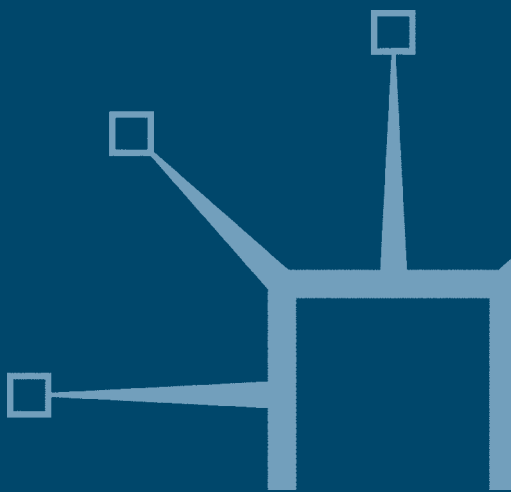
palgrave
macmillan

# The Japanese Copula

## Forms and Functions

Tomiko Narahara



The Japanese Copula

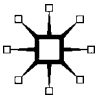
*This page intentionally left blank*

# The Japanese Copula

## Forms and Functions

Tomiko Narahara

palgrave
macmillan





First published 2002 by
PALGRAVE MACMILLAN
Houndmills, Basingstoke, Hampshire RG21 6XS and
175 Fifth Avenue, New York, N.Y. 10010
Companies and representatives throughout the world

PALGRAVE MACMILLAN is the global academic imprint of the Palgrave Macmillan division of St. Martin's Press, LLC and of Palgrave Macmillan Ltd. Macmillan® is a registered trademark in the United States, United Kingdom and other countries. Palgrave is a registered trademark in the European Union and other countries.

ISBN 0–333–96920–0

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

A catalogue record for this book is available from the British Library.

10 9 8 7 6 5 4 3 2 1
11 10 09 08 07 06 05 04 03 02

Printed and bound in Great Britain by
Antony Rowe Ltd, Chippenham and Eastbourne

# Contents

# Acknowledgements

I would like to thank sincerely those who offered constructive comments on earlier drafts of this book: Professor Pegatha Thomas, Professor Wako Tawa, Professor Akio Kamio, Professor Wallace Chafe, and three anonymous reviewers. I am deeply indebted to Professor Kenichi Takami, who read the original manuscript and provided constructive and encouraging comments.

My sincere thanks also go to my mentor, Professor Susumu Kuno, for his expressions of encouragement and confidence, giving me the inspiration to take up this project. He taught me everything I know about how to approach language phenomena and how to treat data. I hope this book will in some small way serve as a symbol of my gratitude.

I would also like to note that the constant moral support from my colleagues at the University of California, Santa Barbara, during the writing of this book helped preserve my energy and determination to complete it. I express my deepest gratitude to Kate Saltzman-Li, Haruko Iwasaki, Sabine Fruhstuck, John Nathan, Allan Grapard, Sharon Yu, Hiroko Sugawara, Chikako Shinagawa, June Darby and Eliane Lebeck.

Last, but not least, I thank my husband Paul Ryack from the bottom of my heart for helping maintain a perfect environment in which to write this book. I lovingly dedicate this book to him.

## Postscript

As this book went to press, I was deeply saddened by the untimely death of Professor Akio Kamio. I will miss his guidance and encouragement. I wish I could have shown this book to him.

# List of Abbreviations

| | |
|---|---|
| A | adjectival categorial marker |
| ACC | accusative |
| AFF | affirmative |
| AST | assertive |
| CNTR | contrastive |
| COND | conditional |
| CONJ | conjunctive |
| CONJEC | conjectural |
| CONS | concessive |
| CONT | continuitive |
| COP | copula |
| DES | desiderative |
| DIST | distributive |
| EMPH | emphatic |
| EXC | exclamative |
| EXST | existential |
| GEN | genitive |
| GER | gerund |
| Infl | inflection |
| IP | inflectional phrase |
| IRL | irrealis |
| LOC | locative |
| NEG | negative |
| NOM | nominative |
| NP | noun phrase |
| NPS | non-past |
| OBL | obligatory |
| PN | pre-nominal form |
| POL | polite |
| POT | potential |
| PS | past |
| Q | question |
| RLS | realis |
| S | sentence |

| | |
|---|---|
| SE | sentence end |
| TOP | topic |
| V | verbal categorial marker |

## Symbols

| | |
|---|---|
| ↘ | falling intonation |
| ` | falling intonation |
| ´ | rising intonation |

# Part I
# The Concept of the Copula

*This page intentionally left blank*

# 1
# Introduction to the Japanese Copula

## 1 Basic forms and functions

The term 'Japanese copula' in this book is a label for the category that typically occurs with predicative nominals and adjectival nominals in nominal sentences. *Da* and *datta* in the following sentences are inflectional forms of one of the Japanese copulas. *Datta* contains the past tense morpheme *-ta*, which is glossed PS in the following examples.

(1)a. kore wa hen *da*
this TOP strange COP
'This is strange.'

b. kinoo wa Yuuta no tanzyoobi *datta*
yesterday TOP Yuuta GEN birthday COP-PS
'Yesterday was Yuuta's birthday.'

A comparison of the nominal sentences in (1) with the adjectival and verbal sentences in (2) immediately reveals the basic function of the copula.

(2)a. kinoo wa samukat*ta*
yesterday TOP cold-PS
'Yesterday was cold.'

b. kinoo eiga o mi*ta*
yesterday movie ACC see-PS
'I saw a movie yesterday.'

The adjective and verb express past temporal reference by encoding the past tense morpheme *-ta* in their inflected forms. Neither the adjectival nominal *hen* 'strange' nor the nominal *tanzyoobi* 'birthday' can encode the grammatical morpheme. The copula provides the tense features for them by encoding the morpheme in its form. Tense is not the only feature that the copula supplies for its host predicates. The polite form and the negative form provide the polite feature and the negative feature by the morphemes *-es-* and *na-* respectively, as shown in the following examples:

(3)a. kyoo wa doyoobi d*es*u
today TOP Saturday COP-POL
'Today is Saturday.'

b. kore wa nihon no kuruma zya*na*i.
this TOP Japanese car COP-NEG
'This is not a Japanese car.'

The copula's inflectional form also marks a syntactic relation that the host predicative nominal has with other elements within the sentence. For instance, an adverbial form *de* marks its conjunctive relation with another predicate or clause as in (4a), and another adverbial form *ni* marks the formation of a verbal constituent with a verb as in (4b):

(4)a. Tibi wa zassyu *de* nanasai desu.
Tibi TOP mutt COP-ADV seven years old COP-POL
'Tibi is a mutt and (he) is seven years old.'

b. Tibi wa koinu *ni* mieru
Tibi TOP puppy COP-ADV look
'Tibi looks like a puppy.'

Pre-nominal forms of copula signify a modifying relation with a noun. In the following examples, the pre-nominal form *no* in (5b) indicates that the predicative nominal modifies the following noun, and *na* in (5c) indicates that the adjectival nominal modifies the noun that follows:

(5)a. Tanaka-si wa bengosi *da*
Tanaka-Mr. TOP lawyer COP
'Mr. Tanka is a lawyer.'

b. bengosi *no* tanaka-si
lawyer COP Tanaka-Mr.
'Mr. Tanaka, (who) is a lawyer.'

c. sizuka *na* heya
quiet COP room
'A quiet room/a room that is quiet.'

A non-exhaustive inventory of basic forms of the modern copula is given in the following:

(6) **Japanese copula inflection**

| *Plain forms* | *Gloss* |
|---|---|
| *da* | 'is' |
| *no* | 'is' |
| *na* | 'is' |
| *datta* | 'was' |
| *zyanai*/*de*(*wa*)*nai* | 'is not' |
| *zyanakatta*/*de*(*wa*)*nakatta* | 'was not' |

| *Polite forms* | *Gloss* |
|---|---|
| *desu* | 'is' |
| *desita* | 'was' |
| *zyaarimasen* | 'is not' |
| *dewaarimasen* | 'is not' |
| *zyaarimasendesita* | 'was not' |
| *dewaarimasendesita* | 'was not' |

More examples of nominal sentences are given below. Sentences that occur in polite speech are shown in (8), and '[polite]' is added in the translations of polite forms.

(7)a. kare wa bengosi *da*
he TOP lawyer is
'He is a lawyer.'

b. kare wa bengosi *datta*
'He was a lawyer.'

c. kare wa bengosi *zyanai*
'He is not a lawyer.'

d. kare wa bengosi *zyanakatta*
'He was not a lawyer.'

(8)a. kare wa bengosi *desu*
'He is [polite] a lawyer.'

b. kare wa bengosi *desita*
'He was [polite] a lawyer.'

c. kare wa bengosi *zyaarimasen*
'He is not [polite] a lawyer.'

d. kare wa bengosi *zyaarimasendesita*
He was not [polite] a lawyer.'

My analysis extends to copulas in old Japanese – *zo*, *ni ari* and *nari* – as well as the so called existential verb *ari*. Their forms and functions will be examined prior to a discussion of modern Japanese copulas in order to put the latter in a diachronic perspective.

## 2 Categorial status

The copula does not occupy a prominent categorial status in Japanese grammar. In the traditional grammar, it is commonly categorized as one of many *jodooshi* 'auxiliary verbs'. Other auxiliary verbs include the polite *mas-*, the past tense *ta-*, and the negative *na-*. Since, by definition, the auxiliary verb category is suffixed to inflecting categories, the copula is an exception since it occurs with the nominal category. Yamada (1908) does not recognize the auxiliary verb category for Japanese. He categorizes all verbal suffixes as inflectional endings. He proposes a category *sonzai-shi* 'existential category', which includes the copula.

There is no one name that is consistently used to refer to the Japanese copula. For the copula as an auxiliary verb, either *shitei-shi* 'specifying verb' or *dantei-shi* 'judgement verb/assertion verb' is commonly used. Hence there are three ways to refer to the copula in traditional Japanese grammar:

(9) **Terms for copula in the traditional Japanese grammar**
a. shitei-shi 'specifying category'
b. dantei-shi 'judgement category', 'assertion category'
c. sonzai-shi 'existential category'

Except for *sonzai-shi* (9c), the nomenclature has not been explained by the grammarians who use them. Although (9a)–(9c) are used interchangeably to refer to copula words, (9a) and (9b) denote different functions, and (9c) denotes a category based on the origin of the copulas. They all have their origin in the theory of copula in traditional European philosophy. I assume that *shitei* 'specify' refers to the function of specifying the semantic relation that the predicate has with the subject term, such as property and identity. I assume that *dantei* 'judge/assert' refers to the function that expresses the speaker's claim to be expressing the truth. *Sonzai-shi* 'existentials' is a category proposed by Yamada to refer to the existential verb *ari* and all inflecting categories that are supposed to have been derived from it. As I will discuss in a later chapter, copulas and the existential verb *ari* are morphologically related.

The functions and concept that are referred to by these three terms have been proposed by European philosophers for the be-verbs in European or Indo-European languages. The fact that these notions are borrowed to define the Japanese copula indicates that copulas in different languages have universal properties.

In modern linguistics, the Japanese copula is seldom discussed, let alone its categorial status. Two exceptions are Block (1946) and Teramura (1984). Block offers the exclusive category 'copula' to accommodate *da* and its inflectional forms. Teramura points out that auxiliary verbs occur with the inflecting category by definition, and thus do not include copula. He proposes the category *hantei-shi* for copula. *Hantei* has a meaning which is similar to *dantei* 'judgement'. Teramura does not provide an explanation of the term, thus it is not clear how *hantei-shi* differs from *dantei-shi*. A polite copula form *desu* is used with both nominal and adjectival categories:

(10)a. kare wa bengosi *desu*
he TOP lawyer COP-POL
'He is [polite] a lawyer.'

b. ryokoo wa tanosi-katta *desu*
trip TOP enjoyable-PS COP-POL
'The trip was [polite] enjoyable.'

Since the adjective category is inflective, Teramura posits two *desu* of different categories, one *hantei-hi*, and the other an auxiliary verb.

*Hantei-shi* is not a widely used term. Many syntacticians treat the Japanese copula as a copula category and refer to it with a loan word *kopyura* 'copula'.

## 3 Non-inflective categories in Japanese

Nominals, and adjectives as well in some languages, do not inflect. I will use the term 'inflective categories' to refer to categories that inflect, and 'non-inflective categories' for those that do not inflect. The issue of non-inflective categories in Japanese remains the subject of debate among both grammarians and linguists. Let us compare the following:

(11)a. asoko wa gokuraku da/zyanai/datta/zyanakatta
that place paradise is/is not/was/was not
'That place is/is not/was/is [polite] paradise.'

b. asoko wa sizuka da/zyanai/datta/zyanakatta
that place quiet is/is not/was/was not
'That place is/is not/was/is [polite] quiet.'

c. asoko wa hiro- i/kunai/katta/kunakatta
here spacious- is/is not/was/was not
'That place is/is not/was/was not spacious.'

Example (11a) is a nominal sentence containing the predicative nominal *gokuraku* 'paradise'; (11c) contains an adjectival predicate *hiro-i* 'is spacious'. The adjective is an inflecting category and (11a) receives a non-past interpretation for the inflectional morpheme *-i*. The categorial status of a group of words including *sizuka* in (11b) – whether they should be categorized as nominal or non-nominal – has proved controversial:

(12)a. Nominal analysis: sizuka + da
b. Non-nominal analysis: sizukada

In the nominal analysis, grammatical features are carried by the copula. In the non-nominal analysis, *sizuka* is a root, and *da*, or its inflected form, is an inflectional ending as part of an inflected form.

Advocates of non-nominal analysis present their non-nominal properties both semantically and syntactically. Two of the strongest arguments for non-nominal status is that the element denotes qualities, and that it cannot be the subject or the object of the sentence. In the grammar taught in school, this category is treated as an inflective category, a position taken by many traditional grammarians (e.g. Hashimoto 1948/1968). However, the massive redundancy of inflections with the copula can be simply eliminated by treating the category of *sizuka*-type words as uninflected, occuring with the copula just as nominals do. The only morphological difference, the prenominal forms, can be dealt with by subcategorizing regular nouns and *sizuka*-type nouns. This position is advocated in such influential works on Japanese grammar as Sansom (1928), Block (1946) and Tokieda (1950).

The treatment of *da*, the inflective portion of '*sizuka da*', as the copula, allows a straightforward account of the copula-less sentences that form the core of my morphological feature analysis of *da* in Part 4. Observe the following acceptability contrast:

(13)a. koko wa gokuraku.
this place TOP paradise
'this place is paradise.'

b. koko wa sizuka.
this place TOP quiet
'This place is quiet.'

c. *Koko wa hiro.
this place spacious
*'This place spacious.'

d. *boku wa kudamono o tabe
I fruit to eat
*'I to eat fruit.'

The sentences (13c) and (13d), in which the adjective and the verb are in their root form without a tense morpheme, are ungrammatical, as indicated by an asterisk at the beginning of each sentence. Sentences (13a) and (13b) are acceptable and receive a non-past interpretation. If *sizuka* is a root of an inflective category, it should be

unacceptable in the same way as (13c) and (13d). On the other hand, if the categories of *sizuka* and nominals are generalized, then the acceptability of (13b) will be explained in the same way as (13a).

The nominal categorial analysis also accounts for the productive integration of loan words into Japanese. Traditionally Chinese words denoting qualities were assimilated into Japanese in the *sizuka*-type category. English adjectives that are used in Japanese also assume the pattern of the *sizuka*-type category:

(14)a. koko wa *anzen* da.
here TOP safe COP
'It is safe here.'

b. *anzen* na tokoro
safe is place
'A place that is safe/A safe place'

(15)a. kono hoteru wa *derakkusu* da
this hotel TOP deluxe COP
'This hotel is deluxe.'

b. *Derakkusu* na hoteru
deluxe is hotel
'A hotel that is deluxe/A deluxe hotel'

Without further discussion, I will treat the *sizuka*-type words as being adjectival nominal, a subcategory of nominals.

## 4 Some puzzling phenomena of the Japanese copula

The Japanese copula is commonly considered to be a tense feature carrier to provide a temporal interpretation for non-inflecting categories to distinguish 'X is Y' from 'X was Y':

(16)a. ano tatemono wa tosyokan da
that building TOP library COP
'That is a library.'

b. ano tatemono wa tosyokan datta
that building TOP library COP-PS
'That building used to be a library.'

However, a propositional content as in (16a) can be expressed without the copula:

(17) are wa tosyokan
that TOP library
'That is a library.'

This apparent optional aspect of *da* raises a question about its role as a tense feature carrier. The temporal interpretation of (17) shows that the non-past tense feature does not have to be morphologically represented. Sentences such as (5) tend to be brushed aside as cases of omission in informal speech. However, as I will show in this study, the 'omission' is not random.

The optional nature of *da* is also observed in speakers' feminine–masculine distinction in the use of certain sentence-final particles:

(18)a. are wa tosyokan yo
that TOP library yo
'That is a library.'

b. are wa toshokan da yo
that TOP library COP yo
'That is a library.'

The particle *yo* expresses the speaker's assertion in these sentences. The propositional contents of (18a) and (18b) are identical. The type of sentence shown in (18a), without *da*, occurs predominately in women's speech while the sentence (18b), with *da*, occurs in the speech of both men and women.

When we look further, we find sentences in which *da* cannot occur. In the following pair, sentence (19b) is unacceptable, as indicated by the asterisk *.

(19)a. are wa tosyokan?
that TOP library
'Is that a library?'

b. *are wa tosyokan da?
That TOP library is
'Is that a library?'

Sentence (19b) with *da* is totally unacceptable as a yes/no question, asking whether or not it is a library. The sentence form is acceptable only if it is intended to be an echo question, 'Did you say that is a library?' to confirm a statement provided in the preceding discourse. The fact that (19a) yields the non-past temporal interpretation and yet *da* must not occur raises an additional question anout the function of *da* as a tense feature carrier.

*Zyanai* 'is not', the negative version of *da*, is also intriguing.

(20)a. asita wa nitiyoo zyanai (Pitch pattern on *nai*: High–Low)
tomorrow TOP Sunday COP-NEG
'Tomorrow is not Sunday.'

b. asita wa nitiyoo zyanai (Pitch pattern on *nai*: Low–Low)
tomorrow TOP Sunday COP-NEG
'Tomorrow is Sunday!'

c. asita wa nitiyoo zyanai? (Rising intonation on *nai*)
tomorrow TOP Sunday COP-NEG
'Isn't tomorrow Sunday?'

Notice that (20a) and (20b) have opposite meanings. While the proposition is negated in (20a), it is not negated in (20b). That being the case, what is the function of the negative form in (20b)?

This book will examine such puzzling phenomena involving copula forms and demonstrate that the Japanese copula is at the interface of syntax, morphology and pragmatics, performing a wide range of functions.

## 5 Recent linguistic research on the copula

As I have already stated, the Japanese copula is a neglected area in modern Japanese linguistic research. In particular, the two major foci of this study, a morphological feature analysis of copula forms and the syntactic and discourse functions of the copula forms, have received little attention. There are two linguistic studies concerning the copula, Okutsu (1978) and Konomi's doctoral thesis (1994). Okutsu focuses on the use of the Japanese copula as a pro-form that replaces verb phrases:

(21) At a restaurant:
boku wa unagi da
I TOP eel COP
(Literal translation) 'I am an eel.'
(Intended to mean) 'I will have an eel.'

This aspect of the copula will not be dealt with in the present book. Konomi investigates nominal predicates focusing on their sentential structure and the categorial statuses of copula forms within the framework of Chomsky's Principles and Parameters theory. I will critically review her analysis of the copula *da* in relation to the sentence types that exclude it in Chapter 10.

## 6 Organization of the book

This book approaches the topic of the copula from a number of perspectives. The premise of my study is the universality of the copula. Thus, I start my investigation by reaching out to the European philosophical tradition, comparing their views on the copula with the views proposed in modern linguistics. The focus is the notion of linking that appears in definitions of the copula in both the philosophical literature and modern linguistic literature. In the former, this notion is meant to express the core function of the copula as a linguistic expression of judgement. In the latter, this notion is superfluous as the copula is viewed merely as a tense feature carrier. I suggest that these extreme views might be reconciled by finding grammatical features that may derive such semantic notions as judgement. A comparative study of the two opposing views in Part I will serve to direct the rest of the book towards a detailed study of morphological features.

Part II reexamines a widely held view on the morphological representation of the Japanese tense category. It is widely assumed that both present and past tense features are morphologically represented in verbal inflectional forms, including the copula. I argue against the overt representation of the present tense feature on both conceptual and empirical grounds such as the form–function mismatch as a time-referring element. I propose a new morphological analysis for the basic forms of the verbal, adjectival and copula categories. The

elimination of a morphological representation of the present tense feature from Japanese grammar has a far-reaching consequence in any account of the functions of the copula.

Part III begins with a morphological analysis of Japanese verbs to establish a foundation for an inflectional feature analysis of the Japanese copula. I shall take eighth-century classical Japanese as a starting point for an investigation of the evolution of inflectional morphology, focusing on the development of copula forms. From this diachronic study a so-called existential *ar-* will emerge, contributing to word formation including copula forms. At this point, the issue that European philosophers faced comes to the surface: how do we distinguish a copula sentence from an existential sentence? Regardless of the origin of *ar-*, its morphological existence, not only in copula forms but also in adjectival forms, clearly exhibits its function as grammatical feature carrier.

Part IV brings the focus back to the modern copula. A morphological analysis of the older copula form *de aru* lays the foundation for a feature analysis of the newer copula *da*. I will present the curious phenomenon of the obligatory absence of the copula form *da* in certain sentence types, as well as its optional absence in discourse contexts. Therefore, copula-less sentences play a central role in uncovering the basic properties of the copula. My syntactic analysis of the copula, based on copula-less sentences, leads to the semantic notion of an 'ignorative-mode', which in turn, leads to the proposal of a new morphological feature analysis of the copula form *da*. The new feature analysis of the copula is then fully applied to the copula's discourse functions, including signifying the speaker's gender and the interpersonal hierarchical relationship between discourse participants.

# 2
# The Copula as a Universal Notion

## 1 Overview

This chapter investigates how the term copula is defined in linguistic as well as philosophical literature. The verbs 'to be' of European languages have been the targets of intense investigation by philosophers. The Greek philosopher Aristotle (384–322 BC) laid a foundation for the analysis of the *be*-verb for philosophers, logicians and linguists. For the post-Aristotelian philosophers, the copula is a linguistic expression of intellectual operation and/or judgement, and for formal logicians, the copula is a sign of a truth-claim. The notion of *chinjutsu* which, loosely translated, requires the notion of judgement, is repeatedly found in Japanese grammarians' descriptions of the Japanese copula's expressive functions.

In contrast, the copula commands little esteem in modern linguistics, especially among syntacticians. In fact, the copula is commonly treated as a dummy: a semantically empty verb, which is a mere carrier of tense and agreement features (i.e. Lyons 1968). From this perspective, the Japanese copula may appear even less interesting in the absence of agreement features in Japanese inflection. Indeed, nominal sentences without a copula are perfectly grammatical and are extremely common in Japanese.

Are these two camps talking about the same grammatical item? How can something that is so transparent in semantics and so small in morphological shape, e.g. '*da*' in Japanese and '*is*' in English, have so expressive a function as the philosophers and grammarians claim? I will reconcile this difference and reduce the two disparate analyses into a simple generalization of the copula's function.

## 2 Definitions of 'copula'

The term '*copula*' is generally used to refer to uses of the English verb 'to be' and its corresponding versions in world languages. The be-verbs in Indo-European languages commonly have an existential use as in, 'There *is* a palm tree in my garden.' Thus, the relation between the predicative use of 'to *be*' as in, 'This *is* a type of palm tree,' and the existential 'to *be*' has been a subject of great debate, particularly among philosophers and logicians. In my discussion, I will follow the common practice of using the term '*copula*' for predicative *be*-verbs, except when discussing treatments of 'to *be*' as embodying both predicative and existential functions.

'*Copula*' is a Latin word meaning *a link, tie, connection or union*. The term is credited to the French medieval logician and theologian Peter Abelard, born in 1079 (Jacobi 1986). I will be using the term '*copula*' as a collective term for be-verbs including those that appear in writings before Abelard's time. The most common definition of 'copula' found in dictionaries and in the literature of linguistics as well as in philosophy and logic is as follows:

(1) **A definition of 'copula'**
A word that links a subject and a predicate.

The term predicate is an ambiguous notion. The *predicate* used in (1) does not include the copula itself by its very definition. Syntacticians specify the category of 'predicate' in the definition in the following way, as exemplified by Radford (1997):

(2) **A definition of 'copula'**
A verb used to link a subject with a non-verbal predicate.

Radford defines *verb* as follows:

(3) **A definition of 'verb'**
A category of word which has the morphological property that can carry a range of inflections including past tense.

The non-verbal predicates, therefore, are those that do not inflect. In English, non-verbal predicates are nominal as well as adjectival categories, while in many other languages, including Japanese, only

nominals are found in the non-inflecting category. The following English and Japanese examples illustrate the difference:

(4)a. That *was* a French film.

b. The film *was* interesting.

(5)a. are wa huransu no eega *dat-ta*
that TOP French GEN movie COP-PS
'That was a French film.'

b. eega wa *omosirokat-ta*
movie TOP interesting-PS
'The film was interesting.'

In (5a), the copula expresses the past tense with *-ta* glossed as PS, while in (5b), the adjective expresses the tense by encoding the past tense morpheme *-ta* in its inflected form.

I will refer to the nominal and adjective in the sentence type (5) as *predicative nominal* and *predicative adjective* respectively. I will refer to sentences containing a predicative nominal such as (5a) as *nominal sentences* regardless of the assumed categorial status of the copula in a given language. Likewise I will refer to sentences containing a predicative adjective as *adjectival sentences*. English adjectival sentences are like nominal sentences in that they require a copula.

Adding a copula to inflecting categories produces ungrammatical sentences:

(6)a. I saw a French movie.

b. *I was see a French movie.

(7)a. watasi wa kinoo eiga o mi-ta
I TOP yesterday movie ACC see-PS

b. *watasi wa kinoo eiga o mi/mi-ru/mi-ta dat-ta
I TOP yesterday movie ACC see/see-NPS/see-PS COP-PS

Specification of the category of the predicate as non-verbal in (2) amounts to a functional definition of the copula as a verbalizer. Thus

the categorial specification leads to the following interpretation of the copula's function:

(8) **The copula's function**
A copula supplies tense and other verbal inflectional features to non-verbal predicate categories.

The copula's verbalizing function was identified as early as 350 BC by Aristotle. In *De Interpretatione* he defines noun and verb categories based on their ability to express time reference: a noun contains semantic content but does not indicate temporal reference while a verb carries the notion of time in addition to its semantic content. He illustrates this difference with 'health' and 'is healthy'. According to Aristotle's definition, both 'health' and 'healthy' are nouns. He refers to the constituent 'is healthy' as a verb, and notes that it indicates the present existence of state in addition to its proper meaning. The categorial comparison of 'healthy' vs. 'is healthy' as a noun vs. a verb in Aristotle's analysis reveals that one of the functions of the copula is as a verbalizer for its ability to express time reference.

One wonders why Radford uses definition (2) instead of (8). Is the notion of link necessary to account for the phenomena related to the copula? What exactly does the *link* imply in definition (2)? Does it have to do with subject–verb agreement features included in the inflectional features? It is unlikely. In Chomsky's (1995) minimalist approach to formal syntax, which is what Radford's book is about, *link* is a notion used for a movement chain created by a moved element and its copy. Therefore this notion cannot imply a connection between different constituents such as a subject argument and a predicate.

The linking in definitions (1) or (2) is rather vague. First, should it be interpreted that the linking of two items results in the identification of subject and predicate, or are the two items to be linked already identified such as subject and predicate? Second, is linking understood to be a syntactic notion such as sentence formation, or a logico-semantic notion relating to a proposition? As I will discuss shortly, philosophers and logicians have a clear concept of the *linking* function of copula. However, it is not clear whether or not linguists today, including Radford (1997) and Pinker (1995), have inherited the

originally intended meaning of '*link*' when they define copula using the same term or its synonym.

Intuitively, a *link* implies that unlinked elements cannot constitute a larger unit, that is a sentence or a proposition. If sentencehood, a syntactic notion, is what linking is supposed to provide, we still want to know what kind of operation *linking* is. In the Chomskyan syntactic framework (Chomsky 1981, 1995) that Radford follows, what is commonly understood to be a sentence is categorially defined as an inflectional phrase, *IP*. IP is a projection of the syntactic category *Infl* (which stands for inflection), which consists of agreement and tense features. In that case, supplying inflectional features amounts to providing sentencehood and 'linking' has no independent function from (2). Thus the notion of *link* in definition (2) is a function yielded by the specific function expressed in (3).

*Webster's Dictionary* (1984) provides both syntactic and logico-semantic definitions of copula:

(9) **Copula**

a. A verb, as a form of *be* or *seem*, that identifies the predicate of a sentence with the subject.

b. *Logic*: The word or group of words serving as a link between the subject and predicate of a proposition.

Notice that (9a) uses the term '*sentence*' thereby rendering the definition syntactic, while (9b) specifies the definition to be a term of logic and uses the notion *proposition*. Also, definition (9a) states that the copula *identifies* the predicate. An absence of the notion of *identification* in (9b) suggests that the copula in logic links a subject and a predicate which have already been identified as such.

A *proposition*, in traditional European philosophy, is a sentence that contains *judgement*. All propositions are contained in sentences but not all sentences contain propositions. For instance, an interrogative sentence is not a proposition since it does not contain judgement. The dichotomy of *sentence* vs. *proposition* is what separates the 'judgement' oriented perspective of the copula and the grammatical feature oriented perspective of copula. Thus, let us posit two versions of the copula definition as follows:

(10) **Copula-A**
A word that links a subject and a predicate to form a proposition.

**Copula-B**
A word that links a subject and a predicate to form a sentence.

The next section examines definitions of linking in western European philosophy and that philosophy's influence on Japanese grammarians' views on the Japanese copula.

## 3 Copula, the all mighty: the philosophical view

### 3.1 Linking function

Let us consider the definition of copula in Baldwin's *Dictionary* (1901), which represents the view of traditional European philosophy on copula and which corresponds to our copula-A:

(11) ***Copula***: The term whereby the fundamental relation of assertion, as affirmation or negation, is expressed. In the categorical proposition, the simplest form of assertion, the unit of judgment, this expression is given through the verbs '*is*' and '*is not*', which are therefore defined as the copula, and viewed as connecting the subject and predicate terms.

According to (11), proposition is assertion, and assertion is linguistically expressed by a copula. The copula performs that function by *connecting* the subject and the predicate. This last part needs clarification. Consider the fundamental ideas on proposition discussed in *On Interpretation* by Aristotle (350 BC). The following is a quote from Chapters 1 and 4 in Edghill's translation:

> As there are in the mind thoughts which do not involve truth or falsity, and also those which must be either true or false, so it is in speech. . . . For truth and falsity imply combination and separation. Nouns and verbs, provided nothing is added, are like thoughts without combination or separation; 'man' and 'white', as isolated terms, are not yet either true or false. Every sentence has meaning. . . . Yet every sentence is not a proposition; only such are propositions as have in them either truth or falsity.

In this quote, truth and falsity are said to imply *combination* and *separation*. Since '*link*' means the opposite of '*separate*', we can assume that the notion of *link* in the definition of copula is synonymous with '*combination*' in this passage.

Aristotle means by '*combination*' to *link* the subject and the predicate with 'is', as in '*X is Y*'. The result is affirmation of the proposition. In philosophy, the truth or falsity of the judgement is determined by the reality which it represents. Therefore, the judgement expressed in the affirmative assertion '*X is Y*' is true if X is Y holds in reality, but is false if X is not Y in reality. On the other hand, *separation* of X from Y is done by 'is not', as in '*X is not Y*', thus separation means the negation of the proposition. Whether or not the judgement expressed by the negative assertion 'is not' is true or false again depends on the reality. When X and Y are neither linked nor separated, they are *isolated*, thus there is no proposition to affirm or negate and hence no truth or falsity.

It is crucial to an understanding of the functions of '*is*' in Aristotle's theory, to see that the notion of *link*ing is meant to oppose the notion of *separation*: the former is a function of '*is*' to affirm a proposition, while the latter is a function of '*is not*' to negate a proposition.[1] On the other hand, the notion of *isolation* implies neither *linked* nor *separated*. The word '*link*' that commonly appears in definitions of copula in modern linguistics does not specify whether it is used as a syntactic notion or a semantic notion. Furthermore, it may be meant to oppose '*not linked*'. In that case, the *link* is not about affirmation but about well-formedness. The ambiguity of the word '*link*', '*join*' or other words used to define copula can be resolved when the opposing notions are clearly identified, as shown in Table 2.1.

The Characterization of the copula as a linguistic expression of judgement is highlighted in *Summa Theologica* (1266–1273) by the Italian medieval scholastic philosopher and theologian St. Thomas Aquinas. The following is an excerpt from the Dominican Fathers' translation (1920).

> Truth resides, in its primary aspect, in the intellect. . . . When the intellect judges that a thing corresponds to the form which it apprehends about that thing, then first it knows and expresses truth. This it does by *combining* and *dividing*: for in every proposition it either applies to, or removes from the thing signified by

*Table 2.1* Linking and its oppositions

| | | |
|---|---|---|
| ***Type I: Linked vs. not linked*** | | |
| Linked: | X is/is not Y | Well-formed sentence/proposition |
| Not linked: | X Y | The two terms do not form a sentence or a proposition |
| ***Type II: Linked vs. separated*** | | |
| Linked: | X is Y | Affirmed proposition |
| Separated: | X is not Y | Negated proposition |
| Isolated: | X Y | Lack propositional status |

*Note*: X = subject noun; Y = predicate noun/(adjective).

> the subject, some form signified by the predicate. . . . Therefore, properly speaking, truth resides in the intellect *combining* and *dividing*. (emphasis added)

As I have emphasized, *combining* and *dividing*, which are affirmation and negation by copula, are generalized to be the operation of the intellect in judging the truth.

The special function endowed to the copula leads to the question of how propositions that are affirmed or negated without a copula should be treated. Surely 'Jerry runs' is an affirmative proposition. Such a proposition may be used as evidence against the copula's function as a proposition-forming, judgement-expressing agent. The French philosopher, theologian and logician Peter Abelard (1079–1142) offered an answer to this question without modifying the function exclusively attributed to copula. The following is taken from Jacobi (1986):

> Abelard notes several times in the course of his discussions that a proposition can be formed in two ways. First, a finite form of the verb serving as predicate is joined to a noun, the subject. Second, a subject term and a predicate term are linked together by a finite verb placed between them. When the verb serves as a predicate, it has a double function: it is both copula and that which is being predicated, that is to say, it joins itself, its own meaning, to the subject. Only two verbs are capable of linking subject and predicate terms, that is of joining a meaning other than their own to the subject. These are '*est*' (S is P) and '*nuncupatur*' (S is named P).

'*Est*' is a Latin *be*-verb in the third person singular form. S denotes subject and P, predicate. The basic claim is that the copula is manifested in a verb when the verb is linked to or separated from a subject to affirm or negate a proposition. To understand the double function analysis of a verb as a predicate as well as copula, let us reconsider copula-A's definition in (1), repeated in (12):

(12) **Copula-A**
A word that links a subject and a predicate to form a proposition.

Recall that syntacticians qualify 'a predicate' in the definition for copula-A to be a non-verbal category. However, Abelard's double functional analysis of verbs can follow from (12) only if 'a predicate' includes the verb category. In addition, to allow all verbs to function as a copula to affirm or negate a proposition, the copula must be treated as an abstract functional item without a phonological form. This abstract analysis is consistent with Abelard's semantic analysis of the copula that it has no meaning of its own.[2]

The second question that the proposition-forming copula analysis raises is the treatment of the copula in a sentence that may not be considered to contain a proposition. Aristotle said that not all sentences are propositions. Abelard discusses the difference between a proposition and a non-proposition. According to Jacobi (1986), Abelard interprets the traditional definition of *proposition* as signifying the truth or falsity of something by stating or proposing what is the case or what is not the case. Abelard argues that simply joining or separating concepts differs from affirming a proposition or negating a proposition in the way the content is proposed, asserted, contested or declared.

Thus, it seems that pragmatic contexts as well as the notion of speech acts must be considered when defining what constitutes a proposition. Therefore, not every occurrence of a be-verb can be assumed to form a proposition, consequently, not every be-verb is a copula as defined in (12). Consider the following:

(13)a. *Are* they your classmates?

b. I don't believe that this *is* edible.

Neither (13a) nor the embedded clause in (13b) expresses judgement, thus neither of them is a proposition. Thus these be-verbs are not examples of copula-A as defined in (12).

So what are they? Recall that, as I have discussed already, Aristotle defines noun and verb categories based on their ability to express time reference: a noun contains semantic content but does not indicate temporal reference, while a verb carries the notion of time in addition to its semantic content. Abelard too, speaks of the time-referring function of be-verbs. Therefore, in the traditional European philosophy, the *be*-verb as a verbalizer with a time-referring capability, and the *be*-verb as a linking agent with a judgement-expressing function cannot both be copulas. Only the latter is a copula.

However, *be*-verbs that are not copulas according to the definition of copula-A do link a subject and a predicate or separate a subject from a predicate without forming a proposition. This is clearly shown by the fact that (13a) and the embedded clause of (13b) can be negated.

(14)a. *Aren't* they your classmates?

b. I don't believe that this *is not* edible.

Therefore, a linking and separating function is inherent in be-verbs. The same argument holds for regular verbs occurring in a non-propositional (= without truth claim) sentence, as in 'left' and 'did not leave' in the following:

(15)a. I wonder whether she *left* already.

b. I wonder whether she did *not leave* after all.

Since separation of the subject from the predicate in these examples does not involve judgement, it does not involve copula. The separating function must be inherent to the verb. Thus, the linking or separating function that results in a proposition and a truth claim must be clearly distinguished from the linking or separating function that is inherent in be-verbs and regular verbs.

The various functions of be-verbs discussed in the traditional European philosophical context above are summarized in Table 2.2.

*Table 2.2* The functions of be-verbs, regular verbs and copulas

| | **Linking function** | | |
|---|---|---|---|
| | **Link or separate** | **Link or separate as truth claim** | **Act as a time referrent** |
| Be-verb | ✓ | | ✓ |
| Regular verb | ✓ | | ✓ |
| Copula | | ✓ | |

Thus, Abelard distinguishes content from propositions, consequently admitting use of be-verbs without expressing judgement. Crediting the copula for judgement and truth claims in all types of sentences, this theory bears an unavoidable consequence: the copula as an abstract concept.

### 3.2 *Chinjutsu* as linking in Japanese grammar

Yamada (1936) introduced the notion of *chinjutsu*, which heavily influenced traditional Japanese grammarians. Yamada describes the 'force' of *chinjutsu* as defining characteristics of the category of *yoogen*. *Yoogen* is the category of words that inflect: verbs, auxiliary verbs and adjectives. I will use the term '*inflective category*' for the *yoogen* of Japanese and other languages throughout this book. The following is my translation of a passage from Yamada (1936: 148–9) on *chinjutsu*:

> This is an operation that unifies human intellect. In terms of logic, it specifies whether the concept represented by a subject agrees or disagrees with the concept represented by the predicate, and links them accordingly. . . . If there is no act of linking and judging of individual concepts, a thought cannot be complete. . . . The attributes that the inflective categories express are wide-ranging. Some *inflective words* do not express attributes. But as long as they have *chinjutsu* force, they qualify to be inflective *words*. . . . *Ari* 'exists' expresses the existence of things, and like modern *de aru* 'is', it only expresses *chinjutsu* force.

It is not clear what Yamada means by 'force'. I assume that '*chinjutsu* force' together means 'judgement' or 'expression of judgment'.

Notice that his description of *chinjutsu* reminds us of the linking function attributed to the copula by the traditional European philosophers. Indeed, he goes on to say (1936: 678):

> In logic, the linguistic embodiment of *chinjutsu* force is called *copula*. Some people translate it as *keiji* 'linking word'. Basically, *chinjutsu* force is morphologically recognizable in the form of the copula. Among Japanese inflecting categories, only in existentials such as *nari*, *tari*, *de aru*, *da* and *desu* 'is', is the copula's morphological form recognizable. In the adjective and verb categories, which are substantive inflecting categories, their substantive element (the attributes), and their functional element (copula) exist together.

While Yamada claims that *yoogen* (= inflective categories), bear *chinjutsu* force, he is concerned about the inflective category that occurs in an embedded clause such as the following:

(16)a. hana no saku ki
flower GEN bloom tree
'A tree (on which) flowers bloom'

b. hito no sum-anu ie
person GEN live-NEG house
'A house where people do not live'

Yamada says that the subject and the predicate in each relative clause are linked together but there is not enough *chinjutsu* force.

The fundamental ideas in Yamada's *chinjutsu* theory seem to be taken from a concept of the copula that was discussed and developed by European philosophers. Thus, criticisms and comments on Yamada's theory, which I will briefly review below, can also be applied to the original European theory of the copula. Attention tends to focus on the treatment of sentential content that does not involve *chinjutsu*, the judgement, as seen in the comments of Tokieda (1941) and Mio (1939).

Tokieda (1941) points out that the dictionary forms of verbs and adjectives are identical to the forms used to express affirmative judgement. For instance, *hasiru* 'run' is in the entry in a dictionary. As

such, this verb does not bear *chinjutsu* force. The same morphological form is used to express judgement in *Inu hasiru* 'A dog runs.' How should they be distinguished? He proposes positing a zero-copula (as shown by Ø in 17c) after a verb or an adjective to express *chinjutsu*, just as other subjective elements such as exclamatory *ka* and conjectural *rasii* are positioned in sentence final position. His examples are shown in the following:

(17)a. yama wa yuki *ka*
mountain TOP snow EXCL
'Oh, I see snow on the mountains!'

b. soto wa ame *rasii*
out TOP rain seem
'It seems like it is raining.'

c. Inu hasiru Ø
dog run
'A dog runs.'

The zero morpheme analysis of copula, the *chinjutsu* force, is an easy way out of the problem of 'invisible' copula, not only for Japanese but for any other language that does not have overt representation of a judgement-forming copula in its verbal inflection. Tokieda (1950) claims that *chinjutsu* force is also in the final position in a verb in a relative clause, in attributive adjectives, predicative adjectives as well as adverbials, and thus he posits a zero morpheme in all these positions. However, such an unprincipled use of the zero morpheme makes his theory untenable.

Mio (1939) raises a question about linking that does not involve judgement, such as the content of an interrogative sentence. Mio's contention is that verbs and adjectives do not always express judgement and thus *chinjutsu* force cannot be inherent to the inflective category as Yamada claims. I have already discussed interrogative sentences in an examination of Abelard's theory, and Abelard provides an answer. In the case of Yamada's theory, he claims that *chinjutsu* is morphologically recognizable in the copula. Thus, an interrogative sentence such as (18) which has *desu*, a polite copula form that Yamada mentions, would have to be considered as a truth claim proposition.

(18) kore wa Tanaka-sensei no riron desu ka
this TOP Tanaka-teacher GEN theory COP-POL Q
'Is this Prof. Tanaka's theory?'

As the translation shows, the sentence is interrogative, thus the copula *desu* cannot be bearing *chinjutsu* force.

The theories of Abelard, Tokieda and Yamada all suffer from their extending the applicability of the truth claim function too widely to actually demonstrate that there is indeed a linguistic category with such a function. The core of my study is to demonstrate that Japanese has a copula with just such a function. But this is a real copula and its function is not shared by verbs or adjectives.

## 4 Copula or not copula?

### 4.1 Existential function

Inquiry into the copula inevitably faces the be-verb's existential function, both in European languages and Japanese. The Greek versions of the following sentences use the same be-verb, but (19a) yields a meaning equivalent to English 'Socrates exists.'

(19)a. Socrates is.
b. Socrates is pale.
c. Socrates is a man.

Of course the English be-verb accompanying 'there' produces a familiar existential sentence:

(20) There is a unicorn in the park.

But even without 'there', the English be-verb may have the existential function 'I am' in a sentence such as the following which is interpreted as being existential:

(21) I think, therefore I am.

Many of the Japanese copula forms morphologically contain the existential verb *ar-*. In the following examples, *aru* in (22a) is existential, while *de-aru* in (22b) is copula.

(22)a. kono puroguramu ni mondai ga *aru*
this program LOC problem NOM exist
'A problem exists in this program. = There is a problem in this program.'

b. kono puroguramu wa mondai *de-aru*
this program TOP problem COP
'This program is a problem.'

In old Japanese the locative particle *ni* and the existential *ar-* and their fused form *nar-* have copula counterparts. In the following examples, the (a) sentences are existential and the (b) sentences are copulative.

(23)a. Takeru no kora Yamato ni ari
Takeru GEN children Yamato LOC exist
'Takeru's children are in Yamato.'

b. aki ni ar-azu
autumn COP-NEG
'(It) is not autumn.'

(24)a. Kasuga naru yama
Kasuga exist mountain
'Mountains that are in Kasuga.'

b. oba naru hito
aunt COP person
'A person who is my aunt.'

Thus, in defining copula, the following possibilities are considered:

(25)a. The two be-verbs are independent of each other.

b. Existential '*be*' is the basic, and copulative function is derived from it.

c. Copula '*be*' is the basic, and existential meaning and function are derived from it.

From the diachronic viewpoint, 'basic' corresponds to 'older'. In a syntactic consideration, 'basic' means 'more fundamental'. Although

it is not possible to determine which is older, the existential origin (25b) is usually presupposed in works on Indo-European be-verbs, according to Kahn (1986). Possibility (25b) analyses '*be*' as having the semantic content of existence. The copulative function of '*be*' as in [*X is Y*] is then considered a special case that specifies how X exists, as in [*X exists in such a way that X is Y*].

Aquinas stipulated that the expression of existence is the primary function of '*be*', and that the copulative function is derived from it by arguing that the truth or falsity of a proposition, the judgement signified by 'is', follows from the fact that something exists in the nature of things. Interestingly, Aquinas deduces [X is Y] from [Y is existent in X], instead of [X is existent in Y]. The following is a quote from Weidemann (1986: 194), who summarizes Aquinas' writings on existential meaning in copulative sentences:

> according to Aquinas, the sentence 'a man is white' signifies – as the condition of its truth and, thus, as the condition of its being the case (or its being a fact) that a man is white – that whiteness is actually existent as a property inherent in a man.

Abelard assumed a more common existential formula to turn [X is Y] into [There exists X that is Y], and argued against '*be*' as an inherently existential verb. He finds that a sentence 'Chiramaera is non-existent.' would have to mean 'There exists Chiramaera that is non-existent'. Therefore Abelard concludes that a copula sentence cannot be unified with an existential sentence (Jacobi 1986).

Kahn (1986) considers the copula function to be a primary and fundamental function of the Indo-European *be*-verb, and existential use, as in 'I think therefore I am', to be secondary and dependent on the copula verb. He points out that early Indo-European languages had no verb '*to have*', and the idea of '*I have*' was originally expressed in Latin as *est mihi* 'It is for me', which is still preserved in French *Ce livre est à moi* 'This book belongs to me.'

For Japanese, Yamada (1936) and Kasuga (1968) both treat the existential origin of *ar-* as given. Yamada (1908) adopts the same existential formula that Aquinas used in explaining the following sentence as existential.

(26) kono fhuyu wa atataka-k-ari-ki
this winter TOP warm-exist-PS
'This winter was warm.'

As I will discuss in Chapter 6.3 some inflectional forms of Japanese adjectives are formed with the existential verb *ar-*. In (26), the root of *ar-* is found in *-ari*, which I have glossed as 'exist' for convenience of discussion.[3] Yamada argues that the only difference between the original existential and the derived existential, such as (26), is that in the latter, the attribute exists in the subject entity, while in the original existential the subject entity exists in the locative. Hence (26) means 'warmth existed in this winter.'

Ohno (1979) points out that the copula use of *ni ari* and *nari* started only during the Nara period (eight century), and that there was a copula *zo* prior to the establishment of *nari* as a copula. This means it is likely that there was a period when *zo* was a copula and *ni ari* and *nari* had only existential use. However, I will point out in Chapter 8, in which I analyse *ni ari* and *nari* as copulas, the difficulties of assuming the evolution of existential to copula use.

Tokieda (1941) opposes Yamada's (1908) existential account. Tokieda argues that if existential meaning holds at all in (26), the existent is not 'warmth' but 'the winter', as in, 'This winter existed in such a state of being warm.' Tokieda argues, however, that existential and copula sentences do yield different interpretations which must be accounted for by grammatical means. Tokieda proposes a *ji* and *shi* categorial distinction: *ar-* belonging to the *shi* category has semantic content, while *ar-* belonging to the *ji* category only expresses the *chinjutsu* of judgement. The former *ar-* forms an existential sentence while the latter *ar-* forms a copula sentence.

The synchronic analysis of the two types of *ar-* is a sensible solution. But the *ji*/*shi* categorial theory that led to this analysis is itself quite vague. Although he describes *ar-* as a *ji* category with the notion of 'judgement' and '*chinjutsu*', the items that Tokieda categorizes as *ji* are wide ranging and include the interrogative *ka*. As we have discussed, a question does not represent the speaker's judgement. Therefore, the theory of *ji*, when it puts the copula *ar-* and the interrogative *ka* together in the same category with the notion of Yamada's *chinjutsu*, loses its explanatory account.

### 4.2 Identity reading

An alternative approach to copula is to define semantically the relationships between *x* and *y* in '*x* is *y*'. The German philosopher, logician and mathematician Gottlob Frege (1848–1925), drew a four-way semantic distinction in 'be': identity, predication, existential and

class-inclusion (Haarparanta 1986). Fredge's predication is alternatively called attribute, property or characterization. In contemporary linguistics, class inclusion such as 'Linguistics is a cognitive science' is considered to be a sentence of attribute. 'Identity' or alternatively 'equative' or 'identification' refers to the relation $x = y$.

The identity case has both a semantic and a syntactic significance for our discussion. Frege points out that (x = y) can be changed to (y = x) without altering the relationship between x and y. Consider the following pairs:

(27)a. Paul is the physician.

b. The physician is Paul.

(28)a. Paul is a physician.

b. *A physician is Paul.

In (27), '*Paul*' and '*the physician*' can be switched, but in (28), 'Paul' and 'a physician' cannot be switched. In (27), the physician under discussion and Paul are interpreted as being the same individual. In (28), a physician is not a specific individual, but rather it is interpreted to be Paul's occupation, hence one of his attributes. The question is, is '*is*' in (27) a be-verb with the semantics of identity? Kahn (1986) comments that an identity statement is a logically, but not linguistically, special case of predication and a logically special feature is not reflected in the form of the sentence.

Some languages have more than one copula, and it has been proposed that the choice depends on the semantic function of providing an attribute or creating an identity reading. Kuno and Wongkhomthong (1981) categorize the Thai copulas *pen* and *khi*: as characterization and identification based on the choice of the copula in sentences such as (28). The asterisk * on *khi* in (28a) and *pen* in (28b) indicates that these copulas are unacceptable for the given sentence.

(28)a. Yî:pùn pen/*khi: prà thê:d ùdsá:hàkam
Japan is country industrial
'Japan is an industrial country.'

b. khon thî: dichán rág *pen/khi: khun Bill
person that I love is Mr. Bill
'The person whom I love is Bill.'

Paus (1997) generalizes that between the Cambodian copulas *kii* and *ci, kii* is preferred over *ci* for the identity reading, while *ci* is preferred over *kii* for the attribute reading. Some examples are shown in (29). The question mark on *kii* in (29a) and on *ci* in (29b) indicates the option less likely to be chosen.

(29)a. vie ci/?kii ciewphew l?aa.
it is book good
'It is a good book.'

b. Tidaa kii/?ci srey nih.
Tidaa is woman this
'Tidaa is this woman.'

It has been pointed out in the literature (e.g. Rothstein 1995) that the English copula '*be*' is related to an identity reading between two nominals. Consider the following:

(30)a. Mary is my best friend.

b. I consider [Mary to be my best friend].

c. I consider [Mary my best friend].

Assuming that '*consider*' takes a clausal complement, as shown by the brackets in (30b) and (30c), the subject '*Mary*' and the predicate nominal '*best friend*' in these complement clauses have the same attribute reading. The fact that *Mary* and *the best friend* are not linked by the copula, yet they are interpreted to hold an attributive relation, indicates that the copula is irrelevant to the attributive interpretation, or at least it is not necessary to the interpretation.

However, compare (30) with the following:

(31)a. My best friend is Mary.

b. I consider [my best friend to be Mary].

c. *I consider [my best friend Mary]

Example (31c), with the copula-less complement clause, is unacceptable. The difference between (30a) and (31a) is that the former has an attributive reading while the latter has an identity reading. This lead Halliday (1967) to propose that English has two *be*-verbs; one is the grammatical '*be*' and the other is the semantic '*be*' that specifies an identity relation.

A widely accepted view on identity sentences is that the two nominals being equated are both arguments of a special copula (e.g. Rothstein 1987; Rapopport 1987). With a regular copula, the second nominal, 'a physician' in (28a) is a predicative nominal expressing an attribute of the first nominal, 'Paul'. The difference can be expressed as follows:

(32)a. X (Y)
↑ ↑
predicate argument

b. Copula (X Y)
↑ ↑ ↑
predicate argument

The identity sentence is (32b). Thus there has to be a copula that takes these arguments, which causes it to be a copula with equative semantics. Such a view is incompatible with the Dummy Hypothesis (Lyons 1968), which treats the copula as semantically empty. If a phenomenon such as (32) can only be explained by positing a semantic copula, that copula is not a copula according to the Dummy Hypothesis.

In Japanese, either an attribute reading or an identity reading can obtain without the copula as (33) and (34) show:

(33)a. Ken wa boku no sinyuu da
Ken TOP my best friend COP

b. Ken wa boku no sinyuu
Ken TOP my best friend
'Ken is my best friend.'

(34)a. boku no sinyuu wa Ken da
my best friend TOP Ken COP

b. boku no sinyuu wa Ken
my best friend TOP Ken
'My best friend is Ken.'

Both (33a) and (33b) yield an attribute interpretation that one of *Ken*'s attributes is that he is my best friend. Both (34a) and (34b) yield an identity interpretation that the identity of subject *boku-no-sinyuu* 'my best friend' is *Ken*. These facts indicate that the copula is irrelevant to either an attribute or an identity interpretation. In the so-called raising structure, in which the original embedded subject is marked with the accusative as an object of the matrix clause, the identity sentence behaves differently from the attribute sentence:

(35)a. boku wa Ken o boku no sinyuu (da) to
I TOP Ken ACC my best friend (COP) QUOT
omotte iru
thinking be
'I consider Ken (to be) my best friend.'

b. *boku wa boku no sinyuu o Ken (da) to
I TOP my best friend ACC Ken (COP) QUOT
omotte iru
thinking be
'I consider my best friend (to be) Ken.'

In (35a), the matrix object and the embedded predicative nominal yield an attribute reading. In (35b), which is unacceptable, the matrix object and the embedded predicative nominal have an identity relation. The asymmetry is again irrelevant to the copula since its existence does not effect the acceptability in either sentence. A full account of this phenomenon is beyond scope of this study.

## 5 Copula, the dummy: the modern linguistic view

The strongest evidence against the view that the copula expresses more than grammatical features comes from copula-less nominal sentences in a large number of world languages. It has been reported in the literature (e.g. Payne 1997; Schachter 1985) that in many languages, the copula does not occur in the present tense interpretation,

allowing the existence of sentences with two juxtaposed nominals. Consider examples (36)–(39):

(36) **Swahili** (Schachter 1985)
a. Hamisi mpishi
Hamishi cook
'Hamishi is a cook.'

b. Hamisi alikuwa/atakuwa mpishi
'Hamisi was/will be a cook.'

(37) **Russian** (Payne 1997)
a. Ivan uchít$^{j}$l$^{j}$.
John teacher
'John is a teacher.'

b. Ivan bïl uchít$^{j}$l$^{j}$.
John be:MASC teacher
'John was a teacher.'

(38) **Yagua** (Payne 1997)
a. máchituru ráy
teacher 1SG
'I am a teacher.'

b. ra-vyicha-núú-yanu máchituru
1SG-be-CONT-PST3 teacher
'I used to be a teacher.'

rá-á vicha máchituru
1SG-FUT be teacher
'I am going to be a teacher.'

(39) **Hungarian** (Kiefer 1968)
a. Péter katona
Peter soldier
'Peter is a soldier.'

b. Péter katona volt
Peter soldier was
'Peter was a soldier.'

c. Péter katona lesz
Peter soldier will-be
'Peter will be a soldier.'

In examples (36)–(39), the (a) sentences, which are interpreted as present tense sentences, are copula-less. These languages do not have a copula form for the present tense interpretation, which obtains by default, that is by the absence of a feature indicating any other time reference. These examples confirm that the copula makes no contribution to the semantic interpretation and that its primary function is to morphologically encode grammatical features.

As a semantically null verb, the copula morphologically consists of, at most, a stem and tense and other grammatical features. It may minimally encode tense feature, but the present tense is commonly morphologically unmarked. It follows from the Dummy Hypothesis that a copula with unmarked features does not have morphological representation.

Bach (1967) demonstrates the absence of semantic content in the English copula, including the identity sentence, by facts of selectional restrictions. He shows that non-verbal predicates impose selectional restrictions on the subject nominal as regular verbs do on their arguments. Consider the following examples from Bach (1967):

| | | |
|---|---|---|
| (40)a. | McX is a cat. | (class membership) |
| b. | John is old. | (property assignment) |
| c. | Armadillos are mammals. | (class inclusion) |
| d. | John is the armadillo. | (identity) |
| e. | McX is in the flowerbed. | (location in space) |
| f. | The lecture is at four. | (location in time) |

The various meanings, as indicated in parentheses, depend on whether the items are definite or indefinite, generic, locative or predicative. For instance, a class membership reading of (40a) would yield an identity reading like (40d) if 'a cat' is changed to 'the cat', yet the copula remains the same. This phenomenon indicates that the copula does not contribute to the semantic relationship between the predicate and the subject.

## 6 The copula as a feature carrier

It is clear that the copula as a tense feature carrier and the copula as an embodiment of judgement cannot be generalized in a reasonable way. Is there a middle ground for the 'all mighty' copula analysis and the 'dummy' copula analysis? I propose to maintain the basic functional analysis of the copula represented in the Dummy Hypothesis that the copula is a morphological grammatical feature bearer. However, it is necessary to pay attention to grammatical features other than tense. As I will show in my investigation of the Japanese copula, a copula is capable of carrying many types of grammatical features. For my linguistic analysis, philosophical notions such as truth claims or judgement need to be reduced to concepts that are derivable from grammatical features so that the 'linking' part of the definition of a copula will translate to the copula's function as morphological feature carrier.

The best candidate to assist the derivation of such a concept is a polarity feature. Negative and the affirmative notions are the most basic amongst grammatical features, yet they are not given as much recognition as tense features by syntacticians. One of the reasons is that negative polarity is not expressed as a part of the inflectional form in European languages. Instead, a separate negative particle such as 'not', '*non*' or '*ne*' performs that role. Furthermore, as is universally common, these languages lack an overt representation of affirmativity: there is no affirmative morpheme. In the case of tense, languages commonly refer to time by morphologically encoding tense features in inflectional form. This asymmetry in visibility leads to asymmetry in prominence. I will demonstrate from my Japanese data that the polarity is extremely important in the analysis of the copula.

Once we recognize that the copula's function is to be a grammatical feature carrier, then the categorial selection part of the copula's definition must be reconsidered. Recall that the syntactician's definition of copula amounts to verbalization of the nominal category. Behind this idea is an assumption that predicate categories can be divided into fully inflecitve categories and completely non-inflective categories. However, not all languages have inflective categories with a complete inflectional paradigm. A category X may not inflect to encode a feature $\alpha$, which other categories can encode. If category Y

supplies that α for the category X, then that category Y is a *copula* according to the stipulation that a copula is a morphological grammatical feature carrier.

Therefore, the case of the polite *desu*, which occurs with the adjective category, and which Teramura (1984) deemed to be a different category from the *desu* that occurs with the predicative nominal, should be categorized as a copula.

*This page intentionally left blank*

# Part II
# Forms and Functions: The View from Feature Morphology

*This page intentionally left blank*

# 3
# Grammatical Feature Representation

## 1 Labelling inflectional forms

How we refer to a given inflectional form may depend on the perspective of the feature opposition. For instance, consider the verb *iku* 'go', the adjective *hurui* 'is old' and the copula *da*. Stylistically, these forms are the plain forms as opposed to the polite versions that contain a polite morpheme-(*i*)*mas*- or -*es*-:

(1) Verb 'to go'

| | | | |
|---|---|---|---|
| a. | ik-u | plain form | 'go' |
| b. | ik-imasu | polite form | 'go [polite]' |

(2) Adjective 'is old'

| | | | |
|---|---|---|---|
| a. | huru-i | plain form | 'is old' |
| b. | huru-idesu | polite form | 'is [polite] old' |

(3) Copula 'is'

| | | | |
|---|---|---|---|
| a. | d-a | plain form | 'is' |
| b. | d-esu | polite form | 'is [polite]' |

In terms of polarity, *iku*, *hurui* and *da* are the affirmative forms in opposition to the negative forms, which contain the negative morpheme -(*a*)*na*-:

| | | | |
|---|---|---|---|
| (4)a. | ik-u | affirmative form | 'go' |
| b. | ik-anai | negative form | 'not go' |

| | | | |
|---|---|---|---|
| (5)a. | huru-i | affirmative form | 'is old' |
| b. | huru-kunai | negative form | 'is not old' |
| (6)a. | d-a | affirmative form | 'is' |
| b. | z-yanai | negative form | 'is not' |

In terms of tense, they are the present/future or the non-past tense forms in opposition to the past tense forms that contain the morpheme *ta*:

| | | | |
|---|---|---|---|
| (7)a. | ik-u | non-past tense form | 'go' |
| b. | it-ta | past tense form | 'went' |
| (8)a. | huru-i | non-past tense form | 'is old' |
| b. | huru-katta | past tense form | 'was old' |
| (9)a. | d-a | non-past tense form | 'is' |
| b. | d-atta | past tense form | 'was' |

The forms *iku*, *hurui* and *da* allow an interpretation of all of the features above: plain style, affirmative and non-past tense. Therefore, it is also possible to oppose the forms that carry all the morphological features shown in the (b) forms, and refer to them in a more elaborate fashion:

| | | |
|---|---|---|
| (10)a. | ik-u | plain, affirmative, non-past tense form 'go' |
| b. | ik-imasendesita | polite, negative, past tense form 'did not go' |
| (11)a. | huru-i | plain, affirmative, non-past tense form 'is old' |
| b. | huru-kuarimasendesita | polite negative past tense form 'was not old' |
| (12)a. | d-a | plain, affirmative, non-past tense form 'is' |
| b. | z-yaarimasendesita | polite, negative, past-tense form 'was not' |

As we can see by the different length of the (a) and (b) forms in (10)–(12), only the (b) forms are morphological representations of the features that yield the semantic interpretation. The (a) forms in (10)–(12) cannot possibly morphologically represent each and every feature of the plain, affirmative and non-past tense.

The (a) forms in (10)–(12) yield the interpretation of the features that are referred to in the names of the forms. However, unlike the (b) versions, there is no one-to-one correspondence of grammatical feature interpretation and morphology. *Iku* can be segmented as in *ik-u*, where *ik-* is the verb root. It is reasonable to assume that the morpheme *-u* represents no more than one feature. Likewise, *-i* of *hurui*, and *-a* of *da* should morphologically represent one grammatical feature each.

The grammatical features include syntactic features. Recall that the copula has pre-nominal and adverbial forms. Thus, *da* is the sentence final form in opposition to the pre-nominal or adverbial.

| | | | | |
|---|---|---|---|---|
| (13)a. | d-a | sentence final form | 'is' |
| b. | no/na | pre-nominal form | 'is' |
| c. | de/ni | adverbial form | 'is' |

Thus, *-u*, *-i* and *-a* may be representing any one of the plain style, non-past tense or affirmative polarity features. In the case of the *-a* of *da*, there is another possibility: a sentence final feature.

The most common morphological feature analysis of the *-u*, *-i* and *-a* in the (a) forms is that they are the non-past tense/present tense morphemes. Thus, if the name of the inflectional form actually refers to the feature it morphologically encodes, then the (a) forms in all of (7)–(9) are present tense forms. The tense morpheme *-u* is suffixed to the consonant ending root as in *ik-u* and it has an allomorph *-ru* which is used as a suffix to a vowel ending root, as in *tabe-ru* 'eat'. I will represent them as *(r)u* in this study and I will henceforth refer to verbs having a consonant-ending root as C-verbs, and those having a vowel-ending root as V-verbs.

In the next chapter I will argue that there is no morphological encoding of non-past, or present tense, in verbs, adjectives or the copula. While this view opposes the widely accepted or assumed tense analysis that *-(r)u* and *-i* are morphological encodings of non-past tense in verbs and adjectives respectively, it agrees with the tra-

ditional grammarians' analysis of asymmetrical morphological representation of tense, that there is only one morphology in the tense category of modern Japanese: *-ta* for past tense. Among traditional grammarians it is simply assumed that neither *-(r)u* nor *-i* is a tense marker, thus there have been no specific arguments to support this assumption. I will investigate the tense morpheme analysis of *-(r)u* and *-i*, and then present arguments against it.

## 2 Morphological segmentation

Japanese inflectional morphology involves the root of the predicate (verb, adjective or copula) and grammatical morphemes that include suffixes, particles, auxiliary verbs and auxiliary adjectives. The grammatical morphemes in verb forms are also referred to as inflectional morphemes. They are morphological representations of grammatical features. The distinction between a suffix and an auxiliary often proves to be difficult and a source of controversy, as we will see in the next section.

The root is the part of the predicate that remains morphologically constant. It represents the semantics of the predicate that remain the same regardless of the inflection. As I have discussed in Chapter 2, the Japanese copula does not have semantic content except for the features that are encoded in inflectional morphemes. Hence, the root *d-*, unlike a verbal or adjectival root, is merely a morphological root without a semantic content.

The inflectional morphemes are suffixed to the predicate root or to another inflectional morpheme. In the process of suffixation, phonological factors affect the morphological forms. Suffixation of a consonant-initial morpheme to a consonant-final root creates a consonant cluster. This is broken up by deletion of the initial consonant, a vowel insertion or consonant assimilation.

(14)a. Vowel insertion

$$\begin{array}{c} \ldots C \quad C \ldots \\ \qquad \uparrow \\ \qquad V \end{array}$$

b. Consonant deletion

$$\begin{array}{ccccccc} \ldots C & C \ldots & \text{or} & \ldots C & C \ldots \\ \downarrow & & & & \downarrow \\ \emptyset & & & & \emptyset \end{array}$$

c. Consonant assimilation

$$\ldots C_i \quad C_j \ldots \quad \rightarrow \quad \ldots C_j \quad C_j \ldots$$

The suffixation of a vowel-initial morpheme to a vowel-final root creates a vowel cluster. This may be broken up by consonant insertion, vowel deletion or vowel assimilation:

(15)a. Consonant insertion . . . V V . . .
↑
C

b. Vowel deletion . . . V V . . . or . . . V V . . .
↓ ↓
Ø Ø

c. Vowel assimilation . . . $V_i$ $V_j$ . . . → . . . $V_j$ $V_j$ . . .

Whether a given morphological string involves vowel insertion or consonant deletion is not always obvious. For instance, the so-called present tense morpheme for a verb is *ru* for V-verbs, as in *tabe-ru* 'eat', and *u* for C-verbs, as in *kak-u* 'write'. It is usually assumed that the original morpheme is *ru*, and thus that the C-verb present tense form formation involves consonant deletion, as in *kak-ru* → *kak-u*.

However, Ohno (1979) proposes that this verb form came about by suffixation of a verb *-u*. According to this diachronic analysis, V-verbs had to go through a consonant insertion process as in *tabe-u* → *tabe-ru*. I will be referring to this morpheme as *-(r)u* in this book. Hypothetically speaking, if I used *-u* instead, then there would be three ways of segmenting *taberu*: (a) *tabe-r-u*, (b) *tabe-ru* and (c) *taber-u*. Since *-r-* has no semantic or syntactic import, (b) or (c) is preferred. However, (b) compromises the morphological integrity of the tense morpheme, and (c) compromises the morphological integrity of the verb root. It seems to be more important to segment the root without a phonologically motivated element. I will try to avoid segmenting such material in the example sentences in this study, but if segmented, I will not gloss it.

## 3 Traditional approaches to inflectional analysis

To understand the copula's forms and functions, we must understand other inflective categories' forms and functions because the copula creates patterns with them to give features to non-inflective categories and defectively inflective categories. As part of a diachronic investigation of copula forms, I will be examining general verbal

morphology in an historical context. As a tool for morphological description, I will rely on the inflectional morphological analysis of traditional grammar. However, there are at least two inflectional forms in the traditional grammar that I would have to dismiss in order to efficiently describe inflectional forms. They are the irrealis form, assumed to be a stem for the negative form of verbs, and the adverbial form, also assumed to be a stem for the past tense form. I will show that they do not have any meaningful function in the negative or past tense forms.

### 3.1 Irrealis category and the negative form

This section examines the traditional morphological analysis of the negative form. I will show redundancy in the traditional grammarians' morpho-syntactic analysis and present an alternative.

Shibatani (1990) analyses the composition of the traditional verbal morphology as follows:

(16) [Root + Inflectional ending] (+ Auxiliary) (+ Particle)

Stem (= inflectional category)

Each stem, consisting of the root and an inflectional ending, is an inflectional category. Each inflectional category subcategorizes for auxiliary verbs and/or particles to suffix to its inflectional ending. In this compositional analysis, inflectional endings are distinct from auxiliary verbs for the suffixation target: the former suffixes directly to the verb root while the latter suffixes to the stem.

Shibatani (1990) posits two criteria for the categorial status of the auxiliary verb in the traditional grammar: first, it suffixes to a category that inflects, and second, it itself inflects. There are some suffixes that do not seem to fulfil both criteria, yet they are categorized as auxiliary verbs. I will discuss them in a later section. There are six inflectional categories identified for modern Japanese predicates within the traditional grammar, and they constitute the inflectional paradigm.

One of the inflectional categories is the irrealis category (= irrealis form). There are three auxiliaries that are subcategorized for by the irrealis form: negative, passive and causative auxiliaries. In (17), the

morphological forms to the left of the arrows have the compositions shown on the right-hand side. The plus symbol indicates the word boundary between the inflected verb and an auxiliary.

(17) **Negative, passive and causative forms**

| *Surface forms* | | | *Internal compositions* |
|---|---|---|---|
| | | | Irrealis + Aux |
| hanasanai | 'does not speak' | → | *hanas-a* + na-i |
| hanasareru | 'is spoken' | → | *hanas-a* + re-ru |
| hanasaseru | 'makes one speak' | → | *hanas-a* + se-ru |

The portion *hanas-a* is the irrealis form consisting of the root and the inflectional ending *-a*. The auxiliary verbs *na-i, re-ru, se-ru*, consist of the auxiliary root and the inflectional ending *-i*, *-ru*, and *-ru* respectively. The irrealis form *hanas-a* is italicized in the following sentences:

(18)a. Kare wa hitokoto mo *hanas-a* + na-kat + ta.
he TOP one word even speak-IRL NEG PS
'He did not speak a word.'

b. Kaigi de wa omoni eego ga *hanas-a* + re + ta
conference at TOP mainly English NOM speak-IRL PASS PS
'At the conference, mainly English was spoken.'

c. Ore ni mo *hanas-a* + s-e + ro
Me to also speak-IRL CAUS-IMP IMP
'Let me speak too.'

These examples all involve C-verbs. Now let us examine suffixation of the negative auxiliary to V-verbs:

(19)a. tabenai 'does not eat' → tabe + na-i
b. minai 'does not see' → mi + na-i

By definition in the traditional grammar, auxiliaries cannot directly suffix to the root. They must be suffixed to the stem of a verb or another auxiliary: a composition of the root and an inflectional ending (Shibatani 1990). Hence, (19a) and (19b) are analysed as having the following composition in the traditional grammar:

| (20) | *Irrealis form* | | *Negative auxiliary* | |
|---|---|---|---|---|
| | [verb root | inflectional ending] | [Neg. aux | Inf. end.] |
| a. | ta- | be | na- | i |
| b. | | mi | na- | i |

Although the morphologically constant portion of the verb 'to eat' is *tabe-*, and that of the verb 'to see' is *mi-*, the compositional analysis in (20) shows that only the first syllable of *tabe-* is the root, and the verb 'to see' has no root. Also, the morphological form of the inflectional ending differs for each verb.

An efficient way of eliminating this phonologically unprincipled analysis, while keeping the notion of the irrealis category, is to posit a zero inflectional ending for the irrealis form of V-verbs as Sakuma (1936) has done:

| (21) | *Irrealis form* [verb root – inflectional ending] | *Negative Auxiliary* [aux. root – inflectional ending] |
|---|---|---|
| a. | tabe- Ø | na- i |
| b. | mi- Ø | na- i |

Then, the irrealis category can be generalized to have the following two representations:

(22) **Irrealis forms**
[C-root-a]
[V-root-Ø]

Representation (22) leads to the negative suffixation shown below:

(23) **Negative suffixation**
[root-(a)] + na-

Now, let us look at the remaining auxiliaries subcategorized for by the irrealis category: the passive and the causative. Based on the representations of the irrealis category in (22), the passive and the causative forms on the left-hand side are analysed as having the internal compositions shown to the right of the arrows in (24).

(24)a. hanasareru 'is spoken' → *hanas-a* + re-ru

b. taberareru 'is eaten' → tabe-Ø + rare-ru

c. hanasaseru 'makes one speak' → *hanas-a* + se-ru

d. tabesaseru 'makes one eat' → tabe-Ø + sase-ru

From the internal compositions, passive morphemes are identified as *re-* and *rare-*, the causative morphemes, *se-* and *sase-*. Thus, (24) is generalized in (25).

(25)a. **Passive suffixation**
[C-root-a] + *re-*
[V-root-Ø] + *rare-*

b. Causative suffixation
[C-root-a] + *se-*
[V-root-Ø] + *sase-*

It is curious that there are two allomorphs for each of the passive and causative suffixes. The irrealis forms are vowel-final for both C-verbs and V-verbs, thus there is no reason for there to be two allomorphs for each of the passive and causative morphemes. Recall the (*r*)*u*-form, which alternates between *-ru* and *-u* for vowel-final roots and consonant-final roots. The choice of allomorph in the (*r*)*u*-form is phonologically conditioned:

(26) (*R*)*u*-form: Root plus -(*r*)*u*
V-root plus *-ru*
C-root plus *-u*

There is no such trigger for allomorphs in the cases of the passive and causative.

Another oddity of the passive and the causative suffixation in (25a) and (25b) is that they involve double phonological processes: selecting between *-a* and zero in irrealis form and selecting between *-re-* and *-rare-* or *-se-* and *-sase-*.

(27)a. Irrealis category: root – (a)

b. Passive form: irrealis + (ra)re-

c. Causative form: irrealis + (sa)se-

These problems are eliminated if we abandon the irrealis category, and assume that these morphemes are directly suffixed to the root. In the direct suffixation analysis, the negative alternates between *-ana-* and *-na-*, the passive between *-rare-* and *-are-*, and the causative, between *-sase-* and *-ase-* for consonant-final roots and vowel-final roots:

| | | | |
|---|---|---|---|
| (28) | Negative formation: | root-(a) – na- | hanas + ana-<br>tabe + na- |
| | Passive formation: | root-(r) – are- | hanas + are-<br>tabe + rare- |
| | Causative formation: | root-(s) – ase- | hanas + ase-<br>tabe + sase- |

Here, the choice of each auxiliary form from the pair of allomorphs is completely predictable: the consonant-final roots avoid a consonant cluster by selecting the vowel-initial versions of these suffixes, and the vowel-final roots select the other versions.

The same argument holds for eliminating the conditional (realis in classical Japanese), another inflectional category of the traditional grammar. A contemporary interpretation of the traditional analysis of the suffixation of the hypothetical particle *ba* is shown in (29):

| (29) | | | *Conditional form* | | *Conditional particle* |
|---|---|---|---|---|---|
| a. | hanaseba | 'if one speaks' | *hanas-e* | + | ba |
| b. | tabereba | 'if one eats' | *tabe-Ø* | + | reba |

The conditional category has two representations: [root-*e*] for the C-verbs, and [root-Ø] for the V-verbs. The conditional particle has two allomorphs. Again, the suffixation involves a two-tier phonological selection process between *-e-* and zero, and between *ba* and *reba*, with no phonological account for the latter selection. On the other hand, the direct suffixation analysis reduces redundancy and provides a generalized phonological motivation for the allomorph selection.

(30) **Conditional suffixation**
root + (r)eba
C-root + eba
V-root + reba

This examination reveals an inefficient inflectional analysis of the negative, causative, passive and conditional forms in the traditional grammar. I have shown that elimination of the realis and the conditional categories leads to a simple and efficient morpho-phonological analysis. The morphological structure of these inflectional forms now parallels that of the (*r*)*u*-form

(31)a. root-(r)u (Non-past)

b. root-(a)na- (Negative)

c. root-(r)arer- (Passive)

d. root-(s)aser- (Causative)

e. root-(r)eba (Conditional)

Consequently, one of Shibatani's auxiliary criteria that auxiliary verbs are suffixed to a stem (= root + inflectional ending) instead of to a root disqualifies the negative, passive and causative morphemes from auxiliary verb categorial status. Since I will not take up passive or causative forms in this study, I will not discuss their categorial status here. However, I will treat the negative morpheme occurring with a verb form as an inflective non-auxiliary.

### 3.2 Adverbial category and the past tense form

The *renyoo-kei*, 'Adverbial category/form', literally means 'a form followed by an inflective category'. In the traditional grammar for classical Japanese, several aspectual auxiliaries are specified to be suffixed to this form. One of them is a perfective auxiliary *-tari*:

(32)a. Adverbial form
[root-(*i*)]

b. Perfective form
[root-(*i*)] + tari

An example with *tari* is shown in (33):

(33) yorosiu *yom-i* *tari*
well compose-ADV PERF
'(I) have composed a nice poem.'
(Makurano sooshi, 21 by Sei Shoonago 990 AD)

In modern Japanese grammar, among those that are specified to suffix to the adverbial form are the past tense morpheme *-ta*, the polite morpheme *-mas*, and the conjunctive particle *-te*. The past tense morpheme *-ta* evolved from the perfective *-tari*. Tari evolved from *-te* and the existential verb *ari*.

(34)a. Past tense form
[root-(*i*)] + ta

b. Conjunctive form
[root-(*i*)] + te

c. Polite form
[root-(*i*)] + mas-

However, while suffixation of *-mas-* to [root-(*i*)] results in the phonological string of root -(*i*)*-mas-*, the past tense form and the conjunctive form of C-verbs are fused with the adverbial morpheme *-i*, rendering *-i* unrecognizable except in the case of a few verbs like *hanas-i-ta* 'spoke'.

(35) **Suffixation of *-ta* to C-verb roots**

| | *root* | | *ta-form* | |
|---|---|---|---|---|
| a. | hanas- | → | hanas-i + ta<br>speak-ADV + PS | 'spoke' |
| b. | sak- | → | sa-i + ta<br>bloom-ADV + PS | 'bloomed' |
| c. | kog- | → | ko-i + da<br>row-ADV + PS | 'rowed' |
| d. | yom- | → | yon- + da<br>read- + PS | 'read' |
| e. | ar- | → | at- + ta<br>exist- + PS | 'existed' |
| f. | mot- | → | mot- + ta<br>hold- + PS | 'held' |

In these past tense forms, many roots and the morpheme *-i-* are fused and reduced. The conjoining particle *-te* yields exactly the same

phonological shapes. Such a phonological reduction strongly indicates that the adverbial form no longer has grammatical relevance to the past tense form. Thus, *-ta* and *-te* suffixation is better treated as a case of direct suffixation to the root. In this morphological analysis, the former adverbial morpheme *-i-* is reduced to a consonant cluster breaker for only a few forms. For convenience, let us posit *-i*-* for the abstract representation of the fused *-i-*. Since not all consonant clusters are broken up by the vowel *-i-*, I assume it is selcted by *-ta* and *-te*. Thus I will segment *-i*-* together with *-ta* and *-te*:

(36)a. Past tense form
[root- + (*i**) *ta*]

b. Conjunctive form
[root- + (*i**) *te*]

For ease of discussion, however, I will represent the past tense and conjunctive morphemes as *-ta* and *-te* in the rest of this book. To be consistent with the past tense form without positing the adverbial form, the polite forms should also be analysed as a case of direct suffixation to the root:

(37) Polite form
[root- + (*i*) mas-]

In this analysis, *-ta*, *-te* and *-mas* are all inflectional endings each constituting an inflectional form with the host root. Since the polite *-mas-* inflects fully, this morpheme is an auxiliary according to Shibatani's (1990) criterion. According to his analysis, *kakimasu* 'write' has the internal morphological structure of (38).

(38) [[root-*i*] + *mas*-] [*kak-i*] + *mas-*

I consider preserving the adverbial form within the polite form to be meaningless because the adverbial form has no semantic or syntactic relevance to the polite form. Accordingly, it is the notion of auxiliary that should be reconsidered.

However, this does not mean that the adverbial form of verbs is eliminable. Consider the following pair:

(39)a. osusi *o* *tukur-i* tomodati to tabe-ta
sushi ACC make-ADV friend with eat-PS
'I made sushi and ate it with my friend.'

b. osusi o *tukut-te* tomodati to tabe-ta
sushi ACC make-CONJ friend with eat-PS
'I made sushi and ate it with my friend.'

The conjunctive form *tukut-te* in (39b) is the form just considered above in the discussion of *-ta* form. In (39a), *tukur-i* is an adverbial form by itself. It simply marks the fact that the element that follows it is a verbal or clausal category without holding a conjunctive relation.

The adverbial form of the adjective category is formed with an adverbial morpheme *-ku*. This form is important for expanding the adjective category's inflectional forms. I will discuss it in relation to the copula's function as a feature provider in Chapter 7. The adverbial form of the copula itself will be discussed in a diachronic study in Chapter 8, for each of the copulas.

# 4
# Against Non-past Tense Morphology

## 1 Outline of present tense marking

This chapter investigates the most basic predicate form, commonly referred to as the non-past tense form – recall my discussion of referring to a given verbal form based on semantic oppositions of the feature category. I suggested at the outset of Chapter 3 that the forms such as *hanas-u* 'speak', '*samu-i*' 'is cold' and *d-a* 'is' may be the non-past tense forms from the perspective of the tense category in which these forms yield the non-past tense interpretation, as opposed to the past tense forms such as *hanas-ita* 'spoke', and *samu-katta* 'was cold', *d-atta* 'was'. But there are also other perspectives from which these forms may be viewed. From the perspective of the polarity category, these are affirmative forms, yielding an affirmative interpretation, as opposed to negative forms such as *hanas-nai* 'not speak', *samuku-nai* 'is not cold' and *zya-nai* 'is not'. From the perspective of politeness, these are the plain forms, yielding an informal interpretation, as opposed to the polite forms such as *hanas-imas-u* 'speak [polite]', and *samuii des-u* 'is cold [polite]'. However, the most widely accepted analysis is that these forms are the non-past (= the present) tense forms, encoding non-past tense features.

The concepts of past, present and future are defined in relation to the speech time. The past tense represents a temporal reference to an event that occurred or a state that existed prior to the time of speech. The present tense represents a temporal reference to an event in progress at the time of speech, or a state existing at the time of speech. The future tense refers to the time of an event or a state beyond the time of speech.

It is widely assumed in contemporary linguistic analyses of Japanese verbal inflections that there are two grammatical tense categories, *past* and *non-past*, and that they are morphologically encoded as *-ta* and *-(r)u* in verbs and as *-ta* and *-i* in adjectives respectively (Block 1946; Okutsu 1978; Nakau 1976; Lee 1999). The copula too, encodes the past tense morpheme *-ta* in *datta*. For the non-past tense, *-a* in the copula form *da* is identified as the non-past tense morpheme (Teramura 1993, Okutsu 1978). Both the past and non-past morphemes are considered to be inflectional endings forming past tense form and non-past tense form as part of an inflectional paradigm.

Some linguists use the term *present* instead of *non-past*, but it is only a matter of naming for the tense category that opposes the *past*. The notion of *non-past* in the dichotomy of *past* vs. *non-past* is a collective term for *present* and *future*, as the morpheme *-(r)u* is assumed to represent the latter two categories. The temporal interpretations of present state for stative predicates, and habitual or future actions for action predicates are attributed to the morphemes *-a*, *-i* and *-(r)u* in the following examples. (The non-past is glossed as NPS.)

(1)a. kyoo wa nitiyoobi *d-a*
today TOP Sunday *COP-NPS*
'Today is Sunday.'

b. kono natu wa sugoku *atu-i*
this summer TOP very *hot-NPS*
'It is very hot this summer.'

(2)a. watasi wa kyoodai ga sannin *ar-u*
I TOP sibling NOM three *have-NPS*
'I have three siblings.'

b. boku wa mainiti hanbaagaa o *tabe-ru*
I TOP everyday hamburger ACC *eat-NPS*
'I eat a hamburger everyday.'

c. sono hanbaagaa wa asita *tabe-ru*
that hamburger TOP tomorrow *eat-NPS*
'As for that hamburger, I will eat it tomorrow.'

The non-past category opposes the past tense category represented by *-ta*. In the following sentences, the copula, an adjective and a verb

are affixed by *-ta*, yielding the past time reference. The material between the root and the tense morpheme such as *-at-* in *d-at-ta*, or *-kat-* in *atu-kat-ta* is irrelevant to the semantic interpretation. I will discuss them in a later section. Meanwhile I will not gloss them.

(3)a. kinoo wa doyoobi *d-at-ta*
yesterday TOP Saturday *COP-PS*
'Yesterday was Saturday.'

b. kyonen no natu wa *suzusi-kat-ta*
last year GEN summer TOP *cool-PS*
'It was cool last summer.'

c. boku wa kinoo hanbaagaa o *tabe-ta*
I TOP yesterday hamburger ACC *eat-PS*
'I ate a hamburger yesterday.'

In this tense morphology analysis, each of the two opposing tense categories, non-past vs. past, is morphologically encoded: *-(r)u* and *-ta* in verbs, *-i* and *-ta* in adjectives, and *-a* and *-ta* in the copula respectively. I will refer to this as *binary tense marking analysis*.

I will call the verb form ending with *-(r)u*, as in *tabe-ru* 'eats' and *hanas-u* 'speaks', the *(r)u-form*, the adjective form ending with *-i* as in *atu-i* 'is hot' the *i-form*, and forms ending with *-ta* as in *tabe-ta* 'ate', the *ta-form*, regardless of the morpho-syntactic analyses of these suffixes. The copula form *da* will simply be called *da*. In the binary tense marking analysis, *(r)u-form*, *i*-form and *da* are the non-past tensed forms, and the *ta-form* is the past tensed form. The binary tense marking analysis is summarized below.

(4) **Binary tense marking analysis**

| tense category: | past | present future<br>non-past |
|---|---|---|
| morphology: | *-ta* | *-(r)u* (verbs)<br>*-i* (adjectives)<br>*-a* (copula) |
| examples: | tabe-*ta* 'ate'<br>hanas-i*ta* 'spoke'<br>atu-kat-*ta* 'was hot'<br>d-at-*ta* 'was' | tabe-*ru* 'eats'<br>hanas-*u* 'speaks'<br>atu-*i* 'is hot'<br>d-*a* 'is' |

It is well known that the temporal interpretation of -(*r*)*u* and *-ta* in subordinate clauses is not absolute, but is relative to the matrix event time. Consider the following pair of sentences:

(5)a. [ryoosin ga *ku-ru*] node heya o soozi si-ta
parents NOM come-NPS because room ACC clean do-PS
'Because my parents were coming to visit, I cleaned the room.'

b. [ryoosin ga *ki-ta*] node heya o soozi si-ta
parents NOM come-PS because room ACC clean do-PS
'Because my parents came to visit I cleaned the room.'

In each of the sentences, the adverbial clause denoting a reason is indicated by brackets. The main clauses in both sentences are past tensed and interpreted accordingly. The verb in the reason clause in (5a) is present tensed. This yields an interpretation that the event denoted by the adverbial clause had not occurred at the time of the event denoted by the main clause. In (5b), the past tensed verb in the adverbial clause yields an interpretation that the event that it denotes had already occurred at the time of the event denoted by the matrix clause. The phenomenon of relative tense extends to the temporal interpretation of the embedded clauses in argument positions. It has been shown in the literature that relative tense phenomenon can be accounted for without discarding the binary tense feature analysis (see Lee 1999).

## 2 Conceptual problems in binary tense marking analysis

There are problems in binary tense marking analysis, both conceptually and empirically. I will first present three conceptual problems, which are not strong evidence against the binary tense marking analysis, but which none the less point toward an alternative analysis, which identifies only one, not two, overt tense markers. Then I will present three empirical problems for the binary tense marking analysis, specifically with the morphemes -(*r*)*u*, *-i*, and *-a* as morphological tense markers. I will argue that these problems do not arise if -(*r*)*u*, *-i*, and *-a* are not analysed as tense markers, and will propose an alternative tense marking analysis.

### 2.1 Redundancy

Conceptually, binary tense marking is redundant. Languages have a morphological device for expressing two opposing features by morphologically marking only one of them. The unmarked one expresses the opposite of the semantics that is expressed by the marked one. For instance, consider the polite–informal and negative–affirmative distinctions in Japanese. In distinguishing the speech level, the polite speech level is overtly marked by -(i)*mas*- or -*es*- (glossed as POL) but there is no morpheme that marks the informal speech level, which is to say that the latter speech level interpretation obtains by lack of the polite morpheme:

(6)a. tabe-ru
eat-NPS
'I will eat.'

b. tabe-mas-u
eat-POL-NPS
'I will eat (polite).'

(7)a. kore wa kagi d-a
this TOP key COP-NPS
'This is a key.'

b. kore wa kagi d-es-u
this TOP key COP-POL-NPS
'This is a key (polite).'

In distinguishing polarity, the negative is marked with the morpheme -(a)*na*- or -*n*, but the affirmative is unmarked. The affirmative interpretation obtains by lack of the negative morpheme:

(8)a. tabe-ru
eat-NPS
'I will eat.'

b. tabe-na-i
eat-NEG-NPS
'I will not eat.'

Bybee (1985) notes that Jacobson (1939, 1957) observed that the zero-morpheme (= morphologically unmarked) tends to occur in the

semantically unmarked members of categories. This certainly holds true for Japanese polite–informal and negative–affirmative distinctions: informal speech is more basic than polite speech. The affirmative is more basic than the negative. Bybee tested Jacobson's generalization cross-linguistically and found that it also held true in her language samples. Particularly noteworthy for the present discussion is that among nineteen language samples, all had present and past tense distinction, and in twelve (63 per cent) of them the zero-morpheme occurred in the present tense. Therefore, the two-way overt tense marking in Japanese is exceptional from a cross-linguistic perspective, as well as in comparison to speech level and polarity distinctions through one-way overt marking.

### 2.2 Morphological asymmetry

The second conceptual problem is the conspicuous asymmetry between the past tense morphology and the non-past tense morphology. The past tense is marked with *-ta* across the board in verb, adjective and the copula categories as shown by the following examples. (I will discuss the segmented materials that are neither roots nor the tense morpheme in a later section.)

(9)a. *Verbs*

| | |
|---|---|
| tabe-*ta* | 'ate' |
| tabe-na-kat-*ta* | 'did not eat' |
| tabe-mas-i-*ta* | 'ate (polite)' |
| tabe-mas-e-n-d-es-i-*ta* | 'did not eat (polite)' |

b. *Adjectives*

| | |
|---|---|
| atu-kat-*ta* | 'was hot' |
| atu-ku-na-kat-*ta* | 'was not hot' |

c. *Copula*

| | |
|---|---|
| d-at-*ta* | 'was' |
| zya-na-kat-*ta* | 'was not' |
| d-es-i-*ta* | 'was (polite)' |
| zya-ari-mas-e-n-d-es-i-*ta* | 'was not (polite)' |

Across all categories and in negative, affirmative, polite and plain forms, the past tense is marked by *-ta*.

In contrast, there is a different non-past morpheme for each category: -(*r*)*u* for verbs, -*i* for adjectives and -*a* for the copula. In addition, the non-past pre-nominal form of the copula is *no* when following a regular nominal, and it is *na* when following an adjectival nominal, while the non-past pre-nominal forms of the adjective and verb are identical with those of the sentence final position. Consider the following examples which pair a sentence and a noun phrase:

(10)a. kono neko wa *tiisa-i*
this cat TOP small-NPS
'This cat is small.'

b. *tiisa-i* neko
small-NPS cat
'a small cat'/'A cat who is small'

(11)a. tori wa kono hana no tane o *tabe-ru*
bird TOP this flower GEN seed ACC eat-NPS
'Birds eat seeds of this flower.'

b. tori ga *tabe-ru* tane
bird NOM eat-NPS seed
'The seeds that birds eat'

(12)a. Ian wa watasi no itoko d-a
Ian TOP my cousin COP-NPS
'Ian is my cousin.'

b. watasi no *itoko no* Ian
my cousin COP Ian
'Ian, who is my cousin'

(13)a. kono heya wa sizuka *d-a*
this room TOP quiet COP-NPS
'This room is quiet.'

b. *sizuka na* heya
quiet COP room
'a quiet room'/'a room that is quiet'

Japanese noun modifiers, including relative clauses, are always pre-nominally positioned, and there are no relative pronouns. Therefore, there is no distinction between 'a quiet room' and 'a room that is quiet' in Japanese, which leads to a widely accepted view that noun modification by a predicative category involves a relative clause structure (e.g. Kuno 1973; Kamio 1983).

If we assume that a predicate nominal modifies a noun in a parallel fashion to the way adjectives and verbs do, the pre-nominal copula forms *no* and *na* must be assumed to encode a non-past morpheme just as *da* does. Then, *no* would have to be analyzed as *n-o*, and *na* as *n-a*, in which *-o* and *-a* are non-past tense morphemes. Altogether this identifies four distinct non-past tense morphemes in the Japanese tense marking system.

Furthermore, as I will also discuss as an empirical problem in a later section, the polite negative affix *-masen* does not encode a non-past tense even though it can yield the present or future temporal reference. Finally, as I will discuss in detail in Part IV, the copula *da* is obligatorily excluded in certain sentence constructions. Copula-less sentences are thus another instance where a non-past tense is not morphologically encoded. When we add these 'zero' cases to the overt non-past tense morphemes, we have a wide variety of representations of the non-past temporal reference. This asymmetry of one past tense morpheme vs. multiple non-past tense morphemes, including zero cases, is conceptually odd to say the least.

## 3 Empirical problems with binary tense marking analysis

### 3.1 Time-less events and states

The first empirical problem with the binary tense marking analysis is that the *(r)u*-form does not always represent future or present time reference. It has been pointed out in the literature (e.g. Yamada 1908; Mikami 1953; Teramura 1984), that there are states and events which transcend time. Consider the following sentences:

(14)a. (a modified sentence from Yamada, 1908)
hakkin wa kinzoku tyuu mottomo omo-i
platinum TOP metal among most heavy-NPS
'Platinum is the heaviest metals.'

b. (a sentence from Teramura 1984)
sankakukee no naikaku no wa wa
triangle GEN interior angle GEN total TOP
nityokkaku ni hitosi-i
two right angle to equal-NPS
'The total of interior angles of a triangle is equal to two right angles.'

c. mizu wa reido de koor-u
water TOP zero degree at freeze-NPS
'Water freezes at zero degrees.'

d. DNA wa hitori hitori tiga-u
DNA TOP one person one person differ-NPS
'Each individual has unique DNA.'

e. kita wa kotira d-a
north TOP this way COP-NPS
'North is this direction'

These sentences represent time-less truths which transcend a segmentable time reference such as past, present and future. The time-less truths that these sentences represent is universal: English versions also represent time-less truths. Thus, for English too, these tense-less interpretations would be a problem if the verb forms were assumed to be the present tensed forms.

English verb forms that yield present time reference as well as the time-less interpretations are, in fact, not morphologically marked for tense. Notice that the only morphology that separates them from the infinitive forms is the third person singular agreement marker as shown in (15).

(15) **English verbs**

| *Forms* | *Example verbs* | |
|---|---|---|
| infinitive | freeze | have |
| 3rd person singular | freezes | has |
| All other | freeze | have |

English be-verb forms that yield the present temporal reference are '*am*', '*are*' and '*is*'. They have no morpheme in common that can be extracted as a present tense marker either. They, too, only encode

person and number agreements. Thus we can conclude that so-called present tense forms of English verbs do not morphologically encode the present tense. Therefore, the lack of a specific tense reference in English translations (14a)–(14e) is accounted for by the absence of tense morphology.

It is important to distinguish *present tense form* as a semantic term from present tense form as a morphological term. A form that yields present tense interpretation, or non-past tense interpretation for that matter, is often referred to as a present tense form or non-past tense form. However, they are not necessarily morphologically marked for that tense category. English present tense forms are morphologically unmarked for tense while the past tense forms are marked with the morpheme -(*e*)*d*. The former may yield not only the time reference opposite the marked tense, but also no time reference as we have observed in the English translation in (14). Therefore, the time-less interpretation of the Japanese sentences in (14) is consistent with English if Japanese -(*r*)*u* is not a tense morpheme.

An absence of a time reference is also observed in embedded clauses. This is a nominalized form that receives the same interpretation as the English infinitive or gerund forms. First, consider the following example:

(16) Yumi wa piano o *hik-u* koto ga deki-ru
Yumi TOP piano ACC play-NPS NML NOM can-NPS
'Yumi can play piano'

The verb form *hiku* preceding the nominalizer *koto* (lit. 'thing') is the non-past tensed form if -(*r*)*u* is the non-past tense morpheme. Despite its form, *hiku* in this construction is referentially tense-less. The tensed form analysis led McCawley (1988) to term it as 'surface tensed, deep tense-less'. This apparent inconsistency does not arise if the -*u* in *hik-u* is not analysed as a tense morpheme. The same phenomenon is also observed in the following constructions:

(17)a. Yuuta wa kenkoo sindan o *uke-ru* no o
Yuta TOP health exam ACC receive-NPS NML ACC
okotat-ta
neglect-PS
'Yuta neglected to have a physical examination.'

b. Yuuta wa kenkoo sindan o okotat-ta
Yuta TOP health exam ACC refuse-PS
'Yuta refused a physical examination.'

(18)a. Sono tosyokan e wa tikatetu de *ik-u* no ga
that library to TOP subway by go-NPS NML NOM
benri da
convenient COP
'To get to that library, going by the subway is convenient.'

b. Sono tosyokan e wa tikatetu ga benri da
that library to TOP subway NOM convenient COP
'To get to that library, the subway is convenient.'

The fact that it is possible to rephrase the (a) sentences as the (b) sentences without using the embedded verbs indicates an absence of temporal reference in the (*r*)*u*-form of these verbs just as the verb infinitives and the verb gerund in the English translation lack any temporal reference.

### 3.2 Forms without a tense morpheme

The second problem is concerned with the phenomenon of an absence of the morpheme -(*r*)*u*, in a certain verbal form. The polite morpheme -(i)*mas*- is an auxiliary verb according to a criterion that distinguishes an auxiliary from an inflectional ending: the former inflects and the latter does not. Consider the verb *tabe*- 'to eat' in its polite forms:

(19)a. tabe-*mas-u*
eat-POL-NPS
'eats'

b. tabe-*mas-i-ta*
eat-POL-PS
'ate'

c. tabe-*mas-e-n*
eat-POL-NEG
'does not eat'

d. tabe-*mas-e-n-des-i-ta*
eat-POL-NEG-POL-PS
'did not eat'

Notice the negative form in (19c), in which the expected non-past tense morpheme is missing. The sentences with -(*i*)*masen* can express a state or event with or without temporal reference:

(20)a. watasi wa konban wa terebi o *mi-mas-en*
I TOP tonight TOP TV ACC watch-POL-NEG
'I will not watch TV tonight.'

b. abura wa mizu ni *toke-mas-en*
oil TOP water in melt-POL-NEG
'Oil does not melt in the water.'

The negative form of -(*i*)*mas*- used to be -(*i*)*mas-e-n-u*, but the negative affix -*nu* lost the final vowel -*u* during the Edo period (seventeenth to mid-nineteenth century) (Kaneda 1969).

(21) -(i)*mas-en-u* → -(i)*mas-en*
POL-NEG-NPS POL-NEG

The consonant -*n* in *masen*, without an accompanying vowel due to the loss of -*u*, is not a syllable but it counts as a *mora*, the basic time unit for the Japanese sound system. Thus, phonologically, it is a legitimate form. On the other hand, morphologically, the fact that -*u* has no effect on the temporal interpretation cannot be explained if -*u* is a morphological representation of the non-past tense category.

Next, let us consider a polite copula form *d-es-u*, COP-POL-NPS. *Desu* is pronounced as *des* in Tokyo and many other dialects. This is due to the high vowel devoicing phenomenon in fast to normal speech, in which the Japanese high vowels -*u*- and -*i*- occurring in a non-initial position of a word and noncontiguous to a voiced sound are devoiced. *Desu* is such an environment and the -*u*- is frequently devoiced. Thus, unless deliberately clearly pronounced, the morpheme -*u* in *desu* is inaudible in the Tokyo dialect.

Perhaps the most devastating case against overt tense marking for the non-past temporal reference comes from copula-less nominal sentences. Consider the following sentences containing predicate nominals:

(22)a. kyoo wa nitiyoobi d-a
today TOP Sunday COP-NPS
'Today is Sunday.'

b. kyoo wa nitiyoobi
today TOP Sunday
'Today is Sunday.'

(23)a. *kyoo wa nitiyoobi d-a?
today TOP Sunday COP-NPS
'Is today Sunday?' (As a non-echo question)

b. kyoo wa nitiyoobi?
today TOP Sunday
'Is today Sunday?'

The pair in (22) show that the copula *da* is optional. As the English translation shows, both sentences yield a present time reference regardless of the presence or absence of the copula *da*. The acceptability contrast between the pair in (23) shows that *da* must be obligatorily absent in a question sentence. Again, the absence of *da*, which is assumed to encode the non-past tense, does not block the present time reference in the (b) sentence.

Further, the time-less truth expressed in the copular sentence in (14e) can be expressed without the copula:

(24) kita wa kotti
north TOP this way
'North is this direction.'

In a question sentence, the copula *da* must be absent:

(25)a. *nee, kita wa kotti d-a?
hey north TOP this way COP-NPS
'Hey, is north in this direction?'

b. kita wa kotti?
north TOP this way
'Is north in this direction?'

These phenomena reveal that (i) the non-past temporal reference yields even without the supposedly non-past tense markers, and (ii) the supposedly non-past tense markers may not yield a time reference. On the other hand, the past time reference cannot happen

without the past tense morpheme as illustrated in the acceptability contrast in (26) and (27):

(26)a. watasi wa mada gakusee d-at-ta
I TOP still student COP-PS
'I was still a student.'

b. *watasi wa mada gakusee d-a
I-TOP still student COP-NPS
'(intended to mean) I was still a student.'

c. *watasi wa mada gakusee
I TOP still student
'(intended to mean) I was still a student.'

(27)a. Kinoo no kaigi naga-kat-ta
yesterday's meeting long-PS
'Yesterday's meeting was long.'

b. *Kinoo no kaigi naga-i
yesterday's meeting long-NPS
*'Yesterday's meeting is long.'

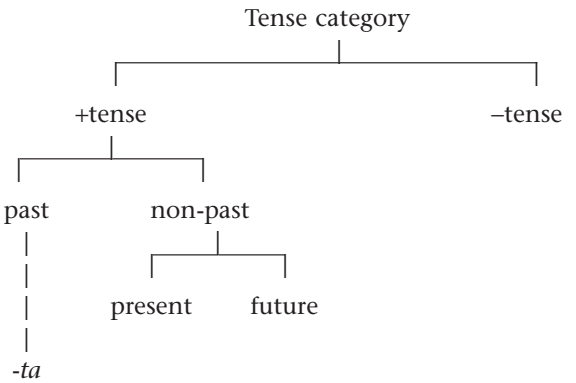
These facts cannot be accounted for by the binary tense marking analysis. In the following chapter I will propose a non-tensed form analysis for the (*r*)*u*-form, *i*-form and *da*.

# 5
# Categorial Marking Analysis

## 1 A solution for the temporal interpretations

To solve the problems presented in the preceding chapters, we have to abandon the idea that the morphemes *-(r)u*, *-i* and *-a* are the morphological representations of the non-past tense that yield a present or future time reference. I propose that the Japanese tense category consists of [+tense] and [–tense] categories, of which the former is subcategorized to past and non-past. Only the past tense is grammaticalized in the morphological form of *-ta* to be encoded in the predicates. This is summarized as follows:

(1)



Without the morpheme *-ta*, the temporal reference of the given propositional content can be the non-past time or time-less, to be determined by the lexical content of the items within the sentence. The term non-past is ambiguous in three ways. Used in the binary overt tense marking analysis, which I just refuted, *non-past* is not a category of minus value as in [*–past*]. It is a positive category that covers present and future tenses. As such, it is analysed to be overtly encoded. However, in my analysis, which can be referred to as *single marked tense analysis*, the non-past tense is a category of minus value as in [–past] or [–past tense], and thus it is morphologically unmarked. Within the [+tense] category, [–past] amounts to the present and the future. But, in the larger [tense] category which encompasses [+tense] as well as [–tense] subcategories, the [–past] amounts to the present tense, the future tense and [–tense] category. It is in the latter sense that predicate categories unmarked for the past tense can yield present or future time reference, or time-less reference.

In this analysis, the following copular sentences with *da* and its polite version *desu*, and copula-less sentences receive the same tense interpretation precisely because they are unmarked for the past tense. (The morphemes *-a*, *-(r)u* and *-i*, formerly glossed as NPS, will be glossed X until their feature identifications are made later in this chapter and the next chapter.)

(2)a. kyoo wa nitiyoobi *d-a*
today TOP Sunday COP-X
'Today is Sunday.'

b. kyoo wa nitiyoobi *d-es-u*
today TOP Sunday COP-POL-X
'Today is Sunday.'

c. kyoo wa nitiyoobi
today TOP Sunday
'Today is Sunday.'

It now remains to identify the features that the morphemes *-(r)u*, *-i* and *-a* represent. In the following section I will focus on *-(r)u* and *-i*. Chapter 8.4 will be devoted to the feature identification of the morpheme *-a* in the copula form *da*.

## 2 Treatment of (*r*)*u*-form, *i*-form and *da* in the traditional grammar

### 2.1 Overview

In the traditional grammar, -(*r*)*u*, and -*i* are not tense markers. They are inflectional endings without any particular semantic import. Therefore these morphemes do not have a name. The copula *da* is analysed as an inflectional ending itself on a par with -(*r*)*u* or -*i*. This in turn means that *da* is analysed as not having a root.

(3)a. Verb: kak-*u*

b. Adjective: samu-*i*

c. Copula: Ø-*da*

The copula (3c) is as described in Matsushita's (1961) chart, in which the root is absent.

This analysis, however, is not a result of principled morphological consideration, but rather a result of confining the morphological analysis within the limitations of the Japanese writing system. The Japanese syllabic/moraic writing system cannot separate a syllable into a consonant and a vowel, and thus cannot extract consonant-ending roots. Even though romanization is available today, the traditional morphological description continues even in the school grammar. Hence I follow Shibatani (1990) in taking the liberty of interpreting and describing in modern linguistic terms the concept of the verbal inflection system in the traditional grammar. Thus, I assume (4) for copula structure instead of (3).

(4) Copula
*d-a* *da* 'is'

In (4), *d-* is the root and *-a* is an inflectional ending. The reason to extract *d-* as the root, not *da-* is that other copula forms such as *de* (the adverbial) and *des-* (polite) do not contain *-a-*.

The traditional grammar posits six verbal inflectional categories (= forms) among which three are syntactically defined: *Ren'yoo-kei* 'Adverbial form', *Syuusi-kei* 'End form' and *Rentai-kei* 'Pre-nominal form'. Table 5.1 shows these forms of representative verbs, adjectives and the copula.

*Table 5.1* Verbal, adjectival and copulative inflectional paradigm
Entries: *hanasu* 'speak', *taberu* 'eat', *atui* 'hot' and *da* 'is'

| **Infl. category** | **Verb** | **Adjective** | **Copula** | **Subcategorizing auxiliary/particle** |
|---|---|---|---|---|
| *Ren'yoo-kei* (Adverbial form) | tabe-<br>hanas-i- | atu-kat-<br>atu-ku | d-at-<br>ni/de | -ta -te |
| *Shuusi-kei* (End form) | tabe-ru<br>hanas-u | atu-i | da | |
| *Rentai-kei* (Pre-nominal form) | hanas-u<br>tabe-ru | atu-i | na/no | |

All three (*r*)*u-form*, *i*-form and *da* are *Syuushi-kei* 'the end form' (or conclusive form, see Shibatani 1990). The verb (*r*)*u*-form and adjective *i*-form, but not the copula *da*, are also *Rentai-kei*, 'the pre-nominal form'.

## 2.2 The end form

The end form, the pre-nominal form and the adverbial form are all syntactically defined according to whether other material follows, and if so what category it is. The end form means the sentence ends and that nothing follows. As a verb-final language, it means the end of the matrix sentence:

(5) $[\ldots\ldots\ldots\ldots\text{-}(r)u/\text{-}i/da]_S$

The past tense forms can also appear at the end of a sentence. However, recall that in the traditional grammar, the past morpheme is an auxiliary outside the verb form. Therefore, the end form is one of only two – the other being the imperative form – that occurs in sentence final position. Thus, the morphemes -(*r*)*u*, -*i* and *da* (or possibly -*a*) in the end form are recognized as inflectional endings with the syntactic function of indicating the end of the sentence.

## 2.3 The pre-nominal form

The verb (*r*)*u*-form and adjective *i*-form, but not the copula *da*, are also categorized as 'the pre-nominal form'. Assuming again that the name of the inflectional category indicates the function it performs,

the morphemes -(*r*)*u* and -*i*, and the copula forms *na* and *no* are recognized as inflectional endings with the syntactic function of indicating that a nominal category linearly follows. For ease of discussion, I will refer to this function as the pre-nominal function. The effect of the pre-nominal form is that it modifies a noun, forming a larger noun phrase.

The sentence-ending and pre-nominal functions of (*r*)*u*-forms and -*i*, are illustrated in the following examples. Henceforth I will gloss -(*r*)*u*, -*i*, and the -*a* of *da* in the sentence end position as SE, and -(*r*)*u*, -*i* and the copulas *no* and *na* in the pre-nominal position as PN until the final feature identification is made.

(6)a. haha wa tokidoki osusi o *tukur-u*
mother TOP sometimes sushi ACC make-SE
'My mother sometimes make sushi.'

b. haha-ga *tukur-u* osushi wa oisi-i
mother NOM *make-PN* sushi TOP delicious-SE
'The sushi that my mother makes is delicious.'

(7)a. kono kuruma wa *atarasi-i*
this car TOP *new-SE*
'This car is new.'

b. Yuuta wa *atarasi-i kuruma* ga hituyoo d-a
Yuuta TOP *new-PN* car NOM necessary COP-SE
'Yuuta needs a new car.'

Notice that the topicalized subject of (7b) is a noun phrase containing a relative clause. As I have already discussed, noun modification by a predicative category involves the relative clause structure, which is shown in the following structural analysis.

(8)a. $[[[\ldots\ldots\ldots\text{-}(r)u]_S\ N]_{NP}\ldots\ldots]_S$

b. $[[[\ldots\ldots\ldots\ldots\text{-}i]_S\ N]_{NP}\ldots\ldots]_S$

The noun that heads the noun phrase containing a sentence in (9) may not be a lexical noun. It may be a nominalizer such as *no* or *koto* that turns a clause into a noun phrase. Therefore, *an embedded sen-*

*tence marking* vs. *a matrix sentence marking* may better describe the functions of pre-nominal form and sentence-ending form respectively. However, regardless of which one of two contrastive notions we adopt to describe their functions, we only create a paradox by attributing pre-nominal or sentence-ending function to the morphemes -(*r*)*u* and -*i*, precisely because both (*r*)*u*-form and -*i* form are pre-nominal and sentence-final forms at the same time.

### 2.4 The end and the pre-nominal copula

The copula *da* does not occur in the pre-nominal position.

(9)a. Katoo-san wa genzai bengosi *d-a*
Ms. Kato TOP currently lawyer *COP-SE*
'Ms. Kato is currently a lawyer.'

(10) *genzai bengosi *da* Katoo-san ga sityuusen
currently *lawyer* *COP-SE* Kato NOM mayoral election
ni de-te i-ru
for run-GER be-SE
(Intended to mean) 'Ms Kato, who is currently a lawyer, is running for the mayoral election.'

Can we attribute this fact to the morphological form *da* by assuming that it contains a morpheme that functions to end a sentence? Such an analysis cannot explain why *da* cannot occur in the sentence final position as the following acceptability contrast shows:

(11)a. *Nee, Tanaka-san wa bengosi d-a?
Hey Tanaka TOP lawyer COP-SE
'Hey, is Mr. Tanaka a lawyer?'

b. Nee, Tanaka-san wa bengosi?
Hey Tanaka TOP lawyer
'Hey, is Mr. Tanaka a lawyer?'

Therefore, a sentence-ending function cannot be attributed to the copula form *da*.

A copula in pre-nominal position takes the form of *na* or *no* depending on the category of the preceding nominal: *na* follows an adjectival nominal, and *no*, a regular nominal category.[1]

(12)a. genzai bengosi *no/ *na* Katoo-san ga
currently lawyer COP·PN Kato NOM
sityoosen ni de-te i-ru
mayoral election run-GER be-SE
'Ms. Kato, who is currently a lawyer, is running for the mayoral election.'

b. asoko ni *hen* **no/ na* mono ga ar-u
over there LOC *strange* *COP·PN* thing NOM exist-SE
'There is something strange over there.'

There is a homonym of *no* in a different category. It is a genitive case marker and can be distinguished from the pre-nominal copula *no*.

(13)a. bengosi no musuko ga taihos-are-ta
laywer GEN son NOM arrest-PASS-PS
'A lawyer's son was arrested.'

b. bengosi *no* musuko ga taihos-are-ta
laywer COP·PN son NOM arrest-PASS-PS
'(my) son who is a laywer was arrested.'

The genitive *no* in (13a) yields the possessive interpretation between *bengosi* 'lawyer' and *musuko* 'son', the pre-nominal copula *no* in (13b) yields the appositive interpretation between the two nominals.

The copula forms *no* and *na* cannot occur in the sentence final position:

(14)a. *Yosida-san wa bengosi *no*
yoshida TOP lawyer COP·PN
(intended meaning) 'Mr. Yoshida is a lawyer.'

b. *kono hana wa kiree *na*
this flower TOP beautiful COP·PN
(Intended meaning) 'This flower is beautiful.'

This fact follows if we assume that *na* and *no* are morphological representations of the pre-nominal function. In the following section I will propose a new morphological feature analysis for -(*r*)*u*, -*i*, *na* and *no*, which accounts for the phenomena we have observed.

## 3 A proposal: categorial marking analysis

In the preceding sections I argued against the following three analyses of -(*r*)*u*, -*i*, and *da*.

(15)a. -(*r*)*u* in verbs, -*i* in adjectives, and -*a* in the copula *da* represent the non-past tense.

b. -(*r*)*u* in verbs -*i* in adjectives and the copula -*da* function to indicate the end of a sentence.

c. -(*r*)*u* in verbs and -*i* in adjectives function to indicate that the category that follows it is nominal.

Then what do these morphemes represent? I propose that -(*r*)*u* represents the categorial status of the verb and -*i*, the categorial status of the adjective. This proposal is in a way too obvious, since the -*i* form is an adjective and the (*r*)*u*-form is a verb by morphological definition. Therefore I will refer to them as the *Categorial form*, which, by definition, simply consists of the root and the categorial marker. It encodes nothing else. Henceforth I will gloss a verbal categorial morpheme as V, and an adjectival categorial morpheme as A:

(16) **Categorial forms**

a. *Verbs*

| | |
|---|---|
| tabe-ru | hanas-u |
| eat-V | speak-V |

b. *Adjectives*

| | |
|---|---|
| atu-i | oisi-i |
| hot-A | delicious-A |

Under this analysis, any feature interpretation that the categorial form receives is by default, by the absence of marked features. Its occurrence in sentence-final position or in a pre-nominal position is due to the absence of an adverbial feature. Its non-past tense or tenseless interpretation is due to the absence of a past tense marker. This analysis gives a straightforward account for the pre-nominal copula forms *no* and *na*, as I will discuss below.

The (*r*)*u*- and the -*i* mark the category of its host predicate. While the roots of verbs and adjectives represent their meanings, the copula root does not. The meaning of the copulative predicate is borne by the predicative nominal or adjectival nominal. Consider the following pairs, in which the (a) sentences contain *da* and the (b) sentences do not:

(17)a. Yuuta wa [[*itinensei*] *da*]
Yuta TOP first grader COP-X

b. Yuuta wa [*itinensei*]
Yuta TOP first grader
'Yuta is a first grader.'

(18)a. koko wa [[*sizuka*] *da*]
this place TOP quiet COP-X

b. koko wa [*sizuka*]
this place TOP quiet
'This place is quiet.'

The predicate of sentence (17a) consists of a predicative nominal and the copula, while the predicate of (17b) consists of a predicative nominal only. The predicate of sentence (18a) consists of a predicative adjectival nominal and the copula, while the predicate of (18b) consists of a predicative adjectival nominal only. Yet each pair yields the same interpretation, which in turn shows that the copula does not have lexical content. The copula category cannot constitute a meaningful predicate by itself.

Thus the copula's status as a predicate is unlike that of verbs and adjectives in that the copula is part of a compositional predicate with a predicative nominal or predicative adjectival nominal. In (17a), *kodomo da* 'child is' is a nominal predicate, and in (18b), *sizuka da* 'quiet is' is an adjectival nominal predicate.

As I have mentioned, the copula in the pre-nominal position takes the form of *na* when the preceding nominal is an adjectival nominal, and *no* when the preceding nominal is a regular noun:

(19)a. itinensei *no* Yuuta wa Hiragana ga yom-e-ru
first grader COP·PN Yuta TOP Hiragana NOM read-POT-V
'Yuuta, who is a first grader, can read Hiragana.'

b. Yosida-san wa *sizuka na* tokoro ni hikkos-ita
Yoshida TOP *quiet COP·PN* place move-PS
'Mr. Yoshida moved to a quiet place.'

I assume that the subject of (19a) and the locative phrase in (19b) have the following syntactic structures:

(20)a. $[[Ø\ [\text{itinensee}\ \text{no}]_{\alpha}]_{S}\ \text{Yuuta}]_{NP}$
first grader COP·PN Yuta

b. $[[Ø\ [\text{sizuka}\ \text{na}]_{\beta}]_{S}\ \text{tokoro}]_{NP}$
quiet COP·PN place

The subscript symbol S in the middle brackets indicates a sentence. In (20a) and (20b) the S is a relative clause. The subjects of both relative clauses are relativized, thus the subject position in each S is empty as shown by the symbol Ø.

*Itinensee* 'first grader' in (20a) is a predicative nominal. It constitutes a nominal predicate compositionally with the copula. This constituent is shown in brackets with α. *Sizuka* 'quiet' in (20b) is a predicative adjectival nominal. It constitutes an adjectival nominal predicate compositionally with the copula. This constituent is shown in brackets with β. I propose that the categorial status of the compositional nominal predicate is encoded in the copula form *no*, and that of the compositional adjectival nominal predicate is encoded in the copula form *na*.

This morpho-syntactic analysis of the pre-nominal copulas *no* and *na* leads to a further proposal that they are Categorial forms of a compositional copula: the vowel *-o* encodes the categorial marker for the nominal predicate and, *-a*, the categorial marker for the adjectival nominal predicate. I analyse the consonant *-n* as a copula root. I will discuss copula forms with an *n*-root in Chapter 6.4.2. Henceforth I will segment *no* as *n-o* and *na* as *n-a*, and gloss them COP-N, in which N stands for the nominal predicate, and COP-AN, in which AN stands for the adjectival nominal predicate, respectively:

(21)a. [itinensee n-o]
first grader COP-N

b. [sizuka n-a]
quiet COP-AN

The categorial marking analysis does not apply to the morpheme *-a* in the copula *da*. The morpheme *-a* in *da* is obviously not the adjectival nominal predicate marker since *da* can appear with either a predicative nominal or a predicative adjectival nominal. Another piece of evidence that the *-a* in *da* is not a categorial marker is the fact that *da* cannot appear in yes–no question sentences as illustrated in (22):

(22)a. *Nee, kita wa kotti d-a?
Hey north TOP this way COP
'Hey, is north in this direction?'

b. Nee, kita wa kotti?
Hey, north TOP this way
'Hey, is north in this direction?'

Any morphological feature analysis of the *-a* in *da* must be able to account for the obligatory exclusion of *da* in yes–no question sentences. The categorial marker analysis cannot explain this fact.

The category of copula itself is identified by the copula root in various copula forms. The root *d-* appears in every copula form except *-na* and *-no*, of which the root is *n-*. The diversion of the copula root is due to diachronic evolution of copula forms. I will discuss the historical development of copula forms in a later section.

The categorial encoding of a given item dictates how it inflects to other forms. *Da* exhibits an irregular inflection, a common cross-linguistic phenomenon for copulas. The copula *de aru*, which contains a verb *ar-*, inflects as a verb. Thus its categorial form occurs both in the sentence-final and in the pre-nominal positions. A pair of examples is shown below:

(23)a. Wasinton wa amerika no syuto *de ar-u*
Washington TOP America GEN capital COP-V
'Washington is the capital of America.'

b. amerika no syuto *de ar-u* wasinton ni wa
America GEN capital COP-V Washington to TOP
ooku no gaikokuzin kankookyaku ga otozure-ru
many foreign tourists NOM visit-V
'A lot of foreign tourists visit Washington, which is the capital of the USA.'

Morphologically, *de aru* contains the copula root *d-* and the verbal category marker *-u*. The verbal category marker dictates the inflection of this form. Thus, it inflects to the polite form by encoding *-(i)mas-*, as in *de arimasu*, unlike the copula *da*, which inflects to the polite form by encoding *-es-*, as in *desu*.

For the proposed analysis of the *(r)u*-form, *i*-form, and *na* and *no* as Categorial forms, it is important to look at their diachronic development so that we may eliminate any possibility that they evolved as tense markers or any other features that are irrelevant to categorial features. The next chapter investigates the historical development of inflectional morphology.

# Part III
# Evolution of Inflectional Morphology

*This page intentionally left blank*

# 6
# Verb Forms

Adjectives and many verbs possessed the pre-nominal form distinct from the end form over the course of the evolution of inflection, but the pre-nominal forms of verbs over took the end forms during the twelfth to fourteenth centuries. The pre-nominal and end forms of adjectives were neutralized in the seventeenth century. Only the copula still possesses the pre-nominal forms distinct from the end form in contemporary Japanese. The term 'pre-nominal form' is a misnomer when considering the three functions it performed:

(1)a. it turns the clause that immediately contains it into a modifier of a noun;

b. it turns the clause that contains it into a noun;

c. it ends a sentence when paired with an emphatic particle.

Only (1a) can be described as pre-nominal. As a form used to perform (1b), it should be called a nominalized or nominalizing form. Functioning as in (1c), it should be considered a special case of the end form.

In the preceding chapter, I proposed a categorial form analysis for the (*r*)*u*-form, *i*-form as well as *no* and *na* forms. Is the proposal weakened by the fact that many of the categorial forms in modern Japanese used to be pre-nominal forms, and that the pre-nominal forms had the three disjunctive functions (1a)–(1c)? I will show in the following sections that the proposed category form analysis can be maintained.

## 1 Evolution of verb categorial forms

Let us first look at verbs. There is evidence, albeit at a speculative level, that -(*r*)*u* developed as a verb-forming suffix. Ohno (1979) proposes that the verbs' end form (as distinct from the pre-nominal) developed from a verbal root suffixed by a morpheme -*u*, which in old Japanese meant to *sit down*, as it appears in a poem in *Man'yoo shoo* ('Anthology of myriad of leaves', completed around 770 AD):

(2) tatu tomo *u* tomo kimi ga manimani
stand up or sit down or you GEN mercy
'I will stand up or sit down, whatever you wish.'

Ohno relates this *u* to the inflectional ending *un* in the Naha dialect of Okinawa. The *un*-form is the end form in Naha dialect. According to Ohno, this *un* developed from *wori*, which was formed from the *u* (= *wu*) and the existential verb *ari*. *Wori* was used to indicate an action in progress. Therefore the end form in Naha inherently contained the meaning of continuing action. Ohno hypothesizes that when the end form with -*u* was originally formed, the morpheme carried the abstract meaning of continuing action. For the morpheme -*ru* that occurs with V-verbs, Ohno explains that -*r* was inserted to break up a vowel cluster created by the suffixation of -*u* to the vowel-final root since such a phonetic environment was strictly avoided in Old Japanese.

Ohno does not discuss how the notion of continuing action relates to sentence-ending function. Ohno's account works much better for my proposed analysis that -(*r*)*u* represents the verbal category rather than for the sentence-ending analysis, particularly because of the meaning of *u* as 'to sit down' and for what it represents in the poem that Ohno quoted. In this poem, the female author is not literally offering to sit down or to stand up, but expressing that she would do anything for her lover. I speculate that sitting down and standing up in this poem symbolize actions in general as opposed to states. The transition from a word expressing an action per se to the marker of the verbal category is highly plausible.

What of the pre-nominal forms that eventually replaced the end form? The irregular verbs and a group of the V-verbs in the pre-nominal position had a form distinct from those in the sentence-final position. A number of examples are shown in (3):

(3)

| *End-form* | *Pre-nominal form* | *Gloss* |
|---|---|---|
| *k-u* | *k-u-ru* | come |
| *sin-u* | *sin-u-ru* | die |
| *s-u* | *s-u-ru* | do |
| *ok-u* | *ok-u-ru* | wake up |
| *ot-u* | *ot-u-ru* | fall |
| *kuy-u* | *kuy-u-ru* | regret |
| *task-u* | *tasuk-u-ru* | help |
| *tazun-u* | *tazun-u-ru* | inquire |

The distinction is an extra suffix *-ru*, and the forms with *-ru* replaced the end form as shown in (4).

(4)a. Verb for 'do'
End form: *su* ↴
Pre-nominal form: *suru*

b. Verb for 'fall'
End form: *otu* ↴
Pre-nominal form: *oturu*
(→ *otiru* in modern Japanese)

However, the C-verbs and another group of V-verbs, the forms occurring in the sentence final and pre-nominal positions were identical, as shown in (5):

(5)a. Verb for 'write'
End form and pre-nominal form: *kak-u*

b. Verb for 'see'
End form and pre-nominal form: *mi-ru*

Ohno's theory on the absence of the pre-nominal form distinct from the end form in C-verbs is that the pre-nominal morpheme *-ru* suffixed to the consonant ending root had the effect of losing the *-r-* of *-ru* to avoid a consonant cluster, thereby resulting in a form indistinguishable from the end form as shown in (6b). For 'see' type verbs, the *-r-* insertion in the end form resulted in the identical forms of the end and pre-nominal forms, as shown in (7):

(6) *kak-* 'to write'
   a. End form: *kak* + *u* → *kak-u*
   b. Pre-nominal form: *kak* + *ru* → *kak-ru*
      (loss of *-r-* to avoid a consonant cluster) → *kak-u*

(7) *mi-* 'so see'
   a. End form: *mi* + *u* → *mi-u* →
      (insertion of *-r-* to avoid a vowel cluster) → *mi-ru*
   b. Pre-nominal form: *mi* + *ru* → *mi-ru*

However, his theory admits to an inconsistency of the *-ru* suffixation: *-ru* is suffixed to the end form in 'fall' type and irregular verbs, while it is suffixed to the root in 'write' and 'see' types. I will not pursue the derivation of the pre-nominal form further. The important point is that there were some pre-nominal forms that were distinct from the end form by the clearly extractable morpheme *-ru*.

The very fact that not all verbs had two distinct forms for sentence final and pre-nominal occurrences is already an indication that the morphological encoding of pre-nominal function was not crucial to semantic interpretation. Further, the vowel *-u* in the pre-nominal morpheme *-ru* indicates that the pre-nominal form was clearly marked for the verbal category. The fact that this form replaced the end form is an indication that *-ru* has become simply a representation of the verbal category.

Now let us consider the nominalizing function of the pre-nominal form mentioned in (1b). The following sentence from *Makura no sooshi* by Sei Shoonagon (990? AD) involves nominalization. (Henceforth reference to *Makura no sooshi* will be done by the book title rather than the name of the original author or the editor, Ishida, of a reprint. The number given is the section number of the book. I have translated the Japanese into English literally, not poetically.)

(8) [hayoo mi-si onna no koto home iide nado
earlier see-PS woman GEN matter praise say-begin such
*su-ru*] mo . . . nao niku-si
*do-PN* too still irritating-SE

'Doing things such as starting to praise the woman he used to see is even more irritating.'

(*Makura no sooshi*, 26)

In this sentence the verb *su-ru* in the embedded clause, which I bracketed, is the pre-nominal form. The embedded clause is the subject of the matrix sentence and it is directly followed by the particle *mo*, which indicates that the embedded clause is nominalized. This in turn indicates that the pre-nominal form itself is functioning as a nominal and has the effect of nominalizing the clause that immediately contains it. The nominalizing function has been lost in modern Japanese, in which a nominalizer *no* or *koto* is necessary to nominalize a clause. According to the analysis that the vowel *-u* in the pre-nominal morpheme *-ru* is a categorial marker of the verb, the loss of the nominal function of *-ru* is a natural outcome.

The pre-nominal verb form in the final position in the matrix sentence also renders the *pre-nominal* a misnomer. Consider the following example from *Makura no sooshi*:

(9) haru no hazime ni mizu *namu* oo-ku
spring GEN beginning TIME water EMPH much-ADV
izu-ru
come out-PN
'In the beginning of spring season, a lot of water springs out.'

(*Makura no sooshi*)

The use of the pre-nominal here is a phenomenon of grammatical agreement with an emphatic particle. *Namu* was one of the emphatic particles that required the pre-nominal form of the verb in a non-pre-nominal position. This use of the pre-nominal form started even without the emphatic particles as early as the tenth century and eventually took over the end form.

The use of the pre-nominal form for emphatic agreement may strengthen the categorial marking analysis of -(*r*)*u* if we consider the pre-nominal form to be an emphatic form for the extra categorial morpheme. As shown in (3) these pre-nominal forms practically contain the end form. Therefore, the *-u-ru* combination is a doubling of the categorial morpheme, having the effect of emphasis.

## 2 Existential verb *ari/aru*

The Japanese existential verb *ar-* 'to exist' is morphologically unique for its end form *ar-i*. Besides the morphological form, the existential verb *ar-* has contributed to word formations on a large scale, especially in adjectival and copula forms. Its significance will be discussed in the relevant sections. In this section I will discuss only the morphology of *ar-* as a lexical verb with the meaning 'to exist'.

The existential verb *ar-* in modern Japanese is a C-verb inflecting in the same way as other C-verbs whose root ends with *r-*. The old existential verb *ar-* was also a C-verb, but its end form was *ar-i*. In the following examples, those of (10) contain the end form, the prenominal form and the realis form of *ar-* in classical Japanese, and those of (11) contain the end form, and the past tensed form in modern Japanese:

(10)a. Yamato Takeru no kisaki ra narabini ko ra Yamato ni
Yamato Takeru GEN wife PL and child PL Yamato LOC
*ar-i*
exist-SE
'Yamato Takeru's wives and children are in Yamato.'
(*Kojiki chuukan*, 12)

b. Yamato *ni* amata *ar-u* naka . . .
Yamato *LOC* many exist-PN among
'Among many that exist in Yamato.
(*Makura no sooshi*, 12)

c. iisugu-si mo si-tu beki tokoro dokoro mo
say exceed-PS also do-PERF seem places also
*ar-eba* . . .
exist-RLS
'Because there were some lines where I seemed to have said too much. . . .'
(*Makura no sooshi*, 376)

(11)a. asoko ni kissaten ga *ar-u*
over there LOC coffee shop NOM exist-V
'There is a coffee shop over there.'

b. mukasi wa tegami o kak-u kikai ga
old days TOP letter ACC write-V occasion NOM
takusan *at-ta*
many exist-PS
'In old days, there were many occasions to write letters.'

Let us focus on the end and the pre-nominal forms:

(12) Existential verb *ar-*
End form: *ar-i*
Pre-nominal form: *ar-u*

The *-i* ending in the end form and the *-u* ending in the pre-nominal form render the old existential verb a cross category: the adjectival category in the sentence-final position, but the verbal category in the pre-nominal position. The adjectival categorial status is attributed to the semantics of existence: a state, rather than an action (e.g. Kameda 1909). It is reasonable to assume that *ar-i* as the matrix sentence ending form developed before *ar-u* did as the embedded sentence ending form. Thus the cross categorization indicates verbalization of a semantically adjectival category.

The fact that the verbalization of the existential *ar-* is marked by the pre-nominal form confirms my proposed analysis that the morpheme *-ru* which is added to the sentence-final form in the general derivation of the pre-nominal form is a marker of the verbal category.

By the middle of the sixteenth century, the pre-nominal form *ar-u* became the end form as well, except in formal writings superseding *ar-i*. According to Kasuga (1968), there was a prolonged period of time when both *ar-u* and *ar-i* were used in sentence-final position. While the emergence of the pre-nominal forms of predicates in sentence-final position was triggered by the phenomenon of agreement with emphatic particles, *ar-u* had another reason for replacing *ar-i*. The conjectural auxiliaries, *besi*, *ram*, *rasi*, required the end form with the -(*r*)*u* ending to which to suffix. Hence *ar-u,* not *ar-i*, occurred with these auxiliaries. Thus, some linguists (e.g. Matsushita 1974) posit two forms, *ar-i* and *ar-u*, as the end forms of the existential verb.

As a verbal category, *ar-* was negated by suffixation of a negative auxiliary -(*a*)*zu*, forming *ar-azu*, just as were other verbs, for example

*yom-a-zu* 'read-NEG'. As an adjectival category, it opposes an adjective *na-si*, which itself is not a negative form. *Ar-* and *na-* oppose each other just as English 'present' and 'absent' do. The *ar-i*/*na-si* pair is found in the following:

(13) wa ga omow-u hito wa *ar-i* ya
I GEN think-V person TOP existent-A or
*na-si* ya to
non-existent-A or QUOT
'(I ask you) whether the person I love is alive or not.'
(*Ise monogatari*, 'Tales of Ise', 9
by Ariwara no Narihira (825–80))

*Na-si*, the negative counterpart of *ar-i*, evolved to *na-i* just as other adjectives did. The verbal negation by -(*a*)*zu* eventually faded away, and the *ar-i* form was replaced by the *ar-u* form, thus the affirmative and negative opposition of the existential verb in modern Japanese is *ar-u* and *na-i*. Thus, stative semantics is no longer represented in a categorial form, but its negative counterpart *na-i* maintains the adjectival categorial form.

A locative phrase in an existential sentence is marked by the particle *ni* in both old and modern Japanese:

(14) koko *ni* *ar-ite* Kasuga ya izuko.
here LOC exist-CONJ Kasuga EXC where
'Here I am and wondering where Kasuga is.'
(*Man'yoo shuu*, 1570)

The locative particle *ni* and the existential verb *ar-* became fused as *nar-*.

(15) Fused from
Pre-nominal form: *nar-u*

While the fused end form is theoretically *nar-i*, there is no occurrence of its end form *nari* in *Man'yoo syuu* according to Kasuga's (1968) statistics. On the other hand there are many occurrence of the fused form in the pre-nominal position in *Man'yoo syuu* as well as other sources. The following is representative:

(16) Kasuga *nar-u* Mikasa no yama ni ide-si
Kasuga exist-PN Mikasa GEN mountain on appear-PS
tuki kamo
moon EXC
'Oh, the moon on the Mikasa Mountains in the village of Kasuga!'
(by Abe no Nakamaro in *Kokin shuu*)

Notice that *Kasuga* in (16) is interpreted to be a locative phrase even though *ni* is fused into *nar-u*. This leads to two questions: Why did the fusion occur at the expense of the locative particle? How is the locative interpretation possible without the particle *ni*? In modern Japanese, the fused form is not in use for existential expressions. Kasuga suggests that the fusion of the locative particle and the existential verb was motivated by a need to control the number of syllables in the *tanka* poems, which consist of thirty-one syllables. They are composed of five, seven and five syllables in the first three lines, then five and seven syllables in the last two lines. By fusing *ni aru* into *naru*, the number of the syllables in that line can be reduced by one.

Kasuga quotes the following poem from *Man'yuu shuu* to show the effect of a syllable reduction. Notice that the first line containing a *nar-* form consists of exactly five syllables, and the fourth line which contains a *ni ar-* form consists of exactly seven syllables as desired:

(17) line 1 → tabi *nar*-eba
travel *exist*-RLS
'Because I am on my trip'

line 2 omofi tae-te mo
thought cease-GER EMPH
'I have given up any thought (of seeing her)'

line 3 ar-i-tur-edo
exist-PERF-CONS
yet I live

line 4 → ie *ni* *ar*-u imo
home *LOC* exist-PN wife
my wife, who is staying at home.

line 5 omof-i kana-si mo
think-and sad-SE EXC
I am sad thinking of her.

Kasuga does not discuss the second question as to how the locative interpretation is possible.

The fact that locative interpretation obtains follows if the fused form is lexically specified for locative semantics. Does this mean that *nar-* is lexically specified for compositional features as in the following?

(18) *n-ar-*
LOC exist

Example (18) is unlikely, since, in a morphological evolution, phonological reduction usually accompanies semantic reduction. Therefore, I propose that *nar-*, in a morphological fusion, lost its existential semantics, and is lexically specified only for locative semantics:

(19) nar-
LOC

In this analysis, *nar-* easily derives the semantics of 'to be located', which in turn can derive existential meaning without being specified for it. *Kasuga nar-u yama*, in which *Kasuga nar-u* modifies *yama* 'mountain' corresponds to the English phrase 'Mountains in Kasuga', a reduced form from 'Mountains that are/exist/located in Kasuga'. This reduced meaning accounts for the fact that *nar-* does not occur in sentence-final position.

# 7
# Adjective Forms

## 1 Categorial forms

Now, let us consider adjectives. The adjective category's end form was marked by *-si* while its pre-nominal form was marked by *-ki*. The consonant *-k-* in *-ki* was lost around the seventeenth century and was reduced to *-i*. This *i*-form then replaced the end form, resulting in the neutralization of the *ki*-form and the *si*-form into the *i*-form:

(1) **Adjective end and pre-nominal forms**

a. Adjective for 'sad'

| | | | |
|---|---|---|---|
| End form: | *kanasi* | | *kanasi-i* |
| | | | ↑ |
| Pre-nominal form: | kanasiki | → | kanasi-i |

b. Adjective for 'sacred'

| | | | |
|---|---|---|---|
| End form: | *kiyosi* | | *kiyo-i* |
| | | | ↑ |
| Pre-nominal form: | kiyoki | → | kiyo-i |

Notice that the old pre-nominal form of the *kanasi* 'is sad' type was derived from suffixation of *-ki* to the end form, while the end and pre-nominal forms of the *kiyosi* 'is sacred' type were derived by suffixation of *-si* and *-ki* to the root respectively.

The *kanasi* type is problematic for a morphological segmentation. *Kanasi-* remains intact in both end form and pre-nominal form, as well as the adverbial form *kanasi-ku*, and the nominalized form

*kanasi-sa*. However, if *kanasi-* is the root, then the end form has no inflectional ending. If we assume that *kana-* is the root, thereby obtaining the end form *kana-si,* of which the inflectional ending is a homonym to that of *kiyo-si*, then the pre-nominal form would have the morphological structure *kana-siki* with the inflectional ending *siki*. I will assume, without discussion, the analysis of *kanasi* as an end form without an inflectional ending.

It has been pointed out that there is a correlation between the inflectional type and semantic characteristics: many of the type illustrated in (1a) express emotions and feelings such as 'lonely', 'embarrassing', 'happy', and 'sad', while many of the type shown in (1b) express a more objective state such as 'numerous', 'cold', 'old' and 'far' (Ohno 1979; Yamazaki 1992). For clarity of discussion, I will refer to the former type of adjectives as *subjective adjectives*, and the latter type as *objective adjectives*.

Yamazaki proposes that the subjective adjectives originally developed from the suffixation of *-asi* to verbs:

(2)a. kuyu + *asi* → kuya*si*
regret regretting/vexed

b. tanomu + *asi* → tanoma*si* → tanomo*si*
rely reliable

Yamazaki hypothesizes that *-asi* is related to a Korean word *-asypta*, meaning, in Yamazaki's words, 'to feel both desire for and dissatisfaction with something'. Hence, according to Yamazaki, *-asi* was an adjective-forming morpheme that converted a verb into an adjective. The pre-nominal and adverbial forms were derived from the *asi*-form by suffixation of *-ki* and *-ku* respectively:

(3)a. kuya*si* (end form = root)
regrettable·SE

b. kuyasi-*ki* (pre-nominal)
regrettable-PN

c. kuyasi-*ku* (adverbial form)
regrettable-ADV

It is hypothesized that the objective adjectives have developed by suffixing *-si* to nominal-like words.

(4) waka-*si* (end form)
young-SE

Yamazaki hypotheses that *-si* had an existential meaning and that its origin is unrelated to *-asi*. This semantic diversion explains the semantic characteristics of objective adjectives: they are not emotive. The pre-nominal and adverbial forms consist of the root suffixed by *-ki* and *-ku* respectively:

(5)a. kiyo-*si*
sacred-SE

b. kiyo-*ki* (pre-nominal)
sacred-PN

c. kiyo-*ku* (adverbial)
sacred-ADV

The pre-nominal form of both the subjective and the objective adjectives further evolved by losing *-k-* preceding the final *-i*, then took over the end form thereby neutralizing the two forms into the *i*-form as shown in (1).

The functions of the pre-nominal form evolve parallel to those of the verbs: the pre-nominal function to modify a noun, the nominal function and the sentence ending function in agreement with emphatic particles. The following examples from Sei Shoonagon illustrate each function.

(6)a. *tiisa-ki* *mono* wa mina *utukusi*
small-PN thing TOP all *beautiful-SE*
'Small things are all beautiful.'
(*Makura no sooshi*, 149)

b. ki no hana wa *ko-ki* mo *usu-ki* mo beniume
tree GEN flower TOP dark-PN also light-PN also red plum
'As for flowers on trees, the red plum blossoms (are lovely) whether they are dark or light.'
(*Makura no sooshi*, 35)

c. uguisu wa . . . <omit> . . . kokonoe no uti ni
warbler TOP . . . palace GEN inside LOC
nak-anu *zo* ito *waro-ki*
sing-NEG·PN EMPH very bad-PN

> 'As for warblers . . . [their] not singing inside the palace ground is very unfortunate.'
>
> (*Makura no sooshi*, 39)

In (6a), *tiisa-ki* 'small-PN' modifies the following noun, in (6b) *ko-ki* 'dark-PN' and *usu-ki* 'light-PN' are functioning as nominals, and in (6c), *waro-ki* 'bad-PN' in the sentence final position is agreeing with the emphatic *zo*.

In these examples, *-i* as the adjective categorial marking emerges. The adjective forming suffixes *-asi* and *-si* originally represented the typical semantics that adjectives represent: emotion and state of existence respectively. Even though the *-asi*-type and *-si*-type were of different semantic subcategories, the fact that they shared the same pre-nominal morpheme and the adverbial morpheme indicate that they were generalized to be of the same syntactic category.

The transition of a word with a semantic content to one with a categorial marker parallels the verb forming morpheme *-u*, which originally represented actions. Further, the pre-nominal morpheme *-ki* contained the same vowel as the *-asi*/*-si,* the original adjective forming morphemes, and its nominal function as exemplified in (6b) was lost, indicating the emergence of *-i-* as the categorial marker for adjectives.

The pre-nominal form as emphatic agreement also supports the categorial marking analysis, when we assume that *-ki* in addition to *-si* had the effect of emphasizing the states that the adjective category represents. However, as is the case with verbs, the emphatic effect is only visible with the pre-nominal form of the emotive adjectives that was derived from suffixation of the *-ki* to the end form. Finally, the fact that *-si* and *-ki* neutralized to *-i* is the crucial evidence that *-i* is neither a sentence ending marker nor a pre-nominal marker. Thus, my proposed analysis of *-(r)u* and *-i* as categorial markers for the verbal category and adjectival category can be maintained.

## 2 Copula and adjective formation

Further inflectional development of the adjectival category involves the verb *ar-*. As a lexical verb it means 'to exist'. Just as the European *be*-verbs have both an existential use and a copulative use, Japanese *ar-* also has both functions. In this section, I will refer to the *ar-* that

forms adjective inflectional categories as simply *ar-* or the verb *ar-* and gloss it as AR until its categorial status is determined. According to Ohno (1979), the adjectival realis form with the realis particle *ba* appears frequently in the sources of the eighth century.

(7)a. kuyasi-kereba 'because (I) am vexed'

b. kiyo-kereba 'because (it) is sacred'

In modern Japanese, this form is called the *conditional form* with the meaning of 'if . . .'. These are fused forms derived from the complex of the adverbial form of the adjective category and the realis form of the verb *ar-*:

| (8) | *Original form* | | *Fused form* |
|---|---|---|---|
| | kuyasi-*ku* + *ar*-eba | → | kuyasi-ker-eba |
| | vexed-ADV AR-RLS | | vexed – RLS |
| | 'Because (I) am vexed . . .' | | 'Because (I) am vexed . . .' |

In the fused form, *-ker-*, formerly *-ku-ar-*, has no semantic or syntactic significance. It is a mere trace of morphological evolution.

From the end of the eighth century the verb *ar-* helped adjectives further extend their inflectional range to carry the negative, perfective and other grammatical morphemes through the same morpho-syntactic means: it follows the adverbial form of the adjective category, and provides its own verbal inflectional forms. The non-fused and fused forms of the negative and the perfective are shown in the following:

| | | | | |
|---|---|---|---|---|
| (9)a. | waka-*ku* | *ar*-azu | → | waka-kar-azu |
| | young-ADV | AR-NEG | | young – NEG |
| | '(He) is not young.' | | | '(He) is not young.' |
| b. | waka-*ku* | *ar*-iki | → | waka-kar-iki |
| | young-ADV | AR-PS | | young – PS |
| | '(He) was young. | | | '(He) was young.' |

Again, *-kar-* in the fused form is a leftover morphological element that has no semantic relevance. Then, how should *ar-* in the non-fused version be analysed? The fact that the non-fused form and the

fused form yield exactly the same semantic interpretation indicates that *ar-* in the non-fused form should not be treated as a lexical verb with existential meaning.

Yamada (1936) refers to *ar-* and all forms derivative of *ar-* as *sonzaisi* 'existentials'. In his terminology, those adjective forms that are derived from *ar-* are *existential adjectives*. He points out that there are two classes of existentials: one with existential meaning and the other with only a *chinjutsu* function. As I discussed in Chapter 2.3.4, by *chinjutsu* Yamada means an expression of the speaker's judgement. According to his theory, the *chinjutsu* force operates on any predicate category in affirming or denying the relationship between the subject and the predicate. Thus, most predicates have double expressive functions: their lexical meaning and *chinjutsu*. Some predicates do not have lexical meaning and they are used solely to express *chinjutsu*. According to Yamada's theory, the latter category is by definition a copula, and Yamada classifies the *ar-* in existential adjectives in this way. Tokieda (1950) also argues strongly for the importance of recognizing two classes of the verb *ar-*.

As I discussed in the preceding section, the original inflectional range of the adjective category had only three forms, of which two were later reduced to one:

(10) End form [root + (si)]

↘

Categorial form [root + i]

↗

Pre-nominal form [root + ki]
Adverbial form [root + ku]

All other forms contain *-ar*. The element *-ar* in fused forms in (8b) and (9b) can be treated as unanalysable morphological material. However, *ar-* in the non-fused forms in (8a) and (9a) is a morphologically intact verb. As a semantically empty verb, *ar-* only functions to provide verbal inflections to the adjective category. Since the inflection provides grammatical features, it fits the definition of the copula as a feature provider for both non-inflective and inflective categories. In this case, the original adjective category was inflective with a defective inflectional paradigm as shown in (10).

Let us now consider the syntactic operation of how *ar-* forms the complex with the *-ku* form in (11):

(11) Complex adjective formation
[Adjective root *-ku*] + *ar-*

The morpheme *-ku* is the adverbial morpheme. We need to determine whether the *ku*-form should be treated as an adjective or an adverb. For comparison, let us consider a construction in which the adjective *ku*-form appears with verbs of cognition and perception. Both classical and modern Japanese examples are provided below:

(12)a. *aware ni yukasi-u* obo-yu . . .
lovely ADV intriguing-ADV feel-SE
'(It) impresses me lovely and intriguing . . .'
(Genji monogatari, Waka murasaki)

b. *anazurawasi-ku* omoiyar-are-te . . .
insultable-ADV impress-PASS-CONJ
'(He) struck me as easy to insult and . . .'
(*Makura no sooshi*, 22)

c. imizi-u *azayaka-ni* miy-e tar-u nado . . .
wonderful-ADV brilliant-ADV look-ADV PERF-PN such
'Such as looking wonderfully brilliant . . .'
(*Makura no sooshi*, 35)

(13)a. Ayako wa *waka-ku* mie-ru
Ayako TOP young-ADV look-V
'Ayako looks young.

b. sono koto ni tuite *kuyasi-ku* kanzi-ru
that matter about vexed-ADV feel-V
'(I) feel vexed about it.'

Notice that, as shown in the translation, the adjectives are not adverbialized. In these sentences, the adjectives in English and the adjectives in the adverbial form in Japanese are a complement of the verb. A verb and its complement are intrinsically related and express a

concept together. Thus without a complement, the sentence is not only incomplete but can also be incomprehensible or misinterpreted. The sentences of (14) are shown without these complement phrases.

(14)a. Ayako wa mie-ru.
Ayako TOP seem-V
*'Ayako seems.'

b. ?Sono koto ni tuite kanzi-ru
that matter about feel-V
*'I feel about that.'

Example (14a) is likely to be misinterpreted as another *mieru* verb as 'Ayako can see', sentence (14b), sounds too incomplete to be acceptable, as indicated by the question mark.

These sentences contrast sharply with the following:

(15)a. *kasigamasi-ku* naki nonosir-u
loud-ADV cry scream-SE
'(The cat) screams loudly.'
(*Sarashina nikki*)

b. minna *tanosi-ku* odot-ta
everyone merry-ADV dance-PS
'Everyone danced happily.'

These adverbial phrases consisting of an adjective in the *ku*-form are modifiers of the verb, expressing the manner in which an action is carried out or an event occurs. Notice that the English versions contain adverbs. Syntactically, these phrases are adjuncts, optional elements in a sentence, because they are not specified as a lexical property of the verb. Therefore, sentences without them still constitute complete and perfectly grammatical sentences. Examples (15a) and (15b) are repeated below with the adjuncts in parentheses:

(16)a. (*kasigamasi-ku*) naki nonosir-u
(loud-ADV) cry scream-SE
'(The cat) screams (loudly).'

b. minna (*tanosi-ku*) odot-ta
everyone (merry-ADV) dance-PS
'Everyone danced (happily).'

These two distinct constructions provide a clue to the syntactic status of the *ar-* in the adjectival complex. First, the *ku*-form of the adjective in the construction (12) is an inflectional form of an adjective. It cannot be an adverbial category since, as shown in examples (15a)–(15b), adverbs are adjuncts, not complements. Second, in a similar way to the verbs that take an adjectival complement, *ar-* can be considered to be a copula verb that takes an adjective as its complement.

This account leads us to question why the adjective complement is in the adverbial form. This is a fundamental property of Japanese inflection. We have already seen that Japanese inflectional morphology provides not only semantic information, such as time reference and politeness, but also syntactic information about the categorial status of the other items within the sentence. The pre-nominal form marks that it is adjacent to a noun and in a modification relation to that noun, but it does not render the pre-nominal form into an adjective. The same is true of the adverbial form, which marks that it is adjacent to verbal material with which it forms a verbal constituent. However, that does not render it an adverbial category.

Having determined *ar-* in the adjectival complex to be copula, I will henceforth gloss the copula *ar-* as COP in my data.

Although the end form and the pre-nominal form were already in existence as represented in (17a) and (18a) respectively, the copula *ar-* did form alternative end and pre-nominal forms as shown in (36b) and (37b):

(17)a. waka-si
young-SE

b. waka-ku ar-i → waka-kar-i
young-ADV COP-SE young – SE

(18)a. waka-ki
young-PN

b. waka-ku ar-u → waka-kar-u
young-ADV COP-PN young – PN

Since *ar-* does not add any extra semantic content to the adjective, (17b) has no advantage over (17a) when saying '(He) is young' or

(17a) over (18b) to say 'a young man'. Indeed, the fused form of (17b) is rarely found in sources. Furthermore, for the pre-nominal form, the new form with *ar-* results in a change in morphological category from the adjective category form to the verbal category form, as in (18b). Then, why did these alternative forms develop?

There was a need for the verbal categorial form for adjectives, whether fused or non-fused. For many verbs, the end form and the pre-nominal form were morphologically identical. But, recall that there were a group of verb forms that had an end form which was morphologically distinct from the pre-nominal form, for example *otu* 'fall-SE' and *otu-ru* 'fall-PN'. With any one of the conjectural auxiliaries, such as *ram-u* and *be-si*, the end form occurred. However, the verb *ar-* occurs in the pre-nominal form *ar-u* instead of the end form *ar-i* when suffixed by any one of these auxiliaries. This means they required a verbal categorial form, and if there are two distinct verbal category forms for the same lexical item, the end form was selected.

Therefore, in order for an adjective to be suffixed by one of these conjectural auxiliaries, it needs to take a verbal category form, and the pre-nominal form of *ar-u* supplied it:

(19)a. kyoo no aida wa tanosi-ku ar-u-be-si
today GEN time TOP enjoyable-ADV COP-PN-CONJEC-SE
'It should be fun today.'
(*Man'yoo syuu*, 832)

b. kanasi-k-ar-u-ram-u
sad-COP-PN-CONJEC-SE
'It will be sad.'
(*Kokin syuu*, 4, quoted in Yuzawa 1959:304)

Secondly, the non-fused complex alternates (17b) and (18b) can accommodate particles for various semantic effects, while *si*-form or *ki*-form cannot. In the following example, there is a particle *mo* for an emphatic effect.

(20) umure-te wor-eba uresi-ku mo ar-u ka
gather-GER stay-RLS happy-ADV EMPH COP-PN EXCL
'Oh, how happy we are because we are together.'
(*Man'yoo syuu*, 4284)

Without these reasons, there is no motivation for using complex adjective *ku ar-i/kar-i* and *-ku ar-u/kar-u* forms over *ki*-form and *si*-form. Indeed, it has been pointed out in the literature that bare *kar-i* and *kar-u* forms are rare. Yuzawa (1959) reports that only four adjectives in *-kar-i* form are attested: *nakar-i* 'absent', *warokar-i* 'bad', *hukakar-i* 'deep' and *ookar-i* 'many/numerous'. Most cases are *ookari*, 'many/numerous'. In the case of the bare pre-nominal form *karu-*, only *ookar-u* is used.

(21)a. otomo ni rei no yon'i goi ito *ookar-i*
company among regular fourth fifth very *many-SE*
'Among those accompanied, regular fourth and fifth ranking were many.' = 'There were many regular fourth and fifth ranks among . . .')
(*Makura no sooshi*, 237)

b. ominaesi *ookar-u* nobe ni yadori s-eba . . .
Ominaeshi *many-PN* field LOC take refuge do-IRL
'Because I am taking refuge in a field where *ominaeishi* flowers are many' = '. . . where there are a lot of *ominaeshi* flowers blooming'
(*Kokin syuu*, 4, quoted in Yuzawa 1959:128)

c. ito nare-nu koto nomi zo *ookar-u*
very familiar-NEG things only EMPH many-PN
'Only unfamiliar things are many.'
= 'Only there are many unfamiliar things.'
(*Turezuregusa*, 15, quoted in Yuzawa 1959:129)

As the more natural English translation shows, *ookar-i* and *ookar-u* yield existential interpretation. I assume that this adjectival complex formation involves *-ar* as a lexical verb rather than *-ar* as copula. Then, the fact that almost all cases of *kar-u* and *kar-i* are *ookar-u* and *ookar-i* forms can be explained as having a different source in the formation of the complex form.

# 8
# Copula Forms

Lastly, let us look at the copula from the perspective of categorial marking analysis based on the diachronic investigation. I will investigate the copula forms in chronological order, focusing on their pre-nominal and sentence final forms.

## 1 *Zo*

It would appear that copula-less sentences have always existed in the Japanese language. Kasuga (1968) hypothesizes that the oldest representations of predicate nominals were nominal sentences without a copula. In eighth-century writings, both copular and copula-less sentences are found. According to Kasuga (1968) and Ohno (1979), the oldest copula form is *zo*. They hypothesize that *zo* was formerly a demonstrative *so*, the addressee-oriented demonstrative morpheme within the Japanese demonstrative system. Among world languages, copulas with a demonstrative origin are not uncommon.[2] In the following examples, (1) is copula-less and those in (2) contain *zo*. (Again, reference will be made by book titles rather than the names of the original authors or the editors of reprints.)

(1) Yamato wa kuni no mahoroba
Yamato TOP country GEN wonderful place
'Yamato is a wonderful place.'
(from *Kojiki*, completed 712 AD)

(2)a. waga kokoro Urasu no tori *zo*
my heart Urasu GEN bird *COP*
'My heart is (like) birds of Urasu.'
(From *Jindai ki*, 3)

b. yama nomi ni huri-si yuki *zo*
mountain only to fall-PS·PN snow *COP*
'It is the snow that fell only in the mountains.'
(*Man'yoo shuu*, 4227)

*Zo* is not associated with any other copula form. It occurred in historical sources only in the sentence final position. *Zo* only affirms nominal predicate sentences. There is no corresponding negative form nor past tense form for *zo*. The only other nominal predicate sentence construction was the interrogative version with a particle *ka* as in *yama ka* 'Is it a mountain?' (Ohno 1979). Could *zo* simply be a particle opposing the interrogative particle *ka*?

*Zo* exhibited the pragmatic characteristic of functioning to emphasize a proposition in an addressee directed statement (Kasuga 1968). For instance, the example (2b) was said in the context of emphasizing the preciousness of the snow. A similar implication is felt in the following poem quoted by Ohno (1979):

(3) wakega tame waga te mo sumani haru no no
your sake my hand even without rest spring GEN field
ni nuk-er-u tubana *zo*. mesi-te koe-mas-e
LOC pull-PERF-PN reed ear *COP* eat-and fatten-HON-IMP
'(These) are the reeds' ears I pulled from the spring meadow for you without even resting my hands. Please eat them and get fat.'[3]
(*Man'yoo shuu*, 1460)

The addressee orientation is also found in the frequent occurrences of *zo* in annotations and commentaries on Chinese style writings. Kasuga characterizes the nominal sentences with *zo* in annotations as *kyooji-bun* 'instructional sentences'.

(4) hue no na zo
flute GEN name COP
'It is the name for flute.'
(annotation on *Nihon ryooiki*, quoted in Kasuga 1968)

The addressee orientation may be attributed to its former function as a demonstrative. Within the Japanese demonstrative system, *ko-*, *so-* and *a-*, the *so*-series functions to indicate that the demonstrative reference or referent is in the addressee's territory in terms of physical or mental space.

These characterizations point to an assertive particle status rather than a copula status of *zo*. In fact *zo* appears under 'particle' entries in classical grammar books (e.g. Yuzawa 1959) as one of the emphatic particles to agree with the pre-nominal forms that were mentioned in the preceding section. Additional examples are given below:

(5)a. yoru nak-u mono nanimo nanimo medeta-si
night cry-PN thing everything everything wonderful-SE
tigodomo nomi *zo* sasimo *na-ki*
babies only *EMPH* that much *NEG-PN*
'Every creature that cries at night is wonderful. Only babies are not that great.'

(*Makura no sooshi*, no. 39)

b. ututu ni wa mada sir-an-u o yume no
real as TOP yet know-NEG-PN ACC dream GEN
kokoti *zo* *su-ru*
feeling *EMPH* *do-PN*
'Since I have never known (such beauty) in real life, it feels like a dream.'

(*Makura no sooshi*, 181)

Without the emphatic *zo*, the negative auxiliary *na-ki* in (5a) would be the end form *na-si*, and the matrix verb *sur-u* in (5b) would be the end form *s-u*.

However, the *zo* that Ohno and Kasuga identify as a copula occurs in the sentence final position, unless inverted, following a predicative nominal. This seems to be the criterion with which Ohno and Kasuga determined this *zo* to be a copula. My proposed definition of copula presented at the beginning of this study is that a copula carries a grammatical feature or features for non-inflecting categories or defectively inflecting categories. As far as I know, 'emphasis' is not a grammatical feature associated with predicate categories, although

we should not rule out the possibility that such a notion is derivable from a specific grammatical feature.

I would like to consider Kasuga's (1968) statement that *zo* did not occur with adjectival nominals. He speculates that this co-occurrence restriction was inherited from the former function of *zo* as a demonstrative pronominal that specifies concrete objects, which adjectival nominals do not represent. Regardless of its origin, I find the categorial restriction extremely relevant to the status of *zo* as a copula, and as a predicate category.

I propose that the morphological form *zo* possesses the morphological function of representing a nominal predicate category. Let me show how this analysis fits the categorial form analysis for *no* and *na* that I proposed in the previous section. First, let us consider the following nominal sentences with and without *zo*. I have provided brackets to show the relevant constituents.

(6)a. kono toyomiki wa [[waga miki] *zo*]
this great sake TOP my sake COP

b. kono toyomiki wa [waga miki]
this great sake TOP my sake
'This great sake is my sake.'

In (6a), a predicative nominal *waga miki* 'my sake' is within inner brackets. It can constitute a nominal predicate by itself, as in (6b). According to the copula analysis of *zo*, the outer brackets contain a compositional nominal predicate: a predicate nominal and a copula. This copula represents the categorial status of the compositional nominal predicate. The vowel *-o* in *zo* is the morphological encoding of the category, and *z-* is the morphological host, the root, for the categorial feature to suffix. The absence of the adjectival nominals occurring with *zo* is thus accounted for.

*Zo* as a category form reminds us of the categorial marking of one of the pre-nominal copulas, *no*. Recall that I proposed that the vowel *-o* in *no* is the nominal predicate categorial marker in opposition to *-a* in *na*, which marks the adjectival nominal predicate category.

(7)a. n-o
COP-N

b. n-a
COP-AN

According to Kasuga (1968), the pre-nominal copulative use of *no* is attested as early as in *Nihonshoki* 'The Chronicles of Japan' (completed around 720 AD) when *zo* was in common use as a copula in sentence-final position. Kasuga quotes the following:

(8) aga hor-u tama *no* awabi siratama
my want-PN precious stone *COP* abalone pearl
'(Lit.) The abalone pearl, which is the jewel I want.'
(*Nihonshoki*, Buretsuki, 92)

The fact that this *no* is a copula, not a genitive particle, can be shown by translating (8) to modern Japanese and replacing the *no* with *de aru*:

(9) watasi ga hosi-i isi *de ar-u* awabi no sinzyu
I NOM want-PN stone *COP-PN* abalone GEN pearl
'The abalone pearl, which is the jewel I want.'

*De aru* is another copula form that can occur in both pre-nominal and sentence end positions. I will discuss this form in Chapter 9. The fact that *zo* and *no* were in use concurrently, and both exclude the adjectival nominal as their host predicate leads me to speculate that *no* and *zo* are the sentence-final form and pre-nominal form of the same copula. In this analysis, the initial consonant of each of *zo* and *no* acts as an inflectional morpheme: *z-* in *zo* signals a sentence end position and *n-* in *no* signals a pre-nominal position.

This morpho-syntactic analysis is not far fetched when we consider the negative auxiliaries *z-* and *n-*. I will use the *(a)zu* and *(a)nu* forms in the following discussion in order to avoid referring to grammatical items by a single consonant. They are productive negative auxiliaries in classical Japanese. *(A)zu* and *(a)nu* are considered to be the same negative auxiliaries with a complementary distribution. (*A*)*nu* has occurred in the pre-nominal form *(a)n-u* and the realis form

*(a)n-e*. *(A)zu* formed other inflectional forms, including the end form *(a)z-u*.

(10)a. Mina hito sir-a*z-u*
all person know-NEG-SE
'No one knows (about it).'
(*Ise monogatari*, 8)

b. inisie no koto wa sir-a*n-u* o . . .
ancient GEN matter TOP know-NEG-PN ACC
'Despite the fact that (I) don't know about the ancient matter.'
(*Man'yoo shuu*, 1096)

Thus, the only distinction between *(a)z-u* and *(a)n-u* is the initial consonant, and the former occurs in the sentence-final position, while the latter occurs in the pre-nominal position. This fact suggests that the *z*/*n* alternation I proposed for the copula may be part of a more general phenomenon.

The categorial form analysis explains the co-occurrence restriction on *zo*. However, *zo* does not obligatorily occur with predicative nominals. What triggers the occurrence of *zo*? Emphasis, addressee orientation and its use in 'instructional' sentences have been identified in the literature as characterizing *zo*. They can be generalized as having an 'asserting' function to present a proposition with the speaker's (or poet's and writer's) strong conviction to the addressee (or audience) for him or her to accept.

I propose two properties of *zo* from which this asserting function may be derived. First is the nominal predicate categorial marking of *zo*. By grammatically indicating that the preceding nominal is the predicative nominal, it has the effect of giving focus to the predicative nominal. The fact that *zo* often occurs in 'X *wa* Y *zo*', in which the subject is topicalized, and is the old information, supports this analysis. Second is the declarative function of *zo* in opposition to the interrogative *ka*. Without the negative, or past tensed counterpart, the interrogative nominal sentence with *ka* was the only opposition to the nominal sentence with *zo*. Since nominal sentences without *zo* are already affirmative sentences, it is plausible that the overt element *zo* in a nominal sentence bore a strong declarative function.

This account of the copula *zo* gives a natural link to the emphasizing function of *zo* as an emphatic particle if *zo* as a particle evolved from the copula category. Ohno (1979) argues that the particle status derived from the copula status by hypothesizing that the particle function originally developed from *zo* as a copula by inversion to emphasize the predicate nominal. For instance, (11a) is clearly the inverted version of (11b):

(11)a. ai nom-am-u miki *zo* kono toyomiki wa
together drink-VOL-PN sake *COP* this great sake TOP
'(It) is the kind of sake I want to drink with others, this great sake.'
(*Man'yoo-syuu*, 973)

b. kono toyomiki wa ai nom-am-u miki *zo*
this great sake TOP together drink-VOL-PN sake *COP*
'This great sake is a kind of sake I want to drink with others.'

Ohno hypothesizes that the agreement phenomenon of emphatic particles with the pre-nominal form of predicates as in (12a) is a case of inversion.

(12)a. waga mati koi-si kimi *zo* *ki-mas-er-u*
my wait long for-PS·PN you EMPH come-HON-PERF-PN
'My long awaited darling, you have finally come.'
(*Man'yoo syuu*, 1523)

b. *ki-mas-eru* wa waga mati koi-si kimi
come-HON-PERF·PN TOP my wait long for-PS·PN you
*zo*
COP
'(The person) who has come is my long-awaited darling, you.'

(12a) is a case of the pre-nominal form *kimaseru* in sentence-final position agreeing with an emphatic particle *zo* occurring with the subject. Ohno analyses this sentence as being inverted from (12b), in which the pre-nominal form functions as a subject nominal, and

the rest, a predicate nominal with copula *zo*. That means *zo* then extended its occurrence in sentence medial positions with various categories and became an emphatic particle that commands pre-nominal agreement in sentence-final position. On the other hand, Kasuga argues that the copula function of *zo* derived from its function as an emphatic particle.

The hypotheses of Kasuga and Ohno on the evolution and categorial changes of *zo* are summarized in (13).

(13)a. Ohno's hypothesis on *zo*
demonstrative → copula → emphatic agr. particle →

b. Kasuga's hypothesis on *zo*
demonstrative → emphatic agr. particle → copula →

My proposed analysis of copula *zo* supports Ohno's theory. From the viewpoint of the categorial form analysis of *zo*, Kasuga's theory would have to explain why *zo* has evolved from a nominal category oriented demonstrative to a particle of relatively free co-occurrence categorial restriction, back again as a copula for the nominal categories, and finally to a sentence-final particle in present day Japanese. Also, the evolution of copula → emphatic particle has in fact been attested in other copulas in dialects of modern Japanese, for example the affirmative copula *da* occurs with adjectives and verbs for emphasis.

(14)a. kono mondai wa muzukasi-i *da*
this problem TOP difficult-A COP
'This problem is difficult, I tell you.'

b. sakura ga yatto sai-ta *da*
cherry NOM bloom-PS COP
'Finally the cherry flowers bloomed!'

Thus, I conclude that there is enough evidence to support the category form analysis of *zo* as a copula constituting a nominal predicate.

This declarative function of the copula *zo* can be an attested case of the concept of the copula that European philosophers developed.

Recall the discussion in Chapter 2 on the function that the traditional European philosophers attributed to the copula. It is to form a proposition, which is the expression of judgement and a truth claim. The medieval philosopher, theologian and logician, Abelard, had to concede that sentences without judgement are perfectly affirmed and negated. Thus, he posited an abstract copula which expresses the speaker's judgement. He noted that a proposition defined with the notion of judgement, when uttered, is declared, proposed, asserted or contested.

Since the nominal sentences of the languages that the philosophers investigated do not have the option of occurring without a copula, the copula in the sense of an expression of a truth claim or judgement is opaque. The abstract copula Abelard posited cannot be proven. But here is *zo*, an affirmative copula, optionally occurring to assert and declare. It then evolves into an emphatic agreement particle capable of emphasizing the agreeing verb. This can be compared to Abelard's proposed abstract copula embodied within verbs.

*Zo* is alive and well in modern Japanese as a sentence-final particle. In what follows, I will briefly describe the diachronic change of *zo* from an emphatic agreement particle to the modern sentence-final particle. *Zo* as an agreement particle began to enjoy wide use when its competitor, another emphatic particle, *namu*, declined. However, during the period from the twelfth to the sixteenth centuries, the pre-nominal forms of predicates started to occur in the sentence-final position without an agreement particle. Thus, the agreement phenomenon declined and died out, and the pre-nominal forms of predicate categories replaced the end forms. Consequently *zo* lost its function as an agreement particle.

The emergence of new copula forms *nari*/*ni ari* during the eighth century, which I will discuss shortly, created a distributional effect on the already existing copula *zo*. While *zo* never occurred with yes–no question sentences (Kasuga 1968), its use with wh-question sentences increased as *nari*/*ni ari* started to take over the affirmative copula function of *zo* (Okamura 1976).

(15)a. nanigoto *zo*
what thing *COP*
'What is it? (= What happened?)

(*Makura no sooshi*, 85)

b. ta ga kak-ase-tar-u *zo*
who NOM draw-CAUS-PERF-PN *COP*
'Who had (the picture) drawn?'

(*Makura no sooshi*, 181)

According to Kasuga (1968), the *n*-type copulas never occurred in sentence-final position in a question sentence. During the sixteenth century *zo* as an emphatic sentence-final particle almost exclusively occurred with wh-questions.

At the discourse level, use of *zo* as a sentence-final particle became restricted to non-honorific contexts. Even as a sentence final particle in utterances addressed to a social equal or inferior, its use dwindled when the copula form *zya* emerged (Okamura 1969). Having gone through various categorial changes, *zo* in modern Japanese functions as the assertive sentence-final particle (henceforth SF particle) that primarily occurs in men's speech. *Zo* as an SF particle will be discussed in Part III in relation to a modern copula form *da*.

As a copula, *zo* faded away with the establishment of new copula forms, to which I now turn.

## 2 *N*-type copulas: *nari*/*naru*

It has been pointed out in the literature that the existential verb *ar-* underlies various words and categories in Japanese (e.g. Yamada 1936; Tokieda 1950; Kasuga 1968). We have looked at how *ar-* provided inflectional forms for the adjective category in relation to the categorial statuses and their functions. Yet the most important word formations involving *ar-* are copula forms. This section investigates *ni ar-* and its fused form *nar-*, focusing on inflectional forms and functions.

During the eighth century, exactly the same forms as *ni ar-*, a locative particle and the existential verb, and its fused form *nar-*, started to occur in nominal sentences, and according to Matsumura (1971) they were established copula forms during the eighth to the twelfth centuries.

(16)a. mikoto *ni ar*-eba . . .
emperor's order COP-RLS
'Because it is the emperor's order . . .'

(*Man'yoo shuu*, 4432)

b. waga seko ga ku-be-ki yoi nar-i
my husband NOM come-CONJ-PN evening COP-SE
'(It) is the night when my husband may come to visit.'
(*Nihon shoki*, 65)

*Ni ar-* in (16a) and *nar-* in (16b) are morphologically indistinguishable from *ni ar-* and *nar-* used for existential sentences. Thus, the main inquiry of this section is how to account for copulative and existential interpretations.

To distinguish them from the *de ar-* copula that develops later, I will refer to *ni ar-* as *the compositional n-type copula*, and *nar-* as the *fused n-type copula*.

According to Kasuga (1968), both the compositional form *ni ar-* and the fused form *nar-* were already occurring for both existential and copulative functions at the time of the earliest Japanese writings. Kasuga assumes both fused and compositional *n*-type copulas occurred with nominal predicates as well as adjectival nominal predicates. The following examples contain an adjectival nominal *sakari* 'peak' with *nar-* forms:

(17)a. osi-ki mi no *sakari nar-u* sura
precious-PN body NOM peak COP-PN even
'Even though the precious life is at its peak.'
(*Man'yoo shuu*, 4211)

b. sakura-bana ima *sakari nar-i*
cherry-blossoms now peak COP-SE
'The cherry blossoms are at their peak now.'
(*Man'yoo shuu*, 4361)

Kasuga observes that the copula use of *ni ar-* and *nar-* in *Man'yô syû* is more frequent than their existential use.

Their inflection follows the pattern of the existential verb *ar-*. Their inflectional categories increased the expressive capacity of nominal predicate sentences. Recall that *zo* did not inflect, thus there were only affirmative nominal predicate sentences. With the inflection of *nar-* or *ni ar-*, nominal sentences can be negated, past tensed and conjoined, and can express conditionals, reasons and commands, suffixed by inflectional endings, auxiliary verbs and particles. The major inflectional forms of *nar-* and *ni ar-* are shown in (18). The inflective endings are shown in their end forms. The forms in

(18a)–(18c) are not recognized as inflectional forms in the traditional grammar as I discussed in Chapter 3.

(18)a. Negative
ni ar-azu nar-azu

b. Past tense
ni ar-ikeri nar-ikeri

c. Perfective
ni ar-itari nar-itari

d. Adverbial
ni ar-i nar-i

e. Realis
ni ar-eba nar-eba

f. Imperative
ni ar-e nar-e

g. End
ni ar-i nar-i

h. Pre-nominal
ni ar-u nar-u

*Nar-* and *ni ar-* inevitably caused ambiguity in interpretation, especially of the noun phrase that directly precedes *nar-* or *ni ar-*. If the *ar-* that underlies the given *nar-* or *ni ar-* functions as a lexical verb with existential meaning, then the noun phrase immediately preceding it receives a locative interpretation. *Nar-* as an existential verb must be considered to yield a compositional semantics of existence and its location.

(19)a. X (wa) Y *nar-* 'X is in Y' (X exists in Y)

b. X (wa) Y *ni ar-* 'X is in Y' (X exists in Y)

If, on the other hand, the underlying *-ar* in the given *nar-* or *ni aru-* functions as a copula, the immediately preceding noun phrase receives predicative nominal interpretation.

(20)a. X (wa) Y *nar-* 'X is Y'

b. X (wa) Y *ni ar-* 'X is Y'

The interpretation must rely on the semantics of the subject, if present, and the semantics of the noun phrase immediately preceding these verbs, as well as the preceding linguistic and discourse contexts. Let us examine some examples:

(21)a. Takiguti *nar-i-ker-i*
Takiguti COP-ADV-PS-SE
'It was (someone of) Takiguchi.'
(*Makura no sooshi*, 82)

b. otona *nar-u* kodomo
adult COP-PN child
'Children who are adults' (grown children)
(*Makura no sooshi*, 23)

c. aki *ni ar-az-u* tomo
autumn COP-NEG-SE though
'Even though it is not the autumn season (now)'
(*Man'yoo shuu*, 4126)

The interpretation of (21a) shown in the English translation relied on the preceding context. In a different context, the sentence can have existential meaning: '(Someone) was *in* Takiguchi.' *Nar-* in (21b) may also yield, in a special context, an existential meaning of 'a child (= a childish nature) existing within an adult.' *Ni ar-* (21c), too, may have an existential reading in a context where someone is speaking of some special event and saying 'although it is does not exist (= it is not held) in the autumn season.'

Now, let us consider the following examples:

(22)a. kono hito izuti nar-am-u
this person where exist-CONJEC-PN
'I wonder where this person can be.'
(*Utubo monogatari*, quoted in Yuzawa 1959: 370)

b. narihira no ason no ie nar-iker-u onna
Narihira GEN lord GEN house exist-PS-PN woman
'A woman who existed (= lived) in Lord Narihira's household'
(*Kokinshuu*, 14)

The locative interpretation of the nominal immediately preceding *nar-* is clear from its intrinsic locative meaning: *izuti* 'where' and *Narihira no ason no ie* 'The Lord Narihira's house'.

In the following example, taken from a poem by Ootomono Tabito in Man'yoo shuu, there are two occurrences of *nar-* and one occurrence of *ar-*. I have bracketed each of them:

(23) ike-ru mono tuinimo sinu-ru mono [ *nar-eba* ]
live-PN thing eventually die-PN thing COP-RLS
kono yo [ nar-u ] ma wa tanosi-ku
this world in exist-PN while TOP happy-ADV
o [ *ar-ana* ]
ACC exist-VOL
'Since living things are things that die eventually, let's be happy/let's live happily while existing in this world.'
(*Man'yoo shuu*, 349)

'(X) Y *nar-*' means either '(X) is Y', or '(X) exists in Y'. To distinguish a given *nar-* in these readings, we again have to rely on the semantics of Y, and X, if present, as well as the pragmatics and the context. The noun phrase 'things that eventually die' preceding *nar-eba* in the first bracket cannot be a location where 'the living things' exist, thus, it is not the existential *nar-*. Instead, it makes sense with a subject–predicate interpretation. *Nar-* semantically contributes nothing besides the realis conditional reading of 'because' to the interpretation of 'because (all) living things are things to die eventually'. The locative phrase interpretation of *kono yo* 'this world' preceding *nar-u* in the second brackets relies on the pragmatic impossibility of its being the identity of the topic of the sentence.

*Ar-a-na* in the third brackets is subtly ambiguous between the predicate reading and the existential reading. Recall the discussion in a preceding section on the copula use of *ar-* with the adverbial form of the adjective category as in *tanosi-ku ar-*. *Ar-* was determined to be a copula since its only function in the complex adjective form is to inflect the adjective and/or to insert a particle between itself and the host category. *Ar-* in *tanosi-ku o ar-a-na* in (23) performs both functions: to allow suffixation of the volitional auxiliary *nam* (here the final *-m-* is dropped by euphony), and to allow the particle *o* to be

inserted for exclamatory implication. The sentence is then interpreted as 'Let's be happy'. Another interpretation is an existential reading of the *ar-* in this sentence. *Ar-* as a lexical verb 'to exist' has a derivative concept, 'to live'. The adverbial phrase *tanosi-ku* simply modifies the verb in an adverbial manner, thus yielding the interpretation of 'Let's live happily'. The latter interpretation seems to fit better with the context given in the preceding sentence.

The most difficult aspect of the existential vs. copula distinction is the treatment of *-ni* in the copula interpretation.

(24) X (wa) Y ni ar-i
  a. 'X is in Y'
  b. 'X is Y'

The copula function of (24) is illustrated by the following examples. Until the *ni* in copulative *ni ar-* is identified, I will gloss it as NI. The *ar-* part is glossed as AR. I have provided brackets for some constituents for convenience.

(25)a. aki *ni ar*-azu tomo
autumn *NI AR*-NEG CONS
'Even though it is not autumn.'
(*Man'yoo syuu*, 4126)

b. [ hitori ari-u-ru mono] *ni ar*-e ya
alone exist-POT-PN thing *NI AR*-RLS Q
'Is (it) a creature that can exist alone?'
(*Man'yoo syuu*, 3601)

c. [ [ koto tow-a-n-u ] ki ] *ni* wa *ar*-e domo . . .
thing ask-NEG-PN tree NI TOP AR-RLS although
'Although (it) is a tree, which does not talk.'
(*Man'yoo syuu*. 3324)

Despite *ni*, each nominal preceding it is not interpreted to be a locative phrase in these sentences.

Even though it is commonly assumed that the copulative function of (65) derived from the existential function, the fact that there are two distinct interpretations available means that there are two

distinct constructions. If indeed the existential function was the original, we must consider that we now have a reanalysis version which is syntactically and semantically independent of (24a) as the existential construction. Theoretically, it is even possible that (24b) originated as a copulative construction, although we will not be able to prove it.

We have already seen a copulative function of *ar-* is to provide inflectional forms for the adjective category as its complement in complex adjectival construction (26):

(26) Complex adjective formation
[ Adjective root *-ku* ] + *ar-*

What remains to be determined is the categorial status of *ni* in the copulative *ni ar-*. I will not examine Kasuga's (1968) suggestion that *ni* in copulative *ni ar-* evolved from the locative particle. Trying to find the locative semantics in nominal sentences will not give us much insight into the evolution of copula forms.

An alternative analysis to locative *ni* is that it itself is an adverbial form of copula *nar-* (Yuzawa 1959; Tokieda 1950). The original copula analysis of *ni* appears in Chamberlain (1886). He analyses *ni* in '*ni te ar-*', the form I will discuss in the next section, to be 'an old indefinite form of *naru* "to be"'. The grammar books of pre-modern Japanese typically list *ni* and *nari* side by side as alternative adverbial forms for *nar-*. The chart for *nar-* is in Table 8.1 from Yuzawa (1959):

The copula analysis of *ni* will most straightforwardly account for the copula function of *ni ar-u*. However, morphologically, *ni* is an anomaly among forms containing the root *nar-*. It is implausible that

*Table 8.1* Inflectional categories of *nar-*

| **Irrealis** | **Adverbial** | **End** | **Pre-nominal** | **Realis** | **Imperative** |
|---|---|---|---|---|---|
| *nara* | *nari*<br>*ni* | *nari* | *naru* | *nare* | *nare* |

*Source*: Yuzawa (1959).

*ni* is an inflectional form of *nar-*. Assuming that it is given that the copula *nar-* was originally developed from *ni ar-*, *ni* as the adverbial form of *nar-* would have to have made the following evolution:

(27) *ni ar-* → *ni ar-* → *nar* ----> *ni*
LOC exist ? COP COP COP-ADV
↑_____↓

The dotted arrow in (27) means that it is inflected from *nar-*. To say that this *ni* that was derived from *nar-* as its inflectional category is the *ni* in the original *ni ar-* makes the argument entirely circular. Therefore, the analysis that *ni* is the adverbial form morphologically derived from *nar-* cannot be maintained.

Additional clear evidence that *ni* was not derived from *nar-* is that there is 'another' adverbial form of *nar-*: *nar-i*. This is morphologically a fully fledged adverbial form in pre-modern Japanese since the adverbial form of verbs was formed by suffixation of *-i* to the verb root.

However, that does not diminish a possibility that *ni* is a copula and is an adverbial form. Besides its use as a locative particle, the morpheme *ni* has many seemingly unrelated functions. One of them is to provide the adjectival nominal category an adverbial function. The primary function of an adverb is to modify a verb. The following examples are from classical Japanese (28a) and (28b), and modern Japanese (29). *Ni* is glossed as ADV for adverbializer:

(28)a. hi no *ururaka ni* sasiide-tar-u hodo ni . . .
sun GEN warm ADV shine out-PERF-PN when TIME
'When the sun warmly rose and shone . . .'
(*Makura no sooshi*, 237)

b. *mameyaka ni* hur-eba
real ADV fall-RLS
'Because it is raining really hard.'
(*Makura no sooshi*, 97)

(29) Yuuta wa *sizuka ni* makuramoto o aru-ita
Yuta TOP quiet ADV pillow side ACC walk-PS
'Yuuta walked the bedside quietly.'

Recall the discussion in Chapter 6.3 on the functions of adjectives in the adverbial form. I showed that there are two adverbial types. One functions as an adjunct, an optional element for the sentence, and the other as a complement lexically related to the verb. Those in (28) are cases of adjunct. The sentence (28a) would still be grammatical and meaningful without *uraraka-ni* 'warmly'. The sentence (28b), if the implied subject *ame* 'rain' is provided, would still be a grammatical sentence 'because it was raining', without the phrase *mameyaka-ni* 'very hard'. Likewise, (29) stands as a perfect sentence without the phrase *sizuka ni* 'quietly'.

Now let us consider the following type:

(30)a. *azayaka ni* miy-etar-u nado . . .
brilliant ADV look-PERF-PN such
'Such as looking *brilliant* . . .'
(*Makura no sooshi*, 35)

b. heya o *kiree ni* si-ta
room ACC clean ADV make-PS
'(I) made the room *clean*.'

Notice that, as shown in the translation, the English adjectival complement of these verbs is not adverbialized in sharp contrast with those in (28)–(29). In these sentences, the adverbial phrases are the complements of the verbs. This can be shown by trying to comprehend the sentences without the adverbial phrases. Sentence (30a) does not make sense without *azayaka ni* 'brilliant'. Neither does (30b) without *kirei ni* 'clean'.

There are sentences of this type with a nominal followed by *ni*.[5] Two examples from classical and modern Japanese are shown in the following:

(31)a. hototogisu wa . . . *sitarigao ni* mo
cuckoo TOP . . . all-knowing-face ADV even
kiko-e tar-u ni . . .
sound PERF-PN ADD
'As for cuckoos . . . they even sound confident, . . .'
(*Makura no sooshi*, 39)

b. sore wa tooku kara wa *tori ni* mie-ta
that TOP far from CTRS bird ADV look-PS
'From afar, it looked (like) a bird.'

These two sentences are about what something is like audibly and visually. Without *sitarigao ni* ('as if all-knowing') or *tori ni* ('as a bird'), sentences would be about what is audible or visible. Thus each of these phrases with *ni* functions as a complement of the verb.

The ways in which the corresponding English can express the same proposition is revealing of their syntactic properties. Consider the verbs 'to sound' corresponding to *kikoyu* (*kikoeru* in modern Japanese) and 'to seem' corresponding to *miyu* (*mieru* in modern Japanese):

(32)a. The cuckoo sounded confident.
b. The cuckoo sounded as if it were confident.

(33)a. The man sounded like a foreigner.
b. The man sounded as if he were a foreigner.

(34)a. Aya seems confident.
b. Aya seems to be confident.
c. It seems like Aya is confident.

(35)a. Jan seems like a nice person.
b. Jan seems to be a nice person.
c. It seems like Jan is a nice person.

The semantic interpretation of the two sentences in (32) and (33), and the three sentences in (34) and (35) are the same. In (32a) and (32b), the speaker is presenting a proposition that the cuckoo is confident and the man is like a foreigner, respectively, but qualifying the information as a conjecture based on auditory impression. In (33) and (34), the speaker presents a proposition that Aya is confident and Jan is a nice person, respectively, but also qualifies it as conjecture based on limited experience. Thus, even in (a) sentences there is an embedded proposition. Such a semantic interpretation can be accounted for if we analyse the complement nominal and adjective in (a) sentences as predicative.

With this syntactic perspective, let us return to the Japanese sentences and consider the following, which are simplified versions of the originals we have examined:

(36)a. *azayaka ni* miy-u
*brilliant ADV* look-SE
'(It) looks brilliant.'

b. hototogisu wa *sitarigao* *ni* kikoy-u
cuckoo TOP *all-knowing-face* ADV sound-SE
'The cuckoo sounds confident.'

c. *yukasi-ku* oboy-u
*intriguing-ADV* feel-SE
'I find (it) intriguing.'

According to what the English sentences in (36) reveal, the italicized elements in the sentences above are predicates, not modifiers. This means *sitarigao* 'all-knowing-face' in (36b) is a predicative nominal, *azayaka* 'brilliant' in (36a) is a predicative adjectival nominal, and *yukasi* 'intriguing' in (36c) is a predicative adjective. This leads me to identify the *ni* in (36a) and (36b) to be copulas constituting a compositional predicate category, inflecting to the adverbial form for the host category.

(37)a. $[[\text{sitarigaro}]_{N}$ ni]
all-knowing-face COP·ADV

b. $[[\text{azayaka}]_{AN}$ ni]
brilliant COP·ADV

The existence of an adverbial copula is expected when we consider the fact that adjectives inflect to the end form, the pre-nominal form and the adverbial form without the help of the copula *ar-*:

(38) Adjective category
a. End form [root -(*si*)]
b. Pre-nominal form [root -*ki*]
c. Adverbial form [root -*ku*]

Recall that there were two copula forms before the *nar-* copula developed: the end form *zo* and the pre-nominal form *no*. The adverbial *ni* would make the same inflectional paradigm as the adjectival category:

(39) Copula
a. End form *zo*
b. Pre-nominal form *no*
c. Adverbial form *ni*[6]

The paradigm of the copula parallels that of the adjective category even in the morphological diversion between the end form on one hand and the pre-nominal and adverbial forms on the other. The adjectival category shares *k-* in the pre-nominal and adverbial forms, and the copula shares *n-* in these forms.

Having identified *ni* as an adverbial copula, let us return to the construction *ni ar-*. As the verb *ar-* has already been identified as a copula, I propose the following double copula analysis for the non-existential *ni ar-*:

(40) ni ar-
COP-ADV COP

Why does it take two copula forms? *Ar-* has two functions. Morphologically, it provides grammatical features to other categories. Syntactically, it functions as a semantically null version of the seem- and sound-type verbs, taking predicative complement. Further, it requires an inflective predicative category complement as shown in (26). Thus, non-inflective categories such as predicative nominal and adjectival nominal have to be a compositional predicate with the copula. Among the three copulas shown in (39), only *ni* is syntactically qualified to occur with a verb.

The other copula *nar-* can therefore be analysed to be a fusion of two copulas. With this simple version of the copula available, why did the *ni ar-* version co-exist? A plausible reason is that *ni ar-* allows the insertion of various particles for special effects:

(41) koto towa-nu mono ni wa ar-edo . . .
thing ask-NEG person LOC TOP exist-CONS
'Even though (you) are a person who does not say a word . . .'
(*Man'yoo shuu*)

There is a particle *wa* between *ni* and *ar-* to qualify the statement together with the concessive form.

As I discussed in Part I, the synchronic analysis of the primary function of the copula is to provide non-inflecting categories with a morphological host to carry inflectional features. In this diachronic analysis, *ni ar-* and *nar-* emerge as the first category in Japanese to serve this function. The maximum inflectional function can be provided when the morphological host allows a verbal inflection. The other inflecting category, the adjectives, had only a limited range of inflection. And their inflection was also expanded by the *ar-* at around the same time. The significance of *nar-* and *ni ar-* as copulas is in their verbalization of nominal predicates.

## 3 *Na* and *no* as categorial forms

Now let us consider the following example from *Makura no sooshi*, which contains both *nar-u* and *nar-i*:

(42) sukisukisi-u aware *nar-u* koto nar-i
tasteful-ADV elegant *COP-PN* state *COP-SE*
'(This) is an atomosphere that is elegant and tasteful.'
(*Makura no sooshi*, 21)

In the noun phrase *sukisukisi-u aware nar-u koto* 'an atmosphere that is tasteful and elegant', there is an adjective and an adjectival nominal. *Sukisukisi-u* is a phonological variant of *sukizukisi-ku*, an adverbial form of the adjective *sukizukisi*. It is in the adverbial form because it is conjoined with an adjectival nominal predicate, *aware naru*. The latter is in the pre-nominal form because it is adjacent to the head noun that it modifies. *Aware* is an adjectival nominal and it can modify a noun because of the pre-nominal copula *naru*. Before the *n*-type copula developed, there were only two copula forms, *zo* for the sentence-final position and *no* for the pre-nominal position, neither of which formed a compositional predicate with an adjectival nominal. The *n*-type copulas accommodated the adjectival nominal category, which helped it to increase in number. Newly created adjectival nominals or Chinese adjectives adapted into Japanese were subsequently easily represented in sentences.

The pre-nominal copula *naru* occurred with either a regular nominal as in (43a) or with an adjectival nominal as in (43b):

(43)a. saburai no osa nar-u mono
servant GEN head *COP-PN* person
'a person who is the head servant'
(*Makura no sooshi*, 85)

b. ooki nar-u ki domo[7]
large *COP-PN* tree PL
'trees that are large (= large trees)'
(*Makura no sooshi*, 195)

The pre-nominal form *naru* compositionally forming an adjectival nominal predicate as in (43b) was to go through a phonological process of nazalization and erosion during the middle period (end of the twelfth to the fourteenth centuries) as follows:

(44) Evolution of *na*
*naru* → namu → *nan* → *na* (Yamauchi 1981)

Yamauchi provides the following examples:

(45)a. ooki *namu* hito
large *COP* person
'a large person'
(*Konjaku monogatari shuu*, 24–5)[8]

b. ika *na* yooi sama zo
what kind *COP* preparation state COP
'What kind of preparation is (it)?'
(*Meigetsuki*, the entry of Kanki 2, written around 1180)

c. sugu *na* mozi
straight *COP* character
'a straight character (= letter)'
(*Tsurezuregusa*, 62, written around 1331)

I have proposed that *na* in modern Japanese is the categorial form of the copula to mark the compositional adjectival nominal predicate category.

Since *naru* evolved from *ni aru*, the vowel *-a* in *na* can be traced back to the initial vowel of the existential verb *ar-*. As I will discuss

shortly, the existential verb *ar-* contributed to various word formations, thus we see that *-a* can be traced back to the existential *ar-* in other forms of copula as well as adjectival and auxiliary forms. In my analysis, the significance of *-a* in *na* but not in other forms also containing *-a* is that it functions as the category marker for the compositional adjectival nominal predicate category in opposition to *-o* in *no* functioning as a category marker for the compositional nominal predicate category. The initial consonant *n-* in the *n*-type copula forms is the root by definition. The root, not an inflectional ending, identifies the copula category itself.

(46)a. *na* as the categorial form

| n | – | a |
|---|---|---|
| COP | | AN |

b. *no* as the categorial form

| n | – | o |
|---|---|---|
| COP | | N |

Furthermore, as we have seen, the copula form *ni* constitutes a predicate category compositionally with either nominal or adjectival nominal category. The compositional category functions adverbially, signalling the verbal category to follow.

(47) *ni* as the categorial form

| n | – | ai |
|---|---|---|
| COP | | V |

*This page intentionally left blank*

# Part IV
# Forms and Functions of the Modern Copula

*This page intentionally left blank*

# 9
# *De aru* Copula

## 1 Overview of the *d*-type copula

The copula verb *ar-* contributed to the formation of another copula *de ar-*, which I will refer to as the *d*-type copula. Some of the *d*-type copula forms that I will examine in this chapter are shown in (1). Until I make an identification of *de*, I will gloss it DE.

(1)a. wagahai wa neko de ar-u
I TOP cat DE COP-V
'I am a cat.'

b. Yamada-san wa genki d-atta
Yamada TOP healthy COP-PS
'Ms. Yamada was well.'

c. kore wa daizi zya na-i
this TOP important COP NEG-A
'This is not important.'

d. sore wa nan d-es-u ka
that TOP what COP-POL-V Q
'What is [polite] that?'

The *d*-type copulas originally consisted of *ni te ari*:

(2)a. *ni te ar-i* → *de ar-i*

b. *ni te ar-u* → *de ar-u*

According to Yamauchi (1981), the *de ar-* copula developed during the Kamakura period (twelfth to mid-fourteenth century). *De ar-* is still in use in modern Japanese, although usually only in writing. In speech, it is mostly the fused versions which are used as I will discuss shortly.

There has been relatively little study of the *ni te ar-,* the origin of *de ar-*. Tracing back to *ni ar-*, we can assume the following evolution:

(3) From *ni ar-* to *de ar-*
*ni ar-* → *ni te ar-* → *de ar-*

It is curious that *te* occurred between *ni* and *ar-*. The most important function of *te* is to conjoin the host category with another inflective category or clause.

(4) yama *koe-te* umi watar-u tomo . . .
mountain climb-CONJ over and ocean cross-V though
'Even though I am climbing over mountains and crossing the ocean . . .'
(*Nihon shoki*, 119)

However, conjoining can be performed by an adverbial form by itself. In modern Japanese conjoining by an adverbial form alone is more formal than conjoining by the *-te* form:

(5)a. kesa wa rokuji ni *oki* taisoo o
this morning TOP six o'clock get up-ADV exercise ACC
si-ta
do-PS
'This morning (I) got up at six and did (some) exercise.'

b. kesa wa rokuji ni *oki-te* taisoo
this morning TOP six o'clock get up-CONJ and exercise
o si-ta
ACC do-PS
'This morning (I) got up at six and did (some) exercise.'

Recall that the adverbial copula form was *ni* at the time that *ni* ar- and *nar-* were in use. Its *te*-form is *ni te*. This is consistent with Chamberlain's (1942) comment, '*Nite* is a gerund of *naru* "to be" '

The combined form *ni te* spread during the period from the ninth to the twelfth centuries.

(6)a. titi wa naho hito *ni* *te* haha namu
father TOP regular person COP-ADV TE mother EMPH
fuziwara nar-iker-u
Fujiwara COP-PS-PN
'Father is a commoner and mother is from Fujiwara clan.'
(*Ise monogatari*, 9)

b. tuki no miyako no hito *ni* *te* titi haha
moon capital person COP-ADV TE father mother
ar-i . . .
exist-SE
'(I) am a person from the moon and I have a father and a mother.'
(*Taketori monogatari*)

These sentences can be translated into modern Japanese with *de*. I will follow the common practice of using the term 'gerund' to refer to the form *de* for the conjunctive function. Therefore I will gloss it as GER:

(7)a. titi wa heimin *de* haha wa fuziwara no
father TOP commoner COP-GER mother TOP Fujiwara
hito d-es-ita
person COP-POL-PS
'My father was a commoner and my mother was from Fujiwara family.'

This direct correspondence between *ni te* and *de* suggests that the transition from *ni* to *ni te* was a colloquialization of the copula form. *De*, can therefore be considered as the adverbial form of the copula evolved from *ni* through *ni te*. The change from *ni te* to *de* is purely phonological.

(8) *ni-te* > *n'te* > *de*

The copula status of *de* renders to *de ar-* a double copula form.

(9) de ar-
COP COP

## 2 *De ar-* forms in modern Japanese

(10) Inflectional forms of *de ar-*

| | | | |
|---|---|---|---|
| a. | *de ar-u* | (the categorial) | 'is' |
| b. | *de at-ta* | (the past) | 'was' |
| c. | *de na-i* | (the negative) | 'is not' |
| d. | *de wa na-i* | (the negative) | 'is not' |
| e. | *de na-katta* | (the negative-past) | 'was not' |
| f. | *de wa na-katta* | (the negative-past) | 'was not' |
| g. | *de ar-eba* | (the conditional) | 'if . . . is . . .' |
| h. | *de ar-e* | (the imperative) | 'be . . . !' |
| i. | *de at-tara* | (the conditional) | 'if . . . is . . .' |
| j. | *de ar-i* | (the adverbial) | 'is . . . and . . .' |

According to Yoshida (1971), *de ar-* has never been a mainstream copula form in speech. *De ar-* was adopted as a translation for the Dutch copula *zijin* 'be' in a Dutch–Japanese dictionary published in 1816 even though it was not widely used in daily speech, and it was subsequently used as the translation of copulas in scientific writings in Western languages. In 1875, the first book written using *de ar-* forms was published. It was a translation of an introductory chemistry book. Also, *de ar-* became a preferred copula form in novels. In the Meiji era (1868–1911), it was a hallmark of political speeches.

*De ar-* forms are stylistically formal in modern Japanese, possessing a distinctively assertive tone. They signal a formal and impersonal style, and their use in modern Japanese is mostly limited to the written language and public speeches.

*De ar-u* is used in both sentence-final and pre-nominal positions:

(11)a. kono mondai wa sinkoku *de ar-u*
this problem TOP serious COP COP-V
'This problem is serious.'

b. Yamada wa bengosi *de ar-u* yuuzin ni soodansi-ta
Yamada TOP lawyer COP COP-V friend DAT consult-PS
'Yamada consulted with a friend, who is a lawyer.'

*De aru* as a pre-nominal copula may occur in speech as it does not yield the ambiguity of another pre-nominal copula *no,* which is a homonym of the genitive particle *no*.

*De ar-i* as the end form is no longer in use. The same form is used as the adverbial (or continuitive) form.

(12) komo mondai wa sinkokui *de ar-i*, musi
this difficult TOP problem COP COP-ADV ignore
deki-na-i
can-NEG-A
'This problem is serious, and we cannot ignore it.'

*De* and *ar-* are separable by a particle *wa* or *mo* for restrictive or focus implication respectively:

(13) baisinin seedo wa minsyuteki *de wa ar-u* ga
jury system TOP democratic COP CNTR COP-V but
hihan no mato *de mo ar-u.*
criticism GEN target COP also COP-V
'The jury system is democratic but it is also a target of criticism.'

Since particles cannot be inserted in the contracted forms, *de ar-* with *wa*, *mo* or *sae* 'even/as long as' does occur in speech.

(14) kenkoo de sae ar-eba hokani nani mo ir-ana-i
healthy COP even COP-COND other nothing need-NEG-A
'As long as (I) am healthy, I do not need anything else.'

Let us consider the following pair of affirmative and negative sentences:

(15)a. kuzira wa honyuurui *de ar-u*
whale TOP mammal COP COP-V
'Whales are mammals.'

b. same wa honyuurui *de na-i*
shark TOP mammal COP NEG-A
'Sharks are not mammals.'

There is an asymmetry between the copula forms:

(16)a. Affirmative copula
*de* *ar-u*
COP COP-V

b. Negative copula
*de* *na-i*
COP NEG-A

There are two copula roots in (16a) while there is only one in (16b). This asymmetry is due to the fact that the verb *ar-* cannot be negated like other verbs as illustrated in the following comparison:

(17)a. kak-u → kak-ana-i
write-V write-NEG-A

b. ar-u → *ar-ana-i

As shown in (17b), the form *ar-ana-i* is ungrammatical. Instead of negating *ar-*, the negative counterpart of *ar-* is the negative auxiliary adjective *na-i*. As I discussed in Chapter 7, this also holds true for the negative existential. *Nai* is not a negative concept as in 'not exists' but it constitutes a positive concept of being absent.

A different kind of dichotomy may hold in the copula forms *de aru* and *de nai*. The impossibility of '*de ar-anai'* follows if we assume that *aru* in *de aru* is the overt representation of an affirmative feature.

(18) *de* *ar-u*
COP AFF-V

The negative and the affirmative are opposing features and one cannot turn one into the other, which is to say, the affirmative marked item cannot be negated. The negative forms of regular verbs are formed by suffixing the negative morpheme to the root, not the affirmative marked form. There are no overt affirmative morphemes for regular verbs anyway.

In Japanese, as in many other languages, affirmative vs. negative polarity is asymmetrically marked. The negative feature is overtly marked by (*a*) *na-* but the affirmative interpretation relies on the

absence of the negative marking rather than on an overt affirmative marking. However, if we assume *ar-u* to be an affirmative auxiliary verb (glossed as AFF-V) on a par with *na-i* as a negative auxiliary adjective, then the double copula analysis for *de ar-* is eliminated, which in turn leads to a dichotomy as follows:

(19)a. Affirmative copula: *de* *ar-u*
COP AFF-V

b. Negative copula: *de* *na-i*
COP NEG-A

Is there evidence that *aru* in *de aru* is exceptionally marked for the affirmative feature? Does it behave differently from other forms and categories that are not overtly marked for the affirmative? I have already noted a strongly assertive tone in the *de ar-* copula. This is true only for *de aru* among the inflectional forms of *de ar-*. The title of Sooseki Natsume's *Wagahai wa neko de aru* (1906) novel 'I am a cat' sets a tone for the story of an arrogant cat. *Wagahai*, a pronoun for an arrogant self-reference, is in total agreement with the tone of the copula *de aru*. However, such a subjective impression, even though many native speakers might agree with it, cannot be crucial evidence for the overt affirmative feature analysis.

A test case is an interrogative sentence. Affirmation by an overt affirmative feature would block speech acts of question. Since *de ar-* is not used commonly in speech, we have to imagine a special context. Let us imagine a public speech in which the speaker makes a statement, (20a), then asks the young audience a question, (20b):

(20)a. watasi no musuko wa gakusee *de* ar-u.
I GEN son TOP student COP AFF-V
'My son is a student,'

b. ??kimitati mo gakudee *de* *ar-u* *ka*?
you too student COP AFF-V Q
'Are you also students?'

The interrogative sentence (20b) is extremely awkward. If this is asked without *de aru*, the sentence is perfectly fine:

(21) kimitati mo gakusee ka?
you too student Q
'Are you also students?'

Japanese questions can be asked with or without the sentence-final *ka*. However, a question with *de aru* not followed by *ka* is completely unacceptable:

(22) *kimitati mo gakudee *de* *ar-u*?
you too student COP AFF-V
'Are you also students?'

But the unacceptability of (22) is heavily influenced by the incompatibility of the non-masculine tone of asking a question without the sentence final particle *ka*, and the impersonal, formal *de aru* style. Therefore (22) cannot be a crucial piece of data.

There is evidence that the affirmative analysis of the *aru* in *de aru* must be confined to the verbal categorial form *de aru*. First, the distinctive tone in *de-aru* is not observed in forms such as the polite-negative copula form *de (wa) ar-i-mas-e-n* 'is not [polite]' that occurs in polite speech. (The morpheme *-mas-* bears a politeness feature and derives polite forms.) Second, the affirmative analysis creates uninterpretable feature combinations in *de (wa) arimasen*. Consider the following pair:

(23)a. kuzira wa sakana de(wa) ar-imas-en
whale TOP fish COP AFF-POL-NEG
'Whales are not [polite] fish.'

b. kuzira wa sakana de-(wa)-na-i
whale TOP fish COP NEG-A
'Whales are not fish.'

These sentences yield an identical interpretation of the truth-value of the sentential content. Both negate the proposition 'Whales are fish'. The only difference is that (23a) occurs in polite speech. However, notice that *-arimasen* in (23a) contains both the affirmative *ar-*, and a negative *-(e)n*. This renders the sentence affirmative and negative at the same time. In order to account for the interpretive

fact, *ar-* cannot be assumed to be an overt affirmative marker. The same argument applies to every inflectional form that contains *-arimasen*.

Additional evidence against the overt affirmative analysis is that *de aru* can occur with an epistemic modal predicate such as *kamo sirenai* 'may be' or *rasii* 'it seems':

(24)a. sore wa hooritu ihan *de ar-u* kamo sirena-i
it TOP illegal COP AFF-V may be
'It may be illegal.'

b. sore wa hooritu ihan *de aru* rasi-i
it TOP illegal COP AFF-V seems
'It seems like it is illegal.'

These sentences show that the speaker of each sentence is not certain whether it is illegal or not. Therefore, I believe the validity of the overt affirmative feature analysis for *de aru* to be inconclusive. However, I will come back to this issue when I investigate another copula form, *da*, in the next chapter.

On the subject of inflection, the categorial form *de aru* and *de nai* indicate that the former inflects as a verb and the latter as an adjective.

## 3 Contracted *d*-type copula forms

There are contracted forms of *de ar-*. Major inflectional forms of plain *de ar-* and their contracted versions are shown in (25).

| (25) | *Non-contracted* | *Contracted* | |
|---|---|---|---|
| a. | *de ar-u* | *da* | 'is' |
| b. | *de ar-ta* | *d-atta* | 'was' |
| c. | *de na-i* | *zya-na-i* | 'is not' |
| d. | *de wa na-i* | *zya-na-i* | 'is not' |
| e. | *de wa na-katta* | *zya-na-katta* | 'was not' |

There are four types of contractions among the contracted forms. First, the simplest copula form *da* evolved from *de aru* through phonetic erosion and contraction as follows:

(26) Development of *da*
*de aru* → *de ar* → *dea* → *da*

One of the transit forms *dea* is reported to be still in use in Okunoto and Mino dialects, and its phonological variants, [*ja*], [*dʒa*] and [*ya*] are found in various other dialects (Doi 1981). Due to the serious phonological erosion, the morphological feature analysis of *da* is not simple. I have already argued against the non-past tense morpheme analysis for *-a* in *da*. I will take a syntactic approach to make a feature identification of *a-* in *da* in Chapter 10.

Second, the past tense form *d-at-ta* is a contracted form of *de ar-ta*.

(27) Contracted past tense copula

| | | | | | | |
|---|---|---|---|---|---|---|
| *de ar – ta* | | → | *de* | *at-ta* | → | *d-at-ta* |
| COP COP-PS | | | COP | COP-PS | | COP-PS |

The contracted form *d-ta-ta* is one word with root *d-*. Therefore *-at-* in the middle has no semantic or syntactic import.

Third, the negative *zya nai* evolves from *de nai* as well as *de wa nai*.

(28) Contracted negative copula

a.

| | | | | | |
|---|---|---|---|---|---|
| *de* | *na-i* | | → | *zya* | *na-i* |
| COP | NEG-A | | | COP | NEG-A |

b.

| | | | | | | |
|---|---|---|---|---|---|---|
| *de* | *wa* | *na-i* | → | *zya* | *na-i* | |
| COP | TOP | NEG-A | | COP | NEG-A | |

There are two alternative negative forms in non-contracted forms, one with the topic particle *wa*, the other without a particle. In speech, (28b) with *wa* is much more common than (28a) without *wa*. In (28a), there is nothing for *de* to contract to. Martin (1975) suggests that *zya* in the colloquial *zya nai* is simply a phonological variant of *de*. The particle *wa* in the non-contracted form adds a restrictive implication. However subtle an implication it may provide, when *de* and *wa* are contracted into *zya*, *wa* is no longer visible. Therefore, it is indistinguishable from *zya nai* in (28b). Martin reports that some speakers lengthen *zya nai* as in *zyaa nai* for the same effect *wa* may bring.

Some example sentences containing these copula forms are shown below. The form *da* is glossed only as COP for now.

(29)a. kore wa hen da
this TOP strange COP
'This is strange.'

b. boku no konpyuutaa wa IBM zya nai
my computer TOP IBM COP NEG·A
'My computer is not IBM.'

c. kinoo wa ame d-at-ta
yesterday TOP rain COP·PS
'It was rainy yesterday.'

## 4 Polite forms of the *d*-type copula

The speech level distinction between the polite and the plain form is signalled by the presence or absence of the polite morphemes (POL in gloss) *-es-* or *-(i)mas-*. I will refer to the forms that contain a polite morpheme as polite forms, and those that do not, as plain forms. In the following, the verbal category, the adjectival category and the copula are shown in polite and plain forms:

| (30) | *Polite form* | *Plain form* |
|---|---|---|
| a. | hanas-imas-u | hanas-u |
| | speak-POL-V | speak-V |
| | 'speaks' [polite] | 'speaks' |
| b. | ao-i-d-es-u | ao-i |
| | blue-A-COP-POL-V | blue-A |
| | 'blue is [polite]' | 'blue is' |
| c. | d-es-u | da |
| | COP-POL-V | COP-? |
| | 'is [polite]' | 'is' |

The feature '?' in (30c) COP-? will be identified in the next chapter.

The polite forms contain mixed categories, which cause apparent form–function mismatches. First let us consider the well-known

phenomenon of the occurrence of the polite copula *desu* with adjective and verb forms.

(31)a. ao-i-desu
blue-A-desu
'It is [polite] blue.'

b. ao-ku-na-i-desu
blue-NEG-A-desu
'It is [polite] not blue.'

c. ao-kat-ta-desu
blue-PS-desu
'It was [polite] blue.'

d. ao-ku-na-kat-ta-desu
blue-NEG-PS-desu
'It was [polite] not blue.'

(32)a. mi-na-i-desu
watch-NEG-A-desu
'I don't [polite] watch it.'

b. mi-na-kat-ta-desu
watch-NEG-PS-desu
'I didn't [polite] watch it.'

Although *d*-copula forms occur with the nominal and the adjectival nominal categories, the polite copula *des-u* (COP-POL-V) occurs with finite forms of adjectives as well as some verb forms as the above examples show. It is widely agreed upon among linguists (e.g. Okutsu 1978) that this *desu* is a mere polite morpheme and that it is to be categorially distinguished from the *desu* that occurs with a predicate nominal such as the following:

(33) kyoo wa nitiyoobi *desu*
today TOP Sunday desu
'Today is Sunday.'

Such a view is based on the assumption that *-u-* in the copula *desu* is the non-past tense morpheme which would conflict with the past

tense forms of the adjectival forms such as (31c). Also, based on the common definition that the copula occurs only with non-inflective categories, this *desu* cannot be a copula. However, in my analysis, the copula is a feature carrier for non-inflective categories and defective inflective categories. Also, in my tense feature analysis those forms that contain -(*r*)*u, -i*, or *-a* are not specified for tense. The copula *desu* does not encode a tense morpheme. Therefore, the grammaticality of (31) is straightforwardly accounted for.

| | | |
|---|---|---|
| (34)a. | d-es-u<br>COP-POL-V | 'is' |
| b. | d-es-ita<br>COP-POL-PS | 'was' |
| c. | zya-ar-imas-en<br>COP-COP-POL-NEG | 'is not' |
| c′. | zya-na-i-d-es-u<br>COP-NEG-A-POL-V | 'is not' |
| d. | zya-ar-imas-en-d-es-ita<br>COP-COP-POL-NEG-COP-POL-PS | 'was not' |
| d′. | zya-na-kat-ta-d-es-u<br>COP-NEG-PS-COP-POL-PR | 'was not' |

Although omitted from the chart, *zya* in each of (34c), (34c′), (34d) and (34d′) may alternate with the non-contracted version *de wa* with the exact same interpretation. Let us consider *zyaarimasen* 'is not [polite]' in (34c). *Arimasen* is the polite negative form of the existential verb *ar-*, hence a polite version of *nai*. Notice in the segmented form that there is no feature morpheme after the negative morpheme *-en*. *Arimas-en-u*, an old version of *arimas-en,* had the morpheme *-u* after the negative morpheme *-n*. However, it is lost in the current form. *Mas-en* encodes the polite and negative morphemes not just for the copula but also for verbs and adjectives as in *ik-imas-en* 'does/do not go [polite]' and *ao-ku-ar-imas-en* 'is not blue [polite]'. If *-u* is the non-past tense morpheme, then the fact that all predicates in the polite negative form can receive non-past tense interpretation cannot be accounted for. In my analysis that does not

recognize the non-past tense marking; the *masen*-form without *-u* is not a problem.

Lack of tense marking in *masen* accounts for the well-formedness of (34d), *zyaarimasen-desita* 'was not [polite]'. This form consists of a combination of (34c) and the past tense copula *desita* in (34b). Adding *desita* causes no tense conflict since the past tense *-ta* encoded *in des-ita* is the sole tense marker in *zyaarimasen-des-ita*.

# 10
# *Da*

## 1 Overview

The goal of this chapter is to identify the feature that *-a* in the copula form *da* represents in order to explain and describe the functions of *da*.

I examine cases of the obligatory exclusion of *da* in sentences with a nominal predicate, on the premise that the feature that *-a* represents is incompatible with one or more elements in these sentence types. I identify five sentence types that disallow *da* and examine their core elements to abstract out what these sentence types share.

My investigation reveals that obligatory exclusion of the copula *da* correlates with the speaker's lack of knowledge of the truth of the sentential content. This generalization leads to a proposal that the Japanese language signifies the speaker's ignorance by morpho-syntactic means, a type of epistemic modality. In order to account for the modal nature of the presence and absence of the copula form *da*, I propose to identify the feature that *-a* in *da* represents. Then I will utilize the proposed feature analysis to account for the roles that the copula *da* plays in various discourse settings. Konomi (1994) investigated sentences that exclude *da* and concluded that *da* is not a copula but a modal. I will begin with a critical review of Konomi's analysis.

For ease of reading example sentences, I will minimize the segmentation of inflectional forms and accordingly provide a gloss only for the relevant portions. I will gloss categorial marking morphemes such as V and A only when necessary for clarity. The copula form *da*

is glossed only as COP until the morphological feature identification is made.

## 2 Past research on *da*

Konomi's (1994) major claim is that *da* is not a copula but is a modal. She makes the following assumptions on which she bases her arguments:

(1)a. the copula's sole function is to phonologically support a tense morpheme;

b. the Japanese sentence is headed by a modal (Whitman 1989);

c. the question particle *ka* is a modal.

Konomi does not provide a definition for 'modal', and thus it is not clear exactly what it does in the framework that she assumes. Based on the use of *desu* with tensed categories as a polite marker, examples of which are shown in (2), she concludes that *da* and *desu* are tense-less:

(2) takai desu
expensive desu
'It is expensive.'

The occurrence of *desu* in (2) leads Konomi to another conclusion: neither *da* nor *desu* is a copula based on her definition of copula in (1a).

Konomi then argues that *da* is a modal, based on sentence types that exclude *da* and those that require *da*. For the former, she presents question sentences and presumptive sentences:

(3)a. *kare wa gakuse da ka
he student COP ka
(Intended to mean) 'Is he a student?'

b. *Kare wa gakusei da daroo
he student COP daroo
(Intended to mean) 'He is probably a student.'

Following Whitman (1989), Konomi assumes that Japanese sentence structure is headed by a modal node, and the *ka* that appears in question sentences is a modal that occupies the modal node. She argues that the fact that *da* does not occur in question sentences whose modal position is occupied by *ka* indicates that *da* is also modal. She also categorizes *daroo* as a modal and, therefore, (3b) also indicates that *da* is a modal. In addition she points out that *da* may occur with a tensed element in some dialects. According to Konomi, that is evidence that *da* is in a modal position, not a tense position, in the structure of Japanese sentences.

Konomi claims that *da* is the indicative morpheme and that the indicative is a modal. She assumes that verbal and adjectival predicates are also headed by the indicative in a modal position with a zero-morpheme. She argues that *da* also bears the [+realis] feature, based on the fact that *kara* 'because' and *kedo* 'although' require *da* with a predicate nominal, as in *gakusee da kara*, 'because (she) is a student', and *gakusee da kedo*, 'although (she) is a student.' The sentential content within the complement clause of *kara* and *kedo* is presumed to be a fact, thus Konomi accounts for the occurrence of *da* preceding *kara* or *kedo* by proposing that *kara* and *kedo* require the [+realis] feature in the modal position in its complement clause.

The first half of Konomi's argument is difficult to evaluate since she does not define or elaborate on the modal category. For instance, her argument for the modal status of copula seems to be based on an assumption that there can be only one item under the modal node. She argues that the fact that *da* and *ka* cannot co-occur shows that *da* is a modal. This, in turn, is based on her premise that *ka* is a modal category. Furthermore, her argument faces an empirical problem: *ka* and the tentative *daroo*, both of which Konomi assumes to be modals, can co-occur perfectly as shown in the following example.

(4) kore wa nan daroo ka
this TOP what daroo ka
'I wonder what it is.'

The perfect acceptability of (4) undermines Konomi's claim that *da* is not copula but is a modal category.

In the second half of her work, she proposes that the modal *da* bears the feature [+realis] based on the fact that a nominal predicate must occur with *da* preceding *kara* and *kedo*, as factive conjunctions. Konomi claims that verbal and adjectival complement clauses also have a modal head. Although she does not discuss it, the fact that verbal and adjectival sentences also occur with *kara* and *kedo* [+realis] would necessitate the [+realis] feature to be in the modal head of verbal and adjectival sentences.

(5)a. sagasi-ta kedo mitukar-ana-kat-ta
search-PS though be found-NEG-PS
'Although I looked for it, It was not found.'

b. tenki ga ii kara tenisu demo simasen ka
weather NOM is good because tennis such as do-NEG ka
'Since the weather is good, why don't we play tennis or something?'

In addition, her theory would necessitate *desu* being headed by a modal and having the [+realis] feature, since *desu*, too, occurs in the complement clause of both *kara* and *kedo*.

(6) kore wa sinkokuna mondai desu kara yoku kentoo
This TOP serious problem is because well look into
simasu.
do
'Since this is a serious problem, we will look into it carefully.'

However, this thrusts everything Konomi proposes in the first half of her analysis into a paradox. She accounted for the fact that *da* does not occur in question and tentative sentences by categorizing *da* as a modal. If verbal and adjectival sentences are headed by a modal element with the [+realis], then they, too, should be excluded in question and tentative sentences, but they all occur in question sentences. Those in plain forms also occur in tentative sentences. On the other hand, if they are not bearing the [+realis] feature, then the fact that they occur with *kara* and *kedo* cannot be accounted for since she claims that *kara* and *kedo* require the [+realis] feature on the head

of their complement clause. Therefore, Konomi's feature analysis of *da* fails to account for its distributional property.

My approach to the phenomena which I discussed briefly in the introductory chapter is to examine them from as many perspectives as possible. I agree with Konomi that *da* should be investigated as having a modal nature. Modality is a vague and broad ranging notion, but basically it is a linguistic manifestation of the speaker's (and sometimes the addressee's) attitude towards the sentential content. Then, and perhaps more importantly, we need to look at the object of study from the speaker's perspective.

## 3 Copula alternation: *da* and the zero-copula

### 3.1 The speaker's gender-stylistic copula alternation

The sentence types that exclude *da* reveal a lot about its nature. First, they show the uniqueness of *da* among all predicate forms by excluding only *da*. This exclusion is strikingly clear when we find it side by side with the overt representation of *da*. We see this kind of copula alternation phenomenon in the gender-stylistic occurrence of the sentence final particles *yo* and *ne*.

In Japanese, sentence-final particles (henceforth SF particles) are one of the most striking markers of the speaker's gender. They optionally appear at the end of a matrix clause. Since Japanese is a verb final language, these particles directly follow a verbal element in the sentence. Additionally they occur mostly in speech and a greater variety of SF particles occurs in informal speech than formal speech.

The choice of SF particle depends on both the speaker's attitude towards, as well as his or her assessment of, the addressee's knowledge of the sentential content. The choice of most SF particles also depends on the gender of the speaker. An exclamatory particle *wa*[1] with a rising intonation occurs only in women's speech while the particles of insistence *zo* and *ze*, and that of exclamation, *naa*, occur predominantly in men's speech.

Examples with *wa*, *zo* and *ze* following a copulative sentence are shown in (7). Rising intonation is indicated by ´ on the vowel of the rising syllable. The term 'feminine' in parentheses means that

the given sentence ending type occurs predominantly in women's speech, and the term 'masculine', in men's speech. The gender distribution of SF particles is heavily governed by the age of the population. Thus, a particle never used by a 40 year old woman may be used routinely by an 18 year old woman. The feminine/masculine distinction as noted in this study can be considered to describe the middle-aged population in Tokyo.

(7)a. koko sizuka da wá (feminine)
this place quiet COP wá
'This place is quiet!'

b. koko sizuka desu wá (feminine)
this place quiet COP·POL wá
'This place is [polite] quiet!'

(8) koko sizuka da ze/zo (masculine)
this place quiet COP zo/ze
'This place is quiet, I tell you.'

The SF particle *wa* occurs both in informal and polite speech. Therefore, it can follow the plain form as in (7a) or the polite form of the predicate as in (7b). However, *zo* and *ze* are used only in informal speech in modern Japanese as in (8).

Besides gender specific SF particles, there are inherently gender neutral SF particles that occur in both men's and women's speech: an insistence particle *yo*, and a confirmation seeking particle *ne*. They are commonly used in both polite and informal speech.

In polite speech, these particles follow the polite form of the predicate. An example of a copulative sentence in the present tense is shown below. (*Neutral* in the parentheses means that this sentence ending type occurs in both men's and women's speech.)

(9) Koko sizuka desu yo/ne (neutral)
this place quiet COP·POL yo/ne
'This place is [polite] quiet, I'm telling you (yo)'
'This place is quiet, I would say/don't you think?/isn't it? (ne)'

However, in informal speech, *yo* and *ne* are used differently depending on the gender of the speaker as illustrated in the following:

(10)a. koko sizuka da yo/ne (masculine-neutral)
this place quiet COP yo/ne

b. koko sizuka Ø yo/ne (feminine)
this place quiet Ø yo/ne
'This place is quiet, I tell you (yo)'
'This place is quiet, don't you agree? (ne)'

*Yo* and *ne* in (10a) each follow *da*. But in (10b), the copula is absent, and each SF particle follows the predicate nominal directly. Yet, (10a) and (10b) yield identical interpretation including present tense, affirmative polarity and informal speech level.

The only difference is the gender of the speaker: in men's speech, a nominal predicate for an affirmative, present tense, informal interpretation almost always occurs with *da* when followed by *yo* or *ne*. But in women's speech, it may occur with or without *da* when followed by *yo* or *ne*. Therefore, *yo* and *ne* following the predicate nominal without *da* occur almost exclusively in women's speech. Whether a woman uses *yo* and *ne* with or without *da* depends on her individual speech style,[2] to which the speaker's age is relevant. *Da yo* and *da ne* seem to be the norm among women of the younger generation.

The sentences (10a) and (10b) are purely stylistic variants: a male speaker chooses (10a) over (10b) for the reason that he is male. If he utters (10b), he would sound effeminate. A female speaker's choice between (10a) and (10b) largely depends on her generation. The (10b) version is quickly disappearing from the speech of younger women. Thus, (10a) is neutral in the speech of the younger generation while it is considered masculine in the speech of the older generation.

The zero-copula is an alternative unique to *da*. *Yo* and *ne* following other copular forms, past and/or negative, as well as verbal and adjectival forms are gender-specified by an extra particle: the SF particle *wa* occurs preceding *yo* or *ne* only in women's speech. Examples of a past tense copulative sentence are shown below:

(11)a. asoko sizuka datta yo/ne (masculine-neutral)
that place quiet COP·PS yo/ne

b. asoko sizuka datta wa yo/wa ne (feminine)
that place quiet COP·PS wa yo/wa ne
'That place was quiet, I'm telling you (yo).'
'That place was quiet, I would think/wasn't it? (ne)'

The presence of *wa* preceding *yo* or *ne* in (11b) adds no extra semantic content. Its sole function is to mark the feminine gender of the speaker as a stylistic opposition to the unmarked *yo* and *ne* in men's speech. *Wa* preceding *yo* or *ne* is also disappearing from younger women's speech, thus (11a) is neutral in the speech of the younger generation as is the case with (11a).

The question is, why does *da* uniquely alternate with the zero-copula to indicate the speaker's gender? Equally intriguing, why does *da* mark the masculine gender, and the zero-copula the feminine gender? Which is supposed to be the grammatical norm? What does copula alternation signify?

The phenomenon has been noted in the literature (e.g. Ueno 1971; Martin 1975; Okutsu 1978; Shibatani 1990) but no account has been given for the significance of the gender governed stylistic copula alternation. Ueno (1971), in her transformational analysis of SF particles, proposed that *yo* and *ne* in women's speech are underlyingly preceded by *wa*, and that an optional deletion rule deletes the *wa* that follows *da*, and then the left-over *da* is obligatorily deleted. This process can be expressed as below:

(12) Underlying sentence: sizuka da wa ne/yo
→ Optional *wa* deletion: sizuka da ne/yo
→ Obligatory *da* deletion: sizuka ne/yo

However, her analysis does not explain why such rules apply and why they apply to *da*. The question comes down to the uniqueness of *da* over all other predicate forms.

The copula alternation accompanying the SF particles *yo* and *ne* is clearly related to, although not identical with, another copula alternation phenomenon that occurs in the bare form without an SF particle as illustrated in the following:

(13) In response to a question whether the library is quiet:

a. ee, sizuka desu (neutral)
yes quiet COP·POL
'Yes it is [polite] quiet.'

b. un, sizuka da (masculine)
yes quiet COP
'Yes, it is quiet.'

c. un, sizuka Ø (neutral)
yes quiet Ø
'Yes, it is quiet.'

For the polite copulative sentence (13a), there are two informal versions: (13b) with *da* and (13c) with the zero-copula. In this alternation, the *da* version occurs predominantly in men's speech but the zero-copula version occurs in both men's and women's speech. Thus, when uttered by a man, (13c) does not sound effeminate while (13b) with *yo* does. Furthermore, there is no gender distinction in other bare copula forms, regular adjectives and verbs that occur without any SF particle. This is illustrated below with the past tense versions of polite and plain copula forms:

(14) In response to a question asking whether the library was quiet:

a. ee, sizuka desita (neutral)
yes quiet COP·POL·PS
'yes it was [polite] quiet'

b. un, sizuka datta (neutral)
yes quiet COP·PS
'Yes, it was quiet.'

The bare copula alternation phenomenon underscores the uniqueness of *da* in its role of distinguishing the speaker's gender. This issue will be discussed in Chapter 11, in which I will apply the findings made in preceding sections to determine what gave rise to the speaker's gender-governed stylistic alternation between *da* and the zero-copula accompanied by the SF particles *yo* and *ne*.

Most revealing of the nature of *da* is the syntactic phenomenon of the obligatory exclusion of *da* regardless of the gender of the speaker, which I will examine in the next section.

### 3.2 Representation of the speaker's knowledge or ignorance

This section examines several sentence types that obligatorily exclude nominal predicates with *da*, on the premise that the feature that *-a* in *da* represents is incompatible with an element or elements in these sentence types. I will characterize the following five sentence types that disallow *da* and examine their core elements to determine what these sentence types share.

(15) Yes/no questions

a. *kyoo wa doyoobi da ka?
today TOP Saturday COP ka
(Intended to mean) 'Is today Saturday?'

b. kyoo wa doyoobi Ø ka?
today TOP Saturday Ø ka
'Is today Saturday?'

(16) Receipt of new information

a. *soo da ka
so COP ka
(Intended meaning) 'Is that right?/I see.'

b. soo Ø ka
so Ø ka
'Is that right?/I see.'

(17) Some sentence final particles

a. *sore wa zyoodan da sa
that TOP joke COP sa
(Intended meaning) 'That is a joke. Can't you tell?'

b. sore wa zyoodan Ø sa
that TOP joke Ø sa
'That is a joke. Can't you tell?'

(18) Epistemic modal predicates
a. **Yuuta wa genki da rasii*
Yuta TOP well COP seem
(Intended to mean) 'Yuta seems to be well.'
b. Yuuta wa genki Ø rasii
Yuta TOP well Ø seem
'Yuta seems to be well.'

In regular declarative sentences, *da* is allowed:

(19)a. kyoo wa doyoobi da
today TOP Saturday COP
'Today is Sunday.'
b. soo da
so COP
'That's right.'
c. sore wa zyoodan da
that TOP joke COP
'That is a joke.'
d. Yuuta wa genki da
Yuta TOP well COP
'Yuta is well.'

*3.2.1 Yes/no questions and the receipt of new information*

Let us first consider *yes/no* question (henceforth Y/N-question) sentences. Japanese Y/N-questions can be asked with either only a rising intonation at the end of the sentence[3] or with an SF particle *ka* with a rising intonation. Each type occurs in both men's and women's polite speech. I will mark a rising intonation with ´ on top of the syllable, as well as a question mark at the end of the sentence. A feature identification of the SF particle *ka* is also one of the goals of this study. Until an identification is made, I will gloss it as KA.

(20)a. asoko sizuka desita ká? (neutral)
that place quiet COP·POL·PS KA
b. asoko sizuka desitá? (neutral)
that place quiet COP·POL·PS
'Was that place quiet [polite]?'

(21)a. Nyuusu hazimarimasita ká? (neutral)
news begin·POL·PS KA

b. Nyuusu hazimarimastá? (neutral)
news begin·POL·PS
'Did the news start [polite] yet?'

In informal speech, Y/N-questions with *ka* occur only in men's speech while those without *ka* occur in both men's and women's speech as illustrated below:

(22)a. asoko sizuka datta ká? (masculine)
that place quiet COP·PS KA

b. asoko sizuka dattá? (neutral)
that place quiet COP·PS
'Was that place quiet?

(23)a. Nyuusu hajimatta ká? (masculine)
news begin·PS KA

b. Nyuusu hajimattá? (neutral)
news begin·PS
'Did the news start yet?'

The issue of the speaker's gender in relation to the use of the SF particle *ka* will be discussed in Chapter 11. Meanwhile, I will continue to indicate the feminine, masculine and neutral distinction for each example sentence without discussion.

With or without the SF particle *ka*, Y/N-question sentences exclude the overt copula *da* in a matrix nominal predicate. Instead, the nominal predicate must take the zero copula to yield the affirmative present tense interpretation.

(24)a. *asoko sizuka da ká?
that place quiet COP KA

b. *asoko sizuka dá?
that place quiett COP KA

c. asoko sizuka Ø ká? (masculine)
that place quiet Ø KA

d. asoko sizuká Ø ? (neutral)
that place quiet Ø
'Is that place quiet?'

The copula in other finite forms including *desu*, which is the polite version of *da*, and the past tense forms *datta* and *desita* as in (20) and (22), as well as verbs as in (21) and (23), and adjectives can occur in Y/N-question sentences. Only *da* is excluded. This phenomenon leads me to the preliminary hypothesis that *da* and only *da* among the inflective predicate categories encodes a feature that is incompatible with an element in Y/N-question sentences.

Phonological and morphological elements that signal Japanese Y/N questions are as follows:

(25)a. An obligatory rising intonation.

b. An optional SF particle *ka*.

The basic communicative function of questions is to elicit information from the addressee, thus I assume that this function is borne by the obligatory element, a rising intonation. Thus, let us tentatively assume that it is the function of information solicitation that is responsible for the obligatory exclusion of *da* in Y/N-question sentences.

What is the function of the SF particle *ka* in question sentences? It does not alter the semantics of the sentence. It cannot be a marker of the male speaker since the *ka*-marked question sentences in polite speech are gender-neutral on a par with those without *ka* as shown in (20a) and (20b) repeated in (26):

(26)a. asoko sizuka desita ká? (neutral)
that place quiet COP·POL·PS KA

b. asoko sizuka desitá? (neutral)
that place quiet COP·POL·PS
'Was that place quiet?'

The optionality of its occurrence in question sentences suggests that the SF particle *ka* redundantly performs a function with another element in a question sentence. Does it mean that *ka* and the obligatory rising intonation both function to signal solicitation for information? There is evidence that the function of the SF particle *ka* is distinct from that of a rising intonation. The evidence comes from a sentence type that I shall refer to as *Receipt of New Information* (henceforth RNI) in which the SF particle *ka* occurs with a falling intonation. In this speech act, the speaker acknowledges receipt of new information provided to him or her in the preceding discourse. Let us consider the following discourse, which contains an RNI sentence (27b). (A falling intonation is indicated by ` on the vowel of the falling syllables)

(27)a. (Speaker A tells B)
*asoko sizuka desu yo* (neutral)
that place quiet COP·POL yo
'That place is [polite] quiet, I tell you.'

b. (Speaker B responds to A)
*soo desu kà. sizuka desu kà.* (neutral)
so COP·POL KA quiet COP·POL KA
'I see/Is [polite] that right
'(You are telling me) it is [polite] quiet.'

In RNI sentences, *ka* with a falling intonation optionally occurs following a nominal predicate containing an adjectival nominal proform *soo* 'so' and/or a repeat of the crucial phrase in the information.

The utterance in (27b) may not induce a response from A, an indication that the SF *ka* with a falling intonation does not have an information soliciting function. This contrasts with (28b) uttered with a rising intonation by a speaker who is very surprised, not convinced, or resists accepting information. Such an utterance induces the information provider's strong confirmation as in (28c):

(28)a. (Speaker A tells B)
asoko sizuka desu yo
that place quiet COP·POL yo
'That place is [polite] quiet, I tell you.'

b. (Speaker B responds to A)
soo desu ká? sizuka desu ká? (*neutral*)
so COP·POL KA quiet COP·POL KA
'Is [polite] that right? It is [polite] quiet?'

c. (Speaker A responds to B)
soo desu yo. sizuka desu yo
so COP·POL yo quiet COP·POL yo (*neutral*)
'Yes, it is [polite]! It is [polite] quiet, I'm telling you.'

The fact that the *ka* with a falling intonation does not induce a response while the *ka* with a rising intonation does induce one indicates that the function of information solicitation is not inherent in *ka*.

Now, let us consider the informal speech version of example (29):

(29) (Speaker A tell B)

a. asoko sizuka da yo (neutral-masculine)
that place quiet COP yo

a′. asoko sizuka Ø yo (feminine)
that place quiet Ø yo
'That place is quiet, I tell you.'

(Speaker B responds to A)

b. soo Ø kà sizuka Ø kà (neutral-masculine)
so Ø KA quiet Ø KA
'I see/Is that right. (You are telling me) it is quiet.'

b′. soò Ø sizukà (neutral-feminine)
so Ø quiet Ø
'I see/Is that right. (You are telling me) it is quiet.'

c. *soo da kà *sizuka da kà
so COP KA quiet COP KA

c′. *soo dà *sizuka dà
so COP quiet COP
(Intended to mean) 'I see./Is that right ( ). (You are telling me) it is quiet.'

Notice that in Speaker B's RNI sentences, *da* is excluded as shown by the ungrammaticality of (c) and (c′). Thus, our tentative assumption

that the obligatory exclusion of *da* in Y/N-question sentences is due to the function of information solicitation represented by the rising intonation, cannot account for the exclusion of *da* in RNI sentences.

According to the data (29c) and (29c′), the copula form *da* encodes a feature that is incompatible with an element that resides in both Y/N-question sentences and RNI sentences. The only morphological element shared by the two sentence structures is the SF particle *ka*. Thus, the SF particle *ka* is clearly incompatible with *da*. However, since *ka* occurs only optionally, it cannot be the sole cause for the exclusion of *da*. As I have already noted, the optional occurrence of *ka* indicates a redundancy with some other element. Apparently this other element is not represented in a morphological form. Potentially, this element emerges compositionally from individual elements.

Thus, let us examine elements of RNI sentences more closely, starting from the falling intonation. A pronounced falling intonation is also observed in utterances of what I tentatively refer to as the *inferential copulative sentence*, in which the speaker infers a sentential content based on his or her inference, not direct knowledge. For instance, consider the context in which the speaker sees his or her roommate studying hard, and infers that he or she must have an exam tomorrow:

(30) asita siken ga aru n dà
tomorrow exam NOM exist·V NML COP
'(lit.) It is that there is an exam tomorrow.'
'I've got it! He must have an exam tomorrow.'

The structure of an inferential copulative sentence is shown in (31):

(31) [[sentence] -n] – copula

In this structure, *-n-*, a phonological variant of the nominalizer *no*, turns the preceding sentence, shown in the inner brackets, into a predicate nominal, shown by the outer brackets, thereby occurring with the copula.

The speaker of the sentence (30) in the given context is not informing the addressee, since it is the addressee who knows the truth. This is not pre-established knowledge either, but a piece of new informa-

tion that he or she has just acquired through his or her own inference. The status of newly-acquired information is shared by the speech act of RNI, in which the speaker acknowledges receipt of new information. Hence, I assume that the falling intonation that occurs in both RNI sentences and inferential copulative sentences, as represented in (30), signals the speaker's acquisition of new information.

Another element of RNI sentences is the sentential content itself, which is represented by the pro-form *soo* 'so' referring to the information given in the preceding discourse and/or its repetition. By referring to the preceding discourse, the RNI shows the history of the information transfer, from the time when the speaker was the addressee and had not acquired the information.

At first glance from the perspective of information transfer, Y/N-questions and RNI appear to represent opposite statuses of the speaker's knowledge about the information: a Y/N question occurs before, and an acknowledgement of RNI occurs after an information transfer. Thus, the speaker of a Y/N question is ignorant about the relevant information, while the speaker of an RNI sentence has just acquired information.

However, these seemingly opposite speech acts can be unified when we examine RNI utterances by focusing on the beginning of the history of the information transfer, specifically, the speaker's knowledge status before receiving information. As my naming suggests, the utterances of the RNI sentences are appropriate only if the information is new to the speaker, which is to say that the speaker lacked knowledge about the information before receiving it. RNI utterances often accompany a statement of admission of past ignorance. Examples of polite and informal utterances are shown below:

(32)a. ah, soo desu ka. sirimasendesita.
oh so COP·POL KA know·POL·NEG·PS
'Oh, is [polite] that so. I did not know [polite] that.'

b. ah, soo Ø kà. siranakatta.
oh so Ø ka. know·NEG·PS
'Oh, is that so. I did not know that.'

For the sake of discussion, I will refer to the speaker's lack of knowledge about the relevant information as the *ignorative mode*. In RNI,

the speaker's past ignorance is signalled compositionally by the two elements that I discussed above: use of the pro-form *soo* 'so' and/or repetition of a crucial phrase referring back to the preceding discourse, as well as the falling intonation indicating that it is new information for the speaker. In this sense, RNI sentences are inherently in the ignorative mode. This profile of the ignorative mode in RNI sentences accounts for the optionality of the occurrence of the SF particle *ka* if we assume that *ka* overtly signals the speaker's ignorance of the relevant information.[4]

Question sentences are also inherently in the ignorative mode: given that the basic function of a question is to solicit information, it simply follows that the speaker lacks knowledge about the information, that is the truth value of the sentential content in the case of Y/N-questions. According to this analysis, a rising intonation and the SF particle *ka* have the distinct functions of information solicitation and expression of ignorance respectively, yet they are redundant because the ignorative mode marked by *ka* also derives from the communicative function of a rising intonation: one solicits information because he or she lacks knowledge.

The ignorative mode as the common thread tying together Y/N-question and RNI sentences thus emerges as the element that is incompatible with a feature encoded in *da*. Let us descriptively refer to this feature as the *anti-ignorative feature* until its identification is made in the next section.

Under my proposed analysis, *da* is excluded by both the ignorative mode inherent to the given sentence type utterance and the ignorative mode marked by the SF particle *ka*. The ignorative mode inherent to the RNI sentences is specific to the time before the utterance, while that relating to Y/N-question sentences refers to the time of the utterance. More sub-types of the ignorative mode are found in two other sentence types: WH-question sentences and those containing the SF particle *sa*.

First, let us examine the Japanese version of WH-questions. Like Y/N-question sentences, WH-questions are uttered with a rising intonation[5] with or without the SF particle *ka* as shown in (33):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| (33)a. | dono | heya | ga | sizuka | desu | ká? | (neutral) |
| | which | room | NOM | quiet | COP·POL | KA | |

b. dono heya ga sizuka desú? (neutral)
which room NOM quiet COP·POL
'Which room is quiet?'

(34)a. dare ga kimasita ká? (neutral)
who come·POL·PS KA

b. dare ga kimasitá? (neutral)
who NOM come·POL·PS
'Who came?'

In informal speech, WH-questions are usually asked only with a rising intonation, and a predicate nominal may occur with or without *da*:

(35)a. dono heya ga sizuka dá? (masculine)
which room NOM quiet COP

b. dono heya ga sizuká Ø ? (neutral)
which room NOM quiet Ø
'Which room is quiet?'

(36) dare ga kitá? (neutral)
who NOM come·PS
'Who came?'

The fact that *da* can occur in WH-questions suggests that the ignorative modes inherent in Y/N- and WH-question types are not identical. WH-questions seek the identification of an element within the sentential content, which means the speaker presumes the truthfulness of the sentential content but is ignorant of the identity of one of its constituents which is represented by a WH-phrase. I will refer to this ignorative mode as the *identity ignorative mode*. On the other hand, Y/N-questions seek the truth value of the sentential content, which in turn means that the speaker is ignorant as to whether the sentential content is true or false. I will refer to this mode as the *truth-value ignorative mode*. Hence I further tighten my hypothesis that *da* encodes a feature that is anti-ignorative on the truth-value of the sentential content.

WH-questions with *ka* in informal speech are not common but may occur in men's speech. When it occurs, it excludes nominal predicates with *da*:

(37)a. ?Doko ga sizuka Ø ká? (masculine)
where NOM quiet Ø KA

b. *Doko ga sizuká da ká?
where NOM quiet COP KA
'Where is it quiet?'

(38) ?dare ga kita ká? (masculine)
who NOM come·PS KA
'Who came?'

Why is *da* excluded in a WH-question with *ka*? The fact that the SF *ka* can occur in Y/N-questions, RNI sentences and WH-questions indicates that *ka* is a general ignorative marker encompassing both sentential content truth value ignorative mode and identity ignorative mode. The fact that *da* is excluded by a WH-question with *ka* indicates that the ignorative mode marked by *ka* supercedes the inherent ignorative mode that allows *da*.

My analysis of the absence of *da* in question and *receipt of new information* sentences so far is as follows:

(39)a. A Y/N question expresses the speaker's ignorance of the truth-value of the sentential content.

b. A WH-question expresses the speaker's ignorance of the identity of a constituent of the sentential content.

c. An RNI sentence expresses the speaker's past ignorance on the sentential content.

d. (a)–(c) are inherently in the ignorative mode. The SF particle *ka* may overtly mark the general ignorative mode.

e. The copula form *da* is incompatible with the truth-value ignorative mode.

f. The copula *da* encodes an anti-ignorative feature, which is incompatible with the truth-value ignorative mode.

Based on the proposal in (39d), I will gloss the SF particle *ka* as IGN for *ignorative* in the rest of this book.

### *3.2.2 Embedded interrogative sentences*

Discussion on question sentences in relation to linguistic representations of the speaker's expression of knowledge and lack thereof naturally leads to the question of whether it applies to embedded interrogative sentences. This section investigates embedded interrogative clauses (henceforth EI clauses) as represented in (40):

(40) moo kaigi ga hazimatta ka sitterú?
already meeting start·PS ka know·PS
'Do you know if the meeting has started already?'

An EI clause contains the plain form of the predicate, which is obligatorily followed by the particle *ka*. I will refer to this *ka* as the EI particle to distinguish it from the SF particle *ka* with the aim of making a generalization that the SF *ka* and EI *ka* are sub-categories of the general *ka*. I will gloss this *ka* as 'ka' until its identification is made.

The EI particle *ka* is commonly categorized as a complementizer to head an EI clause. However, an EI clause may contain more than one *ka*: an EI clause that does not contain a WH-phrase may be followed by the negated version of the predicate or *doo ka* 'how *ka*' as shown in the following.

(41)a. kaigi ni deru ka kimemasita ká?
meeting attend ka decide·POL·PS IGN
'Have you decided if you will attend the meeting?'

b. kaigi ni deru ka denai ka kimemasita ká?
meeting attend ka attend·NEG ka decide·POL·PS IGN
'Have you decided to attend or not to attend the meeting?'

c. kaigi ni deru ka doo ka kimemasita ká?
meeting attend ka how ka decide·POL·PS IGN
'Have you decided whether or not you will attend the meeting?'

Sentence (41b) contains affirmative and negative alternates 'A or not A', and (41c) contains a type of WH-phrase *doo* 'how'. Each extra

phrase accompanies *ka* resulting in two occurrences of *ka* in each EI clause. They are reminiscent of the alternative marker *ka* that appears in nominal phrases as shown in the following:

(42)a. bosuton ka nyuuyooku e ikitai
Boston or New York to go·DES
'I want to go to either Boston or New York.'

b. otya ka nanika o nomimasyoo
Tea or something ACC drink·POL·VOL
'Let's drink tea or something.'

One way to deal with the multiple *ka* in (41) may be to categorize the first *ka* as an alternative marker 'or', and the EI clause final *ka* as a complementizer. However, such an analysis runs into a problem if (41a) is analysed to be a short version of (41b) or (41c) as shown in (43):

(43)a. kaigi ni deru ka (denai ka) kimemasita ka?
meeting attend ka (attend·NEG ka) decide·POL·PS IGN

b. kaigi ni deru ka (doo ka) kimemasita ka?
meeting attend ka (how ka) decide·POL·PS IGN

According to these sentence structures, *ka* in *deru ka* would be the alternative marker *ka,* not the complementizer *ka*. This would further complicate the analysis since EI clauses containing WH-phrases do not accompany another *ka*-marked phrase:

(44)a. kaigi ga nanzi ni hazimaru ka puroguramu ni
meeting what time at begin *ka* program in
kaite arimasu
write·GER is·POL
'It is written in the program what time the meeting starts.'

b. *kaigi ga nanji ni hazimaru ka hazimaranai ka
meeting what time at begin ka begin·NEG ka
puroguramu ni kaite arimasu
Program in write·GER is·POL
*'It is written in the program whether or not what time the meeting begins.'

c. *kaigi ga nanzi ni hazimaru ka doo ka puroguramu ni
meeting what time at begin ka how ka program
kaite arimasu
write·GER is·POL
*'It is written in the program whether what time the meeting begins.'

The two-category analysis of *ka* in EI would have to say that the *ka* in (44a) is a complementizer while the *ka* in (41a) is an alternative marker.

Let us, then, look at these occurrences of *ka* from the perspective of the speaker's knowledge and intention without presuming a particular syntactic categorial status for it. The major function of the independent interrogative sentences, which I discussed in the preceding section, is to solicit information. Crucially, EI clauses do not function to solicit information. This can be attributed to the fact that the sentence medial *ka* cannot bear a rising intonation. Without a rising intonation, information cannot be solicited except by lexical means such as saying 'Please tell me' or 'Do you know?' in the matrix clause. Therefore, the EI clause itself is not in the inherently ignorative mode.

Then, is the EI particle *ka* an overt ignorative marker just as the SF particle *ka* is? In my proposed analysis, it can be tested by a nominal predicate. If the EI particle *ka* is an ignorative marker, then a nominal predicate in an EI clause should not be able to occur with *da*, which encodes an anti-ignorative feature. The data show that *da* can optionally occur. Observe the following:

(45)a. soko ga sizuka da/Ø ka siranai
there NOM quiet COP/Ø ka know·NEG
'I don't know whether or not it is quiet there.'

b. soko ga sizuka da/Ø ka sitterú?
That place NOM quiet COP/Ø ka know
'Do you know whether or not it is quiet there?'

(46)a. dono heya ga sizuka da/Ø ka sitterú?
which room NOM quiet COP/Ø ka know
'Do you know which room is quiet?'

b. soko ga sizuka da/Ø ka kiita?
there NOM quiet COP/Ø ka ask/hear·PS
'Did you ask/hear which room is quiet?'

The difference in interpretation between those with *da* and those without *da* is very subtle. Those without *da* sound slightly more reserved.[6] The fact that *da* can occur in the EI clauses indicates that the EI particle *ka* is not an ignorative marker. Also, the fact that the occurrence of *da* is not affected by whether the matrix clauses are question sentences as in (45b) and (46b), or not, as in (45a) and (46a), indicates that EI clauses are not within the scope of the ignorative mode of the matrix sentences.

Sentences about the addressee or a third person do not express the speaker's knowledge or ignorance. Sentences about the speaker may state the speaker's ignorance lexically as in (45a). There are also sentences in which the speaker lexically states that he or she knows the truth value or constituent identity of the embedded proposition as shown in the following:

(47)a. boku wa kaigi ga nanzi ni hazimaru ka sitteiru.
I TOP meeting NOM what time at begin ka know
'I know what time the meeting starts.'

b. obaatyan wa ame ga huru ka doo ka
grandma TOP rain NOM fall ka how ka
sinkeetuu no guai de wakaru
arthritis GEN condition by can tell
'My grandma can tell whether it is going to rain or not by her arthritis condition.'

The presence of *ka* in the EI clauses embedded inside the main clauses which lexically show the speaker's knowledge further support the fact that the EI particle *ka* is not an ignorative marker.

However, even in (47), the speaker does not actually identify the truth-value of the sentential content or identity of the WH-phrase. In other words, the speaker makes no commitment to a particular constituent identity in the sentential content, that is 'ten o'clock' for (47a), or the truth-value of the sentential content, that is 'it is quiet' for (46a). Let us refer to this attitude as the *indeterminate mode*. The

speaker of an independent Y/N question or a WH-question shares this attitude in the sense that he or she does not make a commitment to the truth-value of the sentential content or the identity of a constituent. The difference is that the indeterminate mode in independent question sentences can be derived from the ignorative mode, while that in the EI clause is inherent. On the other hand, the indeterminate mode in the EI clauses must be overtly marked. I propose that the EI particle *ka* is the indeterminate marker.

As an indeterminate marker, which is neutral to the speaker's knowledge status, it is not incompatible with the anti-ignorative feature in *da*. Therefore, the occurrence of *da* is accounted for.

The notion 'indeterminate' also fits the semantic interpretation of the alternative particle *ka* that occurs in noun phrases as shown in (42), repeated in (48):

(48)a. bosuton ka nyuuyooku e ikitai
Boston ka New York to want to go·DES
'I want to go to either Boston or New York.'

b. otya ka nanika o nomú?
tea or something ACC drink
'Would you like tea or something?'

c. kuruma wa Honda ka Nissan ga ii
car TOP Honda ka Nissan NOM good
'As for cars, Honda or Nissan is good.'

At the time of the utterance, the speakers have not chosen between one of the two alternatives. Therefore, the speakers are in the indeterminate mode.

To sum up this section, I propose that the interrogative complementizer *ka* and alternative particle *ka* are one and the same modal particle, an indeterminate marker that expresses the speaker's non-commitment to the truth-value of the sentential content, identity of a constituent in the sentential content, and choice between the two alternatives.

### *3.2.3 Sentence final particles*

Besides *ka*, an SF particle *sa* excludes the nominal predicate with *da*, puzzling behaviour for a particle used to assert information. The SF

particle *sa* is mostly used in informal speech in modern Japanese and occurs predominantly in men's speech. Consider a context in which the speaker responds to a question about whether the library is quiet:

(49)a. *motiron sizuka da sa
of course quiet COP sa

b. motiron sizuka Ø sa (masculine)
of course quiet Ø sa
'Of course it is quiet.'

Other finite predicate forms can co-occur with *sa*. Consider a context in which the speaker replies to a question about whether he should pack a hair dryer for the trip:

(50) sonna mono dono hoteru ni mo aru sa (masculine)
such thing every hotel in even exist sa
'You'll find things like that at any hotel.'

Matsushita (1961) and Ueno (1971) have characterized *sa* as expressing the speaker's feeling that the information is too obvious to mention or is a matter of course. Ueno also notes that its nature is to make fun of the addressee's ignorance of an obvious matter, thus possibly yielding the effect of insulting him or her.

A notable co-occurrence phenomenon, that *-sa* sentences often contain an adverb *motiron* 'of course', is observed in (49b). It amounts to implying 'Don't you know?' or 'You should know'. These characterizations and the effects of *sa* all follow if we adopt the notion of the addressee's ignorance in the definition of the SF particle *sa*: it overtly expresses the speaker's assessment of the addressee's ignorance of the information.

The ignorance of the addressee is a basic presumption on the part of the speaker when he or she uses any SF particle that forms an informative sentence. Thus, *sa* is unique in that it overtly marks this presumption. In this view, a sentence marked with *sa* yields a sub-type of the ignorative mode, referring to the status of the addressee's knowledge. Exclusion of *da* by *sa* then follows as a conflict between the ignorative mode marked by *sa* and the anti-ignorative feature encoded in *da*.

In contrast to *ka* and *sa*, the SF particles *zo*, *ze* and *wa*, which were introduced in the preceding section, select *da* over the zero-copula for nominal predicate with affirmative present tense interpretation:

(51)a. koko sizuka da zo/ze (masculine)
this place quiet COP zo/ze
'This place is quiet, I tell you.'

b. *koko sizuka Ø zo/ze
this place quiet Ø zo/ze
(Intended to mean) 'This place is quiet, I tell you.'

(52)a. koko sizuka da wa (feminine)
this place quiet COP wa
'Oh, this place is quiet!'

b. *koko sizuka Ø wa
this place quiet Ø wa
(Intended to mean) 'Oh, this place is quiet!'

The masculine SF particles *zo* and *ze* express the speaker's insistence or imposition of information on the addressee. This speech act follows from the speaker's possession of knowledge of the information or strong belief in his judgement. Therefore, it is the antithesis of the ignorative mode. The sentence with *wa* in (52a) represents the speaker's immediate and emotional reaction to an event. As such, it expresses the speaker's strong belief in her perception.

These SF particles can also accompany other copulative forms, verbs and adjectives. Some examples are shown in (53):

(53)a. asoko sizuka datta zo/ze (masculine)
that place quiet COP·PS zo/ze
'That place was quiet, I tell you.'

b. kore oisii wa
this delicious wa
'This is delicious!'

c. ame ga hutte kita ze/zo
rain falling come·PS ze/zo
'Hey, it started to rain.'

It is important to note that the fact that the selection of *da* over the zero-copula for nominal predicates by these *SF* particles cannot be an indication that they require the anti-ignorative feature in their host predicate. If we assume that these particles select predicates with the anti-ignorative feature, then we would have to assume that all predicates, past tense copula forms, verbs and adjectives that occur with these SF particles must also bear that feature. Under such an assumption, the anti-ignorative feature will not be able to account for the uniqueness of *da* as the only predicate form excluded in the sentences in the ignorative mode.

As I discussed at the beginning of this chapter, Konomi (1994) proposed that the modal feature that *da* represents is [+realis], based on the fact that it occurs with assertive conjunctive particles and *kara* 'because' and *kedo* 'although', whose complement clause is presumed to be factual. This is exactly what creates a paradox for her analysis. If *da* bears [+realis], and verbs and adjectives also bear [+realis], as they too occur with *kara* and *kedo*, then the fact that only *da* does not occur in question sentences, while verbs and adjectives do occur, cannot be accounted for.

I hypothesize that conjunctive particles and SF particles select predicate forms overtly encoded with an inflectional feature or features *unless* these particles are lexically specified as an ignorative marker such as *ka*, in which case they cannot select the anti-ignorative *da*. This analysis accounts for the fact that an exclamatory SF particle *naa* selects *da* over the zero-copula, but it may also follow the ignorative marker *ka*, which selects the zero-copula over *da*:

(54)a. koko sizuka da naa (masculine-neutral)
this place quiet COP naa
'Oh, this place is quiet!'

b. *koko sizuka Ø naa
this place quiet Ø naa

(55)a. *asoko sizuka da ka naa
that place quiet COP IGN naa

b. asoko sizuka Ø ka naa (masculine-neutral)
that place quiet Ø IGN naa
'I wonder if that place is quiet.'

*Naa* can co-occur with the ignorative SF particle *ka* as long as *ka* precedes it. The fact that *naa* can occur with the ignorative particle that excludes *da* indicates that it is not lexically specified to select overt predicate forms.

### *3.2.4 Epistemic modal predicates*

This section examines so-called epistemic modal predicates such as *rasii* 'it seems/they say that . . .', *mitai* 'it seems/looks like/appears that . . .', *ni tigainai* 'it must be that . . .' and *kamo sirenai* 'it might be that . . .'. They express the speaker's conjectural judgement on the truth of the content in their complement clause.

The predicate of the complement clause selected by these epistemic modal predicates takes the plain forms, among which the nominal predicate with *da* is excluded.

(56)a. *asoko sizuka da rasii
that place quiet COP seem

b. asoko sizuka Ø rasii
that place quiet Ø seem
'It seems like that place is quiet (according to what people say).'

(57)a. *asoko sizuka da mitai desu
that place quiet COP seem COP·POL

b. asoko sizuka Ø mitai desu
that place quiet Ø seem COP·POL
'It seems [polite] like that place is quiet.'

(58)a. *asoko sizuka da ni tigainai
that place quiet COP as certain

b. asoko sizuka Ø ni tigainai
that place quiet Ø as certain
'The place must be quiet.'

(59)a. *asoko sizuka da kamo sirenai
that place quiet COP maybe

b. asoko sizuka Ø kamo sirenai
that place quiet Ø maybe
'That place may be quiet.'

Among these predicates, *kamo sirenai* 'may be' and *tigainai* 'must be' are negative verbs, *rasii* 'seems' is an adjective, and *mitai* 'it seems/looks like/appears that . . .' is an adjectival nominal. Therefore, outside the complement clause, the copula form for informal present tense interpretation that occurs with *mitai* varies as exemplified below:

(60)a. asoko sizuka Ø mitai da zo/ze (masculine)
that place quiet Ø seem COP zo/ze
'I tell you, that place seems to be quiet.'

b. *asoko sizuka Ø mitai Ø zo/ze
that place quiet Ø seem Ø zo/ze

(61)a. *asoko sizuka Ø mitai da ká?
that place quiet Ø seem COP ka

b. asoko sizuka Ø mitai Ø ká? (masculine)
that place quiet Ø seem Ø ka
'Does that place seem to be quiet?'

c. asoko sizuka Ø mitaí Ø? (neutral)
that place quiet Ø seem
'Does that place seem to be quiet?'

(62)a. asoko sizuka Ø mitai da (masculine)
that place quiet Ø seeming COP
'That place seems quiet.'

b. asoko sizuka Ø mitaí Ø (neutral)
that place quiet Ø seem Ø
'That place seems quiet.'

In (60), *mitai*, when it is followed by an SF particle *zo* or *ze*, must occur with the overt *da*. In (61) the matrix clauses in the ignorative mode exclude *da*. In (62), a declarative matrix sentence allows *da*, but its occurrence is governed by discourse factors as I will discuss in Chapter 11.

In terms of the status of the knowledge of the speaker or of the agent of the embedded clause[7] about the sentential content in the complement clause, the semantics of conjectural judgement brings about both ignorative and non-ignorative modes: he or she does not

have direct knowledge to assert the sentential content to be true; on the other hand, he or she has enough knowledge to conjecture the degree of likeliness of the sentential content's being true.

Under the proposed analysis correlating the obligatory exclusion of *da* with the ignorative mode, it is this dichotomy that accounts for the phenomenon observed in the data in (60)–(62). The complement clauses all take the zero-copula over *da*, indicating that the complement clause is governed by the ignorative mode that derives from the semantics of conjecture expressing ignorance on the truth of the sentential content. The selection between *da* and the zero-copula for the matrix nominal predicate differs as discussed above. These facts indicate that outside the scope of the ignorative mode, epistemic predicates express judgement on the truth value of the sentential content, which can be insisted, solicited or asserted by the speaker, hence subject to various factors that determine representation of the copula independent of the ignorative mode in the complement clause.

When they are embedded in a quotative clause followed by a quotative particle or a hearsay auxiliary, they express the judgement of the source of the hearsay, the original speaker as illustrated in (63).

(63) tosyokan ga itensuru kamo sirenai tte.
library NOM move may be QUOTE
'Someone said that the library may move.'

The data examined above support my hypothesis that *da* and only *da* among all predicate forms including verbs, adjectives and other inflected forms of the copula, encodes a feature that is incompatible with the speaker's ignorance of the truth-value of the sentential content. In the following section, I will identify the category of the anti-ignorative feature encoded in *da* and propose a feature analysis of *da* which will lead to a unified account for syntactic and discourse governed copulative alternations.

## 4 Feature analysis of *da*

In the preceding sections I concluded that *da* has a unique feature that separates it not just from the zero-copula but also from all other inflected forms. I proposed that this feature gives rise to a semantic

feature that is incompatible with the ignorative mode, thus referring to it as the anti-ignorative. The traditional grammarians studied *da* and other copula forms for what they are, not for what they are not, as I have done. Yet, the conclusion is very similar. They characterize the copula *da* 'is', *desu* 'is [polite]' and *de-aru* 'is [formal]' with the notions such as *dantee* 'assertion', *hantee* 'judgment' and/or *kakutee handan* 'judgment with certainty'. *Ninonbunpoo Daijiten* 'The Japanese Grammar' states that *da* 'is', *desu* 'is [polite]', *dearu*, 'is [formal]' and *dearimasu* 'is [formal + polite]' express *dantee*, the speaker's assertive judgment.

The crucial difference is that the traditional grammarians characterize all three finite copula forms (*da*, *desu* and *de-aru*) as a group. However, the distributional property of *da* that we have observed in this chapter clearly shows that we have to recognize and account for the modal asymmetry that exists between *da* and all other predicate forms.

Sentences containing a nominal predicate with the zero-copula yield the interpretation of present tense, affirmative polarity and the informal speech level. This fact supports the argument I made in Chapter 3 for the availability of a default interpretation of these semantically unmarked grammatical features. This, combined with the fact that *da* yields an identical interpretation of present tense, affirmative polarity and informal speech level, leads me to hypothesize that the copula form *da* and only *da* is exceptionally overtly encoded for one of the semantically unmarked features.

The perfect candidate for the overt feature represented by the morpheme-*a* in *da* is the affirmative feature. *Da* as the affirmative marked category fits exactly the characterization of the feature in *da* that I proposed in the preceding section as anti-ignorative. Overt affirmative marking instead of covert affirmation by a zero-morpheme readily expresses the speaker's certainty in his/her knowledge and belief in his/her judgment about the sentential content. Such a modality is incompatible with the ignorative mode.

If *a* is an affirmative morpheme, not a non-past tense morpheme, then the tense interpretation must be yielded by default. Recall I proposed in Chapter 5 that non-past interpretation of Japanese sentences yields by lack the past tense marking on verbal morphology. Thus, the affirmative feature analysis of *da* is consistent with my tense marking analysis.

Let us also recall the discussion of the historical development of *da* that originates in *de-aru*, which is repeated in (64).

(64) *de aru* → *de ar* → *de a* → *da*.

In my discussion of *de-aru*, I explored the possibility that *ar-* in *de-aru* is an affirmative auxiliary. I could not conclude that it is the case, because *de aru* occurs with conjectural auxiliaries which express the speaker's uncertainty. However, the fact that an overt affirmation effect is observed even in the isolated cases of *de aru* is a perfect scenario for the affirmative feature analysis for *da*. I propose that *-a*, the remainder of the auxiliary *ar-* as shown in (64), is grammaticalized as an affirmative feature morpheme, thereby fossilizing the overt affirmation effect of *de aru*. Thus I propose the following morphological structure for *da*, where AF represents *affirmative*:

(65) Morphological feature analysis of *da*

*d-a*

COP-AF

Under this morphological feature analysis, the uniqueness of *da* observed in the preceding sections derives from its being the only predicate form that is morphologically marked for affirmative polarity. The affirmative interpretation of other predicate forms obtains by default, by not being marked with the negative morpheme. The affirmative marking in *da* is also the only grammatical feature that distinguishes *da* from the zero-copula, both of which are unmarked for all other features. Thus, alternation between these two copulative forms amounts to the presence or absence of overt affirmative feature marking.

## 5 *Da* as a linking verb

Let us recall my discussion in Part I on the linking function that European philosophers attributed to copula. The Japanese linguists Yamada (1936) and Tokieda (1941) also proposed such a concept. But even the most thorough theory by Abelard had to posit an abstract copula, which can never be verified. The concept of linking is a grammatical affirming agent that is more than 'not to separate = not

negative'. It is to assert the affirmative judgment. Abelard said that such a function emerges in declaring, proposing and asserting speech acts (Jacobi, 1986). Unfortunately, I assume, there is no overt copula form that fits that description in Indo-European languages. There is such a usage, but there is no copula exclusively dedicated for that use. Yamada (1936) and Tokieda (1941) proposed that such a copula exists in Japanese but they, too, had to resort to an abstract copula as a morphological zero.

If there is such a copula form it must be overt to be verifiable. Thus it cannot be omnipresent in every inflective category. As Abelard noted, there are affirmative sentences that do not express judgment. An interrogative sentence 'Is it true?' is grammatically affirmative as opposed to 'Isn't it true?' The affirmative sentences do not necessarily assert a proposition. Since European copulas can occur in interrogative sentences, they cannot always be a linking agent. My exhaustive investigation strongly suggests Japanese copula *da* can derive the linking function.

I define the overt affirmative feature AF encoded in *-a* in *da* as anti-ignorative affirmative and thus inherently incompatible with the IGN feature in contrast to unmarked affirmative which may occur in sentences in the ignorative mode. As such, *da* is the only form not only among copula forms but also among all inflective predicate forms in Japanese that can express the speaker's explicit assertion of his/her affirmative judgment thereby functioning as a linking agent.

# 11
# Discourse Functions of *da* and *zyanai*

## 1 Discourse governed copula alternation

In this chapter, I will examine copula alternation in Tokyo dialect as a discourse phenomenon, employing the proposed grammatical feature analysis of *da*.

### 1.1 Zero-copula as a tone down

Japanese informal speech is expressive with frequent occurrences of SF particles. But sentences without any SF particle also occur, ending with a predicate in the bare plain form. Nominal predicates without an SF particle also exhibit alternation between *da* and the zero-copula as we briefly mentioned in Chapter 1. I will refer to these as *bare da* and *bare zero-copula* as needed. Past research has paid little attention to this phenomenon, but a close examination reveals a principled alternation pattern governed by discourse contextual factors.

The informal speech level is signalled by lack of a polite morpheme in the predicate form in the sentence-final position. Informal speech typically occurs among close friends and family members. Let us consider a context in which the speaker calls home and identifies him- or herself saying, 'It's me.' In the sentences below, *boku* is a first person masculine pronoun. *Watasi* is also a first person pronoun, which is gender-neutral in polite speech but feminine in informal speech. I will use the symbol # to indicate that the sentence ending is unnatural for the setting. I will gloss *da* as COP-AF for affirmative copula.

(1)a. mosi mosi, boku da. (masculine)
hello, me [male] COP-AF

b. mosi mosi, boku Ø. (masculine due to *boku*)
hello, me [male]
'Hello, it's me.'

(2)a. #mosi mosi, watasi da. (inappropriately masculine)
hello, me [female] COP-AF

b. mosi mosi, watasi Ø. (feminine due to *watasi*)
hello, me [female]
'Hello, it's me.'

The male speaker of (1) may utter either the *da*-version (1a) or the zero-copula variant (1b). However, they are not always free alternatives. If the caller is identifying himself to his parent, he would choose the zero-copula version (1b) but not the *da*-version (1a). If the speaker is talking to his younger sibling, then he may choose either (1a) or (1b). If it is a phone call from a husband to his wife, he may also choose either one. If he is a hen-pecked husband, he is likely to choose the zero-copula version (1b). But in women's speech, the *da*-version (2a) does not occur even if the speaker is a mother talking to her child.

This state of affairs leads me to generalize that the male speaker's choice between the bare *da* and the bare zero-copula depends on his evaluation of his interpersonal hierarchical relation with the addressee, even within a close relationship that calls for informal speech. The bare *da* is avoided and the zero-copula is used instead when the speaker considers himself to be lower in the hierarchy than the addressee. This phenomenon seems to be a specific instance of a universally observed *tone down* strategy, which Givón (1990) attributes to Syder and Pawley (1974).

(3) ***Tone down strategy***
When facing an addressee of higher power, status or authority, speakers tend to scale down their expression of certainty.

The overt affirmation by *da* represents the speaker's confidence and certainty in his or her knowledge and belief in the proposition being

affirmed. The zero-copula's role as a toned down alternative to *da* follows from its lack of the overt affirmative feature. Covert affirmation is a modest version of *da* as the speaker withholds overt expression of his or her certainty:

(4) Zero-copula as politeness device

Overt affirmation by *da*
(tone down)
↓
Covert affirmation by zero-copula

This is clearly distinct from the syntactic zero-copula phenomenon observed in sentences and clauses in the ignorative mode in which the speaker's knowledge about the truth of the proposition is truly lacking. While there are many ways to tone down an expression of certainty besides the copula alternation, the term '*tone down*' as used in the rest of this book will refer specifically to the tone down phenomenon involving *da* and the zero-copula unless otherwise noted.

Acknowledgement of the hierarchical relation between the speaker and the addressee is the core of linguistic politeness in Japanese, thus the clear manifestation of the tone down strategy in the copula alternation is not surprising. What is surprising is that within informal speech, the level below polite speech, there are two layers that are distinguished according to the speaker's gender and his or her hierarchical relation to the addressee.

The effects of overt affirmation by *da* are pronounced in sentences in which toning down is expected. Let us consider again the telephone conversation context, in which a boy identifies himself to his parent:

(5)a. #mosi mosi, boku da. (inappropriately authoritative)
hello, me [male] COP-AF

b. mosi mosi, boku Ø.
hello, me [male]
'Hello, it's me.'

In (5a) *da* is perceived to be too assertive and authoritative for a young boy talking to his parent. I will refer to the perceived inap-

propriateness of the use of *da* as *da-effects*. By definition, *da*-effects result from the failure of the expected application of tone down.

Now, continuing the telephone conversation context, in this example a woman is identifying herself to her child or husband.

(6)a. #mosi mosi, watasi da. (inappropriately masculine)
hello, me [female] COP-AF

b. mosi mosi, watasi Ø.
hello, me [female]
'Hello, it's me.'

Sentence (6a) is perceived to carry an inappropriately assertive masculine tone, even when the speaker is talking to her child. This *da*-effect indicates that a woman is expected to tone down *da* regardless of her hierarchical relationship to the addressee.

(7) ***Da-effects***
*Da*-effects are assertive, authoritative or masculine tones yielded by the use of *da* that is perceived to be inappropriate for the speaker's gender or the hierarchical interpersonal relation between the discourse participants.

As briefly noted in Chapter 10, gender-governed copula alternation is also observed in WH-question sentences as exemplified below:

(8)a. dono heya ga sizuka dá (masculine)
which room NOM quiet COP-AF

b. dono heya ga sizuká Ø (neutral)
which room NOM quiet
'Which room is quiet Ø?'

The speaker of the WH-question is ignorant of the identity of one of the constituents of the sentential content but he or she presumes the truth of the sentential content itself. In (8), the speakers are certain that one of the rooms is quiet. Hence, the zero-copula version (8b) is the toned down version of the speaker's certainty, covertly affirming the sentential content. Let us suppose the speaker of (8a) is a young boy. *Da* in the sentence would yield strong *da*-effects if the

addressee is his parent, but not if the addressee is his peer. On the other hand, if the speaker were a female, there would be *da*-effects regardless of the hierarchy between the speaker and the addressee.

Thus, the speaker's gender distinction in the bare copulative forms can be attributed to different ways in which the modesty device of the tone down strategy is applied to men's and women's speech: normal application vs. over-application. Male speakers are not expected to apply tone down unless addressing a superior such as a parent, an older sibling or senior school mate, but female speakers are expected to apply it regardless of the hierarchical relation to the designated addressee.

(9) **Application of tone down**
Male speakers are expected to tone down *da* when facing a superior. Female speakers are expected to over-apply it.

Over-application of tone down is consistent with a general pattern of over-application of politeness devices in Japanese women's speech, including extensive use of the beautification prefix *o-* for nouns representing items that are not targets of respect (Shibatani 1990) and the use of referent honorifics referring to addressees of inferior status.

In either informative sentences such as those in (1) or WH-question sentences as in (8), men are free to tone down *da* even in interpersonal contexts that do not require it. This spontaneous tone down of *da* is becoming an increasingly common occurrence in the speech of younger men. This state of affairs renders overt affirmation by the bare *da* to be markedly masculine, even as the form sanctioned by the tone down strategy, and makes covert affirmation by the bare zero-copula gender-neutral. Consequently, a male speaker has a wider range of expressive choices in the bare copula forms. When addressing his inferior or equal, he may signal through *da* his authority or male camaraderie. Or, he may tone down by opting for the bare zero-copula when speaking to a female or very young person.

Now, let us turn to sentences with the zero-copula governed by the ignorative mode and examine them in their relation to the speaker's gender. This type of zero-copula does not alternate with *da* to indicate the speaker's gender. In the instance of nominal predicates with the masculine SF particle *sa*, which is the ignorative marker referring

to the addressee's knowledge status, there is no feminine version. In Y/N questions, the SF particle *ka* occurs in a fashion parallel to that of *da*: it is absent in women's speech, and there is a tendency for male speakers to avoid *ka* when asking their superior a question.

Consider the following question sentences:

(10)a. *asoko* *sizuka* Ø *ká* (masculine)
that place quiet Ø IGN

b. *asoko* *sizuká* Ø (neutral)
that place quiet Ø
'Is that place quiet?'

If the speaker is a boy addressing this question to his parent, he would utter (10b). If he utters (10a) to his parent, it would yield an effect similar to one of *da*-effects: an inappropriately authoritative tone. However, he may utter (10a) with *ka* to his peer and it would not yield such an effect. A female speaker would not utter (10a), even to her child.

These data show that, while *da* and *ka* are used for two opposing functions – expressing knowledge vs. ignorance – their occurrences are both governed by considerations of politeness towards the addressee.

In the preceding chapter I posed the question of which of the copulative forms is the grammatical norm, *da* or the zero-copula, occurring with *yo* and *ne* for the affirmative present tense interpretation. I hypothesized that SF particles select the overt *da* over the zero-copula by default unless they are ignorative particles or are preceded by an ignorative particle. Thus, if *yo* and *ne* are shown to be non-ignorative particles, *da* would be the norm when they occur without an ignorative particle, and the zero-copula in women's speech would be the stylistic opposition. On the other hand, if they are shown to be ignorative markers, the zero-copula would always be the norm, and thus *da* in men's speech would be the stylistic opposition. I will argue that they are non-ignorative particles.

The SF particle *yo* is often referred to as an assertive particle (e.g. Martin 1988). The SF particle *yo* optionally occurs in a wide range of speech acts directed to an addressee, from asserting to making commands, requests and proposals:

(11)a. kono mise ga itiban ii desu yo
this store NOM number one good COP·POL *yo*
'This store is the best.'

b. sonna koto iwanaide kudasai yo
such thing say not please *yo*
'Please do not say such a thing.'

Roughly generalizing, *yo* expresses the speaker's strong intention to compel the addressee to accept, respond to or comply with the propositional content. It would be hard to account for such communicative intent if *yo* were an ignorative marker. Let us examine the data to find evidence which will rule out that possibility.

The nominal predicate followed by *yo* may occur in both assertion and questions:

(12)a. asoko sizuka da yo (masculine-neutral)
that place quiet COP-AF yo

b. asoko sizuka Ø yo (feminine)
that place quiet Ø yo
'That place is quiet, I tell you/believe me.'

(13)a. sore nan da yò (masculine-neutral)
that what COP-AF *yo*

b. sore nani Ø yò (feminine)
that what is Ø yo
'What is that? Tell me!'

In each of the sentences in (12), the speaker has the information and insists upon it to the addressee. If *yo* is an ignorative marker, then it should refer to the addressee's knowledge status. In (13), the speakers urge the addressee to provide them with information. Thus, *yo* would have to refer to the speaker's ignorance, creating a paradox. If we assume that *yo* is not an ignorative particle, this problem does not arise. It selects *da* over the zero-copula by default, which makes the zero-copula in (12) and (13) a device to mark the speaker's feminine gender, not ignorance.

Now, consider the following Y/N-question sentences with *yo*:

(14)a. asoko sizuka Ø ka yò (very masculine)
that place quiet Ø IGN *yo*

b. *asoko sizuka da ka yò
that place quiet COP-AF IGN *yo*

c. ***asoko** *sizuka Ø yò*
that place quiet Ø *yo*

d. *asoko sizuka da yò
that place quiet COP-AF *yo*
'Is that place quiet? Tell me, is it?'

Among these four question sentences with *yo*, only (14a) is grammatical. The SF *ka* selects the zero-copula over *da*, thus its grammaticality is accounted for regardless of the status of *yo*. The ungrammaticality of (14c) for the intended interpretation cannot be accounted for if *yo* is an ignorative marker since it should select the zero-copula even without *ka* and should be able to yield an interpretation of the speaker's lack of knowledge. On the other hand, if *yo* is a non-ignorative particle, it follows that it cannot select the zero-copula. These data lead me to conclude that *yo* is a non-ignorative particle, thus *da* is the norm in declarative sentences, and the zero-copula is the norm in question sentences containing *ka*.

Example (14a) occurs exclusively in men's speech; there is no feminine version. The fact that neither (14b) nor (14d) occurs as the feminine version of (14a) indicates that *da* is not used for gender marking as a stylistic opposition to the norm of the zero-copula. Instead, *da* in (14b) and (14d) is operative with an affirmative feature and renders the sentences ungrammatical. *Da* in (14b) conflicts with the ignorative particle *ka*. For (14d), *da* blocks the intended interpretation of a question. Therefore, preceding the SF particle *yo*, *da* as the norm is stylistically opposed by the zero-copula, but the zero-copula as the norm has no gender stylistic opposition.

The function of *ne* may be best characterized as a signal that the speaker and the addressee share the information (Kamio 1990). The speaker may seek to confirm his or her presumption that the addressee shares the information, or convey confirmation that he or she shares the information with the addressee:

(15)a. koko sizuka da ne (masculine-neutral)
here quiet COP-AF *ne*

b. *koko sizuka Ø ne* (feminine)
'This place is quiet, isn't it?'

(16)a. *un, sizuka da ne* (masculine-neutral)
yes quiet COP-AF *ne*

b. un, sizuka Ø ne (feminine)
'Yes, it is quiet. (I agree with you)'

In (15), the speakers have information and they presume that the addressee has the same information. The information they are seeking is not the truth of the proposition but rather confirmation that their presumption is correct. Hence, *ne* cannot be an ignorative marker for either the speaker or the addressee. In (16) the speakers have the information and know that the addressees do too. Thus, again, *ne* cannot be an ignorative particle.

*Ne* may co-occur with an ignorative marker to solicit confirmation that the addressee shares the speaker's lack of knowledge about the information. Consider the following in which *ne* follows an ignorative marker *ka* in (17) and (18) and its derivative feminine ignorative marker *kasira* in (19) and (20):

(17)a. *asoko sizuka da ka ne
that place quiet COP-AF IGN *ne*

b. asoko sizuka Ø ka ne (neutral-masculine)
that place quiet Ø IGN *ne*
'I wonder if that place is quiet. Do you wonder too?'

(18)a. *dono heya ga sizuka da ka ne
which room quiet- COP-AF IGN *ne*

b. dono heya ga sizuka Ø ka ne (neutral-masculine)
which room quiet Ø IGN *ne*
'I wonder which room is quiet. Do you wonder too?'

(19)a. *asoko sizuka da kasira ne
that place quiet COP-AF IGN *ne*

b. asoko sizuka Ø kasira ne
that place quiet Ø IGN *ne* (feminine)
'I wonder if that place is quiet. Do you wonder too?'

(20)a **dono heya ga sizuka da kasira ne*
which room quiet COP-AF IGN *ne*

b. dono heya ga sizuka Ø kasira ne (feminine)
which room quiet Ø IGN *ne*
'I wonder which room is quiet. Do you wonder too?'

The speaker's ignorance of the truth value of the proposition or of the identity of its constituent is marked by *ka* or *kasira*, which selects the zero-copula over *da*. Thus, the zero-copula is the norm in this construction. *Ne* simply signals that the ignorance marked by *ka* and *kasira* is shared by both the speaker and the addressee. The speaker's gender is marked not by the copula form but by the choice of the ignorative marker that precedes *ne*: *kasira* occurs almost exclusively in women's speech while *ka* occurs in both men's and women's speech.

I conclude that the expected grammatical copula form to co-occur with these particles is *da* unless the ignorative SF particle *ka* intervenes. The zero-copula is used to mark the speaker's feminine gender in opposition to the norm *da*. When the norm is the zero-copula, there is either no feminine version, as in the case of *yo*, or a feminine ignorative particle is used instead of *ka*, as in the case of *ne*.

In the preceding chapter I also posed a question regarding what is signified in marking the masculine gender of the speaker by *da* and the feminine gender by the zero-copula in the use of the inherently gender neutral SF particles *yo* and *ne*. The significance of *da* occurring in men's speech is two-fold. First, it is the grammatical norm, not a device. Second, *da* is an overt expression of the speaker's certainty in his knowledge and belief.

The significance of the zero-copula in non-ignorative sentences in women's speech is that it is a device to mark the feminine gender of the speaker. Against the background of the exclusion of *da* as a

syntactic phenomenon governed by the ignorative mode and as a politeness phenomenon governed by the tone down strategy, the zero-copula as a gender stylistic device symbolizes modesty as linguistic femininity. However, since its normal version *da* is not subject to tone down, the zero-copula preceding *yo* or *ne* has no actual effect of expressing deference to the addressee.

By its emergence in younger women's speech, the gender neutralization of *yo* and *ne* preceded by *da* is an indication that the form symbolizing modesty without an actual modesty effect is giving way to 'the normal form'. This is in stark contrast to the neutralization of the bare zero-copula due to the increase of spontaneous tone down of the bare *da* in outward informational utterances in men's speech. In the latter case, the form of modesty with an actual modesty effect is taking over. Thus, gender neutralization of the copula forms is proceeding without sacrificing the expression of politeness. Its implication and relevance to other linguistic phenomena of gender and politeness await investigation.

### 1.2 Information status and applicability of tone down

Does the bare *da* ever occur in women's speech without *da*-effects? There are indeed discourse contexts in which the speaker's expression of certainty by overt affirmation is not subject to tone down. This section presents examples of such sentences and characterizes their discourse contexts.

First, let us consider (21) in a context in which the speaker sees on the refrigerator a picture that someone drew of a face which he or she perceives to be of him- or herself. Surprised and delighted, he or she exclaims as follows:

(21)a. aa, kore boku da (masculine due to use of *boku*)
Oh, this me [male] COP-AF

b. aa, kore watasi da (feminine due to use of *watasi*)
Oh, this me [female] COP-AF
'Oh, this is me!'

Despite the uninhibited expression of the speaker's certainty with *da*, there are no *da*-effects in either (21a) or (21b). At the time of the utterances of (21), there may or may not be an addressee. In a mono-

logue context, an addressee-sensitive strategy such as tone down is irrelevant, thus an absence of *da*-effects is expected.

However, lack of *da*-effects is also observed in utterances in the company of another discourse participant. For instance, consider a context in which a boy puts up on the refrigerator a picture of a face that he has just drawn and asks his mother to look at it. The mother perceives it as her face and says:

(22) ara, sore okaasan da
Oh that mother COP-AF
'Oh, that is your mother (=me)!'

Within a Japanese family, when one member speaks to a younger member, he or she refers to him- or herself by a kinship term. Thus, *okaasan* 'mother', used as the speaker's self-reference in (22), indicates that she considers her son to be the addressee. Also, the use of the demonstrative pronoun *sore* 'that,' which denotes an item in the addressee's territory, clearly indicates that the utterance is directed toward the addressee. However, the mother's utterance with *da* does not yield *da*-effects.

The occurrence of *da* without *da*-effects in (22) contrasts sharply with the mother's utterance in the next context: just as she is praising the picture, another son comes in, goes to the picture and asks the mother whom it is supposed to depict. She replies as in (23a):

(23)a. sore okaasan Ø
that mother Ø

b. #sore okaasan da
that mother COP-AF
'That is your mother (= me)'

The mother utters the zero-copula version (23a). The *da*-version (23b) would have strong *da*-effects in this context.

There is a qualitative difference in the information status of the propositional content between (23) and (22). The speaker in (22) is at the stage of acquiring knowledge by making an inference based on her visual perception, thus the proposition constitutes a new and yet to be established piece of information in the speaker's mind. As

such, the speaker does not intend the proposition to be informative to anyone but herself. I shall refer to such an utterance as *inward informational*. An inward informational utterance does not require an addressee. When there is one, his or her role is merely to be an eyewitness to the speaker's acquisition of the information. Let us refer to him or her as the *observer addressee*. The addressee of (22) is the possessor of the direct knowledge about the proposition, thus, the propositional content of (22) indeed has no informational value to him. What he learns as an observer addressee is the speaker's knowledge status and belief about the proposition.

In the context of (23), on the other hand, the speaker has full and direct knowledge and she presumes the addressee to be ignorant of it. Thus, the speaker targets the addressee for the information transfer. This is what characterizes ordinary conversation. Let us refer to this type of utterance as *outward informational* and its addressee as *a designated addressee*. The correlation between the presence of *da*-effects in the outward informational utterance, and the lack of *da*-effects in the inward informational utterance in women's speech leads to a reduction in the range of utterances subject to tone down.

At this point, let us turn to the feminine SF particle *wa* as it relates to inward informational utterances. Recall that the feminine SF particle *wa* selects *da* but not the zero-copula, as shown in (24):

(24)a. koko sizuka da wá (feminine)
this place quiet COP-AF *wá*
'Oh, this place is quiet!'

b. *koko sizuka Ø wá
this place quiet Ø *wá*

Although Ueno (1971) defines *wá* as a particle of mild insistence, its exclamatory nature becomes evident when used in informative copulative sentences. To see a clearer case than (24a), consider the sentences in (25), which are intended to illustrate a mother (25a) and a father (25b) telling their children that dinner is ready:

(25)a. #gohan da wá
meal is *wa*
(Intended to announce) 'Dinner is ready!'

b. gohan da zo (masculine)
meal is *zo*
'Dinner is ready!'

The mother's utterance in (25a) cannot be interpreted as a mother informing others. Rather, it is interpreted to be inward informational: the mother just realized that the dinner is ready or there is meal on the table and exclaims 'Oh! It's dinner!' On the other hand, the masculine assertive particle *zo* yields the intended outward informational interpretation of a father announcing dinner time.

A context such as the one given in (26) in which the speaker has just realized the person in the picture is herself, is perfect for *wa*:

(26) ara, kore watasi- da wá.
Oh, this me [female] COP-AF
'Oh, this is me!'

These examples clearly show that a nominal sentence with *da* which precedes the feminine particle *wá* has to be inward informational.

The data of bare *da* examined in this chapter show that applicability of the tone down strategy depends on the information status and the assumed status of the addressee in terms of information transfer. The data reveal that it is applicable to outward informational utterances in which the addressee is presumed to be ignorant and thus designated to be the recipient of the information. I hypothesize that strong affirmation expressed with *da* in an outward informational utterance highlights not only the speaker's certainty in his or her knowledge and belief, but also his or her presumption of the designated addressee's ignorance. This combination brings out an authoritative tone and it is to be avoided when the speaker has a lower interpersonal hierarchical relation to the addressee, even if it is a close relationship.

Just as the copulative form *da* encodes the affirmative feature redundantly with the default affirmative interpretation, the SF particle *ka* marks the speaker's ignorative mode redundantly with the ignorative mode inherent in question sentences. I hypothesize that the doubling of the speaker's ignorative mode in question sentences by the SF particle *ka* is to emphasize the need for information, which has the effect of adding a demanding tone to information solicita-

tion. I assume that in question sentences with *ka* in polite speech, the polite marker encoded in the predicate of the sentence blocks such an effect. Thus, I conclude that a question sentence without the SF particle *ka* is a type of tone down in deference to the addressee, which, like the tone down of overt affirmation, is over-applied in women's speech.

## 2 The negative copula as an ignorative marker

In this section, I will identify a negative copula that is distinct from the negative copula I discussed in Chapter 9. I will examine its communicative function and propose an account for it based on the notion of ignorative mode that I introduced in the preceding chapter.

*Zyanai* is the compositional negative form of the copula consisting of *zya*, and *nai* the negative auxiliary. As was discussed in Chapter 9, *zya* is a contracted form of *de*, the copula gerund, and the restrictive particle *wa*.

(27)a. de wa nai → zya nai

b. de nai → zya nai

Consider the following nominal sentences negated by *zyanai*:

(28)a. kore wa honmono zyanai
This TOP real thing COP·NEG·A
'This is not genuine.'

b. zyagaimo wa ne zyanai
potato TOP root COP·NEG·A
'Potatoes are not roots.'

In the Tokyo dialect, the negative auxiliary *nai* in the copula form *zyanai* bears a pitch accent on *-na-* causing the next mora *-i* to fall, resulting in the high–low pattern as in (29).

(29) *zya na i*
| |
high low

The pitch on *zya* depends on the pitch pattern of the preceding word as illustrated in the following examples.

(30)a. ho n mo no *zya na i*
L H H H H H L
'(It) is not a real thing.'

b. ne *zya na i*
H L H L
'(It) is not root.'

c. si zu ka *zya na i*
H L L L H L
'(It) is not quiet.'

d. hi ma *zya na i*
L H H H L
'(I) am not free.'

*Zya* is low-pitched when preceded by an accented mora as in (b) and by a low-pitched mora as in (c), and it is high-pitched when preceded by an unaccented high pitched mora as in (a) and (d). Hence the pitch on *zya* is irrelevant to the present discussion.

However, the *-nai* syllables in *zyanai* in the following three sentences have the same pitch pattern. Observe the acceptability contrast.

(31)a. kore wa tabemono *zyanai*
this TOP food COP·NEG·A
'This is not food.'

b. kore wa kookyun *zyanai*
this TOP high class COP·NEG·A
'This is not high class.'

c. *kore wa ii *zyanai*
this TOP good·A COP·NEG·A
'(intended to mean) This is not good.'

*Zyanai* cannot negate inflective predicate categories. Hence the negative in (31c) is ungrammatical.

Now, consider the following discourse:

(32)a. A wears a brand new scarf and shows it to B saying:
*doo*?
(how)
'How does it look?'

b. B responds saying:
*ii* *zyanai* (neutral)
good·A COP·NEG·A
'Looks great!'

The sentence in (32b) is perfectly grammatical with a pitch pattern that is distinct from that of (31c):

(33) *zya* *na* *i*
| |
low low

The pitch on *zya* depends on the pitch pattern of the preceding word. In order to distinguish the two *zyanai* notationally, I will underline *nai* in *zyanai* in (33) as in *zya*<u>*nai*</u>, to indicate low–low, I use a small circle as an accent marker on *-a-* in *zyanai* in (29) as in *zyanåi* to indicate a fall from high to low.

(34)a. *zya*<u>*nai*</u>: zya na i
| |
L L

b. *zyanåi*: zya na i
| |
H L

As the English translation of (32b) shows, *zya*<u>*nai*</u> does not alter the truth-value of the sentential content. Nor does it co-occur with negative polarity items unless the main predicate is negative. Consider the following:

(35)a. sugoku ii
very good·A
'It is very good.'

b. *amari ii
very good·A
(Intended to mean) 'It is very good.'

c. amari yoku nai
very good·ADV NEG·A
'It is not very good.'

An adverb *amari* 'very/much' occurs in a negative sentence as shown in (35c). Now, observe the following with *zyanai*:

(36)a. sugoku ii zyanai
very good·A zyanai
'It's very good!'

b. *amari ii zyanai
very good·A *zyanai*
'(Intended to mean) It's very good!'

c. amari yoku nai zyanai
very good·ADV NEG·A zyanai
'It's not very good, is it (↘)'

The acceptability contrast between (36a) and (36b), and that between (36b) and (36c) indicates that *zyanai* does not syntactically negate the main clause.

Let us now consider the following discourse:

(37) B starts talking about Tanaka, but A does not remember who he is.
Thus A asks:
a. *Tanaka-san*?
'Tanaka?'

B responds saying:
b. kyonen gakkai de atta zyanai
last year conference at meet·PS zyanai
'We met him last year at the conference. Don't you remember?'

Again, *zyanai* does not negate the content of the clause that precedes it. Note also the clause that precedes *zyanai* in (37b) is in the past tense. The data above indicate that *zya na i* is a fixed expression without the basic copula function of a semantic feature provider, unlike *zyanâi* in (28) which negates the preceding predicate nominal and provides a non-past temporal interpretation by defalut. For the purpose of discussion, I will refer to *zyanai* as a *negative tag*.

The negative tag also occurs with nominal predicates accompanying a copula form. Negative and past nominal sentences followed by the negative tag are shown in (38):

(38)a. kore honmono zyanâi zyanai
this real thing COP·NEG·A zyanai
'This is not genuine!'

b. asoko sizuka datta zyanai
there quiet COP·PS zyanai
'That place was quiet!'

Let us see whether or not the copula *da* can occur with the negative tag:

(39)a. *kore honmono da zyanai
this real thing COP·AF zyanai
'(Intended to mean) This is genuine!'

b. kore honmono Ø zyanai
this real thing Ø zyanai
'This is genuine!'

As the unacceptability of (39a) shows, *da* is excluded in a sentence accompanying the negative tag. This fact suggests that an entire sentence with a negative tag is within the scope of the ignorative mode.

The clearest evidence for the ignorative mode is that the SF particle *ka*, which in my proposed analysis is an overt ignorative marker, occurs optionally with the negative tag. Each acceptable sentence with the negative tag shown as above has a corresponding version with the SF *ka* without altering its interpretation. The only difference is that the *zyanai ka* version is masculine. The *ka* version of (40) is shown below:

(40) kore honmono Ø zyanai ka (masculine)
this real thing Ø zyanai IGN
'This is genuine!'

In what follows I will investigate discourse contexts for *zyanai* and show that their occurrence can be accounted for by the ignorative analysis of *zyanai*.

The negative tag is appropriate in contexts in which there is a gap in knowledge or opinion between the speaker and the addressee, or between the speaker's current and past knowledge. Consider, for instance, sentence (32b), repeated in (41), uttered after being asked how the addressee looks with her new scarf:

(41) ii zyanai (ka)
good·A zyanai (IGN)
'You look great!'

Let us suppose that the speaker assumes or knows that the addressee is not sure that this is a good scarf for her. The sentence states the speaker's positive impression of the scarf, with a connotation that the addressee is wrong not to think that she looks great in the scarf. This connotation can be accounted for by the ignorative marker, which refers to, in this utterance, the addressee's assessment of the situation.

If the speaker had known that the addressee had bought a new scarf, he or she may have had certain expectations. If the reality exceeds or is contrary to the speaker's expectation, then that gap may be expressed by *zyanai* as the ignorance on the part of the speaker. Then, (41) would imply 'You look great, even better than I expected.' If the speaker had no previous knowledge or expectation, he or she may still use *zyanai* to express his or her surprise, which in effect results from the speaker's past ignorance.

Yet another potential context is that the speaker knows or assumes that the addressee loves the scarf. Then (41) implies that she does indeed look good with the scarf admitting the speaker's past ignorance and that he or she shares the positive impression of the scarf.

Let us now return to (37b), repeated below, in the context in which the speaker is trying to remind the addressee, who cannot remember who Tanaka is:

(42) kyonen gakkai de atta zyanai
Last year conference at meet·PS *zyanai*
'We met him last year at the conference.'

The previous discourse context makes clear the addressee's ignorance on the subject. Thus, the communicative goal of utterance (42) is more than merely to express the addressee's ignorance, but to help him or her recall the event. Such an effect is derivative of the given discourse context. In general, *zyanai* is a virtual *ignorance corrective marker* functioning to express the speaker's desire to improve the knowledge level of the addressee. In this view, the 'recalling' effect observed in (42) and the 'sharing' effect observed in (41) are natural extensions of the corrective function of *zyanai*.

Another corrective function is clearly observed in scolding or complaining utterances. Consider the following:

(43)a. syukudai site nai zyanai
homework do·GER NEG·A zyanai
You have not done your homework!'

b. sonna koto o sitara dame zyanai
such thing ACC do·COND no-good zyanai
'(Lit.) It is not good if you do such a thing.'

In (43a), the speaker has just found out that her child has not done his or her homework yet, and reminds him or her of the fact. In (43b), the speaker is responding to something bad that her child has done. Both sentences yield a strong connotation of 'you should know better'. This can be accounted for by the ignorance corrective function of *zyanai*.

*Zyanai* is a negative copula form containing a negative morpheme *na-*. As a negative feature carrier, this is a fully-fledged copula form. I propose to subcategorize *zyanai* into a proposition negator and modal negator. *Zyanâi* is the proposition negator and it functions to negate the proposition by negating the predicate. It opposes *da* and the zero-copula, both of which affirm the predicate. *Zyanai* is the modal negator and it functions to negate the anti-ignorative mode but it covertly affirms the proposition. It opposes *da* as a mode indicator.

*Table 9.1* Propositional and modal functions of the zero-copula, *da*, *zyanâi* and *zyanai*

| ***Ø*** | ***da*** | ***zyanâi*** | ***zyanai*** |
|---|---|---|---|
| Covert affirmation<br>Neutral mode | Overt affirmation<br>Anti-ignorative | Negation<br>Neutral mode | Covert affirmation<br>Ignorative mode |

I summarize these functions in Table 9.1 which includes the zero-copula. The first row shows grammatical functions, the second, modal functions.

The four-way oppositions shown in Table 9.1 summarize the core findings of this study. Each of the forms carries, either overtly or covertly, only one of the two most basic predicative features, the negative or the affirmative feature.

## 3 Concluding remarks

I embarked on this study to solve many puzzles that the copula presented to me. On the premise of the universality of the copula, I investigated writings ranging from Aristotle through to Classical Japanese. I analysed historical copula forms in Japanese poems and literary essays. On the journey back to contemporary Japanese, I followed the evolution of inflectional features and word formation, focusing on copula forms. My syntactic analysis of the modern Japanese copula *da* opened up an exciting new understanding of the copula's previously hidden grammatical properties. I discovered *da* to be an attested case of the copula that European philosophers hypothesized; they attributed to it a proposition-forming capacity. From a modern linguistic point of view, this merely means that the Japanese copula *da* is overtly marked for the affirmative. But I have shown that this small feature affords us the linguistic facility of observing socially governed principles, such as tone down and the expression of a speaker's gender.

# Notes

## Chapter 2: The Copula as a Universal Notion

1 It should be noted that, strictly speaking, the copula '*is*' by itself can only affirm, and thus can only link. For it to separate two terms, it needs a negative particle '*not*'. Therefore, definitions of copula often mention only the linking function. In a language that has a copula which inflects for a negative form, the copula can link and separate by itself.
2 Aristotle, too, distinguishes '*is*' from regular verbs for its lack of semantic content. He characterizes '*is*' as a *co-signifier*, an element that can signify or denote only in combination with other elements.
3 The consonant *k* before *-ari* will be discussed in Chapter 7.

## Chapter 5: Categorial Marking Analysis

1 It is also phonologically controlled: *no* is replaced by *na* when followed by a nominalizer *no* or its compound, e.g. *gakusee* **no*/*na no o ii kotoni* 'taking advantage of being a student', *gakuse* **no*/*na noni* 'even though he is a student'.

## Chapter 8: Copula Forms

1 *Yukasi-u* is a phonological variant of the standard *ku*-form, as in *yukasi-ku*. This euphony is referred to as *onbin* in Japanese. Loss of *-k-* and *-s-* in the adjective pre-nominal morpheme *-ki* and the sentence-final morpheme *-si* is also due to *onbin*.
2 According to Li and Thompson (1977) the Mandarin copula *shi* can be traced back to a demonstrative from around the first century. Callender (1984) reports that the Middle Egyptian copula *pw* was originally a demonstrative pronoun. Neither *shi* nor *pw* inflects.
3 The completion date of compilation is unkown. The latest poem in *Man yoo shuu* was written in 759 AD. Examples were taken from Muraki (1966).
4 For a poetic interpretation:

> All for your sake
> in fields of spring
> the healthful herbs
> a-gathering
> that now I bring—
> Please take,
> and flourish!
>
> (translation by H. H. Honda, 1967)

5 It is difficult to find a classical version of (72b), containing a fully fledged regular noun with *ni*.
6 Ohno (1979) hypothesizes that in ancient Japanese a suffixal morpheme *-i-* was productively used as a nominalizer, and that verbs' adverbial forms were originally nominalized forms. Yamazaki (1992) hypothesizes that noun-like adjectives became the adjectival category with this *-i-* as a nominal stabilizer and the *-si* suffix:

| | | |
|---|---|---|
| sizuka-i-si | sizukë-si | 'quiet-SE' |
| tasika-i-si | tasikë-si | 'certain-SE' |

(ë is one of the eight vowels posited for the ancient Japanese vowel system).
7 This is the origin of *ooki-na*, the adverbial nominal version of 'large' as opposed to the adjectival version *ookii* in modern Japanese.
8 Completion date unknown; possibly during the second half of the twelfth century.

## Chapter 10: *Da*

1 An exact characterization and definition of each SF particle is outside the scope of this paper. See Ueno (1971) and Martin (1975) for detailed characterizations of SF particles.
2 Personally, I do not use *da-yo*, but may occasionally use *da-ne*.
3 *Desu* with only a rising intonation is sometimes unacceptable. Not all question sentences have a free alternative between the presence and absence of *ka*. Question sentences ending with *desu* without *ka* do not always sound perfect:

*Hayashi-san-wa gakusei-desu-ka* (↗)
?*Hayashi-san-wa gakusei-desu* (↗)
'Is Hayashi a student?'

4 However, it does not explain why *ka* is obligatory in an RNI sentence in polite speech. I leave this issue for future research.
5 Some WH-question utterances do not have a rising intonation. In these utterances, the communicative goal is not purely information gathering.
6 If a predicate nominal of a WH-interrogative complement clause is a WH-phrase, the overt copula *da* is preferred over the zero-copula:

a. *Ano hito dare da/Ø ka sitteru*
that person who COP/Ø ka know
'Do you know who that person is?'

b. *Kimura-san no uti-ga doko da/Ø ka wakarimasita*
Kimura GEN house NOM where COP/Ø *ka* found out
'I found out where Kimura's residence is.'

I believe that the preference for *da* in the above is to avoid an utterance sounding like the indefinite pronouns *dareka* 'someone', *dokoka* 'somewhere' *ituka* 'sometime'. Sentence (a) could indeed cause ambiguity if *dara-Ø ka* is taken to be 'someone':

*Ano hito dareka sitteru*
that person someone know
'Does someone know that person?'

7 These conjectural predicates may be embedded in reporting predicates or form a relative clause. Thus the person who makes a conjecture is not always the speaker.

# References


Ackerman, F. and Webelhuth, G. (1998) *A Theory of Predicates* (Stanford, CA: CSLI Publications).

Anderson, S. R. (1992) *Amorphous Morphology* (Cambridge: Cambridge University Press).

Aquinas, St Thomas (1920) *The Summa Theologica of St Thomas Aquinas*, trans. Fathers of the English Dominican Province; revised edition of vol. 1 (London: Burns, Oates & Washbourne).

Aristotle, *On Interpretation*, trans. E. M. Edghill; available on Internet resource *English Server* by the University of Washington.

Aristotle (1962) *On Interpretation: Commentary by St Thomas and Cajetan,* trans. J. T. Oesterle (Milwaukee, WI: Marquette University Press).

Bach, E. (1967) '"Have" and "be" in English Syntax', *Language*, **43**: 2, pp. 462–85 (Baltimore: Linguistic Society of America).

Baldwin, J. M. (ed.) (1901) *Dictionary of Philosophy and Psychology*, vol. 1 (New York and London: Macmillan); reprinted in Internet resource *Classics in History of Psychology,* http://psychclassics.asu.edu/Baldwin/Dictionary.

Block, B. (1946) 'Studies in Colloquial Japanese. I: Inflection', *Journal of the American Oriental Society*, **66**, pp. 304–15.

Bybee, J. (1985) *Morphology: A Study of the Relation between Meaning and Form (*Amsterdam and Philadelphia: John Benjamins).

Bybee, J. (1995) 'The Semantic Development of Past Tense Modals in English', *Modality in Grammar and Discourse*, ed. J. Bybee and S. Fleischman (Amsterdam and Philadelphia: John Benjamins).

Bybee, J., Perkins, R. and Pagliuca, W. (1994) *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World* (Chicago and London: University of Chicago Press).

Callendar, J. B. (1984) *Studies in the Nominal Sentence in Egyptian and Coptic* (Berkeley and Los Angeles: University of California Press).

Carnie, A. (1995) *'Non-verbal Predication and Head Movement'* (doctoral dissertation, MIT).

Chamberlain, B. H. (1942, originally published 1886) *A Simplified Grammar of the Japanese Language*, rev. edn (Chicago, IL: University of Chicago Press).

Chomsky, N. (1981) *Lectures on Government and Binding* (Dordrecht: Foris).

Chomsky, N. (1995) *The Minimalist Program* (Cambridge, MA: MIT Press).

Chung, S. and Timberlake, A. (1985) 'Tense, Aspect, and Mood', *Language Typology and Syntax Description*, vol. 1: *Clause Structure*, ed. T. Shopen (Cambridge: Cambridge University Press).

Chvany, C. (1975) *On the Syntax of BE-Sentences in Russian* (Cambridge, MA: Slavia Publishers).

Comrie, B. (1985) *Tense* (Cambridge: Cambridge University Press).

Doi, Y. (1981) *'Chuusee Kookigo (Muromachi)' (Japanese language in the second half of Middle Ages: the Muromachi Period)*, in K. Morioka, H. Miyaji, H. Teramura and Y. Kawabata (eds), *Kooza Nihongogaku*, vol. 3: *Gendai bunpoo to no shiteki taisyoo* (Tokyo: Meiji Shoin).

Donaldson, T. (1980) *Ngiyambaa: The Language of the Wangaaybuwan* (Cambridge: Cambridge University Press).

Dudman, V. H. (1983) 'On Interpreting Conditionals', *Australian Journal of Linguistics*, **3**, 25–44.

Edghill, E. M. (trans.) *On Interpretation by Aristotle*; available on Internet resource *English Server* by University of Washington.

Frantz, D. G. (1991) *Blackfoot Grammar* (Toronto: University of Toronto Press).

Furuta, T. (1976) *'Da' 'Desu' 'Masu' Kotengo gendaigo Joshi Jodooshi syoosetsu* (Study of particles and auxiliary verbs in classical and modern Japanese), 3rd edn, ed. A. Matsumura (Tokyo: Gakutoosha).

Givón, T. (1990) *Syntax: A Functional Typological Introduction,* vol. 2 (Amsterdam and Philadelphia: John Benjamins).

Givón, T. (1995) *Functionalism and Grammar* (Amsterdam and Philadelphia: John Benjamins).

Grimes, J. E. (1964) *Huichol Syntax* (London, The Hague and Paris: Mouton).

Haaparanta, L. (1986) 'On Frege's concept of being', in S. Knuuttila and J. Hintikka (eds), *The Logic of Being* (Dordrecht: D. Reidel).

Haga, Y. (1962) *Nihonbunpoo Kyooshitsu* (Japanese grammar classroom) (Tokyo: Tokyodo).

Halliday, M. A. K. (1967) 'Notes on transitivity and themes in English: II', *Journal of Linguistics*, **3**.

Haraguchi, Y. (1981) *Kinsei kookigo: Edo* (Pre-modern late period: Edo period), *Kooza Nihongogaku 3: Gendai bunpoo-to-no shiteki taisyoo* (*Lectures on Japanese language 3: historical comparison with the contemporary Japanese)* (Tokyo: Meiji Shoin).

Hashimoto, S. (1948/1968) *Kogugohoo kenkyuu,* 15th edn (A Study of the Japanese language grammar) (Tokyo: Iwanami Shoten).

Honda, H. H. (1967) *The Manyoshu: A New and Complete Translation* (Tokyo: Hokuseido Press).

Hooper, P. (1975) 'On Assertive Predicates', in J. P. Kimball (ed.), *Syntax and Semantics*, vol. 4 (New York: Academic Press).

Ide, I. (1982) *'Imijoo no bun no shurui o sono koosei: Shiteki koosatsu'* (Semantic sentence types and their constructions: A historical examination). In K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).

Inoue, K. (1990) *Joohoo no nawabari riron (Territory of information*) (Tokyo: Taisyuukan).

Inoue, K. (1997) *Territory of Information* (Amsterdam and Philadelphia: John Benjamins).

Inoue, K. (1998) 'An Analysis of Japanese *Ne*', in N. Akatsuka *et al*. (eds), *Japanese/Korean Linguistics*, vol. 7 (Stanford, CA: CSLI Publications).

Ishikawa, J. (trans) (1976) Kojiki: 'Records of Ancient Matters' (originally completed in 712 AD) in *Koten nihon bungaku zensyuu 1* (Classical Japanese literature 1) (Tokyo: Chikuma Shoboo).
Iwasaki, S. (1993) *Subjectivity in Grammar and Discourse: Theoretical Considerations and a Case Study of Japanese Spoken Discourse* (Amsterdam and Philadelphia: John Benjamins).
Jacobi, K. (1986) 'Peter Abelard on the Speech Sign "EST"', in S. Knuuttila and J. Hintikka (eds), *The Logic of Being: Historical Studies* (Dordrecht: D. Reidel).
Jacobson, R. (1939) 'Signe zéro', *Selected Writings III* (The Hague: Mouton).
Jacobson, R. (1957) 'Shifters, Verbal Categories and the Russian Verb', *Selected Writings III* (The Hague: Mouton).
James, D. (1982) 'Past Tense and the Hypothetical: a Cross-Linguistic Study', *Studies in Language*, **6**, pp. 375–403.
Kahn, C. (1973) *The Verb 'be' and its Synonyms (6): The Verb 'be' in Ancient Greek* (Dordrecht: D. Reidel).
Kahn, C. (1973) 'On the Theory of the Verb "to be"', in Milton K. Munitz (ed.), *Logic and Ontology* (New York: New York University Press).
Kahn, C. (1986) 'Retrospect on the Verb "to be" and the Concept of Being', in S. Knuuttila and J. Hintikka (eds), *The Logic of Being: Historical Studies* (Dordrecht: D. Reidel).
Kameda, J. (1909) *Kokugogaku gairon* (Tokyo: Hakubunkan).
Kamio, A. (1983) 'Meishiku no koozoo' (The structure of noun phrases), in K. Inoue (ed.), *Nihongo no kihon koozoo* (The basic structure of Japanese) (Tokyo: Sanseido).
Kamio, A. (1990) *Zyoohoo no nawabari riron* (The theory of the territory of information) (Tokyo: Taishunkan Shoten).
Kamitani, E. (1981) *'No-da ni tuite' (On no-da). Kyoto Furitsu Daigaku Gakujutsu Hookoku, Jinbun*, no. 33.
Kaneda, H. (1969) *'Nai: the negative' Kotengo gendaigo joshi jodooshi syoosetsu* (Study of particles and auxiliary verbs in classical and modern Japanese), ed. A. Matsumura (Tokyo: Gakutoosha).
Kanehiko, Y. (1971) *Gendaigo jodooshi-no shiteki kenkyuu* (Diachronic study of auxiliaries in contemporary Japanese) (Tokyo: Meiji Shoin).
Kasuga, K. (1968) *Sonzaishi ni kansuru kenkyuu* (A study of existential words) (Tokyo: Kazama Shobo).
Kasuga, K. (1976) 'Nari – the judgmental', in A. Matsumwa (ed.), *Kotengo gendaigo Joshi Jodooshi syoosetsu* (Study of particles and auxiliary verbs in classical and modern Japanese), 3rd edn (Tokyo: Gakutoosha).
Kawabata, Y. (1982) 'Dooshi katsuyoo no shiteki tenkai' (Historical development of verbal inflection), in K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).
Kiefer, F. (1968) *A Transformational Approach to the Verb 'to be' in Hungarian: The Verb 'be' and its Synonyms*, ed. John Verhaar (Dordrecht: D. Reidel).

Kindaichi, H. (1953) 'Fuhenka jodooshi no honshitsu: syukanteki hyoogen to kyakkanteki hyoogen no betu ni tuite' (Essential properties of non-inflecting auxiliary verbs: distinction between subjective and objective expressions), in *Kokugo kokubun*, **22**, 2 and 3.

Kindaichi, H. (1982) *Nihongo seminar* (Seminar on Japanese language) (Tokyo: Chikuma Shoboo).

Kitahara, Y. (1965) 'Nari to miyu (nari and miyu)', in *Kokugogaku*, **61**, pp. 11–28 (Tokyo: Kokugo gakkai).

Kitahara, Y. (1967) 'Nari no koozooteki imi' (The structural meaning of nari), *Kokugogaku*, **68**, pp. 17–33 (Tokyo: Kokugo gakkai).

Kitahara, Y. (1982) 'Dooshisei jutsugo no shiteki tenkai (3): Mood' (Historical development of verbal predicates (3): Mood), in K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).

Kitahara, Y. *et al*. (eds) (1981) *Nihon bunpoo jiten (A dictionary of Japanese grammar)* (Tokyo: Yuseidoo).

Knuuttila, S. and Hintikka, J. (1986) *The Logic of Being: Historical Studies* (Dordrecht: D. Reidel).

Konomi, E. (1994) *'The Structure of the Nominal Predicate in Japanese'* (doctoral dissertation, Cornell University).

Kreeft, P. J. (ed.) (1990) *A Summa of the Summa: The Essential Philosophical Passages of St Thomas Aquinas' 'Summa Theologica'* (San Francisco, CA: Ignatius Press).

Kuno, S. (1970) 'Some Properties of Non-referential Noun Phrases', in R. Jakobson and S. Kawamoto (eds), *Studies in General and Oriental Linguistics* (Tokyo: TEC).

Kuno, S. (1973) *The Structure of the Japanese Language* (Cambridge, MA: MIT Press).

Kuno, S. (1978) 'Japanese: a Characteristic OV Language', in W. Lehmann (ed.), *Syntactic Typology* (Austin and London: University of Texas Press).

Kuno, S. (1983) *Shin nihon bunpoo kenkyuu (New studies in Japanese grammar)* (Tokyo: Taishukan).

Kuno, S. and Wongkhomptong, P. (1981) 'Characterizational and Identificational Sentences in Thai', *Studies in Language*, **5**: 1.

Kuroda, S.-Y. (1973) 'Where Epistemology, Style, and Grammar Meet: a Case Study in Japanese', in S. Anderson and P. Kiparsky (eds), *A Festschrift for Morris Halle* (New York: Holt, Rinehart and Winston).

Kuroda, S.-Y. (1992) *Judgment Forms and Sentence Forms: Japanese Syntax and Semantics* (Dordrecht: Kluwer Academic).

Lambrecht, K. (1994) *Information Structure and Sentence Form* (Cambridge: Cambridge University Press).

Lee, K. (1999) 'Relative Tense and Absolute Tense in Adverbial Adjuncts in Japanese', in A. Kamio and K. Takami (eds), *Function and Structure in Honor of Susumu Kuno* (Amsterdam and Philadelphia: John Benjamins).

Li, C. N. (ed.) (1977) *Mechanisms of Syntactic Change* (Austin, TX: University of Texas Press).

Li, C. and Thomson, S. A. (1977) 'A Mechanism for the Development of the Copula Morpheme', in C. N. Li (ed.), *Mechanisms of Syntactic Change*, pp. 419–44.
Lyons, J. (1968) *Introduction to Theoretical Linguistics* (Cambridge: Cambridge University Press).
Martin, S. (1975) *A Reference Grammar of Japanese* (Rutland, VT: Charles Tuttle; rev. edn 1988).
Matsushita, D. (1961) *Hyoojun nihonkoogohoo (Grammar of standard spoken Japanese)* (Tokyo: Hakuteisya).
Matsumura, A. (ed.) (1971) *Nihon bunpoo daijiten (Dictionary of Japanese grammar)* (Tokyo: Meiji Shoin).
Matsushita, D. (1974) *Kaisen hyojun nihon bunpoo* (Newly selected Japanese grammar), ed. Masanobu Tokuda (Tokyo: Benseisha).
McCawley, J. D. (1968) *The Phonological Component of a Grammar of Japanese* (The Hague and Paris: Mouton).
McCawley, J. D. (1988) *The Syntactic Phenomena of English*, vol. 1 (Chicago: University of Chicago Press).
Mikami, A. (1953) *Gendaigohoo josetsu* (An introduction to modern Japanese grammar) (Tokyo: Kurosio Publishers, 1972).
Mio, S. (1939) 'Bun ni okeru chinjutsu sayoo towa nanzoya' (What is Chinjutsu in sentences?), in *Kokugo to kokubungaku*, S14-1 (Japanese language and Japanese literature).
Munitz, M. K. (ed.) (1973) *Logic and Ontology* (New York: New York University Press).
Muraki, S. (trans) (1966) *Man'yoo shuu I* (Collection of Myriads of leaves: I) (Tokyo: Chikuma Shoboo).
Muraki, S. (trans) (1966) *Man'yoo shuu II* (Collection of Myriads of leaves: II) (Tokyo: Chikuma Shoboo).
Nakanishi, U. (1982) 'Dooshisei jutsugo no shiteki tenkai (2)' (Historical development of verbal predicates), in K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).
Nakau, M. (1976) 'Tense, Aspect, and Modality', M. Shibatani (ed.), *Syntax and Semantics 5: Japanese Generative Grammar* (New York: Academic Press).
Napoli, D. Jo. (1989) *Predication Theory: A Case Study for Indexing Theory* (Cambridge: Cambridge University Press).
Nishio, T. (1982) 'Keiyooshi-sei jutsugo no shiteki tenkai' (Historical development of adjectival predicates), in K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).
Noda, H. (1997) *No(da) no kinoo* (Functions of no [da]) (Tokyo: Kurosio Publishers).
Ogami, K. (1982) *'Bun no kihon koosei: Shiteki tenkai'* (Basic sentence structures: Historical development), in K. Morioka *et al*. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).

Ohno, S. (1979) '*Dooshi katsuyookee no kigen*' (Origin of verbal inflectional forms), in S. Hattori *et al*. (eds), *Nihon no gengogaku*, vol. 4 (The Japanese linguistics) (Tokyo: Taishukan).
Ohtsuki, F. (1996, originally 1891) *Gohoo shinan* (Tokyo: Benseisha).
Okamura, K. (1969) 'Zo', in A. Matsumura (ed.), *Kotengo gendaigo joshi jodooshi shoosetsu* (Particles and auxiliary verbs in classical and modern Japanese (Tokyo: Gakutosha).
Okamura, K. (1976) 'Kakari Joshi' (Agreement particles), in A. Matsumura (ed.), *Kotengo gendaigo Joshi jodooshi syoosetsu* (Study of particles and auxiliary verbs in classical and modern Japanese), 3rd edn (Tokyo: Gakutoosya).
Okutsu, K. (1978) *Boku wa unagi da no bunpoo (Grammar of 'I am an eel')* (Tokyo: Kurosio Publishers).
Palmer, F. R. (1986) *Mood and Modality* (Cambridge: Cambridge University Press).
Paus, C. (1997) 'Variability in Cambodian Copular Constructions: A Semantic Analysis', *Papers in Southeast Asian Linguistics, no. 16* (Canberra: Pacific Linguistics, Australian University).
Payne, T. E. (1997) *Describing Morphosyntax: A Guide for Field Linguists* (Cambridge: Cambridge University Press).
Pinker, T. (1995) *The Language Instinct* (New York: Harper-Collins).
Radford, A. (1997) *Syntax: A Minimalist Introduction* (Cambridge: Cambridge University Press).
Rapopport, A. (1987) 'Copular, Nominal and Small Clauses: a Study of Israel: Hebrew'. PhD dissertation, MIT, Cambridge, Mass.
Rothstein, S. (1987) 'Three Forms of English *be*', in M. A. Browning, E. Czaykowska-Higgins and E. Ritter (eds), *MIT Working Papers in Linguistics* (Cambridge, MA: MIT Press).
Rothstein, S. (1995) 'Small Clauses and Copula Constructions', in A. Cardinaletti and M. Guasti (eds), *Syntax and Semantics 28: Small Clauses* (New York: Academic Press).
Ruwet, N. (1991) *Syntax and Human Experience* (Chicago, IL: University of Chicago Press).
Sadock, J. and Zwicky, A. M. (1985) 'Speech Act Distinction in Syntax', in S. Timothy (ed.), *Language Typology and Syntactic Description,* vol. 1: *Clause Structure* (Cambridge: Cambridge University Press).
Sakuma, K. (1936) *Gendainihongo no hyoogen to gohoo* (Tokyo: Kurosio Publishers, reprinted in 1983).
Sansom, G. (1928) *A Historical Grammar of Japanese* (Oxford: Clarendon Press).
Schachter, P. (1985) 'Parts-of-Speech Systems', in T. Shopen (ed.), *Language Typology and Syntactic Design* (Cambridge: Cambridge University Press).
Sei Shoonagon (1975, originally completed around 990), *Makura no soosi* (Pillow stories), ed. Ishida Joji (Tokyo: Kadokawa Shoten).
Shibatani, M. (1990) *The Languages of Japan* (Cambridge: Cambridge University Press).
Soga, M. (1983) *Tense and Aspect in Modern Colloquial Japanese* (Vancouver: University of British Columbia Press).

Stassen, L. (1997) *Intransitive Predication* (Oxford: Clarendon Press).
Steele, S. (1975) 'Past and Irrealis: Just What Does it all Mean?', *International Journal of American Linguistics*, **41**, pp. 200–17.
Syder and Pawley, 'The reduction principle in conversation', MS, Anthropology Dept, Auckland University, Auckland, New Zealand.
Takeoka, M. *'Jodooshi nari no arawasu mono'* (Semantics of nari), *Kokugogaku*, **25**, pp. 43–71.
Tanomura, T. (1990) *Gendai nihongo no bunpoo I: Noda no imi to Yoohoo (Grammar of modern Japanese 1: meaning and usage of noda)* (Osaka: Izumi Shoin).
Teramura, H. (1982) *Nihongo-no syntax-to imi I (Syntax and semantics of Japanese I)* (Tokyo: Kurosio Shuppan).
Teramura, H. (1984) *Nihongo-no syntax-to imi II (Syntax and semantics of Japanese II)* (Tokyo: Kurosio Shuppan).
Teramura, H. (1993) *Teramura Hideo ronbunshuu (Collection of Hideo Teramura's work)* (Tokyo: Kurosio Shuppan).
Tokieda, M. (1941) *Kokugogaku genron (A basic theory of study of Japanese language)* (Tokyo: Iwanami Shoten).
Tokieda, M. (1950) *Nihon bunpoo: Koogohen (Japanese grammar: the spoken language)* (Tokyo: Iwanami Shoten, rev. edn 1978).
Tokieda, M. (1954) *Nihon bunpoo: Bungohen (Japanese grammar: Classical Japanese)* (Tokyo: Iwanami Shoten).
Tsukishima, H. (1964) *Kokugogaku (Study of Japanese language)* (Tokyo: Tokyo Daigaku Syuppankai).
Uehara, S. (1998) *Syntactic Categories in Japanese: A Cognitive and Typological Introduction* (Tokyo: Kurosio Publishers).
Ueno, T. (1971) 'A Study of Japanese Modality – a Performative Analysis of Sentence Final Particles' (PhD dissertation, University of Michigan).
Watanabe, M. (1953) 'Jojutsu to chinjutsu' (Describing and stating), *Kokugogaku*, **13–14** (Tokyo: Kokugo gakkai).
Whitman, J. (1989) 'Topic, Modality, and IP Structure', in S. Kuno *et al*. (eds), *Harvard Studies in Korean Linguistics III: Proceedings of the 1989 Harvard Workshop on Korean Linguistics*.
Wiedermann, H. (1986) 'The logic of being in Thomas Aguinas', in S. Knuuttila and J. Hintikka (eds), *The Logic of Being: Historical Studies* (Dordrecht: D. Reidel).
Yamada, Y. (1908) *Nihonbunpooron (Theory of Japanese grammar)* (Tokyo: Hakubunkan).
Yamada, Y. (1936) *Nihonbunpoogaku gairon (Introduction to the study of Japanese* grammar) (Tokyo: Hobunkan).
Yamaguchi, G. (1981) 'Fukubun no koosei: shiteki koosatsu' (Structure of complex sentences: a historical study), in K. Morioka et al. (eds), *Kooza nihongogaku 2: Bunpooshi* (Lectures on the history of the Japanese language 2: History of grammar) (Tokyo: Meiji Shoin).
Yamaguchi, Y. (1975) 'No-da no bun ni tuite' (On no-da sentences), *Kokubungaku kenkyuu, 56* (Tokyo: Waseda Daigaku Kokubungakukai).

Yamauchi, Y. (1981) 'Chuusee zenkigo' (The language in early middle ages), in K. Morioka *et al*. (eds), *Kooza Nihongo 3: Gendaibonpoo to no shiteki taishoo* (Lectures on Japanese language 3: Diachronic comparison with modern grammar) (Tokyo: Meiji Shoin).

Yamazaki, K. (1992) *Keiyooshi jodooshi no kenkyuu (A study of adjectives and auxiliaries)* (Osaka: Izumi Shoin).

Yoshida, K. (1971) *Gendaigo jodooshi no shiteki kenkyuu (A historical study of auxiliary verbs in modern Japanese)* (Tokyo: Meiji Shoin).

Yuzawa, K. (1959) *Bungo bunpoo syoosetsu (A detailed study of classical Japanese grammar)* (Tokyo: Yuubun Shoin).

# Index