. (2001). Revisiting the two-dimensional approach to mimetics: A reply to Kita (1997). *Linguistics*, 39, 409-418.
- Tsujimura, N. (2007). *An introduction to Japanese linguistics* (2nd ed.). Oxford: Blackwell Publishing.
- Tsujimura, N. (2017). How flexible should the grammar of mimetics be? A view from Japanese poetry. In N. Iwasaki, P. Sells & K. Akita (Eds.), *The grammar of Japanese mimetics: Perspective from structure, acquisition, and translation* (pp. 103-128). New York: Routledge Studies in East Asian Linguistics.
- Tsujioka, T. (2002). *The syntax of possession in Japanese*. New York and London: Routledge.
- Tsunoda, T. (1996). The possession cline in Japanese and other languages. In H. Chappell & A. William (Eds.), *The grammar of inalienability: A typological perspective on body part terms and the part-whole relation* (pp. 565-630). Berlin: M. de Gruyter.
- Uehara, S. (1998). Syntactic categories in Japanese: a cognitive and typological introduction. Tokyo: Kuroshio Publishers.
- Valenzuela, E., Iverson, M., Rothman, J., Borg, K., Pascual, D. & Pinto, M. (2015).
  Eventive and stative passives and copula selection in Canadian and American heritage speaker Spanish. In I. Pérez-Jiménez, M. Leonetti & S. Gumiel-Molina (Eds.), New perspectives on the study of ser and ester (pp. 267-291).
  Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Vance, T. (1987). An introduction to Japanese phonology. Albany: State University of New York Press.
- Wade, T. (1992). A Comprehensive Russian grammar. Cambridge: Blackwell 239

Publishers.

- Watanabe, A. (2012). Direct modification in Japanese. *Linguistic Inquiry*, vol. 43, no 3, 504-513.
- Watanabe, A. (2017). Attributive modification. In M. Shibatani, S. Miyagawa & H. Noda (Eds.), *Handbook of Japanese syntax* (pp. 783-806). Boston/Berlin: Walter de Gruyter.
- Wells, J. C. (2006). *English intonation: An introduction*. Cambridge: Cambridge University Press.
- Yamaguchi, M. (ed) (2003). *Kurashi no kotoba gion/gitaigo jiten* [Dictionary of Mimetics]. Tokyo: Koodansya.
- Yamakido, H. (2000). Japanese attributive adjectives are not (all) relative clauses. In R. Billerey & B. D. Lillehaugen (Eds.), *Proceedings of the 19th West Coast Conference on Formal Linguistics* (pp. 588-602).
- Yamakido, H. (2005). *The nature of adjectival inflection in Japanese*. Doctoral dissertation. Stony Brook University.
- Yip, M. (2002). *Tone*. Cambridge: Cambridge University Press.