CAMBRIDGE LANGUAGE SURVEYS

The languages of Japan

Masayoshi Shibatani

This book is a detailed survey of the two main indigenous languages of Japan: Japanese and Ainu. No genetic relationship has been established between them, and structurally they differ significantly. Professor Shibatani has therefore divided his study into two independent parts. The first is the most comprehensive study of the polysynthetic Ainu language vet to appear in English, and includes data and texts from both classical and colloquial materials. The second part deals extensively with Japanese. It discusses topics from the evolution of the writing system and the differences between men's and women's speech, to issues of greater theoretical complexity, such as phonology, including tone-analysis, the lexicon and word-formation, and the syntax of agglutinative morphology.

As an American-trained scholar in Japan, the author is in a unique position that affords him a dual perspective on language deriving from Western linguistic scholarship and the Japanese grammatical tradition, which has a history of over 200 years. Professor Shibatani critically examines for the first time some modern analyses of such prominent features of Japanese as topic construction and verb inflection in the light of traditional scholarship.

The languages of Japan will appeal not only to those seeking a basic survey, but also to advanced students and Japanese specialists interested in the theoretically problematic areas of the two languages, and to those working on Japan generally. Like other language surveys in this series, it makes a considerable contribution to descriptive linguistics and language typology.

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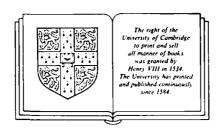
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THE LANGUAGES OF JAPAN

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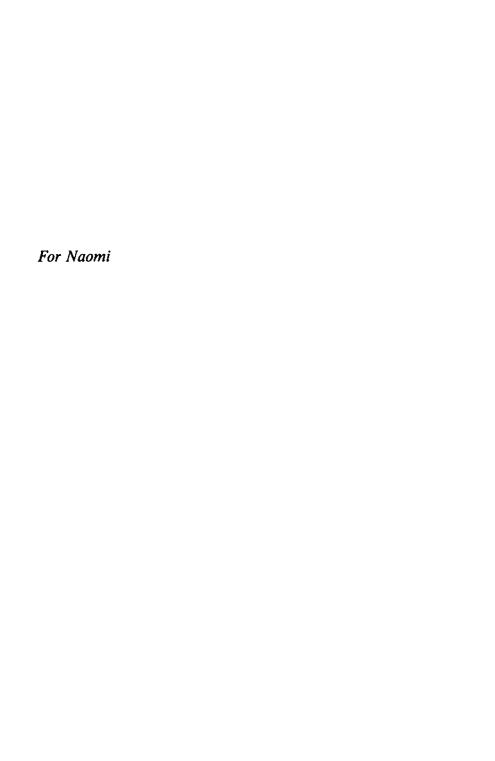
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There are arguably three indigenous languages in Japan: namely, Ainu, Japanese, and Ryūkyuan. However, the genetic relationship between Japanese and Ryūkyuan has been proven and the transparency of the relationship is such that the latter is now considered as a dialect (group) of Japanese by most scholars. This leaves us with two languages to deal with, and the book title of "Ainu and Japanese" would have been less pretentious. The less pretentious title, however, suggests that the book is about the genetic relationship between Ainu and Japanese or a comparative work dealing with them. Neither was my primary concern, and the book consists of two independent parts. There is no strong evidence suggesting a genetic relationship between Ainu and Japanese, and structurally the two differ significantly. Ainu, especially Classical Ainu, is a polysynthetic language involving incorporated nouns, incorporated adverbs, affixal forms of reflexive and reciprocal morphemes, as well as personal affixes agreeing with subject and object. Japanese also shows a high degree of synthesis in its verbal morphology, but involving neither personal affixes nor noun incorporation of the Ainu type, it shows a qualitative difference from the Ainu structure.

Having to deal with only two languages has afforded me space to dwell on a number of salient points in Ainu and Japanese. However, this proved to be both curse and advantage. Compared to most other surveys in this series, this book is perhaps more technical and less informative with regard to certain elementary facts than may be expected by non-specialists. On the other hand, I was able to concentrate on those theoretically problematic areas that general linguists and Japanese specialists may find interesting. The decision to opt for this format was primarily based on the availability of reference works in English. In the case of Japanese, there are at least two works that cover the general ground: namely, Roy Andrew Miller's The Japanese Language (University of Chicago Press) and a slightly more technical grammar book by Samuel E. Martin, A Reference Grammar of Japanese (Yale University Press). In the case of Ainu we are less fortunate. The only easily available book in English is Kirsten Refsing's recent book, The Ainu Language

(Aarhus University Press). But since this eminently readable book deals mainly with the colloquial Ainu of a single dialect – actually a single speaker – I have tried to offer a broader survey, sometimes concentrating more on Classical Ainu, which shows a stronger polysynthetic character than the colloquial dialects. Here too some readers may find parts of the discussion somewhat technical and will have to bear with me.

Another point of emphasis in this book is the introduction of some salient aspects of the grammatical tradition in Japan, which has a history of more than two hundred years. While a large number of notions and concepts developed within this tradition must be carefully interpreted in the framework of the linguistic tradition of the West before they can be rendered understandable to non-Japanese, such efforts are worthwhile since many of them, as I have attempted to show, have contemporary relevance. Indeed, as far as some aspects of Japanese are concerned, the treatments offered within the Western tradition are shockingly shallow compared to those analyses that have undergone and endured two hundred years of repeated challenge and enrichment within Japan. While I am least interested in boosting academic nationalism, I certainly hope that Western readers realize that a rich grammatical tradition exists in Japan, whose inception antedates the Neogrammarian comparative grammar by a hundred years.

In writing a book of this nature, one accumulates numerous debts in both professional and private spheres. But before recounting those who have helped me more immediately, I wish to take this opportunity to thank my former teachers at Berkeley: Wallace L. Chafe, Charles J. Fillmore, Richard Stanley, William S.-Y. Wang, and Karl E. Zimmer. Writing this book owes much to my first linguistics teacher, Bill Wang, who, when I was drifting toward empty theorization in linguistics, suggested that I become a linguist with a strong language background, perhaps a Japanese specialist who can be asked anything about the language. Well, I am still far from the kind of linguist that Bill had in mind when he lectured me, but this book is a small token that I have not forgotten and that I am still doing my homework.

Bernard Comrie, Charles De Wolf, Stanley Dubinsky, John Hinds, Sachiko Ide, Stefan Kaiser, Bart Mathias, Katsumi Matsumoto, Kyōko Murasaki, Ho-Min Sohn, and Andy Spencer read portions of this book and provided me with comments invaluable in improving the contents. Above all, I owe the greatest debt to John Haig, who, while spending a year in Yamagata in the final phase of this work, read the entire manuscript and offered numerous comments and advice on both substantial and stylistic matters. I am fortunate to have a colleague-friend like John, who is so knowledgeable about Japanese and who shares so many academic interests with me. Without his help this book would have been much the poorer.

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Professor Eugénie Henderson, the editor assigned to this book by Cambridge University Press, also read the entire manuscript and guided me, with remarkable patience, through the completion of the work. Her offer of the use of her office at SOAS greatly facilitated the completion of part of the book. My stay at the University of London was made possible by a research grant from the British Council, for which I am very grateful, and was made comfortable by the hospitality rendered me by Professor R.H. Robins and Professor Theodora Bynon, Head of the Phonetics and Linguistics Department at SOAS. At a more personal level, Wynn Chao must be thanked for her appetizing conversation over the Chinese noodles in Leicester Square and the oysters at Wheeler's.

Much closer to home, I wish to thank Suzuko Tamura and Kyōko Murasaki, two of the foremost contemporary Ainu specialists in the world and perhaps the last linguists to have done extensive work with native Ainu speakers, for providing me with useful information about the language and for sharing with me their research results. Mayumi Nakamura and Masumi Katagiri, graduate students in linguistics at Kobe, were also helpful in typing portions of the manuscript and drawing maps.

Professor Hisao Kakehi, my senior colleague, made sure that I had ample time to do research and write in Kobe. His encouragement and confidence in me were a source of needed energy in the course of writing. I am also very grateful to Professor Kazuko Inoue, who, like Professor Kakehi, saw to it that I have been provided with an ideal research setting ever since I returned to Japan in 1979. I am pleased to acknowledge that this work was in part supported by a research grant to the project headed by Professor Inoue: "The theoretical and empirical studies of the properties of Japanese in terms of linguistic universals" (Monbushō-Grant for Specially Promoted Research Project (1) No. 60060001).

Finally, it is my pleasurable duty to acknowledge here the patience and understanding shown by my wife and daughter while this book was (or sometimes was not) being written. Hopefully, they will not have to put up with an absent-minded husband and father at the dinner table – until, well, the next book. This book is affectionately presented to Naomi, our nineteen-year-old daughter, who has just set out to see the world and to experience the excitement of intellectual pursuits.

M. S. Kobe, Japan

ABBREVIATIONS USED IN GLOSSES

ABL	ablative	INTERJEC	interjection
ACC	accusative	IO	indirect object
ADV	adverb(ializer)	ITERA	iterative
AGT	agent	LOC	locative
AP	adverbial particle	N	noun
APPL	applicative	NEG	negative
ASP	aspect	NOM	nominative
ATTR	attributive	NOMI	nominalizer
CAUS	causative	0	object
COHORT	cohortative	OBL	oblique
СОМ	comitative	PASS	passive
CONCL	conclusive	PAST	past
COND	conditional	PERF	perfective
CONJ	conjunctive	PL	plural
CONT	continuative	POTEN	potential
COP	copula	POSS	possessive
DAT	dative	PRES	present
DESI	desiderative	PROG	progressive
DO	direct object	Q	question
EXCL	exclusive	REAL	realis
EXPL	expletive	REC	reciprocal
ЕМРН	emphatic	REFL	reflexive
FP	final particle	S	subject
GEN	genitive	SG	singular
GER	gerundive	SPON	spontaneous
HON	honorific	SU	subject
IMP	imperative	TOP	topic
INCL	inclusive	1	first person
IND	indicative	2	second person
INDEF	indefinite	3	third person

PART 1 The Ainu language

Introduction

1.1 People and distribution

The "Ainu" are a people living on the northern Japanese island of Hokkaidō whose ancestors were both physically and culturally distinct from the Japanese. The pre-historical distribution of the Ainu people is not easily ascertainable, but many place names in the northern part of the main Japanese island of Honshū indicate that they might have once lived in that region as well. Ainu place names are also found in the southern part of the Kamchatka peninsula; and a report by Russian explorers in the early eighteenth century notes the presence of the Kamchatka-Kurile, who were believed to be a distinct group of people formed by intermarriage between Kamchadal and Kurile Ainu.

Although more recent history indicates that the Ainu lived on the Kurile Islands and Sakhalin, Hokkaidō has nevertheless been the main area of the Ainu habitation. The Kurile Ainu, moved to Shikotan in 1884, were only forty-one in number in 1933, and it is believed that there are no longer any direct descendants of the Kurile Ainu still living. In the 1940 census, the Hokkaidō Ainu numbered 16,170, and the 1935 census reported the population of the Sakhalin Ainu to be 1,512. After World War II, some of the Ainu of Sakhalin were relocated to Hokkaidō. In recent years, as a reflection of the Japanese government policy of advocating assimilation of the Ainu into Japanese society, the Ainu have not been considered as a distinct group for census purposes; accordingly, there are no available figures for the contemporary Ainu population. It is estimated to be around 16,000, but as a result of intermarriage between Ainu and Japanese, pure-blood Ainu are said to number less than 1 percent of that figure.

In the Ainu language, the word aynu means 'person'. While the historical distribution of Ainu throughout Hokkaidō is amply demonstrated by the large number of place names that derive from the Ainu language, the language itself is on the brink of extinction. Though ethnically minded Ainu may dispute Hattori's assessment that the Ainu language "has reached the point of complete extinction" (1967:58), it is true that Ainu is no longer used as a means of daily communication and that

it is remembered only partially by a handful of people of advanced age. Despite this regrettable situation, there exist ample data with which to investigate the nature of this remarkable language.

The Ainu vocabulary reflects the Ainu life style of the past, whose economic and social activities were centered largely around hunting, fishing and gathering. Old patterns of settlement show Ainu communities to have been scattered along coastal areas and along rivers toward the inland. It is conjectured from this that fishing and the hunting of sea animals were the primary economic activities of the Ainu in former times (see Map 1, p. 8). Reflecting the settlement patterns, many place names have the endings -nay and -pet which both have the meaning 'river'. The Ainu's concern with salmon and whales is also obvious from an examination of their lexicon. The different stages in the life cycle of the salmon are finely delineated by numerous words (roughly twenty) referring to the fish. There are also about fifty words referring to harbor seals, and twenty-four words for different types of whales. In addition, there are taboos, taboo words, and rituals referring to fishing.

Among land animals, bears, deer, hares, and badgers were hunted for food. Of these, bears in particular are of central importance in Ainu culture. This is quite clearly evidenced by the fact that the word *kamuy*, which is a generic term for animals, is also used to designate bears, and by the presence of eighty-three distinct words relating to bears. *Kamuy* also means 'god'. Indeed, bears are thought to be mountain gods that bring bear meat to the village. Dogs were also apparently quite significant in Ainu culture, there being forty-four words for them. It is said among other things that dogs were sometimes trained to catch salmon.

1.2 Literature

The Ainu language has not developed a writing system, but it does have a rich tradition of oral literature. In addition to various kinds of songs, e.g. love songs, boating songs, Ainu has both verse and prose types of oral literature. The verse forms are generally called yukar in Ainu and yûkara in the Japanese tradition of Ainu scholarship. Yukar are recited epics that relate the experiences of gods who manifest themselves by assuming various forms of animals, plants, and natural phenomena, or the experiences of love and war by heroes. In a strict sense the term yukar refers only to the heroic verse, mythic epics being more specifically referred to as kamuy yukar, mat yukar, or oyna. There are as well prose-style old stories and folktales.

The language of yukar differs significantly from the spoken language. The former, called Classical Ainu in this study, is more conservative and has less dialectal variation as compared with the colloquial language. The two types of language show differences in both syntax and vocabulary, although there is a great

1 Introduction 5

deal of overlap. The most salient difference between them is that Classical Ainu tends to be more strongly polysynthetic than its colloquial counterpart.

1.3 Linguistic affiliation and dialects

In terms of genetic classification, Ainu is best described as a language-isolate. Although various suggestions have been made relating Ainu to such language families as Palco-Asiatic, Ural-Altaic, and Malayo-Polynesian, or to individual languages such as Gilyak, Eskimo, and Japanese, none of them have progressed beyond the level of speculation.

Among Ainu specialists, John Batchelor (1845–1944), sometimes referred to as the father of Ainu studies, is unique in suggesting the "Aryan connection". In his pioneering work on the Ainu language, An Ainu–English–Japanese Dictionary, published first in 1889, Batchelor sets up a section entitled "Ainu and the Aryan connection", in which he compares a number of Ainu words with Welsh, Cornish, and a few other languages. He then concludes the section by saying: "This chief argument, however, for an Aryan origin of the Ainu language will be found to lie in the Grammar rather than in vocabulary" (p. 25). But, in the grammar section of the dictionary, no extensive discussion of this issue appears.

From their geographic proximity. Ainu and Japanese are likely candidates for a linguistic grouping. Batchelor, for example, suggests in his dictionary that an analysis of certain words indicates a "very close connection between some parts of ancient, and now obsolete, Japanese and present Ainu speech" (p. 16). However, the relating of Ainu to Japanese was a hypothesis rejected by Basil Hall Chamberlain (1850-1935), whose primary interest was in Japanese and in comparative studies of Japanese and other Oriental languages. In "The language, mythology, and geographical nomenclature of Japan viewed in the light of Aino studies" (1887), Chamberlain pointed out fifteen reasons for his conclusion that Ainu is related to neither Japanese nor any of the Altaic languages, and that it must be considered a language-isolate. Chamberlain's points were reviewed and reinterpreted in a new light by one of his successors, Kindaichi Kyōsuke (1882-1971), perhaps the foremost Ainu specialist in the world. Comparison of the two languages indeed reveals that the Ainu language, despite its geographical proximity, has a linguistic structure quite distinct from that of Japanese. To summarize some of the features, including those discussed by Chamberlain (1887) and Kindaichi (1937) in their arguments for considering Ainu and Japanese to be unrelated:

- (a) Ainu makes extensive use of personal affixes (section 3.3).
- (b) Ainu, especially Classical Ainu, exhibits phenomena which characterize it as a polysynthetic language (sections 3.5.3 and 3.5.7).

- (c) There are no verbal inflections.
- (d) There are verbal suffixes as well as suppletive verbal forms for the plural subject and the plural object (section 3.5.4).

Certainly these features are foreign to Japanese.

Hattori (1959, 1964), on the basis of the glottochronological data and the similarities in word order and the related phenomena summarized in section 3.2, maintains the possibility of an affinity between Ainu and Japanese. However, recent studies in syntactic typology (e.g. Greenberg 1963) indicate that these features are universal characteristics of the languages with SOV word order, and have no direct bearing on the question of genetic classification. Indeed, the characteristics summarized in section 3.2 are shared not only by Ainu, Japanese, and Korean but also even by an Indo-European language such as Sinhalese which is also an SOV language.

Hattori (1964), after completing an Ainu dialect dictionary (see below), remarks that his dictionary provides "good material for the comparative study of Ainu with other languages" (p. 40). He then illustrates one such possibility in terms of the Ainu root kur:

Ainu:	√kur:	kur	'shadow', etc.
Japanese:	\sqrt{kur} :	kurasi	'dark', etc.
Korean:	kurum	'cloud'	kurim 'soot', etc.
Tungusic:	kurunyuk	'soot', etc.	
Mongol:	?kara	'black'	
Turkic:	kurim	'soot'	
Hungarian:	korom	'soot'	

Hattori then comments that: "Inasmuch as all of these resemblances cannot be viewed as accidental, we have to assume some historical factors, perhaps even a genetic relationship, to account for the resemblance of Ainu to the other languages" (p. 40).

Hattori's lexicostatistical work (1959) suggests to him that even if Japanese and Korean were related, the time of split would be more than 4,000 years ago. In the case of Ainu, his view is that, even if Ainu is related to Japanese, the relationship is a fairly indirect one. First, Japanese and Korean are related – if related at all. Then, these are perhaps related to Altaic languages. If Ainu is related to Japanese at all, it is only at this level (p. 236). Schematically represented, Hattori's conception is as shown in Figure 1.1 below.

Hattori, in other words, is speculating that the Ainu-Japanese split took place roughly 10,000 years ago (p. 235). Considering the time span of 1,500 years for the

1 Introduction

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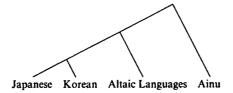


Figure 1.1 The relationship of Japanese to Ainu according to Hattori

split of Romance languages, the Ainu-Japanese connection, if it ever existed, is far beyond our grasp.

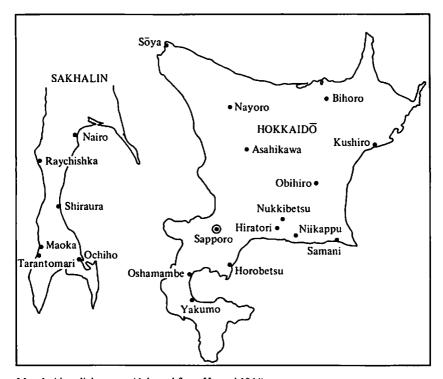
Recently a gallant attempt has been made by James Patrie (1982) to relate Ainu to the Altaic family, and to establish an Ainu-Japanese-Korean subgroup. Patrie, who also gives a good summary of previous attempts in this field, offers 140 Ainu lexical items for his Altaic hypothesis and a total of 221 Ainu lexical items for the above-mentioned subgroup. While Patrie's work is the only serious and substantial comparative and historical work on Ainu, it has received mixed appraisals from the specialists ranging from encouraging (Miller 1983) to quite unfavorable (Street 1983).

Dialects: Paralleling the original regions of Ainu habitation, three large dialect groups are recognized; namely, the Kurile group, the Sakhalin group, and the Hokkaidō group. Among the Sakhalin group, the eastern coastal dialect of Taraika is said to be markedly different from the speech of the other areas. The Raychishka dialect is a representative west coast dialect and has been studied extensively (see below).

The Hokkaidō group is normally sub-divided into southern and eastern groupings. The differences among the dialects are said to be more phonological and lexical in nature than grammatical. In 1955, Hattori Shirō and Chiri Mashiho and their investigative team set out to investigate the various Ainu dialects of Hokkaidō covering nineteen regions, and including data from the Sakhalin expatriates (see Map 1 below).

In the introduction to the resulting dialect dictionary, Hattori summarizes the relationship among the dialects as follows:

- There is a great gap between the Hokkaidō dialects and those of Sakhalin.
- (ii) Sōya is a Hokkaidō dialect which is relatively distinct from and closer to the Sakhalin dialects than the other dialects of Hokkaidō.
- (iii) Among the Hokkaidō dialects, some are closer to each other, forming sub-groups, than others, e.g. Yakumo and Oshamambe; Nukkibetsu,



Map 1 Ainu dialect map (Adapted from Hattori 1964)

Hiratori and Niikappu; Obihiro, Kushiro and Bihoro; etc. If we choose one from each group and compare them, e.g. Oshamambe, Hiratori, Nayoro and Bihoro, we find that the differences between them are quite substantial.

(iv) A considerable gap is seen between Samani on the one hand, and Niikappu, Hiratori, Nukkibetsu (and Horobetsu) on the other; and this is of some significance, because there is also a marked difference in other cultural aspects between these districts. It is also to be noted that Samani is lexicostatistically rather close to Obihiro and Kushiro. (paraphrasing Hattori 1964:38)

1.4 Data

The description of Ainu presented here is largely based on data collected and analyzed by Ainu specialists. The foremost of these specialists is Kindaichi Kyōsuke, whose work has concentrated on the collecting, transcribing, and translating of *yukar* and on writing the grammar thereof. Kindaichi's eight-volume

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collection of yukar, Yūkarashū (1959-64), compiled in collaboration with an Ainu speaker and accomplished yukar reciter, Mrs. Kannari Matsu, along with his grammar of Ainu, included in his 1960 volume, together constitute perhaps the most comprehensive and accessible materials to be found on Hokkaidō Ainu.

Chiri Mashiho (1902-61) was a Japanese-monolingual Ainu who, under Kindaichi's tutelage, specialized in the language of his people. Chiri (1936) updated Kindaichi's grammar, and wrote grammatical sketches himself, but his contributions are most strongly felt in the area of Ainu lexicography and the etymological studies of Ainu place names.

Recently, a sizable body of data in the form of recording tapes and text, as well as a grammar of Sakhalin Ainu (Raychishka dialect) have been made available by Murasaki Kyōko (1976, 1977). Murasaki's work was carried out largely with the help of perhaps the last fluent speaker of Sakhalin Ainu, Mrs. Fujiyama Haru (deceased in 1974), and it stands as a great addition to the corpus of data on Ainu languages. An English outline of Murasaki's grammar was published in 1978.

Numerous articles on the Saru dialect have been published by Tamura Suzuko. These articles together cover a substantial portion of the grammar of this dialect, which is a main dialect of the Hidaka area and a direct descendant of Classical Ainu as represented by the version of *yukar* "Itadorimaru", described by Kindaichi, Chiri, and below.

While these materials are written mainly in Japanese, a grammar of the Shizunai dialect has been published in English recently. Kirsten Refsing's *The Ainu Language* (1986) is an important contribution to the meager source of Ainu materials in European languages.

Finally, Batchelor's An Ainu-English-Japanese Dictionary (reprinted in 1981), which has a section on the grammar, and Hattori's Ainugo hōgen jiten (An Ainu Dialect Dictionary; published in 1964) provide the lexicographical materials.

Among these materials, the following description and analysis most heavily depend on the works of Kindaichi and Chiri. Additional, new materials were sought in the following two sources. The *yukar* "Kutune Shirka", or "Itadorimaru" in Japanese, is one of the principal *yukar*, which Kindaichi transcribed and translated and upon which he based his grammar. The title refers to a magic sword that protects the hero of the epic, which relates various fightings over the golden sea otter caught by the hero. Those examples indicated as (Itadori) at the end of the cited forms are the ones newly culled from the first version in Kindaichi (1931) of the *yukar* "Itadorimaru", which is about 10,000 (Ainu) words long.

Additional colloquial examples come from the book Ku sukup oruspe (My Life Story) by Mrs. Sunasawa Kura. Mrs. Sunasawa, an Ainu born in 1897, wrote down memories of her life in her native language, the Ishikari dialect of Ainu, using the

Japanese kana syllabary together with Japanese translation. Her materials of roughly 10,000 words were edited as well as transliterated into near-phonemic form by members of the Linguistics Department of Hokkaidō University before being published in book form in 1983.

The Ishikari dialect of the region that spreads between Sapporo and Asahikawa (see Map 1) differs slightly from Kindaichi's and Chiri's colloquial grammars, which, like Tamura's work on the Saru dialect and Refsing's on the Shizunai dialect, are based on the southern dialects centering around the Hidaka region. A brief sketch of the Ishikari dialect is found in Asai (1970).

In the following discussion, the examples from Mrs. Sunasawa's memoirs are indicated by the notation (Ishikari), whereas those followed by the notations (Sakhalin) and (Saru) are borrowed from the work of Murasaki and Tamura, respectively. Those examples without any indications of regions or source are from the grammars of Kindaichi and Chiri. The transcription of the examples, especially of those from Kindaichi's and Chiri's work, have been regularized in near-phonemic form so as to be consistent with the practice of contemporary Ainu specialists.

Many of the theoretically interesting word-formation processes which characterize Ainu as a polysynthetic language occur in Classical Ainu, and our more theoretically oriented discussion makes many references to the language of yukar. In this regard this contribution complements Refsing's recent work on the colloquial language of the Shizunai area.

Sound structure

Ainu has a relatively simple phonology. In what follows only the most salient features of Ainu phonetics and phonology are presented.

2.1 Vowels

Ainu has five vowels, as shown in Table 2.1 below.

There is no contrast between short and long vowels in Hokkaidō Ainu. Diphthongs such as ai, ui, au, etc. involve devocalization leading to the pronunciation [aj], [uj], [aw], etc. and transcribed as ay, uy, aw, etc. in the cited forms in the text. Syllable initial vowels are preceded by a glottal stop, e.g. aynu [?ajnu] 'person', and this fact makes Ainu syllables conform to one of the following types: CV, CVC (for Hokkaidō Ainu), or CV, CVV (long vowel), CVC (for Sakhalin Ainu). The glottal stop is not written in the transliterations below.

2.2 Consonants

The consonantal system is shown in Table 2.2 below.

There is no voicing contrast among the stops. In final position they are unreleased. The combination [ti] does not occur. Since the morpheme final [t] turns to [ts] when a suffix beginning in [i] is added, the absence of [ti] can be attributed to the phonetic rule: $/t/ \rightarrow [ts] / i - a$ rule observed in Japanese as well. (Cf. the alternation in [mat] 'wife' [a-matsi] 'my wise'.) The affricate /c/ freely varies among [ts], [ts], [d3], and [dz]. The fricative /s/ is realized either as [s] or [s]; the [s] sound occurs consistently before [i], and in syllable-final position.

The semivowels /w/ and /y/ occur with all vowels except for [u] and [i], respectively; i.e. the sequences [wu] and [ji] do not occur.

The alveolar nasal [n] may optionally velarize and become [n] before [k]. The flap [r] devoices after [k] and [p], while after [t] it not only devoices but also exhibits slight frication, and after [f], it is devoiced and completely fricated.

All consonants occur in syllable-initial position. In syllable-final position, all except /c/, /h/, and /?/ may occur. In Sakhalin Ainu syllable final stops (/p/, /t/,

Table 2.1. The five vowels of Ainu

		
i		u
e		0
	a	

Table 2.2. The consonantal system of Ainu

p	t	k	7
	s		h
	С		
w	у		
m	n		
	r		

/k/) have turned into /h/, and the final /r/ has become either /h/ or the sequence of /r/ plus a vowel.

2.3 Accent

Ainu has a pitch accent system in which syllables are pronounced with high or low pitch. In words consisting of stems and affixes, the stems have high pitch, e.g.

(1) nú-pa 'hear (plural object)' nú-re 'hear-CAUS' ku-nú '1st Person-hear'

In other two- and three-syllable words, high-pitch falls on the first syllable if it is either a diphthong or a closed syllable, e.g.

(2) áynu 'person'
úyna 'ash'
árpa 'to go'
pirka 'pretty'
ókkay 'boy'

In all other words, high pitch occurs in the second syllable, e.g.

(3) kirá 'to flee' cisé 'house' netópa 'body'

2.4 Phonological processes

Ainu has a strong tendency to avoid vowel sequences, and a number of phonological processes operate just to effect this tendency. We have already noted that in

diphthongs such as ai and ui the second vowels are devocalized and pronounced as [aj] and [uj].

The semivowels w and y are inserted when high vowels are followed by other vowels; w is inserted following u, and y after i:

(4) *u-asur-ani* → *uwasurani* 'talk about rumors to each other' i-ekarkar → iyekarkar 'do something to me'

Other means of avoiding vowel sequences are as follows: (1) Two identical vowels are reduced to one, e.g. kera + an 'taste + exist' $\rightarrow keran$ 'tasty'. (2) When two different vowels come together, the first is normally elided, e.g. ine + an + kur 'which + exist + person' $\rightarrow inankur$ 'which person'.

A number of assimilatory and dissimilatory processes are also observed – the most prominent among them involving the sonorant consonants, n and the flap r. Syllable final r turns into n before n and into t before t:

(5) akor nispa → akon nispa 'our chief'

pekor nupe → pekon nupe 'sparkling tears'

akor tures → akot tures 'our sister'

akor totto → akot totto 'our mother'

r before another r dissimilates and becomes n:

(6) kukor rusuy → kukon rusuy 'I want to have (something)' kor rametok → kon rametok 'his bravery'

In other words, rn, rt, rr become nn, tt, and nr, respectively.

Final n assimilates to following bilabial sounds (m and p) and becomes m:

(7) pon-pe → pompe 'small thing'
pon menoko → pom menoko 'small girl'

Final n is also affected by a following y or s, in which case it becomes y:

(8) pon yuk → poy yuk 'small deer' pon seta → poy seta 'small dog'

2.5 Vocalic euphony

Among the phonological phenomena of Ainu, perhaps the one with the most interesting genetic and typological considerations is the possible existence of vowel harmony pointed out by Chiri (1952).

Chiri examined two grammatical categories that involve the suffixation of vowel affixes in their formation. One category is a group of verbs with their transitive affixes, the other category being nouns with pronominal affixes. In the case of

Table 2.3. The three vowel groups

A group:	a, u
B group:	o
C group:	i, e

transitive verbs of this group, they are derived either from intransitive verbs or verb roots, which participate in various verbal derivations but do not stand as free morphemes. As can be observed below, all the five vowels are involved here:

(9)	intransitive Vs or V roots	transitive Vs		
	mak-	mak-a	'open'	
	kay	kay-e	'bend'	
	as	as-i	'stand up'	
	kom-	kom-o	'fold'	
	yak	yak-u	'mash'	

Nouns in Ainu are made into personal forms when they are used with reference to a possessor (cf. section 3.4.2). In the formation of the personal forms of nouns, again all the five vowels are used, as is seen below:

(10)	basic form		personal form	
	ka	'string'	ka-a	'his string'
	haw	'voice'	haw-e	'his voice'
	mon	'and'	mon-i	'his hand'
	tom	'inside'	tom-o	'inside of him'
	tap	'shoulder'	tap-u	'his shoulder'

In both transitive verbs and the personal forms of nouns, the vowel affixes are not interchangeable, and Chiri set out to examine the co-occurrence relationships between the stem vowels and affix vowels. Chiri's investigation led to the following discovery.

The vowels are classifiable into three groups as shown in Table 2.3. Among the members of these three groups: (i) the members of the same group may co-occur, e.g. a-a, a-u, o-o, i-i are possible, (ii) the vowels of C group, i and e may co-occur with either the A group vowels or the B group vowel, and (iii) the A group vowels and the B group vowel may not co-occur.

Put in the terms used in the literature of vowel harmony, the front vowels i and e are neutral vowels, occurring with any vowel. Among the back vowels, the peripheral ones a and u form a harmonic set in opposition to the mid vowel o; when the stem vowel is a peripheral vowel, the affixal vowel, if it is a back vowel,

2 Sound structure 15

must be one of the two peripheral vowels, and when the stem vowel is o, the affixal vowel must be o.

Chiri likens the above co-occurrence relationships among these vowels to the vowel harmony phenomena found in Uralic and Altaic languages, as well as to those observed in African and American Indian languages. Indeed, the observation that the front vowels i and e are neutral is consistent with the facts of Uralic (but not of Altaic) languages, e.g. in Hungarian both i and e are neutral. However, there are a number of important differences between the situation in Ainu and the prototypical case of vowel harmony.

First, in typical instances of vowel harmony, the harmonic sets have a well-defined phonetic basis. In Uralic and Altaic languages, the harmonic sets are differentiated in terms of the backness and the roundedness of the vowels, while in many African languages the tongue-root position is a basis for harmonic sets. However, in the case of Ainu there is no clear phonetic basis separating the set consisting of a and u from the one consisting of o. In the above description, we used the expression "peripheral" for a and u, but "peripheral" is itself not an established phonetic feature for vowels, and these vowels simply do not seem to form a phonological class that can be motivated by general phonological phenomena exhibited in other languages. Of course, there is always a possibility that a well-defined system has changed into some form which synchronically lacks clear phonetic motivations. And thus, the Ainu system might have an origin in the tongue-root system.

Secondly, in typical cases of vowel harmony, the suffix vowels alternate according to the stem vowel, and, given a limited amount of information about the suffix vowel, the entire phonetic shape of the vowel is predictable on the basis of stem vowel qualities. However, this is not found to be the case for Ainu. Take, for example, the personal forms of nouns, ka-a 'his string' and tap-u 'his shoulder'. Even if we know that the suffix vowels are back, non-mid vowels, there is no way to predict that ka 'string' takes -a and tap 'shoulder' -u.

The plural suffix on verbs is consistently -pa regardless of the stem vowel, thus permitting forms such as kom-pa 'to bend many things', where the o-a sequence occurs. In addition, there are non-derived forms such as kotan 'village' and poru 'cave', in which o-a and o-u sequences occur, contrary to the restrictions posited by Chiri.

These considerations lead us to conclude that the vocalic euphony noticed by Chiri is characteristically different from typical cases of vowel harmony, thus reducing its value as a typological feature or as a clue for genetic classification.

Grammatical structure

Ainu is a so-called SOV language – a language in which the major constituents, subject, object and verb, occur in that order. The general pattern of modification and other features associated with basic word order are consistent with the characteristics exhibited by other typical SOV languages such as Japanese and Korean. One notable exceptional characteristic of Ainu as an ideal SOV language is the prevalent occurrence of prefixes. Contributing to its polysynthetic character, Ainu verbs are marked by affixes (both prefixes and suffixes) that agree with the subject and object in person and number; voice, reciprocals, reflexives, and other derivational functions are also predominantly marked by affixes. The personal (agreement) affixes that mark verbs are also attached to nouns in possessive expressions.

In traditional Ainu scholarship, Ainu is considered to be an incorporating language based on the fact that both the subject and object have agreement affixes on the verb. However, this would not normally be considered a principal feature characterizing an incorporating language, whose normal defining characteristic is the complete incorporation of object and/or subject nouns into the verb. Leaving aside the problem of the traditional characterization of Ainu as an incorporating language, Ainu does present the characteristics of an incorporating language. Indeed, Ainu verbs incorporate not only nouns but adverbs as well, along with various other relational functions, which are alternatively expressible by means of postpositional particles or by means of applicative affixes. Attributive verbs (adjectives) also appear to be incorporable into the head nouns within noun phrases. And finally, there is an instance of the incorporation of an attributive verb into another attributive verb. This extensive incorporation and concentration of various morphemes in the verb has been correctly recognized as a characteristic of polysynthetic languages by the Ainu specialists. It is in this area that Ainu offers unique, interesting, and sometimes devastating data to those theories of incorporation hitherto offered (see section 3.5.7).

The polysyntheticity, however, is mostly a characteristic of the language of the epics, i.e. Classical Ainu, while in the colloquial language, analytic expressions are

more common. In other words, Ainu, along with Chukchi (see Comrie 1981), offers a case of metamorphosis from a polysynthetic language to an analytic language.

Ainu has no tense distinctions such as the present and past tenses of English. The plain verbal form of action or process is best translated as a simple past tense expression. Thus, for example, *ku-itak* '1sG-speak' is translated as 'I spoke'. The lack of tense distinctions is compensated for by a rich system of aspectual expressions.

3.1 Sentence types

3.1.1 Simplex sentences

Since Ainu has person marked on predicates, many sentences do not have overt subjects, e.g.

(11) a. Ku-itak.

lsG-speak
'I spoke.'
b. E-itak.

2sG-speak
'You (sG) spoke.'
c. Itak.

speak

'He spoke.'

The bare verbal form is used for a third-person subject shown in (11c), which indicates that the third-person subject marker is zero, and in an imperative sentence. This type of sentence is of course limited to situations where the subjects are pronominal and their referents are understood from the context. Examples of full intransitive sentences are given below.

(12) Intransitive sentences

a. Kuani ku-itak.

I lsg-speak

'I spoke.'

b. Aynu ek. person come

'A person came.'

c. Pon turesi ka isam. (Ishikari) small sister too die
'The small sister too died.'

Forms corresponding to adjectives in meaning and function of other languages function as predicates in exactly the same way as intransitive verbs. Not only do they share the same personal affixes, but they both function as nominal modifiers in exactly the same way (section 3.3). Furthermore, these forms can have an inchoative reading, as well as their basic stative one. For example, poro 'big' can also mean 'become big'. On the basis of this inchoative interpretation, these forms, just like intransitive verbs, yield imperatives, with the reading 'become X', as in Tunasno pirka! (quickly good) 'Get well quickly!' Thus, there does not seem to be any need to set up an independent category for adjectives in Ainu.

(13) Stative sentences

a. Ku-pirka.

1sG-good

'I am good./I became rich.'

b. Toan nupuri ri.
that mountain high

'That mountain is high.'

c. Rera ruy.
wind strong
'The wind is strong.'

Transitive and ditransitive verbs take different sets of personal affixes from those of intransitive verbs. Since the copula belongs to the former group of verbs, the distinction between intransitive verbs and transitive verbs is made on the basis of whether a given verb is self-contained semantically with just a subject noun or whether it requires an additional element (complement or object) for semantic completeness.

Transitive sentences, however, also occur without an independent subject and object when these are pronominals, as in (14a) below.

(14) Transitive and ditransitive sentences

a. A-e-koyki. (Itadori) Isg-2sg-kill

'I kill you.'

b. Kindaichi tono nispa ku-nukar. (Ishikari)

chief sir 1sG-see

'I met Mr. Kindaichi.'

c. Kamuy umma rayke.

bear horse kill

'A bear killed a horse.'

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d. Kuani pon turesi ku-kay. (Ishikari)
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I small sister 1sG-carry

'I carried the little sister on my back.'

e. Tampe huci ku-kore.

this g. mother 1sG-give

'I gave this to Grandmother.'

f. Ahci mahpooho kosonto miire. (Sakhalin)

g. mother girl Sunday best dress

'Grandmother put the Sunday best on the girl.'

The copula ne also takes the same personal affixes as do transitive verbs.

(15) Copular sentences

a. Kuani Aynu ku-ne.

1sG-be

'I am an Ainu.'

b. Eani sisam e-ne.

you Japanese 2sG-be

'You are a Japanese.'

c. Tan-kur poro nispa ne.

this-person great chief be

'This person is a great chief.'

d. Orwa ku-kor kotan ta oray-as. (Ishikari)

then IsG-have village in be(PL)-IPL

'And then, we were in my village.'

Like other stative verbs, the copula *ne* can have the inchoative reading, meaning 'to become X', and therefore, sentence (15c) above, can also mean 'This person became a great chief.' Notice the plural suppletive copula form *oray* in (15d), which has been selected by the plural subject (see section 3.5.4).

As in many other languages, expressions referring to meteorological phenomena and ambient states are subjectless, e.g.

(16) a. Sirsesek. 'It's hot.'

b. Sirpeker. 'It dawns.'

c. Sirhutne. 'It's narrow.'

d. Mean. 'It's cold.'

Sir- used in (16a)-(16c) originally referred to 'land' or 'place', but now it is used almost like a prefix for expressions of meteorological or ambient conditions. *Mean* in (16c) can be etymologically analyzed as me 'coldness' plus the verb an 'exist'. In

fact, all these subjectless intransitive expressions can be analyzed as a case of noun incorporation, where the subject of an intransitive clause is incorporated into the verb (see section 3.5.7).

3.1.2 Compound and complex sentences

Compound and complex sentences consisting of more than two simplex clauses involve various kinds of conjunctions, most of which function as subordinating conjunctions.

Wa is a coordinate conjunctive particle whose function is similar to the English and.

- (17) a. Arpa wa nukar!
 go and see
 'Go and see!'
 - b. Tunas ipe wa tunas mokor wa tunas hopuni! quickly eat and quickly sleep and quickly get up 'Eat quickly, sleep quickly, and get up quickly.'
 - c. Ku-kor- kur sinen ne kim ta an wa en-ekari IsG-have- man alone be mountain in be and IsG/O-meet san. (Ishikari) descend

'My husband was in the mountain alone and he came down to meet me.'

In the Sakhalin dialect, wa is also used to indicate two simultaneous activities that are perceived as one coherent action, e.g.

- (18) a. ahkas wa eh
 walk and come
 'come walking (i.e. come on foot)'
 - b. ampa wa eh
 carry and come
 'come carrying something'

Both of these uses of wa correspond to those of the Japanese conjunctive ending -te, e.g.

(19) a. kat-te kuru
buy come
'buy and come (back)'

in:

b. arui-te kuru
walk come
'come walking (i.e. come on foot)'

The conjunctive particle wa is limited to the conjoining of sentences and verbal phrases. (Conjoined noun phrases are mediated by the particle newa or most likely to be simply juxtaposed without any mediating particle.)

Subordinating conjunctions occur after subordinated clauses, which come before main clauses.

- (20) kusu 'because, in order to'
 - a. E-eh kusu anekiroro-an. (Sakhalin)
 2sG-come because happy IsG
 'Because you came, I am happy.'
 - b. Ku-siyeye kusu Asahikawa otta ku-kor toy an kusu

 1sG-get sick because in 1sG-have land be because
 page-as. (Ishikari)
 go-1PL

'Because I got sick (and) because I had land in Asahikawa, we went (there).'

(21) korka 'even though'

Ku-kor ku-yupe ku-nukar rusuy korka tuyma-mo an kusu lsG-have lsG-brother lsG-see want though far away be because ene ku-kari isam.

any 1sG-do not

'Even though I want to see my brother, I can't do anything because he is far away.'

(22) yak, yakun 'if/even if'

A-kor irenka wen a yakun ayanurayke, e-kor irenka wen 1sG-have heart bad PERF if (I) get killed, 2sG-have heart bad a yakun aeanunrayke-ki kusu-ne na, hetak itura!

PERF if (you) get killed supposed to be now come

'It is supposed to be the case that if my heart is bad, I get killed, and if your heart is bad, you get killed; now come on!' (from a fighting scene)

3.2 Word order

As may be observed in the examples given above, Ainu is an SOV language. Since there are no case inflections on nouns, word order plays as important a role as in English in determining the grammatical functions of certain nouns. For example, in the following sentences the difference in meaning can be attributed solely to word order:

(23) a. Kamuy aynu rayke.
bear person kill
'The bear killed the man.'
b. Aynu kamuy rayke.
'The man killed the bear.'

However, when the context or the semantics of the sentence prevents an incorrect interpretation, the inversion of the basic word order does occur in both Classical and colloquial Ainu, as shown in the following examples, in which OSV order is observed.

(24) a. Kane rakko arespa kamuy ronnu. (Itadori)
golden otter raised god kill
'The god (= hero) raised (by us) killed the golden sea otter.'
b. Amam totto esose wa... (Ishikari)
rice mother borrow and
'Mother borrowed rice and...'

Ainu exhibits the word-order patterns of various grammatical elements in a manner characteristic of SOV languages such as Japanese and Korean.

(25) a. noun + postposition
cise ta
home at
'at home'
b. attribute + noun
pirka kewtum
good heart
'good heart'
c. relative clause + noun
[beko reska] sisam (Ishikari)
cow raise Japanese
'a Japanese who raises cows'
d. genitive + noun
sapo ninkarihi

sister carrings 'sister's earrings'

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Ċ.

12%

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e. demonstrative + noun

toan seta

that dog

'that dog'

f. quantifier + noun
```

f. quantifier + noun sine aynu one 'one person'

g. proper noun + common noun

Risa unarpe aunt

'Aunt Risa'

h. adverb + verb turasno paye quickly go

'go quickly'

i. verb + auxiliary

a-e rusuy

1sG-eat want

'want to eat'

 j. standard + marker + adjective/stative verb menoko kasuno okirasnu woman than strong 'stronger than woman'

k. final question particle
 Pirka-p ne ya
 rich-person be Q
 'Is (he) a rich person?'

The only exception to the above SOV pattern is the order of the negative and the verb. In Japanese, the negative follows the verb as in *ika-nai* (go-not) 'do not go', but in Ainu the negative precedes the verb as in *somo ku-oman* (not 1sG-go) '(I) do not go.' Korean, which is a strict SOV language, has preverbal as well as postverbal negative expressions, e.g. ani kanda (not go) 'does not go' kaji antha (go not) 'does not go'. This difference is due to the existence of two distinct types of negatives; ones that are adverbial and ones that are predicative. That is, the Ainu negative form somo is an adverb that negates what a verb expresses by modifying it. The non-predicate status of somo is indicated by the fact that it does not take any personal affix. The Japanese negative -nai, on the other hand, is a predicative

auxiliary that inflects for tense and other inflectional categories. The Korean negative an has both of these functions. In SOV-type languages, the adverbial negative occurs before the verb, following the regular adverb-verb order, and the predicative negative after the negated verb. And this is what we see in Ainu (the preverbal adverbial negative), Japanese (the final predicative negative), and Korean (both types).

Also, notice that the desiderative auxiliary does not generally take a personal affix (see (25i)), though there are certain variations as discussed in section 3.5.9.

3.3 Personal affixes

Ainu makes rather extensive use of personal affixes. It is therefore more than appropriate that we set aside a section describing them and their uses at the beginning of our grammatical description of the language.

In both Classical and colloquial Ainu, intransitive and transitive verbs each have distinct sets of personal affixes indicating person and number of the subject and the object.

The subject-marking affixes of Classical Ainu are shown in Tables 3.1 and 3.2. The second-person and third-person (zero) marking are the same for both intransitive and transitive verbs. The intransitive verb *itak* 'speak' and the transitive verb *kor* 'have' have the following forms with personal affixes in Classical Ainu.

(26)	itak-an	'I speak'	itak-an	'we speak'
	e-itak	'you (sG) speak'	eci-itak	'you (PL) speak'
	itak	'he/she speaks'	itak	'they speak'

Table 3.1. Classical Ainu intransitive subject marking

	Singular	Plural
1st person	-an	-an
2nd person	e-	eci-
3rd person	Ø	ø

Table 3.2. Classical Ainu transitive subject marking

	Singular	Plural
1st person	a-	a-
2nd person	e-	eci-
3rd person	ø	ø

Table 3.3.	Classical	Ainu oi	hiect	marking
1 4010 5.5.	Cimonicai	710/1W 1/1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	mur icing

	Singular	Plural
1st person	i-	i-
2nd person	e-	eci-
3rd person	ø	ø

Plurality of a third-person subject can be indicated by the suffix -pa or the suppletive forms; thus *itak-pa* 'they speak' and *kor-pa* 'they have' are also possible (see section 3.5.4 on the plural verb forms).

The copula *ne* 'be, become, looks like' and its derived transitive verbs (section 3.5.3) all utilize the transitive subject markers, since, as mentioned earlier, the transitivity in Ainu is determined on the basis of whether an expression is semantically complete with one argument or not.

In addition to subject-marking affixes, transitive verbs take object-marking personal affixes as well. They are as shown in Table 3.3.

Just as the difference between intransitive and transitive subject affixes is only observed with the first person, the object affixes and the two systems of the subject affixes also differ only with respect to the first-person marker. That is, the second-person affixes e- (sG) and eci- (PL) mark both subject and object, and for third-person marking the affix is zero whether it is subject or object. To summarize then, the first-person category makes the greatest distinction; in this category the transitive and intransitive subject markers differ, and these in turn differ from the object marker as well, though the number is not distinguished in any of them. In the second-person category, neither the transitivity of the verb nor the subject-object distinction is indicated, though the number is distinguished. And in the third-person category, none of these distinctions is made.

Again, the plurality of an object noun can be indicated by the suffix -pa or the suppletive plural verb forms (see section 3.5.4).

Examples of verb forms marked by the subject and object affixes are given below. The order of affixation is seen to be subject—object.

```
c. e -i -kore 'you give me/us'

2sG -lsG/PL -give
d. e-kore 'you give him'
e. i-kore 'he/she gives me/us'
f. e-kore 'he/she gives you'
g. kore 'he/she gives him/her'
```

Because the affix e- is used both as a second-person subject marker and as a second-person object marker, and because the third person has no marking, (28d) and (28f) have the same form; in the former, e- marks the second-person subject, whereas the third-person object marker is zero, and in the latter, e- marks the second-person object, the third-person subject being zero. Indeed, due to the fact that the second person and the third person have the same affixes for subject and object marking, ambiguous forms of this type are numerous.

The personal affixes in Table 3.3 function as "object" markers, and "object" here is to be understood as grammatical objects. This point is important, for semantically oblique adjuncts, such as the benefactive or the abstract goal of an action, can be made object by what is called applicative formation, a mechanism that turns an oblique into an object. The object so derived triggers the object-personal affixes. Thus, the forms in (30) contrast with the one in (29), which has, at some level of representation, a basic object.

- (29) i- sosiekatta i- nimpa lsG/o- take out lsG/o drag '(He) took me outside and dragged me'
- (30) a. a- urepet kasi i- ko-oterke

 lsG- toes -top lsG/O- APPL-step

 'he stepped (me) on the top of my toes'
 - b. Ci-tunas-rayke i-e-karkar wa i-korpare yan!
 INDEF-fast-kill 1SG/O-APPL-do and 1SG/O-give IMP
 'Please do the quick killing for me and give me.' = 'Do me the favor of doing the quick killing for me.'

The occurrence of the applicative affixes ko- and e- in (30) indicates that the unsurfaced first-person nominal was not the basic object. Indeed, the verbs oterke 'step on' and karkar 'do' are two-place predicates that, in their basic function, take only one object argument each. In (30a), the basic object is "the top of my toes", and in (30b) "quick killing". The first-person object marking in these examples has been made possible by the application of applicative formation, which has turned

Table 3.4. Colloquial Ainu intransitive subject marking

Table 3.5. Colloquial Ainu transitive subject marking

	Singular	Plural
1st person	ku-	ci- (EXCL) a- (an-) (INCL)
2nd person	e-	eci- (-es)
3rd person	Ø	Ø

Table 3.6. Colloquial Ainu object marking

	Singular	Plural
1st person	en-	uni (EXCL) i- (INCL)
2nd person	e-	eci- (es-)
3rd person	Ø	Ø

((EXCL) and (INCL) refer to "exclusive" and "inclusive" respectively, and the forms in parentheses indicate those suffixes unique to the Ishikari dialect.)

the originally oblique nominals referring to the first person into grammatical objects (see section 3.5.7 on applicative formation).

Colloquial Ainu has the personal affixes shown in Tables 3.4-3.6.

The basic difference between the transitive and intransitive systems lies in the first-person plural affixes, all other forms being neutralized. In both systems the inclusive forms of the first-person plural are used as second-person honorific forms for both singular and plural. The plural suffix -pa noted earlier is also used for indicating plurality of the subject (or the object).

Again, the inclusive form of the first-person plural is used as the second-person honorific form for both singular and plural. As was the case for Classical Ainu, the differences in the affixal system in the colloquial language are observed in the

first person. Also notice that the second- and third-person affixes are basically the same in both Classical and colloquial Ainu.

It is noted that the exclusive/inclusive categories in the colloquial language developed using the first-person affixes of the classical language as the inclusive forms. The intransitive inclusive affix -an is the intransitive first-person subject affix in the classical language; the transitive inclusive subject affix a- is the transitive first-person subject affix in the classical language; and the transitive inclusive object affix i- is the transitive first-person object affix in the classical language.

For transitive verbs, combinations of the transitive subject-marking affixes and the object-marking affixes occur as in Classical Ainu. However, in the colloquial language, certain combinations have been collapsed and have thus lost their analyticity. That is, the following combinations have all been neutralized and reduced to *eci*-.

Other combinations of transitive subject and object affixes are preserved, e.g.

```
(32) a. ku-i-kore
1sG-2HON-give
'I give you (HON)'
b. e-en-kore
2sG-1sG
'you give me'
c. eci-un-kore
2PL-1PL
'you (PL) give us'
```

In the Ishikari dialect, the collapsing of different affix combinations shown in (31) is not seen, but one peculiarity in this dialect is that the intransitive first-person plural suffixes, -an and -as, are used as transitive subject suffixes in combination with the second-person object affixes. That is, where the combinations of ku-e-(1sG/s-2sG/O), ei-es- (1PL-EX/s-2PL/O), etc. are expected, the combinations of e-...-an and es-...-as, etc. occur.

As mentioned earlier, adjectives are subsumed in the category of intransitive verbs and take the same subject-marking personal affixes as do intransitive verbs, i.e. those listed in Tables 3.1 and 3.4.

In addition to subject and object marking, the personal affixes have several other functions. One of them is person marking on the possessive forms of nouns (see section 3.4.2). Here the transitive subject-marking affixes indicate the nature of the possessor, e.g. mat 'wife', a-maci (Classical) 'my wife', ku-maci (Colloquial) 'my wife'.

Certain of the subject-marking personal affixes, in particular the Classical Ainu first-person plural marker a- and the colloquial first-person exclusive ci-, have other uses as well. (Both of these forms have very similar uses.) A- is often used to indicate indefiniteness of the personal reference; e.g. mi-p 'things to wear' means 'clothes' in the form of a-mi-p, which literally means 'things we wear'. Similarly, cip a-mukar, literally 'we see a ship', means something more like 'a ship is visible' and can be used even if only one person sees the ship. It is through this indefinite use of a- that it developed into a passive-forming prefix (section 3.5.6).

As for the prefix ci-, there are forms such as ci-ku-p 'things we drink, i.e. Ainu wine', ci-ronnu-p 'things we kill, i.e. foxes'. Middle-voice expressions with ci-are exemplified by maknaraye 'send backward', ci-maknaraye 'go backward' and riknapuni 'send upward', ci-rikunapuni 'go upward'. The affixation of ci- also produces attributive forms of passive force (see section 3.4.6).

Object-marking personal affixes can also mark locational and directional forms such as *orowa* 'from there' and *orota* 'there', e.g. *en-orota* 'to me', *e-orota* 'to you', *e-orowa* 'from you', *orowa* 'from him'.

- (33) En- orota oka yan! ISG- there come IMP 'Come to my place!'
- (34) E- orowa ku-nu. 2sG- from there IsG-hear 'I heard from you.'

3.4 Nominal constructions

3.4.1 Pronouns

Since Ainu has personal affix marking on the verb, personal pronouns normally do not surface. When they do, they convey added meaning such as "as for me", "if it were me", etc. Chiri (1936) likens the use of the Ainu personal pronouns to those of Latin and French, and contends that the following expressions are parallel in their use of the overt pronoun (Ainu kuani T, Latin ego, and French moi).

- (35) a. Kuani ku-eraman.
 - I IsG-know
 - 'I know.'
 - b. Ego scio.
 - c. Moi je sais.

	Singular		Plural	
	Classical	Colloquial	Classical	Colloquial
1st person	asinuma	kuani	aoka (i)	aoka (i) (INCL)
2nd person	esinuma	eani aoka (i) (HON)	ecioka (i)	ecioka (i) aoka (i) (HON)
3rd person	sinuma	ani	oka (i)	oka (i)

Table 3.7. Ainu personal pronouns

The list of personal pronouns is given in Table 3.7.

These personal pronouns are derived from any one of several existential verbs meaning "to exist". The first-person pronoun kuani, for example, is analyzable as ku- (first-person singular transitive affix), an 'exist', and -i 'nominalizing suffix' (see section 3.4.3). Okay or oka is the plural verb of an. Aoka 'we', therefore, consists of a- (first-person plural inclusive transitive subject affix) and oka 'to exist'. By the same token, e-, eci-, ci- in eani 'you (sG)', ecioka 'you (PL)', and cioka 'we (EXCL)' are all personal affixes.

In the case of *sinuma* 'he', Chiri (1936) analyzes it as *sir-oma*, where *sir-* is presumably related to the ambient prefix *sir-* (see section 3.7) and *oma* is an existential verb. The other Classical forms *asinuma* 'I' and *esinuma* 'you' involve the personal affixes *a-* and *e-* for the respective person.

3.4.2 The noun

Ainu nouns exhibit neither case inflection nor gender distinctions. However, they do show a formal distinction between the forms denoting generic concepts and those denoting specifically possessed objects. The latter forms are marked by possessive personal prefixes and suffixal endings of varying phonological shapes, which yield special possessed forms of nouns. For example, ona 'father' is the form expressing the generic notion 'a father' and ona or onaha together with the first-person prefix ku-, i.e. ku-ona or ku-onaha means 'my father'. The possessive personal affixes are the same as the transitive subject-marking affixes.

The suffixes marking the possessed forms of nouns are of several types. What follow are the most common types involving additions of extra syllables of one kind or another:

(36) a. apa: apa, apaha 'door'
unu: unu, unuhu 'mother'
sapa: sapa, sapaha 'head'

b. ak: aki, akihi
yup: yupi, yupihi
cep: cepi, cepihi
c. kisar: kisara, kisaraha
tek: teke, tekehe
kotor: kotoro, kotoroho
'younger brother'
'fish'
'leg'
'hand'
'mask'

The noun does not change its form to indicate plural number, i.e. there is no number agreement within a noun phrase (sine aynu 'one man', tu aynu 'two men', etc.), and there is no grammatical category of number for full nouns. However, a suffix -utar can be added to indicate plurality as in aynu-utar 'men' and cip-utar 'ships'. This suffix also expresses the meaning 'X and others'. The distinction between 'my older brothers', for example, and 'my older brother and so on' is indicated by the position of the suffix for the possessed form in the word; thus, ku-yup-utar-i 'my older brothers', ku-yup-i-utar 'my older brother and others'.

3.4.3 Nominalizers

There are several suffixes by which nouns are derived from verbs (which include what corresponds to adjectives in other languages). For instance, the suffix -p(e) produces a noun that denotes a person or thing characterized by the meaning of the original verb.

```
(37) a. pirka 'good' pirka-p 'good thing'
b. husko 'old' husko-p 'old thing'
c. wen 'bad' wen-pe 'poor man'
d. ray 'die' ray-pe 'the dead'
```

Two other noun-forming derivational affixes are the suffixes -i and -ike. The former generates nouns having the meaning 'X-place' or 'X-time', and the latter generates nouns with the meaning 'thing' or 'person'.

```
(38) a. esan
                   'go out there'
                   'place that is protruded, i.e. peninsula'
        esan-i
     b. sinean
                   'one, certain'
                   'one place, a certain time'
        sinean-i
     c. pirka
                   'good'
        pirka-ike
                   'goodness, good thing/person'
     d. poro
                   'big'
        poro-ike
                   'bigness, big thing/person'
```

While these forms may indicate that these nominalizing suffixes are simply lexical derivational suffixes that turn one lexical form into another, they, especially -p(e) and -i, in fact function as quite productive and remarkable phrasal as well as clausal nominalizing suffixes.

(39) a. a-hanke-tuyu-p (Itadori)

IsG-near-slash-NOMI

'the one who slashes near me'

b. a-koyki rok-pe (Itadori)

ISG-strike PERF-NOMI

'the one I have fought'

c. tunas ek-pe (Itadori)

fast come-nomi

'the one who comes fast'

d. a-yanene-p yay-kotanoro esina-p

1sG-dislike-nomi refl-village hide-nomi

'what I dislike is hiding one's village (from which one came)'

c. a-kitamsuye

a-tawki rok-i

I sG-slash with a sword IsG-strike PERF-NOMI

'that I have slashed with a sword'

In addition to -p(e) discussed here, there is another suffix -kur (apparently related to the full noun kuru 'person'), which extensively derives nominal expressions from phrases and clauses that yield both idiomatic forms and those that correspond to relative clause expressions with the noun "person" as the head noun in English.

(40) a. ray-kur (Ishikari)

die-person

'the dead'

b kotan kor-kur

village have-person

'the person who has a village = chief'

c. Poiyaumpe rayke wa an-kur (Itadori)

kill and be-person

'the person who killed Poiyaumpe and is around'

d. ku-kor-kur (Ishikari)

1sG-have-person

'the person I have = my husband'

e. Tokaci wa ek pewre-kur (Ishikari)

from come young-person

'the young man who came from Tokachi'

These nominalizing suffixes, then, appear to be functioning as both lexical derivational suffixes and as syntactic clausal nominalizers. In this respect, they are similar to the Japanese nominalizing suffix -sa, which also has a comparable dual function (see Part 2, Chapter 10).

3.4.4 The case particles

There are no inflections or particles that mark either subject or object, these grammatical functions being primarily indicated by word order (section 3.2). The marking of other grammatical relations is realized through the use of postpositional particles. In addition, there is a set of verbal prefixes that, so to speak, incorporate postposition into verbs. The use of verbal prefixes, characterized as the applicative construction by Kindaichi (1931), is a more conspicuous characteristic of Classical Ainu, accounting in part for its polysynthetic nature, whereas the more analytical use of particles occurs commonly in the colloquial language. The applicative construction interacts with the noun incorporation phenomenon, and thus will be discussed separately in section 3.5.7.

The dative particle: The indirect object of a ditransitive verb is indicated by word order and context, but the dative particle *orun* may also be used to mark the goal noun.

- (41) a. Tampe huci ku-kore.

 this g. mother IsG-give
 'I gave this to Grandmother.'
 - b. Huci matkaci orun upaskuma.
 g. mother girl to tell old stories
 'Grandmother told the old stories to the girl.'

Notice that the pronominal personal goal or indirect object is most typically marked in the verb by means of an object-personal affix, as in the following example.

(42) Beko tope poronno en-kore. (Ishikari) cow milk a lot lsG/o-give '(He) gave me a lot of cow's milk.'

Since no case involving two personal objects is found, it is not known which of the two objects, direct or indirect, takes precedence in object marking in the verb. Usual cases involve, like (42) above, a personal indirect object and an inanimate direct object, and the indirect object is marked in the verb – since the inanimate

object is categorized as a third person, there is no marking even if it were to trigger verbal agreement.

The locative particle: ta

(43) a. Poro cise ta horari.

big house in live

'(He) lives in a big house.'

b. Ru piskani ta nupe cikka-p? – niatus.

road both sides to tears drop-thing - pail

'The thing that drops tears at both sides of a road? - A pail.' (riddle)

The allative particle: ta and un

(44) a. Poropet kotan un arpa.

Horobetsu village to go

'(He) went to Horobetsu village.'

b. Kanesanta ta arki.

to come (PL)

'(They) came to Kanesanta.'

c. Tookyoo un hekomo.

lcave

'He leaves for Tokyo.'

d. Yubet ta sirepa-as. (Ishikari)

at arrive-lpL

'We arrived at Yübetsu.'

The ablative particle: wa, orwa and orowa (optionally plus -no)

(45) a. sapa-kitayna wano wakka a-cari

head top from water PASS-throw

'get thrown water from the top of the head'

b. Poropet orwano Shirawoi orpakno

from

'from Horobetsu up to Shiraoi'

c. Newa-anpe orowa tumi-ne.

that thing from fighting-started

'From that thing, the fighting started.'

The particle *orowa* or *orowano* is also used to mark the agent of a passive sentence (see section 3.5.6).

up to

(46) Meko seta orowa a-hospa.
cat dog by PASS-chase
'A cat was chased by a dog.'

The instrumental particle: ari

- (47) a. tek ari kar-pe
 hand with make-thing
 'a thing made by hand'
 - b. kaya ari terkesail by run'run by a sail'

The comitative particle: tura(no)

- (48) a. pone tura kuykuy
 bone with bite
 'bite X together with a bone'
 - b. Totto-utar tura paye-as. (Ishikari)
 mother-et al. with go-IPL
 'We went with mother and others.'
 - c. Ku-kor-kur ku-tura Aspet ta arki-as. (Ishikari)
 my husband 1sG-with to go-1PL
 'My husband and I went to Ashibetsu.'

Notice that *tura* takes the personal affix like a verb, as in (c) above. While the form is translatable as something like "me accompanying", the verb is marked by the plural personal suffix, as if the subject were plural (see section 3.5.4).

The particle newa is to be used when things are enumerated as in 'X and Y'.

(49) Urki newa tayki u-paekoyki. louse and flea REC-quarreled 'A louse and a flea quarreled.'

The translative particle: ne, derived from the verb 'to be, to become':

(50) Su aynu ne yaykar wa rimse.
pot man into turn and dance
'A pot turned into (became) a man and danced.'

The absessive particle: sak or sakno, derived from the verb 'to lack':

(51) a. Epetciw sakno pay yan!
trouble without go IMP
'Go without trouble, i.e. Farewell!'

b. po-sak menoko child-without woman 'woman without a child'

The genitive particle: There is no genitive case particle. The possessive expression takes the form of the possessor noun plus the possessive form of the possessed noun.

(52) a. nea aynu macihi that man wife 'that man's wife'

b. huci sikihig. mother eyes'grandmother's eyes'

c. sapo ninkarihi sister carrings 'sister's carrings'

d. Cita unarpehe aunt 'Chita's aunt'

The genitive relation of personal pronouns can be expressed by the verb kor 'to have' together with an appropriate personal affix followed by the possessed noun.

(53) a. ku-kor mat IsG-have wife 'my wife'

b. e-kor mat 2sg-have wife 'your wife'

c. kor mat 'his wife'

These are essentially relative clause expressions to be translated literally as 'the wife (I) have', 'the wife (you) have', etc. Notice, further, that in this type of expression, which is limited to those cases in which the possessed noun refers to a person, the possessed noun is in the basic (non-possessive) form. The more general possessive expressions are those involving the possessive form of a noun marked by a personal affix (see section 3.4.2).

(54) a. a-maci IsG-wife 'my wife' b. e-maci

2sG-wife

'your wife'

c. maci

'his wife'

In addition to the above case particles, Ainu has quite a few particle-like elements, (a)-(c), as well as locational nouns, (d)-(g), that indicate spatial orientation, e.g.

(55) a. us-or kotan

lagoon village

'a village inside a lagoon'

b. tumpa-orun oka menoko

inside stay woman

'a woman who stayed inside the room'

c. suop-or omare

box-into put in

'put (it) into a box'

d. cise-pok u

house-below at

'below the house'

e tek-utur

hand-between

'between hands'

f. cise-sov

house-outside

'outside of a house'

g. Kotàn-nosiki ta poro cise an.

village-center at big house be

'At the center of the village, there was a large house.'

3.4.5 Topic particle

Corresponding to the topic markers wa and nun of Japanese and Korean, Ainu has the particle anak(ne). While use of this particle does not seem to be as prevalent in yukar as in colloquial Ainu, its function appears to be quite similar to that of the Japanese and Korean topic particles.

(56) a. Otta a-nuye-p anak aynu-itak ne. in there PASS-write-thing TOP Ainu-speak be 'What is written there is the Ainu language.'

b. Ku-kor hampe anakne isoun-kur ne. (Ishikari)
ISG-have father TOP hunting-person be
'My father was a hunter.'

The particle anakne and other particles of emphasis such as amun and easir can, like their Japanese and Korean counterparts, also mark the object and other types of noun phrases as well as adverbials.

(57) a. Sake anakne somo a-ku.

wine TOP not 1sG-drink 'As for wine, I don't drink.'

b. Ku-turesi anakne unarpe otta ci-hoppa. (Ishikari)

1sg-sister top aunt at 1pL-left

'As for my sister, we left (her) at the aunt's place.'

c. Poron-no anakne isam.

many-ADV TOP don't exist

'Many, there aren't.'

d. E-an-hi kusu anakne somo ku-ek.

2sg-exist-nomi because TOP not 1sg-come

'It is because of your presence that I don't come.'

3.4.6 Nominal modification

As mentioned in section 3.2, modifiers precede the noun they modify. This is consistent throughout the modification pattern.

(58) a. ampene pirika sukup aynu 'very good young man' very good young man

b. hetuku cup 'rising sun'

come out sun

c. ci-kave makiri 'broken knife'

INDEF-break knife

d. a-tomte itak 'beautiful voice'

INDEF-beautify voice

c. ramu-an aynu 'wise man'

mind-exist man

f. ramu-sak aynu 'foolish man'

mind-lack man

g. siretok-kor kotan 'beautiful village'

beauty-have village

h. cise-ne sir 'house-like mountain'

house-be mountain

Stative verbs (adjectives) and other intransitive verbs modify nouns without any change in form (e.g. (a) and (b) above); but transitive verbs must be put into the middle (or spontaneous) or passive voice with the use of the prefix ci- or a-, as in (c) and (d) above. Other modifiers are derived from nouns by compounding them with verbs such as an 'exist', sak 'lack', etc. as in the examples (e)-(g) above.

Modification of a noun by a clause, or relative clause modification, involves no relative pronoun and places the relative clauses before the head noun. Due to the lack of relative pronouns and of the third-person affix, the relative expression is often indistinguishable from a simple prenominal modification pattern seen above. A distinction, however, is clearer in the case involving a transitive verb, which, in the case of relative clause modification, either involves personal affix marking or occurs without the voice prefixes a-/ci-.

- (59) a. [Saru orwa ek] sapo (Ishikari)
 from come aunt
 'the aunt who came from Saru'
 - b. [ku-kor hampe rayke] eper (Ishikari)
 1-sg-have father kill bear
 'the bear that killed my father'
 - c. [sisam oskoni] pon pewre-p (Ishikari)

 Japanese catch small small-NOMI

 'the small things (bears) that a Japanese caught'
 - d. [i-resu] casi (Itadori)

 ISG/O-raise mountain castle

 'the mountain castle in which X raised me'
 - e. [pon ekaci ku-kor] nisatke (Ishikari) small child 1sG-have next day 'the next day when I had a baby'
 - f. [ku-kor-kur orwa icen eikura wa ek] kampi (Ishikari)
 my husband from money send and come money order
 'the money order by which my husband sent money and (by which
 the money) came'

Notice that, since there is no third-person marking in the verb, forms like (b) and (c) are potentially ambiguous. (b), for example, can mean 'the bear that my father killed', and only the context tells that it was the father who was killed in (b). Forms relativizing on nominals holding oblique relations, such as (e) and (f), begin to resemble the appositive construction, in which the modifying clause is complete with all necessary arguments, as in the following forms:

(60) a. [aynu ek] hum (Itadori)
man come sound
'the sound of a man's coming'
b. [okkayo cis] sir (Ishikari)
man cry sight
'a sight of a man's crying'

According to Chiri (1953), the instrumental particle *ari* 'with X' and the delimiting particle *patek* 'only X' function as demonstratives with the meanings of 'with that' and 'only that' when they occur independently, e.g.

(61) a. Unuypa wakka a-kar wa ari a-nuye kor tattooing water INDEF-make and with that INDEF-tattoo PROG okay.

be

'Having made tattooing water, (someone) was tattooing with it.'

b. Penampe ciyehe an wa patek kaskamuy ne a-kor.

penis exist and only that protective god be 1sG-have

'There is Penampe's penis, and I have only that as a protective god.'

When these demonstrative forms are left behind in the relative clauses, we obtain forms in which relative clauses appear to contain stranded particles, which indicate the semantic role of the head nominal within a relative clause.

- (62) a. [ari a-nuye kor okay] unuypa wakka
 with that INDEF-tattoo PROG be tattooing water
 (lit.) 'tattooing water (someone) was tattooing with that'
 - b. [patek kaskamuy ne a-kor] Penampe ciyene
 only that protective god be 1sG-have penis
 (lit.) 'the Penampe's penis I have only that as a protective god'

Other devices that give clues to the semantic role of head noun within a relative clause are the applicative prefixes, which mark the semantic oblique status of the derived direct object (see section 3.5.7), and the suffixes marking the possessed form of a noun (section 3.4.2). A verb in a relative clause may have the applicative prefix indicating that the variable bound by the head noun within the relative clause bears a semantically oblique relation, as in (a) below. Also, when the noun within a relative clause occurs in the possessed form without the possessor noun, the head noun is likely to be its possessor, as in (b) from Chiri (1956).

(63) a. [aw-wen cinkeutarikehe e-hohki-hci] an-mosirihi (Sakhalin)

1SG-bad parents and others APPL-die-PL 1SG-country

'my country where my dear parents and others have died'

b. [kisar-aha tanne] isepo

ear-Poss long rabbit

Numerals precede nouns they quantify.

'a rabbit whose ears are long'

(64) a. sine acapo
one uncle
'one uncle' (Ishikari)
b. re erum

three rat

c. asikne suma five rock 'five rocks'

Numerals, however, can be nominalized by suffixing the nominalizer -p(e) (see section 3.4.3) or -n. The nominalized numerals occur after the nominals which they quantify or alone.

(65) a. Aynu sine-p an.
man one exist
'There is one man.'

b. Suma asikne-p e-yapikir.
 rock five 2sG-throw
 'You threw five rocks.'

c. acapo sine-n uncle one 'one uncle' (Ishikari)

d. Sisam re-n tonoto kor. (Ishikari)
Japanese three wine bring
'Three Japanese brought wine.'

e. Sine-p pirka menoko. (Ishikari)
one pretty woman
'One was a pretty woman.'

While the nominalized number and its quantification function appear to be similar to the adverbialized quantifiers, as in the English expression "We are all

happy", it is not known whether such a number can quantify nominals other than a subject nominal (65a, d) and a direct object nominal (65b) – examination of the texts reveals only those cases in which the subject or direct object is quantified, but since no quantified oblique nominals occur in the texts, nothing conclusive can be said about this.

When more than one modifier occurs, numerals precede the attributive verb.

```
(66) a. sine kunne cikap (Ishikari)
one black bird
'one black bird'
b. sine ku-kor acapo (Ishikari)
one ISG-have uncle
'one (of) my uncle'
```

When the personal affix is used to indicate the possessor of a modified noun, there is a possibility of placing the attributive verb before the affixed head noun or after the affix, disrupting the sequence of affix and head noun, as in the following examples.

small IsG-child
'my small child'
a'. a-wen-yupihi (Itadori)
IsG-bad-older brother
'my dear older brother'
b. wen ku-matakihi (Saru)
bad IsG-younger sister
'my dear younger sister'
b'. ku-wen-matakihi (Saru)
IsG-bad-younger sister
'my dear younger sister

(67) a. pon a-poho (Itadori)

1sG-little-younger sister
'my little younger sister'
d. ku-pon-kahkemah (Sakhalin)
1sG-little-young lady

c. ku-pon-tresi (Ishikari)

1sG-little-young lady
'my little young lady'

Furthermore, an attributive verb may cut into the sequence of personal affix and the verb kor 'have', which indicates the possessive relationship between the personal affix and the head noun.

(68) a. pon a-kor yupi (Itadori)
young lsG-have older brother
'my young older brother'
b. a-wen-kor sapo (Itadori)
lsG-bad-have older sister
'my dear older sister'

These phenomena, where attributive verbs cut into the sequence of the personal affix and the head noun, can be considered as a case of incorporation of attributive verbs and will be discussed further in section 3.5.7.

3.5 Predicate constructions

3.5.1 Transitive-intransitive correspondences

A great many intransitive and transitive verb pairs are morphologically related in a number of ways. Some representative correspondence relationships are shown below, where the left column lists intransitive verbs and the right column the corresponding transitive verbs.

(69) a. Vintr -ke Vtr -vowel suffixes mak-ke 'open' mak-a 'open' kom-ke 'bend' kom-o 'bend' mes-ke 'come off' 'tear off' mes-u Vtr -vowel suffixes b. Vintr-ø an 'exist' an-u 'put' as 'stand up' as-i 'stand up' c. Vintr-ø Vtr -ka 'red' hure hure-ka 'redden' mom 'float' mom-ka 'float' hosipi 'return' hosipi-ka 'return' d. Vintr -ø Vtr -ke ahun 'enter' ahun-ke 'send in' 'dry' sat-ke 'dry' sat 'die' ray-ke 'kill' ray

Although these transitive-intransitive pairs exhibit both morphological and semantic relationships, each form must be learned separately, for there is no way to predict which suffix a given form takes. Notice, furthermore, that the suffixes of the same shape (-ke) are used with one group as an intransitive suffix (69a), and in another group as a transitive suffix (69d). The situation here is similar to that

between intransitive verbs and morphologically related transitive verbs in Japanese, where such forms require their own suffixes, and certain suffixes have the same phonetic shape but opposite functions, e.g. ak-u 'to open (intransitive)', ak-e-ru 'to open (transitive)', sak-e-ru 'to split (intransitive)', sak-u 'to split (transitive)'.

Compared to these idiosyncratic suffixes, the affixes that are treated in section 3.5.3 are completely regular, attaching uniformly to various verbs.

3.5.2 Verbalizers

There are a number of verbs that compound with nouns to generate new verbal forms, e.g.

(70) a.		an	'exist'		
		kunneywa	'morning'	kunneywa-an	'become morning'
		paykar	'spring'	paykar-an	'become spring'
	b.	ne	'be, become'		
		soy	'outside'	soy-ne	'go outside'
		e-pis	'beach'	e-pis-ne	'go to the beach'
	c.	0	'put on, attach,	put in'	
		cip	'boat'	cip-o	'row a boat'
		itak	'word'	itak-o	'speak'
	d.	as	'stand'		
		apto	'rain'	apto-as	'to rain'
		hum	'sound, feeling'	hum-as	'to feel'
	e.	kor	'have, own'		
		mat	'wife'	mat-kor	'take a wife'
		hoku	'husband'	hoku-kor	'take a husband'

Compound verb formation like (70a) and (70e) involves the subject of an intransitive verb and the object of a transitive verb, and can be considered as a case of noun incorporation to be discussed in section 3.5.7.

3.5.3 Verb affixes

It has been already explained that verbs (including stative verbs (adjectives) and the copula) are marked by personal affixes. In addition to these personal affixes, the Ainu verbal morphology involves a larger number of affixes (both prefixes and suffixes) that have a variety of semantic functions and syntactic consequences.

Generalized object i-: The generalized object prefix i- marks the absorption of a generalized object by a verb. When attached to verbs like ku 'drink', i- is normally understood to refer to alcoholic beverages, just like the case of indefinite null

(71) a. Sake a-ku.

complements that occur with verbs like *drink* and *eat* in English. In other instances, *i*- means 'do X', where the reference of *i*- is to be inferred from the meaning of the verb.

IsG-drink
'I drink sake.'
b. i-ku-an.
drink-IsG
'I drink.'

(72) a. Ya a-ske.
net IsG-knit
'I knit a fishing net.'
b. i-ske-an.
knit-IsG

(73) Amam ci-hok, ipe-as. (Ishikari) rice 1PL-buy eat-1PL 'We bought rice, and ate.'

'I do knitting.'

The generalized object prefix decreases the valence of the verb, thereby turning a transitive verb into an intransitive verb. Notice the change of the personal affixes from the transitive verb first-person subject marker a- to the intransitive verb marker -an in (71) and (72). In (73), where the verb hok 'buy' with its object takes the Ishikari transitive first-person plural exclusive subject marker ci-, the verb ipe 'eat' with a null complement is marked by the intransitive first-person plural exclusive -as. It is tempting to analyze the verb ipe, which also means food, as consisting of the generalized object i- and the transitive verb pe. However, such an analysis no longer seems appropriate synchronically, for there is no transitive verb pe; the transitive verb 'to eat' is e. In other words, the intransitive verb ipe 'to eat' is now fully lexicalized.

As one recalls from Table 3.3 in section 3.3, there is a personal affix i-, which is used as the Classical first-person singular and plural object marker. However, research in other languages and South Pacific pidgins suggests that the intransitivizing affix denoting a generalized object is more immediately connected with the third-person pronominal (object) form, e.g. him > -im in South Pacific pidgins. Among various affixes of the i- form, Batchelor (1938) lists the third-person singular object form; Seta i-nospa 'the dog is chasing him'. The modern form will not have the affix - if it did, it would mean 'the dog is chasing me/us' in Classical

Ainu. Furthermore, since the affix *i*- is also used as an optional third-person possessive affix, e.g. *i-kotan* 'his village', the generalized object affix *i*- may be traceable to a third-person pronominal form (or affix) of one kind or another.

The reciprocal prefix u-: The reciprocal prefix also reduces the valence of the verb. Certain reciprocal forms have highly idiomatic meanings, as shown in (74) below, and these must be treated as independent lexical items. However, in its productive use it expresses the meaning of 'do X to each other' or 'do X together'.

```
(74) a. nukar 'see' u-nukar 'hold a meeting'
b. koyki 'hit' u-koyki 'fight'
c. yee 'say' u-yee 'quarrel' (Sakhalin)
```

(75) a. Tara merekopo an-koytah. (Sakhalin) those girls | 1 PL-talk to

'We talked to those girls.'

b. *U-koytak-an*.

REC-talk-PL

'We talked to each other.'

(an-: 1PL transitive subject prefix,

-an: 1PL intransitive suffix)

The reciprocal u- (often in combination with the applicative prefix ko-) frequently contributes to the polysynthetic word formation (especially in Classical Ainu), as in the following example:

```
(76) e-u-ram-kotor-mew-pa (Itadori)
APPL-REC-breast-horizontally-stretch-PL
'stretch the breast horizontally together = to arouse a fighting spirit in one another'
```

The reflexive prefix yay-: Again, certain reflexive forms have more idiomatic meanings than others, e.g.

```
(77) a. nu 'listen' : yay-nu 'think'
b. ewen 'bccome bad' : yay-ewen 'bccome disabled'
c. ari 'put' : yay-ari 'live'
```

The reflexive prefix is another affix that frequently contributes to the formation of polysynthetic words.

```
(78) a. Uwokkane kut a-yay-ko-yupu.
fishing belt 1sG-REFL-APPL-pull
'I pulled the fishing belt around myself.'
b. Ku-yay-sipore-re. (Ishikari)
1sG-REFL-bear-CAUS
'I made myself bear X.' = 'I persevered.'
```

Notice that in (78a) the verb complex a-yay-ko-yapuis still transitive (as indicated by the first-person transitive subject prefix a-). This is so, because there still is a direct object. The effect reflexivization has had here is that it has turned another object, derived by applicative formation (notice the affix ko-), into the reflexive prefix form under identity with the subject. The change in the personal affixes is seen only when yay- changes a transitive verb into its intransitive counterpart as seen below:

```
(79) a. Seta a-rayke.
dog 1sG-kill
'I kill a dog.'
b. Yay-rayke-an.
REFL-kill-1sG
'I kill myself.'
```

There is another less productive reflexive prefix of the form of si-. The difference between yay- and si- is said to be a matter of intentionality, the former occurring in an action in which an effect upon the subject is intended, and the latter in an action in which such an effect is unintended, e.g. yay-rayke-re (REFL-kill-CAUS) 'X makes someone kill him': si-rayke-re (REFL-kill-CAUS) 'X does things which would entail the effect of someone's killing him'.

Causative suffixes -(r)e/-te/-(y)ar: While all the previous prefixes have the valency decreasing effect, the causative suffixes have the opposite effect of increasing the valence of the verb, turning one-place (intransitive) verbs into two-place (transitive) verbs, and two-place verbs into three-place (ditransitive) verbs. The variations in the realization of the -(r)e/-te suffix are conditioned phonologically: -re attaches to a vowel-final verb, e- to a r-final verb, and -te to verbs that end in other consonants.

(80)) a. <i>ne</i>	'become Y'	ne-re	'cause X to become Y'
	b. <i>e</i>	'eat'	e-re	'cause X to eat'
	c. kor	'have'	kor-e	'give'
	d. kar	'make'	kar-e	'cause X to make'
	e. ahup	'enter'	ahup-te	'cause X to enter'
	f. komuy	'catch a louse'	komuy-te	'cause X to catch a louse'

(81) a. *U-iku-re* wa *u-ipe-re* wa ... (Itadori)

REC-drink-CAUS and REC-eat-CAUS and

'Making each other drink and making each other eat, and ...'

- b. Pon ike ku-hotke-re. (Ishikari)
 little daughter IsG-sleep-CAUS
 'I put the little daughter to bed.'
- c. Ku-kor-kur utari opitta poronno kam e-re. (Ishikari) my husband in-law all lot meat eat-CAUS 'My husband had the in-laws cat a whole lot of meat.'

As we saw in section 3.5.1, there are many intransitive and transitive verb pairs, and we listed there some transitive forms derived from the intransitive verbs by means of the causative suffix. Since the causative suffix has the effect of converting intransitive verbs into transitive verbs, it is reasonable to ask whether intransitive verbs with independent transitive counterparts might take the causative suffix yielding competing forms comparable to the Japanese forms korosu 'kill' vs. sinase-ru 'cause to die' (derived from sinu 'to die') or to their English equivalents. Many other languages, e.g. Turkish and Quechua, do not have such competing transitive and causative forms – the causative forms being the only possible two-place counterparts for intransitive verbs, e.g. Turkish öl-'die': öl-dür 'kill', Quechua wañu- 'die': wañu-či 'kill'.

In the case of Ainu, Chiri (1942) lists ray-re as 'cause to die', which has the transitive form ray-ke related to the intransitive verb ray 'die'. Also, Murasaki (1978) contrasts the Sakhalin forms hosipi-ka 'return (tr)' and hosipi-re 'to cause to return' – the former meaning something like 'to send back' and the latter 'have someone go home'. The extent to which these pairs are possible is, however, not made clear.

The suffix -(y)ar is the plural suppletive causative suffix, which marks the plurality of the causee.

(82) a. hopum-pa 'people get up' get up-PL

hopum-pa-yar 'cause people to get up'

b. sitoma 'to be afraid'

sitom-yar 'cause people to become afraid'

c. nukar 'see'

nukar-ar 'cause people to see'

Since the plural-marking suffix -pu seen in (82a) typically has the effect of selecting a plural object, we can imagine different combinations of the plural marker -pa and the causative suffixes since the plurality can be independently expressed on the object or the causee. Indeed, the regular causative suffix is used

when the causee is singular and the object is plural, whereas both the plural suffix and the plural causative form occur when both direct object and causee are plural, e.g.

- (83) a. kor 'to have': kor-pa 'to have many things': kor-pa-re 'cause X to have many things': kor-pa-yar 'cause people to have many things'
 - b. A-e-hosip-pa-re. (Itadori)

 ISG-APPL-return-PL-CAUS

 'I made them return there.'
 - c. Inunkuri-ram a-yay-kor-pa-re. (Itadori) unbearable-feelings 1sG-REFL-have-PL-CAUS
 'I made myself have unbearable feelings.'

The pattern seen in (83b) shows that the causee deriving from the intransitive subject is treated differently from the causee deriving from the transitive subject, for it does not trigger the plural causee suffix -yar. The comparison between (83a) and (83b) indicates that the causee deriving from the intransitive subject is treated like the direct object of the transitive clause.

Fukuda (1956) notes that the plural causative -(y)ar is used when the causee is indeterminate and not overtly expressed. She further points out that in this use, the valence of the verb is not increased. Just as the plural form of a verb is used as an honorific (see section 3.5.5), the -(y)ar causative is used as an honorific causative expression, with respect being directed toward the causee.

On the other hand, Asai (1970) reports that the suffix -yar in the Ishikari dialect attaches to the causative form derived by the suffixation of the regular causative suffixes, -re/-te, and is used for a causative situation involving an intermediary such that the causer uses someone to make the causee do something; i.e. as a double causative expression.

(84) (Ku-aki ku-ytek wa) keri ku-us-te-yar. (Ishikari)
1SG-brother 1SG-use and shoe 1SG-wear-CAUS-CAUS
'(Using my younger brother) I had the shoes put on.'
(lit.) 'I made X make Y wear the shoes.'

3.5.4 Plural verb forms

Ainu has a verbal category distinguishing singular and plural forms. Both transitive and intransitive verbs are sensitive to this distinction, the plural forms co-occurring with a plural object or subject; e.g.

```
(85) a. An-an. (Itadori)
be-1sG
'I was (there).'
```

```
b. Oka-an. (Itadori)
be (PL)-1PL
'We were (there).'
c. Sisam ren tonoto kor wa paye. (Ishikari)
Japanese three wine have and go (PL)
'Three Japanese had (carried) wine and went.'
```

d. Icen poronno kor-pa. (Ishikari) money lot have-pl. '(They) had a lot of money.'

There are a number of ways in which plural verb forms are derived. The most regular is the addition of the suffix -pa to the verbal roots, while some forms simply replace their last segment with p.

```
(86)
       Singular : Plural
    a. kom-o
                 : kom-pa
                             'bend'
                             'tie'
    b. kot-e
                 : kot-pa
    c. tur-i
                             'stretch'
                 : tur-pa
    d. kor
                             'have'
                 : kor-pa
                             'accompany'
    e. tura
                 : tura-pa
    f. ahun
                             'enter'
                 : ahup
                 : asip
                             'exit'
    g. asin
```

Suppletion occurs with certain verbs:

```
(87)
       Singular : Plural
                         'kill'
    a. ravke
             : ronnu
    b. arpa
              : paye
                         'go'
    c. ek
              : arki
                         'come'
    d. an
              : oka(v) 'exist'
    e. uko
                         'pick' (Saru)
                 uvna
```

Both Kindaichi (1931) and Chiri (1936) set up inflectional categories for plural verb forms on a par with those categories determined by the person of the subject and object, which makes a number distinction. However, the two systems are characteristically different, as correctly observed by Durie (1986), who has examined the nature of plural verb forms in a large number of languages. Whereas the choice of the personal affixes in the verb can be considered to be a case of (number) agreement between the nominal argument and the verb, the plural marking (or suppletion) needs to be considered as a separate verbal category which selects a plural nominal argument. That is, as convincingly shown by Durie (1986),

the occurrence of plural verb forms should not be considered as an agreement phenomenon; instead it should be treated like a case of selectional restriction. In Ainu this distinction is clear. For one thing, whereas plural agreement between the nominal argument and the verb indicated by means of personal affixes is strictly observed, the selection of plural arguments by the plural verb forms is quite optional. For another, the plural verb forms are selected in the syntactic context, e.g. imperatives, in which number agreement is absent. In the following example, the transitive verb hok 'buy' has the first-person exclusive plural affix agreeing in number with the subject argument; the verb form is singular, despite the plurality of the object argument, by which the transitive plural verb forms are typically triggered (see below). (Notice that the intransitive verb osipi 'return' has both plural personal affix and the plural verbal suffix.) (88b) is an imperative sentence in which plural verb forms are selected – for it is directed to the plural addressee – despite the fact that the imperative construction involves no number agreement (i.c. no personal affixes occur in the construction).

- (88) a. Pon pewrep tup ci-hok wa osip-pa-as. (Ishikari) small bear two IPL-buy and return-PL-IPL 'We bought two small bears and came back.'
 - b. Te un arki wa mono rok yan! (Saru)
 here to come(PL) and quietly sit(PL) IMP
 'Come here and sit quietly!'

Indeed, Kindaichi (1931: 208–9) specifically notes that when the plurality of the subject and object is specified by numerals, only the singular verb forms are usable, as in the case of the first verb in (88a). Fukuda (1956: 50 fn 6) remarks that the plural forms express the plurality of the activity rather than that of the actor or the object. Thus, even if more than one actor is involved, a plural form may not occur if the event is perceived as a unitary activity. In reality, however, it is not easy to see how one determines a given activity to be unitary or not. In the above example, (88a), the husband and wife were coming home together, and yet the plural verb form is chosen. Likewise, an existential expression like (84b) seems difficult to construe in terms of the account based on the number of activity. Examination of various texts reveals that the plural verb forms are most regularly chosen when the intransitive subjects are plural, as in (84b) and the second clause in (88a), whereas the plurality of objects is often ignored, singular verb forms co-occurring frequently with plural objects.

As the last remark above suggests, the plural verb form typically co-occurs with a plural subject when the verb is intransitive and with a plural object when it is transitive. The exclusion of the transitive subject from the plural selection seems

to be a regular pattern across languages. Indeed, Durie, who "unearthed more than 40 languages [with plural verb forms] from diverse parts of the world," tells us that "in every observed case of stem suppletion for number it is the number of the principally affected argument (the intransitive subject or transitive object) for which the verb suppletes" (1986: 356-7). Ainu, then, is a rare language which shows cases of plural verbs co-occurring with plural transitive subjects. For example, Batchelor's dictionary (1938:426) includes these entries: ronnu 'to kill pl. of raige [rayke]', ronnupa 'to kill pl. of the person as well as the object.' (Tamura Suzuko, p.c., believes this to be a mistake on the part of Batchelor.) Indeed, sentences in which plural verbs and plural transitive subjects co-occur are found in both Classical Ainu and the colloquial languages.

- (89) a. Iresu vupi iresu sapo i-res-pa hine oka-an. (Itadori) foster brother foster sister 1sG/O-raise-PL and be(PL)-1PL 'My foster brother and my foster sister raised me and we were (living).'
 - b. Sisam so kor goza sinep hok-pa wa arki. (Ishikari) Japanese from mat one buy-PL and come(PL) '(They) bought one mat from a Japanese and came.'

Among the colloquial languages, the Sakhalin dialect appears to show a more consistent pattern of plural verb forms, which co-occur with plural subjects (of both intransitive and transitive clauses) and objects.

- (90) a. Reekoh orohko okay. (Sakhalin) many Orokkos be(PL) 'There were many Orokkos.'
 - b. Orohko-utah ariki-hci. (Sakhalin) Orokko-PL come(PL)-PL 'Orokkos came.'
 - c. Nean henke ... pooho-hein kira-re-hei. (Sakhalin) that old man kid-PL escape-CAUS-PL 'That old man let the kids escape.'
 - d. Nean orohko-utah nean tumi ki-hci kusu ... (Sakhalin) those Orokko-pt. that war do-PL in order to 'In order for those Orokkos to start that war ...'
 - c. Uriwahne hekaci-utah ... sine wen henke brothers child-PL one poor old man retain-PL manuyke nean wen henke rayki-hci-teh . . . (Sakhalin) that poor old man kill-PL-and 'The brothers kept (in their service) one poor old man and killed that poor old man.'

usiwnekoro-hci

The plural verb forms in Sakhalin involve both suppletive forms, which are shared by the Hokkaidō dialects, and the unique suffix -hci, which is apparently related to the nominal plural suffix -hcin (see (90c)). Notice that in (90b), the suppletive plural verb ariki 'come' is further marked by the plural suffix. Despite this kind of over-marking of the plural suffix, the marking itself still remains optional unlike the number-sensitive agreement of personal affixes. Thus, where plural forms are expected, unmarked verbs occur as in the following example.

(91) a. Taa nay ohta reekoh hemoy ka usaan ceh renkayne this river into many herring too various fish a lot ahun. (Sakhalin) enter

'Many herrings and a lot of various other kinds of fish entered into this river.'

b. ... keeraan cep-uta naa an-ee ... (Sakhalin)
 delicious fish-PL too 1sG-eat
 'I eat delicious fish.'

In the Sakhalin dialect, -pa indicates iterative action as in one use of the same suffix in Classical and Hokkaidō Ainu.

(92) a. A-ko-tam-etay-pa. (Itadori)

ISG-APPL-sword-draw-ITERA

'I drew the sword against (the surface of the bodies) many times.'

b. A-si-kopa-yar-pa. (Itadori)

1sg-refl-misread-caus-itera

'I made myself misread earnestly = I pretended to be X earnestly'

The iterative suffix differs from the plural suffix in that the former occurs at the very end of a word, whereas the latter occurs before other suffixes such as the causative. (Cf. (83c) and (92b) above; in the former the plural suffix occurs before the causative suffix, whereas in the latter the iterative suffix occurs after the causative suffix.)

3.5.5 Honorifics

The use of plural forms as honorific expressions is wide-spread across languages. Plural forms of both nominal and verbal forms are used as honorifics: e.g. the French vous, the German Sie, the Turkish plural marking in the verb. The agent defocusing by means of pluralizing referential forms or action as a way of expressing deference toward the addressee or the referent of a sentential nominal argument is also exploited in Ainu, but not as commonly as in other languages – Classical Ainu

exhibits more instances of honorifies than the colloquial language. The first-person inclusive personal pronouns and personal affixes are used as second-person honorific forms. The plural verb forms (including the suppletive forms) are also used as honorific expressions. Since this use of plural verb forms appears to be restricted to the expression of deference toward the referent of the subject nominal, it gives us a clue in determining whether a given nominal is subject or not. Despite the theoretical importance of the honorific phenomenon, the whole picture is rather unclear, for, in addition to the scarcity of the honorific plural forms, the plurality condition discussed above enters into picture. The fact that the first-person affixes for both singular and plural categories are the same form a- in Classical Ainu also complicates the matter. The following are clearer instances of the honorific use of plural verb forms found in the yukar "Itadorimaru".

- (93) a. a-kor sapo apa otta arki siri
 my sister door to come(PL) sight
 'the sight of my sister's coming to the door'
 - b. Kane rakko a-res-pa kamuy ronnu.
 golden otter lPL-raise-PL god kill (PL)
 'Our honorable (hero), whom we have raised, killed the golden sea otter.'

The first sentence, uttered by the hero of the epic, is a straightforward case involving the intransitive suppletive plural form as expression of the hero's deference toward his foster sister. The form in (b) is uttered by the hero's foster sister. The first plural form here is non-honorific plural, referring to the plurality of the people (the foster sister and foster brother) who have raised the hero, here referred to as *kamuy* 'god', whereas the suppletive plural form *ronnu* 'kill' is used as an honorific in reference to the hero – notice here that both subject (the hero) and object (the golden sea otter) are singular.

These clear examples of the subject honorific use of plural verb forms and apparent lack of object honorific usage will give us some guidance in ascertaining the nature of the Ainu passive construction to which we now turn.

3.5.6 Passive and related constructions

In many languages of the world the passive construction is related to a number of other constructions such as the reflexive, the reciprocal, the plural, the spontaneous, etc. (see Shibatani 1985). In Japanese the passive morpheme -(ra)re figures in the construction types of the spontaneous, the honorific, and the potential (cf. Part 2, Chapter 11 section 4.2). Ainu is no exception to this kind of continuum phenomenon that the passive and other constructions exhibit. In fact, the passive in Ainu

shows continuum of another dimension, namely the transitive-intransitive continuum. The affixes involved in the Ainu passive and related constructions are the first-person plural inclusive affixes, a- (transitive) and -an (intransitive) and the corresponding dialectal forms. We have mentioned already that these plural affixes are used as the second-person honorific markers. The following examples show these two uses of the relevant affixes.

```
(94) a. Itak-an.
speak-1PL
'We (INCL) speak.'
b. A-e-kore.
1PL-2sG-give
'We (INCL) give you (something).'
c. A-en-kore.
2HON-1sG-give
'You (HON) give mc (something).'
```

(95) a. Tepeka paye-an

In addition, the first-person plural inclusive affixes are involved in the indefiniteperson construction, the spontaneous construction, and the passive construction.

The indefinite-person construction corresponds to those involving the indefinite pronouns *one* in English or *on* in French or to those involving the zero pronoun that is interpreted as referring to an arbitrary person, PRO_{arb} (see Part 2, Chapter 11 section 6.1). Both transitive and intransitive affixes occur in this construction, as below, where (a) has the intransitive affix and (b) the transitive affix.

yak Sat ta paye-an.

```
here go(PL)-INDEF if Saru to go(PL)-INDEF
'If we go here, we go to Saru.'

b. Tan cep anakne a-satke wa a-eiwanke-p un
this fish TOP INDEF-dry and INDEF-use-thing be
'This fish is a thing that we dry and use.'
```

The transitive a- is also used as a marker for the spontaneous construction. Since this use has the effect of deriving intransitive verbs from the transitive verbs, Kindaichi (1931) calls the relevant construction "middle passive".

```
(96) a. Cip a-nukar.
ship SPON-see
'A ship is visible/seen.'
b. Pirka hawe a-nu.
beautiful voice SPON-hear
'A beautiful voice is audible/heard.'
```

Finally, the affixes in question are used in passive sentences like these:

(97) a. Kamuy umma rayke.

bear horse kill.

'A bear killed a horse.'

b. Umma kamuy orowa a-rayke.

from PASS-kill

'A horse was killed by the bear.'

(98) a. Nuca Aynu rayke.

Russian

'A Russian killed an Ainu.'

b. Aynu Nuca orowa a-rayke.

from PASS-kill

'An Ainu was killed by a Russian.'

These are sentences apparently constructed by Kindaichi and Chiri; here are examples from the texts we have consulted:

- (99) a. Kamuy kat casi upsororke a-i-o-resu. (Itadori)
 god build mountain castle inside PASS-ISG/O-APPL-raise
 'I was raised inside the god-built mountain castle.'
 - b. Inukuri-ram a-yay-kor-pa-re. (Itadori) unbearable-feeling PASS-REFL-have-PL-CAUS
 'I was made to have unbearable feelings.'
 - c. E-kor hampe eper orwa an-rayke. (Ishikari)
 2sG-have father bear from PASS-kill
 'Your father was killed by a bear.'
 - d. Ne anpe anak ... sonno nispa orwa an-omap. (Ishikari) that one TOP really master from PASS-love 'That one (woman) was really loved by the master.'

The construction we have identified above as passive poses a number of theoretically interesting questions. The problem is raised by the fact that the verbal morphology is unmistakably transitive. Notice that in all the examples above, the transitive subject prefix a- is used. We saw in (95) that in the indefinite use of the affixes in question, both transitive and intransitive affixes are used appropriately. However, in the passive construction, the transitive version is invariably used. Furthermore, as seen in (99a), the patient is marked by the transitive object prefix in the verb. Thus, the Ainu passive poses a very basic question: are the sentences in (99) above really passive? This question can be adequately answered only if we have a good definition of a passive construction. The discussion in Shibatani (1985)

indicates that the most feasible way of defining a passive construction is in terms of prototype definition, which enumerates grammatical properties of prototypical passives. Indeed, it was a set of data like the one we have been examining here that motivated Shibatani to adopt a prototype approach to passives.

The relevant sentences in Ainu are passives to the extent that they share the primary function of the prototypical passive identified by Shibatani, namely that of agent defocusing function. While the colloquial examples from the Ishikari dialect given above encode agents, Ainu passives typically lack an agentive nominal in the surface. Non-encoding of an agent is an ultimate answer to the idea of agent defocusing. Even if an agent is encoded in a passive clause, it is still defocused to the extent that it is encoded in the oblique relation, as opposed to the prominent subject relation in the active voice. Ainu shares this important characteristic of passives with other languages by encoding (if this option is taken) an agent in the oblique ablative role marked by the postposition or(o)wa 'from', the pattern reminiscent of the preposition von in the German passive (see (99c,d)).

The status of the agent in the passive is, thus, perfectly clear. But the syntactic status of the patient is unclear. In forms like (99a), in which the verb encodes the patient, it is encoded by the object affixes. This indicates that the patient is encoded as an object syntactically. However, in the case of the passive the verbal morphology is not a good indication for the syntactic role of a nominal expression. We know this by the fact that in the case of the agent, the transitive affix does not agree with the agent in person and number - in (99d) the agent is third-person singular, whereas the affix an- in other regular uses is either first-person plural inclusive, second person (the honorific use), or indefinite person. Furthermore, as mentioned earlier, this affix is a transitive subject marker, whereas the agent is in the oblique role. Thus, the passive prefixes a-, an-, etc. have no syntactic correlation with the agentive nominal. By the same token, the object marking in the passive verb may not correlate with the patient perfectly. As far as the categories of person and number are concerned, the object affix and the patient agree. Our question, therefore, is focused on the correlation of the syntactic role of the patient and the object affix; that is, is the passive patient a syntactic object as the verbal morphology suggests?

There are at least two kinds of indication that the patient in the passive sentence is not really an object and that it is instead a subject. One is word order. When oblique nominals marked by postposition are involved, word order seems to be fairly flexible. However, perusal of the relevant data indicates that normally the subject occurs before the ablative nominal, whereas the object follows such a nominal occurring immediately before the verb. Now in the passive, the typical position in which the patient nominal occurs is at the very beginning of the sentence or at least before the ablatively marked agentive nominal rather than immediately

before the verb (see (97b), (98b), (99c)). This word order fact indicates that the patient in the passive clause is treated more like a subject.

The other phenomenon that indicates the subject status of the patient of the passive has to do with the honorific use of the plural verb forms. As discussed in the preceding section, the plural verb forms can be used to show the speaker's deference toward the referent of the subject nominal. Since there is no independent case of the object honorific use of the plural verb forms, the honorific plural verbs used in reference to the passive patient indicate that it is treated like a subject. The following pair of sentences highlights the contrast between the two forms:

```
(100) a. Amset-kasi a-i-o-resu. (Itadori)
bed-top PASS-1SG/O-APPL-raise
'On top of (this) bed I was raised.'
b. nekonan-kur a-o-res-pa... (Itadori)
what kind of person PASS-APPL-raise-PL
'What kind of person is being raised.'
```

These two forms, uttered by the hero of the epic, occur separated by one sentence in the beginning portion of "Itadorimaru" where the hero is describing the immediate environment in which he was raised (see the text in Appendix 1). The second form comes from the description of a splendidly decorated room visible from the high bed on top of which the hero had been raised. The hero, viewing the room from his bed, is wondering what kind of noble person is being raised in that gorgeous room. (The hero's elder brother emerges from the room.) Now, in (100a) the hero, referring to himself, uses the plain, non-honorific form. (100b), on the other hand, refers to someone who, on the basis of the splendidness of the room in which he is being raised, seems to be quite noble, and the hero uses the plural form to indicate his respect to this unknown person. The honorific trigger here is the semantic patient of the passive clause, but the fact that it triggers the honorific plural marking indicates that it is syntactically a subject.

Thus, contrary to the verbal morphology, the passive sentence seems to have made the patient a syntactic subject. What is really happening here is a case of syntactic change – a change from the transitive indefinite person construction to the passive intransitive construction. The verbal morphology shows the prechanged form, whereas the syntax has already undergone the relevant change of making the patient a subject and allowing optional encoding of the agent as an oblique phrase. The rise of passives from indefinite-person constructions is not an isolated case found only in Ainu. The Indonesian passive appears to be an instance of this kind of development, but the passives in Kimbundu and Trukic almost perfectly parallel the Ainu passive, which can be rendered in an analogous manner, as in (103) below.

(101) Kimbundu

Nzua a-mu-mono (kwa mame). (Givón 1979:211) John they-him-saw by me 'John was seen (by me).'

(102) Trukic

Waan re-liila-o ree-i. (Jacobs 1976:121)
John they-kill-him by-me
'John was killed by me.'

(103) Ainu rendered in the manner of Givón and Jacobs *Umma kamuy orowa a-o-rayke*.

horse bear from we-it-kill

'The horse was killed by the bear.'

The Ainu passive thus instantiates the fairly widely attested development of passives from indefinite or impersonal constructions, in which verbal marking typically involves a third-person singular or plural form, and it also shows a typical development characteristic of such a change; namely that the verbal morphology lags behind the syntactic reorganization. (See Cole et al. (1980) for a relevant discussion.) In this kind of situation, the verbal morphology also betrays the semantics of the construction. In Classical Ainu, the a-marking in the passive can no longer be considered an indefinite person prefix, for the passive agent is not an indefinite, or arbitrary person as in the case of the genuine indefinite-person construction seen in (95); in most cases of the passive the identification of an agent is quite clear from the context or from the overt specification in the orowa-phrase, though there are some instances where the identification is vague. Thus, while the Ainu passive has developed from the indefinite-person construction (or ultimately the first-person plural inclusive transitive construction), it has severed its historical connection with the latter both syntactically and semantically; only the verbal morphology retains its historical relics - thus, glossing the passive in the manner of (103) is only meant to reveal its historical past. Viewed in a broader perspective, the Ainu passive represents a case of change from a transitive construction to an intransitive construction. That the syntax and the morphology disagree in the aspect of transitivity is a consequence of a gradual change along the transitiveintransitive continuum.

3.5.7 Incorporation and polysynthesis

As observed already, a fairly large number of elements are concentrated on the Ainu verb. They include personal affixes, a prefix marking a generalized object, and a suffix expressing the plurality of object. Voices (passives and causatives), recipro-

cals, and reflexives are also expressed by the affixes that attach to the verb. In addition, Ainu verbs incorporate full nouns. We have already seen one instance of noun incorporation in section 3.5.2, in which certain verbs with basic meanings incorporate nouns and result in verbs of specific meanings. In this section we examine more general instances of incorporation, and observe how incorporation phenomena and the concentration of various affixes in the verb complex contribute to the polysynthetic nature of the Ainu language – especially that of the classical language. The incorporation phenomena in Ainu constitute a rich domain of theoretical interest, for their variety seems to be unmatched by other languages that exhibit similar phenomena, with a consequence that most of what has been said about incorporation is contradicted by the Ainu data. Thus, our examination of various cases of Ainu incorporation involves some theoretical discussion along the way.

Noun incorporation: As already mentioned, incorporation phenomena are more the property of Classical Ainu than the colloquial language, and our discussion largely dwells on the phenomena exhibited by the classical language. In the case of colloquial speech, more analytic expressions are favored, though a few apparently lexicalized complex expressions are frequently encountered. In the memoirs of Mrs. Sunasawa, which reflect the Ishikari colloquial form, only one pair of parallel incorporated and unincorporated expressions, given below, is found.

```
(104) a. Asir cise ci-kar kor... (Ishikari) new house IPL (EXCL)-make and "We made a new house and ..."
b. Ney ta cise-kar-as. (Ishikari) there at house-make-IPL (EXCL) "We made a house there."
```

The above example is a case of noun incorporation incorporating a full direct object nominal. A major area of theoretical controversy in the incorporation phenomenon centers around the target of incorporation: i.e. what kind of nominal can be incorporated and how to state the observed restrictions? In perhaps the most thorough investigation of noun incorporation phenomena, Mithun (1984) states the target of incorporation as follows:

If a language incorporates N's of only one semantic case, they will be patients of transitive V's ... If a language incorporates only two types of arguments, they will be patients of transitive and intransitive V's ... The majority of incorporating languages follow this pattern. Many languages additionally incorporate instruments and/or locations ... (p. 875)

Mithun's characterization of the target of incorporation is in terms of semantic case (or relations/roles) rather than in terms of grammatical relations such as subject and object. A major reason for this is that both transitive subject and agentive intransitive subject are systematically excluded from incorporation in most incorporating languages, and this is confirmed by Ainu as well. However, Ainu does present a situation in which the grammatical relation object must be invoked. This has to do with incorporation of obliques represented by instrumental and locative nominals. These nominals too are incorporated in Ainu but only via applicative formation (or postposition incorporation), which has the effect of making these oblique nominals direct objects. That is, instrumentals and locations cannot be incorporated directly; they are susceptible to incorporation only when they are syntactic direct objects. Since incorporation of oblique nominals interacts with applicative formation, they will be discussed separately below. Additionally, Ainu incorporates adverbs as well as noun-modifying verbs. (Remember, Ainu makes no distinction between verbs and adjectives.) Thus, Ainu allows a far wider range of elements than is commonly the case. Among those reported, Chukchi appears to be comparable to Ainu in its range of incorporable elements (see Comrie (1981: Chapter 6) for a brief survey).

We have already seen cases of incorporation of intransitive subjects (see section 3.1.1). While most of these are expressions of meteorological and ambient conditions, the incorporated subjects are indeed semantically patient, and there appears to be no agent incorporation. A few examples are repeated below:

(105) a. Sir-pirka.
weather-good
'It's fine.'
b. Sinnam-an. (Sakhalin)
coldness-be
'It's cold.'
c. Kunneiwa-an.
morning-become

'It dawns.'

A difficult problem with these forms is that since they involve no verbal affix (third-person subject and object are zero-marked in the verb), it is not clear whether they are really a case of incorporation or simply a case of regular intransitive sentences. Indeed, Kindaichi (1931) is not quite consistent in his transcription of yukar regarding these forms; sometimes the noun and the verb are separately written and sometimes together with an intervening hyphen. The same problem arises with respect to the incorporation of an object, which again immediately

precedes the verb. If there are personal affixes, recognition of incorporation is easier; if the affix is in the verb, then incorporation has not taken place, whereas if the affix is prefixed in the noun which is immediately followed by a verb, the incorporation is assumed to have taken place. The same kind of indication for incorporation is obtained through the applicative prefixes. Since the applicative prefix does not attach to a noun, a noun-verb sequence preceded by an applicative prefix marks a case of noun incorporation. For example, in a simple sequence of tumi osma 'war began', it is not clear whether incorporation has taken place or not, but if the noun tumi 'war' has an applicative prefix, as in the following example, then we have a clear case of noun incorporation. (Applicative prefixes will be detailed below.)

(106) Kane rakko o-tumi-osma. (Itadori)
golden otter APPL-war-begin
'The war started because of the golden sea otter.'

(106), then, is a clear instance of incorporation of an intransitive patient subject. With the incorporation of direct objects, we might anticipate a decrease in valency, and the following examples illustrate just such an effect.

(107) a. Inaw a-ke 'I make a wooden prayer symbol.'

b. Inaw-ke-an.

make-1sG

(108) a. Wakka a-ta-re. 'I make X draw water.' water lsG-draw-CAUS

b. Wakka-ta-re-an.

(109) a. Kina a-e rusuy. 'I want to eat herbs.' herbs IsG-eat want

b. Kina-e-rusuy-an.

Notice in these examples that the incorporated versions have been turned into intransitive clauses – the transitive subject affix a- in (a) being replaced by the intransitive subject affix -an in the incorporated versions in (b). Also the examples from the Ishikari dialect in (104) given earlier show the same change; ci- is the first-person plural exclusive transitive subject affix, whereas -as is the intransitive subject counterpart. This shift from transitive to intransitive does not seem to be a general property of object incorporation in a number of other languages. In Ainu too, there appear to be some variations. Kindaichi and Chiri cite (107)–(109) as examples seen in the Iburi dialect – and we now note that the Ishikari dialect shows

the same pattern – while also citing examples in which the incorporated forms still retain their transitive subject affix. Compare the (b) examples of (107)–(109) with the following:

- (110) a. Wakka a-ta-re. 'I make X draw water.'
 water lsG-draw-CAUS
 b. A-wakka-ta-re.
 lsG-water-draw-CAUS
- (111) a. Mukcaraha a-tuye. 'I cut his chest.'
 his chest | IsG-cut
 b. A-mukcar-tuye.
 IsG-chest-cut
- (112) a. Kina-tuy-hosi ari yay-pokisir a-karkar.

 grass-woven leggings with self's-legs 1sG-wrap
 'I wrapped my legs with grass-woven leggings.'
 b. Kina-tuy-hosi a-e-yay-pokisiri-karkar.

1sg-Appl-self-legs-wrap

In certain incorporated forms, the transitive subject affix is independently motivated. (112b) above is just such a case. Here, through the use of the applicative prefix e- instead of the particle ari 'with' in (112a), the original instrumental noun kina-tuy-hosi 'grass-woven leggings' has been made into a direct object (see below). Thus even though the original direct object yay-pokisir 'self's legs' has been incorporated, there is a derived direct object.

There are instances in which it might appear at first glance that oblique nouns have been incorporated, e.g. kaye-e-terke (sail-APPL-run) 'run by a sail'. However, these forms arise in interaction with the process of applicative formation. Since there is no case of directly incorporating obliques, we shall now turn to the phenomenon of applicative formation which feeds into noun incorporation.

Applicative formation: Kindaichi (1931) first recognized the applicative construction in Ainu, which stands in the paraphrase relationship with the postpositional expressions. Applicative formation, involving the prefixes e-, o-, or ko-, again takes place more prevalently in Classical Ainu than the colloquial language. As the following paraphrases show, applicative formation, so to speak, absorbs postpositional particles, and though the applicative prefixes show no morphological resemblance to the postpositional particles, they nonetheless indicate the semantic relations of the stranded (i.e. particleless) oblique nominals just like the postposi-

tional particles. Because of this characteristic, Baker (1988) considers applicative formation as a case of P (pre- or postposition) incorporation.

(113) Dative or goal relation

- a. Huci matkaci orun upaskuma.
 - g. mother girl to tell old stories
 - 'Grandmother told the old stories to the girl.'
- b. Huci matkaci ko-paskuma.

APPI

(114) Locative relation

a. Poro cise ta horari.

big house in live

'He lives in a big house.'

a'. Poro cise e-horari.

APPL

b. Ru riskani ta nupe cikka-p? - Niatus.
 road both sides at tears drop-thing pail
 'The thing that drops tears at both sides of a road? - A pail.' (a riddle)

b'. Ru riskani o-nupe-cikka-p?

APPL-tear-drop-thing

(115) Allative relation

a. A-kor kotan ta sirepa-an.

ISG-have village to arrive-ISG
'I arrived at my village.'

a'. A-kor kotan a-e-sirepa.

ISG-APPL-arrive

b. Tookyoo un hekomo.

for leave

'He leaves for Tokyo.'

b'. Tookyoo ko-hekomo.

APPI.

(116) Ablative relation

a. Newa anpe orowa tumi-ne.
 that thing from war-become
 'From that thing, the war began.'

b. Newa-anne o-tumi-ne.

APPL

(117) Instrumental relation

- a. tek ari kar-pe
 hand with make-thing
 'things made by hand'
- a'. tek-e-kar-pe hand-APPL-make-thing 'hand-made goods'
- b. kaya ari terke sail with run 'run by a sail'
- b'. kaya-e-terke sail-APPL-run

(118) Comitative relation

- a. pone tura kuykuy
 bone with bite
 'bite X together with a bone'
- b. pone ko-kuykuy APPL

Applicative formation may apply with respect to two different nominal adjuncts, as in the following example, where the first applicative prefix e- indicates a more abstract meaning relation of "about/regarding".

(119) Asinuma ekasi matkaci a-e-ko-paskuma.

I g. father girls lsG-APPL-APPL-tell an old story
'I told girls an old story about Grandfather.'

One of the claims made by Baker (1988) regarding applicative formation or P incorporation is that no inactive intransitive clause undergoes this process. This claim comes from the assumption that inactive (or the so-called "unaccusative") verbs do not assign an abstract Case to a nominal, while an abstract Case is required of every overt noun phrase in the particular theoretical framework (the so-called GB framework) in which Baker is working. This claim is falsified in the Ainu data. For example, forms (106), (115a'), and (116b) illustrate a case of applicative formation involving an inactive intransitive clause. Additional examples of the same kind include the following:

(120) a. cip o-ika turse ship APPL-overflow fall 'fall from a ship'

- b. ni o-pici
 tree APPL-miss footing
 'miss one's footing from a tree'
- c. tu repun mosir e-an rok nispa (Itadori)
 many offshore country APPL-be PERF master
 'the masters who are (exist) in many offshore countries'
- d. Mokor a-e-wen.sleep ISG-APPL-bad'I missed sleeping.'
- e. Sake a-e-niste.
 wine ISG-APPL-strong
 'I am strong in (drinking) wine.'
- f. Iyoype-nupek cise-upsor ko-maknatara.
 treasure-light house-inside APPL-gleam
 'The lights of the treasure were gleaming in the room.'

The forms in (115a, a') clearly indicate that applicative formation increases the valence of the verb, turning an intransitive verb to a transitive verb, as evidenced by the change of the intransitive subject affix -an in (a) to the transitive subject affix a- in (a'). Whether applicative formation turns an intransitive verb to a transitive verb that assigns the abstract objective Case to the stranded nominal is an interesting question, which cannot be readily answered in the case of Ainu, which has no overt case marking for an object nominal. However, there are two facts that indicate that the stranded nominal indeed turns into an object. One is the fact that the personal affixes in the verb change from the intransitive forms to the transitive forms, and the other is that the stranded nominal incurs the object-personal affix marking in the verb (cf. the discussion on the examples in (30) on pp. 27–8 above). Furthermore, it is just such an object that can be incorporated into the verb.

Interaction of applicative formation and noun incorporation: We have concluded earlier that no nominal holding an oblique semantic relation can be directly incorporated. This conclusion comes from the fact that whenever such a nominal is incorporated, the verb is always marked by one of the applicative prefixes. In other words, an oblique nominal – typically instrumental or locative – can be incorporated only after being made an object via applicative formation. Most cases of incorporation of an oblique nominal via applicative formation reflect morphologically the order of application of these two processes – the applicative prefix occurs first (internally), and then the incorporated noun is added. This interaction of applicative formation and noun incorporation is illustrated by the following examples:

(121) a. tek-e-kar-pe hand-APPL-make-thing 'hand-made goods'

b. Ratki apa a-sapa-e-puni. (Itadori)
 hung door 1sG-head-APPL-lift
 'I lifted the suspended door with my head.'

- c. Pon akor sapo a-at-e-uk. (Itadori) young my sister PASS-rope-APPL-tie 'My young sister was tied up with a rope.'
- d. Yaopiwka a-rep-o-cari. (Itadori)
 stony river-bed IsG-offing-APPL-scatter
 'Scattering (the stones of) the stony riverbed in the offing (offshore place).'
- e. Nea cep a-pone-ko-kuykuy.
 that fish 1sG-bone-APPL-bite
 'I bit that fish together with bones.'

With the last example, we can illustrate the derivational steps, which involve a stage in which an oblique has become an object prior to incorporation.

- (122) a. Nea cep pone tura a-kuykuy. (with a comitative adjunct) that fish bone with 1sG-bite
 'I bit that fish with its bones.'
 - b. Nea cep pone a-ko-kuykuy. (applicative formation) that fish bone Isg-APPL-bite
 - c. Nea cep a-pone-ko-kuykuy. (incorporation of the originally that fish ISG-bone-APPL-bite oblique N)

While the (b) stage above is an artificially constructed form following Chiri's illustration of such a form, there are actual forms in which two objects obtain due to applicative formation, e.g.

- (123) a. Oanray kewe sanota-kurka a-ko-osura. (Itadori)
 dead body beach-surface IsG-APPL-throw
 'I threw the dead body on the surface of the sandy beach.'
 - b. Iyoykir-ka kane rakko a-e-sitayki. (Itadori)
 implement-top golden otter lsg-APPL-dump
 'I dumped the golden sea otter on top of the row of the implements
 of rites.'
 - c. Kane rakko riraskitay a-e-orawki-re. (Itadori)
 golden otter high beam ISG-APPL-escape-CAUS
 'I let the golden sea otter escape to the high beam.'

These double-object constructions typically involve an original patient object and a derived locative object – the derived instrumental object tends to be incorporated as in the examples in (121). Notice that these locative nominals would be marked by the postpositional particle, e.g. *ta*, as in the following example, had they not been advanced to the object role via applicative formation.

(124) Omayse-ka ta u-uk-rorumpe hopuni. (Itadori) floor-top on REC-grapple-fight arise 'Rough-and-tumble fights started on the floor.'

Now, those forms in (121) are derived via application of applicative formation and noun incorporation in this order to the same semantically oblique nominal. It is, however, possible that incorporation and applicative formation apply with respect to different nominals, the former to the patient, basic object and the latter to the oblique nominal. Though the application of incorporation to the patient object in the forms such as (123) is a theoretical possibility, the morphological shape indicates that incorporation of the patient object takes place prior to applicative formation. That is, as observed in the following examples, the incorporated patient noun occurs prior (internally) to the applicative affix.

- (125) a. Siatuy-noski ko-cip-terke-re. (Itadori)
 ocean-middle APPL-ship-run-CAUS
 '(They) ran the ship in the middle of the ocean.'
 - b. Tam-kurpoki a-ko-tam-etaye. (Itadori) sword-underneath IsG-APPL-sword-draw out 'l drew out the sword underneath the sword.'
 - c. Wen Iskarunmat i-kosunke hawe ne rok oka....
 bad Ishikari-woman IsG/O-lie voice be PERF be (PL)
 a-ko-tam-enere. (Itadori)
 IsG-APPL-sword-swing

'There were voices of the Ishikari-woman lying to me. I swung the sword at them.'

To summarize the two instances of the interaction of noun incorporation and applicative formation, we obtain the following situations:

(126) Applicative > Incorporation (involving the same nominal)

Aynu cuporo sikanna kamuy sar-e-ciw. (Itadori)

man belly dragon god tail-APPL-pierced

'The dragon-god pierced the man's belly with the tail.'

(cf. (121) for additional examples)

(127) Incorporation > Applicative (involving different nominals)

I-turen kamuy utarorkehe tu piskan nissut

1sG/o-bless god comrades many surrounding clouds

ko-hum-paye-re. (Itadori)

APPL-sound-go-CAUS

'The gods blessing me sent the sounds to all those surrounding clouds.'

(cf. (125) for additional examples)

The order of application of the processes in (126) is a natural consequence of the restriction that obliques cannot be incorporated directly. As for the order in (127), we might entertain a hypothesis that applicative formation is easier to apply after incorporation of the basic object. The latter has the effect of turning a transitive clause into an intransitive clause, at least in the sense that it creates an empty object slot which can be filled by a subsequently created object via applicative formation. (See pp. 63-4 on the variability in dialects over the transitive-intransitive shift in the verbal morphology accompanying noun incorporation.) This ordering, thus, maintains the valency of the verb to the two basic patterns (transitive and intransitive) throughout the derivation, whereas the opposite application involves a stage in which a less common pattern of double objects arises. Though double objects are permitted, as in (120) or with a limited number of three-place predicates, they do not seem to be favored as there aren't many examples of them.

Thus, the two ways of ordering noun incorporation and applicative formation illustrated in (126) and (127) seem to be motivated, and the different orders are reflected in the order of affixes in the verb – what is applied first attaches an affix or a noun closer to the stem. This happy situation obeying Baker's Mirror Principle (Baker 1985) – that the order of formatives mirrors the order of application of the rules responsible for them – however, is marred by a number of forms found in Chiri (1936:93), which includes the forms consistent with our discussion but also the following paraphrases.

- (128) a. ni o-pici = o-ni-pici
 tree APPL-miss step APPL-tree-miss step
 'fall from a tree'
 b. sik o-poso inkar = o-sik-poso inkar
 eye APPL-through see APPL-cye-through see
 'to see through narrowly opened eyes'
 c. cip o-ika turse = o-cip-ika turse
 ship APPL-spill fall APPL-ship-spill fall
 - ship APPL-spill fall APPL-ship-spill fall
 'fall (spilling) from a ship'

All these are cases of the application of applicative formation and noun incorporation to the same nominals, and in such cases we expect the order of applicative formation first and then noun incorporation, but the morphological derivations do not mirror these syntactic derivations. The order of the formatives suggests either (1) that noun incorporation has taken place first incorporating the oblique nominals directly, and then applicative formation has applied, or (2) that the order of the application is the same as the other cases of both rules affecting the same oblique nominals (i.e. applicative > incorporation), but, for some reason, the incorporated nouns have cut into the sequence of the applicative affix and the verb stem. The first possibility is inconceivable, because after the incorporation of an oblique nominal, there is no oblique adjunct to which applicative formation can apply. Of course, if one assumes that applicative formation can also affect the stranded postpositional particles alone, the first possibility is feasible, but such an assumption grossly undermines the function of applicative formation, which is to advance an oblique nominal adjunct to the status of direct object. Thus, there appears to be a case in which an incorporated noun cuts into the sequence of the applicative affix and the verb stem with the result that betrays the order of syntactic derivations. Whatever the ultimate explanations for this may be, those forms listed in (128) remain a minor irregularity, as the examination of the yukar "Itadorimaru" has failed to uncover any such form. (There is a possibility that the o-prefix in (128) is that of the direction-indicating prefix (h) o- discussed in section 3.5.12.)

Adverb incorporation: Whereas oblique nominal adjuncts do not incorporate directly, adverbs incorporate rather freely with the following qualification. What is incorporated is a basic (root) form of a noun, adverb, or verb. Thus, in the case of noun incorporation, the possessive form (see section 3.4.2) will never be incorporated. For example, the noun sik 'eye' in (128b) is the basic form, which is used in a generic sense. In typical occurrences nouns assume the possessed forms sik-i or sik-ihi, as in ku-sik-i 'my eye', o-sik-i 'his eye', etc. Thus, despite the fact that many incorporated nouns appear to represent specific, referential entities (see e.g. the incorporated nouns in (125)–(127)), the possessive forms do not incorporate. The same is true with adverb incorporation. When the adverbial form is itself a basic form, its full form incorporates. However, when adverbs are derived from stative verbs by means of suffixing the adverbial ending -no, as in pirka 'good' > pirka-no 'well', moire 'slow' > moire-no 'slowly', etc., what is incorporated are basic verb forms. Some cases of adverb incorporation are given below:

(129) a. Toyko a-kikkik.
thoroughly 1sg-beat
'I beat (him) up thoroughly.'

a'. A-toyko-kikkik.

IsG-thoroughly-beat

b. Ratki apa a-moyre-caka. (Itadori)
 hung door lsG-slow(ly)-open
 'I opened the suspended door slowly.'

c. Hanke ek ay ... a-i-ko-tunas-rap-te. (Itadori)
near come arrow PASS-1SG/O-APPL-fast-fall(PL)-CAUS
'The arrows coming near were made to fall fast toward me.'

While no more than one noun can be incorporated into the verb at a time, a noun and an adverb can be incorporated into one verb base at the same time.

(130) a. Pinne kamuy kiraw-riki-kur-roski. (Itadori)
male god horn-high-EXPL-raise
'The male (dragon) god raised the horns high.'

b. *Pirka pon menoko ... okkew-maka-atte*. (Itadori) pretty young woman neck-backward-drop
'The (dying) pretty girl dropped her neck backward.'

When these forms involving a noun and an adverb are combined with the reflexives and other affixes, we obtain a truly polysynthetic word like the following:

(131) Usa-oruspe

various-rumors

a- e- yay-ko- tuyma-si-ram- suy-pa.

ISG-APPL-REFL-APPL-far-REFL-heart-sway-ITERA

(lit.) 'I keep swaying my heart afar and toward myself over various rumors.' = 'I wonder about various rumors.'

Incorporation within the noun phrase: We saw in section 3.4.6 that an attributive verb occurs in two positions – either before the affixed head noun or between the personal affix and the head noun, e.g.

(132) a. pon a-poho little 1sg-child 'my little child'

b. a-wen-yupihilsG-bad-older brother'my dear older brother'

We shall examine here the possibility of considering the (b) form as a case of incorporation of an attribute into the head noun. While these two forms are from Classical Ainu, the colloquial languages of different dialectal areas show the forms

of the (b) pattern, in which an attribute cuts into the sequence of the possessive personal affix and the head noun.

Given the fact that these forms co-exist with paraphrases in which attributes occur before the affixed nouns, it appears that we can easily conclude that the above forms are derived via incorporation of attributes into head nouns. However, the actual situation is slightly more complex. Tamura (1970) points out that only one attribute can be incorporated, illustrating this by the impossibility of the forms such as (b) below, while the phrasal paraphrases like (a) are perfectly well-formed.

(134) a. earkinne arka ku-sikihi (Saru) awfully hurt 1sG-eye 'my eye which hurts awfully' b. *k-earkinne-arka-sikihi

Based on this restriction and others of similar kinds, Tamura concludes that those forms represented in (133) are words rather than phrases. Tamura's point is well taken in view of the general fact that word formation does not involve a phrasal category, and her conclusion lends support to the analysis that derives the forms in question by a word-formation process of incorporation. However, actual situations, at least in the Sakhalin dialect, are not as straightforward as Tamura's description.

Hattori (1961) presented his native informant of the Sakhalin dialect with various combinations of the personal affixes, attributes, and head nouns to see which combinations and orders are permitted. His results, though not exhaustive, at least show that the following orders are generally permitted.

(135) a. kurasno poro e-setaha black big 2sG-dog 'your big black dog' b. e-kurasno poro setaha 2sG-black big dog (136) a. pon-no poro e-setaha
slightly big 2sG-dog
'your slightly big dog'
b. e-pon-no poro setaha
' 2sG-slightly big dog

The possibility of the (b) forms presents some problem for the incorporation analysis, for in (136b) an attributive phrase consisting of an adverb *pon-no* 'slightly' and an attributive verb *poro* 'big' has been incorporated, contrary to Tamura's observation in her Saru data. Somewhat similar forms to Hattori's concocted forms are found in the natural Sakhalin data collected by Murasaki (1976).

(137) ku-wen pon kahkemacihi (Sakhalin)
1sG-bad little young lady
'my dear young lady'

Here the form wen 'bad/dear' does not assume the adverbial form of wen-no 'very, excessively', but the expression can be taken to involve the adverbial force with the meaning of 'my very cute young lady'. Recall that incorporation involves the root forms of nouns and adverbs. Thus, (137) too can be construed as involving phrasal incorporation.

The incorporation of an attribute within the noun phrase is thus somewhat ambiguous. Hattori (1961) too is wary of considering the forms such as (135b) and (136b) as "compound words", on the basis of the fact that each unit has its own prosodeme and that a variety of adjectives can occur in such forms. A similar view is expressed by Asai (1970) for the similar forms in the Ishikari dialect. Hattori suggests that these forms should be described as consisting of four words (e.g. e-, kurasno, poro, setaha) and as constituting a unit he calls "word concatenation". This is basically a phonological unit, like a phonological phrase, consisting of words that are pronounced as a unit. The problem with this suggestion is that it fails to identify the forms in question in syntactic terms: are they words or phrases? If these forms are phrases, as implied by Hattori's suggestion that they should not be considered as compound words, then we still face a number of problems. One is that too many attributive elements cannot be inserted between the personal affix and the head noun, as Hattori's informant rejects a form like e-sine kurasno poro setaha intended as meaning 'your one black big dog'. If the forms are indeed phrases, we would not expect such a limitation on the length - presumably a real phrase like sine kurasno poro e-setaha (one black big 2sG-dog) 'your one big black dog' is perfectly well-formed. Secondly, Hattori's survey also indicates that the distribution of the personal affixes is limited in such a way that only one of them

can occur per unit; i.e. a form like e-kurasno poro e-setaha (2sg-black big 2sg-dog) is not permitted. That is, a personal affix cannot be attached to both attributive verb and head noun. A restriction like this can be most straightforwardly accounted for by positing an incorporation rule that inserts an attributive element into the basic head unit consisting of a personal affix and the head noun. Thus, notwith-standing an indication that a phrase may be incorporated against a general rule of word formation, the forms under consideration should be considered as a case of word formation involving the incorporation of the attributive elements into the head noun.

Also ambiguous are the cases involving attributes within the possessive phrase with the verb kor 'have' of the following forms:

- (138) a. pon a-kor yupi (Itadori) young IsG-have older brother 'my young older brother'
 - b. a-wen-kor sapo (Itadori)
 lsG-bad-have older sister
 'my dear older sister'
 - c. an-koro pon kahkemah (Sakhalin)

 1PL-have little young lady
 'our cute young lady'

The question here is whether a sequence such as a-kor yupi (lit.) 'an older brother I have' is to be considered a word unit. A similar unit such as ku-kor-kur (IsG-have-person) 'my husband' is clearly a unit, for the form kur is a nominalizing suffix denoting a person. If the sequence of Affix-kor-Noun were a word unit, then an attribute gets incorporated in two slots, as in (b) and (c), but if only the portion of Affix-kor is to be considered a word unit, then only (b) would constitute a case of incorporation. The latter, more intuitively satisfying, analysis leads to the discovery of a new type of incorporation where an attributive verb gets incorporated into another attributive verb.

3.5.8 Summary of valency changes and morphological effects

Noun incorporation and the use of certain verbal prefixes have the effect of decreasing the valence. Among the prefixes, the generalized object marker i-, the reciprocal u-, and the reflexive yay- and si- all effect a morphological change – transitive personal affixes are replaced by intransitive personal affixes. In the case of noun incorporation, there may be dialectal variation; however, the general pattern is that the incorporative transitive verb exhibits intransitive morphology. The indefinite-person prefix a- gave rise to the passive construction, but the

personal affix marking the patient remains an object affix, the verbal morphology still exhibiting the older transitive configuration, while the clausal syntax has acquired the intransitive characteristics.

The applicative prefixes e-, o-, and ko- as well as the causative suffixes -(r)e/-te/-(y)ar all produce an increase in valence, and the resulting constructions are all morphologically transitive. The interaction of applicative formation and noun incorporation often has the effect of canceling out the valency-changing effects on the basic verb morphologically or as reflected in the number of bare nominal arguments within the clause.

3.5.9 The order of verbal affixes

A large number of affixes that are concentrated in an Ainu verb complex are ordered with respect to one another. Figures 3.1 and 3.2 provide a summary of possible orderings.

Among the prefixes, an object prefix does not co-occur with the generalized object prefix, the reflexive prefix, or the reciprocal prefix, and these latter three prefixes are also mutually exclusive. Applicative prefixes, on the other hand, may occur twice, although occurrences of a second applicative prefix seem to be very limited. The following is an example of a form with two applicative prefixes:

(139) earkaparpe e-yay-ko-noye.
only-thin-clothes APPL-REFL-APPL-turn
'wrap oneself with only thin clothes'

This expression etymologically means something like 'one turns around the person with thin clothes', and thus the prefix ko- here makes the person, around whom the one wrapping him turns, a direct object, which has been reflexivized,

Persona	Personal prefix		Generalized		
Subject	Object prefix	APPL	Object	APPL	Verb
prefix			Reflexive		
			Reciprocal		

Figure 3.1 The order of prefixes (personal prefixes occur before all others)

Verb	Plural	Causative	Iterative

Figure 3.2 The order of suffixes

and the other prefix e- makes the instrumental expression "with only thin clothes" a new direct object.

3.5.10 Auxiliary verbs

Auxiliary verbs are not generally marked by personal affixes, which are attached to the main verbs.

- (140) a. Icen ku-kon rusuy. (Ishikari) money IsG-have want
 'I want to have money.'
 - b. Ku-ype kaspa. (Saru)lsg-eat surpass'I ate excessively.'
 - c. ... niicayteh ... tani an-tuye hemata. (Sakhalin)
 firewood now IPL-cut finish
 'We have chopped up the firewood now.'

Certain auxiliary verbs have main-verb counterparts, perhaps being derived from the latter. Examples of them seen frequently are easkay 'can (do)' and eaykap 'can't (do)'. When these forms function as main verbs, they take personal affixes, whereas in their auxiliary function, they do not, as in the following examples:

- (141) a. Kampi ku-easkay. (Ishikari) study (N) 1sG-can do
 'I could do the study (well).'
 - b. Ku-man easkay. (Ishikari)1sG-swim can1 could swim.
- (142) a. Sisam itak ku-eaykap. (Ishikari)
 Japanese speech 1sg-can't do
 'I couldn't speak the Japanese language.'
 - b. Ku-yanke eaykap. (Ishikari)IsG-pull up can't'I couldn't pull (it) up.'

Though not observed in the Ishikari dialect data, Hattori (1961) reports that his Sakhalin dialect informant told him that in the case of these auxiliaries, it would be better to attach personal affixes to both main and auxiliary verbs. While the forms with personal affixes attached to either the main verb or the auxiliary are possible, they are characterized as sloppy speech.

In the Sakhalin dialect, some speakers also attach a personal affix to the auxiliary rusuy 'want'. Also, in this dialect, the plural verbal suffix -hci may be attached to auxiliary verbs as well.

(143) a. Speaker F: Pon kahkemah ooya'an itah i-ko-nuu little lady various words lpL/O-APPL-hear rusuy. (Sakhalin)
want

'The cute young lady wants to hear various words from us.'

b. Speaker O: Taa keera'an cep uta naa an-ee ranke orowa those delicious fish PL too 1PL-eat and then simakoray rusuy-an.

pass away want-1PL

'We want to pass away after eating those delicious fish.'

c. Rayciska onne reekoh nean tumikoro e-ariki

really that war APPL-come (PL)

rusuy-a-hci. (Sakhalin)

want-?-PL

'(They = Orokkos) really wanted to come to Raychishka for that war.'

One example of the affix-marked auxiliary rusuy 'want' was found in "Itadorimaru", and both Kindaichi (1931) and Chiri (1936) also give examples of it as the incorporative main verb – notice in these that the occurrence of the intransitive subject -an indicates that noun incorporation has taken place. While (144b,c) appear to indicate a case of incorporating a phrase, e.g. wakka ku 'drink water', by the verb rusuy, perhaps a better interpretation is that a verbal compound, e.g. ku-rusuy 'want to drink', has occurred first, after which the object is incorporated into the compound verb.

(144) a. Ekimne rusuy-an. (Itadori)
go to the mountains want-lsG
'I wanted to go to the mountains (to hunt).'

b. Wakka-ku-rusuy-an.

water-drink-want-1sG

'I want to drink water.'

c. Kina-e-rusuy-an. (Iburi) herbs-eat-want-1sG 'I want to eat herbs.'

These variations in affix marking in auxiliary verbs seem to reflect the difference

in the degree of change from main verbs to auxiliaries; those that have completely become auxiliaries do not take a personal affix, whereas those on their way to becoming auxiliaries may or may not be affixed.

3.5.11 Tense and aspect

The Ainu verbal system does not possess any affix that would mark tense. Indeed, Ainu makes no tense distinction such as that of present and past in English. The simple verb form refers to events irrespective of their time in relation to the time of utterance. However, as is the practice in this text, sentences with plain verb forms are best translated in the English past tense. On the other hand, Ainu has a rather rich aspectual system. There are both auxiliary-type aspect markers and aspectual suffixes. Examples of these are given below, where the glosses indicate the etymological meanings, many of which are retained when these elements function as independent verbs:

- (145) Perfective: a (SG), rok (PL) 'to sit'
 - a. Nep kamuye i-turen rok kus. (Itadori)
 what god IsG/o-bless PERF perhaps
 'Perhaps some god has blessed me.'
 - b. Arki rok a? (Saru)
 come (PL) PERF Q
 'Have they come?'
- (146) Incipient: oasi (o- 'hip' asi 'stand/appear/arise')
 - a. Eci-uwekot oasi.2PL-fall about to'You are about to fall.'
- (147) Progressive: kor 'have'
 - a. A-i-ku-re-pa kor i-ko-pakes-kor-pa. (Itadori)

 PASS-1SG/O-drink-CAUS-PL PROG ISG/O-APPL-cup-have-PL

 'I was being made to drink and they all gave me the half-drunk cups of wine.'
 - b. Ku-paraparak kor hoyupu-as. (Ishikari)
 ISG-cry PROG run-IPL
 'We ran while I was crying.'
- (148) Terminative: okere 'finish'

 Kampi a-nukar okere.

 letter 1sG-see finish

 'I finished reading the letter.'

It is noted that these aspectual auxiliaries do not take personal affixes.

- (149) Aspectual suffixes:
 - a. -kosanu Instantaneous

 mat-kosanu 'it happened all at once'
 - b. -rototo/-rototke Successive keu-rototo 'sounds of thunder occurring successively'
 - c. -hitara/-natara Durative
 raye-hitara 'push continually'
 - d. -osma Momentary
 rik-osma 'go up suddenly'
 - e. -tek Trivial ran-tek 'go down a little'

3.5.12 Adverbs

Adverbs occur before the verbs they modify, e.g.

(150) Tunas ipe wa tunas mokor wa tunas hopuni!

quickly eat and quickly sleep and quickly get up

'Eat quickly, sleep quickly, and get up quickly!'

Adverbs are generally derived from other parts of speech, such as nouns and verbs. Stative verbs (adjectives) are used as adverbs without any formal modification, especially in Classical Ainu. In the colloquial language the suffix -no is generally used in deriving adverbs from verbs.

- (151) a. kosne suma 'light rock'
 light rock
 b. kosne terke 'jump lightly'
 - jump
 c. kosne-no terke '(ditto)'
- (152) a. pirka menoko 'pretty woman' pretty woman
 - b. pirka inu 'listen well'
 - c. pirka-no inu '(ditto)'

Ainu has a systematic way of indicating motion toward or away from various locations. There are two productive prefixes for this purpose, $(h)e^{-t}$ face' and $(h)e^{-t}$ hip', with their associated meanings 'facing', and 'away from'.

(153) a. pas 'downstream'

he-pas san 'go downstream'

go down

ho-pas ek 'come from the shore (down stream)'

come

b. pes 'upstream'
e-pesne arpa 'go upstream'

go

o-pesne san 'go downstream'

go down

c. mak 'mountain side'

he-makasi oman 'go toward the mountain side'

go

ho-makasi ek 'come from the mountain side'

come

d. cupka 'east'

e-cupkaun arpa 'go to the east'

go

o-cupkaun ek 'come from the east'

come

3.6 Imperatives, negatives, and interrogatives

Imperative sentences are formed using bare verb forms, i.e. without personal affixes. The particle *hani* can optionally be added.

(154) a. Ek hani!

'Come!'

b. Arpa wa inkar wa ek!

go and see and come

'Go, see, and come!'

c. En-nur-e wa en-kor-e!

1sg/o-hear-caus and 1sg/o-have-caus

'Let me hear and let me have; i.e. Do me the favor of letting me hear!'

When the addressee is plural, yan is added in final position.

(155) a. Arki yan! come (PL)

'Come on!'

```
b. Apunno oka yan!peacefully exist (PL)'Live peacefully; i.e. Good bye!'
```

Expectedly, the plural imperative form is also used as a polite command.

The cohortative expression "Let's ..." is formed with the final particle ro, e.g.

```
(156) a. Paye-an ro!
go-1PL
'Let's go.'
b. Mokar-an ro!
'Let's go to sleep.'
```

Negative sentences are produced with the adverb somo, e.g.

(157) Tampako anakne somo ku-ku
tobacco TOP NEG lSG-smoke
'As for tobacco, I don't smoke.'

Negative imperatives use the iteki 'never'.

(158) Iteki iku!
'Don't drink (wine)!'

Interrogatives do not involve word-order change. The final interrogative particle ya or rising intonation alone suffices to form interrogatives, e.g.

```
(159) a. Eci-ye? (with a rising intonation)
2sG-say
'Did you say?'
b. pirka-p ne ya?
rich thing be Q
'Is (he) a rich person?'
```

The interrogative pronouns listed below tend to occur sentence initially because the subject pronoun is often deleted; but there is no need to move the wh-element to sentence initial position – see (161c,d) below.

(160) humna 'who' hemanta 'what' hunak(-ta) 'where' inan-pe 'which' hempar 'when' hempak 'how many'

(161) a. Humna eci-ne? who 2sG-be 'Who are you?'

- b. Hemanta eci-nu rusuy ya? what 2sG-hear want Q 'What do you want to hear?'
- c. Eani hemanta e-e? you what 2sG-eat 'What do you eat?
- d. Ekasi hunak ta an?
 g. father where at exist
 'Where is Grandfather?'

3.7 Mood

Ainu has a well-developed system of mood that allows the speaker to express varying attitudes with respect to the statement he makes. Chiri (1936) summarizes the Ainu mood system as follows:

$$\begin{cases} \textbf{Fact-mood} & \{ \text{confirmatory} \\ \text{witnessed} \\ \end{cases} \\ \textbf{Thought-mood} & \{ \text{hearsay-reportive} \\ \text{semblative} \\ \text{expectative} \\ \end{cases} \\ \textbf{Intentional-mood} \end{cases}$$

The modal expressions, most of which are evidential in nature, in general assume the form of the appositively nominalized expressions with the head nouns plus the copula *ne* or *an*. Etymologically the head nouns derive from nouns with the meanings typically associated with the types of evidence for the information, the channel through which information is obtained, etc.

Confirmatory mood: The particle ruwe 'trace' together with the copula ne confirms the truthfulness of the statement. This form is used in story-telling and more often by men than women.

(162) Hapo ray ruwe-ne.
mother die it is
'It is (a fact) that his mother died.'

Witnessed mood: The particle sir, related to the noun siri of the typically ambient meanings 'weather, time, space, land', is used to affirm a fact that has been witnessed by the speaker.

(163) a. Apto as anke sir-an.
rain fall about to
'It is about to rain.'

b. Apto as siri-ne.

'It has just rained.'

Hearsay-reportive mood: The particle hawe is related to the noun haw 'voice', and this mood thus expresses the meaning of 'They say that ...' or 'I hear that ...'

(164) Hapo ray hawe-ne.
mother die
'I hear that his mother has died.'

Semblative mood: Humi is derived from the noun hum 'sound', and expresses the meaning 'it sounds', 'it appears', 'I gather', etc.

(165) Apto as humi-ne.
rain fall
'It seems to be raining.'

Expectative mood: The meaning 'it must be' comes under the heading of expectative mood and is expressed by the particle kuni, which also has the meaning of 'in order that'.

(166) Kamuy ne kuni a-ramu awa.

god be must 1sG-think then

'Then I thought that (it) must be a god.'

Intentional-mood: The speaker's intention is expressed by the use of the particle kusu, which is also used as a subordinating conjunctive with the meaning of 'because' and 'in order to'.

(167) ku-oman kusu-ne. 1sG-go 'I intend to go.'

The use of this mood particle has been extended to the future tense and to the polite imperative, as in the following expressions:

(168) a. Penampe hopuni kusu-ne ko ...
get up

'As Penampe is to get up ...'

b. e-ere kawe e-oman kus-ne na.

2sG-feed while 2sG-go please

'Please go while feeding X.'

APPENDIX I

Classical Ainu text

- 1. I-resu yupi i-resu sapo i-res-pa hine oka-an ike:lsG/O-raise brother foster sister lsG/O-raise-PL and be (PL)-lsG then
- Kamuy kat casi casi-upsor a-i-o-resu. god build castle castle-inside PASS-1SG/O-APPL-raise
- 3. Tapan inuma ran-pes kunne cirikinka, enkasike nispa-mut-pe such treasure cliff like rise high over there master-wear-thing otu-santuka o-uka-uyru otu-pusa-kur suypa kane asso-kotor mike many-hilt APPL-REC-exist many-knot-shadow sway gold wall glitter kane anramasu auwesuye.

 gold pleasing interesting
- Inuma-koca ci-tuye amset amset-kasi a-i-o-resu. treasure-front pass-cut bed bed-top pass-1sg/o-appl_raise
- 5. Oharkisi un retan-ni tumpu asrukonna meunatara. left-side in white-wood room stood splendid
- 6. Nekonan-kur a-o-res-pa tumpu ci-tomte ruwe what kind of person PASS-APPL-raise-PL room PASS-beautify that oka nankor a a-eramisikari rayap kewtum be perhaps be 1sg-not to understand surprised feelings a-yay-kor-pa-re.

1sG-REFL-have-PL-CAUS

 Pakno-nekor amset-ka ta tomi-ka nuye ikor-ka nuye, tampe patek and then bed-top at sword-top carving sheath-top carving that only a-ko-sine-an-i-nan-tuye-re.

ISG-APPL-one-be-place-face-turn-CAUS

(From Yukar "Kutune sirka" (Itadorimaru) in Kindaichi (1931))

Translation:

(1) My foster brother and foster sister raising me, we lived then. (2) The god-built mountain castle, inside the mountain castle, I was raised. (3) The pile of treasure was heaped like a cliff, and above it the master's swords were crossing their hilts, and when the shadows of the sword knots swayed, the walls glittered in gold. How beautiful and how interesting! (4) In front of the treasure, there was a specially made bed, and I was raised on the top of the bed. (5) Toward the left, a white-wood room stood splendidly. (6) Not knowing what kind of person was being raised in the room so beautifully decorated, I was struck with wonder. (7) And then, on the top of the bed, I was making-my-face-turn-to-one-place (i.e. concentrating) on the carving on the surface of the sheath.

APPENDIX 2

Ainu colloquial text (Ishikari dialect)

- Hampe isam, oya-paykar orwa gakkoo¹ otta somo ku-oman. father die next year from school to not IsG-go
- Pon turesi siko kusu kesto an kor ku-pakkay. little sister born because daily be PROG ISG-carry

- 3. Ku-aki ku-turesi tura okay-as kor totto kim ta oman wa 1sg-brother 1sg-sister with be-1PL PROG mother mountain to go and takenoko² uk wa se wa san, eiyok. bamboo shoot take and carry and descend sell
- 4. Totto ekimne kor pon turesi mamma ku-rusuy kusu mother go to mountain when little sister milk 1sg-want because paraparak, ene ku-kar-i ka ku-erampetek.

 cry what 1sg-do-NOMI too 1sg-not to know
- 5. Unarpe sinen ene itak-i, "Beko³ reska sisam otta oman wa beko aunt one thus speak-NOMI cow raise Japanese to go and cow tope hok wa kore ya," sekor itak kusu ku-pon-turesi ku-kay, milk buy and give IMP so speak because IsG-little-sister IsG-carry ku-aki teke ku-ani, ku-turesi, inen ci-ne wa beko an-reska-i IsG-brother hand IsG-take IsG-sister four IPL-be and cow INDEF-raise-NOMI tapaye-as.

 go-Pl.
- 6. Sisam nispa ene awki, "Totto ney-ne oman ruwe an?" sekor en-kopi
 Japanese master thus say mother where go that be so IsG/o-ask
 kusu "Hampe ray, ora* totto ekimne takenoko kar kusu
 because father die my mother go to Mt. bamboo shoot take so as
 oman," sekor hawki.

go so say

- 7. Ku-cis kor sonno en-erampokinu, beko tope poronno en-kore.

 1SG-cry PROG really 1SG/0-pity cow milk lot 1SG/0-give
- Pon turesi ku-kore kor onuman pakno haw sak.
 little sister 1sG-give PROG evening until voice without
- Totto takenoko eiyok wa amam hok wa keray-kusu ipe-as. mother bamboo shoot sell and rice buy and with thanks eat-IPL

(1 a Japanese word for "school", 2 a Japanese word for "bamboo shoot", 3 a Japanese word for "cow", 4 a Japanese word for "I")

(From Ku sukup oruspe [My life story] by Sunasawa Kura)

Translation:

(1) Father died, and from the year after that I didn't go to school. (2) Since a sister was born, I was carrying her on my back every day. (3) While my younger brother, younger sister, and I stayed, mother went to the mountain, took bamboo shoots, carried them, came down, and sold them. (4) When mother went to the mountain, the little sister cried wanting milk, but I didn't know what to do. (5) An aunt said this way, "Go to where the Japanese raise cows, buy cow's milk, and give it to her." That being said, I carried the little sister on my back, took the little brother's hand, and my younger sister; being four of us, we went to where the Japanese raised cows. (6) The Japanese master said, "Where did your mother go?" Thus asked, "Father died. My mother went to the mountain to take bamboo shoots," said I. (7) I was crying, and he pitied me, and gave me a lot of cow's milk. (8) Having given it to the little sister, she didn't cry until evening. (9) Mother sold bamboo shoots, bought rice, and with thanks we ate.

PART 2 The Japanese language

Introduction

Japanese is spoken by virtually the entire population of Japan – some 121 million people as of 1986. In terms of the number of native speakers, it easily surpasses major European languages such as German and French, ranking sixth among the languages of the world after Chinese, English, Russian, Spanish, and Hindi. Yet, despite its status as a major world language and its long literary history, which goes back to the eighth century, Japanese is surrounded by numerous myths, some of which are still perpetuated by Japanese and foreigners alike. The following chapters intend to identify the factors that contribute to these myths and attempt to dispel some of them, while at the same time shedding some light on a few characteristic features that appear to distinguish Japanese from more familiar European languages.

The main factor contributing to the formation of various myths about Japanese is its virtual isolation from other languages. Unlike the languages spoken on the European, American, and Asian continents, the Japanese language, being spoken in an island nation, is physically isolated from other languages in such a way that there is no linguistic contiguity such as that often observed in Europe, where a clear linguistic borderline separating the German-speaking area from the Dutch-speaking area, for example, is practically impossible to draw. Also, unlike major European languages like English, Spanish, and others, Japanese is primarily spoken within the confines of its national boundaries, with no other country using it as either a first language or a second language, though there are a few immigrant groups in Hawaii, North and South America, where daily users of Japanese are found among the first- and second-generation residents.

This physical isolation of Japanese is accentuated by its linguistic isolation in that Japanese, in a non-technical sense, is unlike any other language; there is no other language that, to the mind of an average Japanese or non-Japanese, is quite like Japanese. In a technical sense, Japanese is a language-isolate in that its genetic affiliation to other languages or language families has not been entirely clarified.

The physical and linguistic isolation that characterizes Japanese has had pro-

found effects upon both Japanese and non-Japanese in their conceptualization of the Japanese language as a mother tongue or as a foreign language to be reckoned with. One of the persistent myths held by the Japanese concerning their native language is that it is somehow unique. This myth derives mainly from considerable ignorance of other languages as well as from the superficial comparison between Japanese and the closely related Indo-European languages such as English, German and French, and the obvious disparities which such work reveals. Another persistent myth is that Japanese, compared to Western languages, notably French, is illogical and/or vague. This belief, remarkable as it may be, is most conspicuously professed by certain Japanese intellectuals well-versed in European languages and literature. In addition, many Japanese and non-Japanese alike hold Japanese to be an extremely difficult language. From a technical point of view, all these assertions can be dismissed as myths. However, like all myths, they do have some basis - in some characteristic features of the Japanese language. The major portion of the following chapters is concerned with the grammatical characteristics of Japanese, though the dispelling of some of the myths will require us to look beyond grammar. In this introduction, we shall briefly introduce some of the grammatical characteristics of Japanese in response to the myth that Japanese is a unique language, while postponing the discussion of the other myths, which largely pertain to extragrammatical features of Japanese, until the end of the book.

Is Japanese a unique language? Offering an entirely satisfactory answer to this question requires a full discussion of the language, and the following chapters in part represent an effort to do so. Here we shall confine ourselves to outlining some of the salient features of Japanese that are detailed in the text that follows. One of the aspects in which a language can potentially be different from others concerns the origins of or the original formation of the language. In terms of what is known about genetic relationship, Japanese is arguably unique in that, compared to other major languages of the world, its genetic affiliation to other languages or language families is not definitively known. Japanese may also be unique in that its original formation may have involved an amalgamation of two or more languages, in contradistinction to the other major world languages, which typically develop by splitting away from a mother language. The topic, as discussed in Chapter 5, is hotly debated currently, but clearly this is one of the areas in which professional linguists have so far not been able to provide definitive answers. While languageisolates are observed elsewhere, e.g. Basque in Europe and Burushaski in Asia, it is noteworthy that the languages spoken around the Japanese archipelago, namely, Japanese, Ainu, and Korean, are all characteristically of uncertain origin.

As noted above, the idea that Japanese is unique derives mainly from comparison with European languages in a Eurocentric perspective on the world. Japanese

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indeed has a number of features that are typologically quite interesting, but to determine the extent to which Japanese is structurally unique requires two linguistically neutral perspectives: namely, an examination of the overall pattern and a detailed examination of specific aspects. First, as for the overall typological characteristics, recent studies in this field dealing with a large number of languages representing genetic and geographic diversities have revealed that Japanese is not unique; on the contrary, Japanese is a very typical human language as far as its overall grammatical structure is concerned. As detailed in Chapter 11, Japanese has the basic word order of Subject-Object-Verb, and the order of other grammatical elements consistently follows this basic modifier-head pattern. The SOV order predominates among the world's languages, amounting roughly to 50 percent of the languages sampled in various typological studies (see Matsumoto 1987). In the realm of phonology too, it is a commonplace language, with five hardly exotic vowels, a rather simple set of consonants, and a basic CV syllable structure (see Chapter 8). Thus, from the overall structural point of view, the myth that Japanese is a unique language is easily dispelled. However, detailed examination of specific structural domains reveals certain characteristics that are not shared by many other languages.

One phonological parameter used as a typological classificatory feature is tone. If a textbook definition were applied to Japanese, most Japanese dialects would be classified as tone languages, for whether a given syllable has a high pitch or low pitch affects the meaning of a word to a certain extent. However, Japanese differs from the archetypical tone languages of the Chinese type. In this type of language, it is necessary to specify the tone for each syllable, but in the case of Japanese, given a diacritic accent marker and a set of rules, the pitch of each syllable of a phrase can be predicted. The accentual system of Japanese, furthermore, involves two units of counting, namely syllables and moras, the latter being obliterated in most European languages. The use of these units in the accentual system, however, is one of the features that distinguish dialect groups.

From the point of view of morphology, Japanese is classified as an agglutinative language, as it involves a fair amount of affixation in its verbal morphology. Recent discussion in linguistic theory has been concerned with the syntax of typologically different languages, where similarities and differences in the organization of syntax across typologically different languages are investigated and principled accounts are sought for the observed diversity. A section in Chapter 11 directly focuses on this question by examining the syntax of agglutinative morphology with special reference to the formation of causative and passive expressions.

The original perspective on agglutinative morphology, of course, focused on the nature of word formation. The traditional conception of the lexicon as a depository

of words has been expanded in recent years, and an increasing amount of attention has been focused on the question of word formation and the internal structure of words. Japanese also offers an interesting perspective on this question. On the one hand, Japanese word formation involves various types of suffixes, some of which appear to have a syntactic basis; and on the other, it also has productive mechanisms of compound formation and one type of compound also seems to have syntactic relevance. We shall see that, with regard to the locus of word formation, three types of word formation need be recognized: lexical word formation (one type of compound formation and certain other affixing processes), syntactic word formation (affixation involving the honorific prefix as well as the causative and passive morphemes), and post-syntactic word formation (another type of compound formation).

Another syntactic construction dealt with in Chapter 11 concerns what is known as the topic construction. Among the recently proposed typological parameters is distinction in terms of subject-prominence and topic-prominence. Japanese lies in the middle of this subject-topic dichotomy in that it possesses an archetypical topic construction, while the notion of subject also figures importantly in its syntactic organization. Thus, Japanese affords an interesting perspective on the two basic types of sentence construction that are generally merged in one direction or the other in many other languages.

As the above discussion shows, while the overall structural pattern of Japanese represents a typical human language, certain characteristic features of Japanese emerge when the details of the phonological, grammatical, and morphological organizations are examined. Thus, the structure-based answer to the question of whether Japanese is unique or not must await thorough investigation of the entire structure of the language, and the major portion of this book is devoted to this end.

When viewed from a larger perspective, the uniqueness of Japanese can be sought in the multiplicity of coding possibilities that the language permits. First, Japanese possesses a writing system that affords four ways of representing one and the same concept: namely, Chinese characters called *kanji* (literally 'Chinese letters') in Japanese, two types of syllabary known as *hiragana* and *katakana*, and the use of the Roman alphabet (see Chapter 6). In the domain of the lexicon, successive waves of loan words resulted in a large number of doublets and sometimes triplets composed of a native word, a Sino-Japanese word, and a Western word. As discussed in Chapter 7, these near-synonyms are often associated with different shades of meaning or stylistic values, and the correct use of them is delicate both linguistically and politically. Linguistically, often the meanings of the foreign loan words are altered from the original meanings, and many expressions have been newly created in Japan by combining existing foreign words. Politically, one may be censured for using too many foreign expressions.

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In the realm of grammar, while it is true that all grammars provide a means of saving essentially the same thing in different forms (e.g. the active-passive alternation), Japanese, as in the case of writing and lexical choice, permits, or in fact requires, a greater variation in the form of an expression. The form of an expression in Japanese is affected far more than seems to be the case in many other languages by contextual factors such as the means of communication (writing or speaking), the formality of the setting, and the sex and the social status of the speech-act participants as well as of the person being talked about. Among these, the last set of factors plays an important role in the system of honorifics, whose mechanism requires dexterity in adapting to different circumstances. As detailed in Chapter 11, the highly elaborate honorific system extends to the use of pronouns (and the avoidance of using pronouns) as well as other personal referential terms. The speaker can refer to himself not only by the so-called first-person pronouns of different forms depending on the occasion, but also by other referential terms such as sensei 'teacher', otoosan 'father', ozisan 'uncle', and others depending on the relationship between him and the addressee.

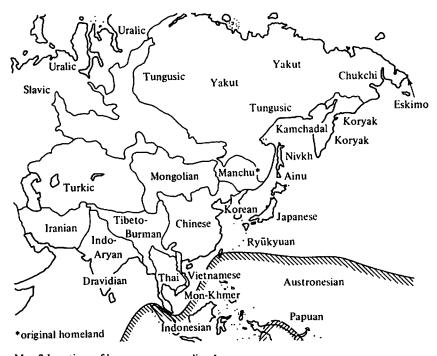
The extent to which Japanese provides alternate ways of expressing the same thing constitutes one characteristic feature of Japanese that sets it apart from more familiar languages, but it is also one of the factors that contribute to the myth that Japanese is vague, difficult, or even illogical. In order to respond to this assertion, it is profitable to first examine both grammatical and extra-grammatical aspects of Japanese in some detail. In the course of the examination, we shall hopefully find a partial answer to the question of the vagueness, the logic, or the difficulty of Japanese, and the remaining portion of the answer will be taken up in the epilogue.

Genetic affiliation

As pointed out in the introduction, one of the factors contributing to the myths surrounding Japanese is the uncertainty of its genealogy. Indeed, Japanese is the only major world language whose genetic affiliation to other languages or language families has not been conclusively proven. Since the middle of the nineteenth century, this challenging topic has been attacked by both foreign and Japanese scholars alike, and various hypotheses connecting Japanese to a large number of languages and language families have continuously been proposed. Since the initial hint for a possible genetic relationship comes from a language's geographic affinity to other languages, it might be instructive to become familiar at the outset with the distribution of the languages and language families surrounding Japanese (see Map 2).

Kamei (1961/1973:401-2) conveniently categorizes the past attempts at providing Japanese with a genealogy in the following manner:

- 1. Theories connecting Japanese with the languages of North Asia.
 - a. Theories placing Japanese with the Altaic or Ural-Altaic languages.
 - b. Theories connecting Japanese with Korean. The majority of scholars upholding this theory also regard Korean as a branch of the Altaic language family. They try at least to find relationships between Korean and Japanese on the one hand, and between Korean and the Altaic languages on the other.
 - c. Theories connecting Japanese with Ryūkyuan. Scholars today are agreed that the language of the Ryūkyuan Islands is a dialect that branched off from Japanese.
- 2. Theories relating Japanese with the languages of South Asia.
 - a. The Malayo-Polynesian or Austro-Asiatic theory.
 - b. The Tibeto-Burmese (sic) Theory.
- 3. Theories connecting Japanese with the Indo-European languages.
- 4. Other theories. In the past various unacceptable theories have connected Japanese with Persian, Greek, Basque, and Sumerian, but these theories have been quickly forgotten.



Map 2 Locations of languages surrounding Japanese

Not included in the above summary by Kamei are two other hypotheses concerning the origins of Japanese that have attracted increasing attention in recent years, namely the following:

- 5. A hypothesis that considers Japanese to consist of an Austronesian substratum and an Altaic superstratum.
- 6. A hypothesis that views Japanese as an Austronesian-Altaic hybrid or mixed language.

Among these hypotheses, 3 and 4 have been least successful, and we will ignore them in this survey. (On the questions regarding the relationships between Japanese and Ainu and between Japanese and Ryūkyuan, see Part 1 and Chapter 9, respectively.) The most time-honored, widely debated, and perhaps persuasive are those that assign Japanese to the Altaic family and those that subgroup Japanese and Korean together within this family. According to Poppe's foreword to Miller (1971), the first systematic attempt to investigate the relationship between Japanese and Ural-Altaic languages was made in 1857 by Anton Boller, who "advanced serious reasons for genetic affinity and illustrated his observations with convincing

examples" (Miller 1971:ix). Japanese scholars had not been as much interested in the question of genetic affiliation of their language as European scholars, and it was only in 1908 that, in response to a number of previous suggestions largely made by non-linguists, the linguist Fujioka Katsuji (1872–1935) pointed out fourteen characteristic Ural-Altaic features. After demonstrating that Japanese largely shares these features, Fujioka concluded that "Japanese must be first connected to the Ural-Altaic family prior to an attempt at a theory relating it to Indo-Germanic." Fujioka's (1908) well-known fourteen features are largely typological, but since they are often taken as a starting point in the discussions of the genetic relationship of Japanese, especially among the Japanese scholars, we summarize them below:

- (1) Fujioka's fourteen characteristic features of Ural-Altaic languages
 - a. No consonant sequences occur in word-initial position.
 - b. There are no native words that have the sound r in word-initial position.
 - c. There is vowel harmony.
 - d. There are no articles.
 - e. There is no grammatical gender distinction.
 - f. Verbal inflections are expressed by suffixing elements.
 - g. There are many kinds of verbal endings.
 - h. Pronominal declensions are expressed by attaching particles.
 - j. Postpositions, instead of prepositions, are used.
 - k. In the expression of possession, the existential "be" expression, instead of the possessive "have", is used.
 - In the comparative expression, the ablative "from", instead of "than" is used.
 - m. In the interrogative expression, a question particle is attached in sentence-final position.
 - n. Conjunctions are not used widely.
 - Modifiers precede the modified heads, and the object is placed before the verb.

At the time Fujioka delivered his lecture, Japanese was not thought to be a vowel harmony language, but subsequent research indicated a possibility that Japanese too had a feature of vowel harmony (see Chapter 6), and the proponents of the Japanese-Altaic connection generally take it to be a piece of evidence for their hypothesis. (Subsequent researchers notice that Uralic languages do have a word-initial r.)

While it is true that Japanese largely shares Fujioka's features, two serious drawbacks are inherent in his methodology. One is that Fujioka's features are largely typological, and the other is that many of them are negative rather than positive features. The weakness of typological comparison in establishing a genetic relationship has been demonstrated by Benveniste (1952–3/1966), who showed that the Penutian language Takelma shares all the six features that Trubetzkoy proposed as typological features that, as a whole, characterize Indo-European languages. Indeed, the proponents of the Japanese–Dravidian (–Altaic) connection (see below) point out that Fujioka's features are largely shared by Dravidian languages as well. The limitations of the typological approach to the question of genetic relationships are made even clearer by recent works in typological research by Greenberg (1963) and others, which show that typological features may be shared by languages that are both genetically and areally distinct.

Notwithstanding the weaknesses and limitations of the early attempts at establishing the Japanese-(Ural-)Altaic relationships, their influence on subsequent research, particularly those efforts that try to relate Japanese to Altaic, cannot be ignored. In fact, typological features, however inadequate they may be, figure prominently in most subsequent discussions on the genetic affiliation of Japanese. And this very fact underscores the difficulty that researchers have encountered in establishing convincing sound correspondences (see below).

Along with the progress in Altaic linguistics, largely thanks to the works of such scholars as G.J. Ramstedt, Nicholas Poppe, Karl Menges, and Johannes Benzing, more careful etymological investigations as well as attempts based on the Neogrammarian comparative method have been made with the aim of establishing the Japanese-Altaic connection. (Except for a few sporadic attempts, the Uralic component has been excluded from consideration in this tradition, due largely to the uncertainty of the Uralic-Altaic unity.) The standard comparative material on the Japanese side is Old Japanese, as reflected in the writings of the late seventh century and the eighth century, such as the Kojiki (Records of Ancient Matters) (712), the Nihon Shoki (Chronicles of Japan) (720), and especially the Man'yōshū (Collection of a Myriad Leaves) (ca. 759). The Old Japanese materials have been made readily accessible by Omodaka et al.'s (1967) dictionary of Old Japanese. The phonetic details of Old Japanese, though not conclusive in some areas (see Chapter 6), have been ascertained from both the modern pronunciation of the descendant forms and the Middle Chinese pronunciation of the characters used in the transcription of the Old Japanese materials. On the Altaic side, the descriptions of individual languages and the reconstructions made by the aforementioned Altaic specialists are the standard references.

Among Japanese scholars, the most ardent supporter of the hypothesis of a Japanese-Altaic affinity is Murayama Shichirō, an Altaic specialist trained in Berlin, who, in a series of works beginning in the 1950s, has conducted important investigations into the establishment of a Japanese-Altaic connection. Among Western scholars, the foremost promoter of the Altaic hypothesis (in the sense of the hypothesis connecting Japanese and the Altaic family) is Roy Andrew Miller, whose efforts, inspired by Murayama's works (see Miller 1974), culminated in his Japanese and the Other Altaic Languages (1971), which attempts to establish the case for the Altaic origin of Japanese. Murayama and Miller, both trained as comparativists, attach the greatest significance to the comparative data. However, supporting evidence for the sound correspondences arrived at is not always provided in sufficient quantity and what is offered is often controversial (see below).

Miller (1971) offers wide-ranging sound correspondences of both vowels and consonants among Altaic languages and Korean languages (proto-, Middle, and Modern Korean) as well as Old Japanese and Modern Japanese, attributing each correspondence to the proto-Altaic phonemes reconstructed by Poppe (1960). The following are sample correspondences of selected vowels in first syllables. (See Chapter 6 for the representative Old Japanese syllables.)

(pA = proto-Altaic, OJ = Old Japanese, J = Modern Japanese)

As for consonants, we might cite the following correspondences of word-initial consonants offered by Murayama (1973: 205):

(pA = proto-Altaic, AJ = Archaic(proto-?)Japanese, OJ = Old Japanese)

Murayama (1973:205) offers the following cognates illustrating the y:d correspondence in the table.

(4) Old Japanese
yama < *daban
'mountain'

Altaic languages
Mongol daba- 'to cross a
mountain'
dabagan (colloquial dawān) 'ridge'
Tungus dawakīt 'ridge'

yasu-mi < *dasa-Manchu dasa- 'control' 'by controlling' M. Korean dasp|ri- 'control' yopa < *doppa < *dolpa 'night' Tungus *dolba 'night' $yo < *d\ddot{o}$ 'four' Mongol *dörben Tungus *dügün < *dö-gün $vu < *d\bar{u}l$ 'hot water' Evenki dūl- '(the sun) warms' Lamut dul- 'hot, warm (day)' Mongol dulagan 'warm' Turkish vilig 'warm' Manchu dasa- 'prepare' yösöp- < *dəsə-p-'attire oneself' M. Korean tasi < *das-i 'newly'

Among the grammatical elements, the discussion of the Old Japanese accusative particle wo is most interesting in light of our own discussion of the development of this particle within Japanese (Chapter 11). Murayama (1957) first compared this, which he believes to go back to *wa, with the Manchu accusative suffix -be and proto-Tungus *-wa/*wa. Miller (1971) elaborates further on these correlations. He points out that both proto-Tungus *-ba and Old Japanese wo share the function of indicating, in addition to objects, time and place, and that the Manchu accusative suffix -be also marks a subordinate clause just as Old Japanese wo marks a nominalized clause functioning as the object of a main clause. Murayama (1973), by pointing out further that the accusative suffix of Nanay (or Goldi) also has a function as an exclamatory particle, draws the conclusion that the modern Japanese accusative particle o and the topic particle wa, which are generally believed to have arisen from exclamatory, emphatic particle(s), are relatable to the proto-Manchu-Tungus accusative particle *ba/*ba, whose original function, Murayama believes, was to mark emphasis and exclamation rather than a grammatical object.

As the above discussion on the Old Japanese particle wo indicates, a close affinity of Japanese to Tungus has been hypothesized by both Murayama and Miller. Other specific languages of the Altaic family that are said to be closely related to Japanese include Mongol and Korean, if the latter were to be considered as an Altaic language. Among the Japanese scholars, Ozawa Shigeo is perhaps the most energetic promoter of a Japanese-Mongol connection, as represented by his effort published in 1968.

Whether one seeks the origins of Japanese toward the north or toward the south (see below), everyone must acknowledge that the most systematic comparative work relating Japanese to a single other language is Martin (1966), who, by comparing 320 seeming cognates and reconstructing their proto-forms, demonstrates a close affinity between Japanese and Korean. The following table lists a

sampling of the sound correspondences and proto-Korean-Japanese reconstructions offered by Martin:

(5)	proto-k-J K		J	reconstructions	Korean	Japanese
	*p	p	p > hw > h	*pal(y)i 'bee'	"pəl, MK pəli	*pati>hati
	*b()	p	b	*syibxa 'brushwood'	səph, MK səp	siba
	*mp()	p	m	*txumpye 'claw'	MK thop	tume
	*w	p	#	*vasyi 'foot'	pal < MK 'pal	así
	*ts	С	S	*tsuldyi 'line'	cul	sudi
	*lğ	i	k	*swalğye 'liquor'	sul, MK suul,	sake
	*s	1	S	*masu 'measure'	mal < MK'mal	masú
	*i	i	i	*jipye 'house'	cip	yipė
	*yi	ë	i	*cyic(yi) 'breasts'	cëc	titi
	*a	a	a	*taxye 'bamboo'	ta < MK 'tay	take
	*wa	u	a	*tsxwampu 'cold'	chuw/p	samu-
	*u	u	u	*pudye 'brush'	pus < MK 'put	pude
	*5	a <o< td=""><td>u</td><td>*ponye'boat'</td><td>pä < MK 'pɔy</td><td>púne</td></o<>	u	*ponye'boat'	pä < MK 'pɔy	púne

(In the MK (Middle Korean) forms ' and '' indicate high and low rising pitch accents, respectively, whereas in the Modern Korean forms, "marks vowel length. In the Japanese forms, the stress mark indicates a high-pitched syllable.)

While Martin's work is a culmination of efforts that have a long history, especially in Japan, reaching back to Aston (1879), Oya (1889), or the more thorough overall comparison of Kanazawa (1910), criticisms and revisions have been made by Miller (1967b), Mathias (1973), and Lee (1973), among others. The major criticism of Martin's work centers on the use of primarily modern forms of Japanese and Korean rather than the oldest forms for comparison. Attempts to avoid such criticisms had been made prior to Martin's work by Murayama (1962) and Lee (1963) in their comparison of Old Japanese and an older form of Korean, or at least a component assumed to contribute to the formation of Middle Korean of the fifteenth century, the language of Koguryo, spoken by northern Koreans around the beginning of the Christian era. Though we will not dwell on the question of the Japanese-Korean connection here, since it is taken up in detail by Ho-Min Sohn's volume on Korean in this series, at the moment Korean is the single most likely sister language candidate for Japanese. Thus, if the Korean-Altaic connection is proved, the probability of the Altaic origin of Japanese will be considerably strengthened.

Taking all these considerations into account, Miller (1971:47) concludes the

introductory chapter to his book by saying that: "the phonological and morphological correspondences in matters of precise detail that can now be established between Japanese and Turkish, Mongol, and Tungus leave no reasonable doubt that Japanese is a later, changed form of the earlier linguistic unity to which Turkish, Mongol, and Tungus must also be referred; in other words, Japanese is another one of the Altaic languages." As to the original homeland of the Altaic speakers, Miller (1980:54) offers the Transcaspian steppe area, where a long series of migrations by the original Altaic speakers started that "would distribute the Altaic languages across the Asian continent, from Turkey in the west to the Pacific coast in the east. These migrations would eventually take them to the Japanese archipelago..." Miller (1971:44) summarizes the historical relationship of Japanese (and Korean) to the Altaic languages in terms of Figure 5.1 below.

While Miller's proposal is a reasonable one considering the past discussions by himself and others regarding possible connections between Japanese and Korean, between Japanese and Tungus, and between Japanese and Mongol, one would surely find unacceptable his regarding Middle Korean, Old Japanese, and Ryūkyuan as sisters on a par. As discussed in Chapter 9, the Japanese–Ryūkyuan connection is far more transparent than that between Japanese and Korean, and Ryūkyuan is now considered to be a dialect (group) of Japanese by most Japanese scholars. Furthermore, in view of the certainty of the relationships among the languages of the three Altaic groups of Turkic, Mongolian, and Tungusic, on the one hand, and the relative remoteness of the relationships between Japanese and Korean and between these to the three Altaic groups, one cannot simply dismiss Street's proposal (1962) – a suggestion also made by Poppe in his foreword to Miller (1971) – that proto-Korean–Japanese(–Ainu) is related to the Altaic family as a sister language of proto-Altaic, these together forming proto-North-Asiatic.

The most embarrassing problem for anyone attempting to relate Japanese to the Altaic family or to Korean is the phonological discrepancy between the former and the latter. Japanese, especially Old Japanese, basically has a CV syllable structure, whereas Altaic languages and Korean abound in closed syllables with a variety of syllable-final consonants. Also the vowel system of Japanese of various historical stages has been relatively simple in contrast to more complex vowel systems found in Altaic or Korean. Though there is a hypothesis that Old Japanese had eight vowels, most scholars believe that the stage of the eight-vowel system was quite short, arising from a four- or five-vowel system of pre-Old Japanese and turning to the present-day five-vowel system (see Chapter 6). This kind of phonological discrepancy and the difficulty of establishing convincing sound correspondences of significant quantity between Japanese and Altaic languages (and Korean as well) had the effect of making researchers turn their attention to other languages

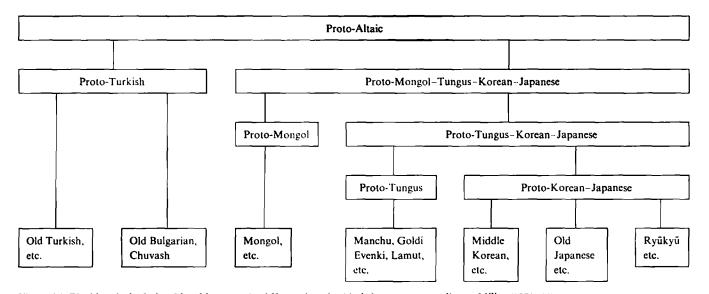


Figure 5.1 The historical relationship of Japanese (and Korean) to the Altaic languages according to Miller (1971:44)

with relatively simpler phonological systems. From the geographic position of the Japanese archipelago, whose southwestern tip extends toward Formosa, the northernmost Austronesian habitat (see Map 2), Austronesian (or Malayo-Polynesian) languages were natural candidates for comparison with Japanese.

While Kamei's summary of the past research, quoted at the beginning of this chapter, points out theories that seek the origins of Japanese among Austronesian languages, and while there is the expression nanpoosetu 'southern theory' in the literature, most serious works that attempt to compare Japanese and Austronesian languages consider the Austronesian elements in Japanese to be primarily an Austronesian lexical stock in the Japanese lexicon, maintaining in the main that the grammatical characteristics of Japanese are of Altaic origin. That is, most researchers who speak of the southern origin of Japanese fall into the categories of researchers who believe in either the southern substratum theory or the mixed-language theory incorporating the southern substratum theory.

Shinmura (1908) is a precursor of the present-day southern substratum theory. In his non-technical general survey of the problem of the genealogy of Japanese, Shinmura concludes that it is indisputable that Japanese is related to Ural-Altiac, though remotely, but suggests that the simple Japanese phonology is due to early mixing with the people of the South Pacific. On the other hand, Polivanov (1924) characterizes the original formation of Japanese in terms of a hybrid of southern, Austronesian elements and western continental elements common to Korean and other Altaic languages. In other words, Japanese is said to be an amalgam of Austronesian and Altaic elements. In a footnote to his 1924 paper, Polivanov lists the following "external similarities" that suggest the closeness of Japanese to Austronesian:

- (6) a. typical bisyllabicity of the lexical morpheme (kata, naka, etc.) and monosyllabicity of the formal morpheme;
 - the presence (which differentiates Japanese from the fully suffixal Altaic languages) of some prefixes in Japanese, this being an Austronesian legacy since all the other, suffixal, morphology is evidently of continental origin;
 - c. morphological functions of (full and less than full) reduplication in the most archaic layer of Japanese morphology;
 - d. simplicity of the vowel system and the absence of vowel harmony (as we will see, "tone harmony" replaces it in Common Japanese);
 - e. musical Wortakzent:
 - f. the fact that open syllables are typical;
 - g. almost full identity of the very uncomplicated consonant system of pre-Japanese and typical Polynesian (without paired voiced and in

- general without "paired" categories of phonemes); incidentally, with three nasals m, n, and n. And also some parallel developments:
- h. the process of the loss of lip participation in $p: p > f(\varphi) > h$; cf. Japanese pi > fi > hi (ci) and Polynesian apui > api > afi > ahi 'fire';
- i. the secondary nature of the paired voiced semi-nasals ("b, "d, from which Tōkyō b, d came) which developed in Common Japanese and, on the other hand, in Melanesian.

With regard to features (b) and (c), Polivanov (1918) discusses the Japanese prefix ma-'very, really', which derives emphatic adjectives, e.g. 'black' kuro:ma-kkuro, 'white' siro:ma-ssiro, 'inside' naka:ma-nnaka 'dead center'. From the pair of onomatopoeic adverbs such as pikka-ri and pika-pika 'gleaming', Polivanov considers the long [geminate] consonants involved in the ma-prefixed adjective forms (as well as in the -ri suffixed adverb forms) to be originally due to reduplication, i.e. ma-kkuro < *ma-kukuro. This conjectured proto-form [ma + REDUPLICATION] is identified with similar adjective formation patterns in Austronesian languages such as the Tagalog adjective form, e.g. ma-butingbuting 'very good', Ilokano ma-saksakit 'sick', Melanesian nanukunuku 'soft', manaenae 'wilted'.

Both Shinmura and Polivanov find supporters in contemporary Japan. In the case of the southern substratum theory, Izui (1953) is perhaps the first systematic formulation. Izui believes that there were various formative elements that contributed to the formation of Japanese. The Austronesian elements in Japanese should be considered as old borrowings by Japanese that, among other language materials from different sources, contributed to the formation of early Japanese. The genealogy of Japanese must be sought in terms of the identification of one language that, upon organizing the various contributing linguistic elements, had the effect of stamping its linguistic character on Japanese. In Izui's thinking there is only one genealogical line, whereas there have been many sources of language materials that contributed to the formation of Japanese. Genealogically, Izui believes, Japanese is northern or continental. (Izui invested considerable effort in relating Japanese to the Uralic family.)

Izui's work has played a number of important roles in the subsequent work in this area. Firstly, as pointed out above, it has given the so-called Austronesian elements in Japanese the status of a substratum of Japanese. Secondly, Izui has shown sound correspondences between certain Japanese words and Austronesian correspondents, though he has been firm that these sound correspondences should not be taken as an exercise in establishing a genetic relationship; they are meant to show the nature of regularity between the borrowed items and their source forms. And finally, Izui's work has had the effect of turning researchers' attention from

a purely genealogical issue to the problems regarding the formation of Japanese. Indeed, as discussed below, more and more researchers are interested in investigating the nature of the entire formation of Japanese, rather than simply attempting to identify its genealogy.

Izui's Austronesian-Japanese correspondences include the following (MP = Malayo-Polynesian):

(7) MP *n - Jn

*nam-nam 'to taste': Batak nam-nam 'to taste with the lips, to lick', Tagalog nam-nam 'taste', Melanesian (Sa'a) na-na 'to eat' – Japanese namu 'to lick', na in sakana 'fish'

*i-num 'to drink': Tagalog, Chamorro 'inum, Batak 'inum, inum, Malay mi-num, etc. – Japanese nomu 'to drink'

MP * y - J n

*buŋa, baŋa 'flower': Batak, Malay buŋa 'flower,' Tagalog buŋa 'fruit', Chamorro baŋa 'flower', etc. – Japanese hana (<*pana) 'flower'

MP *p - J *p > (p, F), h

*put'əg' 'navel': Tagalog pusod, Batak pusok, Javanesc pusər, Malay pusat, etc. – Japanese hoso 'navel'

MP * t' - Js

*t'abah 'watered rice paddy, swamp': Malay, Javanese sawah 'paddy', Batak saba 'paddy', etc. - Japanese sawa 'swamp'

*at'at 'shallow': Javanese asat 'shallow', Cham asit 'small', Melanesian (Sa'a) ma-ata 'dry up and shrink', Samoan m-asa 'shallow', etc. — Japanese asa 'shallowness'

MP *d - J t, d(?)

*dakep 'to cuddle': Malay dakap 'cuddl(ing)', Batak dahop 'cuddl(ing)', Tagalog dakip 'to maintain', etc. – Japanese daku 'to cuddle'?

The great popularizer of the southern substratum theory is Ōno (1957), who summarizes the formation of Japanese as follows. During the Jōmon period (8000, 7000 BC-400 BC), a language of southern origin with a phonological system like Polynesian languages was spoken in Japan. As the Yayoi culture was introduced to Japan from the Asiatic continent (around 300 BC), a language of southern Korea with the Altaic grammatical structure and vowel harmony began to spread eastward from Kyūsyū along with the eastern spread of this culture, which introduced to Japan the cultivation of rice, iron and bronze implements, and other continental artifacts. Since the migration from Korea was not large-scale, the new language

did not eradicate certain older lexical items, though it was able to change the grammatical structure of the existing language. Thus, genetically Japanese must be said to be Altaic, though it contains Austronesian lexical residues, which account for the scarcity of the Altaic cognates in the Japanese lexicon.

Ono's view is more radical than Izui's in that he considers the southern elements in Japanese to be not merely due to borrowing. In his view an Austronesian language was once spoken in the Japanese archipelago. Ono (1980a) maintains his southern substratum theory despite Miller's (1974:458) criticism that "all substratum theories are essentially and fatally circular" - Miller, in this review, incorrectly identifies Ono's formulation as involving "an Altaic substratum now largely obscured by many subsequent accretions, particularly by Malayo-Polynesian elements" (p. 458). In fact, Ono is now one of the leading scholars advancing the Japanese-Dravidian (especially Tamil) connection. Ono's latest view (1980a) subscribes to the concept of a multi-layered formation of Japanese. According to Ono's summations (1980a: 83, 109-10), the earliest Japanese of the period around 8000 BC had a simple phonology with four vowels and vowel-ending syllables (?) - this was perhaps an Austronesian (or Papuan) language. In the middle of the Jomon period (3500 BC), proto-Tamil, accompanying the eastward migration of the Tamil people, was funneled into Japanese bringing with it many words relating to farming, e.g. J ine: T nel 'rice plant', J wasa: T paccai 'early ripening (rice)', J Fatake: T patukar 'plowed field'. And then around 300 BC (the beginning of the Yayoi period) a Koguryŏ-type Altaic language arrived in Japan via Korea bringing with it Altaic characteristics such as vowel harmony, which lasted until the eighth century but was doomed to die out in the ninth century because proto-Tamil speakers, to whom vowel harmony was foreign, were more numerous than the newcomers.

Though Ōno's Austronesian-Dravidian-Altaic confluence may strike one as being quite farfetched, Shiba (1980), another promoter of a Japanese-Dravidian connection, points out that Dravidian languages and Ural-Altaic languages share a large number of similarities in the first place. Thus, most of the features that have been enumerated as those features shared by Japanese and Ural-Altaic languages, such as Fujioka's listed in (1) earlier and others, are also largely shared by Dravidian languages, indicating not only the possibility of the Japanese-Dravidian connection but also that of the Dravidian-(Ural-)Altaic connection – the latter, according to Shiba, being also contemplated by Dravidian and Altaic specialists such as R. Caldwell, T. Burrow, M.B. Emeneau, K. Menges, and K. Bouda. Shiba also points out that Dravidian languages show similarities to Austroasiatic and Austronesian languages in the following respects: (a) there are three (proximal, medial, distal) series of demonstratives, (b) many body-part words show simi-

larity, and (c) phonologically Dravidian and Austronesian languages share many similarities.

Whereas Ono's hypothesis emphasizes the layered nature of the formation of Japanese, Murayama (1973), inter alia, more closely subscribes to Polivanov's hybrid or mixed-language hypothesis. As indicated by the discussion above, Murayama was one of the foremost supporters of the hypothesis connecting Japanese to Altaic, especially Tungusic, languages. However, in the middle of 1960s, he discovered Polivanov and began to advance the latter's idea of Japanese being a mixed language of Austronesian/Austroasiatic and Altaic strains. Poppe in his foreword to Miller (1971) also introduces Polivanov's hybrid language hypothesis, adding that "it is quite possible that Japanese does have a Malayo-Polynesian stratum. In the event that several strata can be established in Japanese, Miller's work would be affected insignificantly and would retain its validity with regard to the Altaic stratum in Japanese" (p. xi). Whereas Miller in the text has nothing to say in response to this benign view, Ono's and Murayama's works can be interpreted as directly aiming at such a possibility by going beyond the Altaic stratum in search of those other elements that may have contributed to the formation of the oldest form of Japanese. While all these scholars agree on the presence of an Altaic stratum in Japanese, both Ono and Murayama think that the study of the possible Altaic stratum alone, though by no means exhaustively explored, would not solve the questions regarding the origins of Japanese, as evidenced by Murayama's confession: "I myself had been thinking that the problem of the genealogy of Japanese would be resolved by means of comparative Altaic linguistics, but I have reached the conclusion that it cannot be resolved unless the presence of a thick Austronesian substratum is taken into consideration" (Murayama 1973:224).

Though Murayama keeps using the term Austronesian substratum, his view of a mixed language is more than having a large number of foreign words integrated into another language as a substratum or a loan-word component – a situation exceedingly common. What Murayama has in mind is a language whose morphology involves elements deriving from two (or more) different languages – a kind of language that Meillet (1925) declares not to have been found.

Murayama (1973) refers to the work of a Russian linguist who has reported a case of the type of mixed language he has in mind. The case in point is an Aleut-Russian hybrid spoken on the island of Mednyy in the Bering Sea off the Kamchatka Peninsula. Due to the influence of the Russian brought to the island by Russian hunters, some of whom remained and married Aleut women, the Aleut language of the island adopted the Russian system of verb inflection completely. Thus, Mednyy Aleut has a mixed verbal morphology of Aleut stems and Russian

inflectional endings, whereas pure Aleut has been maintained in the other Komandorskiye island of Beringa, where no Russians settled. Murayama believes that the Japanese inflectional paradigm exhibits some forms that are made up in just the way Mednyy Aleut has developed its verbal paradigm.

Murayama (1984) maintains that there is both Altaic and Austronesian stock among the Japanese verb roots, whereas the inflectional endings are of Altaic origin. That Austronesian roots inflect in terms of the Altaic (Tungusic, Korean) inflectional endings is taken as evidence showing that Japanese involves an Austronesian substratum and an Altaic superstratum rather than the other way around. According to Murayama, the Austronesian verb stock includes: *ase < *asa-i 'to become shallow, to lighten (as of a color)' (proto-Austronesian *at'at 'being shallow'), atari < ta-ri 'to hit' (the verbalized form of ata 'foe, revenge') (proto-Austronesian *ha(n)dp 'frontage'), nābari < nāba-ri 'hiding' < *Nitamba-(proto-Austronesian *ta(m)bəŋ 'hiding'), tumi < tum-i < *d'ump-i 'pluck' (proto-Austronesian *d'əmput 'plucking'), and watari < wata-ri 'ford' (the verbalized form of wata < *wat'a 'ocean') (Polynesian wasa < *wat'a 'ocean'). (For proto-Austronesian forms, Murayama depends on O. Dempwolff's reconstructions.)

On the other hand, the following and others are said to belong to the Altaic verb stock: ipi < ip-i 'to say' (Middle Korean ip 'mouth'), nuki < nuk-i 'to doff' (Tungusic luk-, nuk- 'to doff'), *öki 'to get up' < *ökö-i < *ögə- (Mongol ögede 'on top', Tungus ugi 'top', ögili 'on top', Middle Korean uh < *ög 'top'), *urupi < *ulup-i 'moisture, damp' (Evenki ulap- 'to become wet', Lamut ulap-, ulup- 'to become wet', etc.), wari < wa-ri 'to break, to smash' (proto-Tungus *wa- 'to kill, to destroy'). The Japanese (reconstructed) verb forms shown here are in the adverbial (nominalized) form with the inflectional endings of -i or -ri. These endings, Murayama claims, are Altaic in origin; -i corresponds to the nominalizing suffix -i in Altaic languages, and -ri finds its Altaic analog in the Mongol suffix -ri, which forms nominals representing the location or result of an action. As for the irrealis forms (see Chapter 10 for the Japanese inflectional categories), Murayama posits -ra, whose origin is identified with the Tungusic -ra, which attaches to the predicative agrist form. With regard to the conclusive form, Murayama believes it to originate from the combination of the adverbial (or nominal) form and *wu 'to be'. This *wu is said to be related to the Ryūkyuan *wum, which is the conclusive ending that attaches to the adverbial form. Furthermore, *wum goes back to the proto-form *bü-m. The bü- is then identified with the Mongol bü-'to have', Tungus bi-si < *bū-si- 'to have', Middle Korean isi- < *wisi- < *bi-si-. The -m portion of *wum is identified with the Altaic nominalizing affix -m.

Now, while these inflectional endings originating from the Altaic source attach to verb roots of both Altaic and Austronesian stocks, the combination of an Austronesian root and an Altaic suffix produces a kind of morphological mixing that Murayama believes characterizes the earliest form of Japanese as a mixed language. In Murayama's view then, forms such as watari (<wata-ri) 'to ford-ADVERBIAL', watara (<wata-ra) 'to ford-IRREALIS', wataru (wata-ru < *wata-rjum < *wata-ri-wu-m < *wata-ri-bü-m) 'to ford-CONCLUSIVE' are mixed morphology par excellence. On the basis of his examination of what appear to be Austronesian morphological traits, e.g. morphological derivation involving the prefix *maN-corresponding to proto-Austronesian *ma-, in pre-Old Japanese, Murayama believes that the Austronesian contribution to the formation of Japanese is not a simple case of lexical borrowing or of an inert substratum; rather, the Austronesian elements had a far more active participation in the formation of early Japanese. In other words, Japanese is an Austronesian-Altaic mixed language by origin.

While both Ono and Murayama subscribe to the traditional view that the Austronesian and the Altaic elements form a substratum and a superstratum, respectively, this view has not been universally accepted among those who subscribe to the substratum or the mixed-language theory. Kawamoto (1980), for example, also believes that Japanese was an Austronesian-Altaic mixed language at the time it was formed, but he thinks that it is the Altaic traits, e.g. SOV word order, that form a substratum. His reasoning is based on his observation that, while a strong language forming a superstratum tends to impose its vocabulary on a weaker, subjugated language, in the case of Japanese there are not as many Altaic words as expected from a theory incorporating an Altaic superstratum.

Murayama is not the only convert from the straightforward Altaic hypothesis of the origins of Japanese. Among the most notable is Gō Minoru, who, like Murayama, is an accomplished Altaic specialist. With the background of his fifty years of Altaic studies, Gō (1980) believes that the genealogy of Japanese remains unresolved as it is, and that Japanese must be compared (simultaneously?) with numerous languages. He has performed one such comparison, examining the 200 words of the Swadesh basic vocabulary across the six languages/language families that have been said to be related to Japanese, namely, Korean, Ainu, Altaic, Austronesian, Dravidian, and Papuan. The result was that both Dravidian and Papuan language groups show a greater similarity to Japanese than that exhibited between Japanese and Austronesian or between Japanese and Altaic languages. Encouraged by this and by the shared typological features, Gō has been pursuing a possible Japanese—Papuan genetic relationship.

Whereas the Altaic-Austronesian combination hypotheses are more concerned with the total formation of Japanese than with the straightforward identification of the genealogy of Japanese, there have also been attempts, like Go's, to establish a genetic relationship between Japanese and specific language families of South Asia. Among these latter attempts, the Tibeto-Burman family figures prominently.

Parker (1939) is the most well-known and ambitious early attempt to compare a wide range of grammatical elements, including pronouns and case particles as well as more general typological features, of Japanese with Tibeto-Burman languages. Despite his confident assertion that great Tibeto-Burman and secondary Mon-Khmer influences are seen in the Japanese lexicon as well as in the syntax and that the relationship between Tibeto-Burman and Japanese is similar to that between Anglo-Saxon and English, his crude methodology – a characteristic not unique to this work – has, like other works, not succeeded in entirely convincing other serious scholars. However, some thirty years later, Nishida Tatsuo, a Tibeto-Burman specialist, began to seriously pursue the possibility of a Japanese-Tibeto-Burman connection.

With full recognition of the possibility that Japanese received influences from a number of languages before it reached the Old Japanese stage, Nishida (1978, 1980) presents the bold hypothesis that Japanese is a member of the Tibeto-Burman family, in which Japanese occupies the position of a classical language along with Tibetan. Nishida's strategy is (a) to establish, from the Tibeto-Burman perspective, the oldest Japanese forms or the morphophonemic (i.e. underlying) Old Japanese forms, which can be systematically compared with the Tibeto-Burman protoforms. and (2) to relate such forms to the attested Old Japanese forms. This is not an orthodox comparative method, which goes back "bottom up" from the available (and reconstructed intermediate) forms, and which, by way of showing the plausibility of the reconstruction, traces the historical development. Nishida, instead, first assumes the Tibeto-Burman origin of Japanese and tries to prove his assumption by showing how Old Japanese forms developed from the hypothesized original Japanese forms comparable to their Tibeto-Burman cognates. If the hypothesized forms are plausible and their subsequent developments down to Old Japanese are shown to be systematic and plausible (from the known facts of historical change), then Nishida thinks that his position is just as good as one arrived at by the comparative method. Nishida's position comes from his belief that the genealogy of Japanese cannot be established by the regular comparative method, which has been highly successful in Indo-European and a number of other language families (see below for a related discussion).

Anyone who knows anything about Tibeto-Burman or the larger group of Sino-Tibetan is struck by the predominantly monosyllabic character of the morphemes among the languages of this group. On the other hand, Japanese, as pointed out by Polivanov (see above), favors the disyllabic morpheme shape. How does Nishida reconcile this glaring discrepancy? Nishida believes that there were two major processes that converted the originally monosyllabic (pre-Japanese) morphemes into disyllabic Japanese forms. One is the expansion of a consonant cluster. By

inserting a vowel characteristically harmonic to the stem vowel in the middle of a consonant cluster, original monosyllabic morphemes were converted into disyllabic words, e.g. Old Japanese *Fana* 'nose' is related to Tibetan *sna* 'nose' in this manner. The other process of deriving disyllabic words is the compounding of monosyllabic morphemes. The Japanese word *musi* 'worm, bug' is analyzed as arising from *mu* 'worm' and *si* 'worm' in view of the corresponding Tibetan <u>h</u>bu-srin 'worm', which is a compound form of <u>h</u>bu 'worm' and *srin* 'worm'. Among those words that were derived by the first, predominant process, Nishida lists the following:

(8) Tibeto-Burman Archaic/Old Japanese

*gru/dru	turu	kro2-kra (Burmese) 'crane
*dri	tiri	dri-ma (Tibetan) 'dust'
*gral	kura	gral (Tibetan) 'seat, rank'
*sgro	Fukuro	sgro (Tibetan) 'bag'
*s-kum-	sukum-Fu	skum-pa (Tibetan) 'shrink'
*s-tor-	sutur-Fu	stor-ba (Tibetan) 'lose'
*d-gar-	wakar-Fu	dgar-ba (Tibetan) 'separate'
*s-kram-	Fukuram-Fu	skrang-ba (Tibetan) 'inflate'

Like Murayama and others, Nishida also considers correspondences in morphological structure very important, for wholesale borrowing of complex morphological patterns is far less likely than that of separate words. Nishida thus shows the correspondences in inflected verbal forms as well as some derivative processes. For example, the Old Japanese (underlying) conclusive ending of the verb is said to be -Fu on the basis of correspondence with the Tibeto-Burman basic verbal ending *-pa (OJ *sak-Fu: Tibetan \underline{h} chang-pa 'to split (intr.)'), whereas the adverbial ending -i(-te) corresponds to Tibetan -s(-te) (OJ sak-i-te: Tibetan bshag-s-te < *bchag-s-te 'to split (tr.)'). (The change of -s to -i is said to be seen elsewhere in Tibetan: e.g. written Tibetan gss 'clothes' > goi > goi > khöo (low tone).)

As an example of the correspondences in the morphology of verbal derivatives, Nishida compares the following causative formation pattern between Old Japanese and Tibetan, where the suffixes *-bya 'to do' (Tibetan) and -su < *-tsu 'to do' (OJ) are said to correspond.

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    (9) Non-causative: 'take shelter'
        Tibetan *sdo-d-(-pa) > sdod-pa
        OJ (ya)dor-Fu
        Causative: 'give shelter'
        Tibetan *sdo-d-bya > sdod(-par)-byed-pa < *bya-ed-pa</p>
        OJ (ya)do-su < *do-r-tsu</p>
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Non-causative: 'to fall, to rain'
Tibetan *pref bu-d(-pa) > \underline{h} bud-pa

OJ Fur-Fu

Causative: 'to drop, to make it rain'

Tibetan *pref bu-d-bya > \underline{h} bud(par)byed-pa < *bya-ed-pa

OJ Fur-a-su < *Fur-Fa-tsu

Correspondences of the above and other types that range over a wide area of morphology such as inflections and derivations have led Nishida to believe that they constitute strong evidence that Japanese is a member of the Tibeto-Burman family. Though Nishida's attempts have been criticized by Miller (1980: 188), who says: "his work is distinguished by its extremely careless citation of Japanese forms and their meanings, as well as by its total disregard of the historical principle in linguistics," such characteristics are by no means unique to Nishida's work, as they apply, especially the first point made by Miller, to other works including Miller's own attempts. Indeed, Miller's criticism of Nishida's work illuminates the root of the difficulty in arriving at a consensus regarding the origins of Japanese among the scholars in the field.

Miller (1980) laments the lack of acceptance among his Japanese colleagues of what he considers to be the Western consensus on the matter, namely that Japanese is genetically related to the Altaic family. Miller identifies two causes for this; (a) ignorance on the part of Japanese scholars of foreign achievements in this area, which are mostly published in European languages, and (b) unfamiliarity on the part of Japanese scholars with the method of comparative linguistics. As for the first point, it is surprising that such criticism comes from Miller himself, whose books (1967, 1971, as well as 1980) have long been translated into Japanese and circulated widely in Japan. In fact, Nishida Tatsuo performed the role of editorial supervision over the translation of Miller (1971); his recent arguments for the Tibeto-Burman case, thus, reflect not his ignorance of Western scholarship but the failure of Miller's work to convince him. As for Miller's second point regarding the comparative method, it cannot apply to scholars like Murayama, who was trained as a comparativist in Berlin, or to a scholar of Nishida's caliber, whose historical work in the Tibeto-Burman area commands high respect among specialists in the field. We thus need to look elsewhere in identifying causes for the lack of consensus or the major obstacles that have prevented a solution from emerging that is successful enough to convince the specialists in the field as well as the Japanese public, who are keenly interested in the origins of the Japanese language and of themselves.

The problem is mainly methodological. The comparative method, a most useful and successful tool in historical linguistics, relies on cognate sets, and its usefulness

diminishes as the difficulty of establishing cognate sets between the languages compared increases. A major problem faced by scholars investigating the genetic relationship of Japanese is rooted in the difficulty in establishing cognate sets. One's proposal for a given cognate set is likely to be met with skepticism and counterproposals. As pointed out earlier, people have been most successful in establishing cognate sets between Japanese and Korean. Martin (1966) offers some 320 sets of seeming cognates, but he is admirably and refreshingly candid about their plausibility on both formal and semantic grounds. In the hundred-word Swadesh list, he finds "twenty items that show the proper correspondences to be cognates and about which we have little doubt" (pp. 196-7). In the case of comparisons involving other languages, reliable cognate sets are extremely small in number. Indeed, when one examines the works that compare Japanese with Altaic languages, one is struck with the scarcity of evidence presented for cognate sets and sound correspondences. This is only to be expected in view of the fact that even among the three Altaic groups of Turkic, Mongolian, and (Manchu-) Tungusic, scarcity of reliable cognate sets is a cause for the controversy over whether these three groups should be seen as forming a linguistic unity.

In his review of Miller (1971), Mathias (1972:285) remarks: "while the range of sound correspondences is indicated ... very little detail or evidence is presented." When correspondences are presented, their validity can be easily questioned on the basis of phonetic and/or semantic ill-correspondence. Again, to quote from Mathias's review of Miller, "ten correspondences cited as evidence for a certain sound law, whose 'phonetic and semantic correspondences ... leave virtually no room for reasonable doubt' (pp. 115-19), only three or four struck this reader [Mathias] as better than very unlikely" (pp. 286-7). Murayama (1972), apparently discussing the same ten correspondences that Mathias alludes to, evaluates Miller's attempt thus: "Among these ten [sets of] examples very few are suitable for postulating the correspondences [of forms involving proto-Altaic *12 and Old Japanese s] ..., and therefore the author's attempt to compare Mo. [Mongolian] yašil 'purple', Tkm. [Turkmen] yāšil 'green' on the one hand, and J. [Japanese] nasi ['pear'] and J. nasubi 'eggplant' on the other, cannot be considered successful' (p. 466).

Similar situations are commonplace in various other attempts to relate Japanese to other languages. Thus, Miller (1974), in turn, criticizes Murayama's (1973) etymological gymnastics in associating Japanese *mimi* 'car' to Austronesian words meaning 'vulva' as "a little unlikely, to say the least" (p. 100).

The difficulty in keeping semantic discrepancy to a controlled range in the search for cognates is a recurring problem in one attempt after another, and its extent can be illustrated by the controversy between Murayama and Ono over the latter's attempt to relate the Japanese word fati, fatti (Fati, Fatti?) 'rompish girl, beggar,

menstruation' with Tamil patti 'lawless, unbridled person, theft, prostitute'. Murayama (1981) thinks that Ono fails to consider the history of Japanese fully, and suggests that these should not be considered as cognates. In the first place, Murayama points out, the Japanese forms fati or fatti are not attested in Old Japanese nor found in a standard dictionary of Modern Japanese. Murayama thinks that Ono culled these forms from Tojo's dialect dictionary, which lists hati 'rompish girl' (Wakayama, Ōsaka), hati, hatti 'beggar' (Ōita, Kagoshima), and hati 'menstruation' (Nīgata, Nagano). Murayama believes that these are three separate words with etymologies of their own. In his opinion, hati, hatti meaning 'beggar' comes from the Sanskrit patra(m) 'bowl, container' - used by Buddhist monks in religious mendicancy. The word hati for 'rompish girl' is said to be related to Chinese *pat 'eight'. As for hati 'menstruation', Murayama suggests a connection with ti 'blood'. Now, Ono (1982) replies by saying that comparisons of wideranging meanings in both derivative and dialectal forms of Tamil patti and Japanese hati, hatti reveal a great deal of semantic overlaps that justify his considering them to be cognates. One points out the following semantic parallels, where parenthetic identifications illustrate localities where the Japanese forms in question are used with the given meanings:

(10) Tamil patti Japanese hati, hatti

straying bull someone shunned (Shizuoka),

imperfect pair (Akita)

deceit, defrauder deceit, lie (Shizuoka)
harlot, prostitute lustful woman, prostitute

(Shimofusa, Ōsaka, Edo)

unbridled person describes deprecatively a woman who does not

obey her parents

(Ōsaka, Nara, Wakayama, Okayama, Nīgata,

Yamagata)

The question of whether one is persuaded by \overline{O} no's method of identifying cognates aside, the above controversy raises an important, and in fact fundamental, question regarding the comparison of two languages in general and the comparative method in particular. That is, what is a valid basis for comparison? In the above example, \overline{O} no compares contemporary dialect forms of Japanese with a Tamil word, but is such comparison permissible? Also, even the validity of the entire languages being compared is questionable. For example, \overline{O} no (1957:100, 1980a:71) notices that Polynesian languages and Tamil both have five vowels, a, i, u, e, o, and says that this and other phonological characteristics are extremely similar to the phonological characteristics of Japanese. But \overline{O} no knows better than

anyone that Old Japanese may have had eight vowels and pre-Old Japanese four vowels (see Chapter 6). It is only the central dialects of Japanese after the tenth century that have consistently had five vowels. In fact, since \overline{O} no (1980a) believes, on the basis of evidence from internal reconstruction, that the oldest Japanese vowel system involves four vowels of a, i, u, o (see Chapter 6), and since Dempwolff (1934-8) reconstructs four vowels of a, i, u, o, for proto-Austronesian, \overline{O} no's point could have been better made when Japanese and Austronesian were compared at the reconstructed stage.

We have already noted that Martin's (1966) comparison of Japanese and Korean has been criticized because he used modern forms, as opposed to Old Japanese and Middle Korean materials. Indeed, the comparative method involves successive comparison of older forms of potential daughter (proto-)languages. Thus, given a hypothesis connecting Japanese to proto-Altaic, like that of Miller, which was schematically represented in Figure 5.1 on page 102, one expects a comparative linguist proposing such a hypothesis to first reconstruct proto-Korean-Japanese on the basis of Old Japanese and Middle Korean materials, and then compare this proto-language with proto-Tungusic so as to reconstruct proto-Tungusic-Korean-Japanese, and so on before ultimately reaching the reconstructed form of proto-Altaic. Of course, no one, including Miller, has been able to do such a work. However, one can expect of Miller, a true believer in the comparative method (see below), to be at least consistent with the comparative method by using proto-Korean-Japanese, as, e.g., reconstructed by Martin (1966), and to be consistent with regard to the Japanese materials he employs. Miller ostensibly uses Old Japanese materials in his comparison, but many forms he cites are modern forms not attested in Old Japanese, i.e. not listed in Omodaka et al.'s dictionary of Old Japanese, upon which Miller relies heavily. For example, one of the high points in Miller (1971) is the establishment of correspondences between the Old Turkish (OT) root final l: s opposition (seen in tol-'be (become) full': tos-'make full') and the Japanese root-final opposition in terms of r: s (as in tar-u 'suffice': tas-u 'make (something) sufficient'), which reflects the transitivity distinction of certain verb roots. The forms ending in l/r are intransitive (endoactive) and those ending in s/sare transitive (exoactive). Miller (1971:135) proposes the following correspondences on the basis of additional Japanese forms such as wor-u 'be, exist': wos-u 'rule over, command', kar-u 'borrow'; kas-u 'lend', Fur-u 'fall down'; Fus-u 'place, lay (something) face down', as well as forms such as kiy-u 'disappear': kes-u 'extinguish', moy-u 'burn': mos-u 'burn (something)'.

As noted above, this is one of the high points in Miller (1971), as it has attracted the attention of several reviewers (Murayama 1972, Bynon 1973, Unger 1973), and as it leads Miller to conclude that: "The correspondence in different items of detail exhibited by these forms alone would probably be sufficient to demonstrate the genetic relationship of Japanese to Old Turkish, and by extension to the Altaic languages in general ..." (p. 135). However, as also noticed by Murayama (1972), the forms tas-u (the very form identified as OJ by Miller as in (11)), kes-u, and mos-u are not attested in Old Japanese. Murayama believes that they are later developments within Japanese in the manner of e.g. tas- < tar-a-s-u, and that the -s-involved here, which changes an intransitive verb to a transitive verb, should be compared with the Japanese verb s-u 'to do'.

These illustrations suffice to show the difficulty the researchers in the field face in establishing cognates. The comparative method, of course, does not stop at the stage of cognate identification; sound correspondences and sound laws must be postulated so that protoforms can be reconstructed and related to their descendant cognate forms in a systematic manner. The reason that no one is convinced by anyone else's theory on the genealogy of Japanese lies precisely in the absence of this ever more important step in historical linguistics. The past works at most compare seeming cognates that show correspondences of individual sounds rather than those systematic correspondences that yield sound laws accounting for not only the correspondences of initial or other individual sounds but also whole syllables and ultimately entire morphemes. Recognizing this kind of limitation even in the works dealing with Japanese and Korean, $\bar{O}e$ (1978), a specialist in Altaic and Korean linguistics, concludes his review of the literature thus: "To summarize, there are forms that show resemblances, if examined separately, but we are unable to capture the similarities and differences between them systematically in terms of laws of sound correspondence; accordingly, there are still problems to be resolved before we can recognize them [the seeming cognates] as those corresponding to the protoforms from which they arose. That is, we are still not in a position to be able to explain the fundamentals of the linguistic structures of the two [Japanese and Korean] in terms of developments from a common protolanguage."

Öe's sober assessment of the state of the art concerns the Japanese-Korean relationship, which is considered by many to be the most plausible. One can thus infer how primitive other attempts may be when viewed from the perspective of the comparative method. It is because of the difficulty in assembling reliable cognate sets and in drawing sound laws of any validity that Nishida (see above) and others have turned away from the comparative method as a major tool in search of the origins of Japanese. The limitations of the comparative method are felt not only in relation to Japanese but also in other areas. For example, Foley

(1986: 209-300), in dealing with Papuan languages that show extensive crossinfluence, points out that: "As the comparative method, with its sorting of cognates from borrowings, is deeply grounded in the family tree model, its application to Papuan languages is no mean problem, and suggests that some major rethinking of the method itself may be needed for these languages." Another area is the Altaic family itself. Whereas most scholars believe that the three Altaic subgroups of Turkic, Mongolian, and (Manchu-) Tungusic each form a unity of their own, some doubt that these three groups can be combined to form the Altaic unity representable in terms of proto-Altaic, Miller (1971:9) thinks that: "To follow these critics of proto-Altaic is to abandon the findings and techniques of the comparative method. It is to hold that Indo-European too - as well as proto-Algonquian, and all the many other earlier linguistic unities that have been recovered through its assumptions - is a false and misleading figment of the scholarly imagination." Hardly; those who are questioning the applicability of the comparative method question not the usefulness of the method as a whole, but its usefulness in relation to particular language groups. The comparative method developed where it was most successfully applicable, i.e. in the Indo-European field, where sister languages yield a large number of cognates of high transparency. But where such cognates are hard to identify, the usefulness of the comparative method diminishes. Thus, Foley (1986: 229) concludes his discussion on the problems of comparative linguistics in Papuan languages by saying that: "The major point is that all traditional uses of the comparative method can be applied to Papuan languages at a relatively shallow level, but as the relations of a deeper level become the centre of interest, grammatical comparison and reconstruction must assume a progressively greater role in establishing genetic relations."

The likelihood of an enormous time depth lying between the time of Old Japanese and the time when it was in close affinity with other languages is perhaps the major reason why the comparative method has not been as effective as in other situations involving languages of recent splits. Another factor is that, due to several successive landings of different cultural groups in the Japanese archipelago, Japanese in origin may very well have been a mixed language in the Polivanov—Murayama sense. The existence of mixed languages has been reported increasingly in recent years (e.g. Foley (1986) on Papuan languages, and Nishida (1978) on Tibeto-Burman languages). Whereas the concept of genetic relationship is compatible with the concept of a mixed language (cf. carlier discussion on Izui's work), it is reasonable to assume that finding the answer to the original formation of Japanese may require more than the comparative method. Especially needed is a better understanding of the manner in which different languages come into contact and form a new unified structure. In this regard, much can be expected from recent progress (e.g. Bickerton

1981) in the theory of the processes of pidginization and creolization. Inquiries into the origins of Japanese are at present characterized by a lack of methodological principles, but precisely because of this, they may lead to a breakthrough in the methodology of historical linguistics that aims at reaching far back in history – the time depth that renders the comparative method ineffective.

Hattori (1950:19) concluded his assessment of the field by saying: "So far as the research results of various scholars go, it must be concluded that the genetic relationship between Japanese and other languages, except Ryūkyuan, is not proven." More than twenty years later, Murayama (1972:457) echoes Hattori in the conclusion of his review of Miller (1971): "The solution to the difficult problem concerning the affiliation of Japanese to other languages has not been entirely achieved..." Thus, while most people feel that Japanese and Korean are related and that these two languages are related to the Altaic languages, no conclusive evidence has been presented either for such connections or for others. In the field where so little agreement is seen among the scholars involved, few can disagree with Murayama's (1973:224) suggestion that a possible solution to the question of the genealogy of Japanese depends on detailed studies in the fields of Altaic linguistics, Austronesian linguistics, and of Old Japanese of the Nara period. The enormity of the task requires cooperation among the scholars concerned rather than the bickering that characterizes many recent publications in this field.

History

Just as in the case of dialect divisions, dividing the history of a language into a number of time periods is both delicate and controversial, and several different ways of dividing up the history of Japanese have been proposed. However, it is commonly agreed that if the history of Japanese were to be divided into two, the dividing line would fall somewhere between the twelfth century and the sixteenth century, the so-called Kamakura-Muromachi period, when the language shed most of the characteristics of Old Japanese and acquired those of Modern Japanese. Besides this major historical division, further small-scale divisions are customarily proposed by Japanese historical linguists. These smaller divisions roughly correspond to the historical divisions that are demarcated by political events, especially those that accompany a change in political power such as relocation of the capital. Indeed, the Japanese historical periods, especially the early ones, are typically named after the name of the capital city of each period. The following table summarizes the major historical periods and the name given to the language of each period:

	Periods	Language names				
A.D.	710 Nara	Zyooko Nihongo (Old Japanese)				
	794 Heian	Tyuuko Nihongo (Late Old Japanese)				
	1185 Kamakura					
	(or 1192)	Toursel Nilhamas (Middle Language)				
	1331 Muromachi	Tyuusei Nihongo (Middle Japanese)				
	(or 1392)					
	1603 Edo	Kinsei Nihongo (Early Modern				
		Japanese)				
	1868 Meiji					
	1912 Taishō	Condai Nihanna (Madam Imana)				
	1926 Shōwa	Gendai Nihongo (Modern Japanese)				
	1989 Heisei					
(The	Fnglish-language nam	es are those of Miller 1967)				

(The English-language names are those of Miller 1967.)

In Japan, Modern Japanese is often contrasted with Late Old Japanese and Middle Japanese in terms of *gendai-go* 'modern language' (or *koo-go* 'colloquial language') versus *bun-go* 'literary language'. The English term "Classical Japanese" largely corresponds to *bungo*, though different scholars use the term more specifically to refer to the language of any period between the eighth and the fourteenth or the fifteenth century.

6.1 Overview

Instead of describing the characteristics of the language of each period, the following exposition traces the entire course of development of a number of salient features of Japanese. Following this, a couple of topics of general appeal are taken up in detail.

The major achievement of the Japanese of the Nara and the early Heian period is the acquisition of a writing system. The writing system evolved from both semantically and phonetically based uses of Chinese characters. The present-day writing system is the result of simplification of the original Chinese characters in two ways.

Alongside the use of the original Chinese characters, the Japanese developed two syllabaries. The system known as *katakana* developed from the abbreviation of Chinese characters, while the other version of *kana* called *hiragana* resulted from the grass (cursive) style of writing characters. Much more recently Chinese characters themselves were also simplified leading to a system that diverges from the original characters. Because of the recent abbreviation of the characters in mainland China, there are now three different sets of Chinese characters: the original complex forms used in Taiwan and the Republic of Korea (in formal writing), the medially complex forms used in Japan and the Republic of Korea (informal writing), and the most radically abbreviated forms used in the People's Republic of China. The evolution of the writing system will be taken up separately below.

Contact with a superior culture means the borrowing of, among other things, lexical items. Japanese is no exception to this truism, and it borrowed a large number of Chinese words in early phases of its history. The systematic borrowing of Chinese words took place in three waves, though sporadic pre-historic borrowing leaves such deeply ingrained words as *uma* 'horse' and *ume* 'plum'. The beginning of the first wave of borrowing occurred in the pre-Nara period when Buddhism was introduced to Japan in A.D. 552 (or 538). The sounds or readings of the Chinese characters attributed to this first wave of borrowing are known as *go'on* ('go sound/pronunciation'). It is generally believed that go refers to the Wu area of southern China, and thus the go'on reading is thought to reflect a southern Chinese dialect of the Six Dynasties period (ca. beginning of the fourth century to the mid or late sixth century).

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The second wave of Chinese borrowing took place during the Nara period, when many students and court officials went to study in Luoyang and Chang'an, the two great metropolises of the Tang dynasty. The new pronunciation associated with this second wave of borrowing during the early phase of the eighth century is called kan'on and is considered to reflect the standard language of the Tang period. Then, during the fourteenth century, new vocabulary and pronunciation were introduced chiefly by the followers of the Zen sect of Buddhism. This new pronunciation, believed to represent that of the Hangzhou area of the period, is called $t\bar{o}$ - $s\bar{o}$ 'on ('Tang-Song pronunciation').

While some characters have three ways of reading, reflecting the three waves of borrowing, most have only the go on and/or kan on pronunciations, indicating the smaller influence of the $t\bar{o}$ - $s\bar{o}$ on pronunciation. Also, different pronunciations are associated with different spheres of learning: go on with Buddhism, kan on with Confucian and other secular learning, and $t\bar{o}$ - $s\bar{o}$ on with Zen Buddhism. However, all this is a historical fact, and average native speakers of Japanese do not know about these historical distinctions in pronunciation; they simply learn that a given character has two or more different readings (see below).

The first systematic contact with the Western world was brought about in 1543, when a drifting Portuguese merchant ship reached an island off Kyūshū. The Portuguese introduced to Japan not only guns and other Western objects but also Western words as well as Christianity. The Spaniards and Dutch followed suit. The second wave of Western borrowing had to wait until the beginning of the Meiji period, for during the Edo period the country was closed to the outside world except for limited contact through the Dutch in Kyūshū, who represented Western interests. Since the Meiji period English, German, and French have usurped the position of Dutch as a language of foreign learning, and after World War II, the third onslaught of foreign loans came primarily from America. Thus since the Meiji period English loans have claimed the lion's share in the vocabulary of Western origin. A thorough description of the role of foreign loan words is given separately in Chapter 7.

As the vocabulary has been constantly enriched by borrowing throughout history, the phonological system has also been affected with the importation of new syllable types. New syllable types also evolved as a result of internal changes, but some of these internally created new syllable types are attributed to influence from the foreign syllables. The canonical syllable structure of Old Japanese was (C)V, all syllables and words ending in a vowel, and vowel sequences being avoided. However, Chinese loans brought in new syllable types, those ending in consonants and sequences of vowels. Among the new additions were the syllable-final nasal and other syllable-final consonants, as represented by hon 'book', and kekka 'result' (and more recent forms such as beddo 'bed'). These subsequently gave rise to

independent moraic units (see Chapter 8). Also forms such as keidai 'temple compound' introduced vowel sequences. It is generally believed that these imported syllables were instrumental in the internal development of syllable types after the Heian period, e.g. yonde < yomite 'read CONJ', totte < torite 'take CONJ', kaite < kakite 'write CONJ', siroi < siroki 'white ATTR'. Besides this kind of enrichment of the phonological system, there are also aspects of simplification of the system. Especially noteworthy is the reduction of the number of syllables distinguished. Old Japanese of the Nara period is phonologically most interesting in that it distinguished the greatest known number of native syllables. The earliest written document of significance, the Kojiki (Record of Ancient Matters) (A.D. 713), distinguished eighty-eight syllables, whereas the Nihon shoki (Chronicle of Japan) (A.D. 720) distinguished eighty-seven syllables obliterating the distinction between the syllables mo_1 and mo_2 . (See Table 6.4 for syllable types, and the o_1 and o_2 and similar distinctions.) The significantly larger number of syllables of Old Japanese in contrast to that of Modern Japanese, which distinguishes sixty-two native syllables, is due to the distinctions made between the so-called koo (A series) and otu (B series) vowels observed in Old Japanese. A distinction, for example, was made between ki_1 and ki_2 , which merged into ki in the ensuing Heian period. It is due to these A and B distinctions that the hypothesis has been advanced that Old Japanese may have had more vowels than the present five. We will discuss this topic separately below (see section 6.3).

The early Heian period saw the obliteration of the A and B series distinctions noted above, and further merger of e ([ie]?) and je, and o ([iio]?) and wo resulted in the radical reduction of the number of syllables, of which there were now sixty-six. This was followed by the merger of i and wi and e and we during the Kamakura period. Entering the Edo period, zi merged with di and zu merged with du, resulting in the present-day number of sixty-two native syllables.

The accentual system is also believed to have developed in such a way that newer systems are the results of mergers of earlier distinctions. While this appears to be the case with many modern dialect systems, there is considerable debate as to whether the Kyōto-Ōsaka system, which makes more distinctions, is older or newer than the Tōkyō system. This issue and other notable phonological changes are taken up in Chapter 9, where the geographical distributions of their remnants are discussed.

In the realm of syntax there are both stable and fluctuating aspects. Among the most consistent features is word order, which has been SOV from the time of Old Japanese, though observed throughout history is the inverted word order, which places a subject or object nominal after the verb, for the expression of afterthought, emphatic assertion, etc. Other phenomena related to the order of the major constituents are also systematically exhibited in accord with the basic word order,

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making Japanese one of the ideal SOV languages. Thus, modifiers, e.g. adjectives and adverbs, precede their heads, e.g. nouns and verbs. Auxiliaries in the form of suffixes consistently follow the main verb, and adpositional elements in the form of particles are consistently postpositional (see Chapter 11). Despite this overall consistency that runs throughout history, the contents of these categories have undergone considerable degrees of change.

In the case of auxiliary elements, the system has moved from a richer to a more impoverished one. Especially noteworthy is the decline in the systems of tense, aspect, and mood. In Modern Japanese there is only one past tense suffix ta, which is also used in an expression of the perfective sense, but in Old Japanese there was a clear formal distinction between the perfective aspect and the past tense. Tu, nu, tari, and ri were perfective suffixes, the first two having an added meaning of confirmation. The past tense was expressed by ki and keri. Nu, tu, ri, ki and keri disappear during the Kamakura and Muromachi periods, while tari begins to develop into the present-day past-tense form ta at the end of the Heian period; tari itself survives until the end of the Edo period.

In the area of mood, again there were many forms expressing conjecture, but they too died out before the end of the Muromachi period. Ramu and rasi contrasted in terms of firmness of evidence, the former being dubitative and the latter implying firmer conjecture. Meri was for a conjecture based on visual evidence, while nari was for one based on auditory evidence. The present-day form rasii '(it) seems' has no directly connected historical antecedent. Although there was the form rasi, which shows semblance to rasii, in the Nara and Heian period, it dies out at the end of the latter period, and rasii only emerges in the Edo period.

Compared to these, voice suffixes are fairly stable. The spontaneous/potential/passive/honorific raru and the causative/honorific sasu, which emerged in the Heian period, survive and are vigorous today in the forms rare and sase, though the latter has shed the honorific meaning (except in the subject honorific expression asoba-su (play-CAUS) 'do'). The desiderative tai is a new development from tasi, which took place toward the end of the Kamakura period.

Particularly interesting is the rise and fall of the honorific system, since this reflects the social organization of each period rather clearly. While honorific forms are seen in the earliest history of the language, the elaboration of the system started in the Heian period, when the court-centered society came to maturity. New developments during this period are 1) two levels of honorifics, 2) combination of subject and object honorific forms, which is not possible in Modern Japanese, and 3) polite expressions directed toward the addressee. Among the forms that had two levels of honorifics are: 'to be' owasu (ordinary honorific): owasimasu (superhonorific), 'to give' tamau (ordinary): tamawasu (super).

The elaboration of the honorific system continues throughout the Kamakura

and Muromachi periods, when political power was transferred to the warrior class. which is characterized by a strict hierarchical rank system within each clan as well as across different clans. However, the zenith of the continued elaboration is witnessed by the Edo period, when the Tokugawa government issued a decree for the formation of social classes, which consisted in the descending order of 1) the warrior-bureaucrats, 2) the peasants, 3) the artisans, and 4) the merchants. While there seemed to be a clear class distinction between the first category and the rest, there does not seem to be any significant social difference among the people of the latter three classes. Thus for practical purposes there were two classes, the warriorbureaucrats (busi and kuge) and the townsmen (tyoonin). As can be surmised, it is among the townsmen that newer honorific forms developed, as the warriorbureaucrats continued to use the earlier honorific forms. In this period, certain expressions developed three degrees of honorification. For example, for the verb 'to be, to come, to go', gozarimasu is the super honorific form, gozaru the ordinary honorific form, and mesaru the intimate honorific form. Also developed were those forms that reflect the social class, the sex, and the profession of the speaker. Ozvaru 'to come' and tukamaturu '(I) do' are forms used by warriors, svansu 'to do' and the polite endings gozansu and yansu are exclusively for female speakers, and the polite endings gozarinsu and yasu were those belonging to the language of the amusement quarters.

The elaborate honorific system comes to an abrupt end when the Meiji Restoration (1867) abolished the Tokugawa social class system, thus putting an end to feudalism. Though a new class system consisting of noblemen and the common people was instituted, the tide of Western democracy and compulsory education had the effect of simplifying the honorific system considerably. The present-day honorific expressions are generally descendants of the newer Edo expressions. The subject honorific form o/go...ni naru and its precursor o/go...nasaru are seen in the dialect of Edo (presently $T\bar{o}ky\bar{o}$), but its wide use started only in the middle of the Meiji period, when the polite ending desu also began to be widely used. The spread of the object honorific form o...suru was even later, i.e. in the late Meiji period.

In the case of particles, a general trend has been that the adverbial particles have become less active, while case particles have become more rigidly integrated. This change in the system of particles has been interpreted as a reflection of an underlying structural change in the Japanese language by Sakakura (1977).

The use of certain adverbial particles had the effect of cutting off the flow of the predication process, which allowed the insertion of various adverbial expressions and clauses within a clause. The insertion of complex adverbial clauses was made possible largely because certain adverbial particles participated in a phenomenon

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called kakari-musubi, whereby the occurrence of a particular adverbial particle correlated with a particular inflectional form of a predicative element; thus even if the subject nominal marked off by an adverbial particle was separated from its predicate by an intervening adverbial clause, the subject and the verb could be paired up because of the rules of kakari-musubi (see Chapter 11 section 11.5.1 below). Sakakura calls this characteristic of Late Old, or Classical Japanese of the Heian period "open structure". The disintegration of the kakari-musubi phenomenon and the concomitant weakening of many of the adverbial particles during the Kamakura period ushered in the development of the nominative case particles, which had the effect of tying the subject and the predicate in a closer relationship because the nominative particles developed from the attributive particles that related two nominal elements under various semantic relationships. This shift, according to Sakakura, has turned Japanese from an open-structure language to a closed-structure language, which does not allow insertion of complex adverbial clauses within a clause, which was formerly permitted.

Sakakura believes that this is a major overall structural change that has taken place in the history of Japanese. This change, which took place over the span of the Kamakura and Muromachi periods, coincides with a time of great sociopolitical upheaval, when the seat of government was transferred back and forth between Kyōto and Kamakura, crossing a major bundle of dialect isoglosses. One can agree with Sakakura that major changes in the Japanese language occurred during this period without necessarily subscribing to his more speculative assessment of the cause for the changes, which he attributes to the theory that the sociopolitical upheaval of the period brought together people of different social and regional backgrounds necessitating a more logical discourse punctuated more clearly by the use of case particles and characterized by simple, straightforward sentences.

Having presented an overall picture of the changes that have taken place in the history of Japanese, the following sections examine in detail too topics of general interest. The developments of principal particles are discussed in Chapter 11.

6.2 The writing system

The earliest extant systematic written records of the Japanese language date back to the eighth century. The oldest among them, the *Kojiki* (Record of Ancient Matters) (A.D. 712), is written in Chinese characters. The preface to this work is written in Chinese syntax as well. Thus, the document is not readily intelligible to those who do not know how the Chinese ordering of elements corresponds to the Japanese ordering; i.e. while Chinese is basically an SVO language like English, Japanese is an SOV language. Furthermore it is not clear how these characters were

read; they may have been read purely in the Chinese style in imitation of the Chinese pronunciation of the characters, or they may have been read in a Japanese way, i.e. by uttering those Japanese words corresponding in meaning to the written Chinese characters and inverting the order of elements so as to follow the Japanese syntax. Perhaps both systems were practiced.

By the time the Man'yōshū (Collection of a Myriad Leaves), an anthology of Japanese verse, was completed (A.D. 759), the Japanese had mastered the use of Chinese characters as a phonetic means of writing Japanese. For example, the Japanese word yama 'mountain' could be written phonetically by using a combination of characters with a sound similar to ya (e.g. 夜 'evening') and another character with a sound like ma (e.g. 麻 'hemp') as 夜麻. In other words, what stands for 'mountain' could now be written in two ways. One used the Chinese word and its character 山. The other way was to choose Chinese characters read as ya and ma. This practice helped establish a relation between the original character and its Japanese semantic equivalent leading to the practice of assigning a dual reading to Chinese characters: one a Chinese reading (on-yomi) and the other a Japanese reading (kun-yomi). This means that a character such as 山 'mountain' was read both as san, the Chinese reading, and as yama, the Japanese reading. This practice of reading Chinese characters both in the Chinese way and the Japanese way persists even today (see below).

The phonetically used characters are known as man'yoo-gana among Japanese grammarians because their most diversified use is seen in the Man'yōshū, though their earlier use is seen in other writings, e.g. the songs in the Kojiki. This kind of phonetic use of Chinese characters as purely phonetic representation of words is most likely not the invention of the Japanese at the time. It was practiced in China in rendering foreign names, place names, official titles, and especially in transliterating Sanskrit Buddhist terms. The same was done by the Koreans who used Chinese characters phonetically in indicating grammatical particles and inflectional endings as an aid in reading documents written in the Chinese manner. Since the early tutors of the Chinese language in Japan were Koreans, it is reasonable to assume that their practice at home influenced the rendering of Japanese in terms of Chinese characters.

Next came the development of syllabary writings known as kana, originally pronounced as karina. Two kinds of kana have developed as a simplification of man'yoo-gana. Originally, kana were used as mnemonic symbols for reading characters and were written alongside them. Katakana 'partial kana' developed as abbreviations of characters, and they retain a squarish shape. Hiragana 'plain kana', on the other hand, have been developed by simplifying the grass (i.e. cursive) style of writing characters, and they are round in shape. Examples of these two

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Table 6.1. Japanese kana syllabaries

	a	ka	sa	ta	na	ha	ma	ya	ra	wa	
Hiragana	あ	か	à	た	な	は	ŧ	ch	5	b	
Katakana	7	カ	#	A	ナ	ハ	マ	+	ラ	ワ	
	i	ki	si	ti	ni	hi	mi		ri		
Hiragana	13	ð	l	5	12	v	3		ŋ		
Katakana	1	牛	シ	Ŧ	=	٤	3		ij		
	u	ku	su	tu	nu	hu	mu	yu	ru		
Hiragana	う	<	す	つ	数	ふ	t	Ø	る		
Katakana	ゥ	2	ス	ッ	ス	フ	4	ı	ル		
	e	ke	se	te	ne	he	me		re		
Hiragana	ż	17	tt	7	ね	^	め		n		
Katakana	エ	ケ	セ	テ	木	^	×		V		
	0	ko	so	to	no	ho	mo	yo	го	wo	n
Hiragana	お	Ž.	そ	٤	Ø)	æ	Ł	ょ	ろ	を	h
Katakana	*	コ	ソ	ŀ	1	ホ	モ	3	U	ヲ	ン

(Voicing oppositions, where applicable, are indicated by diacritical dots on the upper right-hand corner of each kana, e.g. $gi \not\in \mathcal{A}$ as opposed to $ki \not\in \mathcal{A}$. $\not\in$ and \mathcal{A} , used only in writing the accusative particle o are pronounced the same way as $\not\in$ and $\not\in$, which are used in all other instances of the o sound. $\not\in$ and $\not\cap$ are pronounced as $\not\in$ when they are used to write the topic particle $\not\in$ and $\not\cap$ are pronounced as $\not\in$ when used to write the directional particle $\not\in$. Among the missing syllables in the table, the $\not\in$ kana for $\not\in$ and $\not\in$ exist but they are no longer in common use, as the sounds have merged with $\not\in$ and o.)

types of kana and their sources are shown below, and the complete contemporary kana syllabaries are set out in Table 6.1.

Original characters	宇	加	久	比	利	呂
Katakana	ウ	カ	7	٤	IJ	U
Hiragana	う	か	<	U.	ŋ	ろ
Pronunciations	11	ka	ku	hi	ri	ro

The orthodox Sinico-Japanese, or *kanbun*, manner of writing was a formal writing method. The phonetic *kana* writing was considered only "temporary" or mnemonic in nature. Despite this secondary status of *kana*, they were eagerly used by women with literary aspirations, who were discouraged from learning Chinese characters, which belonged to men's domain of learning and official writings. Indeed the *Genji monogatari* (The Tale of Genji), considered by many to be Japan's greatest literary achievement, was written almost entirely in *hiragana* by Lady Murasaki at the beginning of the eleventh century (ca. 1001–10).

Despite this early separation between Chinese characters and kana, the contem-

porary practice is to use Chinese characters, called *kanji*, for content words, and *hiragana* for grammatical function words such as particles and inflectional endings. *Katakana* are now used to write foreign loan words, telegrams, and certain onomatopoeic expressions.

In addition to these writing systems that originate in Chinese characters, there is rōmaji, which is another phonetic writing system using the Roman alphabet. The first systematic transcription of Japanese in the Roman alphabet dates back to the late sixteenth to early seventeenth centuries, when Portuguese and Spanish missionaries transliterated Western stories, such as Aesop's fables, and Japanese tales. Also, grammatical treatises by these missionaries contain Romanized Japanese expressions. While the system of transcription was largely based on the Portuguese spelling pronunciation, the materials are of great philological importance, since they indicate the pronunciation that was used during the early seventeenth century but which has been lost since then. For example, in perhaps the most impressive grammatical treatise on Japanese in a Western language of the time, Arte da lingoa de Iapam by João Rodriguez (1561-1633), which was completed between 1604 and 1617, the s-beginning syllables are transcribed as sa, xi, su, xe, so, indicating that the se syllable, which is now pronounced as [se] in the standard dialect, was pronounced during the period with a palatalized sibilant as [se], just like the si syllable, which is still pronounced as [fi]. (The [fe] pronunciation occurs dialectally even today; see Chapter 9.) Also di and zi, which have now merged and are pronounced as [d₃i], are distinguished as gi and ji; and du and zu, as zzu/dzu and zu, indicating that all these syllables were distinguished at the time when transcriptions were made. (Again, there are dialects that distinguish these syllables to varying degrees; see Chapter 9.)

Other attempts to devise rōmaji systems based on Spanish and Dutch were made, but the arrival of a system with wide acceptance and endurance had to wait until the middle of the Meiji period, when the American missionary James Curtis Hepburn (1815–1911) developed a system for his Wa-ei gorin shūsei (Japanese-English Glossary), first published in 1867. The present Hepburn system (known in Japan as Hebon-shiki) is largely based on the system adopted in the third edition of the above dictionary published in 1886. There have been several additional systems proposed since then, but in 1937 the Japanese government attempted to unify all the different systems and promulgated what is referred to as the kunreisiki (cabinet ordinance system). The essential difference between the two is that while the Hepburn system is based on the system of English spelling pronunciation, the kunreisiki is phonemic in nature, largely based on the arrangement of the hiragana chart (see Table 6.1). The Hepburn system, which is arguably easier to read for those familiar with English spelling pronunciation practice, has retained its

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popularity, and in 1954 the government promulgated a revised version of the kunreisiki system, which consists of two charts, Chart 1 listing all the syllables in the kunreisiki and Chart 2 listing those syllables that are written differently in the Hepburn system. The preface to the revised version stipulates that in transcribing the Japanese language Chart 1 be used, but those in Chart 2 may be used if the change cannot be made at once due to customs and considerations of international relations. Thus, the Japanese are stuck with two overlapping official systems of Romanization, which are used mainly in signing documents written in Western languages, foreign acronyms, e.g. ILO, IMF, and names of stores and firms on signboards and in advertisements.

The essential difference between the two systems lies in the transcription of some twenty syllables. The syllables [tsui], [fi], [fi], [ou], [dzi], etc. are written as tsu, shi, chi, fu, and ji in the Hepburn system and as tu, ti, hu, zi/di in the kunreisiki system. Thus, for example, the family name pronounced [tsut[ihafi] is written as Tsuchihashi in the Hepburn system and as Tutihasi in the kunreisiki system. Despite the government's decree for the use of the kunreisiki system, the Hepburn system is still widely used and perhaps more popular than the kunreisiki system. One area in which the Hepburn system is consistently used is in the writing of Japanese railroad station names as an aid for foreigners. The transliteration of Japanese expressions in linguistic treatises is often done in the kunreisiki system. However, the practice here is not consistent even among specialists of the Japanese language. While Roy Andrew Miller's The Japanese Language (1967) uses the Hepburn system, Samuel E. Martin's A Reference Grammar of Japanese (1975) uses the kunreisiki system. The style sheet of the journal Papers in Japanese Linguistics stipulates that the transliteration be done in the kunreisiki system. The method adopted in this book and some others basically follows the government decree using the kunreisiki system for cited forms and the Hepburn system for proper nouns, such as people's names and names of books.

Thus the Japanese essentially have four ways of writing their language. The word for 'mountain' can be written as \coprod in kanji, as $\forall \forall$ in katakana, as $\forall \sharp$ in hiragana, and yama in $r\bar{o}maji$. Though the domains of their use are fairly distinct, as indicated in the above exposition, sometimes all these four ways of writing can be found in one sentence. For example, the sentence 'Hanako is an OL (< office lady, i.e. office girl) working in that building' is most likely to be written as follows, where four writing systems are mixed.

花子 は あの ビル で 働いている OL です. Hanako wa ano biru de hataraiteiru ooeru desu TOP that building at is working OL COPULA The traditional way of writing is vertical, with the lines progressing from right to left, and books accordingly open from the reverse direction from English. Today both vertical writing and horizontal writing are practiced, though the formal way is vertical writing, as reflected in newspaper articles and formal letters.

As can be surmised from the above discussion, learning how to write Japanese involves considerable effort. Japanese children must master all four ways of writing by the time they complete nine years of Japan's compulsory education. (Rōmaji is briefly taught in the Japanese language class in the fourth grade of primary school.) Of these, the most difficult is the kanji. Not only are kanji difficult to write correctly according to the correct order of strokes, but they are also hard to read. For most kanji at least two ways of reading must be learned: one the on-yomi, the Sino-Japanese reading, and the other kun-yomi, the Japanese reading. As mentioned above, for the character ill 'mountain', san is the Sino-Japanese reading and yama the Japanese. Normally, the Sino-Japanese reading is employed in compounds consisting of two or more characters, while in isolation, the Japanese reading is adopted. Thus, again for ill, the Sino-Japanese reading is employed for a compound like ill ill sannyaku 'mountain range' and the Japanese reading for a form like ill ill sannyaku 'mountain nom', where the character occurs alone together with the nominative particle written in hiragana.

An additional complication is the multiplicity of Sino-Japanese readings. This is due to the fact that, as discussed earlier, Chinese words and their pronunciations were borrowed from different parts of China as well as at different times. Thus, dialectal differences in pronunciation also had to be learned by the Japanese. The problem is not simple because one and the same character may have two or three different readings. For example, the character 行, which has the Japanese reading ik-u as in 行く 'to go', has the go'on reading gyoo as in 行儀 gyoogi 'manner', the kan'on reading koo as in 行進 koosin 'marching', and the tō-sō'on reading an as in 行脚 angya 'pilgrimage'. Unlike the Japanese versus Sino-Japanese reading, there is no systematic rule for determining whether a given expression is to be read in kan'on, go'on, or tō-sō'on; each expression must be learned as to which way it is read. That is, the $go'on/kan'on/t\bar{o}-s\bar{o}'on$ distinction is purely historical, and speakers of Japanese must simply live with the fact that in addition to the Japanese way of reading, most kanji have two or more Chinese ways of reading them, and that the kanji is likely to be pronounced differently depending on the expression in which it is used.

Because of the complexity caused by retaining all these writing systems and different readings of *kanji*, there have been movements for abolishing Chinese characters in favor of *kana* writing, or even more radical movements for completely Romanizing the Japanese language. All these, however, have so far failed, and it

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is safe to say that the Chinese characters are here to stay. What has been done instead of abolishing Chinese characters altogether is to simplify their shapes and limit the number of commonly used characters. In 1946, the Japanese government issued a list of 1,850 characters for this purpose. The list was revised in 1981, and the new list, called jōyō kanji hyō (list of characters for daily use), contains 1,945 characters recommended for daily use. This is now regarded as the basic list of Chinese characters to be learned during primary and secondary education. Also, most newspapers try to limit the use of characters to these 1,945 characters; when those outside the list are used, the reading in hiragana accompanies them.

One of the most inefficient aspects in dealing with Japanese-language materials has been typewriting, for it involves a large tray of characters from which one has to find and type out the desired characters. This is very time-consuming compared with using a European typewriter; and official documents must be typed. This problem, largely caused by the presence of Chinese characters, has been solved to a large extent due to progress in electronics technology and the development of Japanese word processors, some of which can handle both Japanese and European languages and are nearly as efficient as European typewriters. The process of converting kana sequences into the normal sequences of mixed kana and characters is, however, an additional step still required.

6.3 The Old Japanese vowel system

Distinctions such as these were fairly consistent and the characters were not freely interchanged. The vowels involved in such distinctions are of the three types, i, e, and o. Thus, it has been hypothesized that in addition to a and u, there were two types of i, e, and o. The two series of the latter have traditionally been designated by the class names koo and otu, or series A and series B. However, recent practice

Table 6.2. Graphemically distinguished Old Japanese vowels

i ₁		u	
e ₁		o ₁ o ₂	
e ₂		o ₂	
	a		

Table 6.3. The widely accepted eight vowels of Old Japanese

	Front	Central	Back
Closed	i	ï	u
Mid	е	ë ö	o
Open			a

(Ono 1980a: 154)

(Ono's eight-vowel hypothesis goes back at least to Ono 1953, but we cite this vowel chart from his more recent writing.)

has been to designate the A series vowels with subscript 1 and the B series vowels with subscript 2, for reasons to be discussed below. This A/B distinction has led to the hypothesis that Old Japanese had eight vowels, as shown in Table 6.2, which were at least phonetically distinguished.

There has been a great deal of speculation concerning the actual phonetic values of the two series of vowels and the phonemic interpretation of the system. Perhaps the most influential is that of Ono Susumu, who speculates that i_2 and e_2 were centralized versions of i and e, respectively, and the o_2 was a central version of o. By assuming that all these vowels had phonemic status, Ono arrives at the eight-vowel system for Old Japanese shown in Table 6.3.

This eight-vowel system is widely accepted, as evidenced, for example, by Miller's (1967) unquestioned acceptance. Miller tells us that philological evidence derived from written records, the comparative method, and the technique of internal reconstruction, i.e. the three major tools of historical linguists, all point to the same conclusion, namely that Old Japanese did have eight vowels.

Miller's comparative method involves correspondences between the vowels of Satsuma (presently Kagoshima prefecture in Kyūshū) and those of Tōkyō. Miller's reasoning leads him to conclude that the Tōkyō-Satsuma e::i, i::e and o::u correspondences are the reflexes of the constructed series B vowels, namely e_2 , i_2 , and o_2 , or Ōno's \ddot{e} , \ddot{i} , and \ddot{o} . However, Miller's attempt at the comparative method here has been effectively undermined by Aoki (1972), who shows that, in addition to a

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logical flaw as well as certain factual inconsistencies inherent in Miller's analysis, the Tōkyō-Satsuma vowel correspondences can be straightforwardly accounted for without ever invoking the series A and series B distinction of Old Japanese writing. That is, one needs just to posit a number of fairly simple phonological rules, some of which occur in other dialects as well, that relate the Tōkyō (or basic Japanese) five vowels to those of Satsuma.

The internal reconstruction evidence that Miller adduces in supporting the eight-vowel hypothesis involves alternations of vowels in such forms as sake 'rice wine' and saka-zuki 'cup for rice wine', ki 'tree' and ko-kage '(tree) shade', and siro-i 'white' and sira-ga 'white hair'. Since there are vowels i, e, and o, which do not show this kind of morphological alternation, Miller concludes that two varieties of i, e, and o must be set up. However, it is precisely on the basis of alternations of this kind that Matsumoto (1975) argues that the method of internal reconstruction leads one to cast strong doubt on the eight-vowel hypothesis.

Before discussing Matsumoto's work, let us examine the distribution of the A and B series of vowels under discussion. Contrary to what the eight-vowel hypothesis, represented in terms of the vowel chart in Table 6.3, may suggest, the distribution of these vowels is not quite uniform. Especially, the A and B series vowels are severely restricted in their distribution. In fact, what is involved are not simply two sets of i, e, and o, but rather three; that is, those that do not show any A/B distinction and the A series vowels and B series vowels. The situation is clearer once the following distributional pattern is examined (see Table 6.4); there are, for example, three i's -i, i_1 , and i_2 .

In reference to the skewed distributional pattern seen in Table 6.4, Matsumoto (as well as Hattori, see below) first points out that, contrary to what the traditional A/B (or koo/otu) labels applied uniformly to i, e, and o suggest, the front vowels i_1/i_2 and e_1/e_2 must be treated separately from the back vowels o_1/o_2 , for they show a marked difference in their distributional pattern. Having argued for different treatments of the front vowels and the back vowels, Matsumoto, in a series of articles beginning with his internal reconstruction paper (1975), launches a two-pronged attack against the popular eight-vowel hypothesis.

The first of Matsumoto's arguments is based on evidence adduced from internal reconstruction. By examining the alternations between a and e_2 , and between o and o an

```
a/e<sub>2</sub> alternation (where e<sub>2</sub> is attributed to the a-i origin):
ama/ame<sub>2</sub> 'heaven' ama/ame<sub>2</sub> 'rain' kaga/kage<sub>2</sub> 'shade' saka/sake<sub>2</sub> 'rice wine'
```

a	pa	ma	wa	ta	na	sa	га	ja	ka
u	pu	mu		tu	nu	su	ru	ju	ku
	pí,	mí ₁							ki,
i	pi ₂	mi ₂	wi	ti	ni	si	ri		ki ₂
	pe ₁	me,						,	ke ₁
e	pe ₂	me ₂	we	te	ne	se	re	je	ke ₂
				to ₁	по	so ₁	ro ₁	joı	ko,
0	po	mo	wo	lo ₂	no ₂	so ₂	ro ₂	jo₂	ko ₂

Table 6.4. Distribution of Old Japanese "vowels" in terms of syllable units (exclusive of voiced versions), arranged in order of place of articulation from left to right

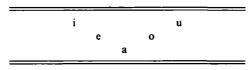
o/i₂ alternation (where i₂ is attributed to the o-i origin):
 oko-ru/oki₂ 'to rise' kopo-si/kopi₂ 'to love'
 sugo-su/sugi₂ 'to (sur)pass' nobo-ru/nobi₂ 'to ascend'
 u/i₂ alternation (where i₂ is attributed to the u-i origin):
 mu/mi₂ 'body' tuku-su/tuki₂ 'to exhaust' nagu-si/nagi₂ 'a calm'
 amu-su/ami₂ 'to bathe'

Matsumoto distinguishes between the forms that occur independently and those forms that occur typically in compounds with another form or that occur in inflected forms, and then assumes that those occurring in compounds or inflected forms are the basic stem forms, while those that occur in isolation are historically derived by the addition of an -i suffix. That is, ame_2 'rain', for example, is derived from ama-i. Matsumoto draws an analogy between the effect of the -i suffix on the preceding vowel and the German Umlaut phenomenon. With regard to the nature of the -i suffix, it is conjectured that the -i suffix that derives nouns is related to the emphatic particle i, and the one for verbal inflection is related to the voice suffix -j.

With regard to the phonetic values of e_2 and i_2 that have the historical sources in the a-i and o/u-i sequences, Matsumoto posits [e] for the former and [(u)i] for the latter. In relation to e_1 and i/i_1 , these vowels are assumed to have contrasted in terms of the presence or absence of the palatalizing effect on the preceding consonants. The reasoning for this comes from the likely sources of e_1 , namely the i-a sequence, e.g. sakeri 'bloomed' < *saki-ari 'blooming-be'. This historical i of the i-a sequence would have naturally had a palatalizing effect on the preceding

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Table 6.5. Matsumoto's Old Japanese vowel system



(Matsumoto 1975 entertains the possibility of i for i_2)

consonant. Thus the phonetic realization of e_1 is more like [je], while that of e_2 , which arose from a-i, is the straightforward [e]. In other words, the difference between the A series syllable ke_1 and the B series ke_2 , for example, had the phonetic difference [kje] versus [ke].

The same reasoning can be applied to i/i_1 and i_2 . The former is the original i, and the latter is derived from the o/u-i sequence, as discussed above. The former, therefore, would have had a palatalizing effect on the preceding consonant, while the latter did not, yielding the phonetic interpretations of [ji] and [(u)i].

Thus, the distinction between the A and B series of the front vowels in the Nara period can be attributed to the difference in palatalization of the preceding consonants, which can be phonemically interpreted as a sequence of a consonant and the following glide /j/, rather than to an opposition in terms of independent vowel phonemes such as /i/ vs. /i/ and /e/ vs. /e/.

With regard to o_1 and o_2 , Matsumoto simply assigns them to the single phoneme |o|, assessing the phonetic value of o_2 to be something like [o]. This conclusion derives largely from the evidence exhibited by the alternation involving a and o, as in waka 'young': woko 'foolish', kura 'dark': kuro 'black', pira 'flat': piro 'wide'. Matsumoto discovered the following distributional pattern for the o vowel that alternates with a.

- (a) In the CoCo pattern, o2 always occurs.
- (b) In the CuCo pattern, o1 always occurs.
- (c) In the CiCo pattern, either o_2 or o_1 occurs.

In (a) and (b), o_1 and o_2 show complementary distribution. While some problem remains with regard to the (c) situation, Matsumoto's analysis capitalizes on the complementary nature of the o_2 and o_1 vowels exhibited in (a) and (b) and on the distributional limitation of o_2 and o_1 , namely that they never occur within a stem.

Matsumoto's internal reconstruction thus leads him to posit the five-vowel system shown in Table 6.5 for Old Japanese, which is identical to the present-day standard system.

Hattori (1976b) is in complete agreement with Matsumoto with regard to the A and B series of i and e. That is, ki_1 and ke_1 are analyzed as /kji/ and /kje/, and ki_2 ,

Table 6.6. Hattori's Old Japanese vowel system

i		ö		ט	
	e	b	o		
		a			

 ke_2 as /ki/, /ke/. However, Hattori is wary of giving up the phonemic distinction between o_1 and o_2 , especially in light of the fact that there are a number of minimal pairs involving these vowels, e.g. ko_1 'child': ko_2 'this', to_1 'door': to_2 '10', yo_1 'night': yo_2 'generation'. Hattori (1976a), by positing the central round vowel $|\ddot{o}|$ for o_2 , proposes a six-vowel system for Old Japanese shown in Table 6.6.

Matsumoto's other avenue of attack against the eight-vowel hypothesis as well as against Hattori's six-vowel hypothesis relies on language universals. There are strong universal tendencies reflecting the physiology of the oral tract, which is often schematically represented by the inverted triangle with a wider front dimension. Namely, with regard to the front-back dimension, more distinctions are likely to be made in higher vowels than lower vowels. In the case of the high-low dimension, more distinctions are likely to be made in front vowels than the back vowels. Now, in both the eight-vowel system in Table 6.3 and the six-vowel system in Table 6.6, more distinctions are made in mid vowels than in high vowels, thus contradicting the universal tendencies.

Next, both \bar{O} no and Hattori posit a central round vowel \ddot{o} , but the existence of a marked vowel like \ddot{o} implies the existence of a less marked round vowel \ddot{u} , but in neither of the eight- or six-vowel systems is there \ddot{u} posited.

Finally, with regard to the assignment of \ddot{o} to the series B o_2 vowel and o to the series A o_1 vowel in Ōno's and Hattori's systems, Matsumoto adduces statistical evidence on the distribution of the less marked o and the marked \ddot{o} . In languages like German, French, Turkish, Cheremis, etc., which have \ddot{o} , its frequency of occurrence is far less than that of the unmarked o, the average ratio being 70 percent (o) and 30 percent (\ddot{o}). However, in the Old Japanese data, it is the series B o_2 that is found more frequently (75 percent) than the series A o_1 vowel (25 percent). From this, Matsumoto concludes that the series B o_2 cannot be a central round vowel \ddot{o} .

Aside from arguments based on the universals of vowel systems, both Matsumoto and Hattori pay special attention to the skewed distributional pattern of the A/B series vowels as seen in Table 6.4, where the A/B distinctions in front vowels occur only after non-apical consonants, and where the A/B distinctions in o are made only after non-labial consonants. It is strange, both Matsumoto and Hattori argue, that, if there were indeed eight distinct vowel phonemes, their distributions

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Table 6.7. Ono's oldest Japanese vowel system

 -			
i		u	
	õ		
	a		

are so severely limited. If, on the other hand, the A/B distinctions were attributed to the preceding consonants (at least for i_1/i_2 and e_1/e_2), then the distributional facts would receive a natural explanation: namely, that the contrast in terms of palatalization is easier to realize in non-apical consonants.

While Matsumoto's arguments based on the universals of vowel systems and the pattern of distribution of the A/B series vowels are generally well taken, they can be countered. The last argument based on the distributional pattern can be easily answered by saying that there were indeed eight vowels, but that the A/B distinctions were lost in all environments except in those hospitable for the required contrasts. (However, the generally held assumption that the A/B distinctions were in terms of the front vs. centralized vowels (in the case of i, e vs. i, e) and in terms of the back vs. central vowels (in the case of o vs. o) does not seem to be consonant with this counterargument. For, what phonetic motivation is there for the preservation of the front-central distinction after non-apical consonants when the back-central contrast is preserved after apical and back consonants?)

Similarly, both Ono and Hattori can say that their eight- or six-vowel systems are indeed strange from the universal point of view. But it is precisely because of the instability inherent in such vowel systems that they have undergone change to become a more stable five-vowel system. Indeed, no one seems to be claiming that the eight- or six-vowel system was stable, and as for the Pre-Old Japanese or Proto-, or even Pre-Japanese vowel system, there is general agreement as far as the number of vowels is concerned.

By reducing e to the combination of a-i, e to i-a, o to u-a, and i to u-i and o-i, Ono (1980a) posits the four-vowel system shown in Table 6.7 for the oldest form of Japanese perhaps dating back to the pre-Christian period.

This is generally agreed upon by Miller as well as Matsumoto; the former suggests the possibility of replacing \ddot{o} no's \ddot{o} by o, and the latter posits the simple o. Hattori (1976a), on the other hand, posits the five vowels shown in Table 6.8 for Proto-Japanese, still retaining the ancestor of the series B \ddot{o} in terms of a schwa. (Notice that in all these attempts to reconstruct the proto vowel system, the vowel e has not been included, reflecting the general consensus that this vowel evolved from the sequences of a-i and /or i-a.)

Needless to say, Matsumoto is ready to attack the unnaturalness of having \ddot{o} in

Table 6.8. Hattori's Proto-Japanese vowel system

i		u	
	ə		
		0	
	a		

Table 6.9. Matsumoto's Proto- or Pre-Japanese vowel system

i	u	
9(0		
a		
 		

Ono's system and the overall unnatural patterning in Hattori's system, especially where more distinctions are made in the back vowels than the front vowels, contrary to universal tendencies. Matsumoto (1984) also recognizes the rarity of a system consisting of i, u, a, and o, and entertains the possibility of reinterpreting o as a schwa, ultimately suggesting the system of Proto- or Pre-Japanese shown in Table 6.9.

As evidenced from the foregoing review of a number of works in the field, the problem of the Old Japanese vowel system is quite controversial, perhaps rivaling that of the genetic relationship of Japanese itself. The general tendency in recent years seems to be to cast doubt on the validity of the popularly held eight-vowel system. Especially strong is the interpretation of the A/B distinctions of the front vowels in terms of palatalization of the preceding consonants or in terms of the presence and absence of a phonemic /j/ or a similar glide, as in Matsumoto's and Hattori's treatments. This tendency notwithstanding, the entire issue is far from resolved, as can be seen in ongoing speculations and continuous research to uncover evidence for one system or another. (See Matsumoto (1984) for a critical review of other proposals concerning the Old Japanese vowel system.)

Before leaving the issues surrounding the Old Japanese vowel system, there is a related topic that needs to be touched upon, however briefly. That is the possibility of the presence of vowel harmony in the history of Japanese. This topic too is controversial, as the widely held view that there was vowel harmony in Japanese (e.g. Ono 1957) is viewed skeptically by Hattori, Matsumoto, and others.

The hypothesis concerning vowel harmony was a result of the generalization of the vowel co-occurrence restrictions discovered by Arisaka Hideyo (1941, 1955). Arisaka especially noted a strong tendency for avoidance of the combination of o_2

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Table 6.10. Vowel co-occurrence possibilities according to Arisaka

Back vowels:	u	o_1	а
Central (?) vowel:	02		
Neutral vowels:	i	e	

and o_1 , u, or a within a single stem. This tendency and other co-occurrence possibilities yield the vowel groups shown in Table 6.10.

Whereas the existence of vowel harmony in Old Japanese would be quite encouraging for those who are inclined to group Japanese in the Altaic family, Hattori points out that the situation in Old Japanese is characteristically different from the vowel harmony phenomena of Korean and Altaic languages. That is, the vowel harmony phenomena in Altaic languages in general are in terms of the backness and/or roundness (Turkish, Mongol), or in terms of the narrowness (Middle Korean, Literary Manchu), but in the case of the Old Japanese pattern, as shown in Table 6.10, there is no such clear phonetic motivation. Also, true vowel harmony takes place across morpheme boundaries, rather than being confined to stems. Despite these differences, Hattori allows the possibility that the Old Japanese co-occurrence pattern could be a remnant of vowel harmony. Thus, the problem here too is unresolved (see the parallel discussion on the possibility of vowel harmony in Ainu in Part 1).

7.1 General characteristics of the Japanese lexicon

The vocabulary of a language reflects the cultural and socio-economic concerns of its speakers, and the Japanese lexicon is no exception to this truism. What is especially interesting in the case of Japanese is that in the domain of cultural borrowing, it clearly shows both traditional and new patterns of borrowing. In former times, Japanese borrowing exhibited the traditional pattern of borrowing words from more culturally advanced neighboring countries – China, in the case of Japan. In recent times, with the progress of international trade and communication, a new pattern of borrowing has emerged. Now, geographic proximity is no longer a factor; rather, technological superiority and economic dominance have come to determine the flow of words across linguistic boundaries. Contemporary Japan is thus inundated with loan words from English and other European languages whose native speakers reside on the far side of the globe. We shall dwell on Japanese loan words subsequently, but for now, a more traditional aspect of the Japanese lexicon will be briefly examined.

The socio-economic activities in traditional Japanese society were centered around farming and fishing, and the native vocabulary reflects this fact. The native Japanese vocabulary is well-endowed primarily in the following areas: words and expressions relating to nature, crops, fish, and those relating to senses and feelings.

For farmers, the weather condition is of prime importance, and reflecting this, Japanese contains many expressions relating to the weather, especially rain and water, which are essential in rice farming. Rain is characterized according to the scasons of rainfall. In Japan, it rains most frequently in spring, summer, and fall, and the rain-related words often make reference to these seasons. Haru-same 'spring rain' (<haru 'spring' + ame 'rain') and aki-same 'autumn rain' (<aki 'autumn' + ame 'rain') are examples. Samidare 'May rain' and tuyu, the word for the rainy season in early summer, designate periods of rain important for transplanting rice seedlings. Yuudati 'evening shower' is typical of the summer-time rain.

And sigure refers to typical intermittent winter-time showers. There are also many expressions that include the word ame 'rain', e.g. ama-asi 'the strength of rainfall' (asi 'leg'), ama-yadori 'taking-shelter from rain' (yadori 'shelter-taking'), ama-gumo 'rain cloud' (kumo 'cloud').

Other natural phenomena such as wind and seasons also appear in many expressions that make fine distinctions among similar objects. Japanese is also rich with names for plants and insects. This concern with nature is reflected in the multitude of onomatopoeic expressions that relate to the sounds of the natural environment (see section 7.3 below).

Rice, being a Japanese staple food, is clearly delineated with regard to its different states. The rice plant is *ine*, raw rice is called *kome*, and cooked rice is *gohan* or *mesi*. The important status of rice as a staple in the Japanese diet is reflected by the fact that *gohan* or *mesi* also refers to meals in general. For example, *gohan desu* yo (lit. 'It's cooked rice') means 'It's meal time' or 'Dinner's ready'. Likewise, *Mesi* o kuoo (lit. 'Let's eat cooked rice') can mean 'Let's eat'.

Names for fish are numerous, and some kinds of fish have several names referring to the different stages of their maturation. For example, what is generally called "yellowtail" in English has several Japanese names, some being dialectal, according to its size. Abuko, tubasu, and wakanago refer to a yellowtail of less than 6-9 cm. When it reaches a length of about 15 cm., it is called yasu or wakasi. Inada, seguro, and warasa refer to yellowtails of 36-60 cm. Next comes hamati (45-90 cm.), and finally buri (over 1 m.).

Also, relating to fishing grounds, the offshore areas and shores are given different names. Oki is a general name for the offshore area. Nada refers to choppy sea, whereas ura is a calm bay. Hama is a sandy beach, while iso is a rocky shore.

Compared to the above mentioned lexical domains, the native Japanese vocabulary is poor in the domains of domestic animals, body-parts, and bodily movements. Indeed, there are, for example, no basic words distinguishing calf, cow, and bull. For these, the general term usi 'cattle' is compounded with ko- 'child', me-'female', and o- 'male' as in ko-usi 'calf', me-usi 'cow' and o-usi 'bull'. There is no distinction made between foot and leg, or between hand and arm; asi 'leg/foot' and te 'hand/arm'. The word tobu covers jumping, springing, and flying. Warau refers to chuckling, smiling, giggling, as well as other manners of laughing. The lack of specificity in these verbs, however, is more than compensated for by the richness of onomatopocic expressions that are available for adverbial use (see section 7.3 below).

Other general areas of interest in an examination of the Japanese lexicon are the distinct lexical items for male and female speech, honorific expressions, loan words,

and onomatopocia. Among these, male/female speech and honorifics will be taken up in a different chapter (see Chapter 11). The remaining sections of this chapter are devoted to loan words and onomatopoeia.

7.2 Loan words

The Japanese lexicon contains an extremely large number of loan words. Japanese has borrowed words from neighboring languages such as Ainu and Korean, but by far the most numerous are Chinese loan words. Traditionally, the Japanese lexicon is characterized in terms of three strata. The terms wago 'Japanese words' or Yamato-kotoba 'Yamato words' refer to the stratum of the native vocabulary, and kango 'Chinese words' refers to loan words of Chinese origin (hereafter called Sino-Japanese words or, simply S-J words). All other loan words from European languages as well as from Korean and Southeast Asian languages are designated by the rubric gairaigo 'foreign words' (lit. 'foreign coming words'). The relative proportions of these loan words in the Genkai dictionary (1859) were: Sino-Japanese words – 60 percent, and foreign words – 1.4 percent. Although the proportion of foreign words has steadily increased (see below), that of Sino-Japanese words remains fairly constant.

The distribution of loan words and native words in actual use was examined in a study conducted between 1956 and 1964 by the Kokuritsu Kokugo Kenkyūjo (National Language Institute, KKK hereafter). This study surveyed ninety magazines from five different fields: (i) literary magazines (12); (ii) popular magazines (14); (iii) practical and popular science (15); (iv) domestic and women's magazines (14); and (v) entertainment and hobby magazines (35). The magazines were all published in 1956. The statistics summarized in Table 7.1 are based on a sample of roughly 40,000 different words and of 530,000 counted words.

The category 'hybrid' refers to those words that are created by compounding elements from the different strata of the lexicon. As is obvious from Table 7.1, the proportion of distinct native words is not as great as that of S-J words, but the figures in the left-hand column indicate that native words occur more frequently than the S-J words.

Table 7.1. The distribution of loan words and native words in magazines according to the KKK report (1964)

1. % of to	otal word count	2. % of total number of distinct words
Native	53.9%	36.7%
S-J	2.9%	47.5%
Foreign	2.9%	9.8%
Hybrid	1.9%	6.0%

Table 7.2. The distribution of words according	to magazine type
(KKK report 1964)	

	1. % of	ftotal	word coun	it	2. % of of di	total i		
	Native	S-J	Foreign	Hybrid	Native	S-J	Foreign	Hybrid
(i)	58.9	40.0	1.5	1.6	39.9	51.5	5.0	3.3
(ii)	55.1	41.2	1.9	1.8	35.9	54.3	5.7	4.0
(iii)	36.7	59.3	2.1	1.8	28.8	60.3	7.0	3.9
(iv)	56.3	35.5	5.7	2.5	44.7	39.1	9.9	6.2
(v)	60.7	34.7	2.7	1.9	41.3	45.7	8.3	4.7

Table 7.3. KKK report on the vocabulary of newspapers (1971)

1. % of	total word count	2. % of total number of distinct words
Native	26.6-43.9%	35.2-38.8%
S-J	50.7-65.3%	44.4-46.9%
Foreign	4.0- 6.0%	12.0-12.7%
Hybrid	1.4- 2.1%	4.8- 5.1%

The same KKK report gives tables that are organized according to the types of magazines examined. In Table 7.2, (i) refers to literary magazines, (ii) to popular magazines, (iii) to practical and popular science magazines, (iv) to domestic and women's magazines, and (v) to entertainment and hobby magazines.

From Table 7.2 a general picture of the distributions of the native and loan words emerges. In the practical and popular science magazines (row iii), S-J words are particularly predominant, while the native vocabulary is weak. In the domestic and women's magazines (row iv), on the other hand, the situation is reversed. Foreign words also assert themselves most strongly in the domestic and women's magazines. In other words, the S-J vocabulary is used in technical fields, while the foreign vocabulary relates to the domestic and women-related fields such as cooking and fashion.

In an interim report of the KKK (1971) on the vocabulary of newspapers published in 1966, higher percentages of foreign words are seen, as shown in Table 7.3.

A comparison of Table 7.3 with Table 7.1 indicates that S-J words are also more frequently used in newspapers. This also reflects the fact that the S-J vocabulary is prominent in fields that involve abstract concepts.

The effect of loan words on the Japanese language is not insignificant. In particular, the effects of S-J borrowing have been felt in all aspects of the Japanese language, including syntax. Restricting our discussion to the domain of the lexicon,

however, S-J and foreign loan words have resulted in a large number of synony-mous expressions. This demonstrates that Japanese has borrowed even those words whose equivalents already existed in the language. This may appear at first to be unmotivated and uneconomical. However, ostensibly synonymous words are often associated with different shades of meaning and stylistic values, thereby enriching the Japanese vocabulary and allowing for a greater range of expression. For example, Sibata (1976) makes some interesting observations about the following sets of synonymous triplets:

(1) Gloss 'inn' 'idea' 'acrobat' 'detour' 'cancellation'
Native yadoya omoituki karuwaza mawarimiti torikesi
S-J ryokan tyakusoo kyokugei ukairo kaiyaku
Foreign hoteru aidea akurobatto baipasu kyanseru

In general, the native words have broader meanings than their loan counterparts. For example, torikesi can be applied to various kinds of cancellation-type acts, even in taking back one's words. The S-J word kaiyaku is normally used with reference to the cancellation of contracts and other formal transactions. The foreign word kyanseru, on the other hand, is used only for the cancellation of appointments or ticket reservations, etc. The S-J words, which generally convey a more formal impression, tend to be used with reference to higher quality objects than do the native equivalents. On the other hand, the foreign words have a modern and stylish flavor.

Though various factors can be pointed out to account for the ready acceptance of loan words in Japanese, the main linguistic reasons have to do with the lack of nominal inflections and the presence of a syllabary writing system. Since Japanese does not mark gender, person, or number on nouns, and since cases are indicated by separate particles, a loan word can simply be inserted into any position where a native nominal might appear, with no morphological readjustment. For the borrowing of verbal expressions, Japanese utilizes the verb suru, which has the very general meaning 'do'. This useful verb can attach to the nominal forms of loan words to create a verbal expression, e.g. the S-J word hukusya 'copy' yields hukusya-suru 'to copy', and the English loan kopii 'copy' yields kopii-suru 'to copy'.

Adjectives are borrowed into the category of adjectival nominals, which take the -da ending in the predicative function. The word soft is thus borrowed as sohuto-da '(it is) soft'. The ending -da becomes -na in the attributive function, as in sohuto-na 'soft'. The adverbial ending -ni may be substituted for -da/-na to yield the adverbial form sohuto-ni.

The presence of a syllabary writing system (see Chapter 6) also facilitates the borrowing of foreign words which can be adapted into Japanese at the phonetic

level, though the original pronunciation is often grossly altered. The possibility of adapting foreign words without the semantic interference entailed by adapting Chinese characters, which are largely ideographic, gives Japanese an advantage over Chinese in the domain of lexical borrowing. Indeed, in Chinese those loan words that are given characters without semantic consideration tend not to stay, being replaced by new words created by the translation of the original foreign words. In the next two sections, the history, status, and the characteristics of the S-J words and foreign words are discussed separately.

7.2.1 Sino-Japanese words

It is generally believed that Chinese words were first introduced into Japan during the first century A.D., or possibly even before that. According to the *Nihon shoki* (Chronicles of Japan) (A.D. 720), a systematic introduction of the Chinese language occurred around A.D. 400, when Korean scholars brought Chinese books to Japan. While Chinese characters and words remained primarily the instruments of recording official documents and of scholarly writing for a long time, they were gradually absorbed into everyday Japanese language. By the end of the Edo period (1603–1867), they had penetrated the colloquial language and local dialects. However, many words that are presently classified as *kango* (Chinese words) are actually not of Chinese origin.

Following the Meiji Restoration (1867), the new government, in its march toward modernization, renovated the system of government as well as that of various academic fields. A part of this modernization effort included the invention of new terms that were, for the most part, translations of English terms. These new terms were created by using the existing Chinese characters, and accordingly, they belong to the stratum of S-J words despite their origin. In other words, the name for this stratum kango refers to those words that utilize the Chinese reading of characters (see Chapter 6). Some of these Japanese-made words, such as syakai 'society' and kagaku 'science', have been introduced to and adopted by the Chinese language.

J.C. Hepburn noted in the 1886 revision of his dictionary Wa-ei gorin shūsei (Japanese-English Glossary) that he had added more than 10,000 new words since the first edition, published in 1867. This dramatic increase in the proportion of S-J words in the Japanese lexicon is thus attributable to the modernization effort of the Meiji period. The proportion and the status of S-J words in Japanese are strikingly similar to that of Latinate words in English. Ueno (1980) points out that the proportion of Latinate words in the English vocabulary is 55 percent, while that of Germanic (Anglo-Saxon) words and of other foreign loans is 35 percent and 10 percent, respectively. Statistics of these different lexical strata incorporating

their frequency of occurrence, on the other hand, show Germanic words occupying 85 percent of the total word count. Though the proportion of Japanese words in actual texts is not as high as that of Germanic words in English, the proportion that S-J words occupy in the Japanese vocabulary is quite comparable to that of Latinate words in the English vocabulary.

Furthermore, the status of S-J words in Japanese is quite similar to that of Latinate words in English. S-J words tend to express abstract concepts, and academic vocabulary is mainly comprised of S-J words. These differences can be seen when native and S-J synonyms are compared, e.g.

(2)	Gloss	Native	S-J
	yesterday	kinoo	sakuzitu
	language	kotoba	gengo
	play	asobi	yuugi
	receipt	uketori	ryoosyuusyo
	difference	tigai	sooi
	form	katati	keitai
	forest	mori	sinrin

Native words such as kinoo and asobi generally belong to the colloquial language, while their S-J counterparts are found in the literary language or academic vocabulary. Compare this with the following list in which Latinate words are contrasted with their Germanic counterparts in English.

(3)	Germanic	Latinate
	help	aid
	begin	commence
	hide	conceal
	happiness	felicity
	deep	profound
	wish	desire

Native words and Chinese vocabulary are also differentiated with regard to the syntactic categories that they belong to. The majority of S-J words (as well as other foreign words) belong to the category of nouns, with some included in the adverb category. Most of these nouns express abstract concepts. In order to function as verbs, they must be compounded with the native word *suru* 'do', which carries tense; for example, *kenkyuu* 'study(N)' becomes *kenkyuu-suru* 'study(V)'. On the other hand, words in the categories of verbs, adjectives, and adverbs and other minor categories such as conjunctions mostly belong to the native vocabulary.

From a morphological point of view, S-J words are more analytic and therefore

semantically more transparent than native words. In general, S-J nouns consist of two or more morphemes, with the last morpheme often indicating the object category of the designated referent. For example, the morpheme ki (機) means 'machine', and words referring to various types of machines contain this morpheme, e.g.

(4) hikoo-ki 'airplane'
soozi-ki 'cleaner'
densan-ki 'computer'
syok-ki 'spinning machine'

Similarly, the terms for different branches of learning all contain the morpheme gaku (学) 'study' as in:

(5) suu-gaku 'mathematics'
rekisi-gaku 'history'
kaikei-gaku 'accounting'
tookei-gaku 'statistics'
syakai-gaku 'sociology'

Furthermore, since the meaning of each character is fairly stable, one can often correctly guess the meaning of a word even upon encountering it for the first time. For instance, even if one did not know the meaning of the word gengo-gaku (書語学), one would know that gen(音) and go(語) both mean 'language' or 'word'. From this, one could guess that the word means something like study of language or words; and the word indeed means 'linguistics'. This process, of course, is analogous to an intelligent guess that an English speaker might make on encountering a Latinate word like linguistics. However, this parallelism between S-J words in Japanese and Latinate words in English, which tend to be more analytic than Germanic words, is only apparent, for the meaning of Chinese characters is far more transparent to the ordinary Japanese than Latinate formatives are to ordinary speakers of English; and, thus, the Japanese have much more advantage in guessing the meanings of unknown words written in characters than English speakers faced with unknown Latinate words.

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7.2.2 Foreign words

Loan words other than those belonging to the stratum of S-J words are called gairaigo (lit.) 'foreign coming words'. First, let us examine the origins of the words that make up this stratum. Adapted in Table 7.4 below is the result of the KKK study of ninety varieties of magazine mentioned earlier.

In Table 7.4, the category 'others' includes words borrowed from Latin, Korean,

Origin	number of words	%
English	2,395	80.8
French	166	5.6
German	99	3.3
Italian	44	1.5
Dutch	40	1.3
Russian	25	0.8
Chinese	22	0.7
Portuguese	21	0.7
Spanish	21	0.7
Others	131	5.3
Total number of words	2,964	99.0

Table 7.4. Foreign words in ninety varieties of magazine (adapted from KKK report 1964)

Ainu, Thai, Indonesian, etc. as well as hybrid words consisting of word from two different languages.

Table 7.4 indicates the dominance of English in the foreign vocabulary, but there were times when other languages claimed a greater share than English. In fact, the languages represented in Table 7.4 reflect the history of Japan's foreign contacts over the last 400 years.

The first Japanese contacts with the Western world came about in the middle of the sixteenth century when a drifting Portuguese merchant ship reached the island of Tanegashima off Kyūshū. The Portuguese were followed some years later by the Spaniards and the Dutch. The latter represented all foreign interests in Japan through most of the Tokugawa period (mid-seventeenth to mid-nineteenth centuries), when Japan had closed its doors to contact from the outside world. Most of the earliest foreign borrowings were thus from Portuguese, Spanish, and, especially. Dutch, which was studied in Japan as a means of obtaining advanced knowledge of medicine and astronomy.

Toward the latter part of the nineteenth century, English usurped the position held by Dutch as the language of foreign studies. French was also studied due to its status as an international language in the areas of culture and diplomacy. The shift of the language of foreign learning from Dutch to English in the early Meiji period is clearly reflected in the origin of foreign specialists hired by the new Meiji government. According to *Oyatoi gaikokujin ichiran* (A roll of foreign employees), there were 214 foreign employees in 1872. Among them, 119 were English, followed by fifty French and sixteen Americans. In comparison, there were only two Dutch and one Portuguese.

Table 7.5. Foreign words used in the Taishō period (adapted from Ueno 1980)

Origin	number of words	%
English	84	51.9
Dutch	45	27.8
Portuguese	23	14.2
French	6	3.7
German	2	1.2
Spanish	1	0.6
Other	1	0.6
Total number of words	162	100.0

The composition of gairaigo 'foreign words' in Japanese accurately reveals the above change. Ueno (1980) studied the origins of 162 foreign words that were actively used in the middle of the Taishō period (1912–25). His summary, adapted in Table 7.5, shows that both Dutch and Portuguese held a far greater share at that time than they do in the modern vocabulary, where they add up to a mere 2 percent of foreign words (cf. Table 7.4).

The presently surviving Portuguese words include tabako (< tabaco), tenpura (< tempero) '(name of a deep-fried dish)'. Older people recall such Portuguese loans as syabon (< sabão) 'soap' and zyuban (< gibão) 'under-shirt', which are no longer used commonly. Dutch words are more numerous, and include biiru (< bier) 'beer', garasu (< glas) 'glass', kokku (< kok) 'cook', tyokki (< jak) 'vest', penki (< pek) 'paint', and orugooru (< orgel) 'music box'.

The distribution of foreign loan words from different languages is sometimes concentrated in specific fields, indicating the focus of Japan's contacts with that nation. German loan words are most frequently found in the fields of medicine, philosophy, mountain climbing, and outdoor sports, e.g. karute (< Karte) 'medical file', gaaze (< Gaze) 'surgical gauze', torahoomu (< Trachom), ideorogii (< Ideologie) 'ideology', hyutte (< Hütte) 'cottage', teeze (< These) 'thesis', zairu (< Seil) 'rope', gerende (< Glände) 'ski slope'. French borrowings abound in the fields of art and fashion, e.g. atorie (< atelier) 'artist's studio', dessan (< dessin) 'sketch', pantaron (< pantalon) 'trousers (mainly lady's)', pureta-porute (< pret à porter) 'ready made (clothing)'. As expected, many musical terms are borrowed from Italian, e.g. piano (< piano), sopurano (< soprano), dakaapo (< da capo), tenpo (< tempo).

As was noted earlier, English terms were first translated into Japanese semantically using Chinese characters, which resulted in a large number of kango coined in Japan. This was in keeping with the traditional practice of assigning semantically

appropriate Chinese characters to foreign loan words. In order to represent the original sounds, a katakana rendering of the original pronunciation accompanied the translated word. Thus, in the initial phase of loan translation, there were, for each word, both character and katakana representations; the former representing the meaning, and the latter sounds. These foreign words then had two paths open to them; some retained the character rendering, and began to be pronounced according to the readings of the characters, while others preserved the katakana rendering. A good number of words took both paths, resulting in the formation of many doublets – the kango version and the foreign (phonetic) version, e.g. kentiku:birudingu 'building', sikihu:siitu 'sheet (linen)', tetyoo:nooto 'notebook', and more recently densikeisanki:konpyuutaa 'computer' (see below on the fate of the kango forms of these doublets).

Contemporary practice now is to borrow by directly representing just the sounds using *katakana*. The three writing systems thus maintain their respective function: *hiragana* for native grammatical words, *katakana* for foreign words, and *kanji* for S-J words (see Chapter 6).

When foreign loan words are rendered in katakana, the original pronunciation is most often grossly altered. Since all the katakana except for /N/ end in a vowel, the consonant clusters and final consonant of a loan word are altered into sequences consisting of a consonant and a vowel. Thus, a one-syllable word like strike becomes the five-mora word sutoraiku (see Chapter 8). As a consequence, many Japanese words of English origin are totally incomprehensible to the ears of the native English speaker, much to the chagrin of the Japanese. Japanese-born American historian and former ambassador to Japan Edwin O. Reischauer comments: "It is pathetic to see the frustration of Japanese in finding that English speakers cannot recognize, much less understand, many of the English words they use."

In addition to the phonological process, there are three other factors that upset native speakers of other languages upon encountering Japanized words borrowed from their native tongues. They are: (i) change in semantics; (ii) Japanese coinage; and (iii) change in form due to simplification. Of these topics, only the first two will be discussed here, the last one being taken up in Chapter 10.

Most of the common types of semantic change that take place historically within a single language are also seen in the process of foreign borrowing. The most frequent type of change seen in Japanese foreign loan words is narrowing and specialization, where only one aspect of the range of the original meaning is adopted. The word sutekki (<stick) is used only in the sense of 'walking stick'; sutoobu (<stove) designates a room heater, never a cooking stove; hitto-endo-ran (<hit-and-run) is used only for a particular kind of play in baseball; and raisu (<rice) is cooked rice served in a Western-style restaurant or served on a plate as

opposed to a rice bowl. To this group also belongs arubaito from the German word Arbeit. The word is used to refer to a part-time job typically held by students. Recently, the word paato (part-time) has come into use for a part-time job typically held by housewives. An interesting pair of words is sutoraiki:sutoraiku, both from strike. The former is used exclusively to designate work stoppage, and the latter as a baseball term.

Semantic extension is not as common as narrowing, but there are a few words that illustrate this process. *Handoru* comes from *handle*, but it is used to designate the steering wheel of a car in addition to a host of handles including the handle bar of a bicycle. *Rezi* comes from *cash register* and is used to refer to the cashier as well.

Transfer or shift in meaning occurs fairly frequently. Perhaps the most surprising of all is abekku from the French preposition avec. The word means a dating couple. Someone who owns a mansyon (< mansion) owns a Japanese-size (meaning small) condominium. Although the women's liberation movement has arrived in Japan, hueminisuto (< feminist) does not mean the kind of person the movement wants to create. Rather, a hueminisuto is at best a male who is soft-hearted toward women and at worst a man who treats women kindly with illicit intent. (Now the word with the original meaning is becoming more widely used.)

Semantic downgrading or pejoration can be seen in words like *madamu* (<*madam*) and *bosu* (<*boss*). *Madamu* designates the female owner of a drinking establishment, and *bosu* the powerful head of a group of gangsters or politicians.

Just as numerous kango are created in Japan, new "foreign" words are coined from combinations of existing loan words. The contemporary expressions of this type are too numerous to list, and only a few examples are given here as an illustration. $Bakkumiraa\ (< back + mirror)$ is a rear-view mirror, and $teeburu\ supiiti\ (is a dinner speech, which is normally delivered before or during dinner. Spinsters are called <math>oorudomisu\ (< old + miss)$ and a female office worker is an $ooeru\ (< OL < office + lady)$. Sometimes English morphology is employed as well, e.g. $naitaa\ (< night + er)$ is a night baseball game, $paato-taimaa\ (< part-time-er)$ is the holder of a part-time job, and the recent coinage arubaitaa adds to the German loan $arubaito\ (< Arbeit)$ the English suffix -er, producing another word with the meaning of paato-taimaa. Sayurisuto involves attaching -ist to the first name Sayuri and denotes a devoted fan of Yoshinaga Sayuri, a well-known actress. $Maikaa\ (< my + car)$ and $maihoomu\ (< my + home)$ are privately owned cars and houses. The recent concoction nau-i 'modish' is an adjective created by suffixing the present tense ending for adjectives -i to the English adverb now.

If these foreign words are incomprehensible to foreigners, they are also not too well understood by the Japanese themselves. Since they are not written with Chinese characters, their meanings cannot be easily guessed at. In 1973, Nippon Hōsō

Kyōkai (Japan Broadcasting Corporation, abbreviated as NHK) conducted a survey concerning the comprehension of foreign words. One hundred words such as baagenseeru (< bargain sale), enzyoi (< enjoy), and riaru (< real) were shown to the respondents together with five possible meanings for each item, and the respondents were asked to select the meaning that most closely corresponds to the given item.

The results showed a great deal of variation according to the respondent groups. In the case of rural housewives (in their forties to fifties), the percentage of correct answers was 40 percent compared to 60 percent for the other three groups of respondents, who were: a group of nursery school teachers (in their late teens to twenties), a group of urban housewives (in their thirties to forties), and a group of male company employees (in their twenties to thirties). This survey also revealed that many foreign words are understood in the semantically shifted meanings, which have diverged from the original meanings, sometimes to quite an extent. For example, 47 percent of the respondents chose the meaning "a person who has a hobby" for the word mania (<mania); 20 percent chose "public morality" for etiketto (<etiquette) and "sound" for boryuumu (<volume), and 22 percent chose "bribe" for ribeeto (<rebate) (see Ishino 1977).

The NHK survey shows that comprehension of foreign words depends a great deal on the respondents' educational and occupational backgrounds, as well as on their age. It also depends on the words themselves. Some foreign words are primarily professional jargon used exclusively by the members of a particular profession, while other words are well integrated into common usage. Still, a large number of words fall somewhere between these two extremes.

There is one area in which precise understanding of foreign loan words does not seem to matter much although they are used conspicuously. This is in the area of advertisement and commercial messages. It is in this area where one encounters such contradictory expressions as mekanikku-na dizitaru kurokku 'mechanical digital clock' and gendaiteki de antikku-na dezain' modernistic and antique design'. Entire phrases can be composed solely in foreign loan words except for inflectional endings, particles, and other minor function words, as in hippu o 3-senti appu-suru 'to up (raise) the hips 3 centimeters' (seen in an advertisement for women's undergarments), and derakkusu na puran wa kono koonaa o '(please use) this corner for deluxe planning' (seen in an advertisement for interior decoration). This kind of advertising copy takes advantage of the psychological effect that foreign words bring about in the mind of potential buyers, who are often attracted to the fashionableness or newness of those foreign expressions, even though they may not fully understand them.

In addition to the fact that foreign words abound in the commercial messages

that inundate Japanese daily life, they are also conspicuous because they are written in *katakana*. The ubiquity and conspicuousness of foreign words in contemporary Japan as well as the fact that they are used without understanding of their precise meanings alarm language purists. Occasional public outcries are heard, and opinions for curbing the use of foreign words are voiced. However, these language purists are fighting a losing battle, and, to their dismay, foreign loan words are gaining a firm footing in the Japanese language.

Foreign loan words, like slang expressions, are quickly adopted and then abandoned. Only those that are firmly entrenched in the language can be found in dictionaries. The proportion of foreign loan words in dictionaries is, however, steadily increasing. The ratio of foreign words in the Genkai, published in 1859, was only 1.4 percent. The rate increased to 3.5 percent in the Reikai Kokugojiten published in 1956. The 1972 version of Shin Meikai Kokugojiten has gairaigo (foreign loans) comprising 7.8 percent of its entries. It is predicted that foreign words would claim at least a 10 percent share of the entries in a dictionary compiled today. Some even think that foreign loan words have the potential of usurping the role of Chinese words in the Japanese lexicon (cf. Ishino 1977). Sociologist Herbert Passin (1982:3) predicts that "the Japanese vocabulary will be completely internationalized before too long." He foresees that, just as Chinese words became part of the Japanese vocabulary, the basic vocabulary of English will be absorbed into Japanese, often replacing existing Chinese words. This trend has, indeed, been occurring. Those words that have the foreign/S-J doublets are losing the S-J versions gradually. Thus, tyoomen 'notebook' is now mostly referred to as nooto (<note). Similar S-J words of this kind are: hyakkaten, sikihu, syokutaku, which are being replaced by departo (< department store), situ (< sheets), and teeburu (<table), respectively. This trend notwithstanding, one must keep in mind that, once foreign words are borrowed into Japanese, they are Japanized both phonologically and semantically, and that they are likely to be incomprehensible to native speakers of the languages from which they were borrowed. One further morphological alteration that many foreign loans undergo is abbreviation, which renders the loans totally opaque (see Chapter 10). Thus, Passin's remark about internationalization of the Japanese vocabulary must be interpreted in a rather limited sense.

7.3 Onomatopoeia

Onomatopoeic and other sound-symbolic words form another conspicuous group of words in the Japanese lexicon. In the narrow sense, onomatopoeia refers to those conventionalized mimetic expressions of natural sounds. These words are called *giseigo* 'phonomimes' in Japanese. In addition to phonomimes, the Japanese

lexicon has two other classes of sound-symbolic or synaesthetic expressions. They are *gitaigo* 'phenomimes' and *gizyoogo* 'psychomimes'. Phenomimes "depict" states, conditions, or manners of the external world, while psychomimes symbolize mental conditions or sensations. A few examples below illustrate these three classes of sound symbolic words, which are collectively referred to here as onomatopoeic words.

(6) Giseigo (Phonomimes)

wan-wan 'bow-wow'

kokekokkoo 'cock-a-doodle-doo'

gata-gata 'clattering'
pyuu 'whizzing'

zaa-zaa '(sound of a downpour)'

(7) Gitaigo (Phenomimes)

yobo-yobo 'wobbly' kossori 'stealthily' guzu-guzu 'tardily'

pittari 'matching perfectly'

zito-zito 'dampish'

(8) Gizyoogo (Psychomimes)

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ziin 'poignantly'
zuki-zuki 'throbbingly'
tiku-tiku 'stingingly'
ira-ira 'nervously'

Morphologically speaking, many of the onomatopoeic words involve reduplication, and, many others, especially among the phenomimes, have the ending -ri. Syntactically, they function as adverbs, often with the particle to or ni, as noun modifiers with no or na, or as predicates compounding with the verb suru 'do' or the copula da.

(9) a. Inu wa wan-wan to hoeru.
dog TOP bark
b. yobo-yobo ni naru 'become wobbly'
c. pika-pika no kutu 'shiny shoes'
d. Atama ga zuki-zuki-suru.
head NOM do throbbingly.'
c. Unagi wa nuru-nuru-da. 'An cel is slippery.'

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In comparison to English, many Japanese verbs have very general meanings. *Naku* for example, covers all types of crying that are expressed in English by specific verbs such as *weep* and *sob*. Similarly, *warau* is a general term for laughing. This lack of specificness of the verb meaning is compensated by the presence of onomatopoeic words. Indeed, the differences between *weep* and *sob*, and between *chuckle* and *smile*, etc. are far more expressively rendered in Japanese.

(10) cry waa-waa naku weep meso-meso naku kusun-kusun naku sob blubber oi-oi naku siku-siku naku whimper wan-wan naku howl hii-hii naku pulc mew een-een to naku ha-ha-ha to warau (11) laugh niko-niko to warau smile chuckle kutu-kutu ta warau haw-haw wa-ha-ha to warau giggle gera-gera warau snigger nita-nita warau ohoho to warau simper nikori to warau grin titter kusu-kusu warau

Sound qualities and synaesthetic effects are correlated to a certain extent. Forms that end in the glottal stop, which assimilates to the following t of the quotative particle to, such as dosat-to (dumping of an object) and kurut-to (turning motion) symbolize sudden cessation of action, quickness, or the single occurrence of an action. The nasal-ending produces a sense of prolonged resonance or that of rhythmicality, e.g. karan 'clack', dokan 'boom'. Long vowels correlate with a sense of prolongation or continuity, e.g. huwaa (floating state), zudoon (prolonged bang). Forms ending with -ri symbolize softness, or slowness, e.g. nosori (slow movement), tururi 'slipperly'. Reduplication, as in many other languages, symbolizes repetitive sounds or movements, e.g. goro-goro 'rumbling', kuru-kuru 'turning'.

Another area of sound-sense correlation that can be compared with similar phenomena in other languages involves voicing opposition and difference in vowel quality. In Japanese onomatopoeia, voicing opposition is utilized as shown in the examples below, where the voiced versions relate to heavier or louder sounds, or

stronger, bigger, rougher actions or states, and the voiceless versions with lighter or softer sounds, or crisper or more delicate actions or states.

(12) kasa-kasa (light rustling gasa-gasa (heavy sound) rustling sound)

ton-ton (light knocking don-don (banging sound) sound)

sara-sara (smooth texture) zara-zara (rough texture)

In Japanese, p and b also contrast with h, which is historically related to p (see Chapter 8), and there is thus a three-way contrast as in the following examples, in which the h versions symbolize even lighter and softer sensations than the p versions.

(13) a. hara-hara: para-para: bara-bara b. horo-horo: poro-poro: boro-boro

In these expressions, the (a) forms describe the manner of falling of certain objects. *Hara-hara* would be used for leaves that fall rather quietly or the shedding of tears, *para-para* would be appropriate for light raindrops or hail, while *bara-bara* describes the manner of falling of heavier objects. The (b) forms depict the manner of shedding tears. A sense of frailness is imputed to *horo-horo*. Small tear drops fall *poro-poro*, while larger ones drop *boro-boro*.

Forms with voiced sounds tend to impart negative connotations. Kira-kira 'sparkling' contrasts with gira-gira 'glaring gaudily', sittori (pleasantly damp as after a light shower in dry weather) with zittori (uncomfortably humid and hot), and sarasara (dry, smooth texture) with zarazara (rough, uncomfortable texture).

The difference in vowel quality also correlates with differences in the texture of observed phenomena. High or closed vowels are associated with higher or softer sounds, or activities involving smaller objects, with low vowels correlating with the opposite phenomena. Front-back opposition is similarly correlated with loudness and size as is the high-low opposition. Thus, kiin is a shrill metallic sound, while kaan is the sound of a fairly large bell. Boro-boro symbolizes the vertical dropping of relatively small objects such as tear drops, as opposed to bara-bara, which depicts the dropping of objects by scattering them. A small whistle sounds pippii, and a steam whistle goes poppoo. A goat baas mee, and a cow bellows moo. Gero-gero is the way a frog croaks, but goro-goro is the rumbling of thunder.

Onomatopoeic words are often pointed to as instances of sound-meaning correlation in language, but that they are by no means a direct rendering of natural sounds and are actually conventionalized expressions within each linguistic com-

munity is clearly demonstrated by the fact that there are dialectal differences in onomatopoeia. In Tōkyō speech, cows bellow *moo*, but in other dialects they are said to bellow differently: *moon* (Yamaguchi, Hiroshima, Ōita, etc.), *mee* (northern area of Honshū, part of Kyūshū, etc.), *uu-uu* (part of Noto peninsula), *nboo* or *nbuu-nbuu* (southern islands of Okinawa). (As seen above, *mee* is baaing of a goat in Tōkyō speech.)

As for phenomimes, it is difficult for speakers of other dialects to ascertain the kinds of mannerisms that these local expressions represent. *Kuteen* is used in an area of Aomori to depict the manner of running eagerly, but it will never be so interpreted by speakers of other dialects. (In the Ōsaka dialect *kuteen* is used in describing a fatigued condition.) *Honnori* in the Tōkyō dialect symbolizes slightness, but in one part of Aichi it correlates with 'certainly', and in Shizuoka it denotes 'sufficiency'.

Onomatopoeic expressions permeate Japanese life. They occur in animated speech, and abound in literary works, to the chagrin of the translators of Japanese literature. In baby-talk, many animals are referred to by the words that mimic their cries: buu-buu 'pig', wan-wan 'dog', nyan-nyan 'cat', moo-moo 'cow'. Indeed, names of many noise-making insects and certain objects are derived by a similar process: kakkoo 'cuckoo', kirigirisu '(a type of grass-hopper)', gatya-gatya '(a noise-making cricket)'. There are said to be more than thirty kinds of cicadas in Japan, and many of them are named after the noises they make: tuku-tuku-boosi, kana-kana, min-min-zemi, zii-zii-zemi, etc. A hammer is sometimes called tonkati, and a favorite pastime of the Japanese is patinko 'pinball game', which is sometimes referred to by the more expressive form tinzyara.

A full discussion of the lexicon requires us to go into the details of word formation. However, since the subtopics relating to word formation involve a morphological perspective different from that concerned with an overall aspect of the lexicon, these will be dealt with in a separate chapter. Chapter 10 offers more detailed, technical discussion of lexical categories, the internal structure of words, and the word formation processes.

Phonology

In the following discussion of the phonological characteristics of Japanese, the speech of the Tōkyō region – the basis of so-called standard Japanese (see Chapter 9) – will be the primary object of inquiry, and will provide a starting point for more general discussions involving the characteristics of other dialects. While the interpretation of the vowel system is fairly straightforward, that of the consonantal system is quite controversial. The subsequent discussion assumes as a point of departure the following inventories of phonemes – which is perhaps the most orthodox interpretation (see Tables 8.1 and 8.2 below).

Since we do not maintain here that phonemic analysis and morphophonemic analysis need be clearly distinguished, all kinds of evidence, e.g. phonetic, distributional, and morphemic alternations, are simultaneously adduced in the analyses of specific sounds. Before discussing segmental units, however, another important phonological unit, the mora, is examined.

8.1 Syllable and mora

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Table 8.1. Vowel phonemes

i		u
e		0
	a	

Table 8.2. Consonantal phonemes

p	t		k	
p b	đ		g	
	S			h
	Z			
		r		
m	n			
w		j		
			N	Q
				_

four moras – ha-k-ki-ri. In the traditional phonemic analysis, the moraic nasal is analyzed as /N/ and the non-nasal moraic consonant as /Q/. Thus sinbun 'newspaper' would be phonemicized as /siNbuN/, and hakkiri 'clearly' as /haQkiri/ (see section 8.3.3 below).

Long vowels, written with two of the same kana or with one kana followed by a bar indicating length, also count as two moras, e.g. ookii 'big' is a two-syllable (oo-kii), four-mora (o-o-ki-i) word.

Both moras and syllables play an important role in the Japanese accentual system. For one thing, in many dialects pitch change occurs at the mora level. The one-syllable word kan (HL) 'completion', in Tökyō, for example, has a pitch drop after the first mora as kan. This contrasts with another kan (LH) 'sense', which has the pitch configuration kan. Also, in Tökyō speech, the initial low pitch can be only one mora in length. Thus, if the first syllable contains two moras, as in ooi 'cover', or hantai 'opposite', only the first mora will have low pitch; ooi (LHH), hantai (LHHH). If the initial syllable has just one mora, it of course will have low pitch: hatumei (LHHH) 'invention'. (Forms beginning with high pitch can also have high pitch which is one mora in length. The second mora of such forms would have low pitch.)

The concept of syllable also plays a role in the accentuation phenomena. In Tökyö speech it is the syllabic unit that carries accent, i.e. the mark of pitch fall. This is so because two-mora syllables always have accent on the first mora. That is, while there are forms like /ko'orogi/ 'cricket', which is realized as koorogi (HLLL), there is no form like /koo'rogi/, with an accent on the second mora of the

first syllable, which would be pronounced as <u>koōrogi</u> (LHLL). If the second mora is an independent syllable, however, it can carry accent as in /koga'isha/ <u>kogāisha</u> (LHLL) 'subsidiary company'. The same applies to syllables with other types of mora. There are forms like /ga'nko/ 'stubborn', but none like /gan'ko/, with an accent on the second mora of the first syllable. If a mora were an accentual unit, there should be no reason for such a restriction. Thus, Japanese accentuation rules must refer to both moraic and syllabic units.

However, not all Japanese dialects have both syllabic and moraic units. According to Sibata (1962), certain dialects in the northern Tōhoku region and the southern Kyūshū region do not count forms like matti 'match' and honya 'bookstore' as having three rhythmic units. Rather they are separated only into two units, mat-ti and hon-ya. A syllable with a long vowel is also counted as one unit in these dialects. For example, tyuusya 'injection', which would be separated into three moraic units in Tōkyō speech, can be divided only as tyuu-sya. In these dialects, the syllable is also the unit of pitch assignment. Thus, in the Takajōchō dialect in Miyazaki prefecture the pitch pattern requires the last syllable to be high, e.g. kokoron (LLH) 'of heart', heitai (LH) 'soldier'. One may contrast this with the Ōsaka dialect, in which a mora is a unit of pitch assignment, where certain forms have high pitch in the last mora, e.g. soturon (LLLH) 'graduation thesis', hentai (LLLH) 'pervert'.

Sibata thus distinguishes two types of dialects: those that divide syllables further into moraic units, such as the Tōkyō dialect, are called "mora dialects", and those in which syllables are the minimal rhythmic units like the Hanawa dialect in Akita are called "syllabeme dialects". Since syllabeme dialects occur only in the peripheral areas of northern and southern Japan, Sibata hypothesizes that Japanese was once a syllabeme language from which the more contemporary mora dialects developed.

The notion of mora figures importantly in any phonemic analysis of Japanese. Indeed, as will be seen below, certain analyses are overly obsessed with the desire to incorporate moraic units directly into the phonemic representation.

8.2 Vowels

The basic vowel phonemes of the major dialects of Tōkyō and Kyōto are quite straightforward. However, a great deal of dialectal variation of the vocalic system is observed. Dialectal systems range from a three-vowel system (/i/, /u/, /a/) in the Yonaguni dialect of Okinawa to an eight-vowel system seen in the Nagoya dialect, which, in addition to the five vowels of the Tōkyō dialect, possesses the central vowels / \bar{u} / and / \bar{o} /, as well as the low front vowel / \bar{w} /. Despite these variations, it is generally believed that the basic vowels of the Japanese language are those five vowels seen in the major dialects, and that the other dialectal systems have evolved from the five-vowel system (see, however, Chapter 6 on the discussion of the Old Japanese vowel system).

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There is no tense vowel and the high and mid vowels tend to be lower than the vowels of European languages represented with the same I.P.A. symbols. Vowel articulation is one of the characteristics that is said to differentiate the dialects of the Western part of Japan (represented by the Kyōto dialect) and the Eastern part (represented by the Tōkyō dialect). Generally speaking, vowels are less clearly articulated in the Tōkyō dialect, and a number of phonological characteristics of this dialect can be attributed to this tendency.

First, in the Tōkyō dialect the high back vowel /u/ is an unrounded [w]. This vowel is slightly rounded in the Western dialects and in Okinawa it is clearly a rounded [u]. When /u/ follows /s/, /t/, and /z/, it is centralized and pronounced as [\ddot{u}]. Other characteristics of Tōkyō pronunciation include (1) the confusion of /i/ and /c/, e.g. $ibaru \rightarrow ebaru$ 'to be haughty', $hae \rightarrow hai$ 'fly', (2) the change of ei to ee, e.g. $eiga \rightarrow eega$ 'movie', $sensei \rightarrow sensee$ 'teacher', and (3) coalescence of ae, oi, and ai, to ee in men's rough speech, e.g. $temae \rightarrow temee$ 'you', $dekai \rightarrow dekee/dekkee$ 'big', $sugoi \rightarrow sugee$ 'great'.

Perhaps the most notable phonetic characteristic of Japanese vowels is the devoicing of the high vowels /i/ and /u/. When these vowels occur in a voiceless environment, they are devoiced, e.g. [kutsul] 'shoes', [haʃi] 'chopsticks', [susuuki] 'eulalia'. Specifying the notion of voiceless environment precisely involves detailed phonetic and phonological accounts, but the following factors have been identified so far: (a) /i/ and /u/ will only devoice if not contiguous to a voiced sound: (2) /i/ and /u/ do not devoice when they are initial sounds even followed by a voiceless sound; and (3) accented /i/ and /u/ do not devoice even if flanked by the voiceless consonants. The phenomenon also depends on the speech tempo: in slow deliberate speech, devoicing is less frequent.

Vowel devoicing is less noticeable in the Kyōto dialect, but occurs in a number of Kyūshū and Okinawan dialects, e.g. Kumamoto, Kagoshima, and Bisara. For example, in some of these dialects the process of devoicing has advanced to the extent where the vowels have completely dropped out, e.g. /katu/ → [kat] 'to win'.

Phonetically, vowel devoicing involves the widening of the glottal opening. Thus, despite the fact that the phenomenon is associated with rapid, casual speech, it is not a simple assimilatory process, for the glottal width in the pronunciation of a devoiced vowel is considerably larger than that for the neighboring voiceless consonants. In the words of Sawashima (1971:13), "the glottal adjustments for devoicing of the vowel are not a mere skipping of the phonatory adjustments for the vowel, but a positive effort of widening of the glottis for the devoiced vowel segment, even though there is no phonemic distinction between the voiced and devoiced vowels."

The phonemic interpretation of long vowels has been one of the controversial issues in Japanese phonology. Long vowels contrast with short vowels, e.g. su

'vinegar': suu 'number', to 'door': too 'ten'. A long vowel cannot simply be considered a single segment, for it is counted as two moras, and, furthermore, because pitch drop occurs in the middle of a long vowel, e.g. \overline{suu} (HL) 'number', just as in any two mora sequence, e.g. \overline{miso} (HL) 'bean paste'. These facts suggest that the long vowel should be analyzed as a sequence of two identical vowels, and many have adopted this analysis. (Our transliteration follows this practice for typographical reasons.) However, the problem is not that simple, because there also exist genuine geminate vowels that arise from suffixation or compounding. For example, when the verb stem suw- 'to suck' is suffixed by the present tense morpheme -ru, the result will be suu via the phonological processes of suw- $ru \to suw$ - $u \to su$ -u (see section 10.3 below). If suu 'number' is to be analyzed as /suu/, then suu 'to suck' cannot be differentiated from it. There are several homonyms that differ in their morphological make-up, e.g. suu-ri 'mathematical principle': su-uri 'vinegar vendor', satoo-va 'sugar dealer' sato-ova 'foster parent'.

Hattori (1955) reflects these morphological differences in his analysis by the use of the glottal stops as in, for example, /suu'ri/ 'mathematical principle' and /su'uri/ 'vinegar vendor'. McCawley (1968) adopts Hattori's analysis and comments that the glottal stop reflects a glottal constriction involved in /su'uri/. The phonetic reality of the glottal stop as a glottal constriction, however, is suspect. It is clearly the case, for example, that /su'uri/ does not involve complete glottal closure, for the vibration of the vocal folds is not interrupted. It is not known moreover whether the glottis is narrowed at all.

What is known, according to the phonetician Sugitō Miyoko (personal communication), is that in the case of su-uri 'vinegar vendor', the articulatory gesture for the second u involves a slight narrowing of the lips. (The narrowing or rounding of the lips is better observed among speakers of the Kyōto dialect or in the pronunciation of the vowel o in sato-oya 'foster parent' vs. satoo-ya 'sugar dealer'.) This distinction is also reflected in the formant pattern seen in spectrograph readings. In the case of suu-ri 'mathematical principle' or satoo-ya 'sugar dealer', no such articulatory gesture is seen. From this observation, it is certain that in forms such as su-uri or sato-oya, the second of the geminate vowels is articulated as an independent segment, while the corresponding vowels in suu-ri or satoo-ya involve only one articulation and just prolongation of the vowels. This would suggest that the correct phonemic analysis of these words is /suuri/ 'vinegar vendor' and /su:ri/ 'mathematical principle'. However, the long vowel, as pointed out above, must still be interpreted as two moras.

Kindaichi Haruhiko (1950) resolves this problem by positing a "vowel lengthening phoneme", which he transcribes as /R/. In his analysis then, the pairs of expressions in question will be phonemicized as /suuri/ 'vinegar vendor' and /suRri/ 8 Phonology 163

'mathematical principle', and /satooya/ 'foster parent' and /satoRya/ 'sugar dealer'. As Kindaichi himself points out, his solution, reached independently, parallels the Bloch-Trager (1942) analysis of long vowels in which calm, caught, etc. are phonemicized as involving the "lengthening element" /h/. These lengthening phonemes are archiphonemes whose phonetic value is determined by the preceding vowel.

By positing /R/, Kindaichi is able to account for the moraic status of the lengthened portion of the long vowel and, at the same time, to differentiate the long vowel from the geminate vowels that involve separate articulatory gestures for the second member of the pair. If one adopts Kindaichi's analysis of the long vowel, an additional phoneme, /R/, must be added to the phonemic inventory in Table 8.2.

8.3 Consonants

In discussing the consonantal phonemes and the distribution of their allophones, it is necessary to refer to the four lexical strata of the Japanese vocabulary (see Chapter 7), since the distribution of certain sounds is limited to specific strata. For example, [p] does not occur in initial position in native or Sino-Japanese words. The flap [r] does not occur initially in native words but occurs in words from other strata of the lexicon. Permitted sequences of sounds and contrasts between sounds also differ according to strata. As might be expected, onomatopoeic words and foreign loan words utilize a far greater variety of sound combinations and contrasts, while the native vocabulary is the most restrictive. In the following discussion, some of these differences are pointed out with regard to specific sounds.

8.3.1 Palatalized and affricate consonants

In the native vocabulary, palatalized consonants have a rather skewed pattern of distribution. In the environment of front vowels, palatalized consonants occur before i, and plain ones before e. Thus, for example, the combinations [fi] and [se], occur, but not [si] and [fe]. Before non-front vowels, both plain and palatalized consonants occur, but the occurrence of the latter is found only in a limited number of words. For example, the combination [fo] can be found in forms such as [foul], a variant of seou 'to bear on the back' and [fimafoo], which is a polite cohortative form of 'do' deriving historically from simaseu. The combination [fa] is found in [faberul] 'chatter', [fakkuri] (onomatopoeic?) 'hiccup' and a fair number of other words. On the other hand, the combination [ful] is extremely limited; it occurs perhaps only in the adverbial [jorofuul] 'well', an antiquated form of [jorofikul] derived via the deletion of k and the assimilation of the i to the following u.

From the fact that the palatalized consonants show a limited distribution before non-front vowels, and from the fact that in the environment of the front vowels,

palatalized consonants and plain consonants are in complementary distribution, palatalized consonants are taken to be allophones of plain consonants. That is, [ʃi] and [tʃi] are phonemicized as /si/ and /ti/, and [ʃa] and [tʃa] are derived from /sja/ and /tja/. This analysis finds support in the phenomena of morphemic alternation and casual speech.

Verb stems that end in /s/ or /t/ change these final consonants to [J] and [tJ] when the following inflectional suffix begins in /i/: e.g. kas- 'to lend' becomes [kaJ-i-masul], and kat- 'to win' becomes [katJ-i-masul], when the polite suffix masu, which calls for the inflectional ending i-, is attached. (Cf. the imperative and negative forms: [kas-e] (imperative), [kas-a-nai] (negative), [kat-e] (imperative), [kat-a-nai] (negative).)

In casual speech, sequences of words ending in -e followed by the topic particle wa or the conditional particle ba coalesce and palatalize the preceding consonants, e.g. $kore\ wa$ 'this top' \rightarrow [korjaa], $ike\ ba$ 'if (I) go' \rightarrow [ikjaa]. The processes involved are: $kore\ wa$ (deletion of w or b and compensatory lengthening of a) \rightarrow koreaa (epenthesis of j between e and aa; this is seen in borrowing as well, e.g. $air \rightarrow ejaa$) \rightarrow korejaa (deletion of e) \rightarrow korjaa. Now, when the verb ends in -se or -te, the resulting form will have [f] or [tf] respectively, e.g. $kase\ ba$ 'if (I) lend' \rightarrow $kase\ aa\ \rightarrow$ $kasejaa\ \rightarrow$ $kasjaa\ \rightarrow$ [kasa], $kate\ ba$ 'if (I) win' \rightarrow $kate\ aa\ \rightarrow$ kate $aa\ \rightarrow$ $aa\ \rightarrow$ a

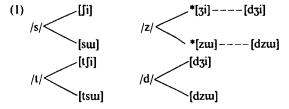
Thus, by positing a rule of palatalization of consonants before *i* or *j*, both allophonic variations and morphemic alternations can be accounted for. This analysis is further extended to both the Sino-Japanese and foreign loan vocabulary. All occurrences of palatalized consonants are thereby reduced to a sequence of a plain consonant plus *i* or *j*, even though the contrast between a palatalized consonant and a plain consonant is observed before all vowels except front vowels in the Sino-Japanese vocabulary, and before all vowels in the foreign vocabulary.

While the phoneme /s/ is realized as [sa, ʃi, su, se, so] before the five vowels with one allophone [ʃ] occurring before /i/, the phoneme /t/ has the following realizations: [ta, tʃi, tsu, te, to]. In addition to the palatalized allophone [tʃ], it also has the affricate [ts] before the vowel /u/. Since there is no contrast between [tuɪ] and [tsuɪ], with the former not occurring in non-foreign vocabulary, most scholars derive both this affricate consonant and the palatalized [tʃ] from the phoneme /t/. However, Hattori (1955), claiming that there is no phonetic reason for affricating /t/ before [i] and [uɪ], sets up an independent phoneme, /c/, for the phones [tʃ] and [ts]. Positing the phoneme /c/ is motivated to some degree, for [ts] marginally occurs before vowels other than /u/, e.g. [otottsan] 'father', [koitsaa] 'this Top', [gottsoo] 'good food'. Nevertheless, some of the forms cited here are analyzable as being derived from combinations of other sounds. For example, [koitsaa] is an abbrevi-

ated form of /koitu wa/ 'this TOPIC', where the [ts] sound can be attributed to the underlying combination /tu/. [gottsoo] is an accented pronunciation of the more basic form /gotisoo/ by the elision of the /i/ between /t/ and /s/. This form then compensates for the loss of /i/ by lengthening the closure of /ts/, yielding the form cited above, [gottsoo].

Hattori's analysis further suffers from the fact that morphemic alternations do in fact involve the patterning of [t] - [ts] - [tf], e.g. [tat-e] 'stand-IMP', [tat-a-nai] 'stand-NEG', [tat-oo] 'stand-COHORT', [tats-uu] 'stand-PRES', [tat]-i-mas-uu] 'stand-POLITE-PRES'. The stem /tat-/ 'to stand' realizes its final /t/ as [ts] before /u/, and as [tf] before /i/. Furthermore, in certain loan words the original [t] is affricated and becomes [ts] before the epenthetic /u/, e.g. $cutlet \rightarrow [katsuretsuu]$ (</katuretu/). These phenomena indicate that an analysis which posits the phoneme /t/ for the allophones [t], [ts], and [tf] is superior in its ability to relate these phones systematically to one which sets up the independent affricate phoneme /c/.

While the voiceless /s/ and /t/ have palatalized and affricated realizations, their voiced counterparts have the skewed distributional pattern shown below:



The phonemic sequences of /zi/ and /zu/ do not yield the expected phonetic sequences [ʒi] and [zw]. It can be seen in forms such as [moto-dʒime] 'controller' and [kwtsw-dzwmi] 'shoe coloring', where the sequences /zi/ and /zu/ merge with /di/ and /du/, with both pairs becoming phonetic [dʒi] and [dzw]. The [-dʒime] of the first form is the voiced form of [ʃime] 'tie' and [-dzwmi] of the second form is the voiced form of [swmi] 'charcoal' – the voicing being due to the sequential voicing phenomenon (see below). At the point at which sequential voicing takes place, these compounds have the intermediate form /moto-ʒime/ and /kutu-zumi/, but the putative /ʒi/ and /zu/ are realized as [dʒi] and [dzw] phonetically.

There is both historical and dialectal evidence that the pair /zi/ and /zu/, and the pair /di/ and /du/ have had distinct phonetic realizations.

Historically, different *kana* were used in transcribing these sequences: $\mathcal{Y}(/zi/)$, $\mathcal{X}(/zu/)$, $\mathcal{F}(/di/)$, and $\mathcal{Y}(/du/)$, which are voiced versions (indicated by the voicing dots) of $\mathcal{Y}(/si/)$, $\mathcal{X}(/su/)$, $\mathcal{F}(/ti/)$, and $\mathcal{Y}(/tu/)$. Certain dialects still preserve some of these distinctions. In the Köchi dialect, /zi/ and /di/ are realized as [3i] and [di], and in many dialects of Kyūshū, they are distinguished as [3i] and [d3i].

Synchronically, however, there is some difficulty in attempting to phonemicize certain forms in the Tōkyō dialect, in which /zi/ and /di/, and /zu/ and /du/ have merged. For example, forms such as [kadʒi] 'fire' and [madzuʃii] 'poor' show no alternation like the compounds seen above, and there is no synchronic evidence that points to either the /kadi/ and /madusii/ analysis or the /kazi/ and /mazusii/ analysis. In 1946 the government decided to use $\mathcal F$ and $\mathcal F$ for [dʒi] and [dzu], respectively, even though $\mathcal F$ is the voiced version of $\mathcal F$ /si/ and $\mathcal F$ is the voiced version of $\mathcal F$ /su/. The exceptions to this orthographic rule are those instances of [dʒi] and [dzu] that are related to [tʃi] and [tsu] morphologically (e.g. [tʃi] 'blood' – [hana-dʒi] 'a nose bleed' [tsuki] 'moon' – [mika-dzuki] 'crescent'), as well as those instances that are due to reduplication (e.g. [tʃidʒimw] 'shrink' [tsudzurw] 'spell'). All of these are written as $\mathcal F$ and $\mathcal F$.

In our transliteration, [fi], [tfi], [tsw], [dzw], [dzw], and [tfa], etc. are rendered as si, ti, tu, zi, zu, and tya, etc.

8.3.2 $h, \varphi, \varsigma, and p$

The distribution of [h], $[\varphi]$, and $[\varsigma]$ is: [ha], $[\varsigma i]$, $[\varphi w]$, [he], [ho]. Since these sounds are in complementary distribution, the most straightforward analysis is to posit the phoneme /h/ and consider $[\varphi]$ and $[\varsigma]$ as allophones realized before /u/ and /i/, respectively. This standard analysis, however, fails to elucidate a number of phenomena concerning h.

First of all, h is strange orthographically, for it has three series of kana. For example, ha is written as \nearrow , and it has not only a voiced version \nearrow ba, with voicing dots, but also a special voiceless version \nearrow pa. The h-series is the only one that has a voiceless version indicated by a small circle. As can be seen, the pattern is $\nearrow = ha$, $\nearrow = ba$, $\nearrow = pa$. Contrast this with the regular consonantal voice-voiceless pattern: $\mathscr{G} = ta$, $\mathscr{G} = da$. The logic of the kana writing system tells us that the form without the diacritic \nearrow should represent the voiceless version of the dotted $\nearrow = ba$, namely pa; but rather it represents the seemingly unrelated sound ha.

Secondly, the distribution of p is extremely limited in the native and Sino-Japanese vocabularies. While p and h contrast in both foreign and onomatopoeic vocabularies, no contrast is seen in native and Sino-Japanese words. Specifically, the distribution of p is limited to the environment of consonant clusters, e.g. yappari 'as expected', simpai 'worry'.

Third, there is alternation between h and p in a large number of forms; h occurs initially, and p in a cluster with another consonant, e.g. hoo 'law': ken-poo 'constitution', hun 'minute': zip-pun 'ten minutes'.

Finally, h regularly becomes b due to sequential voicing, e.g. hito 'person':

hito-bito 'people': tabi-bito (travel-people) 'traveler', hi 'day': hi-bi 'daily': tanzyo-bi 'birthday': kyuuryoo-bi 'pay-day'.

All these peculiarities relating to p and h are due to the historical development of h from p through a phenomenon known among Japanese phonologists as the weakening of "labiality". It is known that p gave rise to h in the following stages: $p > \varphi > h$. This evolution was partially arrested at the stage of φ , where φ still remains before μ , as noted above. Intervocalically φ became ψ , which remains only before ψ . The word for 'river' is presently ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ became ψ but it evolved in the following manner: ψ but it evolved

Capitalizing on all the phenomena discussed above, McCawley (1968) gets rid of the phoneme /h/ from the native and the Sino-Japanese vocabulary, deriving the phonetic [h] from the phoneme /p/. In his analysis, /p/ is converted to [h] via / φ / both in word-initial position and intervocalically – in the latter environment / φ / gives rise to [w] before /a/. In other words, hito 'person' for example, is even synchronically derived from /pito/, and kawa 'river' from /kapa/ in the following steps, which mirror the historical development quite accurately: pito $\rightarrow \varphi$ ito \rightarrow hito (\rightarrow [cito]); $kapa \rightarrow ka\varphi a \rightarrow kawa$.

McCawley's analysis is very appealing in that it accounts for all the phenomena noted above quite systematically. In particular, the h/p alternation such as is found in hoo 'law': kem-poo 'constitution' and the sequential voicing phenomenon that relates h and b as in hito 'person': hito-bito 'people' both find a convincing explanation once hoo and hito are assumed to derive from poo and pito.

However, McCawley's analysis, which rids the phoneme /h/ from the native and Sino-Japanese vocabularies, and which derives a form such as hito 'person' from pito, is so counter-intuitive to native scholars that his analysis is not widely accepted despite its above mentioned merits. Those who do not accept McCawley's analysis must content themselves by saying that the relationships between h and p, and between h and b, are merely historical relics having no synchronic phonetic motivation. Even in McCawley's analysis, however, there is a rule that changes p to h, for which no synchronic phonetic motivation can be given.

8.3.3 Moraic consonants |Q| and |N|

The basic syllable structure of Japanese is CV, but there are also two types of consonants that may close a syllable. They are a non-nasal consonant followed by a homorganic consonant of the following syllable, and a nasal that closes a syllable. These syllable-final consonants count as one mora, much like the syllabic [n] and [l] in English, and they are assigned to two archiphonemes /O/ and /N/.

The phoneme /Q/ is realized phonetically as a prolongation of consonantal

articulation, and its articulatory characteristics are determined by the following consonant, e.g.

```
(2) /jaQpari/ [jappari]
                            'as expected'
    /jaQto/
                [iatto]
                             'finally'
    /juQkuri/ [jwkkwri]
                            'slowly'
    /aQsari/
               [assari]
                            'dry'
    /biOsiri/
                [biffiri]
                             'densely'
    /baQtiri/
                [bat[t[iri]
                            'perfectly'
```

Again, the reason for not considering these phonetically long consonants as such is that they are counted as two moras. Furthermore, there are instances in which gemination arises from two distinct sounds. One case occurs with verb inflection. When a verb stem ending in /t/, /r/, or /w/ is followed by a suffix beginning in /t/, e.g. the past tense /-ta/, gemination occurs: $/tat + ta/ \rightarrow [tatta]$ 'stood', $/tor + ta/ \rightarrow [totta]$ 'took', $/kaw + ta/ \rightarrow [katta]$ 'bought' (/kap + ta/ in McCawley's analysis). The other case involves Sino-Japanese compounds, in which the last high vowel of the first member drops out and the exposed consonant assimilates to the following initial consonant of the second compound member, e.g.

```
(3) /ketu-ka/ [kekka] 'result'
/koku-koo/ [kokkoo] 'diplomatic relations'
/hatu-ten/ [hatten] 'development'
/iti-hai/ [ippai] 'one cupful'
/iti-satu/ [issatsu] 'one volume' (of a book)
```

Geminate consonants also occur in contractions of native expressions, e.g. $katute \rightarrow katte$ 'before' and in emphatic expressions, e.g. katippuri (< kati-huri) 'a manner of winning'. Also, monosyllabic foreign words with lax vowels borrowed into Japanese are rendered into forms with geminate consonants, e.g. $pet \rightarrow petto$, $book \rightarrow bukku$, $bed \rightarrow beddo$. In the Tōkyō dialect a geminate of a voiced obstruent occurs only in loan words.

Voiced consonant clusters are, in fact, restricted to instances where the first consonant is a moraic nasal, which is phonemicized as /N/, e.g.

```
(4) /koNgari/ [kongari] 'crisp'
/sjoNbori/ [fombori] 'dejectedly'
/moNdori/ [mondori] 'somersault'
```

Like the voiceless geminate, the nasal+consonant cluster arises in a variety of verbal inflections. When the verb stem ends in a voiced consonant other than r or w or g, it has the effect of voicing the /t/-initial suffix. The stem-final consonant

is then nasalized and becomes homorganic with the following consonant, e.g. $/tob+ta/\rightarrow/tob+da/\rightarrow[tonda]$ 'flew', $/nom+ta/\rightarrow/nom+da/\rightarrow[nonda]$ 'drank' (see section 10.3 below).

Unlike the non-nasal version, /N/ can end a word, e.g. /hoN/ 'book'. The phonetic value of the final /N/ is not entirely clear, but in careful pronunciation it is close to the uvular nasal [N]. In less careful speech it is realized as a nasalized version of the preceding vowel, e.g. [hõõ] 'book'. This is also observed when it is followed by a vowel, e.g. /iN-oogo/ \rightarrow [iĩoogo] 'Indo-European language'. When other continuants follow, /N/ is a nasal sound whose articulatory gesture approximates the following continuants, e.g. /jaNwari/ \rightarrow [ja \hat{w} wari] 'softly', /hoN-jaku/ \rightarrow [ho \hat{j} jaku] 'translation', /haN-seN/ \rightarrow [ha \hat{s} se \hat{e}] 'anti-war'.

In the traditional analysis, all these moraic consonants are attributed to the (archi-) phonemes /Q/ or /N/, whose values are minimally specified as consonantal and plus or minus nasal. This is justified on the grounds that the complete phonetic values of these phonemes are determined by the following consonant. (Since the final /N/ is realized as [N] in slow, careful speech, one can argue that there is a basic value to /N/, namely [N].) A further justification for positing /N/ and /Q/ as distinct phonemes is that they contrast in forms such as /haN-seN/ [hassee] 'anti-war' and /haO-seN/ [hassee] 'eight thousand'.

The problem with the traditional analysis, however, is that even those clusters that derive from distinct underlying segments are also analyzed as involving the phonemes /Q/ and /N/. For example, forms such as [totta] 'took', [tonda] 'flew', and [hassee] 'eight thousand' are phonemicized as /toQta/, /toNda/, and /haQseN/, since the values of [t] and [n] and [s] in a pre-consonantal environment are completely predictable. Yet, in the derivation of these forms, as noted above, there is no stage in which the relevant segments assume the status of /Q/ and /N/. Once again observe the derivations of the relevant forms:

(5) Underlying form: /tor-i+ta/ 'take+past'Elision of i-: tor+taAssimilation: tot+ta

Phonetic form: [totta] (i- is an inflectional ending)

(6) Underlying form: /tob-i+ta/ 'fly + past'

Elision of i: tob-ta Voicing assimilation: tob + da Nasalization: tom + da Assimilation: ton + da Phonetic form: [tonda] (7) Underlying form: /hati+seN/ 'eight thousand'

Vowel deletion: hat + seN Assimilation: has + seN Phonetic form: [hassee]

Thus, while there is sufficient motivation for positing the phonemic /Q/, /N/ representations for non-derived clusters in such forms as [gakkari] 'dejectedly' and [kongari] 'crisp', there is no motivation to posit them for the derived clusters. This means that a phonemic analysis is not always a good way of stating a contrast or non-contrast between sounds. In the present case, rather than imposing the phonemic representation on those unmotivated cases of consonant clusters, it is best to have an independent statement which, in effect, says that there is no contrast among the first non-nasal consonants in clusters, and among the first nasal consonants in clusters. Also a statement concerning the moraic status of these syllable-final consonants must be made.

The remaining problem has to do with the realizations of the final /N/ in such words as /hoN/ 'book'. The most straightforward solution is to posit the phoneme that is fully specified as the uvular nasal as opposed to the archiphoneme /N/ in the traditional analysis.

One might posit the phoneme /?/ for the final sound in interjections such as [a?] 'Ah!' and [o?] 'Oh!'. When these interjections are followed by the quotative particle to (e.g. [atto], [otto]), the glottal stop also assimilates to the following consonant. Again, in the traditional analysis, these are phonemicized as /aQto/ and /oQto/, but there is no real motivation for this since the glottal stop can be directly mapped on to the appropriate phonetic segment by a well-motivated assimilational rule.

Finally, a brief remark on the phonetics of the moraic consonant. A correlation between the glottal stop and the moraic consonant in the examples above, i.e. [a?] [atto], has led a number of phonologists to analyze [a?] as /aQ/, and to assume that the basic phonetic value of /Q/ is the closure of the glottis. However, fiberscope observation made by Sawashima and his associates, Sawashima and Miyazaki (1973), indicates that in the articulation of the moraic consonant the glottis is open; in fact, the glottal width for geminates is larger than for a single consonant. Fiberscope observation also reveals that the moraic nasal is different from the mora initial nasals in that the former involves a far greater degree of the velar lowering. This is so despite the fact that the moraic nasal seen in a word like [hentoo] 'answer' is articulatorily quite comparable to the initial [n] in [namida] 'tear' (cf. Ushijima and Sawashima 1972).

8.3.4
$$[g] \sim [\eta]$$

In the Tōkyō dialect, the velar stop [g] and its nasal counterpart [ŋ] were once in complementary distribution, [g] occurring word initially and [ŋ] word internally. Despite the fact that the internal [ŋ] was encouraged by educators and voice trainers for singers and broadcasters, for the internal [ŋ] was felt to be "correct" and more "beautiful" than [g], the use of this phone has been declining. Kindaichi (1942) documented the beginning of the decline of the internal [ŋ]. In his study Kindaichi examined the pronunciation of such words as /kago/ 'basket', /hagaki/ 'post card', and /kagami/ 'mirror' among seventy Tokyoite high school students aged fifteen or sixteen. His findings indicated that 30 percent of the students did not use [ŋ] at all, while 26 percent of them used [ŋ] exclusively. The rest showed use of both [ŋ] and [g]. This contrasted sharply with the fact that at that time exclusive use of [g] was quite rare among people over thirty years old.

Kindaichi's study, conducted in 1941 in Tōkyō, is remarkable in a number of respects. For one thing, it made a specific prediction about the future of the internal [ŋ], which could be easily tested at a later time. For another, it had already paid careful attention to those variables that are now considered essential in sociolinguistic research concerned especially with the documentation of linguistic change in progress (e.g. Labov (ed.) 1980). In other words, Kindaichi (1942) could have been a seminal sociolinguistic paper, had it been published in English at the right time. Fortunately, it has engendered a number of studies among Japanese sociolinguists (see below).

Kindaichi recognized both language internal and sociolinguistic variables with regard to the change of the internal [ŋ] to [g]. First, with regard to the morpheme class, Sino-Japanese words, e.g. /tyuugi/ 'loyalty', /kaigun/ 'navy', as opposed to native Japanese words, tend to be pronounced with [g]. Also the following vowel affects the pronunciation of the preceding velar. /g/ before high vowels, /i/ and /u/, e.g. /kaigun/ 'navy', is less frequently nasalized than before mid and low vowels, e.g. /kagami/ 'mirror'. For example, among seventy elicitations of the word /kagami/, forty-two (60 percent) were pronounced with [ŋ], whereas in the same number of elicitations for /uwagi/ 'coat', the instances of the [ŋ] pronunciation were 34 (48.6 percent).

Thirdly, a morphological consideration must be taken into account. Certain /g/-containing forms are monomorphemic involving no internal boundaries, e.g. /kagami/ 'mirror', while certain others involve internal boundaries of different kinds – word boundary, morpheme boundary – e.g. /kai+gun/ (sea-military) 'navy'. Though there is a correlation between the boundary types and the identifiability of the constituent morphemes, perhaps more important is whether members

of compound forms are recognized as those that occur independently with the initial [g]. Thus, the independently used word /gakkoo/ 'school' with the initial [g] is easily recognized in the compound forms such as /tyuu-gakkoo/ (middle school) 'junior high school'. When such association is easily recognized, the velar tends to be pronounced with [g]. A well-known contrast showing this effect is seen in /zjuu+go/ (ten-five) 'fifteen' and /zjuu+go+ja/ (ten-five-night) 'full moon night'. In the former, where the morpheme /go/ 'five' is more readily recognizable as the word for five, the velar tends to be pronounced as [g], whereas in the highly lexicalized latter form, /+go+/ is pronounced more commonly with [η].

Finally, those /g/'s that are produced by sequential voicing (see below) from the underlying /k/'s tend to be pronounced as [ŋ] more than the underlying /g/. Thus, some speakers show contrast between /oo+garasu/[oogarasu]'big (sheet) of glass' and /oo+karasu/[ooŋarasu]'big raven', and between /oo-gama/ [oogama] 'big toad' and /oo-kama/ [ooŋama] 'big kettle'.

Because of the contrast seen in these examples, certain phonologists posit an independent phoneme $/\eta$. But in view of the fact that the contrast is very marginal, an independent phoneme is not really called for. Positing $/\eta$, for Japanese would be like positing $/\tilde{x}$ / as an English phoneme because of the marginal contrast in the forms [kæt] 'cat' and [kæt] 'can't'. Indeed, Kindaichi considers the low functional load of the [g]-[η] contrast in Japanese to be one of the principal causes for the change of the internal [η] to [g].

Besides these linguistic variables affecting the variability between [ŋ] and [g], which have been recognized by Kindaichi and others, Kindaichi attempts to delineate the social variables involved. As pointed out at the beginning, the first social variable to which Kindaichi attaches particular significance is age, which provides a basis for predicting the direction of a change. In 1941, the people in Tōkyō over thirty years of age rarely had the internal [g]. In sharp contrast, among Kindaichi's teenager subjects, those who did not have the internal [g] amounted to a mere 28 percent, indicating a drastic shift in the use of the internal [g]. Kindaichi also observes that female students are more progressive with regard to this change.

Finally, with respect to social class and the geographic area, Kindaichi's findings indicate that the change was initiated in the upper- and middle-class area known as Yamanote. On the other hand, the parent's birth place seems to have little influence on the student's pronunciation.

Kindaichi's findings have been largely corroborated and his prediction regarding the fate of the internal [ŋ] has been borne out by recent studies on the same topic. Thus, both Kato (1983) and Hibiya (1988) show that the internal [ŋ] has been almost completely replaced by [g] by the speakers younger than thirty years old.

Kato's findings also indicate that female speakers are several years ahead in this change, corroborating Kindaichi's earlier observation.

Hibiya's findings, on the other hand, indicate that among the three social classes of middle class, lower-middle class, and working class, the percentage of [g] speakers is greatest among the speakers of the lower-middle class. Also those who have contact with the upper- and middle-class Yamanote area show a higher percentage of the [g] pronunciation than those who do not have such contact. Finally, both Kato's and Hibiya's investigations show that the reading of word lists, as opposed to the reading of sentences containing the relevant forms and natural conversation, is correlated with a higher rate of the appearance of [g]. All these findings indicate that the internal [g] is recognized as a prestige speech trait associated with the upper- and middle-class Yamanote district.

8.4 Morphemic alternation

Certain changes that occur in morpheme shapes are automatic alternations at the phonetic level. Changes such as those seen in the stems of the verbs 'lend' /kas-/ and 'stand' /tat-/ seen in [kasw] 'lend-PRES', [kaʃita] 'lend-PAST', [tatsw] 'stand + PRES', [tatʃimasw] 'stand + POLITE', [tate] 'stand + IMP' are all due to allophonic rules discussed earlier. Certain other morphemic alternations call for specific phonological rules. These rules regularly concentrate on verbal inflection, and the phonological discussion presupposes a morphological analysis of verb forms. Since we have set up an independent chapter on morphological matters, we will defer our discussion of the morphophonemic aspect of verbal inflection until Chapter 10, where the nature of the Japanese verbal morphology is discussed. The next two sections examine some morphemic alternations seen in compounding and casual speech, where no complex morphological issues arise.

8.4.1 Sequential voicing

As has been alluded to occasionally in the above discussion, there is a phenomenon in Japanese of sequential voicing, which is known by its traditional name *rendaku*. This phenomenon involves the voicing of the initial consonant in a form preceded by a prefix or a compound element. Given below are a few examples for illustration:

```
d. [oo] + [same] → [oozame]
'big' 'shark' 'big shark'
e. [to] + [fimari] → [tod3imari]
'door' 'closing' 'locking of a house'
f. [uwa] + [tsumi] → [uwadzumi]
'over' 'piling' 'upper load'
```

Sequential voicing is a very prevalent phenomenon, but there are, however, numerous examples that are unaffected by it. These include the forms given below:

```
(9) a. [jude] + [tamago] → [judetamago]
      'boiling'
                'egg'
                             'boiled egg'
                + [tabi] → [hitoritabi]
   b. [hitori]
      'one man' 'travel' 'travel without company'
   c. [aisw] + [koohii] → [aiswkoohii]
              'coffee'
                        'iced coffee'
   d. [rwwmw] + [kwwraa] → [rwwmwkwwraa]
       'room'
                   'cooler'
                               'room cooler'
   e. [jama]
                 + [kawa] → [jamakawa]
      'mountain'
                   'river'
                             'mountain and river'
   f. [kusa] + [ki] \rightarrow [kusaki]
       'grass' 'tree' 'grasses and trees'
```

Various attempts have been made to discover principles governing the phenomenon of sequential voicing. However, thus far, success in this endeavor has been limited to the specification of some of the circumstances under which sequential voicing does not take place. An early attempt in this direction was made by Motoori Norinaga, who discovered one principle that prevents sequential voicing. This principle is more generally known as Lyman's Law, after the American geologist Benjamin Smith Lyman (1835–1920), who reported on the phenomenon in 1894. Lyman's Law states that sequential voicing does not apply when the second element contains a voiced obstruent. Examples (9a, b), above, illustrate Lyman's Law.

As examples in (9c, d) indicate, foreign words tend to resist sequential voicing. Likewise, many Sino-Japanese words are not affected: e.g. native [oja] + [tanuki] \rightarrow [ojadanuki] 'parent badger', Sino-Japanese [oja] + [kookoo] \rightarrow [ojakookoo]/ *[ojagookoo] 'filial piety'. However, loan words well integrated into Japanese do undergo voicing, e.g. [iroha] (Japanese syllable counting) + [karuta] 'cards' (from the Portuguese carta) \rightarrow [irohagaruta] 'playing cards with hiragana on them', [tʃuɪuʃaku] 'commentary' + [hoN] 'book' \rightarrow [tʃuɪuʃaku boN] 'annotated book'.

Another circumstance under which sequential voicing fails to apply involves dvandva compounds, as illustrated in (9e, f). Notice however that [kawa] 'river'

and [ki] 'tree' do undergo voicing in other situations, e.g. [o] 'small' + [kawa] 'river' → [ogawa] 'stream', [taki] 'burning' + [ki] 'tree' → [takigi] 'fire wood'.

Finally, the segment that is affected and becomes voiced must belong to the word that is a lexical head of the constituent functioning as the domain of the voicing. Thus, $\{(nise\ sakura)\ maturi\} \rightarrow [nise\ zakura\ matsuri]$ '(fake cherry) festival' and $\{nise\ (sakura\ maturi)\} \rightarrow [nise\ sakura\ matsuri]$ 'fake (cherry festival)' (see Otsu 1980 and Itō and Mester 1986).

The problem with the phenomenon of sequential voicing is that there are numerous examples that do not meet the conditions noted above but still fail to undergo voicing: e.g.

Thus, the attempts that have so far been made to predict the occurrence and non-occurrence of sequential voicing have been only partially successful. In fact, the phenomenon bewilders even native speakers of Japanese, especially when it comes to the reading of surnames. There is, for instance, a surname consisting of taka 'high' and ta 'field'. Certain people pronounce their own name with the voicing applied, as in Takada, and others pronounce it without voicing, Takata. Thus, one must ask each person who has this surname how he or she pronounces it. Other surnames of the same type are: Otaka-Odaka, Yamasaki-Yamazaki, Kashima-Kajima. (See Otsu (1980) and Vance (1980) for more detailed discussions on the rendaku phenomenon.)

8.4.2 Casual speech

Certain phonological changes take place in casual speech. It has already been noted that vowels *ai*, *ae*, and *oi* coalesce and become *ee* in men's informal, rough speech (see section 8.2 above). Other casual speech forms discussed below are used by both male and female speakers, but since they are characteristically casual forms, they are only used among intimate friends and associates.

Generally, casual forms arise from the deletion of vowels. Some forms stop at the level of vowel deletion, but some others undergo further changes.

The word mono 'thing' loses its final vowel, especially before the copula da, e.g. boku no mono $da \rightarrow boku$ no monda '(It's) my thing'. The same thing occurs with the possessive particle no and the nominalizer no, e.g. boku no $da \rightarrow bokunda$ '(It's)

mine', iku no da \rightarrow ikunda '(It's) that (you're) going', Taroo ga kita no da \rightarrow Taroo ga kitanda 'that Taro came'.

The translative case particle ni 'to' also loses its vowel especially before the verb naru 'become', e.g. iya ni $naru \rightarrow iyannaru$ 'become disinterested', gakusya ni $naru \rightarrow gakusyannaru$ 'become a scholar'.

The vowel preceding the negative suffix nai drops when it follows r. The resulting sequence of rn then undergoes assimilation and becomes nn, e.g. $siranai \rightarrow sinnai$ 'don't know', $kurenai \rightarrow kunnai$ 'don't give (me)', $wakaranai \rightarrow wakannai$ 'incomprehensible'.

The topic particle wa and the conditional particle ba drop their w and b, e.g. hana $wa \rightarrow hanaa$ 'flower TOP'. When the noun ends in vowels other than a, further changes take place. U and o are lowered and assimilated to a, e.g. boku $wa \rightarrow bokaa$ 'I TOP', koitsu $wa \rightarrow koitsaa$ 'this TOP'.

(11)		'bird top'	'read-cond'
		tori wa	jomeba
	$w, b \rightarrow e$	toriøa	jomeøa
	j-epenthesis	torija	jomeja
	$e, i \rightarrow o$	torja	jomja
	$a \rightarrow aa$	torjaa	jomjaa

When back vowels o and u are involved, no j-epenthesis occurs; instead, the o and u themselves elide and trigger compensatory lengthening of the back vowel, e.g.

(12) 'I TOP' 'thing TOP' boku wa koto wa
$$w, b \rightarrow o$$
 bokuøa kotoøa $o, u \rightarrow o$ bokøa kotøa $a \rightarrow aa$ bokaa kotaa

Compensatory lengthening doesn't apply in some forms. Thus, yomya iindaro 'if (I) read, it'd be O.K, right?' and boka siranai yo 'I don't know' are frequently heard. Notice that in the case of hana wa 'flower TOP', it is hanaa and never hana, indicating that the vowel cluster here is not due to compensatory lengthening. In certain forms, the epenthetic [i] is absorbed into the preceding palatalizing consonant, e.g.

(13)	'do-conj top'	'read-conj top'
	site wa	jonde wa
$w \rightarrow o$	siteøa	jondeøa
$j \rightarrow$ epenthesis	siteja	jondeja
$e \rightarrow o$	sitja	jondja
palatalization	∫it∫a	jond3a
$a \rightarrow aa$	∫it∫aa	jondʒaa

Finally, there are contracted forms with aspectual use of the verb *simau* 'end up doing'. This process involves several steps and there are two different contracted forms depending upon where the process ends, e.g.

(14)		'sec up PAST'	'read up PAST'
		mite simaw + ta	jonde simaw + ta
	$e \rightarrow o$	mit simawta	jond simawta
	palatalization	mit∫imawta	jondʒimawta
	C-assimilation	mit∫imatta	jondʒimatta
	$im \rightarrow o$	mit∫atta	jondʒatta

The forms obtained at the level of C-assimilation, namely [mitsimatta] and [jondzimatta] are possible outputs, but sound somewhat antiquated. Young To-kyoites prefer the final forms [mitsatta] and [jondzatta].

8.5 Accent

If a textbook definition were to be applied to Japanese, most Japanese dialects would be called tone languages. In the Kyōto dialect, for example, the segmental form hasi has three pitch patterns each associated with a distinct meaning: hasi with HH is 'edge', hasi with LH is 'chopsticks', and hasi with HL is 'bridge'. In certain dialects not only the level tones H and L, but also a contour tone H-L is observed. Again, in Kyōto, saru 'monkey' is L H-L; that is, the second mora ru begins high and falls to low.

However, the Japanese accentual system is characteristically distinct from prototypical tone languages of the Chinese type. In this type of language, it is necessary to specify the tone for each syllable. If a word has two syllables, each syllable needs to have a tone specified for it; there is no way of predicting the tone of each syllable of a word or phrase from something else. This is not the case for Japanese. In the majority of Japanese dialects, given diacritic accent markers and a set of rules, the pitch of each syllable of a phrase can be predicted, thereby making the specification of the pitch for each individual syllable unnecessary. Japanese dialects show a great deal of variation in their accentual systems. We will first briefly examine the nature of the accentual system of the Tōkyō dialect.

The Tökyö system makes the same number of surface contrasts in terms of pitch among words of a given length as there are syllables in such words. Two-syllable words have a two-way contrast, three-syllable words a three-way contrast, etc.

```
(15) a. two-syllable words

ame (LH) 'candy'

ame (HL) 'rain'
```

```
b. three-syllable words
```

sakura (LHH) 'cherry'

zakuro (HLL) 'pomegranate'

kokoro (LHL) 'heart'

c. four-syllable words

sirakaba (LHHH) 'white birch'

kamakiri (HLLL) 'mantis'

irogami (LHLL) 'color paper'

kagaribi (LHHL) 'torch'

Notice that we are speaking in terms of syllables rather than moras. As noted earlier, in the Tōkyō dialect, while the pitch change occurs at mora boundaries, the syllable is the unit of pitch contrast (see section 8.1 above). That is to say, in forms like gengo and kooko, which have two syllables gen-go and koo-ko, but three moras ge-n-go and ko-o-ko, the only contrasts observed are between gengo (HLL) 'language' and gengo (LHH) 'original language', and between kooko (HLL) 'public fund' and kooko (LHH) 'pickled radish'. There are no forms like gengo (LHL) or kooko (LHL). In (15), we can observe the following general characteristics: 1) there exist forms without any drop in pitch; 2) when pitch does drop, all the following moras are low pitched; and 3) the two initial moras of any word contrast in pitch: the initial mora is low pitched if the second is high pitched, and vice versa. We can, in other words, predict the pitch of these words if we merely know when the pitch fall occurs. If there is no pitch fall, all moras are high (except the initial mora), if there is a pitch fall, everything before it (except the initial mora) is high and everything after the fall is low. For those words in (15), the following analysis can be then given, where the apostrophe is an accent marker indicating the location of pitch fall.

```
(16) ame
                /ame/
                             'candy'
                /a'mc/
                             'rain'
     ame
     sakura
                /sakura/
                             'cherry'
     zakuro
                /za'kuro/
                             'pomegranate'
     kokoro
                /koko'ro/
                             'heart'
                             'white birch'
     sirakaba
                /sirakaba/
     kamakiri
               /ka'makiri/
                             'mantis'
     irogami
                /iro'gami/
                             'color paper'
     kagaribi
                /kagari'bi/
                             'torch'
```

The above observations about the pitch pattern can be stated as the following set of ordered rules (cf. McCawley 1968):

- (17) a. Assign high pitch to all moras.
 - b. Assign low pitch to all moras following the accent
 - c. Assign low pitch to the first mora if the second is high pitched.

It has been shown above that the number of contrasts in surface pitch is the same as the number of the syllables of a word. If we look at the underlying representations of various forms in (16), it is noticed that, for two-syllable words, one has no accent, and the other has the accent after the first syllable, which yields a two-way surface contrast. The same sort of accent placement is seen in other forms. Conspicuously lacking are forms that have an accent after the last syllable. The existence of such forms is revealed once certain particles are attached to the nouns. For example, there are two nouns, hana, which have the identical pitch shape hana (LH) in isolation, but which show a difference when the nominative particle ga follows.

The difference seen above is attributable to the difference in the underlying forms. 'Flower' has its accent after the second syllable, /hana'/, which causes a drop in pitch on the following element. /hana/, meaning 'nose', on the other hand, is without accent. This fact demonstrates that in the $T\bar{o}ky\bar{o}$ dialect, nouns of n-syllables have n numbers of surface contrasts, but have n+1 underlying accentual possibilities.

All particles are not like ga, seen in (18), which does not have its own accent. Certain others have their own accents, and among these, some manifest their own accent only when the nouns to which they are attached are unaccented, while others always assert their own accent, obliterating that of the preceding noun. The combination of a noun and a particle typically constitutes what is called a minor phonological phrase, which is pronounced without an intervening pause. Minor phrases have at most one stretch of high-pitched moras. Whereas two or more minor phrases make up a major phrase, the speech tempo holds a key as to how a sequence of minor phrases is treated. For example, fast speech often reduces a major phrase with two minor phrases to a single minor phrase.

One of the developments in phonological theory in recent years concerns the separation of specific phonological features from the segmental representation of a morpheme or word. The Firthian tradition of prosodic analysis has, thus, been resurrected in the name of autosegmental phonology. Indeed, one realizes that the term "suprasegmentals" or "supersegmentals" already recognizes that the prosodic features such as stress and pitch are independent of the segments upon which they are superimposed. Autosegmental phonology, developed primarily by phonologists

dealing with the tone languages of Africa, has been applied to Japanese by Haraguchi (1977). Though we refrain from detailing the specific autosegmental analysis that Haraguchi proposes, it needs to be stressed that the past treatments of the Japanese accentuation phenomena, both traditional and generative, have been largely autosegmental, contrary to Haraguchi's mistaken assertion that they are otherwise. (See Shibatani (1979) and Vance (1987) for a comparison of the autosegmental analysis by Haraguchi and the generative analyses by McCawley (1968) and Shibatani (1972).)

Hattori (1951, Chapter 9) explicitly notes that, while Chinese has a "syllable pitch-accent" system, Japanese has a "word pitch-accent" system, and further that it is a mistake to consider Japanese as having H and L tonemes associated with syllables. Within the Japanese tradition tones or melodies are captured in terms of tone patterns that are characterized in terms of the location of the accent, at which point an accentuation (i.e. the tonal inflection) of the basic melody occurs. Since the phonemic status of the pitch is representable in terms of the abstract accent marker (see (16)), little interest has been expressed as to the nature of the mechanism that maps actual tonal patterns onto syllables or moras.

The autosegmental status of the Japanese pitch patterns or tones is most clearly seen in those dialects that have extremely limited tonal patterns whose realization remains constant regardless of the length of a word. For example, the Miyakonojō dialect has the tonal pattern of LH, which is realized as a sequence of L's and a final H when a word is more than two moras long. The pattern seen below parallels those situations in African languages that initially motivated autosegmental tonology (see Leben 1971, Goldsmith 1976).

(19)	ame	(LH)	'candy'
	ame ga	(LLH)	'candy NOM'
	ikada	(LLH)	'raft'
	ikada ga	(LLLH)	'raft nom'
	murasaki	(LLLH)	'purple'
	murasaki ga	(LLLLH)	'purple NOM'

The LH melody of the Miyakonojō dialect can be treated in a number of ways. One method is to assume that the basic Miyakonojō tone is LH and posit a rule that associates the last mora with H, and then spread the L tone to the available moras to the left. This is the method a typical autosegmental analysis of Bantu languages adopts. Alternatively, one may assume the L tone to be the basic melody, and posit a rule that raises the pitch of the last mora. Shibatani (1979) considers the L tone to be the basic melody in the Miyakonojō dialect. This allows him 1) to typologize the dialect systems in a straightforward manner, i.e. in terms of whether

the basic melody of the dialect is H, L, or both, and 2) to analyze similar patterns in a similar manner. First, the basic H tone dialects are typically found in eastern Japan, as represented by the Tōkyō dialect, the basic L tone dialects predominate in Kyūshū (southwestern Japan), as represented by the Miyakonojō and the Kagoshima dialects, and the middle region, represented by the Kyōto and the Ōsaka dialects, contains both H tone words and L tone words. That is,

(20) H melody dialects: Tōkyō, Matsumoto, etc. H and L melody dialects: Ōsaka, Suzu, etc.

L melody dialects: Kagoshima, Miyakonojō, etc.

(Shibatani 1979:934)

The discussion of the Tōkyō dialect shows that in most of the dialects a distinction needs to be made between those words that are unaccented and those that are accented, i.e. those that have an accent marker at which point tonal inflection occurs. The basic tones are manifested straightforwardly in unaccented words, but many dialects have a rule that inflects even the tone of unaccented words. This is the case with the Miyakonojō dialect, which, as seen above, raises the pitch of the last mora. The Suzu dialect in the Noto peninsula, on the other hand, manifests the basic tones of unaccented words straightforwardly. Thus, the unaccented H-tone words have high pitch throughout the words, and the unaccented L-tone words exhibit low pitch over the entire words. For example,

(21) Suzu (unaccented) H-tone words

'cherry' 'cherry NOM' 'cherry ABL'
sakura sakura na sakura kara
HHHH HHHHH

Suzu (unaccented) L-tone words

'rabbit' 'rabbit NOM' 'rabbit ABL'
usaŋi usaŋi ŋa usaŋi kara
LLL LLLL LLLLL

In the Ōsaka dialect, the unaccented H-tone words maintain the H melody throughout, like the corresponding H-tone words in Suzu, while the unaccented L-tone words must raise the last mora of the minor phrase, like the Miyakonojō dialects, in which all words are L tone.

(22) Ōsaka (unaccented) H-tone words:

'cherry' 'cherry NOM' 'cherry ABL'

sakura sakura ga sakura kara

HHH HHHHH

Ōsaka (unaccented) L-tone words

'rabbit'	'rabbit nom'	'rabbit ABL'
usagi	usagi ga	usagi kara
LLH	LLLH	LLLLH

The pitch pattern of the unaccented H-tone words in Suzu and Ōsaka is the same as that of the unaccented H-tone words in Tōkyō, in which the entire words are high pitched, except for the fact that the Tōkyō dialect lowers the initial high pitch when the second mora is also high pitched (cf. the Suzu-Ōsaka sakura forms in (21)-(22) and the Tōkyō sakura form in (15b)).

The high-tone words in Suzu, Tökyō and Ōsaka may have an accent, at which point the pitch drops. The accented L-tone words in Ōsaka, on the other hand, raise the pitch of the accented syllable. (The accented L-tone words in Suzu involve certain complications, and we exclude them from our discussion hereafter.) In these dialects, the position of accent is not determined, but in the Kagoshima dialect, which neighbors the Miyakonojō dialect, the accent always falls on the penultimate syllable of a minor phrase when the words are accented. Thus, the Kagoshima dialect, whose basic tone is L like the Miyakonojō dialect, has the two surface tone patterns:

(23) Kagoshima unaccented words

'color paper'	'color paper NOM'	'color paper ABL
irogami	irogami ga	irogami kara
LLLH	LLLLH	LLLLLH

Kagoshima accented words

'bonfire' 'bonfire NOM' 'bonfire ABL'

kagari'bi kagaribi'ga kagaribi ka'ra

LLHL LLLHL LLLHL

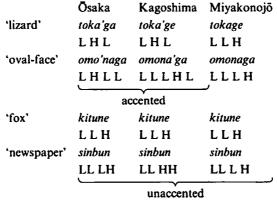
Like the accented words in the Tōkyō dialect, the place of the accent in an accented word is not predictable in the Ōsaka dialect; and, therefore, the accent must be specified lexically. Once the place of accent is determined, the realization of tone in this dialect is the same as the Tōkyō dialect in the case of the H-tone words – the pitch drops after the accented syllable and remains low throughout a minor phrase – and, in the case of the accented L-tone words, it is the same as the Kagoshima dialect – the pitch rises only in the tone-bearing unit (mora in Ōsaka and syllable in Kagoshima) of the accented syllable. The following summarizes these cross-dialectal similarities:

(24) H-tone dialect forms

	Tōkyö	Ōsaka	
'capital'	miyako	miyako	unaccented
	LHH	ннн	
'heart'	koko'ro	ko'koro)
	LHL	HLL	
'life'	i' noti	i' noti	> accented
	HLL	HLL	accented
'head'	atama'	ata'ma	
	LHH	HHL	J

Major pitch-changing rule: Lower the pitch after the leftmost accented tone-bearing unit.

(25) L-tone dialect forms



Major pitch-changing rule: Raise the pitch of an accented tone-bearing unit, if any; otherwise, raise the pitch of the last tone-bearing unit.

(Shibatani 1979:935)

As is evident from the above discussion, there are largely two distinct types of tonal phenomenon among the Japanese dialects, one in which the tone pattern is determined over a minor phrase in terms of a basic melody, and the other in which the accentuation of the basic melody is determined by the accent. The western dialects of the Miyakonojō-type represent the former system, and the eastern dialects of the Tōkyō-type represent the latter. Ōsaka and Kyōto, being geographically sandwiched by these two dialect groups, incorporate both systems. For one thing, this way of looking at the distribution of the tonal phenomena offers not only an

analysis in which the Ōsaka system is similar to both the Tōkyō system on the one hand, and to the Miyakonojō and the Kagoshima systems, on the other. In previous approaches (e.g. McCawley 1968, Haraguchi 1977), the Ōsaka system is treated as being too similar to the Tōkyō system, whereas the Kagoshima and the Miyakonojō dialects are treated as being radically different both from the Ōsaka system and from each other. This is especially the case in McCawley. Also the present approach, which combines the concept of the basic tone or melody and that of the accent, offers a new perspective to the discussion of the origin and the earlier distribution of the accentual or tone systems among the Japanese dialects (cf. Hayata 1987 and the related discussion in Chapter 9).

Japan, a mountainous country with numerous islands, has a setting ideal for fostering language diversification; indeed, Japanese is extremely rich in dialectal variations. Different dialects are often mutually unintelligible. For example, the speakers of the Kagoshima dialect of the southern island of Kyūshū would not be understood by the majority of the people on the main island of Honshū. Likewise, northern dialect speakers from such places as Aomori and Akita would not be understood by the people in the metropolitan Tōkyō area or anywhere toward Western Japan. Communication among speakers of different dialects is made possible by the so-called kyootuu-go (common language). Before the actual examinations of dialectal features and their distributions, we shall briefly discuss the development of the concepts of standard language (hyoozyun-go) and common language (kyootuu-go), which oppose that of dialects.

9.1 Standard language and common language

The existence of the dialects of Japanese was already recognized by the compiler(s) of the anthology of Japanese verse, $Man'y\bar{o}sh\bar{u}$ (Collection of a Myriad Leaves) (A.D. 759), who included the so-called azuma uta 'eastern songs' and sakimori uta 'songs of the garrison soldiers', which show the eastern dialect traits distinct from the western dialect of the then capital of Nara. While it is not clear whether the people of the Nara period (A.D. 710-93) ever entertained the idea of a standard dialect or language, there are indications that the people of the early seventeenth century had a fairly clear idea as to which dialect was to be regarded as "standard". This we can see in the descriptions of Japanese by Christian missionaries. Rodriguez (1604-8), for example, notes that the true colloquial Japanese is the one that is used by the court nobles of the then capital, Kyōto. Other indications for the status of the Kyōto dialect as the standard dialect are found in those glossaries of local dialects that listed Kyōto expressions for the local equivalents.

Even when the seat of government was transferred to Edo (presently Tōkyō) in 1603, the status of the Kyōto dialect did not seem to be threatened immediately,

for Kyōto and its neighboring city of Ōsaka comprised a cultural and economic center, which dominated the rest of Japan. However, the linguistic dominance of the Kyōto dialect gradually eroded as Edo began to assert its political and economic force and to develop culturally as well. Inasmuch as the contrasted language of glossaries of local forms identifies the standard form, we can conclude that the Edo dialect usurped the authority of the Kyōto dialect as the standard language around the end of the eighteenth century; all the glossaries from this period on identify the local forms in terms of Edo expressions (Sanada 1987).

While by the time of the Meiji Restoration (1867) the Edo dialect was assuming the role of lingua franca among the dialect speakers who had to communicate across dialect isoglosses, the Meiji government, by relocating the capital of Japan to Edo and by renaming the city as Tōkyō, authorized a rampant spread of the dialect of the new capital of Tōkyō under the concept of the hyoozyun-go 'standard language'. To have a unified common language was one of the goals and policies of the new government that was desperate to join the civilized Western world after maintaining a closed feudalistic society for nearly 250 years. Though a fairly large number of expressions from Kyōto had been incorporated in the Edo dialect – and some view this to have been an important factor for the acceptance of the Tōkyō dialect as the basis for the projected standard language – and dialect surveys were made in establishing the standard language, the speech of the educated middle-class Tokyoites was to serve as a model for the standard language. Standard Japanese, however, has never been established, and for practical purposes, the Tōkyō dialect has been considered as the standard language.

The need for some standard form of Japanese also arose in the preparation of Japanese-language textbooks as part of the effort accompanying the initiation of compulsory education. However, it was in the educational quarters that the enforcement of the Tōkyō dialect in the name of the standard language both fostered an inferiority complex in the minds of the speakers of peripheral dialects and brought about devastating linguistic experiences. The most notorious incident is the use of the *hoogen huda* 'dialect tag' that was hung around the neck of a student who used his local dialect at school.

The policy of enforcing the Tōkyō dialect and of eradicating peripheral dialects continued until the end of World War II. After the war, however, a new concept of kyootuu-go 'common language' was introduced. Kyootuu-go is a form of Japanese used by dialect speakers in communication with speakers of other dialects but is not quite like the Tōkyō dialect or the standard language. Kyootuu-go is heavily influenced by the standard language but retains dialect traits, such as accentual features. In other words, there are many local kyootuu-go that can be characteristi-

cally different from each other but have sufficient standard features to render them mutually intelligible. Because of the lack of a solid theoretical foundation for the concept of a standard language – it is only grasped as an ideal form of Japanese based on the Tökyö dialect - and as a result of soul searching on the part of the enforcers of the Tōkyō dialect, the term kyootuu-go and its concept in the sense of Gemeinsprache or langue commune have become ever more popular in recent years. Also in educational quarters, efforts are now being made to foster a balanced view towards the dialectal differences. Though text books are prepared with the Tōkyō dialect in mind, many include chapters that discuss dialectal differences and point out the differences in the domains in which people use different forms of Japanese. In other words, the basic idea of bilingualism is beginning to figure in current educational policy. While the idea of Standard Japanese still lives in the minds of language policy makers, the spread and the leveling of the variations of kyootuu-go, fostered by the movement of people and mass communication, have achieved the major linguistic goal of the founding fathers of modern Japan. The linguist's (urgent) task is to record those dialectal forms and features threatened with extinction.

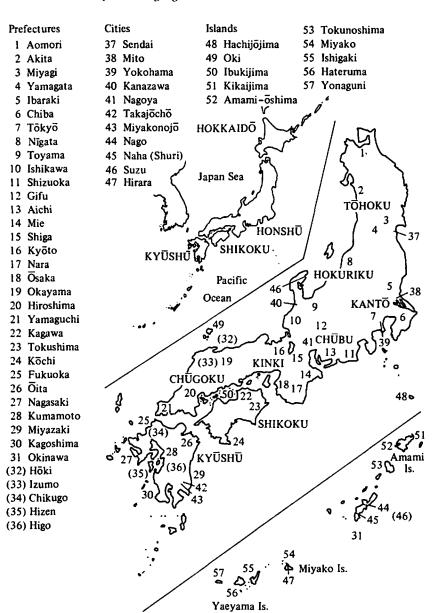
9.2 Dialect divisions

For the reader's convenience, a map of Japan is provided below with areas referred to in the text identified with numbers.

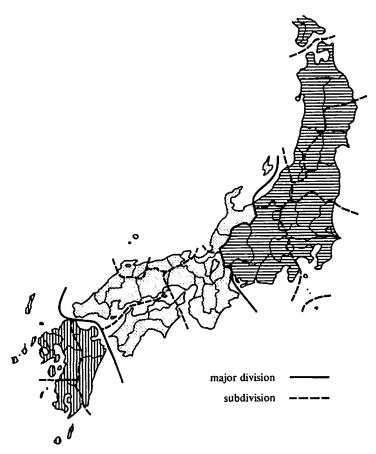
Different dialect divisions have been proposed by the specialists in Japanese dialectology – perhaps one of the most well developed and popular subjects in Japanese linguistics in Japan. Map 4, p. 189, provides one of the most representative attempts at dialect groupings.

While various dialect divisions have been proposed on the basis of linguistic patterns taken holistically, different divisions have been also proposed for different aspects of the language. For example, accentual patterns provide dividing lines of their own, and vocabulary items provide still different dividing lines. The dialectal divisions based on the accentual patterns can be easily surmised from Table 9.1, p. 190, which shows accentual distinctions made in major cities ranging from the northern city of Aomori on Honshū to the southern city of Kagoshima on Kyūshū (cf. Map 7, p. 211).

Despite the various possibilities of dialect division, and despite details of groupings that differ from one scholar to another, the major dialect divisions of great significance are: (1) between the Ryūkyuan dialects and the mainland dialects; and (2) between the Western dialect group and the Eastern dialect group of the mainland. In this chapter, we concentrate on two major distributional patterns of



Map 3 Map of Japan



Map 4 Geographic division of Japanese dialects (Tōjō 1954)

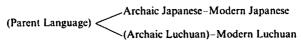
dialectal forms seen in Japan. One is the opposition between the Eastern Japan dialects and the Western Japan dialects, and the other is the opposition of the central areas and the peripheral areas. But let us first consider the Ryūkyuan situation.

9.3 Ryūkyuan dialects

The dialects of the present Okinawa prefecture and the islands belonging to the former Ryūkyuan kingdom were sometimes called Ryūkyū-go (Ryūkyuan or Luchuan) as if it is opposed to Nihon-go (Japanese) as an independent language. In fact, Chamberlain (1895) considered Ryūkyuan as a sister language of Japanese. A similar hypothesis is also seen in a more recent study by Miller (1971) (see

Table 9.1. Accentual distinctions in the major cities

	1	ı	l :	2	Word		١.	.]	<u>'</u> ;	s
-	kaze-ga wind-NOM	tori-ga bird-NOM	hata-ga flag-NOM	hasi-ga Fridge-NOM	yama-ga hill-NOM	mu-ga dog-NOM	sora-ga sky-NOM	hasega chopsticke NOM	ame-ga rain-NOM	harti-ga spring-NOM
Аомел	م	٥		م	⋄	⋄	⋄	مم	⋄	مم
Akita	,o-o	مم	<i>~</i> ~	<i>~</i> ~	⋄	^	⋄ ^₀	ممه	⋄ ^₀	مم
Sendai		~	~ ~	~ ⊸		~~ ~	~	~~	~~	~ ⊸
Mito	0-0-0	·	⊶		~ ~	<u>~~~</u>	~~		ooo	oo
Tokyó	~ ~	~	⋄ ^╮	⋄ ^╮	⋄ ^╮	^	مم	مم	مم	مم
Shizuoka	مم	,0-0	^	<u>^^</u>	⋄	^	م م	می	مم	مم
Nagoya	مره	مره	⋄ ^╮	<u>۸</u>	^	^ ∿₀	مم	ممه	مم	مم
Nigata	<i>~</i> ~	<i>~</i> ~	<i>~</i> ~	<i>~</i> ~	^	^	^	ممه	^	م
Toyama	<i>~</i>	مره	^	مم	^	مم	,	~ ~	^	م
Kanszawa	^	مم	^	^	^	900	مره	~	000	
Kyòto	o-o-o	ooo	مم	200	مم	مم	مرم	م	^ \$	~
Ōsaka	~~~	~	مم	مم	مم	مم	مرم	م	^	<i> </i>
Nara	•••	•••	مم	مم	مم	200	مرم	مرمه	^	~
Okayama	مر	مره	<i></i> ∧₀	^	^	^	200	مره-ه	مم	200
Hstoshima	~ ~	مر	^	^	^	<i></i> ∧₀	مم	ممه	مم	مم
Yamaguchi	مم	مره	^	⋄	^	^	مم	ممه	مم	مم
Ōıta	0-0	-مره	<i>></i> ~	مر	^	^	مم	مم	مم	مم
l ukuoka	<i>^</i>	مم	^ _₀	مم	△	^	مم	مم	مم	مم
Kumamoto	 -۰	~ ~	oo	000	 -		·		·	
Miyakonojó	امرمه	مم	مم	مرم	مرم	مم	مرم	مم	مم	مم
Kagoshama	~	^	<u>~</u>	<u>^</u>	مرمہ	مم	مم	مم	مرها	امره.



(The languages in the parentheses are hypothetical languages.)

Figure 9.1 Chamberlain's genetic tree diagram

Chapter 5). Ryūkyū was the name of an independent kingdom, with its capital in Shuri, presently an area in the city of Naha. The Ryūkyuan kingdom was established at the beginning of the fifteenth century, and it enjoyed its status as an independent country dealing with two strong neighboring countries China and Japan until 1609, when it finally fell into the hands of the Shimazu clan of Kagoshima, Kyūshū. After the Meiji Restoration (1867), it became a prefecture of Japan, and is called *Okinawa ken* 'Okinawa prefecture', the status it regained after the return of the islands to Japan from the American occupation in 1972. From this historical perspective, the Ryūkyuan dialects can be considered as constituting an independent language. Hypothesizing the genetic tree diagram reproduced in Figure 9.1, Chamberlain remarks that the relationship between Ryūkyuan and Japanese is something like that between Spanish and Italian or between French and Italian. But unlike these Romance languages, the Ryūkyuan dialects are often mutually completely unintelligible among themselves, let alone to the speakers of any mainland dialect.

Japanese dialectologists, on the other hand, have generally regarded Ryūkyuan as a group of Japanese dialects since the appearance of Tōjō's pioneering work on dialect divisions of Japanese (Tōjō 1927). Once a genetic relationship is established between two languages, it is a moot point whether to regard them as two languages or as two dialects of one language. However, it is debatable how these two language variations are to be related to other languages. In the case of Ryūkyuan, the question is whether it is related to Japanese and Korean as sisters as in Miller's hypothesis (see Chapter 5) or whether Ryūkyuan and Japanese should form Common Japanese, which is to be opposed to Korean and other languages, as indicated in the works of Japanese dialectologists. Comparative studies show that the relationship between Ryūkyuan and Japanese is far more transparent than that between Korean and Japanese, suggesting the plausibility of Japanese dialectologists' view on the matter. Hattori, for example, offers the tree diagram reproduced as Figure 9.2 below with the reservation that the three major dialect groups may have split directly from proto-Japanese.

Indeed, Ryūkyuan dialects and the mainland dialects show not only systematic similarities in syntactic and morphological aspects but also systematic sound correspondences, e.g.

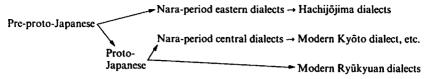


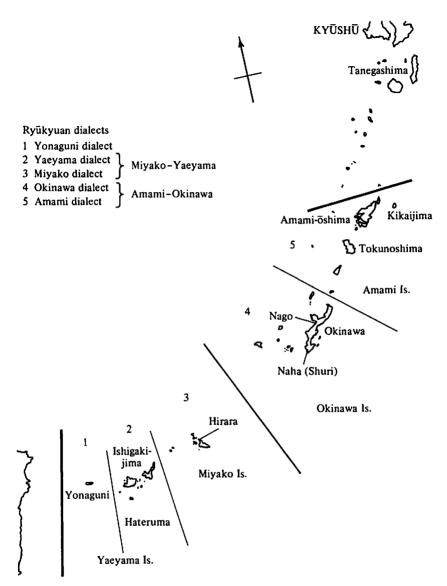
Figure 9.2 The relationship between Japanese and Ryūkyuan according to Hattori 1976a: 26. 29

	Tōkyō	Shuri
'rock'	ifi	ifi
'shoulder'	kata	kata
'hot water'	ju	ju
'grass'	kusa	kusa
'day time'	hiru	firu
'rain'	ame	ami
open (CONJ)'	akete	akiti
'wine'	sake	saki
'bone'	hone	funi
'hair'	ke	kii
'breath'	iki	?iit∫i
'fog'	kiri	tfiri
'sash'	obi	ubi
'star'	hofi	fufi
'string'	0	ии
'sleeve'	sode	sudi
'heart'	kokoro	kukuru

Notice that the mid vowels e and o have been raised to i and u in the above correspondences, e.g. $ame \rightarrow ami$ 'rain' and $sode \rightarrow sudi$ 'sleeve'. Thus, the five standard vowels a, e, i, o, u correspond to a, i, u in the Shuri dialect, a central Ryūkyuan dialect. Notice further that the raising of these vowels must have taken place after palatalization of ti and ki to tfi. Thus, while the original ki and ti sequences have turned to tfi (e.g. $ti \rightarrow tfi$ 'blood', $kiri \rightarrow tfiri$ 'fog'), the derived ti and ki have remained unpalatalized (e.g. $akete \rightarrow akiti$ 'open (CONJ)', $ke \rightarrow kii$).

Other Ryūkyuan developments are fronting of u after s and ts and concomitant consonantal change, e.g. $suna \rightarrow sina$ 'sand' and $tuki \rightarrow tfitfi$ 'moon'. Notice that this fronting of u corresponds to the centralization of u after dental consonants in the Tōkyō dialect. A further discussion on the phonological aspects is given below.

The beginning of the Ryūkyuan dialects is not clear yet, but it is generally estimated that the Ryūkyuan stock split from the mainstream Japanese language



Map 5 Geographic division of Ryūkyuan dialects (Adapted from Hirayama 1966)

at the latest around A.D. 6 (Hattori 1976a, Hokama 1977, Uemura 1965). (Philological materials are available from the late fifteenth century onwards.) The contemporary dialects are divided into three large groups: Amami-Okinawa dialects, Miyako-Yaeyama dialects, and the Yonaguni dialect, and these dialects are mutually unintelligible. Notice in Map 5 that the Amami islands belong to the

Table 9.2.	Correspondences between
Ryūkyuan	dialect vowels and Tōkyō vowels

					_
Tōkyō	i	е	a	0	u
Amami	i	ï	a	u	u
Shuri	i	i	a	u	u
Miyako	ï	i	a	u	u
Yaeyama	ï	i	a	u	u
Yonaguni	i	i	a	u	u

Ryūkyuan group linguistically, but politically they belong to Kagoshima prefecture of Kyūshū.

Among these dialect groups, the position of the Yonaguni dialect in relation to the other groups is not entirely clear. Phonologically, the Yonaguni dialect is distinct from the other two groups. However, lexically, it is closer to the Yaeyama dialect.

The government policy since the Meiji era of fostering the use of "Standard Japanese" has had the effect of eradicating the once common dialect (lingua franca) of the islands, the Shuri dialect, for the rest of the local communities. The number of speakers of local dialects is steadily declining throughout the Ryūkyū area, but especially on the main island of Okinawa. However, various Ryūkyuan dialects retain many phonological, as well as syntactic and lexical, features of Old Japanese.

As shown above, the Shuri dialect has only three short vowels, but it has long mid vowels o: derived from au, ao, and ou, as well as e: derived from ai and ae. Other dialects may have only three vowels (Yonaguni), five or six vowels $(i, \ddot{i}, u, e, o, a)$ (Miyako, Kikaijima, Ishigakijima), and still others have seven vowels $(i, \ddot{i}, u, e, \ddot{e}, o, a)$ (Hateruma). Many dialects developed a centralized i from the vowel corresponding to the Tōkyō i (Miyako, Yaeyama) or from the vowel corresponding to the Tōkyō e (Amami, Tokunoshima). The correspondences between the dialect vowels and the Tōkyō vowels are summarized in Table 9.2.

A unique development in the consonantal system is the appearance of the glottalized initial consonants, which show contrasts with plain consonants, in various dialects of the Amami-Okinawa group and the Yonaguni group, e.g. p?igi 'beard': piri 'side' (Nago), t?a 'tongue': ta 'rice paddy'.

In the mainland dialects, the consonant p turned into φ around the eighth century and eventually to h. However, the original p is retained in many Ryūkyuan dialects, e.g. p?iru 'day time', pana 'flower', pi: 'fire', pa: 'leaf' (cf. the Tōkyō forms: hiru, hana, hi, and ha). In Yaeyama, certain forms have turned their p to the labio-dental

Table 9.3 The inflectional categries of the Shuri dialect

	'to write
Mizen (Irrealis)	kaka-
Renyoo (Adverbial)	tat∫i-
Syuusi (Conclusive)	katfun
Rentai (Attributive)	kat furu
Izen (Realis)	kake'e
Meirei (Imperative)	kaki

(See Section 10.3 for discussion of the inflectional categories.)

fricative f, which now contrasts with p, e.g. puni 'bone': funi 'boat' (Tōkyō forms: hone, hune).

It is believed that the standard phonemes w and y developed from the Old Japanese b and d, and certain Ryūkyuan dialects (Miyako, Yaeyama, Yonaguni) retain these original stops. For example, ba 'I', bata 'stomach' (corresponding to wa and wata), da: 'house', du: 'hot water', dama 'mountain' (corresponding to ya, yu, and yama).

An aspect of Old Japanese is also preserved in the syntax of the Ryūkyuan dialects. Particularly noteworthy is the distinction between the conclusive form and the attributive form of verbs and adjectives. In most mainland dialects, these two forms were merged before the end of the sixteenth century, and the old attributive form became the sole form for both functions (see Chapters 10 and 11). However, in the Shuri dialect, for example, the conclusive form of 'to write' is katfun, while the attributive form is katfuru (e.g. katfuru ttfu 'a person who writes'); cf. the standard conclusive form kaku and the attributive form kaku (e.g. kaku hito 'a person who writes'). Table 9.3 summarizes the inflectional categories of the Shuri dialect.

Certain combinations of inflected stem and conjunctive and other elements have undergone radical phonological change in such a way that they may qualify as additional inflectional categories. For example, the past tense form of 'to write' is katfjan, which derives from kaki-te aru mono (write-CON) be thing).

In the case of particles, the old genitive use of ga, which came to have nominative use exclusively in the majority of the mainland dialects (see Chapter 11), is still preserved alongside the newly developed nominative use.

In the lexical domain, again a number of old forms are preserved, e.g. *tud3i* 'wife', wan 'I', warabi 'child', in addition to a number of unique Ryūkyuan forms, e.g. *tiida* 'sun', *gamaku* 'waist', *Pwaa* 'pig', etc.

In the total picture of the Japanese dialects, the Ryūkyuan dialects form the

most peripheral group, and the fact that they preserve historically residual forms is in line with the classical view in dialectology that peripheral areas retain older forms. In the subsequent discussions, we have occasion to refer back to the historical forms seen in the Ryūkyuan dialects.

9.4 The East-West opposition

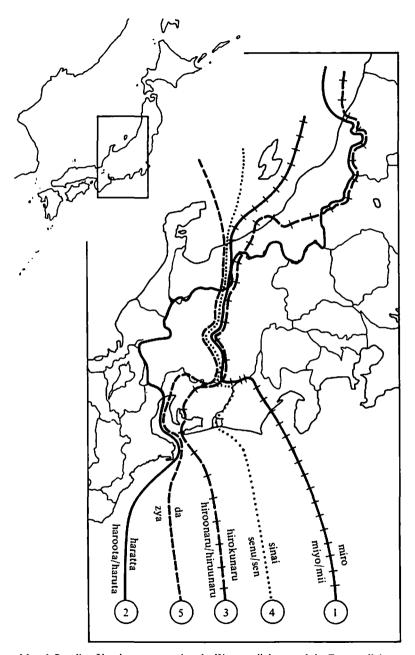
As for the mainland dialects, they are customarily divided into three large groups, Eastern Japan, Western Japan, and Kyūshū. However, there is a deep dialectal gulf that divides the Eastern group on the one hand, and the Western and Kyūshū group on the other. This opposition of East and West is seen not only in the linguistic domain but also in other social and cultural areas. Thus, in recent years, a number of dialectologists have begun to see the possibility of first dividing the mainland dialects into the Eastern group and the Western group, the Kyūshū group being included in the latter. Here we will see a number of features that form a bundle of isoglosses that divides the Eastern group and the Western group.

The items that are frequently cited in the morpho-syntactic domain include: 1) the imperatives of the vowel-final verbs; 2) the *t*-initial suffix forms of the *w*-final verbs; 3) the adverbial forms of adjectives; 4) the negative endings; 5) the copula forms; and 6) the forms of the *s*-final verbs. Concrete examples of these contrasting forms are given below:

	East	West	Glosses
(1) imperatives	miro	miyo/mii	'look'
(2) verb forms	haratta	haroota/	'paid'
		haruta	
(3) adverbial forms	hirokunaru	hiroonaru/	'become
		hiruunaru	wide'
(4) negatives	nai	nu/n	
(5) copulas	da	zya/ya	
(6) s-final verbs	otosita	otoita	'dropped'

The formation of bundles of isoglosses by some of these forms is summarized in Map 6 adapted from Tokugawa (1981).

In addition to the morpho-syntactic elements shown above, there are a fair number of lexical items that form contrasting sets. These include the following, and the formation of isogloss bundles by these items also follows the pattern exhibited in Map 6.



Map 6 Bundle of isoglosses separating the Western dialects and the Eastern dialects

	East	West	Glosses
(7)	kemu/kebu	kemuri/keburi	'smoke'
(8)	nasu	nasubi	'eggplant'
(9)	nanoka	nanuka	'seventh day'
(10)	iru	oru	'exist (animate)'
(11)	kariru/kareru	karu	'borrow'
(12)	syoppai	karai/siokarai	'salty'
(13)	sukkai/su ppai	sui/suii	'sour'
(14)	ototoi	ototui	'the day before yesterday'
(15)	yanoasatte	siasatte	'three days from today'
(16)	manako	me	'eye'
(17)	akarui	akai	'bright'

Phonological characteristics that can be pointed out as characterizing the two opposing groups include: (1) the labiality of /u/; (2) the lengthening of one mora words; and (3) the accentual system. The Eastern dialects generally have unrounded /u/, while in the Western region it is generally rounded. In the Western dialects one-mora words are lengthened and pronounced as two-mora words, e.g. $T\bar{o}ky\bar{o}ki$ 'tree', na 'name': $\bar{o}saka kii$, naa.

In the Eastern region what is called the Tōkyō system accent is widespread, while in the Western region, the Kyōto-Ōsaka system dominates the central area. However, since the distribution of the accentual patterns can be better viewed in another light rather than in the light of the East-West opposition, we will postpone the discussion of this subject until the next section.

It is clear from the above discussion that there is a deep linguistic cleavage between Eastern Japan and Western Japan along the line running between Nīgata prefecture and Toyama prefecture in the north and between Shizuoka prefecture and Aichi prefecture in the south. As seen in Map 6 isoglosses converge more tightly toward the northern and the central regions, while they tend to fan out toward the southern region. This is because of the mountain range, known as the Japan Alps, that runs vertically in the central region, and because there has been more traffic in the Pacific (southern) side compared to the Japan Sea side. The geographic characteristics of the whole region have helped create the East-West opposition not only in the sphere of language, but also in other socio-cultural domains.

A leading figure among those dialectologists who attach a particular significance to the East-West division, Tokugawa (1981) discusses, among other socio-cultural differences, the differences in eating habits and the shapes of tools and utensils between Eastern Japan and Western Japan. For example, there is a difference in the consumption of certain kinds of fish. Salmon is more heavily consumed in the

Eastern region, while the Western region consumes more seabream. *Nattoo*, fermented soy beans, is eaten more in Eastern Japan, while vinegar is consumed more in Western Japan. Indeed, the food maps prepared in the manner of dialect maps indicate that they match the linguistic maps fairly closely.

While the above discussion shows that there is an undeniable division between Eastern Japan and Western Japan in the entire socio-cultural domain, one should not think that the two regions are uniform throughout each. First, as indicated by the dialect division map (Map 4, p. 189), another major line divides Western Japan into the mainland portion and Kyūshū. Further subdivisions are seen in each area in the west as well as in Eastern Japan. These further subdivisions within each region are of course expected. What is more interesting is the fact that within both the Eastern region and Western region, there are areas that show the speech traits of the other region. For example, in the Eastern region, the speech of the Tōkyō (-Yokohama) area differs in a number of respects from the rest of the Eastern dialects. In particular Tōkyō speech includes some traits of the Kyōto (-Ōsaka) region. Also, in Western Japan there are sporadic occurrences of the characteristics of Eastern speech. Some of these mixtures of dialectal traits can be explained easily as a case of borrowing. The Kyōto traits in Tōkyō-Yokohama speech are such a case.

Kyōto (-Ōsaka) speech retained its prestige even after the government was moved to Tōkyō (formerly Edo) at the beginning of the seventeenth century, and its status as the language of the cultural and economic center was powerful enough to influence the language of the new government seat (see section 9.1 above). Indeed, Tōkyō speech stands out from the rest of the Eastern Japan dialects in a number of respects. In the area of phonology, while the Eastern region in general tends to coalesce the vowel sequences /ai/, /oi/, and /ui/ into [e:], [e:], and [i:], respectively, Tōkyō speech, just like Kyōto speech, pronounces them without coalescence.

In the area of morpho-syntax, Eastern Japan is characterized by the use of the -bee ending for the first-person presumptive expression, e.g. Iku-bee 'I guess I'll go'. In some areas the same form is used for the non-first-person presumptive expression, i.e. for the meaning of 'Probably he will go'. In still other areas, the non-first-person presumptive form ends in -danbee: e.g. Iku-danbee 'Probably, he'll go'. But, Tōkyō speech uses the Kyōto forms: the first-person presumptive -(y)oo and the non-first-person presumptive -da-roo; Ik-oo 'I'll go' Iku-da-roo 'Probably he'll go'.

As discussed earlier, in Eastern Japan the adverbial form of an adjective ends in -ku, contrasting with the Western form ending in -o or -u: e.g. haya-ku vs. hayo-o 'quickly'. However, in polite expressions of Tōkyō speech, the Western form is adopted. For example, O-hayo-o gozaimasu 'Good morning', Utukusyu-u gozaimasu

'It's beautiful'. Similarly, in Eastern Japan, the negative ending is generally -nai and its phonological variants, but in Tōkyō speech the negative form of the polite -masu ending involves the Kyōto negative ending -n and results in -mase-n. Finally, the existential verb form oru of Western Japan is used in Tōkyō speech as an honorific form of its existential verb iru. As seen in these examples, many of the Western forms adopted by Tōkyō speech have to do with honorific speech. In general, the honorific speech form is less developed in Eastern Japan than Western Japan, and a vacuum was filled by adopting certain forms from the speech of Kyōto, where the imperial court was located and where the honorific speech pattern was more elaborate.

Among the lexical items, words such as yaru 'give', kaminari 'thunder', and siasatte 'the day after tomorrow (two days from today)' have their origins in the Kyōto area. In the case of siasatte, a semantic shift accompanied the borrowing. In the Kyōto area, siasatte means 'three days from today', asatte being 'two days from today'. In Tōkyō speech, the local Eastern expression yanoasatte was adopted for 'three days from today'.

Other instances of dialectal traits occurring in geographically separated areas concern mostly the occurrences of Eastern traits in Western Japan. In the area of phonology, for example, the Tökyō accent system is seen in the Western areas such as San-in, Shikoku, and Kyūshū (see Map 7, p. 211). Also, vowel devoicing occurs in the similar regions. The Eastern morpho-syntactic and lexical characteristics are also seen in many areas in Western Japan. For example, the imperative -ro suffix occurs in certain areas of Kyūshū (Higo, Hizen, Chikugo); the Eastern verb inflectional form leading to the t-initial suffix (e.g. katta 'bought') is seen in the San-in area; and the da copula form occurs in San-in, Kyūshū and in part of Shikoku. Finally, Eastern lexical traits are also seen in the following: ototoi 'day before yesterday' (Kyūshū), kariru 'borrow' (San-in), iru 'exist' (Kinki).

These sporadic occurrences of Eastern traits cannot be explained simply as borrowing as in the case of those Kyōto-expressions in Tōkyō speech discussed above. For one thing, the regions that show Eastern traits are not contiguous. And for another, there is no evidence showing that these regions had extensive contacts with Eastern Japan. One hypothesis that has been advanced toward explaining the mystery contends that the Eastern-type language was spread all over Japan at the beginning, and later developments of the Western characteristics in the old capitals in Western Japan, Nara and Kyōto, spread outward. The eastward spread, however, was systematically hampered due to geographic reasons around the area that divides Eastern Japan and Western Japan socio-culturally. The spread also failed to reach the San-in area on the Japan Sea side and the Kyūshū area toward the south; and thus Tōhoku, San-in, Kyūshū, and the island groups of Hachijōjima

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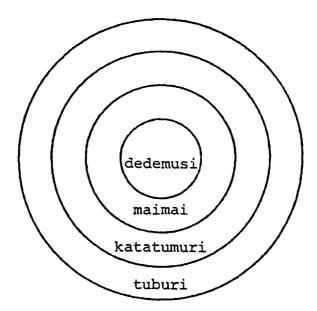


Figure 9.3 Dialect words for "snail"

and Okinawa – all geographically peripheral areas – retain historically older forms (see Mase 1977:259, and the later discussion on the distribution of the accentual systems).

A precursor of this hypothesis is the theory advanced by the folklorist Yanagita Kunio (1875–1962). Yanagita collected and studied various local words for "snail", and discovered that the newest forms are found in the vicinity of the old cultural center, Kyōto, while the older forms are dispersed in the outer areas. It was also found that the new forms spread out gradually in succession, just as ripples spread out in rings of waves. That is, earlier changes are overlaid by new spreading rings of innovations. Since the spreading of new forms take time, older forms tend to be seen in the areas farthest away from the center, creating in effect a situation where older forms surround newer forms. The situation is represented schematically in Figure 9.3, where the outer circles contain historically older forms designating a snail.

Yanagita's idea about the pattern of distribution of older forms is known as the hoogen syuuken ron (theory of peripheral distribution of dialectal forms), which is similar to the wave theory in the European tradition of dialectology. However, Yanagita's theory lays more emphasis on the aspect that the spread of newer forms takes place in a circular pattern just like ripples with its center located in the cultural center. In the Japanese context, Yanagita's conception fits the facts better, for we

see many instances where the areas that retain historically older forms occur both sides of Kyōto. If the Japanese archipelago had more width, it is most likely that the circular distribution of older forms would be seen more clearly.

A hypothesis of this nature can be supported only if those dialectal features in peripheral areas are indeed reflexes of historical forms. It so happens that many of them are in fact relic forms of an earlier stage of Japanese, especially that of the language of Kyōto. However, there are certain independent developments that cannot be attributed to a historically earlier stage of Japanese. Thus, while the distribution of certain dialectal forms can be interpreted in terms of Yanagita's theory, there is another type of distribution that is also determined by the central area versus peripheral areas but that cannot be interpreted in a similar light. In what follows, these two types of sporadically occurring dialectal features are separately discussed. First, we shall consider those features that can be correlated with historical forms.

9.5 The central-peripheral opposition: historical residues

As discussed in Chapter 6, major historical changes in Japanese took place during the Muromachi period (fourteenth to sixteenth century) and those features of an earlier stage of the language preserved in dialects are reflexes of the language of Kyōto of the Muromachi period. The features discussed below include: (1) the palatalization of the fricatives; (2) the labialized velars; (3) the glide-vowel combinations; (4) the labial fricatives; (5) the fricative/affricate contrasts in alveopalatals; and (6) the pre-nasalization of voiced obstruents.

In the contemporary central dialects (i.e. the dialects of Tōkyō, Yokohama, Ōsaka, Kyōto), the palatalization of the fricative /s/ is seen before /i/ but not before /e/. That is, the distribution of the /s/ phoneme before front vowels is: [ʃi], [se], and not [si] and [ʃe]. However, it is generally believed that the palatalization of /s/ occurred before /e/ as well until the fifteenth century. And the combination /ʃe/ remains not only in peripheral areas such as Kyūshū, Tōhoku, Hokuriku, and some areas of Shikoku, but also in the vicinity of Kyōto, e.g. northern Kyōto and some parts of Ōsaka, Mie, and Shiga prefectures. In these areas, then, the standard form sensei 'teacher' is pronounced as [ʃenʃei]. In the northern Tōhoku area, the palatalization has been advanced to the extent of [se], [ce], and even [xe] and [je]. The voiced versions [ʒe] and [dʒe] are also seen in all these areas; i.e. the standard form kaze 'a cold' is pronounced as [kaʒe] or [kadʒe].

In Kyūshū the palatalization of the consonants of the alveo-palatal region before /e/ is very prevalent, and not only the /s/ and /z/ discussed above but also /t/ and /d/ are palatalized, e.g. /mite/ 'see (CONJ)' and /sode/ 'sleeve' are [mitfe] and [sod3e],

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respectively. This strong palatalizing effect of /e/ is attributable to the palatalized nature of /e/ itself. That is, in Kyūshū /e/ is pronounced as [je], which is believed to have been the standard pronunciation of this vowel in the Muromachi period.

The borrowing of a great number of Chinese words introduced the new syllable types [kwa] and [gwa] to Japanese. They were incorporated into Japanese and enjoyed their stable status within the Sino-Japanese lexical stratum until the seventeenth century, when they merged with the plain [ka] and [ga] in the then standard language of Kyōto. However, the opposition between labialized velars and plain velars is preserved in some parts of the Kyōto area and in such peripheral areas as parts of Tōhoku, the majority of the Kyūshū region, and a few other spots in the rest of the mainland. In these areas, the standard forms /kazi/ 'fire accident' and /kazi/ 'house work' are distinguished as [kwadʒi] and [kadʒi].

In certain islands near Kyūshū, the labialization of the velars has advanced to the extent of turning the sequence /kwa/ into [pa]. For example, in peripheral areas of Kagoshima the historical forms /kwannon/ 'the Goddess of Mercy' and /kwasi/ 'candies' are pronounced [pannon] and [paʃi], respectively, and even /kuwanu/ 'do not eat' and /kue/ 'eat (IMP)' became [pan] and [pe].

In the contemporary central dialects, the combinations of the glide and the vowel are severely restricted especially when /w/ is involved. While in the case of /j/, [ja], [ju], and [jo] occur, /w/ is restricted only to /wa/. Thus, the w-final verb stem has a chance to expose its /w/ only when the negative suffix, which calls for the irrealis inflectional ending -a, is attached. In all other instances of suffixation, the /w/ must disappear, e.g. [kaw-a-nai] 'buy-NEG', [ka-u] 'buy-PRES', [ka-e] 'buy-IMP', [ka-oo] 'buy-COHORT', etc. (see Chapter 10). Historically, however, [wi], [we], and [wo] were also possible. These were all given different kana and were distinguished from the plain vowels. At present, however, only /wo/, which in the central dialects has merged with [o], is given a distinct kana, which is used only in writing the accusative particle o (see Chapter 6, section 6.2).

Again, the older combinations of [wi], [we], and [wo] are preserved in various dialects. In the Takajōchō dialect of Miyazaki prefecture, [wi] and [we] occur, and in the Tōhoku region, both [we]/[we] and [wo] are seen. The San-in region preserves [we]. And [je] is also seen in Kyūshū, as noted above, and in Tōhoku.

In the section dealing with the Ryūkyuan dialects, we noted that many dialects in that region retain the older [p] or $[\phi]$ pronunciation for the forms that correspond to [h] in the standard forms. In many mainland dialects, the change of [p] to [h] has been arrested at the stage of $[\phi]$, which reflects the stage of development at the Muromachi period. Again, the $[\phi]$ sound remains in the three areas where other older forms are found, namely, Tōhoku, San-in, and Kyūshū. The standard

form higasi 'east' is [\text{oiga}\si] in northern N\text{\text{o}}\text{gata}, Yamagata, a portion of Aomori (T\text{\text{o}}\text{hoku}), Izumo, and Oki (San-in). The standard form hai 'ash' is [\text{oe:}] in Akita (T\text{\text{o}}\text{hoku}), Miyazaki, and \text{\text{Oita}}\text{ita} (K\text{y}\text{\text{s}}\text{h}\text{\text{u}}).

As discussed in Chapter 8, in the contemporary central dialects, there are no /zi/:/di/ and /zu/:/du/ contrasts. The former are normally pronounced as [dʒi] and the latter as [dzw]. However, the contrasts existed in the Kyōto dialect (and presumably in other dialects) until the end of the sixteenth century, when the merger began to take place in Kyōto. These four sounds are preserved in several forms in contemporary dialects, although, actual realizations of /zi/ and /di/, for example, differ from one dialect to another. Kyūshū again is an area in which this four-way distinction is most clearly preserved. For example, in Kagoshima /zi/ 'letters' and /di/ 'hemorrhoids' are distinguished as [3i] and [d3i], and /suzume/ 'sparrow' involves [zu] as [suzume], while /aduki/ 'red beans' involves [dzu] as [adzuki]. In some areas, such as Oita prefecture, however, the distinctions are reduced to a three-way contrast: either /zi/ and /di/ fall together or /zu/ and /du/ fall together. Kōchi prefecture in Shikoku also preserves the four-way distinction, e.g. /disin/ 'earthquake' and /zisin/ 'self' are [difin] and [3ifin], and /midu/ 'water' and /mizu/ 'do not see' are [midu] and [mizu]. In the majority of other Western and Eastern dialects, except the Tōhoku dialects, only the two-way contrast, generally in terms of [dzi] and [dzu], occurs. Thus, both 'letters' and 'hemorrhoids' are pronounced as [d3i].

In San-in and Tōhōku, where the centralization of /i/ and /u/ occurs, the contrast in vowels of /zi/:/zu/ and /di/:/du/ is lost, and together with the consonantal merger, the original four-way contrast is completely lost. Thus, corresponding to the Kyūshū [ʒi], [dʒi], [zu], and [dzu], there is only one sequence, either [dzūi] or [dzī]. Because of this characteristic, both the San-in dialects and the Tōhoku dialects are known as "zū-zū ben" ("zū-zū" speech).

The dialects of the Tōhoku region are well-known for the centralization of the high vowels, but there is another strongly marked characteristic that distinguishes them from other dialects. It has to do with the pre-nasalization of voiced non-nasal stops, i.e., /b/, /d/, /g/, and /z/. This phenomenon plays an important role in distinguishing certain words, for the entire Tōhoku region shows another phenomenon of the intervocalic voicing of /k/ and /t/, that has the effect of merging certain forms. Thus, in the southern region of the Tōhoku area, the standard forms /ito/ 'string' and /ito/ 'well' are merged into [ido], and likewise /mato/ 'target' and /mado/ 'window' are both [mado]. However, such merger is limited to the southern region, and in the northern area, where pre-nasalization of /b/, /d/, /g/, and /z/ takes place, the merger is avoided. For example, in the northern region /mato/ 'target' and /mado/ 'window' are distinguished as [mado] and [ma^do]. In the case of

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the velar /g/, it is fully nasalized intervocalically, and the distinction between /taka/ 'hawk' and /taga/ 'hoop' is maintained as [taga] and [taŋa]. Voicing, prenasalization, and velar nasalization phenomena in Tökyō and Tōhoku regions are summarized below:

Tōkyō	S. Töhoku	N. Tōhoku
[-g-]~[-ŋ-]	[-ŋ-]	[-ŋ-]
[-k-]	[-g-]	[-g-]
[-t-]	[-d-]	[-d-]
[-d-]	[-d-]	[-~d-]
[-b-]	[-b-]	[-~b-]
[-dz-]	[-dz-]	[-~dz-]

The pre-nasalization phenomenon in northern Töhoku seen above is said to be a remnant of the articulation that was used until the middle of the fifteenth century in Kyōto as well, and the same phenomenon is also preserved in Kōchi prefecture of Shikoku. In Kōchi, where the standard forms /mado/ 'window' and /kabe/ 'wall' are pronounced as [ma~do] and [ka~be], pre-nasalization is extended even to initial voiced obstruents, e.g. /garasu/ [~garasu] 'glass', /gomi/ [~gomi] 'garbage'.

In the morpho-syntactic domain, we will discuss three topics, namely, the emphatic accusative marking, the overlapping use of the particles ga and no and their associated pragmatic functions, and the distinction between the conclusive form and the attributive form of predicates.

In the central dialects, emphasis of the direct object for contrastive purpose is shown by use of the topic marker wa, before which the normal direct object marker (wo) is deleted, together with the emphatic stress on the wa. In Old Japanese, however, this was achieved by stacking the accusative marker wo and the topic particle φa – the combination presumably being pronounced as woba. This emphatic accusative marking is preserved in the form of ba in a number of peripheral areas such as Töhoku, Kyūshū, and Amami-Okinawa. Firstly, both Tõhoku and Ryūkyuan dialects reflect the basic system of Old Japanese case marking in that the subject and the direct object are not normally marked, although they can be. (In the Ryūkyuan dialects nu, corresponding to the mainland genitive no, can be used to mark the subject, e.g. Tiida agatong or Tiida nu agatong 'The sun has risen' (Shuri).) Secondly, these two peripheral regions show further similarity in retaining the emphatic accusative marking, woba or the contracted ba. While the mainland dialects of the Tohoku and the Kyūshū regions typically use ba, some Ryūkyuan dialects (e.g. Kikaijima) use wuba and some others (e.g. Amamioshima) ba, e.g. hon ba yomu 'read the book' (Tōhoku and Kyūshū) and see wuba hooti kuu 'go buy sake' (Kikaijima).

Though we have described here the use of (wo)ba in terms of the notion of emphasis, certain Ryūkyuan dialects appear to have developed a definite/indefinite contrast in the use or non-use of wuba. Matsumoto (1984), for example, contrasts the following two Kikaijima forms: see hooti kuu 'go buy sake' and huneeda hooti qc'aN see wuba hooti kuu 'go buy the sake that (you) bought and came back (with) the other day', noting that the wuba marking appears to be impossible for a non-individuated, generic (non-definite) direct object.

As discussed in Chapter 11, the particles ga and no had overlapping functions as genitive and nominative markers. Their actual uses were differentiated functionally relating to the notion of politeness. Although the emphasis of specific aspect differs from time to time and from one syntactic function to another, generally it was the case that in the genitive function, no was either neutral or honorific, and ga either intimate or contemptuous with regard to the referent of the preceding noun, and in the nominative function of a later period, ga was neutral and no honorific. Related to the honorific role of these particles is their genitive use that developed at the beginning of the Kamakura period (1185–1333) based on the nature of the preceding noun: ga going with personal names and no with everything else. Eventually, the use of no as the genitive marker was generalized and it became the sole genitive marker in the majority of dialects (see Chapter 11). However, uses and distinctions are preserved in a number of dialects, especially in San-in, southwestern Kyūshū, and Ryūkyuan dialects.

In the speech of the older people of Izumo and Oki in San-in, nominative ga is neutral, while no is used as an honorific nominative marker, e.g. zinusisan no gozaddani 'but the landlord is here'. The contrast between ga and no is most clearly preserved in western Kyūshū. In this area, no is a neutral/honorific nominative marker, and ga a derogatory marker. Thus, in Kumamoto, where ga and no are both used in both the genitive and the nominative functions, there is first a morphological restriction on the use of these particles such that ga occurs only with personal names and pronouns, while no occurs with other humans and objects. Secondly, the honorific dimension plays a role: no is neutral with inanimate nouns and honorific with human nouns, and ga is derogatory. Thus, while ame no hurizyaata zo 'it began to rain', and sensei no iinahattai 'the teacher has said', and ayatu ga warukattai 'that guy was bad' are possible, sensei ga iinahattai and ayatu no warukattai are not.

In the Shuri dialect of Okinawa, only no (pronounced as [nu] locally) has the genitive function, but in the nominative function, a similar morphological distinction is seen: namely, the ga form goes with personal names and pronouns, and no with everything else. In Ibaraki prefecture in the Kantō region, the genitive ga occurs with animate nouns and no with inanimate nouns.

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As pointed out in the section dealing with the Ryūkyuan dialects, the old conclusive/attributive distinction in verbal predicates is maintained in the Ryūkyuan dialects, e.g. katfun 'write (conclusive)' vs. katfuru ttfu 'a person who writes (attributive)'. The same distinction is also maintained in the Hachijōjima dialects: ara iku 'I go (conclusive)' vs. waga iko toki 'the time when I go (attributive)'. The sharing of this feature of Old Japanese by these two geographically most peripheral dialect groups is one of the features of the Hachijōjima dialects that are discussed in speculating on the position of these dialects in the Japanese language.

Generally, the Hachijōjima dialects, which vary considerably from one village to another on the tiny island off Tōkyō, are said to retain the characteristics of the Eastern Japan dialects – in fact, the Eastern dialect as recorded in the *Man'yōshū* (eighth century) (see Hattori's diagram, p. 192 above). However, there are certain lexical resemblances to the western Kyūshū dialects and to the Ryūkyuan dialects. Whether these lexical similarities are due to borrowing from these two regions brought about by sailors drifting from the southern islands, or whether they reflect the possibility of independent retention of Archaic Japanese forms is still a matter of speculation.

The above discussion of the dialect areas that preserve historically older forms indicates that Tōhoku, San-in, Hachijōjima, Kyūshū, and Ryūkyū are five major areas that have tended to be left out of modern developments that spread out from Kyōto. Curiously enough, the similarities among these areas go beyond those forms that are well-documented historical residues. These areas also share certain speech characteristics that are apparently newer developments that have taken place independently. Particularly interesting are the parallel phonological developments seen in Tōhoku and San-in.

9.6 The central-peripheral opposition: parallel innovations

We have already mentioned that in both Tōhoku and San-in, vowel centralization occurs, which has the effect of merging, for example, /zi/ and /zu/ into cither [zī] or [zū], the phenomenon responsible for the nickname "zū-zū ben" given to the speech of these two geographically separated areas. The centralization of the high vowels /i/ and /u/ occurs after alveolar or alveo-palatal fricatives or affricates. There are two ways in which these vowels are centralized. First in Tōhoku, in the northern area, e.g. Akita, the standard /su/, /si/ and, /syu/, are merged into [ʃī]; /tu/, /ti/, and /tyu/ into [tʃī]; and /zu/, /zi/, and /zyu/ into [dʒī]. In other areas toward the south, e.g. Sendai in Miyagi prefecture, these groups of sounds occur with a centralized back vowel, namely as [sū], [tsū], and [dzū].

The nickname "zū-zū ben" points to a pronunciation such as [kadzū] for the standard form [kadʒi] 'fire', but this dialectal characteristic causes a great deal of

neutralization of forms. The following illustrates the neutralization in Akita and Sendai:

Tökyö		Akita	Sendai
/sisi/	/susi/	[[ï[ï]	[süsü]
'lion'	'sushi'		
/tizi/	/tizu/	[t∫ïdzï]	[tsüdzü]
'governor'	'map'		
/kuti/	/kutu/	[kït∫ï]	[kütsü]
'mouth'	'shoe'		

In San-in, the vowel centralization also takes the two directions paralleling the Tōhoku developments. In Izumo, /i/ and /u/ are centralized toward [i], but in Hōki (east of Izumo) and Oki (north of Izumo), the centralization is toward [ii]. Thus;

Tōkyō		Izumo	Hōki/Oki
/susi/	'sushi'	[sïsï]	[süsü]
/tizu/	'map'	[tsïdzï]	[tsüdzü]
/tume/	'nail'	[tsime]	[tsüme]

In addition to the centralization of the high front and back vowels after an alveolar or alveo-palatal fricative or affricate, the Tōhoku dialect and the San-in dialect share the phenomenon of the neutralization of initial /i/ and /e/ into a vowel with a quality intermediate of the two vowels. Thus, for example, the standard forms /iki/ 'breath' and /eki/ 'station' are both pronounced as [eki].

While the above phenomena show parallel developments in the two geographically non-contiguous areas of Tōhoku and San-in, there are also other developments that are shared by a number of other dialect regions that are not geographically contiguous. In fact, even the centralization of high vowels that constitutes such a strong regional characteristic of the Tōhoku and San-in dialects also occurs in certain Ryūkyuan dialects. For example, in the Miyako and Yaeyama dialects, what corresponds to Tōkyō and Shuri /i/ is [i] (see Table 9.2, p. 194).

The devoicing of the high vowels /i/ and /u/ seen in Eastern Japan occurs also in the San-in and Kyūshu regions. In Kyūshū, forms such as /kaki/ 'persimmon', /usi/ 'cow', and /natu/ 'summer' are pronounced as [ka.ki], [u.ʃi], and [na.tsu], respectively with a half-lengthening of the preceding vowels. Further south in Kagoshima, the final high vowels completely drop out, thereby rendering all /kuki/ 'stem', /kusi/ 'comb', /kutu/ 'shoe', /kuti/ 'mouth', and even /kugi/ 'nail' and /kubi/ 'neck' to [kut]. Likewise, /kami/ 'paper' and /tegami/ 'letter' turn into [kan] and [tegan], respectively. In Okinawa, vowel devoicing has developed further, and in

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Hirara on the island of Miyako, what corresponds to the standard /hito/ 'person' is [pstu] (< [pïtu] < [pïtu]).

Another widespread phenomenon has to do with the coalescence of /ai/ and /ae/. In Kyōto-Ōsaka and Tōkyō, these vowel sequences are not coalesced, but in many other areas, they have coalesced and become [ɛ:], [e:], [a:], or the short versions of these vowels. For example, /karai/ 'peppery' is [kare] in Tōhoku, San-in, and southern Kyūshū, and [kare:] in Miyagi and Chiba prefectures (Eastern Japan), Okayama prefecture (Western Japan), and Ōita and Miyazaki prefectures (Kyūshū), and [kara:] in the border area of Gifu and Aichi prefectures and in the southern parts of Okayama and Hiroshima prefectures.

In the morpho-syntactic domain, the most notable parallel development in geographically non-contiguous areas is the fusion of the particles to the preceding nouns. The topic particle wa gets fused in the northern Tōhoku area such as Akita. Thus, the standard ame wa 'rain top' and siken wa 'examination top' have become amea and sikenna, respectively. Although the fused topic form seems to have a slight topicalization function, as it can be used in forms such as honna yomu 'read the book' contrasting with the bare object form expression hon yomu 'read a book', it is not entirely comparable to the standard topic construction. In the central dialects topicalization is prohibited in a subordinate clause, except when used in a contrastive sense. However, in northern Tōhoku, an expression like the following is possible, in which the fused topic form occurs in a subordinate clause: Amea hurugara iganea '(I) wouldn't go, since it rains'. (In this region, a separate topicalization particle has been developed from the conditional form of the copula, namely daba, and this form most closely corresponds to the standard topic particle wa.)

In Okinawa, what corresponds to the standard wa has the form ya and the fusion of ya to the preceding noun involves deletion of y and lengthening of the preceding vowel when the nouns end in short vowels; thus, the standard hana wa 'flower TOP', hune wa 'boat TOP', mono wa 'thing TOP' have become hana:, hune:, mono:, respectively, while satoo wa 'sugar TOP' is sa:ta:ya.

In the central dialects, the accusative particle o(< wo) never has the effect of resyllabifying the word it attaches to. Thus, hon o 'book ACC' is syllabified as hon-o and never as ho-no. This strongly indicates that in the central dialects the noun and the following particle maintain clear independent status. However, in a number of dialects, the accusative particle (and in some areas, certain other particles as well) is realized in a fused form, just like the fusion of the topic particle seen above. This phenomenon is seen, for example, in Shikoku and Kyūshū. First, in Shikoku, isi o 'rock ACC' and yume o 'dream ACC' are isyii and yumyoo in Tokushima, and isyo and yumyo in Kōchi city.

In Kyūshū, hon o 'book ACC' is honno in northern Kagoshima, Miyazaki, Ōita, and honnu in southern Kagoshima, southern Miyazaki, and Ōita. Kaki o 'persimmon ACC' and mari o 'ball ACC' are kakyuu and maryuu in Fukuoka, Ōita, Miyazaki, and kakyo/kakyu/kaku and mayo/mayu in Kagoshima.

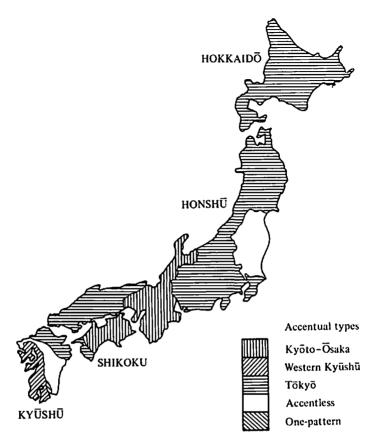
While the above examples amply illustrate possibilities that geographically non-contiguous areas may develop parallel changes independently, a most striking case of this is the way accentual systems are distributed. In fact, Kindaichi (1964) offers a completely new dialect grouping that is based largely on the distribution of accentual systems. Unlike the earlier dialect divisions that were essentially divisions of areas in terms of isoglosses, Kindaichi's approach captures similarities among, and possibly developmental connections among, different dialects that may occur in geographically non-contiguous areas. We will now examine the accentual systems of the Japanese dialects, but first let us take a look at their distribution.

Map 7 shows that the so-called Tōkyō accent system surrounds the so-called Kyōto-Ōsaka system. Superficially, the situation looks like a classic case of the split of a speech area by the intrusion of a new speech type (Bloomfield 1933:313f). That is, it looks as if the Tōkyō-type system was first pervasive throughout Japan, and later on the Kyōto-Ōsaka type intruded in the middle. However, it is generally believed that the older type is the Kyōto-Ōsaka system, from which the Tōkyō and other systems later developed. The basic reason for this assumption has to do with the fact that the Kyōto-Ōsaka system makes more distinctions than the Tōkyō system, and the fact that the former reflects more closely the word classes that are reconstructed in accounting for the cross-dialectal correspondences and splits.

The notion of the word classes arose from the fact that there are regular cross-dialectal correspondences in the accentual patterns. For example, a group of words that have the same accentual pattern in one dialect (e.g. the Kyōto-Ōsaka group consisting of ame 'candy', ebi 'shrimp', etc., which all have the HH pattern) generally corresponds to a group composed of the same words with their own accentual pattern in another dialect (e.g. the words included in the above Kyōto-Ōsaka group have the LH pattern in Tōkyō). Sometimes, the words identified as members of one group in one dialect are divided into two different groups suggesting either the merger of two earlier groups or the split of an old group. These accentual word classes are also corroborated by the accentual distinctions recorded in the thesaurus Ruijūmyōgishō published during the first half of the twelfth century in Kyōto.

Though it is disputable as to how many word classes existed in Archaic Japanese, it is generally agreed that at least five classes must be reconstructed for two-mora words for a certain stage of the development of Japanese, if one were to account for all the different splits seen in various dialects. However, the more conservative

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Map 7 Accent in the Japanese dialects

Kyōto-Ōsaka system showed only four classes, and it was not obvious if the reconstructed five classes could be demonstrated as a possibility. It was thus a great surprise and perhaps a joy for Japanese accentologists when a dialect with the reconstructed five-class system was reported in 1966. Wada (1966) reports that the dialect of the island of Ibukijima of Kagawa prefecture clearly distinguishes the five word classes for two-mora words. Table 9.4 below shows the pattern of merger of the five word classes and the actual pitch shapes of five dialects.

Examples of words of each class are given in Table 9.5 below.

Despite the general acceptance of the hypothesis that the Kyōto-Ōsaka system (or the Ibukijima system) is older than the Tōkyō and other dialect systems, recent studies cast some doubt on this. Tokugawa (1972), for example, points out that the distinction between Class 4 and Class 5 is made only in the region of the

	Class 1	Class 2	Class 3	Class 4	Class 5
Ibukijima	1	HHL LHL		LLH	LLH-L
Kyōto-Ösaka	ннн	Н	LL	LLH	LHL
Tôkyō	LHH	LI	łL.	Н	LL
Kagoshima	Li	łL		LLH	
Miyakonojô			LLH		

Table 9.4. The distinction and merger of the five word classes

(In order to expose all the underlying possibilities of two-mora words, in general practice, three-mora phrases, with the nominative ga attached, are given.)

Table 9.5. Examples of words in five classes

Class 1: niwa 'garden', tori 'bird', ame 'candy', kaze 'wind' Class 2: isi 'rock', kawa 'river', hata 'flag', oto 'sound'

Class 3: yama 'mountain', inu 'dog', mimi 'car', ike 'pond'

Class 4: matu 'pine', kasa 'umbrella', sora 'sky', ito 'string'

Class 5: saru 'monkey', muko 'son-in-law', ame 'rain', koe 'voice'

Kyōto-Ōsaka system, while the other systems that scatter all over Japan make no distinction between those classes (see Map 7). It is quite strange, Tokugawa feels, that the distinction is not maintained anywhere else if the distinction indeed existed in a system from which all the contemporary systems developed. Since the distinction exists only in a contiguous area surrounding Kyōto, Tokugawa entertains a hypothesis that, contrary to the general assumption, it is the Kyōto-Ōsaka system that developed the distinction, which did not exist earlier. On the basis of such an argument, Tokugawa posits the family tree shown in Figure 9.4 below (adapted for our purpose), with a proviso that: "Perhaps either Western Japan accent or Eastern Japan accent could be taken as the parent of Central Japan accent" (Tokugawa 1972:314).

Thus, the interpretation of the situation represented by Map 7 remains inconclusive. (See Ramsey 1980 for a relevant discussion.)

As can be seen in the above table showing the distinction and merger of the word classes, the accentual systems of the Japanese dialects can be characterized in terms of the number of contrasts made and the pitch pattern. The majority of dialects have either the Kyōto-Ōsaka system, which makes a four-way contrast in three-mora phrases, or the Tōkyō system, which makes a three-way contrast in three-mora phrases. The distribution of these two types of dialects and surface variations

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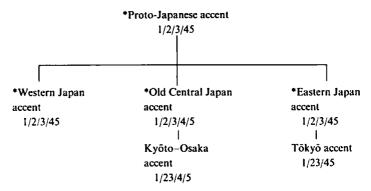


Figure 9.4 Tokugawa's family tree of accents

of the pitch shape can be also seen in Table 9.1, p. 190. The numbers in the top row of this table indicate the word classes.

In addition to the Kyōto-Ōsaka and the Tōkyō systems, there are three additional types, which are generally believed to have developed from the Tōkyō system. First, in Kagoshima and Nagasaki prefectures, a two-way contrast (western Kyūshū) system is seen, and this is illustrated in Table 9.1, too. In this system, a phrase containing words from Class 1 and 2 has high pitch on the penultimate syllable, while a phrase containing words from the other classes has high pitch in the final syllable, e.g. niwa (HL) 'garden', niwa ga (LHL) 'garden NOM' vs. yama (LH) 'mountain', yama ga (LLH) 'mountain NOM'.

One further step from the Kagoshima-Nagasaki type leads to the one-pattern system of Miyakonojō, Miyazaki prefecture. Here there is only one pitch pattern – all phrases have the final high irrespective of the word classes and the number of moras, e.g. kaze (LH) 'wind', kaze ga (LLH) 'wind NOM', yama (LH) 'mountain', yama ga (LLH) 'mountain NOM', murasaki (LLLH) 'purple', murasaki ga (LLLLH) 'purple NOM' (cf. Chapter 8, section 8.5).

Finally, there is an accentless type, which is seen in both Kyūshū and southern Tōhoku and northern Kantō. In the one-pattern system of Miyakonojō, there is a definite pitch shape, and native speakers recognize it, but in the accentless type, there is no native speaker recognition of the pitch pattern, though phrases are normally pronounced in a flat tone with a slight rise in the middle.

Largely on the basis of distribution of these different types of accentual systems as represented in Map 7, Kindaichi (1964) characterizes the Japanese dialects in terms of three rings, the most internal ring coinciding with the old cultural center of Kyōto.

Notice that while in the case of a number of phonological features (possibly

including the accentual system), the Kyōto area, the most internal dialect in Kindaichi's grouping, retains the conservative system, the outer, peripheral dialects show innovations. But as discussed earlier, peripheral dialects also show a large number of dialectal features that represent the historical relic forms. Thus, the Japanese dialects rather clearly show two modes of linguistic change and the formation of dialect areas. On the one hand, the languages of the peripheral areas form linguistic islands of older forms adopted from the central language and of phonetically motivated changes occurring independently. The languages of the cultural centers, on the other hand, have the effect of influencing other dialects by the propagation of innovative forms, but because of the conservatism enforced by literacy and education, they may also form islands, being left out of those changes that may take place in other areas separately or in a parallel fashion.

Word formation

In Chapter 7 a general overview of the Japanese lexicon was given without going into the detail of the word structure. This chapter examines more technical aspects of Japanese words, namely, their morphological characteristics. We concentrate on verbal morphology, especially the issues surrounding verb inflection and compound formation. These areas cover the two most productive aspects of Japanese morphology, and, as will be seen later, certain phenomena here have a great deal of syntactic relevance. Inasmuch as the interaction between morphology and syntax is one of the hotly debated themes in theoretical linguistics today, Japanese, with its agglutinative morphology and productive compound formation mechanisms, offers unique perspectives on several theoretical issues in this area. The major portion of this chapter is primarily concerned with the morphological properties of words, whereas the last section and Chapter 11, section 11.4 examine the nature of noun compounds and agglutinative morphology from syntactic perspectives. Our first topic, however, concerns lexical categories, the understanding of which is essential to any discussion of derivational processes.

10.1 Lexical categories

In addition to the major lexical categories of nouns, verbs and adjectives, and the minor categories, such as demonstratives and conjunctions, Japanese has two lexical categories that do not occur in English and other European languages. One is the category called, in traditional Japanese grammar, *keiyoo-doosi* 'adjectival verb', and the other is called verbal noun by Martin (1975). Members of the first category are really more like nouns than verbs, contrary to what the traditional term seems to suggest. Many Western grammarians refer to this category as "nominal adjectives", but we will follow Martin here, and use the term adjectival nouns, since these, unlike regular adjectives, take the copula.

(1) a. Ano hito wa kirei da. (adjectival nominal predicate) that person TOP pretty COP
'That person is pretty.'

- b. Ano hito wa gakusei da. (nominal predicate) student COP
 - 'That person is a student.'
- c. Ano hito wa utukusii. (adjectival predicate) beautiful
 - 'That person is beautiful.'
- (2) a. kirei na hito (adjectival nominal attribute)
 pretty cop person
 'pretty person'
 - b. gakusei no Taroo (nominal attribute)

GEN

'Taro, who is a student'

c. utukusii hito (adjectival attribute) 'beautiful person'

Adjectival nouns also differ from regular nouns in that they cannot possess the grammatical functions of subject, object, etc. Thus, they cannot directly take case particles such as the nominative marker ga or the accusative o; gakusei ga 'student NOM' but not *kirei ga 'pretty NOM'. However, some adjectival nouns have the corresponding nouns as well, and these forms function like a noun in this respect. For example, genki 'vigorous/vigor' and kenkoo 'healthy/health' are both adjectival nouns as well as regular nouns.

On the other hand, adjectival nouns are like adjectives in that they can be nominalized by the derivational suffix -sa, which cannot be attached to regular nouns, as seen in (3a), and they can be modified by a degree adverb, as in (3b), a property absent in regular nouns.

(3) a. utukusi-sa 'beautifulness' (<adjective)
kirei-sa 'prettiness' (<adjectival noun)
*gakusei-sa 'student-ness' (noun)
b. totemo utukusii 'very beautiful'
totemo kirei da 'very pretty'
*totemo gakusei da '(lit.) very student'

There is one derivational suffix that generates adjectives from nouns, namely -rasii (the last i being a tense-marker for adjectives). Thus, nouns, such as gakusei 'student', yield adjectives as gakusei-rasii 'student-like'. Neither adjectival nouns nor adjectives can use this suffix: *kirei-rasii, *utukusii-rasii. Once a noun, e.g. gakusei 'student', is made into an adjective by the suffixation of -rasii, it can then be nominalized by -sa like any other adjective: gakusei-rasi-sa 'student-like-ness'.

The other special category of verbal nouns requires the dummy verb suru 'do' in the predicate function. They are typically S-J (Sino-Japanese) words, but certain native nouns as well as foreign loan nouns that are derived from verbs also belong to this category. Kenkyuu-suru 'to study' and soodan-suru 'discuss' are S-J words and typical of the predicates formed with verbal nouns. However, a native compound such as azi-tuke 'seasoning' and a foreign loan such as kopii 'copy' may also take suru and become verbs: azi-tuke-suru 'to season', kopii-suru 'to copy'. Notice that regular nouns cannot be verbalized by suru: hon 'book' *hon-suru, yama 'mountain' *yama-suru, syatu (<shirt) *syatu-suru.

Verbal nouns are like other nouns in that they can function as subject or object, taking the particles ga or o respectively: kenkyuu ga hituyoo da 'studying is necessary', kenkyuu o hazimeru 'begin studying'. This noun-like property of verbal nouns yields analytic syntactic expressions alongside the compound predicate expressions: kenkyuu-suru 'to study': kenkyuu o suru 'to do studying'.

The special categories of adjectival nouns and verbal nouns have important functions in the Japanese lexicon. For one thing, they are the categories to which certain newly derived forms belong. More importantly, these categories are most actively used in borrowing and compounding. Foreign adjectives are generally borrowed into the adjectival noun category, e.g. tahu da (<tough), sikku da (<tolerance chic). As noted above, foreign verbs are borrowed into the verbal noun category, e.g. zerokkusu-suru 'to xerox', taipu-suru 'to type'. Many noun compounds involving the adverbial, or infinitive, form of a verb also function as verbal nouns, e.g. haya-gawari-suru (quick-change-do) 'to make a quick change', tati-yomi-suru (stand-read-do) 'to read while standing'.

10.2 Affixation

Japanese is an agglutinative language and its morphology involves both prefixes and suffixes. In examining the process of affixation, several issues need to be taken up. Among them, we will examine the questions of (a) productivity, (b) category change, and (c) the interactions of morphology and syntax.

If one analyzes Japanese verbs morphologically, various affixes can be identified. However, not all these affixes are productive to the same extent, in that some of them co-occur only with specific roots. The transitive/intransitive suffixes are of this type. A comparison of forms such as ak-u 'to open' and ak-e-ru 'to open X' reveals that -e is a transitivizing suffix. However, many other transitive verbs do not use this suffix and instead have others, e.g. tob-u 'to fly': tob-as-u 'to fly X', or-i-ru 'to come down': or-os-u 'to bring down', sinu 'to die': koros-u 'to kill'. In other words, the suffixes seen here, -e, -as and -os, occur only with specific verbs, and there is only a limited range of subregularity, as examined more fully in section

10.4 below. This is similar to the state of affairs with intransitive/transitive pairs in English.

Compared to these, the causative suffixes -sase, -se and the passive suffixes -rare, -re, both of which are classified as auxiliary verbs in traditional grammar, are quite regular, and can be suffixed to any verb stem as long as no semantic constraints bar them. Thus among the suffixes, we must distinguish between productive and non-productive suffixes. The morphology and syntax of the causative and passive suffixation are discussed in section 10.3 below and Chapter 11.

This same division applies to prefixes. The prefixes su- 'bare-' and hi- 'slight-' can occur respectively with nouns such as asi 'leg' and te 'hand', and with adjectives such as yowai 'weak' and karai 'spicy', yielding the forms: su-asi 'bare foot', su-de 'bare-hand', hi-yowai 'weak and slight', and hi-garai 'tingling'. Their productivity, however, is extremely limited, and we find that they cannot be attached to many other nouns such as atama 'head' or to the adjectives such as takai 'high'; *su-atama, *hi-dakai. On the other hand, there exist other prefixes such as the honorific o- and S-J prefixes han- 'anti-' or hu- 'un-', which are very productive.

Generally speaking, the S-J affixes are more productive than the native Japanese affixes. From the historical point of view, productive affixes are those newly introduced, whereas the non-productive ones are remnants of old native forms. In the case of the intransitivizing and transitivizing suffixes, we see some historical connections between them and the currently productive passive and causative suffixes, respectively, indicating the possibility that the former were once productive morphological processes (see section 10.4, and Chapter 11, section 11.4).

While there are both nominal and verbal suffixes, most prefixes are affixed to nouns. The prefix hi- mentioned above, the honorific o-, and ko- 'slight' are about the only prefixes that attach to adjectives. The honorific prefix o- also attaches to verbs in honorific verbal expressions such as o-ik-i ni naru (the subject honorific form of 'to go'), o-tasuke suru (the object honorific form of 'to help'). But the verbs in these expressions occur in their adverbial, or infinitive, forms (ik-i 'going' and tasuke 'helping') which are actually to a great extent like nouns. Indeed, many adverbial verb forms have become nouns. Iki (<ik-u 'going'), tasuke (<tasuke-ru 'help') used above and a host of others like yorokobi 'joy' (<yorokob-u 'to be glad'), nezi 'screw' (<nezi-ru 'to twist'), and asobi 'play' (<asob-u 'to play') are listed as nouns in dictionaries. It is because of this that the inflectional category of adverbial form is often called "infinitive" in Western literature, as we occasionally do in subsequent discussion for ease of identification of the form and its partial function for the Western readers. Certain other adverbial/infinitival forms such as aruk-i (<aruku') 'walking', and ne (<neru) 'sleeping' do not occur as nouns by themselves,

but do form nouns through compounding, e.g. sozoro-aruki 'leisurely walk', hiru-ne (day-sleep) 'nap'.

Nouns are also derived from adjectives with the suffixes -sa and -mi. The former is quite productive, but the latter's occurrence is limited to a number of specific adjectives such as atataka-i 'warm': atataka-mi 'warmth', uma-i 'tasty': uma-mi 'taste'. These adjectives can of course be nominalized by -sa as well, yielding atataka-sa 'warmness' and uma-sa 'tastiness'. As the glosses indicate, the -sa forms are analogous to nouns derived by the productive English suffix -ness, and they, just like the -ness forms, tend to be more abstract in meaning than the -mi forms. Contrast the English forms beautifulness: beauty.

Other noun-forming suffixes have specific meanings. The suffix -te (lit. 'hand') refers to a person who does what is specified by the verb, just like the agentive suffix -er in English: hanasi-te (speaking-hand) 'speaker', okuri-te (sending-hand) 'sender'. S-J suffixes -nin 'person', -in 'member', -sya 'person', -syu 'hand' etc. all have a similar function: uketori-nin (receiving-person) 'recipient', gesyuku-nin (boarding-person) 'boarder', soodan-in (consulting-person) 'consultant', hanzai-sya (crime-person) 'criminal', unten-syu (drive-hand) 'driver'. Just as it is difficult to determine the basis for the distribution of the several agentive suffixes in English (painter, consultant, linguist, logician, etc.), these S-J agentive suffixes have no apparent logical distribution and must be learned separately.

Verbs are formed with the suffixes -garu, -meku, and a few others, but these each have specific meanings associated with them. -garu, as in samu-garu (< samu-i 'cold') 'appear/show signs of being cold' and uresi-garu (< uresi-i 'glad') 'appear glad', has the meaning of 'appear to be X', and -meku has the meaning of 'become like X' as in haru-meku 'become spring-like' and aki-meku 'become autumn-like'.

The productive S-J suffix -teki produces adjectival nouns, which, as seen above, function both as predicates and as noun modifiers together with the copula da, e.g. kagaku-teki 'scientific', goori-teki 'rational'. Verbal nouns are produced from nouns by the suffix -ka '-ize/-fy' and some others, e.g. kindai-ka 'modernize', eki-ka 'liquefy', dorama-ka 'dramatize', eiga-ka 'make a movie out of (a novel)'.

The prefixes do not generally change lexical categories. Notable exceptions to this are the S-J prefixes having negative meanings: hu-'un-', mu-'-less', hi-'non-', mi-'not yet'. These change nouns into adjectival nouns, e.g. tyuui 'attention': hu-tyuui 'careless', rieki 'profit': mu-eki 'profitless', zyooken 'condition': mu-zyooken 'unconditional', zyoosiki 'common sense': hi-zyoosiki 'senseless', kaihatu 'development': mi-kaihatu 'undeveloped'.

In recent years, some English prefixes have been borrowed and are gaining in productivity, e.g. suupaa-tankaa 'super tanker', suupaa-syuturyoku 'super output',

nyuu-taun 'new town', nyuu-seihin 'new product', ooru-nippon 'all Japan', posuto-Nakasone 'post Nakasone', mini-kan 'mini-can (of beer)', mini-keisanki 'mini-calculator'.

Most of the affixation discussed here can be treated straightforwardly as lexical processes. However, certain suffixes are better treated syntactically. These include the causative suffix -(sa)se, the passive -(ra)re, the desiderative -tai, along with certain others that are classified as auxiliary verbs zyo-doosi in the traditional grammar. Unlike many other affixes, these productive suffixes convert an entire sentence into a voice-related expression or into another type of sentence. In the framework of transformational grammar, they are treated as higher predicates of an embedding structure that is "conflated" into a simplex structure by the processes of verb-raising or clause union (see Chapter 11, section 11.4).

The suffix -sa, which nominalizes adjectives, can nominalize an entire desiderative clause produced by the suffix -tai, which itself is an adjectival clause, as well as an adjectival clause produced with the predicate hosii 'want', e.g.

- (4) a. sake o nomi-ta-i

 ACC drink-want-PRES
 'want to drink sake'
 - b. [sake o nomi-ta]-sa ni ...
 'out of desire of drinking sake'
- (5) a. utukusi-sa ga hosi-i beautiful-ness NOM want-PRES 'want beautifulness'
 - b. [utukusi-sa ga hosi]-sa ni ...'out of desire of having beautifulness'
- (6) a. sensei ni home-rare-ta-i teacher by praise-PASS-want-PRES 'want to be praised by the teacher'
 - b. [sensei ni home-rare-ta]-sa ni ...'out of desire to be praised by the teacher'

These forms occur typically in a purposive clause marked by the particle ni, and with the meaning of 'so as to'. The crucial point to observe is that the desiderative clause is a syntactic unit having its own internal structure with elements such as case particles and nouns. The lexical process of nominalization by the suffix -sa is thus applied to this complex syntactic unit. In (5), sa-nominalization occurs once lexically with the adjective utukusi-i 'beautiful', and once again at the syntactic level of the desiderative clause. In (6), before -sa is attached, the desiderative clause has

undergone a passive transformation. Thus, the *sa*-nominalization involves both lexical and clausal suffixation. In Ainu we see similar suffixation processes that apply at the two levels (see Part 1, Chapter 3, section 3.4.3).

It is interesting to note that the clausal -sa forms aspire to become lexical units, in that they tend to suppress clause internal case particles such as ga and o. This leads to forms such as sake-nomi-ta-sa and utukusi-sa-hosi-sa, which are pronounced as single lexical items. However, other particles such as the agentive ni marker in (6b) resist suppression, and accordingly the suppressed form *sensei-home-rare-ta-sa is not acceptable. Generally, the nominative and accusative case particles ga and o, respectively, drop more readily than other, less central case particles. This is in fact a general pattern regarding the omission of case particles in Japanese. Thus, we have here a case where a morphological process applies outside the domain of the lexicon and interacts with syntax. (See Kageyama 1982 for further discussion.) A similar situation is also observed in the compounding phenomena presented below, but for now we turn to the central issue of verbal morphology.

10.3 Verb inflection

There are three parts of speech that inflect in Japanese. They are verbs, adjectives, and (largely suffixal) auxiliary verbs (including the copula). The traditional analysis adds to this class adjectival nouns, e.g. kirei da 'pretty'. However, since the adjectival noun, in fact, does not inflect by itself, inflection being realized in the accompanying copula da, it should be excluded from the group of inflecting parts of speech. Auxiliary verbs, which typically occur as suffixes, are those forms that inflect like verbs but that do not occur alone (see below). While the traditional grammar of Japanese considers the variations in form discussed here as inflection, or katuyoo, most of the forms are straightforwardly segmentable. Indeed, in the case of Japanese, the notion of inflection should be separated clearly from that of inflectional (or fusional) morphology. Morphologically, Japanese inflection assumes the form of agglutination of the Turkish-type rather than the inflectional morphology of the Latin-type. That is, inflectional endings are fairly clearly segmentable, and the segmented endings (or suffixes) are correlated with inflectional categories in a one-to-one fashion, rather than in the one-to-many correlation characteristic of the inflectional morphology. The major issues in Japanese inflection are: 1) the problem of segmentation; 2) the number and kinds of categories to be recognized; and 3) the distinction between inflectional endings and auxiliary verbs (as well as particles), this problem being directly related to the second problem. We will review these issues using the regular verb inflection as an illustration. Since many proposals by both Japanese and foreign scholars have been made

		'die'	'look at'	
Mizen	(Irrealis)	si-na	mi	(m-i)
Renyoc	(Adverbial)	si-ni	mi	(m-i)
Syuusi	(Conclusive)	si-nu	miru	(m-iru)
Rentai	(Attributive)	si-nuru	miru	(m-iru)
lzen	(Realis)	si-nure	mire	(m-ire)
Meirei	(Imperative)	si-ne	miro/miyo	(m-iro/ivo)

Table 10.1. Inflectional categories of Classical Japanese

as alternatives to the traditional treatment, it is necessary to examine first the traditional analysis in some detail.

The inflectional paradigm that is adopted in the traditional Japanese grammar dates back to the period between the late eighteenth century and the early nineteenth century, when the grammatical tradition was being developed by a number of able scholars such as Fujitani Nariakira (1738–79), Motoori Norinaga (1730–1801), his son Haruniwa (1763–1828), Suzuki Akira (1764–1837), and Gimon (1786–1843). The establishment of the present-day six inflectional categories goes back to Gimon's work in 1833. The contemporary designations of the inflectional categories are also largely due to Gimon.

Although not all inflected words have six distinct forms, the traditional grammar recognizes six inflectional categories since some words have six inflected forms. These categories are labeled quasi-semantically and quasi-functionally, and the form of each class is typically used in combination with a number of auxiliary verbs. For students of the traditional grammar (which is taught at school in Japan), it is necessary to learn the forms of inflectional categories (or inflectional endings) and auxiliary verbs and conjunctive particles that co-occur with each category. The six inflectional categories of Classical Japanese and the inflected forms of the verbs sinu 'die' and miru 'look at' are shown in Table 10.1 above.

Although a complete understanding of the inflectional system of Classical Japanese is still unavailable, it offers a slightly clearer picture on the nature of the inflectional categories than Modern Japanese does. The classical inflectional categories reflect a number of grammatical factors, both morpho-syntactic and aspectual as well as modal. As the category labels "attributive", "adverbial", and "conclusive" indicate, these categories are primarily morpho-syntactically determined. The form that occurs when the verb modifies a noun is the attributive form, the form that typically forms compounds with the members of a verbal category is the adverbial form, and the form that occurs when a sentence is concluded is the conclusive form.

Table 10.2. Subcategorization of auxiliaries and conjunctive particles according to the inflectional categories (Classical Japanese)

Mizen: zu, zari (Negative); mu, muzu, masi, zi (Conjectural); ru, raru, yu,

rayu, su, sasu, simu (Voice/Honorific); mahosi

(Desiderative); ba (Conj. particle)

Renyoo: nu, tu, tari (Perfect/Continuative); ki, keri, kemu (Recollection);

tamahu (Honorific); haberi, sourahu (Polite); tasi (Desiderative);

te, nagara, tutu (Conj. particle)

Syuusi: ramu, rasi, besi, bekari, mazi, masizi, meri, nari (Conjectural); to

(Conj. particle)

Rentai: nari, tari (Assertive); gotosi (Comparative); ga, ni, wo (Conj.

particle)

Izen: ba, do, domo (Conj. particle)

The opposition of the realis and the irrealis category is largely aspectual. This is most clearly shown by the conditional/hypothetical expression. The conditional conjunctive particle ba follows both realis and irrealis endings. When it follows the realis ending, the expressed condition is thought to have been realized, whereas when it follows the irrealis ending, the expressed condition is thought to be unrealized yet. That the negative auxiliary and a fair number of conjectural auxiliaries follow the irrealis ending seems to reflect the aspectual notion of "unrealized". On the other hand, the reason for the membership of the auxiliaries of the voice category here is not entirely clear (see Table 10.2 above). Finally, the imperative category represents the imperative mood. Whether these three types of factors underlying the classical inflectional categories can be further unified in terms of the aspectual, modal, or some other concepts remains to be seen, but some speculations can be made. For example, the conclusive category is correlated with the notion of generic time, and the adverbial category with the concept of suspended activity. These together with the realis-irrealis opposition suggest that some kind of aspectual consideration was a basis for the inflectional system.

As mentioned above, the inflectional categories also function as the categories that subcategorize auxiliaries and particles that follow the inflectional endings. The above six inflectional categories subcategorize auxiliaries and some representative conjunctive particles as shown in Table 10.2.

In the course of development, certain inflectional categories fell together, and a large number of auxiliaries, especially those expressing conjectural and aspectual meanings, atrophied. The inflectional paradigm of Modern Japanese is normally given in terms of the six classes shown in Table 10.3 below, although the

		'die'	'look at'	
Mizen	(Irrealis)	si-na	mi	(m-i)
Renyoo	(Adverbial)	si-ni	mi	(m-i)
Syuusi	(Conclusive)	si-nu	miru	(m-iru)
Rentai	(Attributive)	si-nu	miru	(m-iru)
Katei	(Hypothetical)	si-ne	mire	(m-iru)
Meirei	(Imperative)	si-ne	miro/miyo	(m-iro/iyo)

Table 10.3. Inflectional categories of Modern Japanese

Table 10.4. Subcategorization of auxiliaries and conjunctive particles according to the inflectional categories (Modern Japanese)

Mizen: nai, n(u) (Negative); seru, saseru, reru, rareru (Voice/Honorific)

Renyoo: ta (Past); masu (Polite); tai (Desiderative); soo (da) (Conjectural); tari, te, tutu, nagara (Conj. particles)

Syuusi: rasii, soo (da) (Hearsay); to, kara, ga (Conj. particle)

Katei: ba (Conj. particle)

conclusive form and the attributive form are identical for all inflecting parts of speech except for the copula da, whose conclusive form and attributive form are da and na, respectively.

Due to the decline of the irrealis hypothetical expression, e.g. si-na ba 'if X dies', and the disuse of the conditional conjunctive particles -do and -domo, which followed the realis ending, the realis-irrealis opposition was obliterated, which was only useful in distinguishing the conditional/hypothetical expressions with the particle ba (see above). Thus, instead of realis, or izen, the new label hypothetical, or katei, is given to the old realis category, since the hypothetical expression with the conjunction ba is the only use of the form of this category in Modern Japanese. Due to the decline of a large number of auxiliaries, the size of the subcategorized auxiliaries dramatically shrank accordingly.

Though never explicitly formulated, in the conception of the traditional grammar the Japanese verbal morphology involves the following composition of elements:

Whereas certain inflected forms (e.g. the conclusive form) occur without any auxiliary, some others (e.g. the irrealis form) always occur with an auxiliary; and

still others (e.g. the adverbial form) may occur alone or in combination with an auxiliary. The conjunctive particles are called for when a clause is conjoined, and they follow the inflected form. (Remember that auxiliaries also inflect in the pattern of the verb.) In this analysis, then, the inflectional endings are considered to be a stem-forming element, and the auxiliaries and particles attach to the verbal stems, never directly to the verb root. Also to be noticed is that auxiliaries attached to a stem also inflect and form more complex stems to which other auxiliaries may further attach (e.g. $ik-a+se-\theta+rare-ru$ (root-ending+aux-ending+aux-ending) 'go-IRREALIS-cause-IRREALIS-passive-CONCL = be made to cause to go').

A major problem in the traditional analysis is concerned with the identification of the root and the inflectional ending. The traditional grammar identifies the first portion (the portion before the hyphen in Tables 10.1 and 10.3) as a root and the rest as inflectional endings. The idea behind this is clearly the notion of segmentation utilized in the morphological analysis of structural linguistics. However, the transliterated forms in Tables 10.1 and 10.3 show that the segmentation technique is not quite rigorously applied, for one would think that the root should be identified as sin- rather than si-. The reason for this unhappy situation is caused by the syllabary writing, which does not allow one to segmentize a syllable (i.e. the sequence of a consonant and a vowel) into two. Thus, for the irrealis sina, the kana syllabary representation gives us two kana units of si and na, and as such the latter cannot be segmentized any further. Particularly troublesome in the traditional treatment are those forms such as miru 'look at', which consists of only one kana for mi in the irrealis and adverbial forms. If the root is identified as mi-, then the endings for these categories will be zero. In order to avoid this situation, which entails a case of auxiliaries directly attaching to the root (unless a zero morpheme is recognized), the traditional analysis includes mi- in the inflectional endings, which, however, leads to an analysis in which there is no root! Recognizing this problem, many supplementary high school grammar books, following the pioneering practice of Yamada (1908), point out that, if these forms are Romanized, the roots and the endings are clearly discernible, e.g. m- being the root and -i being (part of) the inflectional ending for the verb miru, as in the parenthesized representations in Tables 10.1 and 10.3 above. However, once the Romanized representation is recognized, the segmentation of other forms such as sinu 'die' would be called into question: i.e., why shouldn't the irrealis form sina, for example, be segmentized as sin-a, with the sin-portion and the -a portion being the root and the inflectional ending, respectively? There does not seem to be any reason for not making this move, except that it would upset the whole teaching tradition of the inflectional system, which has been based on the segmentation of forms represented in the kana syllabary.

Table 10.5. Sakuma's inflectional categories

	'die'	'look at'
Basic form	sin-u	mi-ru
Formative form	sin-i	mi-ø
Negative form	sin-a	mi-o
Hypothetical form	sin-eba	mi-reba
Imperative form	sin-e	mi-ro
Future form	sin-oo	mi-yoo
Determined form	si-nda	mi-ta
Suspended form	si-nde	mi-te

Of course, a linguist does not have to worry about upsetting the teaching tradition. Thus, the psychologist-turned-linguist Sakuma (1936) offers the analysis shown in Table 10.5 above.

Since Sakuma was not concerned about correlating the inflectional forms and categories of Modern Japanese with those of Classical Japanese, eight newly labelled inflectional categories were proposed. As evident from the above table, segmentation is applied fairly consistently, thanks to the Romanized transliteration, except in the last two categories. Sakuma's recognition of -nda and -nde as inflectional endings, as opposed to -da and -de, is due to the fact that certain stems change their final consonant when followed by -da and -de. For example, tob-u: ton-da 'fly', yom-u: yon-da 'read'. Since these changes can be handled by morphophonemic rules (see below), there is no need to segmentize sinda as si-nda; instead sin-da will do, which will render the verbal roots consistent. Such consistency is obtained in the analysis of the American structuralist Bernard Bloch (1946), who applied the technique of segmentation fairly thoroughly to phonemically transcribed inflected forms of verbs, adjectives, and the copula. Bloch's analysis, which recognizes ten inflectional endings, has been quite influential among students of Japanese in America, e.g. Eleanor H. Jorden, Samuel E. Martin, and Roy Andrew Miller, who basically subscribe to the paradigm shown in Table 10.6 below.

Bloch's analysis follows the American structuralist practice of the item-and-arrangement representation of morphemic alternations. Bloch, thus, provides two lists of inflectional endings, one for those endings that go with the consonant-final verbal bases (i.e. those endings found after the sin- base in the following table) and the other for those that co-occur with the vowel-final verbal bases (i.e. those that follow the mi- base in the following table).

The hallmark of generative phonology is the analysis characterized by the motto: "one underlying form for one morpheme". This is the method practiced by

Table 10.6. Bloch's inflectional categories

	'die'	'look at'
Non-past indicative	sin-u	mi-ru
Past indicative	sin-da	mi-ta
Non-past presumptive	sin-oo	mi-yoo
Past presumptive	sin-daroo	mi-taroo
Imperative	sin-e	mi-ro/ø
Provisional	sin-eba	mi-reba
Conditional	sin-dara	mi-tara
Alternative	sin-dari	mi-tari
Infinitive	sin-i	mi-ø
Gerund	sin-de	mi-te

Table 10.7. McCawley's additional categories

	'die'	'look at'
Polite present	sin-imasu	mi-masu
Desiderative	sin-itai	mi-tai
Causative	sin-aseru	mi-saseru
Passive	sin-areru	mi-rareru

McCawley (1968), who, rather than listing two variant forms of the inflectional endings, as in Bloch's analysis, posits one underlying form, from which allomorphs are derived by phonological rules. Another move made by McCawley is the virtual obliteration of the boundary between the inflectional endings and auxiliary verbs. Thus, together with some of the regular inflectional categories posited by the Japanese grammarians and those posited by Bloch, McCawley treats the forms given in Table 10.7 in the same manner.

From a purely phonological point of view, McCawley's move appears to be justified by the fact that the same phonological rules that derive Bloch's inflectional endings also derive these auxiliary suffix forms. For example, just as the r of the provisional -reba drops after the consonant-ending stem, the r of the passive -rare is deleted after the consonant-ending stem in McCawley's analysis. However, as is clear from the traditional analysis, the inflectional endings and auxiliary verbs should be separated on morphological grounds, since while the former do not inflect, the latter do. It is this kind of morphological consideration that casts strong doubt on the validity of the analyses by Sakuma and Bloch (as well as McCawley). Indeed, both Sakuma's and Bloch's analyses are marred by the lack of principled categorization of elements and by the failure to obtain exhaustive analysis. In

examining Bloch's inflectional categories, one wonders with regard to the categories of the past presumptive -taroo and the conditional -tara whether they should not be further analyzed as involving the past indicative -ta and the endings -roo and -ra. Here, the status of the past indicative -ta as an inflectional category is itself in question. In fact, following the distinguishing criterion of whether a given form inflects or not, the traditional analysis regards the past tense suffix -ta as an auxiliary, which inflects as -taro(o) and -tara in the irrealis and the hypothetical categories. This, then obviates Sakuma's determined and Bloch's past indicative, past presumptive, and conditional categories.

Also, the categories of the gerund (-te) and the alternative (-tari) as inflectional categories in Bloch's analysis are dubious. These are treated as conjunctive particles in the traditional analysis along with -nagara 'while', -tutu 'concurrently', etc. Indeed, they all connect two clauses, the function not normally associated with the inflectional endings, e.g.

- (8) a. [Taroo ga terebi o mi]-te, Hanako ga zassi o yonda.

 NOM T.V. ACC watch-and NOM magazine ACC read

 'Taro watched T.V. and Hanako read a magazine.'
 - b. [Taroo ga terebi o mi]-tari, [Hanako ga zassi o NOM T.V. ACC watch-ALT NOM magazine ACC yon]-dari site i-ta.

read-ALT do be-PAST

'(There were a lot of things going on such that) Taro was watching T.V. and Hanako was reading a magazine.'

- c. Taroo wa [terebi o mi]-nagara zassi o yonda.

 TOP T.V. ACC watch-while magazine ACC read

 'Taro read a magazine while watching T.V.'
- d. Taroo wa [terebi o mi]-tutu zassi o yonda.

 TOP T.V. ACC watch-CONCUR magazine ACC read
 'Taro read a magazine concurrently watching T.V.'

One is, thus, left wondering why -nagara and -tutu, and other conjunctive particles are not recognized as separate inflectional categories when -te and -tari, which have the same grammatical function as the conjunctive particles, are recognized as constituting inflectional categories. (NB: Though the adverbial inflectional ending appears to conjoin clauses, e.g. Taroo wa [zassi o yomi] terebi o mi-ta 'Taro read a magazine and watched T.V.', it is not a conjunctive particle, for it must be followed by an auxiliary or a compounding verb, except when it is suspended as in the bracketed clause. Conjunctive particles never take on an auxiliary verb or a compounding verb.) A similar problem is seen with respect to Bloch's provisional

Traditional		Sakuma	Bloch	
Mizen	(Irrealis)	Negative		
Renyo	(Adverbial)	Formative	Infinitive	
Syuusi	(Conclusive)	Basic	Non-past indicative	
Rentai	(Attributive)			
Katei	(Hypothetical)	Hypothetical	Provisional	
Meirei	(Imperative)	Imperative	Imperative	
	•	Future	Presumptive	

Table 10.8. Comparison of the three analyses

-reba and Sakuma's hypothetical -reba. The traditional analysis recognizes the hypothetical category, but it differs from these two analyses in recognizing only -re as the inflectional ending, ba being treated as a conditional/hypothetical conjunctive particle. In fact, ba is a conjunctive particle that connects two clauses like other conjunctive particles.

(9) [Taroo ga terebi o mire]-ba Hanako wa zassi o yomu.

NOM T.V. ACC read-if TOP magazine ACC read

'If Taro watches T.V., Hanako will read a magazine.'

Now, by removing those categories that should not be considered as independent inflectional categories from Bloch's and Sakuma's analyses, we are left with the categories indicated in bold in Tables 10.5 and 10.6, and these are fairly similar to the traditional inflectional categories, though the labeling of each category differs. Table 10.8 provides a summary of the correspondences among the three treatments.

Let us now examine those missing slots. First, neither Sakuma nor Bloch recognizes the attributive category, which is recognized in the traditional analysis. For verbs and adjectives of Modern Japanese, the attributive forms and the conclusive forms are identical, as they fell together historically. However, the category distinction needs to be made with respect to the copula, whose conclusive form and attributive form are da and na, respectively. Also certain conjunctive particles that follow the copula must be subcategorized according to the inflectional categories, e.g. the concessive ga 'but' and noni 'even though' follow the conclusive form and the attributive form, respectively - e.g. $kirei\ da\ ga$ 'it's pretty but' vs. $kirei\ na\ noni$ 'even though it is pretty'. Thus, notwithstanding the coalescence of these categories in the other inflecting parts of speech, they must be recognized.

Next, the irrealis category in the traditional analysis and the negative category in Sakuma's analysis largely match, while no corresponding category is recognized in Bloch's analysis. Bloch analyzes the negative formation separately from inflec-

tion as a derivational process, which derives an adjectival form out of a verb. True, the negative forms inflect like adjectives, and considering the negative suffix not as an inflectional ending is correct, for it itself inflects. The question is what to do with the vowel a that occurs between the consonant-final root and the negative suffix nai, e.g. sin-a-nai. Bloch treats it as part of the negative auxiliary, i.e. -ana-i is the negative auxiliary that co-occurs with the consonant-final root. This solution, however, creates a situation where an auxiliary is directly attached to the root, rather than a stem, i.e. the combination of a root and an inflectional ending.

Sakuma's recognition of -a as an inflectional ending, together with the analysis of -na(i) as the negative auxiliary, is in line with the generalization about the verb formation discussed earlier; namely, that auxiliaries and particles follow a stem, not a root. However, labeling the -a-ending form as the negative form as in Sakuma's analysis leaves no category to which the voice suffixes belong. The traditional labeling "irrealis", or mizen, is broad enough, though lacking a semantic unity, to categorize both the negative and the voice suffixes. There is some equivocation in the treatment of the voice suffixes, however.

The causative suffixes seen in mi-sase 'look at-CAUS' and sin-a-se 'die-CAUS' can be analyzed in two ways. In the traditional analysis, the vowel a in the consonantfinal form is an inflectional ending of the irrealis category, while the inflectional ending for the vowel-final form is o. That is, there are two causative suffixes, -sase and -se, which are selected according to the shape of the root of the verb: vowelfinal roots select the former, and consonant-final roots the latter. The generative analysis, on the other hand, follows the slogan "one underlying form for one morpheme", and posits the sase form as the underlying causative form. The two surface forms are derived by the rule that deletes the initial s when the suffix follows a consonant-final verb root, i.e. $/mi + sase/ \rightarrow [misase]$, $/sin + sase/ \rightarrow [sinase]$. In this analysis the vowel a in question is treated as belonging to the suffix. A similar analysis is possible for the passive suffixes -rare and -re. The generative analysis removes the voice suffixes from the irrealis category, and the negative suffix will be the sole member of this category. Since there is no longer any particle that follows the irrealis category, this category can be abolished if we assign the inflectional ending -a of this category to the negative suffix. The negative forms, then, can be analyzed by positing a rule that deletes this a when the verbal root ends in a vowel, c.g. /mi + anai/ → [minai], /sin + anai/ → [sinanai]. This analysis is just as straightforward as the generative analysis of the voice suffixes.

While the generative analysis of the voice and the negative suffixes obviates the irrealis category, it threatens the generalization that auxiliary suffixes do not attach directly to the roots. The question of whether or not the irrealis category is to be maintained (with a more appropriate label, if desired) largely depends on how

significant this morphological generalization is and how strongly one adheres to the practice of generative phonology in setting up the underlying forms. In considering the latter practice, it should be noticed that not all morphemes can be analyzed as involving single underlying forms. For example, separate forms must be recognized for the imperative -e (for the consonant-final roots) and -ro/yo (for the vowel-final roots). We will take up this problem with regard to the causative and the passive suffixes in the next section.

The last disagreement between the traditional analysis and Sakuma's and Bloch's has to do with the category of what Sakuma calls the future form and what Bloch calls the presumptive (-voo, -oo endings). The forms of this category express a number of meanings; the presumptive meaning ('perhaps it will happen, perhaps X does Y') is fairly limited in Modern Japanese (this meaning being expressed by the presumptive form of the copula, daroo). The more prevalent meanings are cohortative 'let's do X' (e.g. Saa, ik-oo 'Now, let's go') and intentional or inclinational 'likely to' (e.g. Boku wa ik-oo to omo u 'I think I'm going'). The treatment of this form has been a real problem in the traditional analysis. The problem is caused precisely because this cohortative form (as we shall call it) arose in the Kamakura-Muromachi period. Historical research generally indicates that the form -yoo/-oo arose from the endings that attached to the irrealis ending. Because of this historical reason, school grammar generally subsumes the cohortative inflection under the irrealis category. However, the historical sound change has yielded a cohortative form that does not conform to the regular irrealis ending. Because of this, subsuming the cohortative under the irrealis results in positing two different inflectional endings for consonant-final roots in the irrealis category: sin-a(+nai) 'die-NEG', and sin-o(+o) 'die-COHORT'. Thus, subsuming the cohortative under the irrealis category, as in the traditional treatment, entails inconsistency in the form of inflectional endings, Furthermore, those auxiliaries, i.e. the negative and voice forms, that are subcategorized to the irrealis do not follow the cohortative ending. Therefore, if the inflectional categories were to represent the categories of inflected forms and of the auxiliaries and particles attaching to the stems, then subsuming the cohortative under the irrealis would not be a commendable solution.

A better solution is to posit a new cohortative category, as in Sakuma's and Bloch's analyses. The problem, however, still remains. That is, should the inflectional ending be -yoo and -oo, as in Sakuma's and Bloch's, or simply (-yo and) -o, as in the traditional analysis? The traditional analysis requires an additional auxiliary suffix, namely -o. This never inflects, in contradistinction to other auxiliaries, and its auxiliary status is thus questionable. Some therefore consider -o as a particle, while others classify it as an auxiliary with the justification that since not all verbs

Table 10.9 Standard inflectional categories and their
endings for Modern Japanese

		'die'	'look at'	Copula
Mizen	(Irrealis)	sin-a	mi-o	_
Renyoc	(Adverbial)	sin-i	mi-o	de
Syuusi	(Conclusive)	sin-u	mi-ru	da
Rentai	(Attributive)	sin-u	mi-ru	na
Katei	(Hypothetical)	sin-e	mi-re	na-ra
Meirei	(Imperative)	sin-e	mi-ro/yo	
Sikoo	(Cohortative)	sin-o	mi-yo	da-ro

and auxiliaries inflect for all the recognized inflectional categories, it is possible that some inflect for only one category, and furthermore that considering the cohortative auxiliary -o as the conclusive/attributive form achieves a generalization with respect to the elements that follow the cohortative forms (see Hashimoto 1969). (Another auxiliary that does not inflect or that inflects only for one category is the negative tentative mai.) We follow the traditional treatment on the matter of segmenting the forms -yoo and -oo, and recognize the cohortative category with its endings -yo (for vowel-final roots) and -o (for the consonant-final roots), with the additional -o being recognized as the cohortative auxiliary.

We have now arrived at the inflectional categories and endings, which constitute the standard inflectional paradigms found in the reference grammars for school children in Japan (see Table 10.9).

We shall now turn to the morphophonemic alternations that inflectional and auxiliary suffixes exhibit. A major problem here is determining whether formal variations ought to be accounted for in terms of phonological rules, i.e. deriving allomorphs from an underlying form, or should be accounted for in terms of the selection that roots and stems make, i.e. an analysis similar to the item-and-arrangement analysis. In both accounts, the final segment of a root and a stem is important, for a selection of allomorphs is largely made on this basis, and the applicability of phonological rules depends on it. As is obvious from the foregoing discussion and from the inflectional paradigm shown in Table 10.9, whether the root (and the stem) ends in a consonant or a vowel determines the shape of the following suffix. As pointed out earlier, the item-and-arrangement analysis is necessary for the imperative endings, since there does not seem to be any phonological motivation for deriving the allomorphs -e and -ro/yo by phonological rules (see the imperative category in Table 10.9). The other inflectional endings seem to be fairly straightforward cases that call for phonological rules. The forms that

follow the vowel roots, except for the irrealis and adverbial categories, can be considered to be underlying forms. Then, a rule that deletes r and y after a consonant will derive the forms that occur after consonant roots. It is this rule that can be utilized in deriving the voice suffixes from the underlying /rare/ (passive/honorific) and /sase/ (causative). However, a morphological consideration forces us to posit both /rare/ and /re/ as well as /sase/ and /se/, which attach to the irrealis stems. The long forms are selected by vowel roots and the short forms after consonant roots.

With regard to the irrealis and the adverbial endings, we can have either a selection analysis with the alternative forms being -a and \emptyset and -i and \emptyset , or posit the underlying forms /-a/ and /-i/, and derive the \emptyset forms by a phonological rule that deletes the vowels following a root vowel. For those who are wary of positing a zero morpheme, the rule analysis might be preferable.

In the proposed analysis, the auxiliary suffixes such as the negative -nai, the polite -masu, and the desiderative -tai are straightforward. The negative attaches to the irrealis stem, whereas the latter two follow the adverbial stem. (In the illustrations that follow, the boundary between the root and the inflectional ending is indicated by a hyphen and that between the stem (i.e. a root plus an inflectional ending) and the auxiliary suffix by a plus sign. The final i of the negative and the desiderative, and the final u of the polite, are respectively the conclusive ending for adjectives, to which these two auxiliaries belong, and the conclusive ending of verbs and verbal auxiliaries.)

'look at-NEG' (10) 'die-NEG' mi-ø + nai sin-a + nai [[inanai] [minai] 'die-POLITE' 'look at-POLITE' sin-i + masu mi-o+masu[[inimasu] [mimasu] 'die-DESI' 'look at-DESI' sin-i + tai mi-o+tai[[initai] [mitai]

A more complex situation arises in the suffixation of the past auxiliary -ta and the conjunctive particle te, both of which attach to the adverbial stem. When the root ends in a vowel or the sibilant s (no z- or d-final root occurs before the past morpheme), no problem arises, but when the root ends in other segments than these, a number of phonological processes take place. First, the following is a simple case involving a vowel root and a sibilant root.

(11) 'look at-PAST' 'lend-PAST' mi-o+ta kas-i+ta [mita] [kaʃita]

When the roots end in velars, the velars elide due to the historical sound change known as *onbin* (sound cuphony), which affected the velars preceding *i* in not only verb morphology but also in nouns as well: e.g. *suki-gaki* > *suigai* 'transparent fence'.

(12) 'write-PAST' 'smell-PAST' kak-i+ta kag-i+ta[kaita] [kaida]

It is noticed above that the root-final voiced velar has the effect of voicing the initial consonant of the past suffix. Other final consonants that have this voicing effect are: b, m, and n. Other voiced finals that do not trigger voicing are: r and w. Thus, this voicing phenomenon is triggered by the root-final voiced stops. One peculiar aspect of the *onbin* phenomenon is that the voicing takes place across the inflectional ending -i (see kaida in (12)). It is also irregular in that not all forms involving a t- or d-initial suffix, compounding verb, or particle are affected. For example, the desiderative -tai or its older form -tasi does not undergo the *onbin* phenomenon, e.g. kak-i+tai [kakitai] 'want to write', kag-i-tai [kagitai] 'want to smell'. Neither do the compounding verbs, some of which are much like a suffix, trigger the phenomenon, e.g. kak-i+tasu [kakitasu] 'add to what is already written', kag-i+dasu [kagidasu] 'begin to smell X'.

Another historical change also subsumed under the term *onbin* involves the other root-final consonants and the t-initial suffix and particle. The roots that end in b, m, and n elide the inflectional ending, and then assimilate to the suffix-initial consonant, b becoming nasal at the same time.

(13) 'fly-past'	'drink-past'	r' 'die-past'	
tob- i + ta	nom-i+ta	sin-i+ta	
[tonda]	[nonda]	[ʃinda]	

The roots ending in t, r, and w elide the inflectional ending and then assimilate the final consonants to the suffix-initial consonant.

(14)	'stand-PAST'	'cut-past'	'buy-past'	
	tat-i+ta	kir-i+ta	kaw-i+ta	
	[tatta]	[kitta]	[katta]	

These so-called *onbin* forms are products of historical sound changes, and before the changes, forms like kak - i + tari 'write-PERF', kag - i + tari 'smell-PERF', tob - i + tari

'fly-PERF', tat-i+tari 'stand-PERF', etc. occurred phonetically. How much synchronic validity these forms have as contemporary underlying forms is a matter of empirical question, which is hard to answer.

In addition to the regular inflectional paradigm discussed above, there are irregular ones involving the verbs kuru 'come', iku 'go', and suru 'do', and adjectives involve different inflectional endings. Since the (traditional!) paradigms for these forms, together with the regular verb paradigm, are found in any Japanese dictionary of a reasonable size, we will not deal with them here.

10.4 Transitive-intransitive pairs

In the preceding section we discussed the inflectional system of Japanese verbs at length. Our conclusion was that the suffixal auxiliaries (and conjunction particles) attach to the stem of a verb consisting of the root and an inflectional ending, rather than directly to the verbal root. Maintaining this morphological requirement entailed positing two different suffix forms for the causative and the passive morphemes, -sase, -se and -rare, -re, respectively, whereas the generative phonological analysis, which violates the morphological principle, posits only the long forms, deriving the short counterparts from the long forms by phonological rules. This section examines the forms of the transitive—intransitive verb pairs and potential forms by way of showing that there is another level of suffixation and that the positing of two suffixes each for the causative and the passive morpheme finds some support elsewhere.

Table 10.10 below lists five groups of transitive—intransitive verb pairs that show a certain subregularity.

In addition to these major groups of pairs, there are some irregular pairs, e.g. sin-u 'die' and koros-u 'kill', ot-i-ru 'drop (intr.)' and ot-os-u 'drop (tr.)', etc. Among the five groups shown below, Group (a) contains the greatest number of pairs, and the suffixes -ar and -e appear to show some degree of productivity. Thus, a new intransitive form such as uw-ar-u 'get planted (of a tree)' has been derived from the transitive counterpart u(w)-e-ru 'plant (a tree)' by adding the intransitive suffix -ar to the verb root, and a new transitive form tunag-e-ru 'connect' has been derived by adding the transitive suffix -e to the root tunag-, despite the fact that this root already has the transitive-intransitive pairs in the forms of tunag-u 'connect' and tunag-ar-u 'be connected'. This limited productivity notwithstanding, the transitivizing and intransitivizing suffixes here are irregular in that they cannot be freely chosen. The transitive form of ag-ar-u 'rise (intr.)' must take -e rather than the -as seen in nak-as-u 'make cry', and vice versa.

Whereas many studies on the transitive-intransitive pairs stop at the level of just listing pairs in the following manner, a further analysis reveals an interesting fact.

Table 10.10. Transitive/intransitive verb pairs

	Intransitive		Transitive		
Group a	-ar		-е		
	ag-ar-u	'rise'	ag-e-ru	'raise'	
	atum-ar-u	'gather'	atum-e-ru	'gather'	
	tam-ar-u	'accumulate'	tam-e-ru	'accumulate	
	tom-ar-u	'stop'	tom-e-ru	'stop'	
Group b	-0	-e			
	ak-u	'open'	ak-e-ru	'open'	
	itam-u	'be damaged'	itam-e-ru	'damage'	
	ir-u	'enter'	ir-e-ru	'put in'	
	ukab-u	'float'	ukab-e-ru	'float'	
Group c	-e -as				
	ar-e-ru	'be ruined'	ar-as-u	'ruin'	
	okur-e-ru	'be late'	okur-as-u	'postpone'	
	ta(y)-e-ru	'be extinct'	tay-as-u	'annihilate'	
	ko(y)-e-ru	'become fat'	koy-as-u	'fatten'	
Group d	-0		-as		
	aw-u	'meet'	aw-as-u	'unite'	
	kusar-u	'spoil'	kusar-as-u	'spoil'	
	nak-u	'cry'	nak-as-u	'make cry'	
	wak-u	'boil'	wak-as-u	'boil'	
Group e	-е		-ø		
	or-e-ru	'be broken'	or-u	'break'	
	ur-e-ru	'be sold'	ur-u	'sell'	
	sak-e-ru	'split'	sak-u	'split'	
	hag-e-ru	'tear off'	hag-u	'tear off'	

Those pairs that show subregularity yield the following suffixes: -ar and -e as intransitivizing suffixes and -as and -e as transitivizing suffixes. Among these suffixes, the -e may be an inflectional ending - perhaps the second adverbial ending. Now, the suffixes -ar and -as show striking resemblance to the contemporary passive suffixes, -rare and -re, and causative suffixes -sase and -se, which we recognized in the preceding section. The connections between passivization and intransitivization and between transitivization and causativization are widely observed in other languages, and the formal resemblances here indicate that in an earlier stage of Japanese, many intransitive verbs were derived by suffixing passive suffixes and many transitive verbs by suffixing causative suffixes.

Evidence that the passive suffix -re must be posited, in addition to the long form -rare, comes from the development of the potential verbal form. Historically, the suffixes -rare and -re (as well as their older forms -rar and -r) have had

multiple functions of marking the passive voice, the potential, the spontaneous, and the honorific form. Thus, theoretically a form such as kak-a+re-ru (write-IRREALIS + passive-CONCL) 'to be written' was multiply ambiguous ranging over the four readings. Among these four functions, another potential form, e.g. kak-e-ru, developed in the course of historical development. Subsequently, this new form became the normal, accepted potential form, with the result a form such as kak-a+re-ru being ambiguous only in three ways. Now, this new potential form involves the suffix -e, which can be argued to relate to the -re form of the passive/ potential/spontaneous/honorific. Indeed, the suffix -re manifests with the initial consonant in potentials derived from the vowel-final roots, as in mi-re-ru 'can see' and tabe-re-ru 'can eat'. These forms, however, are not accepted as correct usage (yet), and the more traditional counterparts $mi-\theta + rare-ru$ and $tabe-\theta + rare-ru$ are said to be the correct potential forms. Notwithstanding the substandard status of these new potential forms, the fact remains that the suffix -re was/is somehow available to speakers of Japanese, and whereas the traditional analysis of the passive and the causative suffixes recognizes such a suffix, the generative phonological analysis does not.

The development of new potential forms shows another interesting morphological point. Whereas the suffixal auxiliaries do not attach directly to the verbal root, always involving an inflectional ending, the potential suffix -(r)e attaches directly to the verbal roots. In this sense, it is much like the transitivizing and intransitivizing suffixes. Perhaps because of this, the potentials involving the suffix -(r)e are called "potential verbs" in the traditional framework, rather than being analyzed as involving a suffixal auxiliary. Thus, there are two levels of suffixation in Japanese; at one level, suffixes attach directly to verbal roots (transitivizing and intransitivizing suffixes as well as the new potential suffix), and at the other level, suffixal auxiliaries call for mediating inflectional endings. The difference does not correlate with the productivity of the forms, since the formation of new potential verbs is as productive as the derivations involving suffixal auxiliaries. Whether or not this difference in the level of suffixation has any theoretical significance remains to be seen.

10.5 Compounds

Compounding is by far the most productive process of new word creation. In Japanese, compounding is a particularly productive process for it combines all categories of elements as the examples below indicate.

(15) Native compounds:

a. N-N : aki-zora 'autumn sky' kona-yuki 'powdery snow'

b. A-N : maru-gao 'round face'

tika-miti 'short cut'

c. Vi-N: watari-dori 'migratory birds'

nomi-mizu 'drinking water'

(Vi = infinitive, or adverbial, form of a verb)

(16) Sino-Japanese compounds:

a. N-N : ki-soku 'rule'

hu-bo 'parents'

b. A-N : syoo-u 'slight rain'

koo-ri 'high interest'

c. V-N: si-ketu 'stopping of bleeding'

satu-zin 'manslaughter'

(17) Hybrid compounds:

a. S-J-native: dai-dokoro 'kitchen' b. native-S-J: to-kei 'clock' sekiyu-sutoobu 'oil stove' c. S-J-foreign: 'towel cloth' d. foreign-S-J: taoru-zi e. native-foreign: ita-tvoko 'chocolate bar' f. foreign-native: 'glass window' garasu-mado g. foreign-foreign: teeburu-manaa 'table manner'

Among the compounds in which the second element is a noun, noun-noun compounds are the most numerous. Enlarging the class of compounds to include forms in which the second element is the infinitive form of a verb or an adjective stem, we find that the N-Vi type is the most numerous, e.g.

(18) a. N-Vi : yuki-doke 'snow-melting'

tume-kiri 'nail clipper'

b. A-Vi : naga-tuzuki 'long lasting'

haya-zini 'premature death'

c. Vi-Vi : tati-yomi 'reading while standing'

hasiri-zukare 'fatigue due to running'

d. N-As: hara-ita 'stomachache'

iro-ziro 'fair skinned'

e. As-As : taka-hiku 'high-low'

f. Vi-As: kire-naga 'long-slit (as of eyes)'
(Vi = infinitive form of a verb, As = adjective stem)

Most of the resulting compounds belong to the categories of nouns or verbal nouns. The native compounds having nouns as their second element, e.g. (15), are all nouns. Among the S-J compounds, those that do not have a verbal element

are all nouns, while those which do, e.g. (16c), are either verbal nouns, such as si-ketu 'stopping of bleeding', or nouns, as satu-zin 'manslaughter'. All hybrid compounds are nouns. For compounds having the infinitive form of a verb or an adjective stem as their second element, it is difficult to predict which category they will belong to. Forms with adjective stems as their second element, (18d-f), are, for the most part, nouns. Those forms having as their second element the infinitive form of a verb, such as the N-Vi forms in (18a), are either nouns or verbal nouns. The examples in (18a) all happen to be nouns and do not take the dummy verb suru: *yuki-doke-suru. However, such forms as ki-zukare 'mental weariness' and mizu-asobi 'water play' are verbal nouns and, consequently, can take suru: ki-zukare-suru 'to be mentally weary', mizu-asobi-suru 'to play in the water'. On the other hand, A-Vi forms and Vi-Vi forms typically fall into the category of verbal nouns.

A comparison between S-J and native Japanese compounds indicates that the order of the elements in a compound reflects the normal word order of Chinese and Japanese. Both these languages exhibit a modifier-head linear order; accordingly, the typical adjective-noun and adverbial-verb order is reflected in compounds, e.g.

- (19) a. aki no sora ← aki-zora 'autumn sky' autumn of sky 'sky of autumn'
 - b. maru-i kao ← maru-gao 'round face' round face'
 - c. wataru tori → watari-dori 'migratory birds' migrate bird 'birds that migrate'
 - d. pen de kaku ↔ pen-gaki 'pen writing' with write

'write with a pen'

- e. Hawai de yakeru
 → Hawai-yake 'Hawaiian tan'
 Hawaii in get-tanned
 'get tanned in Hawaii'
- f. ki ni noboru → ki-nobori 'tree climbing' tree to climb
 'climb up a tree'
- g. gaikoku kara kaeru → gaikoku-gaeri 'foreign returnee' foreign country from return 'return from a foreign country'

- h. otoko yori masaru ↔ otoko-masari 'mannish' man than surpass 'surpassing a man'
- i. hito to tukiau
 → hito-zukiai 'socializing'
 person with associate
 'associate oneself with people'
- j. tyotto miru ↔ tyotto-mi 'glimpse' slightly look 'look slightly'

The Japanese subject-verb order is also reflected in the following:

(20) a. Yuki ga tokeru.

yuki-doke 'snow-melting' snow nom melt 'Snow melts.'
b. Asi ga nagai.

asi-naga 'long legged' leg long 'Legs are long.'

The major difference between S-J and native Japanese compounds with respect to the order of compounded elements occurs in forms that reflect the verb-object relationship. While Japanese is an OV language, Chinese exhibits VO order. This difference is accordingly reflected in compounds: the native compounds have N-Vi order, and the S-J compounds V-N order. Compare the following synonymous words in which the (a) examples are native and the (b) examples Sino-Japanese:

```
(21) a. hito-gorosi
                         'manslaughter'
        person-killing
     b. satu-zin
                         '(ditto)'
        kill-person
(22) a. ti-dome
                         'stoppage of bleeding'
        blood-stop
     b. si-ketu
                         '(ditto)'
        stop-blood
(23) a. tosi-kosi
                         'passing of a year'
        vear-pass
     b. etu-nen
                         '(ditto)'
        pass-year
(24) a. iro-zuke
                         'coloring'
        color-apply
     b. tyaku-syoku
                         '(ditto)'
        apply-color
```

Since the S-J pattern of V-N is deeply ingrained in the Japanese language, even recent S-J coinages made within the realm of the Japanese language follow this pattern. In the case of S-J forms that reflect subject-verb order, the situation is not quite as clear. Many words, as can be seen below, have the V-N order of the transitive pattern seen above, although N-V forms, e.g. (25d), occasionally occur:

(25) a. raku-yoo 'falling leaves'
fall-leaf
b. syuk-ka 'the outbreak of a fire'
crupt-fire
c. gyoo-ketu 'the coagulation of blood'
coagulate-blood
d. niti-botu 'sun-set'

The V-N pattern of the forms based on the intransitive structure seen above may be understood either as being due to the influence of the transitive pattern, which predominates in the compounding phenomenon, or as a reflection of the Chinese word order of a special type of sentence. In the tradition of Chinese grammar, the intransitive sentences that typically depict the occurrence of a phenomenon, such as the falling of rain and the outbreak of fire, are called "phenomenon sentences", and they, unlike other intransitive sentences, exhibit the verb-subject (i.e. V-N) order. Since all these intransitive subject-verb compounds are in fact analogous to the phenomenon sentences, in which the subjects are patients rather than agents, the latter interpretation appears to be correct.

For two-word S-J compounds then, the V-N pattern is predominant. However, when longer transitive compounds are made, the Japanese pattern, reflecting N-V (of object-verb) order, prevails, e.g. [yu-syutu]-[sei-gen] (export-limit) 'limiting of export', [buk-ka]-[too-sei] (price-control) 'price-control'.

There are two major issues relating to the semantic interpretation of compounds involving nouns and verbal elements. One, a major issue in recent discussions of compound formation, has to do with the grammatical function of the nominal element that can be compounded. Examination of the correlations shown in (19) between the compounds and their phrasal paraphrases reveals that in the case of Japanese, the nominal elements of compounds paraphrase into various grammatical relations. Despite this wide possibility, there is a definite pattern recognized. First, as in other languages, nominals corresponding to the subjects of transitive verbs are lacking, though there are some sporadic forms violating this general pattern, e.g. musi-kui (bug-cating) 'eating by a moth'. Even those nominals that correspond to the subjects of intransitive verbs are of specific type; namely, they are patients rather than agents. That is, while forms like ame-huri 'rain-falling' and kata-kori 'shoulder-

stiffening' abound, we do not find compounds like *kodomo-naki 'child-crying' and *uma-hasiri 'horse-running'. Among the non-subject functions, the object is the relation most frequently associated with the nominal elements of the compounds under discussion.

The other issue concerned with the semantics of compounds that merits further study has to do with the denotation of the resulting compound forms and the semantic connection between the compounding elements. In the Noun-Noun compounds, forms ending with nin 'person' or sya 'person' normally designate the agent of the action denoted by the first element of the compound. Kenbutu-nin (sightseeing-person) is a sight-seer, and annai-nin (guide-person) is a guide. However, there are forms in which the denotee is the patient, such as siyoo-nin (use-person), which means employee, not employer, which is siyoo-sya (use-person). Similarly perplexing is the contrast between words such as asobi-nin (play-person) and asobi-tomodati (play-friend); the former is a "playing-person", i.e. a person who seeks easy money, but the latter means a playmate.

Understanding the connection between compounded elements often requires extremely elaborate explanations. *Tyoo-musubi* (butterfly-tie), for example, is a way of tying a ribbon such that the result looks like a butterfly (i.e. a bow knot). One of the more horrendous compounds of this type is *uguisu-bari* (nightingale-flooring); its meaning is something like: 'the boarding of a floor such that when people walk on it the boards squeak, emitting sounds like the singing of a nightingale as a warning of their (enemies') approach'. (Actually, the sounds of the *uguisu-bari* floors, found in castles and temples, are more like the squeaking of mice.)

Despite occasional oddities like those above, most compounds with the infinitivized form of a verb as their second element have fairly regular patterns of meaning. The most basic and perhaps the original meaning of a given compound of this type, from which all other extended meanings were derived, is the denotation of the event itself expressed by the elements of the compound. These are like the nominalization of a verb phrase by the suffixation of an infinitive, or adverbial, ending, though the results, containing no particles and modifying elements, are distinctively words rather than phrases. Thus, mizu-maki (water-spraying) is the act of spraying water, and yama-nobori (mountain-climbing) is the act of mountain climbing.

Many forms, however, take on additional, extended meanings. For example, hito-gorosi (man-killing) can be either manslaughter or a killer. That is to say, the agent of the designated action, as well as the action itself, are both denoted by the same compound word. Very often this agentive meaning assumes the entire range of the meaning, supplanting the denotation of the action. E-kaki (picture-painting), for instance, denotes a painter, and no longer the act of painting itself. (Curiously, the basic meaning denoting the act of painting obtains when the beautification prefix o- is attached as in o-e-kaki 'painting'.) Sumoo-tori (wrestling-doing) 'Sumō

wrestler', kami-yui (hair-dressing) 'hairdresser', uta-utai (song-singing) 'singer' are some additional examples of this phenomenon.

Note that many of these agent-denoting compounds are translated into the agentive -er forms in English. In English this suffix can refer not only to a human agent, but to an instrument used to carry out the specified action as well. For example, washer is an instrument for washing, and a (floor) waxer is a machine used for waxing floors. Interestingly, this same extension of the agentive meaning to cover instruments has also occurred in Japanese. Tiri-tori (dust-collecting) is a dustpan, keito-arai (yarn-washing) is a detergent for washing woolen clothes, and ha-migaki (tooth-polishing) is toothpaste.

There are, as well, certain forms that denote the location in which the specified action takes place. Mono-hosi (thing-drying) is a place for drying laundry, te-arai (hand-washing) is a lavatory, and huna-watasi (boat-crossing) is a ferry terminal. Since these forms can themselves be compounded with ba 'place', as in mono-hosi-ba (thing-drying-place), we might consider the locative compounds listed above to be either abbreviations of the ba-compounds themselves or further extensions of meaning to the instrumental reading. As can be seen from the above examples, the compounds derived from transitive verbs generally denote agents or instruments rather than objects or patients. Hito-gorosi (man-killing) 'manslaughter/killer', for example, does not refer to the victim. Likewise umi-zuri (sea-fishing) 'fishing at sea' cannot mean that which is caught at sea. There is, however, one semantic field in which the compounds almost exclusively do denote objects, rather than agents or instruments. Curiously enough, it is the field of culinary terms. For example, kaki-age (stirring-frying) '(a kind of tempura)', asa-zuke (light-pickling) 'pickles lightly pickled', and tako-yaki (octopus-grilling) 'round dumpling-like snack with octopus bits in it' all refer to something that is made rather than the person or an instrument that makes it.

Characteristically, the first elements of all these compounds denote modification of the verb or subsidiary materials used rather than the objects affected. Kaki-age is a tempura dish made of vegetable pieces that are stirred and mixed in the dough (the kaki part), and then fried (the age part). Tako-yaki (octopus-grilling) is not really grilled octopus. Rather, it is a round dumpling-like food that has octopus bits as its main ingredient. Otya-zuke (tea-dipping) and nori-maki (seaweed-rolling) are of the same type; the former denotes cooked rice, often with dried-fish shavings, seaweed, or other flavorings, over which Japanese tea is poured, and the latter, sushi rolled with seaweed. (Among non-food objects, tyoo-musubi (butterfly-tying), uguisu-bari (nightingale-flooring) mentioned earlier, as well as ittoo-bori ([one knife]-carving) 'carving with one knife,' and mae-kake (front-hanging) 'apron', belong to this class of compounds.)

However, compounds that denote objects of actions are not all like this, and

there are in fact many forms in which the first element does denote the very object affected, the meaning of the compound then being the effect of the verbal second element upon the nominal first element. *Ika-yaki* (squid-broiling), unlike *tako-yaki* (octopus-grilling) mentioned above, is actually broiled squid, *tamago-yaki* (eggfrying) is a rolled-up fried egg, *yasai-itame* (vegetable-sauteing) refers to sauteed vegetables, and *ume-bosi* (plum-drying) denotes dried and pickled plums. Again, some of the compounds in this class display, at best, a rather far-fetched connection between the elements compounded, and the meaning of such a compound itself is rather difficult to arrive at from the meaning of the compound elements. If one asks for *tai-yaki* ('seabream-baking'), one can expect neither baked seabream nor a pie with seabream meat in it; but rather a kind of baked snack filled with bean-jam, which is made in the shape of a seabream (the favorite fish of the Japanese).

Earlier, we noted the parallel extension of agentive meaning to the instrumental meaning that has occurred with some Japanese compounds and in English with the forms having the -er suffix. It also happens that certain English -er forms express objects rather than agents or instruments. For example, broiler denotes not a person who broils, but a chicken for broiling. (Broiler can, of course, denote the broiling instrument itself.) Likewise, a frier can be either a person or an implement that fries, or something to be fried. A prisoner is not a jailor, but the one who is imprisoned.

As discussed more systematically in the next section, the kinds of compound being discussed here are lexical compounds such that they are listed in the lexicon. However, when similar compounds are newly created, they sometimes interact with syntactic elements, e.g. [izime-rare]-kko ([bully-PASS]-child) 'a child tending to be bullied' and [mirai no hazu]-sagasi ([future of husband]-search) 'search for a future husband'. In the first example, the first element is an infinitival verb form containing the passive morpheme izime-rare 'bully-PASS'. This form itself is not an independent noun and occurs only as a compound element, as in the above example or in [izime-rare]-zuki ([bully-PASS]-one who likes) 'one who likes to be bullied'. The form [mirai no hazu]-sagasi 'search for a future husband' is also interesting, for it contains a phrase with the particle no 'of' within its first element. Another example of this type of compounding, found in a newspaper advertisement, is [zyosei no kimoti]-doroboo (woman's heart-thief) 'a stealer of a woman's heart' used in reference to a popular movie actor. Compounding in general, however, does not allow the involvement of a phrasal element, and indeed, forms such as those cited here are quite rare in Japanese as well. When they do occur, they tend to appear in commercial messages created for the nonce or in broadcasting of sports events, which contain certain lexicalized forms, e.g. [tiisana henka]-kyuu ([small

change] ball) 'a ball that deflects slightly as in a curve or shoot', which originate in instantaneous compound creation.

There are two additional types of compounds in Japanese that are not very frequently seen in English or in other European languages. One is the so-called dvandva compound that expresses a coordinate relationship among the compound elements, while the other is the verb compound.

In English the compound in which two members have the same status as head – the dvandva compound – most frequently appears as a prenominal modifier: e.g. mother-child interaction, employer-employee relationship. The use of dvandva compounds in Japanese is much wider and more frequent. While many have three or more elements, as in oya-ko-mago 'parent-child-grandchild', the most frequent ones have just two. The ordering of elements is fixed and is determined largely on the basis of the notion "priority": positive > negative (yosi-asi 'good and bad'), up > down (ten-ti 'heaven and earth'), right > left (migi-hidari 'right and left'), male > female (dan-zyo 'man and woman'), old > young (oya-ko 'parent-child') – but new > old (sin-kyuu 'new and old') – superior > subordinate (zyoosi-buka 'superior and subordinate members of an organization'), inside > outside (uti-soto 'inside and outside') – but far > near (atti-kotti 'there and here') – etc. (cf. Kageyama 1982).

Compound verbs are of several types. Some are noun-verb combinations, while others are adverb-verb combinations. Still others are verb-verb combinations. Among these, the first two classes reflect the syntactic order of sentence elements, as shown below:

```
(26) a. Subject-verb

Awa ga tatu ↔ Awa-datu 'bubble up'
bubble NOM rise

Iro ga tuku ↔ Iro-zuku 'become colored (as of flowers)'
color NOM put on
b. Object-verb

Na o tukeru ↔ na-zukeru 'to name'
name ACC attach

Yuuki o tukeru ↔ yuuki-zukeru 'to encourage'
courage attach
c. Adverb-verb

tikaku ni yoru ↔ tika-yoru 'come closer'
near to come
```

wakaku kaeru ↔ waka-gaeru 'to become young again'

young return

Once again, the combination of a subject and transitive verb is almost entirely lacking. These noun-verb and adverb-verb forms, however, are not as numerous as the nominalized compounds discussed above. Indeed there are a great many gaps between the nominalized compounds and verb compounds of this type. For example, in the case of awa-datu 'bubble up' seen above, there is a corresponding nominalized form, awa-dati 'foaming'. The compound iro-zuku 'put on a color', however, does not have a corresponding nominalized form iro-zuki. On the other hand, there is the nominal niku-zuki (flesh-put on) 'well-fleshedness', but no corresponding verbal form niku-zuku. In the majority of cases, an N-Vi compound exists but the corresponding N-V verbal form does not, e.g. hon-yomi (book-reading) but no hon-yomu (book-read).

Far more numerous than the N-V or Adv-V compounds are verb-verb compounds. The verb-verb compounds can be classified into three groups on the basis of the semantic relationship that holds between the first verb and the second. First, there are those in which the first verb modifies the second. This type is similar to English expressions such as *break open*, in that the first verb expresses the manner in which the action denoted by the second verb is carried out. Let us represent this type of compound as V/m-V. The second type is the inverse of the first in that here the second verb modifies the first. Typically, the second verb expresses any of various aspectual meanings. Let us then call this the V-V/m type. The last type contains two verbs that possess an equal level of importance, and we will therefore refer to it as the V-V type. Some examples of these three classes follow:

```
(27) a. V/m-V type:
        naguri-korosu
                           (beat-kill)
                                            'kill by beating'
        kiri-taosu
                           (cut-fell)
                                            'fell by cutting'
        kami-kiru
                           (bite-cut)
                                            'cut by biting'
     b. V-V/m type:
        kaki-ageru
                           (write-raise)
                                            'write-up'
        ii-tukusu
                           (say-exhaust)
                                            'say exhaustively'
        koware-hazimeru
                           (break-begin)
                                            'begin to break'
     c. V-V type:
        naki-wameku
                           (cry-shout)
                                            'cry and shout'
        tobi-haneru
                           (jump-spring)
                                            'jump and spring'
```

Compounds of the V/m-V type allow paraphrasing such as nagut-te korosu (beat-CONJ kill) 'kill by beating' in which the second verbal element alone has the predicate function. The V-V/m type compounds do not allow this kind of paraphrasing, as kaki-ageru 'write up' does not yield *kai-te ageru. The second verbal

element in compounds of this type is more like a suffix in that it often does not preserve the original meaning of the verb. For example, ageru of kaki-ageru 'write up' means 'to raise' in isolation. However, in compounds such as kaki-ageru and si-ageru ('do-raise') 'finish up', ageru does not possess its isolate meaning; rather it expresses the notion of completion, just as up metaphorically takes on the meaning of completion in the English glosses. Secondly, transitive aspectual verbs such as hazimeru 'begin' and tuzukeru 'continue' are used in compounds, irrespective of the transitivity of the compound. Hazimeru, for example, is transitive as opposed to its intransitive counterpart hazimaru. But in the compound forms, the transitive form hazimeru is exclusively used, even when the sentence itself is intransitive by its nature, e.g. Ame ga huri-hazimeta 'It began to rain' (lit. 'The rain began to fall'), Hana ga siore-hazimeta 'The flowers began to wilt.' These facts indicate that in V-V/m compounds, the second verbal elements are in the process of losing their independent status, and may before too long be reduced to verbal suffixes having aspectual meanings.

V-V type compounds are rare compared to the other two types. They might be paraphrased as 'do X-ing and Y-ing', e.g.

(28) naki-sakebu ↔ nai-tari saken-dari suru cry-shout cry-and shout-and do

'do crying and shouting'

10.6 Post-syntactic compounds

As noted earlier, some of the noun compounds discussed above seem to show some interaction with syntax. However, such an interaction is rather sporadic, and this limited interaction of the compound elements with syntactic elements outside the compounds indicates that they are by and large formed in the lexicon. We present here a case of compound formation that is claimed to take place not in the lexicon but at the post-syntactic, and possibly phonological level. On the one hand, the post-syntactic compounds are words, for their formation obeys the constraints on word formation to which lexically formed compounds (hereafter "lexical compounds") are subject, and on the other, they are distinct from lexical compounds in that the members making up the compounds have independent syntactic status. Our claim, then, is that in Japanese there are two types of compounds, those formed in the lexicon and those formed post-syntactically outside of the lexicon.

What are claimed to be post-syntactic compounds are of two kinds. One type derives from a clausal structure embedded under a noun phrase and headed by formal nouns denoting various notions of time relations, e.g.

```
(29) [...] no N (native)
a. [...] no ori '(on) the occasion of'
b. [...] no setu '(at) the time when ...'
c. [...] no akatuki '(at) the happy occasion of'
(30) [...]-N (Sino-Japanese)
a. [...]-tyuu 'in the middle of'
```

b. [...]-go 'after'
c. [...]-sidai 'as soon as'
The clauses headed by these nouns ar

The clauses headed by these nouns are regular clauses except that their predicates are Sino-Japanese verbal nouns, which do not express tense by themselves. (They must be supported by the verb suru 'do' in order to carry the tense.) Now, these clauses may consist of the predicate and nominal arguments with appropriate case particles, and in this shape they are no different from other clauses except for the two properties mentioned, i.e. they involve S-J verbal nouns as predicates and they do not carry tense in the relevant construction. However, they may also appear in the form in which the case particle of one of the nominals is missing. Thus, we observe the following synonymous pairs of expressions:

- (31) a. [sensei ga kaigai o ryokoo] no sai
 teacher NOM abroad ACC travel of occasion
 '(on) the occasion of the teacher's traveling abroad'
 - b. [sensei ga kaigai:ryokoo] no sai '(ditto)'
- (32) a. [Yamada-san ga tyuukosya o hanbai]-tyuu

 Mr. NOM used car ACC sell middle

 'in the middle of Mr. Yamada's selling used cars'

 b. [Yamada-san ga tyuukosya:hanbai]-tyuu

 '(ditto)'

Notice that, although the clauses in question are translated in the nominalized form in English, they are in fact regular clauses in Japanese exhibiting the regular case-marking patterns. What is peculiar in the (b) versions above is that the object nominals do not have the expected accusative case particle o. Our claim is that these combinations of the object nominal and the predicate, indicated by the bold face, are compound words created post-syntactically by deleting the case particle.

The other post-syntactic compounds derive from the noun phrase consisting of two nominals mediated by the genitive particle no. Again, the particle-less forms are claimed to be compounds formed post-syntactically.

- (33) a. biru no kansei
 building GEN completion
 'the completion of a building'
 - b. biru:kansei '(ditto)'
- (34) a. betonamu no sinryaku

 Vietnam GEN invasion

 'the invasion of Vietnam'
 - b. betonamu:sinryaku '(ditto)'

Our argument for the claim that these noun-verb combinations are indeed compound words takes the form of presenting evidence that these combinations both show the formal characteristics of a lexical compound and obey constraints on word formation which the lexical compounds also obey. For the sake of simplicity, we mostly concentrate on the first type of post-syntactic compounds (see Shibatani and Kageyama (1988) and Kageyama and Shibatani (1989) for further detail).

There are five major considerations that point to the conclusion that the present phenomenon constitutes a word formation process. The first consideration is formal, and has to do with the lack of particles. As discussed elsewhere (see Chapter 11), the particles such as the topic wa, the nominative ga, and the accusative o are dropped in Japanese, but this is a characteristic of informal colloquial speech. However, one domain in which these particles are legitimately absent is the compounds, in which nouns and verbs are joined together without intervening particles. This formal property of the lexical compounds is shared by the post-syntactic compounds. These post-syntactic compounds are, in fact, not part of informal colloquial speech, as they typically occur in formal letters or newspapers.

A second consideration has to do with one of the principles of word formation that prohibits tense inflection on an element of a compound. Thus, taxidrover, church-wenter, etc. are not possible. This is also true with the Japanese lexical compounds in that the compounds involving the verbal elements have these in the infinitive, or adverbial, forms (see above). Thus, yama-nobori 'mountain climbing' is possible but yama-nobo-ru (mountain-climb-PRES) is not. The post-syntactic compounds also obey this constraint, and the expressions involving tense-inflected forms do not undergo compounding even though the head is one of those that trigger post-syntactic compounding.

(35) a. [Nakasone-san ga Amerika o hoomon-suru] sai

Mr. NOM America ACC visit-do occasion

'the occasion when Mr. Nakasone visits America'

b. *[Nakasone-san ga Amerika:hoomon-suru] sai

The (b) version, which contains the tensed verb (as expressed by the dummy verbal element *suru*), is only possible as an informal colloquial expression. Compare this with the perfectly well-formed formal expression in (36b) below, which lacks the tense in the embedded clause.

(36) a. [Nakasone-san ga Amerika o hoomon] no sai

Mr. NOM ACC visit GEN occasion

'the occasion when Mr. Nakasone visits America'

b. [Nakasone-san ga Amerika:hoomon] no sai

'(ditto)'

A third morphological principle that the post-syntactic compounds obey has to do with the grammatical relations of the nominals involved. As seen above, the Japanese lexical compounds involve nominals holding various grammatical and syntactic relations (see e.g. (19), (26)). However, most predominant are the ones involving the relations of the subject of an intransitive verb and the object of a transitive verb. Extremely rare are those involving the relation of the subject of a transitive verb. This is in line with the general properties of word formation such as compounding and noun incorporation (see Mithun (1984) and the section on noun incorporation in Part 1 of this book). This systematic avoidance of the transitive subject in word formation processes is also shared by the post-syntactic compounds, as evidenced by the impossibility of (37c).

- (37) a. Intransitive subject
 [hikooki:tuiraku]-go
 airplane crash after
 'after the airplane crashed'
 - b. Transitive object
 [sensei ga kaigai:ryokoo]-tyuu ni
 teacher NOM overseas travel middle in
 'in the middle of the teacher's traveling overseas'
 - c. Transitive subject
 *[Nakasone-san: Amerika o hoomon] no sai
 - d. Transitive subject (OSV order)
 *[Amerika o Nakasone-san:hoomon] no sai

The impossibility of (37c) may be explained in terms of another principle discussed presently, but the fact that even the subject contiguous to the predicate, as in (37d), cannot be compounded shows that the grammatical relation plays an important role here. Another manifestation of the principle excluding the transitive subject is that the derived compounds involving a verb whose transitive and intransitive forms are identical yield the ambiguous readings that the involved nominal holds the subject relation of the intransitive version of the verb or that the nominal is the object of the transitive version. This is the case in (33b) above, which can be used in the sense that the building has come to the completed state or that someone has completed the building. That the transitive subject interpretation is impossible is seen in the example in (34b) above, which only means that Vietnam is the party to be invaded (the object reading), while the phrasal counterpart, (34a), is ambiguous in the two readings of Vietnam's being invaded (the object reading) and its invading another country (the subject reading).

The next lexical property that the post-syntactic compounds also show has to do with the morphological integrity that words in general exhibit; namely, words do not permit adverbs or parenthetical elements to intrude into them. Thus, a compound word such as theater-going does not allow an adverb like often to intrude, as shown by the ill-formedness of *theater-often-going. The (b) example below shows the applicability of this condition to post-syntactic compounds.

(38) a. Yooroppa o nonbiri ryokoo-tyuu ni

Europe ACC leisurely travel middle in

'in the middle of traveling Europe leisurely'

b. *[Yooroppa: nonbiri ryokoo]-tyuu ni

Finally, there is the principle that prohibits a phrasal element from being involved in word formation. A phrase such as sly fox cannot be part of a compound, as sly fox-hunting is not a possible compound, where sly is interpreted to be forming a phrase with fox. The same is true with the Japanese lexical compounds, and a form like ookina yama-nobori (big-mountain climbing) is impossible. Now, the post-syntactic compounds too obey this restriction against involving a phrase in word formation, as (39b) is not well-formed.

- (39) a. [muzukasii zikken o syuuryoo]-go
 difficult experiment ACC complete-after
 'after the completion of a difficult experiment'
 - b. *[muzukasii zikken:syuuryoo]-go

All these facts show that what we are calling post-syntactic compounding is indeed a word formation process rather than a simple particle deletion phenomenon. Particle deletion in informal speech or in newspaper headlines does not

(40) a. Lexical compounds

obey these principles of word formation. Our claim that the present phenomenon is post-syntactic, rather than lexical, word formation is burdened by the responsibility for showing, on the one hand, that the phenomenon is a word formation phenomenon like lexical compounding, and that it is different from lexical compounding, on the other. That is, we now need to point out those properties of the post-syntactic compounds that are not shared by lexical compounds and that are explainable if we assume the syntactic basis for them.

The first property discussed points out a phonological property that contradicts the phonological notion of a Japanese word. But our claim is that this property is due to the post-syntactic nature of this compounding process. The property in question has to do with the pitch pattern. In Japanese a word (more strictly a minor phonological phrase, which a word typically constitutes - see Chapter 8) has at most one stretch of high pitch. The lexical compounds, and those syntactically formed words (see Chapter 11) follow this pattern, but the post-syntactic compounds do not.

'overseas travel'

```
kaigai- ryokoo
  LH HH H LL
  katei- hoomon
                 'home-visit'
  L HH HL LL
  mimi-soozi
                 'ear-cleaning'
  LH HLL
b. Syntactic compounds
  aruka- se-ru 'make X walk'
  LHHHL
  nagura- re-u 'to be beaten'
  LHH HL
  naguri- ta-i 'want to beat'
  LHHHL
```

c. Post-syntactic compounds

kaigai:ryokoo (tyuu) '(while) traveling overseas' HL LL HH Amerika: hoomon (tyuu) '(while) visiting America' LHHHLHHH mimi: soozi (tvuu) LH LHH '(while) cleaning an ear'

This disparity in the pitch patterns between the lexically and syntactically formed words on the one hand, and the post-syntactically formed words, on the other, can be easily accounted for if we assume that post-syntactic compounds are derived after the phonological rules have assigned pitches to the phrasal constituents. That is, the post-syntactic compounds, which show the same pitch patterns as the corresponding phrases (except for the presence and absence of the particle), simply inherit the phrasal pitch patterns, while the lexically and syntactically formed words obey the regular phonological rules that apply to the word unit.

Another property of the post-syntactic compounds that suggests their syntactic origin has to do with the fact that the number and the nature of the nominal arguments that co-occur with the post-syntactic compounds are exactly the same as those that co-occur in the corresponding clausal expressions, except for the one that is compounded. Thus, if an intransitive clause undergoes post-syntactic compounding, there will be no independent argument left, if a transitive clause is involved, the subject nominal remains, and so on (see (37)). This can be most straightforwardly accounted for if we assume a syntactic (or clausal) basis for the post-syntactic compounds.

The post-syntactic compounds also show the results of their interaction with other syntactic rules. Thus, their verbs may have undergone honorific marking at the time when compounding took place. Such an interaction is not possible with the members of lexically formed compounds, as indicated by the following contrast.

- (41) a. [sensei ga kaigai:go-ryokoo]-tyuu ni teacher NOM overseas HON-travel middle in 'in the middle of the teacher's traveling (honorific) overseas'
 - b. sensei no seito-sidoo teacher GEN student guidance 'teacher's student guidance'
 - c. *sensei no seito-go-sidoo

(42) Taroo wa senzitu,

HON

Finally, the post-syntactic compounds, as opposed to the lexical compounds, do not form an anaphoric island such that their nominals can form anaphoric relationships with pronouns occurring elsewhere. For example,

TOP the-other-day used car sell middle in them
no itidai o kowasite simatta.

GEN one-car ACC damaged ended-up
'The other day, in the middle of selling used cars, Taro ended up damaging one of them.'

[tyuukosya_i: hanbai]-tyuu ni sorera_i

That a lexical compound forms an anaphoric island can be seen from the following, where the lexical compound tyuukosya-hanbai 'used car sale' is used.

(43) *Amerika de wa, tyuukosya_i-hanbai o suru toki wa, sorera_i
in TOP used-car-scale ACC do when TOP them
ni hosyoo o tukenakereba naranai.

DAT guarantee ACC put-not-if won't do
(Lit.) 'In America, when you do used-car sales, you must put a guarantee on them.'

Again, the account that the post-syntactic compounds are syntactically based can explain the difference easily by saying that the surface structure, which has not undergone post-syntactic compounding, is the input to the anaphoric interpretation. Thus, all in all, the phenomena presented above show that, in addition to the lexically formed compounds, Japanese possesses post-syntactically formed compounds. The fact that both types of compound formation obey the same principles of word formation has a significant theoretical implication. Namely, the principles of word formation are not localized in the lexicon; rather they form an independent module which controls word formation in various domains of grammar. Thus, whether word formation takes place in the lexicon, in the syntax, or in the post-syntactic phonological component, it is susceptible to the principles of word formation. What we have observed here are lexical word formation and post-syntactic word formation. In Chapter 11 we will observe word formation that takes place in the syntax. Japanese, thus, exhibits extremely interesting properties of word formation, as it takes place in three major components of grammar.

10.7 Abbreviation

As seen above, compounding is one of the favorite word formation processes in Japanese. One of the consequences of this is the need to accommodate lengthy words. However, Japanese, unlike, for example, German, does not seem hospitable to lengthy words. Native Japanese words are not very long, generally being somewhere between two to four moras. The most common morpho-phonological shape for Sino-Japanese words is that of two morphemes and of three or four moras. Indeed, there are very few single-morpheme, two-mora S-J words, which is perhaps a reflection of the phonological preference manifested by the Chinese language. In fact, just so as to maintain the phonological balance, many S-J words are even composed of two morphemes which have the same meaning, e.g. ki-soku (rule-rule) 'rule', too-ka (light-fire) 'light', setu-dan (cut-sever) 'sever'. The vast majority of non-derived words have two moras or less, and noun compounds typically have four moras. These two factors appear to have led Japanese to set its standard word

size at two to four moras. However, compounding often produces words that are longer than this standard, and there is a tendency in the language to attempt to confine them to the limits of the ideal word size. The mechanism that Japanese uses to accomplish this is abbreviation, which is extremely common and which is sometimes applied ruthlessly, practically mutilating the original forms.

Abbreviation is applied to both native and S-J compounds e.g. hiru-mesi (day-meal) \rightarrow hiru 'lunch' (Native), seiyoo-siki (Western-style) \rightarrow yoo-siki 'Western style' (S-J). However, since S-J words are far more capable of combining to produce longer compounds, they are more often subject to abbreviation. Another favorite target for abbreviation is foreign loan words. As mentioned earlier, foreign loans are resyllabified so as to meet the requirements of the Japanese phonological system and thereby result in forms that are often far longer than the original words in their native language. Again, since Japanese has the tendency to avoid long words wherever possible, abbreviation is applied ruthlessly, e.g. sutoraiki \rightarrow suto '(labor) strike'.

There are several patterns of abbreviation: (i) clipping of everything after the first few moras, e.g. suto '(labor) strike', panku 'puncture'; (ii) clipping of the entire first or second part, or the middle part, e.g. 'platform' > $purattohoomu \rightarrow hoomu$, 'supermarket' > suupaa $maaketto \rightarrow suupaa$, 'ham and eggs' $\rightarrow hamu$ eggu; (iii) the selection of a mora or two from each member of the compound, e.g. kookyookigyoo-tai ('public-enterprise-body') $\rightarrow koo-ki-tai$, gakusei-waribiki ('student discount') $\rightarrow gaku-wari$. Among these, the favorite method is the one exemplified by the last example, in which the initial moras of each member of the compound are picked and combined to form a new word. The resulting word thus conforms to the morpho-phonological pattern seen in the basic form of S-J compounds. Recent abbreviations of this type are $paso-kon \leftarrow paasonaru$ konpyuutaa (< particle personal putter), $pai-con \leftarrow paikuro-conpuutaa$ (< particle micro computer) and particle maikuro-conpuutaa (< particle micro computer) and particle micro computer and part

Abbreviation sometimes applies even to phrases. Among recent popular expressions are: natukasi no merodii 'long-for melodies' \rightarrow natu-mero, mune ga kyun to naru 'the heart aches (for you)' \rightarrow mune-kyun. Notice that the resulting forms conform to the standard pattern for compounds. Indeed, certain compounds appear to have arisen as a result of abbreviation of phrases. For example, [azituke]-nori (season-put-seaweed) 'seasoned seaweed' can be considered as an abbreviation of azi o tuke-ta nori 'seaweed that has been seasoned'. Other examples include sumi de yaku suteeki 'steak that is broiled with charcoal' \rightarrow [sumi-yaki]-suteeki 'charcoal broiled steak' and tosi ga wakai tuma 'a wife whose age is tender' \rightarrow [tosi-waka]-zuma 'tender-age wife'.

Abbreviated hybrid words such as natu-mero, pointed out above, confuse not

only foreigners but also the Japanese themselves, and they are sometimes used without a precise understanding of their original components. Another type of mind boggler results from abbreviation of Japanese-made compounds of foreign words, such as beesu-appu (< base-up) 'raising of one's base salary' \rightarrow be-a, pantiisutokkingu (< panty-stocking) \rightarrow pan-suto, hangaa-sutoraiku (< hunger strike) \rightarrow han-suto. For foreigners, phonological alteration and semantic changes applied to words from their native languages are by themselves enough to throw them off balance. These abbreviated foreign loan compounds often lie completely beyond their comprehension.

Grammatical structure

11.1 Word order and related phenomena

Japanese is an "ideal" SOV (Subject-Object-Verb) language in the sense that the word order of "dependent-head" is consistently maintained with regard to all types of constituent. Thus: (a) nominal relations are expressed by postpositional particles (1a); (b) the demonstrative, numeral (plus classifier) and descriptive adjective precede the head noun in that order (1b); (c) the genitive noun precedes the possessed head noun (1c); (d) the relative clause precedes the modified noun (1d); (e) the proper noun precedes the common noun; (f) the adverb precedes the modified verb (1f); (g) auxiliaries follow the main verb; and (h) the comparative expression takes the order standard-marker of comparison-adjective. In addition, like other typical SOV languages, questions are formed by the addition of the sentence final particle ka (1i). Also, unlike English, there is no movement of a wh-element in a wh-question (1j).

- (1) Basic word order
 - a. Taroo ga Hanako ni hon o yatta.

NOM DAT book ACC gave

'Taro gave a book to Hanako.'

- b. sono san-nin no ookina otoko that three-person of big man 'those three big men'
- c. Taroo no hon

of book

'Taro's book'

d. [Taroo ga katta] hon NOM bought book

'the book Taro bought'

e. Taroo ozisan

uncle

'uncle Taro'

- f. hizyooni hayaku hasiru very fast run 'run very fast'
- g. ik-e-nai go-can-not 'cannot go'
- h. Taroo yori kasikoi from smart 'smarter than Taro'
- i. Taroo ga kita. → Taroo wa kita ka.

 NOM came TOP came Q

 'Taro came.' 'Did Taro come?'
- j. Taroo ga hon o katta. NOM book ACC bought
 - 'Taro bought a book.'

 → Taroo ga nani o katta ka siranai.

 NOM what ACC bought Q know-NEG
 '(I) don't know what Taro bought.'

The parallelism between the Japanese form and the English gloss in (1b) is deceptive. In Japanese, the modifiers involving deictic forms (e.g. sono 'that') are not, strictly speaking, like a demonstrative in English, which does not allow any further modification, e.g. *John's that book. The deictic forms are etymologically analyzable as consisting of the locative nouns and the genitive particle no 'of', i.e. sono 'that' < so-no; functionally they are like other nominal modifiers, which, except for compound forms, invariably involve the genitive particle, e.g. Taroo no hon 'Taro's book', diagaku-kyoozyu no ozisan (university-professor of uncle) 'uncle who is a university professor'. These nominal modifiers, including the ones involving numerals (and classifiers), do not terminate the expansion of a noun phrase, so that forms like ookina so-no issatu no Taroo no hon (big that-of one of Taro of book) are possible. Indeed, Japanese has no functional category of determiners comparable to the English determiner system, which, consisting of demonstratives, articles, and genitives, terminates the expansion of a noun phrase.

As the comparison of (1a) and (1i) indicates, the case-marking system, realized in terms of postpositional particles, follows the nominative-accusative pattern, with the subjects of both transitive and intransitive clauses being marked by the particle ga, and the object of a transitive clause by o. However, certain verbal predicates, which typically express the notion of direction, govern the nominative-dative case pattern, e.g. kansya-suru 'thank', yorikakaru 'lean', katu 'win', makeru 'lose', sitagau 'obey', etc. Also, there are certain stative predicates that exhibit different case alignments from these basic patterns, but they will be discussed separately below.

While the basicness of the SOV order is beyond question (as indicated by text frequency and native speakers' intuition), Japanese does allow reordering of preverbal major constituents; i.e. it exhibits the phenomenon often referred to as "scrambling". The important consideration, however, is that the verb must not move from sentence-final position. This strict verb-final requirement sets Japanese apart from other SOV languages like Turkish in which the verb can also be scrambled. This verb-final requirement has a significant repercussion in the wordorder-related phenomenon of "gapping", in which repeated constituents are deleted or "gapped". Since the verb-final requirement must be satisfied, gapping cannot take place in the forward direction, which would have the effect of gapping the repeated verb of the second conjoined clause; only backward gapping, which guarantees a verb-final structure, is permitted in Japanese, in contradistinction to Turkish, which, being free from the verb-final requirement, allows both backward and forward gapping. Japanese, in other words, shows a consistent contrast with an SVO language like English in respect to the direction of gapping. Thus, whereas Japanese allows (2b), English permits (2c) below.

- (2) a. Taroo ga ringo o tabe, sosite Hanako ga mikan o tabeta.

 apple eat and orange ate

 'Taro ate an apple, and Hanako ate an orange.'
 - b. Taroo ga ringo o ø, sosite Hanako ga mikan o tabeta.
 (lit.) 'Taro an apple, and Hanako ate an orange.'
 - c. *Taroo ga ringo o tabe, sosite Hanako ga mikan o o. (lit.) 'Taro ate an apple, and Hanako an orange.'

One often encounters an expression which, at first glance, appears to violate the verb-final requirement, e.g.

(3) a. Kita yo, Taroo ga. (lit.) 'Came, Taro.'

This kind of expression is typically found in colloquial speech, which is characterized by the presence of a sentence-final particle (FP) such as the soft confirmatory yo, as in the above example. This prima facie violation of the verb-final requirement is in fact distinct from the reordering effected by scrambling. The post verbal element in this type of expression is best considered as something that has been appended to the end of a sentence as an afterthought. Indeed, the intonation pattern shows that the afterthought element is tacked onto the end of a sentence; the verb (and the final particle) is uttered with the falling intonation characteristic of a sentence-final element, and the afterthought element is uttered anew with a low, flat intonation pattern.

Scrambling thus allows six sentence variants for a ditransitive sentence like (1a). However, not all permitted variants show an equal degree of naturalness. The difference between the natural variants and the unnatural ones can be easily stated if scrambling is characterized as a fronting operation. That is, when more than one constituent is fronted, awkwardness results, as shown below:

(4) a. Taroo ga Hanako ni sono hon o yatta.

NOM DAT that book ACC gave

'Taro gave that book to Hanako.' (Basic order)

- b. Hanako ni Taroo ga sono hon o yatta. (Fronting of the indirect object)
- c. Sono hon o Taroo ga Hanako ni yatta. (Fronting of the direct object)
- d. 'Hanako ni sono hon o Taroo ga yatta. (Fronting of both indirect and direct object)
- e. 'Sono hon o Hanako ni Taroo ga yatta. (Fronting of both indirect and direct object)
- f. Taroo ga sono hon o Hanako ni yatta. (Fronting of the direct object to post-subject position)

Scrambling most commonly occurs only within the main and subordinate clauses. However, a constituent can also be scrambled out of a subordinate clause and placed in front of the main clause subject to a restriction on the fronting of a subordinate constituent such that a subject constituent cannot be scrambled out of the subordinate clause. This restriction is seen in the contrast of the wellformedness of (b) and (c) below.

(5) a. Taroo ga [Hanako ga sono hon o kaita] to omotteiru. that book wrote that thinking

'Taro thinks that Hanako wrote that book.'

- b. Sono hon o [Taroo ga [Hanako ga o kaita] to omotteiru]
- c. *Hanako ga [Taroo ga [o sono hon o kaita] to omotteiru]

The illformedness of (5c), that is, the restriction against the fronting of the subject of a subordinate clause, may perhaps be due to the perceptual problem that a structure like (5c) entails, as the sentence is incorrectly parsed in such a way that the scrambled constituent is taken to be the subject of the main clause and the subject constituent of the main clause is taken to be that of the subordinate clause. However, that this restriction is fully grammaticized can be seen from the fact that even a structure that does not permit incorrect parsing is equally ungrammatical.

For example, the (b) version below is just as bad as (5c), even though pragmatic knowledge prevents incorrect parsing.

(6) Taroo ga [sono hon ga ii] to omotteiru.

that book good thinking

'Taro thinks that that book is good.'

b. *Sono hon ga [Taroo ga [o ii] to omotteiru]

It is not easy to specify precisely the semantic effect that scrambling brings about; one detects only mild emphasis on the fronted constituent when it is not stressed. On the other hand, scrambling does bring about a clear effect on the interpretation of logical scope and a certain kind of antecedent-pronoun relationship. For example, observe the following contrast:

(7) a. Minna ga dareka o aisiteiru.

all someone loving

'Everyone loves someone.'

b. Dareka o minna ga aisiteiru.

(Equivalent in interpretation to: Someone is loved by everyone.)

The (a) expression allows ambiguous interpretation with regard to the scope of the universal quantification; namely, "for all x, there is y, such that x loves y" and "there is y, for all x, such that x loves y," but the scrambled version allows only the second interpretation. For the antecedent-pronominal relationship, observe the following examples from Saito (1985):

- (8) a. *Kare; ga [Hanako ga Taroo; ni okutta tegami o] mada yonde-inai.

 he sent letter yet read-NEG

 'He has not yet read the letter that Hanako sent to Taro.'
 - b. [Hanako ga Taroo; ni okutta tegami o] kare; ga mada yonde inai.

Example (8a) is ungrammatical if read in such a way that kare 'he' and Taroo are understood to be coreferential, but the sentence becomes grammatical with such a reading once scrambling fronts a direct object nominal containing the antecedent nominal. Actual situations involving the antecedent-pronoun relationship are far more complex than what is indicated here, but at least the effect that scrambling has on this relationship is clearly shown by the above examples. In other words, scrambling or reordering of constituents by fronting not only puts mild emphasis on the fronted constituent, but also has profound repercussions on the semantic interpretation of a sentence.

In addition to the fronting of a constituent by scrambling, Japanese has two additional mechanisms that front a constituent: topicalization and passivization.

Delineation of the functions of these processes, which exhibit overlapping syntactic effects, is a major task to be included in any attempt to arrive at a satisfactory description of Japanese.

11.2 The topic construction

Another major task for Japanese grammarians has been explication of the differences between the following two types of sentences.

(9) a. Hi ga nobor-u.
sun NOM rise-PRES
'The sun rises.'
b. Hi wa nobor-u.
TOP
'The sun rises.'

Formally, these sentences differ in terms of the particles ga and wa, which are respectively glossed as nominative and topic particles. Past studies, especially those dealing with Modern Japanese, have thus pursued the task of explicating the differences between wa and ga as if the particles themselves are associated with particular meanings. Kuno (1973:37, 38ff), for example, "attempt[s] to answer all these questions [regarding 'the distinction in meaning between wa and ga'] by examining various uses of wa and ga, pinpointing their meanings, and defining the restrictions of their distribution."

Kuno distinguishes two kinds of wa and three kinds of ga, labeling them: "thematic wa", "contrastive wa", "descriptive ga", "exhaustive-listing ga", and "objective ga". Kuno's representative uses of these particles and their meanings in the form of English equivalent expressions are as follows (Kuno's "objective ga" will be discussed separately):

(10) a. Thematic wa: "Speaking of ..., talking about ..."

John wa gakusei desu.

student is

'Speaking of John, he is a student.'

b. Contrastive wa: "X..., but..., as for X..."
Ame wa hutte imasu ga...
rain falling is but
'It is raining, but...'

c. Descriptive ga (neutral description of actions or temporary states):
 Ame ga hutte imasu.
 rain falling is

'It is raining.'

d. Exhaustive-listing ga: "X (and only X) ..." "It is X that ..."

John ga gakusei desu.

student is

'(Of all the people under discussion) John (and only John) is a student.' 'It is John who is a student.' (Kuno 1973:38)

The present study considers these "meanings" of wa and ga to be epiphenomenal rather than basic to these particles. A deeper analysis must seek the fundamental differences between the two types of sentences such as (9a) and (9b) from which explanations for the epiphenomena fall out automatically. The same applies to the often noticed association of given/old information and the topic construction. We shall thus first examine the fundamental differences between (9a) and (9b).

The sentences in (9) differ semantically – and structurally (see below) – despite the identical translations provided. This identity in the translations reflects the fact that both sentences have similar propositional content. In other words, the semantic effects brought about by the particles ga and wa are extra-propositional. Indeed, the contrast between the two sentences cannot be always expressed. The contrast obtains only when the proposition in question is expressed as an independent sentence, and when it is expressed as a subordinate clause, generally only the ga version obtains. We will thus approach the meaning differences between (9a) and (9b) by way of explicating the contexts in which these sentences can be appropriately used.

Sentences such as (9a) with the particle ga are typically used in the descriptions of events or states. For example, (9a), with the present-tense verbal form, can be appropriately uttered when the rising of the sun is witnessed. In this context, the sentence is better translated as something like "(Oh/Look,) the sun rises!" or "There rises the sun!" Indeed, this kind of sentence implies a certain amount of surprise or exclamation that accompanies the discovery or witnessing of an event or state.

Sentence (9b), on the other hand, is a more context-free expression, precisely because its fundamental function is that of conveying a generic statement. (9b), in other words, is usable in the context where one is describing (from the geocentric viewpoint) a general property of the sun. Indeed, (9b), with the present-tense verbal form, cannot be used in reporting a specific event. (Notice that the same is true with the translation "The sun rises" with normal statement intonation.)

It is from this kind of observation that certain Japanese grammarians have distinguished between (9a) and (9b) in terms of whether a sentence represents a description of an event/state or a judgment regarding an entity. (Notice Kuno's term "descriptive ga".) This is a good enough first approximation. However, since a description of an event itself involves a judgment of some kind on the part of the

speaker, a more careful study must recognize different kinds of judgment or some other way of characterizing the difference.

Matsushita Daizaburō (1878–1935) was among the first grammarians to delineate the difference under discussion in terms of the establishment or non-establishment of the conceptual entity as an object of judgment, i.e. topic. According to Matsushita (1928:598), the sentences of the (9a)-type represent descriptions of an event made directly without establishing a topic. On the other hand, the (9b)-type sentences establish a topic and make judgment upon it. Matsushita's description here, especially regarding the topic sentence, is the culmination of the efforts of grammarians, both native and foreign, that have dealt with the function of the particle wa. The studies by Matsushita and his predecessors are significant, because they attempt to explicate what the notion of "topic" or "theme" represents, while many contemporary grammarians are simply content to label a certain constituent as topic or theme with tacit reliance on the reader's intuition as to what it means. Setting aside further discussion on the two types of judgment distinguished by Matsushita for the time being, we shall concentrate on the basic properties of the particle wa.

In contemporary studies, the topic construction, as represented by (9b), is normally discussed in comparison with the non-topic form, represented by (9a), which has had the effect of focusing on the differences between the topic particle wa and the nominative particle ga because the wa-marked topic nominal typically corresponds to the ga-marked nominative nominal in grammatical function – but see below. This effect is unfortunate since the issues involved do not really pertain to the particles per se; rather the issues pertain to the entire aspect of the sentence. That is, the issues that must be addressed are those regarding the effect the particle wa brings to the whole sentence, rather than how the particle wa differs from the nominative particle ga. In this regard, traditional grammarians were more fortunate, for their data, Classical Japanese, did not have the nominative particle ga, this particle being primarily used as a genitive particle (see section 11.5 below).

Within the tradition of Japanese grammatical studies, the earliest remarks on the particle wa appear in the eighteenth century. The key terms employed in these studies are "emphasis" and "separation". Toganoi Michitoshi in his Teniha abikizuna (1770) characterizes wa as "the letter [word] that has the effect of making judgment emphatic or describing an entity by separating [it from others]". While a number of interpretations of these early Japanese grammarians' characterizations of the function of wa are possible, and indeed further interpretations are necessary in order to appreciate the implications of them, the essential ideas in these and other remarks are clear enough: wa separates an entity from the rest of things and has the effect of making an emphatic judgment.

The notion of "emphatic judgment" must be interpreted carefully, since the presence of emphasis is not always clear in every topic-containing sentence. Indeed the notion of emphasis can only be clearly appreciated when embedded in the context of contrast. Thus emphasis (and the occurrence of Kuno's "contrastive" wa) is observed most clearly when there is a contrasting sentence either appearing overtly or implied covertly, as in the following:

- (11) a. Taroo wa tosyokan ni itta ga, hon wa yomanakatta.

 TOP library to went but book TOP read-NEG-PAST
 'Taro went to the library but did not read a book.'
 - b. Ame wa hutteiru ga yuki wa hutteinai.
 rain TOP raining but snow TOP raining-NEG
 (lit.) 'The rain is falling, but the snow isn't falling.'

When no such contrasting proposition exists, there is little emphasis one can detect in the topic construction; i.e. a situation of Kuno's "thematic wa" obtains. In this case, the notion of emphasis needs to be interpreted much more abstractly. Namely, when we make a categorical judgment such as "The sun rises" and "Man is mortal", we are always isolating or singling out these propositions from other possible ones, and thus the contrast is inherent in this kind of judgment, but it only becomes apparent when a parallel or contrasting proposition exists overtly or covertly. In the words of Sansom (1928:258), "It [wa] marks, however, not an emphasis modifying a proposition, but an emphasis inherent in every proposition."

Kuno's "contrastive wa", then, is due to the inherent nature of wa as an emphatic particle (understood as above), whose emphatic force becomes more pronounced when there is a contrasting proposition. That is, there aren't two distinct wa's, or two distinct meanings associated with wa, as suggested by the labels "thematic" wa and "contrastive" wa; rather, one and the same wa has the effect of emphasizing the contrast when the discourse environment provides a background for contrast.

The notion of separation is also multiply ambiguous. In the broadest sense, it echoes the above discussion on the emphasis of judgment; namely what is expressed by the wa-containing sentence as a whole is isolated from other possible propositions. In one of the narrow senses, the notion of separation applies to an item marked by the particle, most typically a noun phrase. In this sense, the particle wa separates or singles out the referent of the preceding noun phrase from other entities. It is in this sense that W.G. Aston remarked in his A Grammar of the Japanese Written Language (1872:51) that: "Wa is used not only to isolate or single out one or more objects from a number, but to contrast one object with another."

Whereas Aston's sense of separation emphasizes the separation of an entity from other general objects, there is another sense of separation that can be ascertained

from the characterization of wa by Fujitani Nariakira in his $Ayuish\bar{o}$ (1778); namely, "[Wa] separates an entity and makes a judgment [about it]." This notion of separation closely corresponds to the philosophical notion of the recognition of an entity or object to be judged. What is separated is a unit of existence and corresponds to the concept of subject, a central entity of what is to be known, in metaphysics and to the subject of judgment in traditional logic (cf. Kuroda 1972, 1976). The characterization of wa by Fujitani is thus similar to the notion of subject in Western philosophy, and the concept of separation in the sense of Aston automatically follows from this more narrowly defined notion of separation.

To continue in philosophical terms, what is to be known or judged is a state of affairs (Sachverhalt). Wa as a separating particle, in the sense of Fujitani, isolates an entity from this state of affairs to be known; i.e. it has the function of setting up two terms: one, a central entity of what is to be known, and the other, the function which materializes the existence of the state of affairs involving the central entity. In the jargon of traditional logic as well as of grammar, these two terms correspond to "subject" and "predicate".

An important point to be recognized here in connection with the notion of wa as a separating particle is that it also "unites" the two terms separated. The mode of judgment underlying the wa-expression is that of distinguishing two terms of a state of affairs to be known and that of affirming (or disconfirming) the connection of the two terms. Again, in the words of Sansom (1928:258), "the mental process by which any logical proposition is formed consists of two stages, first an analysis and then synthesis." This "connecting" aspect of wa is likened to the logical and grammatical copula by a number of grammarians (Yamada 1908 inter alia). Sansom notes that: "There does not seem to be any fundamental difference between the function of wa in hi wa atsushi ['fire is hot'] and the function of 'is' in 'fire is hot'." That is, wa in the form of the proposition {A wa B} has as much the function of connecting copula in {A is B} as it has the function of separating A and B. Thus, the so-called topic construction in Japanese, in fact, closely corresponds to the subject-predicate paradigm in the tradition of Western philosophy and grammar. Finally, notice that the notional definition of the subject of Western languages as "what we are talking about" (Chafe 1976) also fits the Japanese topic understood as above.

An early description of wa as a topic marker is found in Arte da lingoa de lapam (1604-8) by João Rodriguez, where wa, transliterated as va, is said to "point out, present, call attention to, specify, or list up, the preceding word". As in the contemporary practice in translating the wa phrase, Rodriguez also likens the wa expression to the Portuguese expressions o homen 'the man' and quanto a foam 'as for/with regard to someone'.

Among the Japanese grammarians, Fujitani Nariakira was again the first to point out the topic-presenting function of wa. Also in Ayuishō, he remarks that "wa is a particle that receives a topic, which is the theme of a poem [read sentence – MS]." Matsushita (1928) defines the notion of topic as "[a word] that presents the object of judgment" (p. 712).

The close correspondence between the concept underlying wa and the notion of subject in Western philosophical and grammatical tradition calls into question the need for a separate term "topic" in addition to the well-established term "subject". However, at the level of grammatical description, it is necessary that the Japanese wa-phrase be distinguished from the subject of Western languages such as English, since they are not grammatically equivalent in a number of important ways and since there is another unit in Japanese that shows closer syntactic resemblance to the subject of Western languages. This terminological problem arises because English and other Western languages do not structurally distinguish the subject as an object of judgment and the subject as a syntactic category. Japanese calls for such a distinction, as we shall see, and the topic (the subject in the former sense) needs to be distinguished clearly from the syntactic subject.

The above discussion details the type of judgment underlying the topic construction. Morishige (1965) calls this kind of judgment "conceptual judgment", and Kuroda (1972, 1976) adopts the term "categorical judgment" in the Brentano-Marty theory of judgment. The term "experiential judgment" recently proposed by Uchida (1989) might be most descriptive, as this type of judgment is largely based on one's experience. Thus a form such as (9b) Hi wa noboru "The sun rises" is not only contextually unbound but is also uttered with full knowledge that sometimes the sun does not rise, i.e. when cloudy. Morishige points out that a sentence representing this type of judgment is paraphrasable by {...mono da} 'X is a thing of Y property'. The generic sentence Hi wa noboru 'The sun rises', in other words, is a close equivalent of Hi wa noboru mono da 'The sun is a thing that rises.'

The other type of judgment that underlies the non-topic construction is called "realistic judgment" by Morishige and "perceptual judgment" by Uchida, and this appears to correspond to the "thetic judgment" in the Brentano-Marty theory (Kuroda 1972, 1976). In this judgment, a state of affairs is grasped as a whole without the analysis characteristic of the experiential judgment, and this characteristic is likened to the pattern of the nominalized expression $\{...koto\ yo\}$ (koto = 'that' $yo = vocative\ particle$) 'say, it is that ...' by Morishige. Saying $Hi\ ga\ noboru$ 'The sun rises' is like saying $Hi\ ga\ noboru\ koto\ yo$ 'It is the rising of the sun'. Indeed, the favorite pattern of a perceptual judgment used in women's speech takes this nominalized format. Thus upon a sudden discovery of a scene of blooming flowers,

a female speaker is most likely to utter: "Maa, hana ga utukusii koto" "Oh, how beautiful the flowers are!/ (lit.) Oh, that the flowers are beautiful."

To summarize then, the essential difference between the experiential judgment and the perceptual judgment is that while the former, as detailed above, involves the analysis of a state of affairs into two units corresponding to the traditional notions of subject and predicate and the affirmation of the connection between them in the light of the speaker's experience, the latter judgment involves no analysis of this kind. Instead, a state of affairs is grasped as a whole with the judgment involved being that of the recognition, through perception, of a state of affairs itself and its participants.

With the above understanding of what underlies the notion of topic, we now turn to the connection of the topic to the given/old-new distinction, a connection that has been discussed in the tradition of the Prague School linguistics in terms of the concept of communicative dynamism – how much a given entity contributes to furthering communication by way of providing new information. The particle wa has also been discussed in this light by Chafe (1970) and more thoroughly by Kuno (1973). Again, Japanese grammarians antecede these studies in this area as well. One of the earliest that correlates the topic and the notion of given is Matsushita. In his $Hy\bar{o}jun\ Nihon\ K\bar{o}go-h\bar{o}$ (Standard Colloquial Grammar of Japanese) (1930:339), he notes that: "Among the concepts that enter in making a judgment, there are those that are already determined [i.e. given – MS] and can be freely choosable and those that are undetermined [i.e. new – MS] and can be freely choosable. The topic is the former and the comment is the latter." Matsushita illustrates these correlations in the following ways:

(12) TOPIC

a. Watasi wa hon-kai no rizidesu.

determined
unchangeable
non-free

'I am a trustee of this organization.'

b. NON-TOPIC

Watasi ga hon-kai no rizidesu.

changeable

free

'I am the trustee of this organization./ The trustee of this organization is I.'

In the textbook descriptions of wa and ga, one encounters explanations echoing the following observation: "If the center of the thought is on the subject ga is used,

and conversely if it is in the predicate wa is used" (Imbrie 1914). It is the notion of given and new that underlies this notion of the center of thought or importance. What is given is presupposed and thus less important and what is new (or perhaps more accurately what is the focus of new information – see below) is the "center of thought" to which attention is focused. Thus, in (12a) the speaker, by virtue of his presence, is given and the predicate part is new; and indeed this type of sentence is used when someone is informing the addressee what the speaker is. (12b), on the other hand, is used when the addressee does not know who the trustee is, although he presumably assumes that someone is the trustee, and thus the predicate part is given and the subject part is new. We shall explicate the notions of old and new in a more precise form below.

While this kind of explanation of the use of wa and ga goes a long way towards the description of the actual occurrences of these particles, something fundamental needs to be said regarding the relationship between the notion of given and the topic, or regarding the question as to why it is the topic construction that is associated with the notion of given in the first place. In answering this question we must again return to the fundamental of the experiential judgment that underlies the topic construction. That is, the correlation of wa and the notion of given is due to the fact that the existence is always presupposed (or at least hypothesized) of an entity about which an experiential judgment is made; i.e. the existence of the central entity of the state of affairs to be known is presupposed. The prototypical wa-expression reflects an experiential judgment, and, as such, the existence of what is marked by wa must be presupposed. The correlation of wa and the concept of given is thus rooted in the fundamental property of wa.

The topic-presenting function of wa has further ramifications, one of which has to do with the topicalization of adverbials, including certain postpositional phrases – a situation in which the original notion of topic does not fit. We shall come back to this problem subsequently.

Before we return to the concept of separation, which can be understood in yet another sense, we address the problem of two uses of ga; namely, Kuno's descriptive ga and exhaustive-listing ga (see 10). The distinction has to do with the difference one detects in the interpretation of a sentence such as the following.

(13) Yuki ga siroi.

snow NOM white
'The snow is white.'

There are two contexts in which the above sentence can be uttered felicitously. One is when the state of affairs represented is just witnessed – a situation representing a perceptual judgment. The other is when the question "What is white?" is posed. From the above discussion regarding (12), it is clear that the ga-marked

subject corresponds to the element sought in the proposition representing new information, and indeed this correspondence obtains in the two situations in which (13) can be used. In the first context, the whole sentence, including $yuki \ ga$ 'snow NOM', is entirely new information. In this situation, there is no portion of the sentence that can be called the focus of new information. That is, in the entire sentence, it being identical with the proposition of new information, there is no element that stands out from the rest of the sentential elements. In the second context, where (13) answers the question "What is white?", the noun yuki functions as a focus of new information in the sense that it identifies the X in the new information $\{X \text{ is } yuki\}$ ' $\{X \text{ is the snow}\}$ ' against the background of the old information, or presupposition $\{X \text{ is white}\}$. (Notice that yuki is not "new information"; the new information here is the proposition $\{X \text{ is } yuki\}$.) Thus in both cases yuki 'snow' marked by ya represents an entity crucially relevant in supplying new information, but it differs in the two contexts in terms of whether it is a focus of new information or not.

This difference yields what Kuno considers to be a meaning difference, which he attempts to capture in terms of two uses of ga. In one use, the sentence is a neutral description of a state of affairs – the descriptive ga – and in the other, where the sentence answers a question, the ga-marked nominal exhaustively enumerates an item/items that is/are possible answers – the exhaustive-listing ga. Kuno translates the meaning of the exhaustive-listing ga as 'X (and only X)...' or 'it is X that ...'

While Kuno's observation is largely correct, his recognition of the different uses of ga labeled as descriptive ga and exhaustive ga is misguided. First of all, if one is to recognize an independent (use of) ga for the meaning of 'X (and only X)', one is bound to recognize an entire set of other (uses of) particles for the exhaustive-listing reading. For example, the accusative o can be also construed to have two uses; the one in a neutral description, Taroo ga hon o yondeiru 'Taro is reading a book', and the exhaustive-listing o, when this sentence answers the question "What is Taro reading?" Here too, hon 'book' represents the focus of the new information {X is a book} against the background of the old information {Taro is reading X}. And it is normally understood that Taro is reading only a book. Also one can answer the question with the form of one of the translations that Kuno gives for the notion of the exhaustive-reading; namely Taroo ga yonde iru no wa hon da 'It is a book that Taro is reading.'

It is perhaps true that the sense of exhaustive-listing is stronger for ga than o, but this is because of the general property of the subject position, which ga marks. That is, the subject position, being a primary syntactic position, has a general focusing effect.

Now it is the combination of the status of the focus of new information and the Gricean conversational maxim of quantity – "Make your contribution as informa-

tive as is required" - that is responsible for Kuno's exhaustive-listing reading. In both Taroo ga hon o yondeiru 'Taro is reading the book' as an answer to the question "Who is reading the book?" and Taroo wa hon o yondeiru 'Taro is reading a book' as an answer to the question "What is Taro reading?", the ga-marked nominal and the o-marked nominal are focuses of new information, and the 'X (and only X)' reading obtains because of the fact that a focus of new information draws more attention from the hearer and because the hearer assumes, backed by his assumption that the speaker observes the conversational maxim of quantity, that the answer given, either in the ga-marked form or o-marked form, or for that matter in any form, represents the exhaustive listing of the possible answers.

Indeed, that ga never has the lexical or even contextual meaning of 'only X' is indicated by the fact that the (b) answer below is not contradictory, while the (c) answer, with the explicit dake 'only', involves contradiction (cf. Nishiyama 1979).

- (14) a. Nani ga siroi.
 what NOM white
 'What is white?'
 - b. Yuki ga siroi. Sorekara, usagi mo siroi. snow NOM white and rabbit too white 'The snow is white. And the rabbit too is white.'
 - c. Yuki dake ga siroi. Sorekara, usagi mo siroi. snow only NOM white and rabbit too white 'Only the snow is white. And the rabbit too is white.'

Thus, just like the case of the earlier contrastive wa, which we determined to be epiphenomenal, there is no independent particle ga or independent use of ga with the meaning of exhaustive-listing. In fact, what is observed by Kuno is not related to the particle ga per se; it is a conversational implicature associated with a particular kind of sentence – one with a focus of new information – which is derived from the combinatory factors of the focus of new information and the Gricean conversational maxim of quantity.

Returning to the concept of separation that is inherent in wa, we now examine the last sense in which this particle is said to be a separating particle. It has to do with the physical separation of the topic from the rest of the sentence. In the words of S.R. Brown, "wa... separates the words before it from those following it..." (Colloquial Japanese, Shanghai, 1863:xxxiii). Though the flow of articulation needn't be actually cut off after wa, Brown's observation points out an important structural property of a topic sentence.

The structural effect of the separating function of wa has been discussed in terms of how immediately a given nominal is related to the following verbal form. When wa does not occur, a clause is tightly organized (representing the unanalyzed

material of judgment) and all the nominals occurring are immediately related to the nearest verbal element. This is not the case when wa occurs; the wa-marked nominal, i.e. the topic, often seeks its predicate far away from it, even skipping over an immediately following verbal element. The favorite examples among Japanese grammarians illustrating this point, beginning with Yamada Yoshio (1908), involve the following forms:

- (15) a. tori ga tobu toki ...
 bird NOM fly time
 'when a bird flies...'
 b. tori wa tobu toki...
 bird TOP fly time
 'the bird, when it flies...'
- In (15a), the nominative phrase tori ga immediately connects with the verb tobu, and the predication is completed it is a simple relative clause with its head toki 'time'. But this is not the case in (15b), where, while tori is construed to be the subject of tobu, this is not its real predicate, for it seeks another predicate beyond the head of the relative clause. The expression in (15b), in other words, is not a complete chunk of expression in the sense that it lacks the predicate of the topic. The contrast between (15a) and (15b) can best be seen when these forms are continued, as below:
 - (16) a. Tori ga tobu toki naku.
 bird NOM fly time cry
 'When a bird flies, X cries'
 b. Tori wa tobu toki naku.
 bird TOP fly time cry
 'The bird, when it flies, cries.'

As is clear in the translation, the topic *tori wa* in (16b) skips over the immediately following verb *tobu* and connects up with the final verb *naku*. In contradistinction to this, the domain of *tori ga* in (16a) does not go beyond the immediately following verb *naku*.

The same point can be made with regard to sentence nominalization, which takes in the nominative phrase, but leaves out the topic phrase.

(17) a. [Hanako ga sinda] koto o siranakatta.

NOM died that ACC did not know
'X did not know that Hanako died.'
b. Hanako wa [sinda] koto o siranakatta.
'Hanako did not know that X died.'

Likewise, the topic is outside the scope of the provisional suffix -(r)eba 'provided that' and the conditional suffix -tara 'if'.

It is not the case that the non-topic subject cannot be separated from the rest of the sentence by an intervening clause. For example, the *nagara* ('while')-clause can be inserted between the nominative subject noun phrase and the rest of the sentence. Thus, though it depends on the type of subordinate clause, it is the case that the topic construction allows with greater freedom the insertion of an intervening subordinate clause (see Noda (1986) for related discussion and further detail). These observations suggest a particular structural configuration for the topic construction. In fact, as early as 1928 Matsushita points out that the topic constituent is not a sister constituent of the verb with which it forms a case relation – instead it is predicated by the entire remaining structure. This is schematically shown in terms of (18a), which, Matsushita correctly claims, should be understood in the manner of (18b) rather than (18c) (Matsushita 1928: 598).

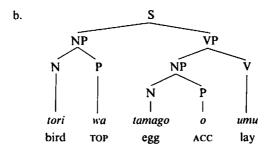
- (18) a. Ka no kisya e wa noru hito ga nai.

 that of train to TOP ride person NOM do not exist

 (lit.) 'To that train, a person who rides does not exist.'
 - b. Ka no kisya e wa | noru hito ga nai
 - c. Ka no kisya e wa noru hito ga | nai

In the modern representation, then, a prototypical topic construction such as (19a) suggests a structure like (19b).

(19) a. Tori wa tamago o umu.
bird TOP egg ACC lay
'A bird lays eggs.'

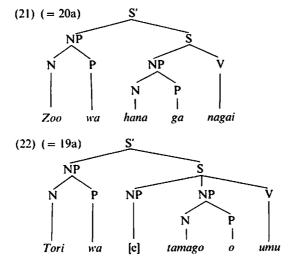


This is the typical subject-predicate structure that is normally adopted for a comparable sentence in English. However, another type of Japanese topic construction points toward a different analysis. In addition to a form such as (19), in which the predicate portion is a truncated form of a proposition – e.g. with a missing subject – there are topic sentences in which a complete sentence makes up the

predicate portion. For example, in the following examples, hana ga nagai 'the nose is long' and tai ga ii 'a seabream is good' are complete sentences.

(20) a. Zoo wa hana ga nagai.
elephant TOP nose NOM long
'An elephant is such that its trunk is long.'
b. Sakana wa tai ga itiban ii.
fish TOP seabream NOM first good
'A fish is such that a seabream is the best.'

By generalizing these two situations, the topic construction can be assumed to involve the following structures:



In the above structure, the noun phrase dominated by S' corresponds to the topic and the S to the comment, and as such these constituents can be labeled as "topic" and "comment", if one wishes to directly represent these functional labels. In structure (22), the subject slot of the comment structure is posited but left unfilled, as indicated by the empty category marker [e]. This empty subject is to be understood as referring to (or, technically, a variable bound by) the topic or else the whole construction will not be properly interpreted. Thus, if we insert into the empty slot a noun referring to something entirely distinct from the topic, the sentence is not quite grammatical, as witnessed below:

(23) *Tori wa [kaeru ga tamago o umu].

bird TOP frog NOM egg ACC lay

'A bird is such that a frog lays eggs.'

At first glance, this seems to contradict the data in (20), where the subject of the comment structure is filled by something distinct from the topic. A close examination reveals that it is not the case that the subject of the predicate structure can not be distinct from the topic, but rather it must be something intimately related to the topic. Most typical cases of this "intimate relationship" involve the whole-part relation (as in (20a)), the inclusion relation (as in (20b)), and the possessor-possessed relationship. Indeed, a form like (23) will be wellformed if the subject of the comment structure is replaced by something referring to an entity that makes the comment structure construable as a statement saying something about the topic.

(24) Tori wa [mesu ga tamago o umu].

bird TOP female NOM egg ACC lay

'A bird is such that a female (bird) lays eggs.'

The "aboutness condition" for the relation between the topic and the comment allow even expressions which are supported by a vaguer relationship between the two. For example,

- (25) a. Huyu wa [sukii ga tanosii].
 winter TOP ski NOM enjoyable
 'Winter is such that skiing is enjoyable.'
 - b. Onsen wa [kimoti ga ii].

 hot spa TOP feeling NOM good
 'A hot spa is such that one feels good.'

In addition to the topic-subject correlation of the structure in (22), there are forms in which the empty element is other than the subject of the comment structure.

- (26) a. Kono hon wa [minna ga [e] yondeiru].

 this book TOP everyone NOM reading

 'This book is such that everyone is reading (it).'

 b. Hanako wa [Taroo ga eigo o [e] osieteita].

 TOP NOM English ACC teaching-PAST
 - 'Hanako is such that Taro was teaching English (to her).'

It is also possible to have a topic which includes a postposition, indicating the possibility that a postpositional phrase as a whole can be placed in the topic position.

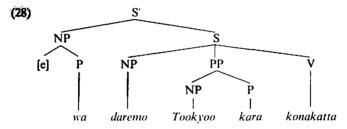
(27) a. Tookyoo kara wa [daremo [e] konakatta].

Tōkyō from TOP no one come-NEG-PAST

'From Tōkyō, no one came.'

- b. Hanako to wa [daremo [e] issyo ni benkyoo-sitagaranai].
 with TOP no one together study- do-wish-NEG
 'With Hanako, no one wishes to study.'
- c. Kono naihu de wa [minna ga yubi o [e] kitteiru]. this knife with TOP everyone NOM finger ACC cut 'With this knife, everyone has cut his finger.'

Though structurally these parallel the other topic sentences examined so far, we wish to maintain that they are not formed in the same way as the others. That is, whereas the regular topic sentences (i.e. those in which the topic phrase does not contain a postposition) are formed as such at the deep-structure level, the postpositional topic phrases are the result of a transformation that moves a postpositional phrase into the topic slot. In other words, the deep structure of (27a), for example, is as follows:



The claim here is that there are two sources for wa-phrases, one base-generated, and the other derived by a movement transformation. This claim is based on the fact that while the base-generated forms do represent a true experiential judgment structure, the derived ones do not. In other words, whereas a base-generated topic expresses an entity about which a judgment is made, a derived one does not. The difference can be appreciated by comparing the sentences in (27) and the following corresponding sentences with the base-generated topics:

(29) a. Tookyoo wa [daremo [e] konakatta].

TOP no one came-NEG-PAST

'Tōkyō is such that no one came (from there).'

b. Hanako wa [daremo [e] issyo ni

TOP no one together

benkyoo-sitagaranai].

study-do-wish-NEG

'Hanako is such that no one wishes to study together (with her).'

c. Kono naihu wa [minna ga [e] yubi o kitteiru].
this knife TOP everyone NOM finger ACC cut
'This knife is such that everyone has cut his finger (with it).'

These sentences are indeed translatable in the form 'Tōkyō is such that ...,' but with the postpositional topic no such translation is possible, as 'From 'Iōkyō is such that ...,' won't do; and indeed it is not about "from Tōkyō" that a certain judgment is made or that the comment portion is describing in (27a).

A superficial ambiguity arises with respect to such forms as kyoo 'today' and kesa 'this morning' that are used both as nouns and adverbs. But when the form is used as a noun, it can be a genuine, i.e. base-generated topic, and when it is used as an adverb, it is a derived topic. Observe the following:

- (30) a. Kyoo wa [tenki ga ii].

 today TOP weather NOM good

 'Today is such that the weather is good.'
 b. Kyoo wa [boku ga [e] ryoori-siyoo].
 - b. Kyoo wa [boku ga [e] ryoori-siyoo].
 today TOP I NOM cook-do-TENT
 'Today, I will cook.'

Notice that (30b) does not allow itself to be rendered as "Today is such that I will cook." It is not a sentence making a judgment or describing a property of today, whereas (30a) is. The same applies to other topicalized adverbials.

- (31) a. Hayaku wa hasirenai.
 fast TOP run-POTEN-NEG
 '(1) can't run fast.'
 - b. Hatizi made wa matu. 8 o'clock up to TOP wait '(I will) wait until eight o'clock.'

The adverbial topic, including a postpositional one, is basically a stylistic topic. It exploits the basic separating function of the true topic, which sets a thing apart from the rest of the sentence. This has the effect of creating a certain amount of tension between the "disguised" topic and the rest of the sentence, which brings about the effect of making the topic a focus of contrast. In other words, this stylistic adverbial topicalization occurs in a context when there is a contrasting proposition either overtly or tacitly that stimulates the occurrence of a contrastive statement with an adverbial as a focus. Thus, (31a) is typically uttered as a response to the order "Run fast!"

The above discussion points to the conclusion that the so-called topic construction in Japanese is, in fact, of two kinds: one that reflects an experiential judgment, and another that is a stylistic variant of a simple sentence. The two need to be kept apart, for, despite their formal similarity, the difference between them is deep, as the genuine topic construction is correlated with one mode of human judgment, while the other, the stylistic topic, is only a superficial device similar to scrambling.

The latter differs from scrambling in that, whereas the scrambled constituent, if unstressed, carries only a simple and slight emphasis, the stylistic topic is the focus of contrast.

Before concluding this section on the topic construction, let us discuss briefly the discourse or textual roles that topic and topicless sentences play. Contrary to the highly plausible view that the grammatical topic (e.g. the wa-marked topic nominal) indicates a discourse topic, no direct correlation obtains between the two. While a discourse topic can be referred to by the wa-marked nominal in a Japanese narrative, and it often is so referred to, wa-marking is determined by other factors than the thematicity of a discourse topic. Indeed, the recent study by Clancy and Downing in this area draws the conclusion that: "wa-marking is not necessary to establish thematic status, nor does wa-marking, when it appears, necessarily indicate that the participant in question is thematic ..." (Clancy and Downing 1987:24).

This conclusion by Clancy and Downing also indicates that the grammatical topic and old/given information are not correlated in a one-to-one fashion. Whereas the topic is most typically old/given, a nominal with the old/given status is not always realized as a grammatical topic. Thus, whether a given nominal is a discourse topic or not and whether it is old/given information or not, it will not be made a grammatical topic when an event involving its referent is to be presented in the manner associated with a topicless sentence. For example, when an event is presented in a subordinate clause as subsidiary, background information, no grammatical topic will be established. Likewise, when an event is introduced as something that is newly perceived, no topic sentence obtains. For this latter situation, observe the following portion of narrative taken from a piece of published writing:

- (32) a. Maku ga akuto, ippon ki ga tatteite, sono sitade onna curtain NOM open one tree NOM standing that below woman ga gyoozui o tukatteiru.

 NOM tub-bath ACC using
 - b. Ki no eda ni karasu ga tomaru. tree of branch crow NOM perch
 - c. Soke e Kyosi ga toozyoosite, hitorigoto o yuu.

 there at NOM enter-and soliloquy ACC utter

 '(a) As the curtain goes up, a lone tree is standing, and below it, a
 woman is using a tub-bath.
 - (b) A crow perches on a branch of the tree.
 - (c) There, Kyosi enters and utters a soliloquy.'

In this piece of narrative no topic sentence is used, and, though cohesive devices such as sono sita de 'below that' and soko e 'there' are used, each scene (as

represented by a separate sentence) is presented as a fairly discrete scene. The three scenes are independently apprehended and so presented. In the above narrative, because nothing is mentioned for the second time, we wouldn't expect a grammatical topic to occur in such a situation. However, the second mention does not automatically lead to the establishment of a grammatical topic. Indeed, even if a second mention of an already introduced element occurs, a grammatical topic will not be invoked when a series of events is presented as comprising discrete or independent scenes. Observe the following piece of narrative made up for our purpose:

- (33) a. Hitori no kodomo ga aruite imasita.

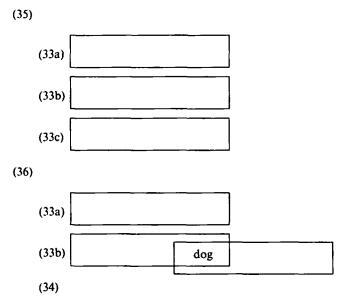
 one of child NOM walking be
 - b. Soke e inu ga hasitte kimasita. there at dog NOM running came
 - c. Sosite sono inu ga kodomo ni kamitukimasita.
 and that dog NOM child to bit
 - '(a) A child was walking.
 - (b) There came a dog running.
 - (c) And then, the dog bit the child.'

The pattern of presentation in (33) is quite similar to that seen in (32). The three events are presented as fairly independent and discrete scenes as if each event is witnessed afresh. While a narrative of this type is possible and both (32) and (33) are wellformed, a long stretch of independently presented scenes is disfavored from the textual consideration of cohesion. Whereas cohesive devices such as soko e 'there' and sosite 'and' help connect one scene to another, they are not enough. The grammatical topic, on the other hand, functions as a powerful cohesive device, which relates an event to the preceding scene in such a way that the new event is presented as a further development of the preceding scene or the new event is made tangential to the preceding scene rather than constituting an independent scene. This textual effect of the topic is seen when sentence (c) of (33) is replaced by the following topic counterpart.

(34) Sosite sono inu wa kodomo ni kamitukimasita. and that dog TOP child to bit 'And then, the dog bit the child.'

The combination of (33a), (33b), and (34) divides the entire sequence of events into two large scenes (33a) and (33b)-(34), where (34) is tangential (but not in the sense of its being subordinate) to (33b) and develops the scene introduced by (33b). Schematically presented, whereas the sequence of (33a), (33b), and (33c) is a series

of three discrete events, as shown in (35) below, (33a), (33b), and (34) involve an overlapping presentation of (33b) and (34) in the manner of (36).



Although a proper understanding of the discourse or textual role of the grammatical topic requires far more careful and thorough study of actual texts, the above discussion should suffice to show how the fundamental differences between the topic sentence and the topicless sentence are correlated with their respective discourse roles. Presenting an event as perceived is the major function of a topicless sentence, and thus it pushes the development of the plot forward in the manner of introducing new events or scenes in sequence. The topic sentence, on the other hand, talks about someone or something, and thus the development of the plot is withheld to some degree. While it may also describe a new event, it does not open a discrete new scene; rather such an event constitutes an elaboration of the same scene.

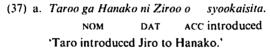
Finally, one should note that the use of the topic particle is not a grammatical necessity motivated by the old/given status of a given nominal. Rather it is motivated by the textual requirement for cohesion, which is ultimately attributable to the Gricean maxim of relation or relevance.

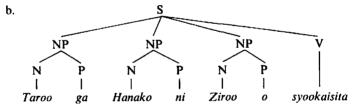
11.3 Grammatical relations

The foregoing discussion shows that the so-called topic construction in Japanese is both semantically and structurally highly similar to the subject-predicate struc-

ture proposed in Western languages such as English. This naturally poses a question regarding the structure of a non-topic sentence; i.e. does it also have the subject-predicate bipartite structure with a subject noun phrase on the one hand and a predicate verb phrase on the other? Within the tradition of Japanese grammar, the status of the subject is highly controversial, some scholars taking its existence for granted, and others vehemently denying the usefulness of the concept. Structurewise, Japanese grammarians in general assume that noun phrases corresponding to the subject, the direct object, and the indirect object are all complements of the verb and are related to the verb on a par. Generative grammarians' treatments differ; some posit a verb phrase, while others propose a "flat" structure for a non-topic sentence. The matter is controversial, partly because while there is no strong syntactic evidence for the VP constituent, such as the VP movement observed in English, positing it expedites the application of theoretical devices largely developed with reference to a VP language like English. (See Whitman 1986 for a review of relevant issues on this topic.)

The assumption that there is no VP constituent yields the following flat structure in which the (syntactic) subject is not structurally differentiated from other NPs.





This flat structure, however, does not mean that all the structurally equivalent NPs involved are equivalent syntactically. Indeed, the notion and the categories of grammatical relations are relevant in Japanese. That is, it is not the case that all the NPs have the same syntactic status, and the hierarchy of grammatical relations is also observed in Japanese. Thus, the subject is syntactically most prominent not only in terms of its ubiquitous status but also in terms of its participation in syntactic phenomena.

Notice that the subject here is a distinct category from the topic discussed in the preceding section. While English coalesces these two categories, they are in principle distinct and the distinction is clearly made in Japanese. The fact that the topic and the subject categories are merged in English is observed from the two notional definitions of subject in the Western grammatical tradition. On the one hand, the

subject is defined as "what is being talked about", and on the other, as an "actor". It is this second notion of subject that is pertinent to the syntactic category of subject. That is, subject as a syntactic category results from a generalization based on the agentive nominal. That is, in the majority of the world's languages, a nominal occurring in an intransitive clause, e.g. he of He came or of He fell asleep, is treated like an agentive nominal of a transitive clause, e.g. he of He hit her, for syntactic and, often, morphological purposes. This generalization often extends to the subject of a passive clause (e.g. He was killed), the possessor nominals (e.g. He owns a car), the perceivers (e.g. He sees a woman), the experiencers (e.g. He loves the woman), and a few other semantic roles, though the extent to which this generalization obtains varies from one language to another. We will see that Japanese has achieved this generalization to such an extent as to warrant a recognition of the syntactic category of subject.

As a first approximation, one may consider the ga-marked NP as the subject, the o-marked NP the direct object, and the ni-marked NP the indirect object. It is because of this correspondence that the particles ga, o, and ni are called syukaku zyosi ('subjective' or 'nominative particle'), taikaku zyosi ('accusative particle'), and yokaku zyosi ('dative particle'), respectively, in the terminology of Japanese grammar.

The hierarchy of the grammatical relations is observed first in terms of the occurrence of those NPs that bear them. The subject occurs in practically all types of sentence. The occurrence of the direct object, on the other hand, is conditioned by the presence of transitive verbs, which are a subset of all the verbs. The class of verbs that require an indirect object is even smaller. Compared with these, other adjuncts lumped together as obliques, are largely optional. The primacy in syntactic status with regard to other syntactic phenomena reflects this hierarchy. Thus, while there are a fair number of phenomena exclusively controlled by the subject, those controlled by the categories low in the hierarchy tend to be quite specific and limited in number.

Among the phenomena controlled by the subject, Japanese and English show exact parallelism in the control of and the occurrence of a gap in sentence coordination. Both the controller and the gap must occur in subject position. Thus,

- (38) a. [Hahaoya ga kodomo o sikat]-te [ø naita] mother NOM child ACC scold-and cried 'The mother scolded the child, and ø cried.'
 - b. (*)[Kodomo ga sowatui]-te [Hahaoya ga Ø sikatta]
 child NOM fidgeted-and mother NOM scolded
 '*The child fidgeted, and the mother scolded Ø.'

In (38a), the gap in the second clause is construed only with the subject of the first clause in both Japanese and English. In (38b), the object gap is not allowed in the same way as the subject gap is. However, since a pronoun needn't surface in Japanese, (38b) can be understood as a case of pronoun deletion or small pro (see below). (Notice that in the English translation of this sentence a pronominal object is allowed in the second clause.) That the subject position controls the gap is clear from the fact that the passive version of the second clause of (38b) is far more natural than the original version with the pronominal reading (see (39b) below). By the same token, the object can become the controller if it is made subject via passivization, as a comparison of (38a) and (39a) reveals.

- (39) a. [Kodomo ga hahaoya ni sikara-re]-te [ø naita] child NOM mother by scold-PASS-and cried 'The child was scolded by the mother, and ø cried.'
 - b. [Kodomo ga sowatui]-te [ø hahaoya ni sikara-re-ta]
 child NOM fidget-and mother by scold-PASS-PAST
 'The child fidgeted and ø was scolded by the mother.'

A second phenomenon that is controlled by the subject is the binding of the reflexive form zibun 'self', which is neutral for person, gender, and number.

(40) Taroo ga Hanako ni Ziroo o zibun no ie de syookaisita.

NOM DAT ACC self of house in introduced
(lit.) 'Taro_i introduced Jiro to Hanako in self's_i house.'

Here the reflexive zibun 'self' cannot refer to anything but the subject Taroo. (Nominal forms with an identical reference – coreferential nominals – are indicated by the indices i, j, etc.)

Thirdly, there is an honorification process which is controlled exclusively by the subject. This honorific form, called *sonkei-go* ('respect language') in Japanese and "subject honorification" in the linguistic literature in English, involves the conversion of the verb into the o V-ni naru form.

(41) a. Kakehi sensei ga warat-ta.
prof. Nom laugh-PAST
'Prof. Kakehi laughed.'
b. Kakehi sensei ga o-warai-ni nat-ta.
(Subject honorific version of a)

The subject honorific form is only usable in reference to the subject, and thus, even if the referent of the object noun phrase is worthy of deference, it cannot be used. For example, (42b) below is inappropriate (as indicated by #), because it

expresses the speaker's deference to Taro not the teacher. In a situation like this when the non-subject noun phrase refers to someone respected, *kenzyoogo* ('humbling language') or "object honorification" involving the *o-V suru* form applies, as in (42c).

(42) a. Taroo ga sensei o tasuke-ta.

NOM teacher ACC help-past

'Taro assisted the teacher'

b. *Taroo ga sensei o o-tasuke-ni nat-ta.

(Subject honorific form of a)

c. Taroo ga sensei o o-tasuke-si-ta.(Object honorific form of b)

When the predicate is other than a verb, the subject honorific form involves only the prefix o. (43a) contains an adjectival predicate and (43b) an adjectival nominal predicate.

(43) a. Sensei wa wakai.
teacher TOP young
'The teacher is young.'
b. Sensei wa o-wakai.
(Subject honorific version of a)

(44) a. Sensei wa genki-da. teacher TOP energetic-COP 'The teacher is energetic.'

b. Sensei wa o-genki-da.(Subject honorific version of a)

As a last phenomenon to illustrate the primacy of the subject position, the occurrence of the pronouns represented as PRO is examined. If one assumes that wherever there is a verb, there are always associated noun phrases that satisfy the valency of the verb, one would have to posit at least three kinds of unarticulated pronouns (i.e. pronouns without phonetic content). By postponing the full discussion of these pronouns, we concentrate here on what is represented by PRO and by PROarb. PRO is typically controlled by a noun phrase of a higher clause. And arbitrary PRO, PROarb, occurs only in a semantically tenseless clause, and its reference is arbitrary as is one of the uses of the English pronoun one. These are exemplified below.

(45) PRO:

a. Boku wa [PRO iku] tumori da.

I TOP go intend COP

'I intend to go.'

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- b. Boku wa Taroo ni [PRO iku]-yooni itta.
 I TOP DAT go-as told
 'I told Taro to go.'
- (46) PROarb:
 - a. [PROarb hito o tasukeru]-koto wa yoi koto da.

 people ACC help that TOP good thing COP
 'To help people is a good thing to do.'
 - b. [PROarb [PRO kono miti o iku]-to eki ni tukimasu.

 this street ACC go-if station to reach
 'One will reach the station if one takes this street.'

These PRO's are not so free in their distributions. In fact, their distributions parallel those of the English PRO. In Japanese, the PRO's occur only in semantically tenseless clauses, as in the English examples I tried [PRO to go], [PROarb to see] is [PROarb to believe], where the clauses in which PROs occur are syntactically tenseless as well. Secondly, and more important for the present context, the PRO's occur only in subject position. In other words, unlike (45) and (46), the following are not possible with the PRO reading:

(47) a. *Boku wa [sensei ga PRO (o) homeru]-yooni sikunda.

I TOP teacher NOM ACC praise-as schemed
'I schemed in such a way that the teacher will praise PRO (= me).'
b. *[Kimi ga PROarb (o) tasukeru]-no wa yoi koto da.

you NOM ACC help that TOP good thing COP
'For you to help PROarb is a good thing.'

While these examples mostly illustrate cases where agentive subjects play relevant roles, it is easy to see that the subject category takes in other semantic roles as well. We saw earlier that the passive patient behaves like an agentive subject in the coordinate subject deletion phenomenon (see (39)), indicating that the passive patient is treated like a subject. The passive subject also triggers subject honorification, as do experiencer subjects of stative verbs such as wakaru 'understand' and dekiru 'can do'. The same can be said about the reflexive—antecedent relationship and the distribution of PROarbs. Thus, the phenomena examined above cannot be described purely in terms of semantic roles such as agent and patient. That is, a syntactic category of subject as a syntactic generalization based on an agentive nominal obtains in Japanese.

Having examined a number of representative phenomena in which the subject plays a crucial role, we now turn to the hierarchy of the grammatical relations. The primacy of the subject among the grammatical relations is clear from the foregoing discussion, which shows that a number of phenomena are exclusively controlled

by the subject. To bring this home, compare the two honorific processes examined above. Whereas what has been called subject honorification is controlled by the subject alone, what has been called object honorification is triggered by all kinds of non-subject noun phrases, e.g. the direct and indirect objects as well as other oblique nominals. The special status of the subject is clearly shown by these two processes.

That the direct object is higher than the indirect object in the hierarchy can be shown by a phenomenon which groups the subject and the direct object together to the exclusion of the indirect object and other obliques. In Japanese, the phenomenon of "quantifier float" (or adverbialization of quantifiers) draws the line of applicability between the direct object and the indirect object. In English, quantifier float is said to be possible only from the subject noun phrase, e.g. All the children are happy \rightarrow The children are all happy, John read all the books \rightarrow *John read the books all. In Japanese, not only subject noun phrases but also direct object noun phrases float quantifiers, but the indirect object and the obliques do not. This is seen in the following data, where a quantifier, e.g. san-nin 'three-person', floats away from the subject NP in (48) and the direct object NP in (49), but not from the indirect object and oblique NPs, (50)-(51).

(48) QF from the subject NP

- a. San-nin no kodomo-tati ga ima hon o yonde-iru.
 3-person of child-ren NOM now book ACC read-be
 'Three children are reading books now.'
- b. Kodomo-tati ga ima san-nin hon o yonde-iru.

(49) QF from the object NP

- a. Kodomo-tati ga san-satu no hon o asoko de yonde-iru. child-ren NOM 3-book of book ACC there at read-be 'The children are reading three books over there.'
- b. Kodomo-tati ga hon o asoko de san-satu yonde-iru.

(50) QF from the indirect object NP

- a. Boku wa san-nin no kodomo-tati ni hon o yatta.
 - I TOP 3-person of child-ren DAT book ACC gave 'I gave books to three children.'
- b. *Boku wa kodomo-tati ni san-nin hon o yatta.

(51) QF from the oblique NP

- a. Boku wa san-nin no kodomo-tati kara hon o moratta.
 - 1 TOP 3-person of child-ren from book ACC got
 - 'I got books from three children.'
- b. *Boku wa kodomo-tati kara san-nin hon o moratta.

We now show that the category of indirect object is distinct in Japanese from that of the direct object and the oblique objects. The QF phenomenon examined above distinguishes the direct object from the other objects (indirect and obliques), while passivization distinguishes the indirect (and direct) object from the obliques, since only the direct object (DO) and the indirect object (IO) can be made the subject (SU) of a passive sentence. Thus, clauses with ditransitive verbs such as ataeru 'give' and sikomu 'train/teach' allow both the direct object and the indirect object to become the subjects of the corresponding passive clauses.

(52) a. Active

Kakehi-sensei ga gakusei-tati ni eigo o sikonde-iru.

prof. NOM student-PL DAT English ACC teach-be
'Prof. Kakehi is teaching English to the students.'

b. Passive (DO → SU)

Eigo ga Kakehi-sensei niyotte gakusei-tati ni sikoma-re-teiru. English NOM prof. by student-PL DAT teach-PASS-be 'English is being taught to the students by Prof. Kakehi.'

c. Passive (10 → su)

Gakusei-tati ga Kakehi-sensei ni eigo o sikoma-re-teiru. student-PL NOM prof. DAT English ACC teach-PASS-be 'The students are being taught English by Prof. Kakehi.'

On the other hand, obliques (OBL) do not convert to the subjects of passive clauses.

(53) a. Active

Kakehi sensei ga kyoositu de eigo o osie-teiru prof. NOM classroom in English ACC teach-be 'Prof. Kakehi is teaching English in the class room.'

- b. Passive (OBL \rightarrow SU)
 - *Kyoositu ga Kakehi sensei niyotte eigo o osie-rare-teiru.
 classroom NOM prof. by English ACC teach-PASS-be
 (lit.) 'The class room is being taught English by Prof. Kakehi.'

The following chart summarizes the hierarchy of the major grammatical relations in Japanese.

Earlier we pointed out that in Japanese the categories of topic and syntactic subject

differ, whereas in English they generally converge. (One clear case in which the topic category (in the Japanese sense) and the syntactic subject diverge in English is a construction involving the expletive it in subject position, e.g. It is likely that John will come.) Indeed, the topic nominals do not always show a uniform pattern with respect to those syntactic phenomena that are uniformly controlled by the subject nominals. The following examples show that while certain topic nominals control subject honorification, others fail to do so:

- (55) a. Kakehi sensei wa seito-tati o o-sikari ni naranai.
 prof. TOP student-PL ACC scold-HON NEG
 - 'Prof. Kakehi is such that (he) does not scold the students.'
 - b. *Kakehi sensei wa seito-tati ga o-okuri ni natta.

 prof. TOP student-PL NOM escort-HON-PAST

 'Prof. Kakehi is such that the students escorted (him) home.'
 - c. *Kakehi sensei wa seito-tati ga maitosi kinenhin
 prof. TOP student-PL NOM every year memento

o o-okuri ni natteiru.

ACC send-HON be

- 'Prof. Kakehi is such that every year the students send a memento (to him).'
- d. *Kakehi sensei kara wa minna ga hai o o-uke ni natta.

 prof. from TOP everyone NOM cup ACC accept-HON-PAST
 'From Prof. Kakehi everyone accepted a cup of sake.'

The same pattern emerges with regard to other phenomena such as reflexive binding. The most straightforward account for the observed pattern above is available once: 1) a clear distinction is made between the topic category and the subject category; 2) the analysis of the topic construction proposed earlier is adopted; and 3) the phenomena of subject honorification (and reflexive binding, etc.) are recognized as rules controlled by the subject, not the topic.

The earlier analysis of the topic construction involves an empty category (marked as [e]) in the comment portion – the clause beneath the S' that dominates the topic constituent; see (22) above. This empty category is identical with the topic nominal and it occupies the slots of various grammatical relations. Thus, the relevant portions of the structures of the sentences in (55) have the following forms, with the empty categories marked by the case particles for ease of identification of their grammatical relations:

- (56) a. [Kakehi sensei wa] [[e]-ga seito-tati o sikaranai]
 - b. [Kakehi sensei wa] [seito-tati ga [e]-o okutta]

- c. [Kakehi sensei wa] [seito-tati ga [e]-ni maitosi kinenhin o okuru]
- d. [Kakehi sensei kara wa] [minna ga hai o [c]-kara uketa]

It is now easy to see that what triggers the subject honorification process is the empty category which occupies subject position and whose referent, identified in topic position, is someone worthy of being shown deference. Thus, while (55a), in which the topic is identified with the empty subject, is wellformed, the others, in which the topic is identified with non-subjects, are all illformed – i.e. to the extent that they express respect toward the students rather than Prof. Kakehi. Notice that the trigger of subject honorification is often a phonetically empty category such as [c] (as in the relative clauses) or PRO (as in embedded clauses). For example:

(57) a. [[e]-ga o-kaeri ni naru] okyakusan return HON-PRES guest 'the guest who is going home'

b. Anata wa [[PRO]-ga o-kaeri ni naru] o-tumori desuka.

you TOP return HON-PRES HON-intention-Q
'Are you of the intention of returning home?'

The analysis proposed in (56) predicts that the forms (56b-d) will permit the object honorification process to take place. This prediction is indeed borne out, and the appropriate forms for them are the following object honorific forms rather than the subject honorific forms (55b-d).

(58) Object honorific forms of (55b-d)

- a. Kakehi sensei wa seito-tati ga o-okuri sita.

 prof. TOP student-PL NOM escort-HON

 'Prof. Kakehi is such that the students escorted (him) home.'
- Kakehi sensei wa seito-tati ga maitosi kinenhin o
 prof. TOP student-PL NOM every year memento ACC
 o-okuri siteiru.

send-HON

- 'Prof. Kakehi is such that every year the students send a memento (to him).'
- c. Kakehi sensei kara wa minna ga hai o o-uke sita.

 prof. from TOP everyone NOM cup ACC accept-HON
 'From Prof. Kakehi everyone accepted a cup of sake.'

The apparent irregularity of the phenomenon of subject honorification with respect to the topic nominals observed in (55) is now resolved. The irregularity is attributed to the grammatical relations that the empty categories maintain in the

structure constituting the comment portion of the topic-comment structure. The examination of the topic-comment structures proposed earlier, however, revealed that not all the structures that function as the comment contain an empty category. For example, the structure in question in (21) above has no gap in it since a complete sentence structure constitutes the comment. With no gap as a trigger for subject honorification, we might predict that such a sentence does not exhibit this phenomenon. The prediction is false, as subject honorific forms of the type of construction under discussion are abundantly attested.

- (59) a. Kakehi sensei wa okusan ga o-kirei da.

 prof. TOP wife NOM HON-pretty COP

 'Prof. Kakehi is such that his wife is pretty.'
 - b. Kakehi sensei wa hige ga go-rippa da.

 prof. TOP beard NOM HON-impressive COP

 'Prof. Kakehi is such that his beard is impressive.'
 - c. Kakehi sensei wa zoosyo ga go-rippa da.

 prof. TOP books NOM HON-impressive COP

 'Prof. Kakehi is such that his book collection is impressive.'

Among these, (59a) is least problematic in that in this sentence it is clearly the case that the trigger for honorification is the subject of the comment sentence okusan 'wife'. We know that the honorific predication is not made with reference to Prof. Kakehi from the fact that the predicate kirei da 'pretty' is only usable with a female subject. Notice also that the same construction allows subject honorification with reference to the subject of the comment sentence even when the topic itself does not qualify as the target of honorification. For example, in the following example, the topic is kimi, which is a non-honorific form of the second-person pronoun. The person so referred to would not be honorified; and thus the well-formedness of the following sentence indicates that it is the subject of the comment sentence, ryoosin 'parents', that triggers the honorification process.

(60) a. Kimi wa ryoosin ga go-rippa da kara...
you TOP parents NOM HON-respectable COP because
'Because you are such that your parents are respectable...'

More problematic are (59b-c), in which an inanimate entity is the subject of the comment sentence. However, here too the problem is only apparent, for the inanimate subject triggers the kind of honorification process under discussion as long as it belongs to someone worthy of respect. Thus, along with (59b-c), the following are wellformed.

(61) a. Kakehi sensei no hige ga ga-rippa da.

prof. of beard NOM HON-impressive COP
'Prof. Kakehi's beard is impressive.'

b. Kakehi sensei no zoosyo ga go-rippa da.

prof. of books NOM HON-impressive COP

'Prof. Kakehi's book collection is impressive.'

As discussed earlier, in the present type of topic construction, the topic and a constituent (typically the subject) of the comment sentence in general must hold a whole-part, inclusion, or possessor-possessed relation. This means that the subjects of the comment sentences in (59b-c) are basically no different from the subjects of the sentences in (61); and this accounts for the fact that the former trigger subject honorification just like the latter. Indeed, when the possessed subject nominal fails to trigger honorification, the corresponding topic construction also fails to do so.

- (62) a. *Kakehi sensei no desi ga mina go-rippa da.

 prof. of pupil NOM all HON-respectable COP
 'Prof. Kakehi's pupils are all respectable.'
 - b. *Kakehi sensei wa desi ga mina go-rippa da.
 'Prof. Kakehi is such that his pupils are all respectable.'
 - c. Kakehi sensei wa desi ga mina rippa da. (Non-honorific version of b)
- (63) a. *Kakehi sensei no seito-tati ga go-katuyaku-tyuu da.

 prof. of student-PL NOM HON-active COP

 'Prof. Kakehi's students are active.'
 - b. *Kakehi sensei wa seito-tati ga go-katuyaku-tyuu da.

TOP

'Prof. Kakehi is such that his students are active.'

c. Kakehi sensei wa seito-tati ga katuyaku-tyuu da. (Non-honorific version of b)

Thus insofar as the parallelism observed between (59b-c) and (61) and between (62a)-(62b) and (63a)-(63b) is maintained, there is no problem in accounting for the honorification phenomenon observed in the topic construction of the (59b-c)-type. However, there are cases in which this parallelism breaks down. In some cases the possessed subject nominals cannot trigger honorification, but the corresponding topic sentences containing them can felicitously contain honorific predicate forms. Observe the contrast below:

(64) a. *Kakehi sensei no asi ga o-nagai.

prof. of leg NOM HON-long
'Prof. Kakehi's legs are long.'

b. Kakehi sensei wa asi ga o-nagai.

TOP

'Prof. Kakehi is such that his legs are long.'

(65) a. *Kakehi sensei no se ga o-takai.
prof. of height ком нок-high

'Prof. Kakehi's height is high = Prof. Kakehi is tall.'

b. Kakehi sensei wa se ga o-takai.

TOP

(lit.) 'Prof. Kakehi is such that his height is high.'

Thus, we have those situations in which both possessed subject nominal and the topic version fail to trigger honorification – (62), (63) – those situations in which both felicitously trigger honorification – (59b-c), (61) – and those situations in which only the topic versions may felicitously trigger honorification – (64), (65). The task is how to account for the last situation, which *prima facie* suggests that the topic nominal triggers subject honorification, a role that we have claimed to be the property of the subject rather than the topic.

One possible solution is to invoke the notion of the degree of relatedness between the possessor and the possessed object. The notion of relatedness itself is similar to that of inalienability, but to what extent these two notions are similar is unclear because the concept of inalienability or the category membership of the class of the inalienable objects differs from language to language. What we observe in Japanese, at least, is that there are those psychologically highly personal objects, e.g. hige 'beard', zoosyo 'book collection', kakei 'family lineage', those that are inalienable but not felt to be as psychologically personal as the first class of objects, e.g. most body parts, and those objects that are alienable but can be significantly related to another person, e.g. desi 'pupil/disciple', seito 'student'. Now the objects belonging to the first category trigger honorification if possessed by a respectable person – (61) - and the latter two categories generally fail to trigger honorification in the same situation. However, the objects of the second category and those of the last category differ in that the former trigger honorification when they are related to the topic nominal; and this is what we must account for. What is suggested here as a possible account assumes that the topic-related objects of the second category get elevated with regard to their relatedness to the possessor, which is expressed as a topic. Our earlier discussion indicated that the topic and an element in the comment sentence must be fairly intimately related. This requirement, which holds with regard to the topic construction in general, then amplifies the relatedness between the topic and the possessed objects of the second category to an extent that allows that latter to trigger subject honorification. (Notice that in the genitive construction, the possessor is "subdued" in the sense that it is not the head of the genitive construction, while in the topic construction the indirectly expressed possessor is highlighted in the sense that it is the object of a judgment.) In the case of the objects of the third category, their alienability is weak enough to satisfy the aboutness requirement of the topic construction but strong enough to block the application of the honorific process.

Another possible analysis involves positing an intermediate structure; by assuming that structure to contain a subject, we let this subject trigger honorification. Although this analysis is less attractive compared to the above, we will nevertheless discuss it because it points us to the next topic of our discussion.

Many, but by no means all, topic sentences have parallel double nominative sentences, and those topic sentences under discussion generally exhibit this property.

- (66) a. Kakehi sensei wa hige ga rippa da.

 prof. TOP beard NOM impressive COP

 'Prof. Kakehi is such that his beard is impressive.'
 - b. Kakehi sensei ga hige ga rippa da.

NOM NOM

'It is Prof. Kakehi whose beard is impressive.'

(67) a. Kakehi sensei wa asi ga nagai.

TOP leg NOM long

'Prof. Kakehi is such that his legs are long.'

b. Kakehi sensei ga asi ga nagai.

NOM NOM

'It is Prof. Kakehi whose legs are long.'

(68) a. Kakehi sensei wa desi ga rippa da.

TOP pupil NOM impressive COP

'Prof. Kakehi is such that his pupils are impressive.'

b. Kakehi sensei ga desi ga rippa da.

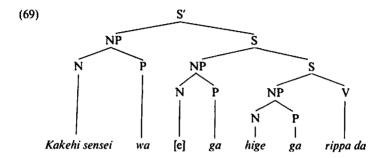
NOM NOM

'It is Prof. Kakehi whose pupils are impressive.'

The double nominative sentences contain a focus of new information in the first nominative phrase, and they typically answer a wh-question posed in a double nominative sentence, e.g. Dare ga hige ga rippa desu ka 'Who is it that his beard is

impressive?' Henceforth, the initial nominative nominal of the double nominative construction will be referred to as the focus nominal, as a way of distinguishing it from the topic nominal.

This alternative solution to the problem of honorification assumes that the topic construction of the (66a)-type contains a double nominative sentence, and, by assuming that the focus nominal is subject, it can be held responsible for honorification. The proposed structure for (66a) is the following:

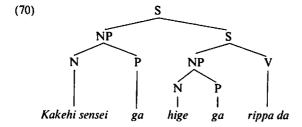


In other words, assuming the empty focus nominal N of the double nominative structure to be subject, we let it trigger honorification rather than the possessed subject nominal of the comment sentence. A number of issues are involved here. First, whether the topic sentences of the (66a)-type derive from the structure in (69), as suggested by Kuroda (1986), is independent from the claim that the focus nominal of the double nominative structure is the subject, as claimed by Kuno (1973, 1978). Secondly, even if the focus nominal of the double nominative sentence is assumed to be subject, we needn't invoke that in accounting for the honorification phenomenon under discussion, i.e. we can still maintain the account offered earlier. Thus, the particular analysis that is discussed below involves the intersection of the two claims; namely (1) that the focus nominal of the double nominative sentence is a syntactic subject, and (2) that it triggers honorification in the topic construction (and in the corresponding double nominative construction).

The particular analysis delineated here entails more problems than it resolves. If the empty focus nominal posited in (69) were a syntactic subject and it triggered honorification, we would need a mechanism of determining when that subject rather than the possessed subject triggers honorification. This is so, because in (60) the possessed nominal rather than the purported empty focus nominal triggers honorification, and because in (62)–(63) neither the purported empty focus nominal subject nor the possessed nominal triggers honorification. In other words, this analysis requires additional explanation compared to the account offered earlier.

The crux of the problem inherent in the analysis reviewed here is the claim that

the focus nominal of the double nominative structure is a syntactic subject. Indeed, the claim that the focus nominals of the (b) sentences of (66)–(68) are subjects is highly controversial. That is, while the analysis of the double nominative construction as involving the following structure is uncontroversial, the subject status of the focus nominal phrase is disputable. (The analysis of a double nominative construction of the present type as a structure involving a sentential predicate was first suggested in Shibatani 1977 and was further developed in Shibatani and Cotton 1976–7.)



The reason for doubting the subject status of the focus nominal is obvious from the above discussion - it does not, if ever, uniformly trigger the subject honorification process. (The initial ga versions of (60) and (62b)-(63b) do not trigger honorification.) Secondly, as discussed in connection with (59a) earlier, the focus nominal of the double nominative structure is not selected by the predicate, and thus its status differs from that of the normal subject, which obeys the selectional restrictions of the predicate with which it co-occurs. Indeed, this property accounts for the failure of the focus nominal (or for that matter, the topic nominal as well) to trigger the honorification process, which, just like agreement phenomena, involves the relationship between the subject and the predicate which selects it. Thus, while it is correct to assume that the focus nominal is predicated by the entire sentence, just as in the case of the relationship between the topic and the comment sentence, it is not quite like other syntactic subjects, again just as the topic nominal is not. Indeed, the structural similarity between the topic construction and the double nominative construction, e.g. between (22) above and (70), suggests that there is no reason to assume that the focus nominal of the latter must be considered a syntactic subject.

The above conclusion notwithstanding, we must recognize the terminological equivocation inherent in the foregoing discussion. That is, inasmuch as we use the term and the notion of predication, we are suggesting the existence of a subject. Thus, our saying that the focus nominal of the double nominative construction of the present type is predicated by a sentential structure, as represented in (70), tacitly implies that the focus nominal is a subject. Recall our earlier discussion which led

to the conclusion that the topic nominal is like a subject in the Western philosophical and grammatical tradition. With the double nominative construction, we have the same situation. An important point to recognize then is that there are different notions or levels of the term subject. The focus nominal is like a subject in the sense that the topic is like a subject in one sense of the term. However, they differ from the concept of syntactic subject that has been discussed above, namely the concept of subject as a syntactic category that is characterized in terms of the valency requirement of a predicate and in terms of its syntactic status as a primary nominal constituent as reflected by its greater relevance in syntactic (and sometimes semantic) phenomena. We tried to impute this notion in the above use of the term subject by using the term "syntactic subject". A division between one level of the notion of subject and another level was in fact already recognized when we made a distinction between topics and subjects with the recognition that the two are largely merged in English. Our ultimate conclusion then will be that the concept of subject is a complex one involving a number of different levels or facets, ranging from a broad definition in terms of the notion of predication (as in the case of the topic – and perhaps the focus nominal in question) and a more narrowly defined syntactic subject. These are not, however, discrete types, as the syntactic subject is a subset of the broader one, and we will eventually resort to the prototype theory of categorization, whereby a subject prototype and subjects of lesser prototypicality are recognized. Our present discussion then is concerned with the syntactic subject (understood in the light of the above discussion), and our conclusion is that the focus nominal marked by ga of the double nominative construction examined above is not quite like a syntactic subject.

Here then we encounter our first situation in which the initially assumed correspondence between the nominative particle ga and the syntactic subject breaks down. Before we examine other such situations, we will briefly examine the difference between the topic construction and the double nominative construction of the type under discussion, since it relates to the above discussion on the different types of subject or the degree and continuum involved in the concept of subject.

As pointed out above, the topic construction and the double nominative construction share a considerable structural similarity. The two also involve a similar aboutness condition between the external nominal and the comment structure. However, the double nominative construction imposes a severer restriction on the relationship between the focus nominal and the sentential predicate. In general, the sentential predicate must state a stable characteristic that represents a significant property of the focus nominal (see Shibatani and Cotton 1976–7). This difference in the restriction on the aboutness condition accounts for the following contrast in grammaticality between the topic sentence and the double nominative sentence:

(71) a. Kono hon wa minna ga yonde-iru.
this book NOM everyone NOM read-be
'This book is such that everyone is reading (it).'

b. *Kono hon ga minna ga yonde-iru.

NOM NOM

'It is this book that everyone is reading.'

(72) a. Sakana wa tai ga ii.

fish TOP seabream NOM good

'The fish is such that the seabream is good.'

b. *Sakana ga tai ga ii.

NOM NOM

'It is the fish that the seabream is good.'

Contrast these with the following:

(73) a. Zoo wa hana ga nagai.
elephant TOP nose NOM long
'The elephant is such that its trunk is long.'

b. Zoo ga hana ga nagai.

NOM NOM

'It is the elephant whose trunk is long.'

(74) a. Koobe wa yama ga kirei da.

Kōbe Top mountain Nom pretty COP

'Kōbe is such that the mountains are pretty.'

b. Koobe ga yama ga kirei da.

NOM NOM

'It is Kobe whose mountains are pretty.'

The severity of the restriction is reflected in the fact that the focus nominal is most typically correlated with the subject nominal of the predicate sentence. Thus while the focus nominal and subject of the sentential predicate of the grammatical sentences such as (73b) and (74b) are conceptually relatable to the genitive construction involving the subject of the sentential predicate as its head, e.g. zoo no hana 'an elephant's trunk' in (73b) and Koobe no yama 'Kōbe's mountains' in (74b), those of the ungrammatical ones normally do not easily yield such a correlation between the focus nominal and the subject of the predicate sentence (see Shibatani and Cotton 1976–7 for further details).

Despite the parallel structures that underlie the topic construction and the double nominative constructions, the focus nominal of the latter is structurally more tightly related to the sentential predicate than the topic is to the comment sentence. This difference is observed from the fact that the focus nominal is included in the nominalized clause and is in the domain of the provisional suffix -(r)eba, while the topic is outside of these scopes, as pointed out in the preceding section.

- (75) a. [Taroo ga se ga takai]-koto o ziman-site-iru.

 NOM height NOM high that ACC boast-be
 'X boasts Taro's being tall.'
 - b. Taroo wa [se ga takai]-koto o ziman-site-iru.

 'Taro is such that he boasts his height's being high.'
- (76) a. [Taroo ga se ga taka-ker]-eba kekkon-suru.

 NOM height NOM high-provided marry

 'X will marry (Taro) provided that Taro is tall.'
 - b. Taroo wa [se ga taka-ker]-eba kekkon-suru.
 'Taro will marry X provided that X is tall.'

Our representing the constituent formed by the topic nominal and the comment sentence in terms of S' and that formed by the focus nominal and the sentential predicate in terms of S is intended to represent the structural difference between the two constructions examined above. It is this structural tightness and the severer restriction that holds between the focus nominal and the sentential predicate that give the focus nominal the greater semblance of a syntactic subject in comparison to the topic nominal.

We now turn to a second case in which the correspondence between the nominative particle ga and the syntactic subject breaks down. (Henceforth "subject" refers to the syntactic subject.) This is observed in another type of double nominative construction, involving a subset of stative predicates. The following are representative examples:

- (77) a. Taroo ga Hanako ga suki da.

 NOM NOM like COP
 - 'It is Taro who likes Hanako.'
 b. Watasi ga otoko no ko ga hosii.
 - Nom boy of child Nom want 'It is I who want a boy.'
 - c. Taroo ga eigo ga tokui da. NOM English NOM good at COP
 - 'It is Taro who is good at English.'
 - d. Watasi ga mizu ga nom-itai.
 - I NOM water NOM drink-want 'It is I who want to drink water.'

These double nominative sentences, having stative predicates, again typically answer wh-questions such as Dare ga Hanako ga suki desu ka 'Who likes Hanako?', and thus the first nominative nominal is a focus of new information. This similarity to the other double nominative sentences examined earlier is due to the nature of the predicate involved; namely, the initial nominative nominal predicated directly or indirectly by a predicate expressing a variable state is typically a focus of new information when the sentence occurs as an independent sentence (see section 11.2 above). The similarity of the present double nominative sentences to the other double nominative sentences stops here, and structurally the two differ significantly.

The first difference is that, whereas in the earlier double nominative sentence, the sentential predicate is a complete sentence by itself and the focus nominal is not selected by the predicate, the present ones require two nominative nominals to satisfy the valency requirement of the predicate. Observe the following contrast:

- (78) a. Kakehi sensei no hige ga rippa da.

 prof. of beard NOM impressive COP

 'Prof. Kakehi's beard is impressive.'
 b. Kakehi sensei no ozyoosan ga suki da.

 prof. of daughter NOM like COP

 'X likes Prof. Kakehi's daughter.'
- (79) a. Koobe no yama ga kirei da.

 Kōbe of mountain NOM pretty COP

 'Kōbe's mountains are pretty.'
 - b. Suugaku no mondai ga tokui da.
 mathematics of problem NOM good at COP
 'X is good at the problems of mathematics.'

As indicated in the translations, the (b) sentences are elliptical sentences missing their subjects, and as such they are always understood to contain unpronounced pronouns. This is not the case with the (a) sentences, which stand as they are without being supplied with information regarding any missing element. In other words, the predicates involved in the present double nominative constructions are transitive, despite their adjectival or adjectival nominal status, in the sense that they require two nominals to satisfy their valency. In this regard these predicates are like English adjectival predicates such as fond of and aware of.

A second important property of the present double nominative construction is that the focus nominal, i.e. the first nominative nominal, functions as the subject of the whole sentence. This is opposite to the earlier double nominative construction in which the second nominative nominal is undeniably a subject. The first phenomenon which shows this is again subject honorification.

- (80) a. Kakehi sensei ga seito-tati ga o-suki da.

 prof. Nom student-PL Nom Hon-like COP

 'Prof. Kakehi likes the students.'
 - b. Kakehi sensei ga tinpira ga o-kirai da.

 prof. Nom punk Nom Hon-dislike COP

 'Prof. Kakehi dislikes the punks.'
 - c. Kakehi sensei ga kendoo ga o-tokui da.

 prof. NOM kendō NOM HON-good at COP
 'Prof. Kakehi is good at kendō.'

That the second nominative nominal is not a subject can be seen by the fact that the following, in which a respected person is referred to in the second nominal, fail to trigger subject honorification.

- (81) a. Gakusei-tati ga Kakehi sensei ga suki da.

 students NOM prof. NOM like COP

 'The students like Prof. Kakehi.'
 - b. *Gakusei-tati ga Kakehi sensei ga o-suki da.
 (Subject honorific form of a)
- (82) a. Tinpira ga Kakehi sensei ga kirai da.
 punk NOM prof. NOM dislike COP
 'The punks dislike Prof. Kakehi.'
 - b. *Tinpira ga Kakehi sensei ga o-kirai da.
 (Subject honorific form of a)

The same point can be made with regard to reflexive binding; only the initial nominative binds the reflexive form. Thus:

(83) Taroo ga Hanako ga zibun no kurasu de itiban suki da.

NOM NOM self of class in most like COP

'Taro, likes Hanako the best in self's, class.'

Furthermore, the arbitrary PRO occurs only in the initial nominative slot.

- (84) a. [(PROarb-ga) kodomo ga suki-na] koto wa ii koto da.

 child NOM like-COP that TOP good thing COP

 'To like children is a good thing.'
 - b. *[Kimi ga (PROarb-ga) suki-na] koto wa ii koto da.

 you NOM like-COP thing TOP good thing COP

 '*For you to like is a good thing.'

The above phenomena all point to the conclusion that the initial nominative is a subject in the double nominative construction of the present type. However, while

these phenomena give negative evidence that the second nominative is not a subject, positive evidence to clarify the grammatical relation of the second nominative is lacking. One piece of evidence that the second nominative is a direct object is that many speakers alternate the nominative ga with the accusative o. This phenomenon, limited to certain predicates such as suki da 'like' and hosii 'want', has been observed for more than two hundred years, despite a strong feeling on the part of native speakers that the ga version is a "correct" form. Sentences (77a-b), for example, have the following alternate forms:

(85) a. Taroo ga Hanako o suki da.

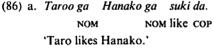
NOM ACC like COP

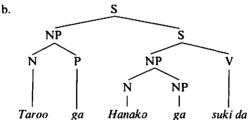
'It is Taro who likes Hanako.'
b. Boku ga otoko no ko o hosii.

I NOM boy of child ACC like

'It is I who want a boy.'

Lack of strong evidence for the objecthood of the second nominative makes it difficult to ascertain the structure of the double nominative construction of the present type. Desire to capture the generalization that ga marks a sentence initial nominal (or a nominal immediately dominated by S under the assumption that the VP exists in Japanese) leads one to posit the following structure, which is structurally identical to the double nominative construction discussed earlier.

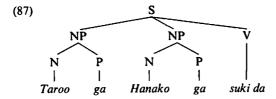




There are a number of problems with this analysis. Whereas the structure claims the second nominative to be the subject of the predicate, there is no evidence, other than the case marking, that it is a subject. Recall that the second nominative does not trigger honorification or bind the reflexive. Secondly, unlike the earlier double nominative construction, there is no restriction on the relatedness between the initial nominative and the second nominative. Notice that both the topic construction and the earlier double nominative construction, which involve a structure in which the topic or the focus nominal is predicated by a sentence, involve some kind

of aboutness condition between the topic or the focus nominal and the sentential predicate. This kind of condition appears to be a necessary condition for a nominal to be predicated by a sentence; i.e. it provides a necessary connection between the topic or the focus nominal and the sentence to which it is joined. The fact that the present double nominative does not involve such a condition strongly suggests that the underlying structure does not involve sentential predication. Finally, allowing a structure like (86b) means allowing a complete S at deep structure that does not satisfy the valency of its predicate. Recall that while the predicate of the carlier double nominative construction is typically intransitive and its valency is satisfied in the embedded S, the present one involves a transitive predicate. The structure in (86b) fails to capture this.

All these arguments indicate that the relevant structure is more like the following.



This allows the second nominative to be interpreted as a non-subject. The question of whether this nominal is to be considered as an object or not aside, we have another case where the correspondence between the nominative ga and the syntactic subject does not hold. We shall now turn to the final set of data which reveals that the usual correspondences between the case particles and the grammatical relations are violated in two directions; namely, a case where a subject is not marked by ga and a non-subject is marked by ga.

In many languages of the world, e.g. Russian, Kannada, Tibetan, some of the predicates involved in the double nominative construction discussed immediately above are subsumed under the class of predicates that require dative-nominative case marking on the nominals involved. Japanese, too, has such predicates, which are semantically fairly close to those that govern the double nominative case marking. They include wakaru 'understand', dekiru 'can do', aru 'have', hituyoo da 'necessary', and ooi 'many', and the derivative potential forms. Their basic pattern of case distribution is shown in the following examples. (Again, these predicates being stative, the topic versions sound more natural. However, for the sake of clarity, we use non-topic, basic forms, which are perfectly natural in a nominalized clause, where topicalization does not take place.)

(88) a. Kakehi sensei ni eigo ga yoku wakaru.

prof. DAT English NOM well understand
'Prof. Kakehi understands English well.'

- b. Kakehi sensei ni okosan ga san-nin aru.

 prof. DAT child NOM 3-person have
 'Prof. Kakehi has three children.'
- c. Kakehi sensei ni sake ga takusan nom-eru.

 prof. DAT sake NOM a lot drink-can
 'Prof. Kakehi can drink a lot of sake.'

Just as in the case of the simplex double nominative construction, all evidence points to the conclusion that, in these sentences, the dative nominal rather than the nominative is the subject. The phenomena of subject honorification, reflexive binding, and the occurrence of PROarb all refer to the dative nominal.

- (89) a. Kakehi sensei ni eigo ga yoku o-wakari ni naru.

 prof. DAT English NOM well understand-ном

 'Prof. Kakehi understands English well.'
 - b. Taroo ni Hanako ga zibun no imooto yori yoku wakaru.

 DAT NOM self of sister than well understand
 'Taroi understands Hanako better than self's; sister.'
 - c. (PROarb-ni) eigo ga hanas-eru no wa subarasii.

 DAT English NOM speak-can that TOP splendid

 'It is splendid to be able to speak English.'

The dative nominals in these sentences are markedly different from the dative nominal of a ditransitive verb such as yaru 'give', which typically expresses a recipient or a goal, and from the dative nominal of a transitive verb such as au 'meet', which governs the nominative-dative case distribution. Take, for example, au 'meet' in the following sentences.

- (90) a. Kakehi sensei ga seito ni at-ta.

 prof. NOM student DAT meet-PAST

 'Prof. Kakehi met the student.'
 - b. Kakehi sensei ga seito ni o-ai ni natta.

 prof. NOM student DAT meet-HON
 (Subject honorific version of a)
 - c. Seito ga Kakehi sensei ni o-ai sita.

 student NOM prof. DAT meet-HON

 'The student met Prof. Kakehi.' (Object honorific)

First of all, the basic word order differs between the DAT-NOM sentence and the NOM-DAT sentence, and the orders given in (88)-(89) and (90) reflect these basic orders. Secondly, in the NOM-DAT sentence, the nominative is subject, whereas the dative is object. Thus, (90b) and (90c) trigger subject and object honorification, respectively.

A similar difference is also observed between the two homophonous verbs *mieru* 'can see' and 'visible/come into view'. While these verbs deploy a similar pattern of semantic roles, an experiencer and a patient or theme, the syntax shows a marked contrast. The potential derivative *mieru* 'can see' realizes the experiencer as a subject, whereas the lexical *mieru* 'visible/come into view' makes the patient a subject. This difference triggers a word order difference and a difference in the honorification pattern.

- (91) a. Sensei ni kono zi ga mi-eru.

 teacher DAT this character NOM see-can
 'The teacher can see this character.'
 - b. Sensei ni kono zi ga o-mie ni narimasuka.

 teacher DAT this character NOM see-HON-POLITE-Q

 'Can you (the teacher) see this character?' (Subject honorific)
- (92) a. Sono toki Huzi-san ga sensei ni mie-ta. that time Fuji-Mt. NOM teacher DAT visible-PAST 'At that time, Mt. Fuji became visible to the teacher.'
 - b. *Sono toki Huzi-san ga sensei ni o-mie ni natta. visible-ном

(Subject honorific version of a)

In these cases, the difference in the selection of a subject imposed by a verb leads to a word order difference. However, in the case of the possessive verb aru 'have' and the existential aru/iru 'exist', basic word order is identical but they crucially differ in the selection of a subject: in the former, the dative nominal is a subject and in the latter the nominative is a subject.

- (93) Possessive aru
 - a. Kakehi sensei ni musume-san ga o-ari ni naru. prof. DAT daughter пом have-ноп 'Prof. Kakehi has daughters.' (Subject honorific)
 - b. Kakehi sensei ni hige ga o-ari ni naru.

 prof. DAT beard NOM have-HON

 'Prof. Kakehi has a beard.' (Subject honorific)
- (94) Existential aru/iru
 - a. Kakehi sensei no hon ga aru/*iru.

 prof. of book NOM exist
 (lit.) 'Prof. Kakehi's books exist.'
 - a'. *Kakehi sensei no hon ga o-ari ni naru. (Subject honorific version of a)

- b. Asoko ni Kakehi sensei no musume-san ga iru/*aru there at prof. of daughter NOM exist (lit.) 'At that place, Prof. Kakehi's daughters exist.'
- b'. Asoko ni Kakehi sensei no musume-san ga irassyaru. (Subject honorific version of b)
- b". Kakehi sensei ni musume-san ga irassyaru.

 prof. at daughter NOM exist-HON

 (lit.) 'At Professor Kakehi exist daughters.' (Subject honorific)
- c. Kimi ni rippa na ryoosin ga irassyaru.
 you at fine COP parents NOM exist-HON
 (lit.) 'At you exist fine parents.' (Subject honorific)

First, whereas the existential verbs alternate between aru and iru depending on animacy of the subject (see (94a-b)), the possessive verb is consistently aru. This shows that in (93a) the nominative nominal musume-san 'daughter' is not a subject, as the verb aru co-occurs with it. (94a') indicates that, unlike the subject honorification involved in the adjectival predicates discussed earlier, the verbal subject honorification does not take place in reference to the possessed object. These two fact together show that in (93) the honorific trigger is the dative nominal.

Secondly, (94b) shows that the subject honorific form of the existential verb *iru* with an animate subject is a suppletive form *irassyaru*. Although it is not clear in (94b") whether it is *Kakehi sensei* 'Professor Kakehi' or *musume-san* 'daughters' that is triggering honorification, (94c) shows that the nominative is the trigger, since this particular sentence is usable in a context in which *kimi* 'you', which does not indicate deference, is used.

Thus, while in many languages the possessive and existential verbs are identical, Japanese shows only a superficial phonological similarity. In particular, the animacy distinction controls the choice between two existential verbs aru and iru, while there is only one possessive verb aru. The syntax also differs between the existential and the possessive verbs. In the former, the nominative nominal functions as a subject, the ni-marked nominal indicating a location or an affiliated person, and in the latter, the dative nominal is a subject as in other predicates that govern the DAT-NOM case pattern.

The foregoing discussion shows that the normal correspondence between the nominative ga and the syntactic subject is disrupted in a number of construction types. We have recognized two types of double nominative construction, which, among others, differ crucially in terms of the distribution of the subject nominal; however, both show that one of the ga-marked nominals within each construction is not a subject. We have also distinguished two types of construction which display the ni-ga pattern. One of these indicates that not only a non-subject is marked by

ga but also that the subject can be marked by ni. Together with our earlier discussion on the prototype approach to the category of subject, these indicate that there are indeed many different kinds of subject. What then is a prototype subject in Japanese?

Recall once again that in Japanese the English-style subject is divided into two categories, the topic and the syntactic subject. A form that embraces these two categories exists in Japanese, namely the topic that is identical with the syntactic subject, and this can be regarded as a prototypical subject in Japanese. The non-topic nominative subject is syntactically subject, but it lacks a property of the prototype, namely, that it express the object of an experiential judgment. Between these two there exists a subject, which is not selected by a predicate and therefore is not a syntactic subject, but which is predicated by a sentence just like the topic. This is the initial nominative of the double nominative construction of the first type. And then there is a syntactic subject, which lacks the important property of nominative marking, namely, the subject marked by the dative ni. This type of subject finds analogs in many other languages, in which predicates expressing the notions of liking/disliking, existence/possession, necessity and ability mark the experiencer subject with the dative case. Finally, there is a class of nominal elements that is marked by the nominative ga, but systematically lacks other syntactic subject properties. Some of these alternate with the particle o, which indicates their object status. However, inasmuch as they involve nominative marking, they can be considered subjects to the extent that they share one important subject property. The conclusion then is that there is a range of subjects in Japanese, from the prototypical one that is an intersection of the topic and the syntactic subject to the least prototypical one that involves only nominative marking.

(N.B. In order to simplify the discussion, we did not go into detail on some of the phenomena examined here. Prominent among the topics that require further investigation are reflexive binding and quantifier float. In the former, there have been pointed out examples showing that the binding noun phrase of the reflexive zibun is not a subject (see N. McCawley 1976 and Oyakawa 1973, 1974). Observations have also been made that certain dative-marked object noun phrases float quantifiers (see Shibatani 1977, 1978 and Haig 1980 for further developments regarding this phenomenon).)

11.4 The syntax of agglutinative morphology

Due to the lack of agreement between the head and the dependent constituent, Japanese is not as highly agglutinative as Turkish, especially in the domain of nominal constituents. However, in the realm of verbal constituents, Japanese shows a high degree of agglutination involving a fair number of suffixes in a row. As in

many other languages, the order of these verbal affixes is generally fixed, though alternate orders are infrequently observed. In Japanese, the following is the typical order:

(95) Vstem-causative-passive-aspect-desiderative-NEG-tense

All the possibilities are not, of course, exploited in each expression, but the following illustrates some of the lengthy but fairly commonly observed forms:

- (96) a. ika-se -rare -na -i
 go-CAUS-POTEN-NEG-PRES
 'cannot make X go'
 - b. ika-se -rare-taku-na -i
 go-CAUS-PASS-DESI-NEG-PRES
 'do not want to be made to go'
 - c. aruka-se- tuzuke-ta -i
 walk-CAUS-CONT -DESI-PRES
 'want to continue to make X walk'

The suffixes most closely related to the verbal stem are the voice suffixes, represented by the causative and the passive suffix. These suffixes are of particular interest, for they exhibit both morphological and syntactic properties that contrast clearly with those suffixes that are lexically determined. Since the distinction between lexical word formation and syntactic word formation has theoretical significance in current linguistic research, we shall examine here word formation involving the causative and the passive suffix.

11.4.1 Causative formation

With the informal definition of a causative verb as a verb that expresses the meaning of "causing X to do something or to be in some state", we can recognize two kinds of causative verbs. (See Shibatani 1976 for a rigorous definition of the causative expression and for a more comprehensive treatment of Japanese causative expressions.) One is those involving the suffixal auxiliary verb -(sa)se seen above, and the other kind is those involving semi-regular suffixes, e.g. tomar-ase-ru 'make X stop' vs. tom-e-ru 'stop X'. The latter are treated as transitive verbs in traditional grammar, but, as discussed in Chapter 10, their connection with the corresponding intransitive verbs is recognized in a morphological analysis that identifies the roots and the suffixes for the intransitive and transitive forms. Furthermore, the suffixes involved for both intransitivization and transitivization are likely to have historical connections with the contemporary passive and causative morphemes (see Chapter 10 for details).

Despite these historical connections between the transitivizers and the causative suffixes and between the intransitivizers and the passive suffixes, synchronically the two uses must be clearly distinguished. In the case of transitive—intransitive derivations, the suffixes are lexically governed and the patterns of correspondence between the members of the transitive—intransitive pairs are generalizations to be represented in the lexicon. In contradistinction, the occurrences of the passive and the causative suffixes are regular, the variations being determined solely by the phonological factor. Thus, the passive -re and the causative -se attach to the irrealis form of a consonant-final root (e.g. kak-a+re-ru 'to be written', kak-a+se-ru 'to make X write'), whereas the long forms -rare and -sase attach to the irrealis form of a vowel-final root (e.g. mi-o+rare-ru 'to be seen', mi-o+sase-ru 'to make X look at') (see the discussion on the two forms of these suffixes in Chapter 10, section 10.3).

The following discussion on causatives examines from a syntactic point of view the differences between the lexically formed transitive verbs with causative meaning and the syntactically formed causative verbs. What is remarkable about the Japanese causative forms is that, unlike many languages, intransitive verbs also form causatives even when there are corresponding transitive verbs with a causative meaning. There are thus competing transitive verbs and causative forms that share a great many semantic properties. These competing forms provide a rare opportunity for the examination of the differences between lexical word formation and syntactic word formation. (In the following discussion, the two causative forms are represented by the long form -sase in the text.)

In the current conception of grammar, productivity alone does not determine the syntactic nature of a particular word formation process, for the lexicon itself can be conceived of as a locus of productive word formation. Showing that a particular word formation process is syntactically based requires far more evidence than mere productivity. In the case of the Japanese causative formation, there is a congeries of evidence that points out its syntactic nature. This can be shown most clearly by contrasting the lexical and the syntactic causative forms with respect to specific syntactic phenomena, but first a few general remarks on the syntactic causative formation are in order.

The causative conversion of an intransitive clause yields two forms, one with the causee nominal marked by the accusative particle o, and the other with the causee marked by the particle ni.

(97) a. Taroo ga ik-u.

NOM go-PRES
'Taro goes.'

b. Hanako ga Taroo o ika-se-ta. ACC 20-CAUS-PAST 'Hanako made Taro go.' c. Hanako ga Taroo ni ika-se-ta.

NOM AGT go-CAUS-PAST

'Hanako had Taro go.'

There is a slight difference in meaning between the o-version and the ni-version. The former implies that the intention of the causee is ignored by the causer, while in the latter, the causer typically appeals to the causee's intention to carry out the caused event. Reflecting this difference, the o-version can imply more coercive causation as opposed to less coercive causation of direction-giving represented by the ni-version.

As in many other languages, the causative -(sa)se expresses both inducing causation and permissive causation. Thus, in addition to the inducing causative reading, the (b)-(c) versions above also mean the permissive counterpart: 'Hanako let Taro go.' The difference between the o-version and the ni-version in the permissive reading is not quite as obvious, but, whereas the former implies that the permission was given in the passive form of withholding an interfering act, the latter implies that a more active permission-granting act is done, as, e.g. in the form of giving permission to the causee.

The nature of the particle ni of the ni-version is not clear. It does not seem to be the dative ni, which typically expresses the recipient or goal of an object or the person (experiencer?) who is in a certain state with regard to some object or person. Rather, the ni in question seems to be either identical or akin to the ni that marks the agent of a passive clause (see next section). In fact, the niversion obtains only when the causee acts as a volitional entity, as observed below.

- (98) a. Hana ga migotoni sak-u. flower NOM beautifully bloom-pres 'The flowers bloom beautifully.'
 - b. Taroo ga hana o migotoni saka-se-ta. NOM flower ACC beautifully bloom-CAUS-PAST 'Taro made the flowers bloom beautifully.'
 - c. *Taroo ga hana ni migotoni saka-se-ta. (the ni-version of b)
- (99) a. Hanako ga kizetusu-ru. NOM faint-PRES 'Hanako faints.'

hunger NOM

b. Kuuhuku ga Hanako o kizetusa-se-ta. ACC faint-CAUS-PAST

'Hunger made Hanako faint.'

c. *Kuuhuku ga Hanako ni kizetusa-se-ta.

(the ni-version of b)

The o-ni distinction, however, is obliterated in causative formations involving a transitive clause: the ni-marked causee is the only possibility permitted.

(100) a. Taroo ga hon o vom-u.

NOM book ACC read-PRES

'Taro reads a book.'

b. Hanako ga Taroo ni hon o voma-se-ta.

AGT book ACC read-CAUS-PAST

'Hanako made/had Taro read a book.'

c. *Hanako ga Taroo o hon o yoma-se-ta.

ACC book ACC read-CAUS-PAST

(the o-version of b)

The impossibility of the o-version in (c) has been attributed to the so-called Double-O constraint that disallows the occurrence of two accusatively marked objects in a simplex clause. Notice that this constraint is independently needed in ruling out double accusative objects in a simplex sentence of the type exemplified in (d) below.

(101) a. Taroo ga benkyoo o suru.

NOM study ACC do

(lit.) 'Taro does a study.'

b. Taroo ga benkvoo-suru.

NOM study-do

'Taro studies.'

c. Taroo ga eigo o benkvoo-suru.

NOM English ACC study-do

'Taro studies English.'

d. *Taroo ga eigo 0 benkvoo o

> NOM English ACC study ACC do

(lit.) 'Taro does a study English.'

A verbal noun such as benkyoo 'study' functions as both noun and verb. When it functions as an object noun, it will be marked by the accusative o and followed by the verb suru 'do', as in (a). When the verbal noun functions as a verb as in (b), it must be supported by suru, which, just like its English counterpart do, also functions as a tense realizer, since a verbal noun cannot carry tense by itself. In this case, the predicative verbal noun may take an independent object, as in (c). But when the verbal noun functions as an object, it does not tolerate another object since the result. (d), comes into direct conflict with the Double-O constraint.

Notice further that the Double-O constraint pertains to a simplex structure, and a sentence involving an embedded clause permits two accusatively marked objects, as seen below:

(102) Taroo wa [kane o watasu]-yoo Hanako o kyoohakusita.

TOP money ACC hand-so as ACC threatened

'Taro threatened Hanako so as to hand over the money.'

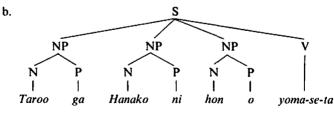
The fact that the causative form obeys the Double-O constraint shows that the derived causative structure is simplex; and this is in accord with the fact that there is only one verbal complex, a stem and the causative suffix, in the causative sentence, as opposed to those complex structures in which two independent verbal forms occur. That a verb stem and the causative suffix form a one-word unit is also evidenced by the fact that the honorification processes treat it just like a single word by converting the whole complex into an honorific form, e.g. ika-se- $ru \rightarrow o$ -ika-se ni naru (subject honorific), o-ika-se suru (object honorific) 'make X go'.

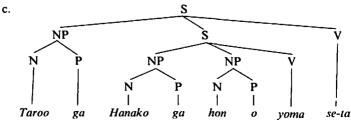
The above conclusion notwithstanding, there is ample evidence that the causative sentence derives from a complex structure in which the suffix -sase functions as an independent predicate that takes a complement sentence. In other words, the Japanese causative form has a simplex surface structure, like (103b), but a complex deep structure, like (103c).

(103) a. Taroo ga Hanako ni hon o yoma-se-ta.

NOM AGT book ACC read-CAUS-PAST

'Taro made Hanako read the book.'





The complex nature of the causative deep structure can be most clearly observed when a causative sentence is contrasted with a simple transitive sentence with respect to those phenomena that show differential patterns depending on whether a given structure involves a simplex structure or a complex structure with two independent clauses. It is seen below that the causative sentence consistently exhibits those patterns characteristic of a complex construction.

The first phenomenon to be examined is reflexive binding. As explained earlier, the Japanese reflexive form zibun 'self' is bound by a subject. Unlike English, however, the binding subject and the reflexive need not occur in the same clause. As a consequence, a complex structure with two different subjects yields an ambiguous interpretation, zibun being construed as referring to either the subject of the main clause or that of the embedded clause. Thus, (104) below is ambiguous, allowing two coindexing possibilities, as indicated in the translation.

(104) Taroo wa [Hanako ga zibun dake o aisite-iru]-to omotte-iru.

TOP NOM self only ACC love-bethat think-be
(lit.) 'Taro; thinks that Hanako; loves only self_{i.j.}'

Needless to say, in the case of a simple clause there is no ambiguity of this kind. Now the lexical causative and the syntactic causative show a marked difference in the interpretation of the reflexive form, the former indicating its simplex nature and the latter its complex nature.

(105) a. Taroo wa Hanako ni zibun no syasin o mise-ta.

TOP DAT self of picture ACC show-PAST

'Taroi showed Hanako self's; picture.'

b. Taroo wa Hanako ni zibun no syasin o mi-sase-ta.

TOP AGT self of picture ACC look-CAUS-PAST

'Taroi made Hanakoi look at self's, i picture.'

Complementary to reflexive binding is the requirement for disjoint reference between an antecedent and a pronoun within a single clause. That is, in both Japanese and English, an antecedent cannot bind a pronoun within a single clause, a domain in which reflexive binding typically occurs. Thus, in a single-clause sentence like (a) below the pronoun must be construed to refer to someone other than Taro, while a double-clause sentence like (b) permits the reading in which Taro and kare 'he' are coreferential, but not the reading in which the subject of the embedded clause, Ziroo, and the pronoun are coreferential.

(106) a. Taroo wa kare o osae-ta.

TOP he ACC suppress-PAST

'Taro; suppressed him,

b. Taroo wa [Ziroo ga kare o bengosuru]-koto o kitaisita.

TOP NOM he ACC defend that ACC expected 'Taro; expected that Jiro; would defend him;, **i, k.'

The lexical causative and the syntactic causative show analogous patterning, the former paralleling a single-clause sentence and the latter a double-clause sentence.

(107) a. Taroo wa Hanako ni kare o sarakedasi-ta.

TOP DAT he ACC expose-PAST
'Taro_i exposed him_{*i,j} to Hanako.'
b. Taroo wa Ziroo ni kare o bengosa-se-ta.

TOP AGT he ACC defend-CAUS-PAST
'Taro_i made Jiro_i defend him_{i,*i,k}.'

Also notice that in (107) Ziroo and kare 'he' cannot be construed to be coreferential. This fact naturally falls out if Ziroo is assumed to be the subject of the embedded clause in which the pronoun kare also occurs. In other words, while Taroo belongs to a higher clause, Ziroo occurs in a lower clause together with the pronoun – a natural interpretation of the analysis of a causative form proposed here.

Further evidence that the causee nominal is the subject of the embedded clause comes from the PRO control phenomenon regarding the *nagara* ('while')-clause. The PRO of a *nagara*-clause can be controlled only by a subject. Normal objects cannot control this PRO, as evidenced in (108a-b).

(108) a. Taroo wa Hanako o [PRO warai]-nagara mukaeta.

TOP ACC smile-while welcomed
'Taro_i welcomed Hanako while (PRO_i) smiling.'
b. Taroo wa Hanako ni [PRO warai]-nagara aisatusita.

TOP DAT smile-while greeted
'Taro_i greeted Hanako while (PRO_i) smiling.'

Now it is the case that unlike the above situation, the causee nominal does control the PRO of a *nagara*-clause, indicating its subject status (at some level of representation).

(109) Taroo wa Hanako ni [PRO warai]-nagara aisatusa-se-ta.

TOP AGT smile-while greet-CAUS-PAST
'Taro_i had Hanako_j greet while (PRO_{i,j}) smiling.'

The discussion of the *nagara*-clause brings us to the topic of adverbial modification. The *nagara*-clause may be interpreted as modifying either the main clause or the subordinate clause. While the restructuring and the possibility of scrambling will not show clearly in the surface structure, one interpretation of the nagara-clause, the one in which PRO is understood to be controlled by the main clause subject, arises from the structure in which that clause occurs in the main clause. The interpretation here is that $\{X, \text{while} \dots, \text{CAUSED} \{\text{event}\}\}$. The other interpretation arises from the structure in which the nagara-clause occurs in the subordinate clause: namely, $\{X \text{ CAUSED} \{Y, \text{while} \dots, \text{did } Z\}\}$. And the bi-clausal deep structure posited for the causative construction affords a natural explanation for these possible semantic interpretations in structural terms. Indeed, there is again ample evidence that adverbials can modify the subordinate clause and the main clause separately in a causative sentence.

In the following examples, the lexical causative forms in (a) are contrasted with the syntactic causative forms in (b). In all of them, the scope of the adverbials in the (b) sentences can be understood in two ways; either only the embedded clause is the scope of modification or the main clause is the primary scope of modification. Compared to this, the lexical causative forms in (a) provide only one scope of modification.

(110) Manner adverbials

- a. Taroo wa Hanako o te o takaku age-te tometa.

 TOP ACC hand ACC high raise-ing stopped
 'Taro stopped Hanako with a hand raised high.'
- b. Taroo wa Hanako ni te o takaku age-te tomara-se-ta.

 TOP AGT hand ACC high raise-ing stop-CAUS-PAST
 'Taro made Hanako stop with a hand raised high.'

(111) Time adverbials

- a. Taroo wa Hanako o 6-zi ni okosita.

 TOP ACC 6 o'clock at wake up
 'Taro woke up Hanako at six o'clock.'
- b. Taroo wa Hanako ni 6-zi ni oki-sase-ta.

wake up-CAUS-PAST

'Taro made Hanako wake up at six o'clock.'

(112) Time frequency

- a. Taroo wa Hanako o san-kai yonaka ni okosita.

 TOP ACC 3-times night at woke up

 'Taro woke up Hanako three times during the night.'
- b. Taroo wa Hanako ni san-kai vonaka ni oki-sase-ta.

wake up-CAUS-PAST

'Taro made Hanako wake up three times during the night.'

(113) Place adverbials

- a. Hanako wa kodomo o nikai de nekase-ta.

 TOP child ACC upstairs at put to sleep
 - 'Hanako put the child to sleep upstairs.'
- b. Hanako wa kodomo ni nikai de ne-sase-ta.

sleep-CAUS-PAST

'Hanako made the child go to sleep upstairs.'

Notice that manner adverbials and other adverbials differ in the scope of modification. As in (110b), a manner adverbial can modify only the main clause, leaving the embedded clause out of scope. This is not possible with other adverbials. (111b), for example, can be understood to mean that only Hanako's waking up took place at six o'clock with the understanding that Taro's direction was given prior to six, or that Taro's waking Hanako up took place at six o'clock. But in this second interpretation, the embedded clause must also be within the scope of modification. That is, it cannot mean that only Taro's waking up of Hanako took place at six with the understanding that Hanako woke up later than six. This difference has to do with the semantics of -sase and causative predicates such as make, have, etc., all of which assert that when the causative act is performed, the caused event is entailed. Thus, when the time or place of the causative act or causing event is specified, the caused event must be understood to have taken place at that time or in that place.

Before we remark on the parallelism obtaining between Japanese and English despite a morphological difference between the two, we hasten to examine the last piece of evidence: namely, the possibility of outbound anaphora. One of the important phenomena that distinguish between lexical word formation and syntactic word formation is that a lexically formed word neither allows part of it to hold an anaphoric relationship with an anaphor, nor does it allow part of it to be replaced by an anaphoric element. For example, one cannot refer to the ash of the lexical compound ashtray with the pronoun it, nor can one replace the ash portion of the compound by it. Thus, in neither When I moved the ashtray, it spilled nor Gather the ash and put it in the it-tray can ash and the boldface it form an anaphoric relationship. And indeed this is the case with the Japanese lexical causatives. However, the syntactic causative form allows a part, root, to hold an anaphoric relationship with the verbal anaphoric form soo suru 'do so'. Observe the contrast:

(114) a. Taroo ga Ziroo o tome-ta node, boku mo soo si-ta.

NOM ACC stop-PAST because I too so do-PAST

'Because Taro stopped Jiro, I did so, too.'

b. Taroo ga Ziroo o tomara-se-ta node, boku mo soo si-ta.

NOM ACC stop-CAUS-PAST because I too so do-PAST
'Because Taro made Jiro stop, I did so, too.'

Notice that in (114a), despite the fact that the lexical causative tome-ru can be morphologically analyzed as tom-e-ru with the suffix -e as a transitivizer or lexical causative suffix, soo sita 'did so' cannot refer to the root part, tom-, and indeed the main clause boku mo soo sita 'I did so, too' cannot mean "I too stopped"; it can only mean "I too stopped Jiro." In the case of the syntactic causative, on the other hand, the root portion tomar- can hold an anaphoric relationship with soo suru to the exclusion of the suffix part -sase, and as such, the main clause of (b) can mean "I too stopped." Since the whole tomara-se is also a verb, (114b) is in fact ambiguous with the other reading of "I too made Jiro stop."

The case examined above is that of outbound anaphora, in which an anaphoric item refers to part of a word. The syntactic causative also allows inbound anaphora, in which part of a word is replaced by an anaphoric element. Observe:

(115) Taroo ga hasit-ta node, boku wa Ziroo ni mo soo
NOM run-PAST because I TOP AGT too so
sa-se-ta.
do-CAUS-PAST
'Because Taro ran. I made Jiro do so too.'

Here the causative form sa-se-ta contains a portion of an anaphoric element which refers to the preceding verb. Needless to say, a lexical causative does not permit such a possibility.

One of the remarkable things about the syntactic causative form is that, despite its status as a single word at a superficial level, it behaves just like a periphrastic causative expression in a non-agglutinative language like English, in which there appear two independent verbs throughout the syntax. The phenomena of adverbial modification and anaphoricity show exact parallelism between the lexical causatives in Japanese and English on the one hand, and the Japanese syntactically formed causative and the English periphrastic causative on the other. This indicates that the process of syntactic word formation that brings together the stem verb and the causative predicate -sase is a fairly superficial operation, motivated by the fact that -sase, being a verbal suffix, must attach to a verb. Though the details of such an operation are not well understood at the moment and there remains a problem of specifying the side-effects, such as the adjustment of the grammatical relations of the nominals of the embedded clause as well as that of the particles, the foregoing discussion clearly demonstrates a case of syntactic word formation as opposed to

the formation of words within the lexicon here represented by lexical causatives. Japanese is among the rare languages that afford a critical examination of the difference between the two types of word formation, for, with the presence of the competing lexical and syntactic forms, it presents a clear contrast between the two types of word.

Before we turn to the next topic, a few words are perhaps in order regarding the semantic difference between the competing lexical and syntactic causative forms. In a nutshell, the difference between them parallels the difference between the lexical causative and the periphrastic causative in English. The lexical causative, e.g. tome-ru 'stop', typically expresses manipulative causation in which the causer brings about the caused event by physically manipulating the causee, whereas the syntactic causative, e.g. tomara-se-ru 'make X stop', typically expresses directive causation in which the causer gives a direction to the causee to bring about the caused event. That the causee brings about the caused event here is important, and the absence of the causee's action in the lexical causative contrasts sharply with the presence of the causee's action in the syntactic causative. It is this difference that allows the positing of a real intransitive (or transitive) verb beneath the causative predicate -sase in the syntactic causative formation and that disallows such an analysis for a lexical causative.

11.4.2 Passive formation

Another productive verbal suffix in Japanese is the passive suffix -(ra)re, which again attaches to both transitive and intransitive verbs. The fact that passivization applies to an intransitive clause is not surprising by itself, for a fair number of languages, e.g. Latin, German, and Ute, permit such an operation. What is interesting in the case of the Japanese passive is that a marked semantic difference arises between the passive of an intransitive verb and that of a transitive verb. The distinction in terms of the transitivity of the verb stem will be qualified presently, but as an initial observation, compare the following.

(116) Intransitive clauses

- a. Tomodati ga kaet-ta.

 friend NOM return-PAST

 'The friend returned.'
- a'. Taroo wa tomodati ni kaera-re-ta.

 TOP friend by return-pass-past

 'Taro was adversely affected by the friend's returning.'
- b. Ame ga hur-u.
 rain NOM fall-PRES
 (lit.) 'The rain falls.'

b'. Taroo wa ame ni hura-re-ta.

TOP rain by fall-pass-past

'Taro was adversely affected by rain's falling.'

c. Kodomo ga nak-u.

child NOM Cry-PRES

'The child cries.'

c'. Taroo wa kodomo ni naka-re-ta.

TOP child by cry-pass-past

'Taro was adversely affected by the child's crying.'

(117) Transitive clauses

a. Tomodati ga Taroo o nagur-u.
friend NOM ACC hit-PRES
'The friend hits Taro.'

a'. Taroo wa tomodati ni nagura-re-ta.

TOP friend by hit-pass-past

'Taro was hit by the friend.'

b. Ziroo ga Taroo o koros-u.

NOM ACC kill-pres

'Jiro kills Taro.'

b'. Taroo wa Ziroo ni korosa-re-ta.

TOP by kill-pass-past

'Taro was killed by Jiro.'

c. Ziroo ga Taroo o hasira-se-ru.

NOM ACC run-CAUS-PRES

'Jiro makes Taro run.'

c'. Taroo wa Ziroo ni hasira-se-rare-ta.

TOP by run-Caus-pass-past

'Taro was made to run by Jiro.'

What is peculiar about the passives of intransitive clauses in (116) is that they mean that some adverse effects befell the referents of the subjects. Notice that the verb kaeru 'to return', for example, is itself neutral with respect to any connotation of adversity, as seen in the active version (116a). But when it is passivized, as in (116a'), the whole clause indicates that the referent of the subject was somehow inconvenienced by the returning of his friend. Such adversity connotation is absent in the passive clauses of prototypical transitive verbs. Thus, despite the fact the verb naguru 'hit', for example, has a lexical meaning of adversity, its passive form (117a') does not have the same kind of adversity reading as, e.g. (116a'):(117a') does not imply that Taro was somehow inconvenienced by his friend's hitting him.

That is, semantically (117a') parallels the passive counterpart in English exactly. On the other hand, the impossibility of direct translation of the intransitive passive clause, e.g. (116a'), stems from the fact that English does not allow the passive of an intransitive and that the Japanese intransitive passive clause typically connotes that the subject is adversely affected in the sense that it is somehow inconvenienced by the event described.

This semantic property of the intransitive passive is one major difference between Japanese and other languages that allow passivization of intransitive verbs. The passive of an intransitive verb, such as Latin *Curritur* 'There is running/The running is being done', has no adversity connotation. Another major difference of a syntactic nature between the Japanese intransitive passive and the passives of intransitives in other languages will be discussed subsequently.

For the sake of simplicity, the discussion so far has illustrated the difference in semantic effect of passivization in terms of the transitivity of the verb stem. Actually, the presence or absence of the adversative meaning does not correlate straightforwardly with the transitivity of the verb stems, for the passive of a transitive verb may also connote adverse effect, e.g.

(118) a. Hanako ga piano o hik-u.

NOM piano ACC play-PRES

'Hanako plays the piano.'

a'. Taroo wa Hanako ni piano o hika-re-ta.

TOP by piano ACC play-PASS-PAST

'Taro was adversely affected by Hanako's playing the piano.'

b. Ziroo ga doramu o rensyuusu-ru.

NOM drum ACC practice-PRES

'Jiro practices the drums.'

b'. Taroo wa Ziroo ni doramu o rensyuusa-re-ta.

TOP ACC drum ACC practice-PASS-PAST

'Taro was adversely affected by Jiro's practicing the drums.'

An important point to draw from these observations is that the adversity reading obtains in a passive form when the event described does not directly affect the subject of the passive clause. The adversity reading obtains typically with an intransitive verb, because, by definition, the subject of the passive of an intransitive verb is not directly affected. Contrast this with the "normal" passive of the (117)-type. Here, the subject of the passive clause corresponds to the direct object of the corresponding active clause, and by virtue of this the subject of this kind of clause can be said to be directly affected by the event described. The notion of the directness and indirectness discussed here has been made more precise by Oehrle

and Nishio (1981) in terms of the criterion of whether a described event can take place independently of (i.e. without involving) the subject of the passive clause. If it can, we obtain an instance of the indirect passive; otherwise an instance of the direct passive obtains.

The distinction between the direct passive and the indirect passive can be thus defined independently of the semantic effect of adversity. Indeed, as we shall see subsequently, the two need to be kept apart, although a great deal of overlap holds, for the indirect passive is always associated with the adversative meaning. Whether one takes the direct—indirect opposition or the adversity—neutral opposition as a criterion for distinguishing two types of passive, a controversy exists as to whether or not the two types of passive in Japanese should be syntactically treated uniformly or separately.

The uniform analysis of the two types of passive within the framework of generative grammar goes back to Kuroda (1965), in which these passives are treated just like the causative construction examined earlier. That is, the suffix -rare functions as a main clause predicate that takes a sentential complement. The two passives, in other words, are assigned the following parallel deep structures in this treatment.

(119) a. Indirect passive, e.g. (116a')
[Taroo ga [tomodati ga kaer] re-ta]
b. Direct passive, e.g. (117a')
[Taroo ga [tomodati ga Taroo o nagur] re-ta]

This analysis has been defended by Howard and Niyekawa-Howard (1976), while the "non-uniform theory", as dubbed by Howard and Niyekawa-Howard, has been advanced by Kuno (1973) and Shibatani (1978), who claim that the two types of the passive need to be distinguished. The particular version of the nonuniform theory analysis offered by Kuno and Shibatani suggests that, whereas the indirect passive derives from an embedding structure, the direct passive is derived from the transitive underlying structure via a transformation that makes the object a new subject, "demotes" the original subject to the ni-marked oblique, and inserts the passive morpheme -rare. In other words, the non-uniform theory treats the direct passive just like the English passive (at least in the framework then fashionable), and treats the indirect passive differently from the passive of English and other languages. This point that, while the Japanese direct passive is analogous to the passives of other languages, the indirect passive is different has been a tacit claim of the non-uniform theory, but it turns out to be a significant one, as we shall see subsequently. (Kuno 1983 backs away from the non-uniform theory and opts for the uniform theory, by accounting for the adversity-neutral distinction by a semantic interpretation rule rather than representing it structurally. As shown below, there are a few important facts that indicate that the non-uniform theory should be maintained.)

Though the lurking motivation for the non-uniform theory was the adversityneutral distinction, the strongest motivation was the radical difference in the phenomenon of reflexive binding observed between the direct and indirect passives. The indirect passive allows an ambiguous reading, whereas no ambiguity obtains in the direct passive.

(120) Indirect passive

Taroo wa Hanako ni zibun no heya de sina-re-ta.

TOP by self of room in die-PASS-PAST

'Taroi was adversely affected by Hanakoi's dying in self'si, room.'

(121) Direct passive

Taroo wa Hanako ni zibun no heya de korosa-re-ta.

TOP by self of room in kill-PASS-PAST
'Taro_i was killed by Hanako_j in self's_{i,•j} room.'

The ambiguity in (120) is the classical phenomenon suggesting a bi-clausal deep structure that has been discussed in connection with the causative construction in the preceding section; and it thus supports the bi-clausal deep structure of the (119a)-type, in which there co-exist two distinct subjects within the same structure until a late stage in derivation. The non-ambiguity of the direct passive resists such an analysis. The non-uniform theory handled this problem by positing a simple active sentence as a deep structure for a direct passive sentence, and by deriving a new subject by transformation, which also introduces the passive morpheme. In this analysis, at no stage of derivation are there two distinct subjects within the same structure; and thus by ordering reflexive binding after passivization, this analysis predicted that the derived passive subject would be the only possible antecedent for the reflexive form.

The uniform theory faces a difficult problem here, for it posits the same kind of bi-clausal deep structure for a direct passive sentence as for an indirect passive; but the anticipated ambiguity does not obtain. However, Howard and Niyekawa-Howard (1976), in defense of the uniform theory, proposed an intriguing solution to the problem. Their analysis relies on the following constraint on reflexive coreference and the Embedded Object Deletion rule.

(122) Reflexive Coreference Constraint (RCC)

Two instances of the reflexive pronoun *zibun* commanded by the same pair of possible antecedents must be coreferential. If they are not, the sentence is marked as ungrammatical.

The Embedded Object Deletion rule, originally proposed by Kuroda (1965), deletes (or zero pronominalizes) the object of an embedded clause under identity with the main clause subject in a structure such as the following:

(123) a. Taroo wa Hanako ni suisensi-te morat-ta.

TOP recommend have-PAST

'Taro had Hanako recommend him.'

b. [Taroo wa [Hanako ga Taroo o suisensi]-te moratta]

Howard and Niyekawa-Howard's solution to the reflexive problem of the direct passive involves obligatory application of reflexive binding before the application of the Embedded Object Deletion rule. The two putative structures for the direct passive in (121) at the crucial stage look as follows:

(124) a. [Taroo_i wa [Hanako_j ga zibun_i o zibun_i no heya de koros] re-ta]
b. [Taroo_i wa [Hanako_j ga zibun_i o zibun_i no heya de koros] re-ta]

In (a), the two instances of zibun are coreferential, and it passes the RCC. After deleting the object zibun o by Embedded Object Deletion, (121) obtains with the correct reading of the reflexive form as indicated in (124a). In (124b), however, there are two instances of zibun which are not coreferential. The RCC blocks this structure as ungrammatical, and thus the second reflexive interpretation never obtains in the direct passive.

Ingenious though this solution by Howard and Niyekawa-Howard is, it has a number of problems associated with it. First, the deletion of the embedded object of the direct passive cannot be identified with Kuroda's Embedded Object Deletion, which is considered to be a process of pronominalization. Indeed, in the structure in which Kuroda's Embedded Object Deletion applies, the embedded object can be left in the reflexive form, but such a possibility does not obtain in the direct passive. Observe the contrast:

(125) a. [Tarro, wa [Hanako ni zibun, o suisensi]-te moratta]
'Taro, had Hanako recommend self,.'
b. *[Taroo, wa [Hanako ni zibun, o koros] reta]
'Taro, was killed self, by Hanako.'

Thus, in the analysis of Howard and Niyekawa-Howard, an object PRO controlled by the main clause subject or a rule of embedded object deletion must be posited. However, as is generally the case, the object position is not a position where a PRO occurs or where an obligatory deletion rule applies. (Notice that Kuroda considers his Embedded Object Deletion rule to be a process of pronominalization. In the contemporary analysis, this corresponds to positing a pro whose antecedent is determined contextually.)

Secondly, on the one hand, the RCC is too strong, and on the other, it is doubtful whether it should be used as a filter at an abstract level. That a constraint like the RCC exists is seen by the following Japanese and English sentences, which do not permit cross coreferential readings involving regular pronouns.

(126) Taroo wa Ziroo ni kare no heva de kare no gitaa o AGT he of room in he of guitar ACC hika-se-ta. play-CAUS-PAST 'Taro had Jiro play his guitar in his room.'

Notice that in both Japanese and English, the two instances of the pronoun kare 'he' must be coreferential. That is, it cannot be the case that Jiro was to play Taro's guitar in Jiro's room or Jiro was to play his guitar in Taro's room. However, a constraint like this, which generalizes to include the RCC, is a surface, perceptual constraint. Indeed, the RCC passes a sentence with two non-coreferential instances of zibun if the semantics and scrambling guarantee easier pairing of the reflexive forms with different antecedents. For example, observe the following indirect passive sentence with two instances of zibun.

(127) Otto husband self of money ACC all wife by self of kesvoohin-dai ni tukawa-re-ta. cosmetics-fee as spend-PASS-PAST 'The husband, was adversely affected by the wife,'s spending all of self's, money as money for self's, cosmetics.'

wa zibun no kane o minna tuma ni zibun no

The analysis of Howard and Niyekawa-Howard is strange in that the RCC marks as ill-formed a structure in which one of the reflexive forms is clearly fated for deletion and the structure so marked ends up satisfying the RCC after the deletion takes place. That is, the ordering of the RCC and Embedded Object Deletion is crucial. If the RCC, or its generalized counterpart, is indeed a perceptual constraint that can be circumvented in an appropriate context, as claimed here, then its use as a mechanism for characterizing an abstract structure as ill-formed must be said to be highly questionable. (See Kuno 1978 for additional arguments against Howard and Niyekawa-Howard's proposal.)

Howard and Niyekawa-Howard's ingenious attempt to save the uniform theory notwithstanding, there is an important syntactic difference between the indirect passive and the direct passive that has not hitherto been seriously addressed but which warrants a separate treatment of them. Earlier we pointed out that Japanese is not the only language that allows passivization of an intransitive verb. However, there is a crucial difference between the case of passivization of intransitive verbs in languages such as Latin and German on the one hand, and the Japanese case on the other. The Latin passive form such as Pugnabatur 'It was fought/There was some fighting' and the German form Hier wurde getanzt 'There was dancing here' and the Japanese passives of intransitive verbs seen in (116) are radically different with respect to the number of arguments that occur in the passive clause. Latin, German, and other languages that permit passivization of intransitive verbs typically lack any overt argument. This is not the case in Japanese, as the passive of an intransitive verb involves two arguments, the subject nominal and the other marked by ni. This difference in fact points out a very fundamental property of the prototypical passive construction and points toward the conclusion that the Japanese indirect passive is fundamentally different from the passive constructions of various other languages. Thus, if the Japanese direct passive is proved to be similar to the passives of other languages, then we derive the conclusion that the indirect passive and the direct passive are fundamentally different, as claimed by the non-uniform theory.

The fact that intransitive passives in Latin, German, and other languages (may) lack an argument is but a consequence of a general property of passivization; namely, passivization reduces the valence of the verb by one. In response to its pragmatic function of agent defocusing, passivization either does not syntactically encode an agent or, if an agent is encoded, it will be assigned to a less central, oblique slot. Since no language allows an agent-encoding passive while disallowing an agentless passive, while in some languages the converse is the case, and since in a large number of languages that permit both types, the agentless passive is far more frequently observed than the agent-encoding passive, the property of agent defocusing and its syntactic consequence of non-encoding of the agent are two fundamental characteristics of passivization.

The valency reduction property of passivization turns a ditransitive verb into a two-argument predicate, a transitive verb into a one-argument predicate, and an intransitive verb into a zero-argument predicate. Thus, what was observed in the Latin and German passives above is an instantiation of this general and fundamental property of passivization; and indeed the passives of the world's languages exhibit this property. (See Shibatani 1985 for a further discussion on the agent-defocusing property of passivization and its syntactic consequences.)

Now the Japanese direct passive shows the syntactic pattern of the passives of other languages in that the agent is most often not encoded, with the result that passive clauses contain one fewer argument than the corresponding active clauses. Since Japanese, just like English, does not allow the direct passive to apply to an intransitive clause, we can observe only the following two instances of valency reduction:

- (128) 3-place predicate → 2-place predicate
 - a. Kakehi sensei wa gakusei-tati ni kendoo o sikonde-ita.

 prof. TOP student-PL DAT kendō ACC teach-be-PAST
 'Prof. Kakehi was teaching kendō to the students.'
 - b. Gakusei-tati wa kendoo o sikoma-re-te i-ta. students-PL TOP ACC teach-PASS-CONJ be-PAST 'The students were being taught kendō.'
- (129) 2-place predicate → 1-place predicate
 - a. Sensei wa kodomo-tati o sikat-ta.

 teacher TOP child-PL ACC scold-PAST
 'The teacher scolded the children.'
 - b. Kodomo-tati wa sikara-re-ta.

 child-PL TOP scold-PASS-PAST
 'The children were scolded.'

A point to be noticed here is that the passive clauses are complete without an agentive nominal in the sense that the valency requirement imposed by the predicate is fully satisfied. Thus, while an active transitive in which the subject is missing (e.g. scolded the children) is incomplete, the passive version of it (the children were scolded) is complete. In Japanese, the notion of completeness is subtler in that it allows the zero pronoun, i.e. small pro. In other words, even if a subject is missing overtly, the sentence can be complete if it is understood to contain a pro in subject position. However, such a situation contrasts sharply with the case of a passive with an unencoded agent. Compare the following pair, for example:

- (130) a. (pro ga) kodomo-tati o sikat-ta.
 child-PL ACC scold-PAST
 'X scolded the children.'
 b. Kodomo-tati wa sikara-re-ta.
 child-PL TOP scold-PASS-PAST
 'The children were scolded.'
- (a) is wellformed only in a context in which there is a definite agent that can be identified by the hearer from the context. In the case of (b), however, the existence of an agent is only implied and its identity needn't be determinable, just as in the case of the English passive. The discussion so far thus shows that the Japanese direct passive is like the English passive with respect to the valency-reducing property.

The indirect passive shows a marked contrast to the direct passive and the passives of other languages with respect to the valency-changing effect. As can be

surmised from the observations so far, the indirect passive points to the opposite direction from the direct passive with regard to the valency-changing effect: it *increases* the valence of a predicate. Thus, the indirect passive of an intransitive verb requires two arguments, and that of a transitive verb three arguments, and so on.

- (131) 1-place predicate → 2-place predicate
 - a. Kodomo ga nai-ta.

child NOM CTY-PAST

'The child cried.'

b. Hanako wa kodomo ni naka-re-ta.

TOP child by cry-pass-past

'Hanako was adversely affected by the child's crying.'

- (132) 2-place predicate → 3-place predicate
 - a. Taroo ga doramu o rensyuusi-ta.

 NOM drums ACC practice-PAST

'Taro practiced the drums.'

b. Hanako wa Taroo ni doramu o rensyuusa-re-ta.

TOP by drums ACC practice-PASS-PAST

'Hanako was adversely affected by Taro's practicing drums.'

- (133) 3 place-predicate → 4-place predicate
 - a. Sensei ga Hanako ni kotae o osie-ta.

teacher NOM DAT answer ACC teach-PAST

'The teacher taught the answer to Hanako.'

b. Taroo wa sensei ni Hanako ni kotae o osie-rare-ta.

TOP teacher by

DAT answer teach-PASS-PAST

'Taro was adversely affected by the teacher's teaching the answer to Hanako.'

The indirect passive clauses here require all the arguments to be present, and if any of them is missing, it is understood as a pro whose identity is provided contextually. Thus, the Japanese indirect passive is radically different from the passives of other languages and from the direct passive. The indirect passive -rare morpheme is a valency-increasing operator just like the causative -sase, whereas the direct passive -rare is a valency-decreasing operator. Whether one assumes an embedding analysis or not, the two passives are fundamentally different, and thus the uniform theory, which treats them alike, fails to explicate this important difference.

There is one type of passive construction that is often classified as the indirect

passive or as constituting a class of its own distinct from either the direct or indirect passive. This type, which typically involves a body part object, is exemplified below:

(134) a. Taroo wa Ziroo ni atama o nagura-re-ta.

TOP by head ACC hit-PASS-PAST

'Taro was hit by Jiro on the head.'

b. Taroo wa Ziroo ni asi o huma-re-ta.

TOP by foot ACC step on-PASS-PAST

'Taro had his foot stepped on by Jiro.'

These sentences show the prima facie evidence that they are indirect passive in that the valence of the verb is increased. The verbs naguru 'hit' and humu 'step on' are transitive verbs requiring two arguments, but their passive forms above contain three arguments. However, these passives do not connote the adversative meaning of the subject's being inconvenienced. Semantically they are exactly like a direct passive such as Taroo wa Ziroo ni nagura-re-ta 'Taro was hit by Jiro', in that whatever adversity sense one detects comes from the lexical meaning of naguru 'hit'. Indeed, our earlier criterion that distinguishes the direct passive from the indirect passive classifies the passives in (134) as direct, for the event of Jiro's hitting Taro's head, for example, will not happen without involving Taro. For the indirect passive interpretation, one would have to imagine a situation where the head belonged to someone other than Taro. Under such a situation where Jiro, for example, hit his own head, (134a) can be construed to be an indirect passive form; and under such an interpretation, the sentence indeed connotes that Taro was adversely affected (for whatever reason) by Jiro's hitting his own head.

Further evidence that the sentences of (134)-type are direct passive comes from the fact that the agent needn't be encoded and that the interpretation of the unencoded agent is exactly like that of regular direct passives. For example, the (a) sentence below is perfectly grammatical and contrasts with the indirect passive (b) sentence, which is missing an agent.

(135) a. Taroo wa man'in densya de asi o huma-re-ta.

TOP packed train in leg ACC step on-PASS-PAST

'Taro had his foot stepped on in a packed train.'

b. 'Taroo wa man'in densya de imooto no asi o huma-re-ta.

sister of foot

'Taro was adversely affected by X's stepping on his sister's foot in a packed train.'

The fact that sentences of the (134)-type are direct passive poses a certain problem regarding the valence or argument structure of the verbs involved such as *naguru* 'hit' and *humu* 'step on', which are normally understood to be two-place

predicates. Our understanding of direct passivization as a valency-reducing phenomenon forces us to allow a provision that these predicates may take more than two arguments underlyingly, especially two object-like arguments in addition to an agent. The structure with two object-like nominals does not surface with two accusatively marked objects, for it comes into conflict with the Double-O constraint (see earlier discussion). However, if these verbs were to take two objects of the same type even at an abstract level, we would face a direct conflict with the well-known restriction that a verb assigns only one unique semantic function to a unique argument. However, a closer examination reveals that the two object-like arguments are in fact different in semantic function. What corresponds to the subject of the passive (Taroo in (134a)) is a patient while what corresponds to the object of the passive (atama 'head' in (134a)) is a location. This difference shows up when a wh-word is used in a wh-question. The body part is expressed by the locative wh-word doko 'where' rather than the object wh-word nani 'what', as seen below:

(136) a. Taroo wa doko o nagura-re-ta?

TOP where ACC hit-PASS-PAST
'Where was Taro hit?'
b. *Taroo wa nani o nagura-re-ta?

what
'What was Taro hit?'

Our claim that the (134)-type passive is an instance of the direct passive predicts that such a passive sentence may be observed in other languages, which may lack the indirect passive. This prediction is borne out, as Korean and Chinese, which lack the indirect passive of the Japanese-type, have passives of the type under discussion. For example,

(137) Korean

Na nun pal lul palp-hi-ess-ta.

I TOP foot ACC step on-PASS-PAST-IND
'I had my foot stepped on.'

(138) Chinese

Wố bèi cải le jiáo.

I PASS step on ASP foot
'I had my foot stepped on.'

In neither Korean nor Chinese need the agent be encoded, and neither language allows the indirect passive interpretation: namely, the interpretation that the foot does not belong to the referent of the subject of the passive sentence.

Our discussion that distinguishes between the direct and the indirect passive also

predicts that the indirect passive, which increases the valence of the predicate contrary to the prototypical valency-decreasing passive observed widely, is rare among the languages of the world. And this prediction is also borne out. Although an adversative expression similar to the Japanese indirect passive is found in many languages, as e.g. English Mother died on me, German Mir starb die Mutter (see Wierzbicka 1979), the use of passive morphology in expressing the adversative meaning is exceedingly rare. The only other language that has extended the use of the regular passive morphology to the adversative passive reported so far is Vietnamese, which uses the passive form bi (cognate to the Chinese passive form bèi) for both direct and indirect passive, as observed below:

(139) Vietnamese

a. Direct passive
Nam bị dánh.

PASS beat
'Nam was beaten.'
b. Indirect passive
Nam bị con Bé.

PASS cry

'Nam was adversely affected by Be's crying.'

Thus, an analysis that distinguishes the direct and the indirect passive in Japanese obtains support not only language internally but also from external sources. This conclusion, however, is reachable only in the analysis that draws the line between the direct and indirect passive in terms of the criterion of whether a given event can take place independently of the subject of the passive clause rather than in terms of the adversity criterion. We have said that the indirect passive is always adversative; however, the converse does not obtain. There are direct passives that connote a kind of adversative effect similar to that inherent in the indirect passive, and this was one of the reasons that Howard and Niyekawa-Howard (1976) did not want to draw the line between the two types of passives. These direct passives typically involve transitive verbs that do not imply physical impingement on the patient. Observe the following examples adapted from Howard and Niyekawa-Howard:

(140) a. Oya wa Taroo o hitori ie ni nokosi-ta.

parent TOP ACC alone home at leave-PAST

'The parents left Taro alone at home.'

a'. Taroo wa ie ni hitori nokosa-re-ta.

TOP house in alone leave-PASS-PAST

'Taro was left alone at home.'

- b. Kaisya wa Taroo o zinzi-ka ni mawasi-ta.

 company TOP ACC personnel dept. to transfer-PAST

 'The company transferred Taro to the personnel department.'
- b'. Taroo wa zinzi-ka ni mawasa-re-ta.

 TOP personnel dept. to transfer

 'Taro was transferred to the personnel department.'

These passive forms express direct passivization in that the subjects of the passives are crucially involved in the execution of the events expressed. However, as correctly observed by Howard and Niyekawa-Howard, they express a sense of adverse effect that befell the patient subject, which is absent in the corresponding active sentences. Thus, it is not the case that the direct passive is always neutral with respect to the adversity effect. What we need is an account that captures the fact that, while the indirect passive is always adversative, only certain direct passives are associated with the adversative reading. A solution to this problem lies among the analyses of Wierzbicka (1979), Oehrle and Nishio (1981), and Kuno (1983). Namely, the notion of the involvement of the passive subject in the expressed event recognized by Wierzbicka should be calibrated in such a way that it applies to both indirect and direct passive situations. In the indirect passive situation, the passive subject is not directly involved, since by definition the indirect passive expresses a situation in which an event expressed takes place independently of the passive subject. In the direct passive events, where the passive subject is necessarily involved, there are degrees of impingement that affect the patient participant. Verbs like kill, break, and hit express the involvement of the highest degree of impingement, while verbs like see, admire, and like express no physical impingement associated with the patient participant. Thus, if the notion of involvement is defined in such a way that it represents the degree of direct and physical impingement upon the patient participant, then the phenomenon of the adversity reading in the passive is captured by saying that the stronger the adversative reading, the less involved is the passive subject in the event expressed. The indirect passive is always adversative in reading, for its subject is only indirectly involved in the expressed event, while the subjects of direct passives show varying degrees of involvement, depending on the main verbs, and accordingly, the direct passives in principle show degrees of adversative effect.

The above discussion, which asserts that the indirect passive is always adversative, comes into direct conflict with at least one passive involving an intransitive verb. It is the one that has been frequently brought up in the literature in connection with the topic under discussion, namely, a sentence of the following type involving the verb huku 'blow':

(141) Kaze ni huka-re-te ton-de kita.
wind by blow-PASS-CONJ fly-CONJ came
(lit.) '(I) came flying, being blown by the wind.'

The verb huku '(wind) blow' occurs only as an intransitive verb, as in Kaze ga huku 'The wind blows', and thus it is expected that the passive of it, e.g. (141), should be an instance of the indirect passive, and as such, it is expected to be associated with the adversative reading. But, as correctly observed by many, a sentence like (141) lacks the adversative reading. It is often concluded from this that the so-called indirect passive is also sometimes free from the adversative reading. This conclusion, however, is incorrect. Although the verb huku 'blow' superficially occurs only as an intransitive verb, a transitive counterpart must be recognized. It is when such a transitive version of huku is involved that the derived passive lacks the adversative reading.

The problem is that there are two different situations conceivable involving the verb huku. One situation is when the wind blows without involving someone or something as a patient directly affected by it, e.g. the wind blows outside and a person sits indoors. This is a situation representable by an indirect passive of the following form:

(142) Kinoo wa itinitizyuu kaze ni huka-re-te doko ni mo yesterday TOP all-day-long wind by blow-PASS-CONJ anywhere even ikenakatta.

couldn't go

'Yesterday, being adversely affected by the wind's blowing all day long, (I) couldn't go anywhere.'

This sentence indeed expresses the adversative reading characteristic of an indirect passive sentence. The situation expressed in (141) is characteristically different from that expressed above in that the subject is directly affected by the wind; he is (figuratively) being pushed by the wind. It thus constitutes a direct passive situation. While (141) is a figurative expression, it is easy to find a literal direct passive expression involving huku, though there is no grammatical active (transitive) counterpart.

- (143) a. Ko-no-ha ga kaze ni huka-re-te titta.

 tree leaf NOM wind by blow-PASS-CONJ scattered

 'Leaves scattered, being blown (away) by the wind.'
 - b. *Kaze ga ko-no-ha o huku. wind NOM tree leaf ACC blow 'The wind blows (away) a leaf.'

The adversative reading, being associated only with an animate passive subject, does not obtain in (143). The wellformedness of this sentence in the non-anthropomorphized reading gives evidence that it is a direct passive.

The problem of *huku* 'blow' is due to the accidental lack of an overt transitive counterpart, which has misled many to claim that there is an intransitive, and hence indirect, passive that lacks the adversative reading. Our earlier discussion of passives involving the possessor of a body part and the body part itself (see (134), (137), (138)) has already illustrated a situation in which certain (direct) passives lack corresponding wellformed active sentences, though the positing of the corresponding active forms or of a basic argument structure underlying them must be recognized. The case of *huku* is exactly of this kind, and together these cases require us to think deeply about the nature of argument structures associated with individual verbs. Too frequently we have been simply assuming that the existing active verb forms tell us the exact pattern of the argument structures associated with them. The foregoing discussion shows that there are verbs that lack such overt active forms as would lead us to posit the correct argument structures for them.

The earlier conclusion that the direct passive and the indirect passive involve two different passive morphemes diametrically opposed in their valency-changing effect drastically undermines the motivation for the uniform theory. The desire for treating the two uniformly derives from the fact that the two do, after all, involve morpheme(s) of the same phonological shape and both express some similar sense that the subject is affected. These are, however, not sufficient reasons for treating the two types of passive alike. That both types of passive convey the meaning that the subject is somehow affected is an important point, and this is perhaps the main reason the morpheme -rare is applied to the indirect "passive". Indeed, our calling the two types of passive "passives" hinges on this semantic characteristic. In the absence of this, we would not be calling the indirect passive passive. Indeed, there are construction types that involve -rare but are not called passive precisely because they lack this semantic property. Just as in Ainu and in many other languages of the world, the morpheme involved in the passive construction is associated with a number of fairly distinct types of constructions. In the case of Japanese, -rare is involved, in addition to the passives, in the potential, the spontaneous, and the subject honorific construction, as exemplified below:

(144) a. Potential

Boku wa ne-rare-nai.

I TOP sleep-POTEN-NEG
'I cannot sleep.'

b. Spontaneous

Mukasi no koto ga sinoba-re-ru.

old time of thing NOM recall-SPON-PRES
'An old time (spontaneously) comes to mind.'

c. Honorific

Kakehi sensei ga warawa-re-ta.

prof. NOM laugh-HON-PAST
'Professor Kakehi laughed.'

Though morphemes of identical phonological shape are involved, one does not wish to analyze them uniformly. The same conclusion should be drawn in the case of the passives. In view of the likely fact that all these -rare forms are historically related, the extension of the morpheme -rare (the historical -raru) must have been motivated by a common pragmatic or semantic factor. Shibatani (1985) identifies this factor as the "agent defocusing" function of -rare. Though it is not vet determined as to whether the spontaneous or the passive -rare was the original morpheme, the application or spreading of the same morpheme to the other constructions is beyond dispute. In the case of the two passives, the fact that the indirect passive is a marked construction, being far less frequently encountered in other languages, suggests that the indirect passive arose historically by the application of the direct passive -rare, which, in addition to its agent-defocusing function, has acquired the role of indicating that the subject of the clause is being affected. What was not inherited by the indirect passive, however, is the valency-reducing character of the direct passive -rare, this fact paving the way for the development of two distinct passive constructions, as we see today.

11.5 The historical development of particles

As the discussions in the preceding sections show, one of the characteristics of Japanese grammar is the use of the postpositional particle, called zyosi 'helping word' in the traditional grammar of Japanese. In this section we offer a historical perspective on the development of particles. The question regarding the development of a topic particle is of general interest especially in view of the typological parameter recently proposed by Li and Thompson (1976), which classifies languages along the scales of topic-prominence and subject-prominence. However, Japanese, while being both topic-prominent and subject-prominent according to the Li-Thompson classification, offers little in the way of explicating how a topic construction develops, for a use of wa similar to that of Modern Japanese already occurs in the earliest records of the language. Nonetheless the stability of wa in the

turbulent history of the Japanese particles is in itself an interesting topic to pursue, and the endurance of the topic construction may be an indication that what lies behind this construction is one of fundamental thought processes, a topic we dwelled on in section 11.2 above.

The history of case particles is also of general interest, for a traditional typological parameter of accusative/ergative dichotomy typically rests on the pattern of marking with regard to subject and object nominals. Also, there are questions regarding the order of the development of the nominative and accusative markers. In a so-called nominative—accusative language, the nominative case tends to be unmarked, with the object nominal being marked by the accusative case form. Furthermore, it is observed that in a large number of languages the accusative marking is not fully developed in that it applies only when the object nominal is referential (e.g. definite) or animate. In what follows we will examine the evolution of the nominative and accusative case particles of Japanese in the light of these issues. But first, let us take a brief look at the problems of classification of particles and the development of other particles as well.

Like other grammatical elements, the classification of particles allows different possibilities depending on what is taken as a classificatory feature. What is generally adopted among Japanese grammarians is a classification scheme based on two features, namely, positional and functional features. Particles that occur in sentencefinal position are called final particles (syuu-zyosi), and those that occur freely within a clause and whose presence or absence does not affect sentence formation are called interjectional particles (kantoo-zyosi). Those particles that conjoin sentences are conjunctive particles (setuzoku-zyosi). Those that indicate the semantic or logical relationships of nominal elements with regard to other nominals or predicative elements are case particles (kaku-zyosi). Needless to say, the nominative particle ga and the accusative o belong to this last class. Then, there are two classes of particles that are adverbial in nature. One class is termed adverbial particles (huku-zyosi), and the members of this class modify the predicate. The other class, called kakari-zyosi, comprises those particles that affect the entire predication, and figure prominently in the classical language of the Heian period. This class of particles, also called adverbial particles by George Sansom (1928), lacks a suitable name in English. The Japanese term kakari-zyosi, coined by Yamada Yoshio (1908), derives from the fact that these particles participated in the kakari-musubi phenomenon, where the presence of these particles called for particular inflectional forms of the predicate. The particle in question is kakari 'relation opener' and the agreeing inflectional form of the verb is musubi 'tying, conclusion'. The presence of a kakari-zyosi affects the mood of a sentence, e.g. converting a statement into an interrogative, a rhetorical question, or an exclamatory sentence. In this sense,

then, the *kakari-zyosi* can be called "modal particles", but we will simply follow Sansom and call them adverbial particles. The topic particle *wa* is generally classified in this class of particles. The study of *wa* thus takes us to the examination of the development of *kakari-zyosi*.

11.5.1 Wa and other adverbial particles

As mentioned above, certain adverbial particles participate in the *kakari-musubi* phenomenon. Different adverbial particles participating in this phenomenon call for different inflectional forms of predicates. Thus, zo, namu, ka, and ya require the predicate to assume the attributive/substantive form (rentaikei), koso the realis form (izenkei), and wa and mo generally the conclusive form (syuusikei), as summarized below (for these and other inflectional categories, see Chapter 10):

(145) Particles Forms of predicates

zo, namu, ya, ka – attributive koso – realis wa, mo – conclusive

As noted above, the *kakari-musubi* constructions affect the mood of a sentence. Zo, namu, and koso add to the sentence an emphatic force; ka and ya convert a sentence into an interrogative, a rhetorical question (or ironical) form or into a sentence with a force of exclamation (or lamentation); and wa and mo create an expression of judgment or of an exclamation. As opposed to these, a plain sentence, i.e. the one without these adverbial particles, expresses a simple description of an event or a state. Thus, the adverbial particles and their correlative predicate forms convert the plain expressions of (146) below into the respective modal expressions of (147):

(146) Simple description

- a. Mizu nagaru.
 water flow CONCL
 'The water flows.'
- b. Tuki kiyosi
 moon clear CONCL
 'The moon is clear.'

(147) Emphatic, exclamatory

a. Mizu zo/namu nagaruru.

water flow ATTR

'The water, oh it flows!'

b. Tuki zo/namu kiyoki.

moon clear ATTR

'The moon, oh it is clear!'

(148) Interrogative, rhetorical question, irony

a. Mizu ya/ka nagaruru.

water flow ATTR

'Does the water flow?'

b. Tuki ya/ka kivoki.

moon clear ATTR

'Is the moon clear?'

(149) Emphatic focusing

a. Mizu koso nagarure.

water flow REAL

'It is the water that flows.'

b. Tuki koso kiyokere.

moon clear REAL

'It is the moon that is clear.'

(150) Emphatic judgment

a. Mizu wa nagaru.

water flow conci.

'As for the water, it flows.'

a'. Mizu mo nagaru.

'As for the water, it too flows,'

b. Tuki wa kiyosi.

moon clear conci.

'As for the moon, it is clear,'

b'. Tuki mo kivosi.

'As for the moon, it too is clear.'

Of course the above are the rules representing ideal situations, and in reality there are forms that do not follow them. Especially when these adverbial particles occur sentence finally, the verbal endings may not follow the rules. Although this can be one criterion for distinguishing final particles from adverbial particles, the distinction is not entirely clear, as historically the adverbial particles and the final particles are related (see below). Thus whether the positional difference warrants a distinction in classification, i.e. dividing them into adverbial particles and final particles, or whether it is to be considered as a mere positional variation of the same adverbial particles is disputable, but the positional difference seems to result

in little functional and semantic difference, though the final use (or final particles) in general expresses a stronger exclamatory sense or a sense of lamentation and of wish. Some actual examples showing this positional variation are given below, taken from the literatures of the Nara and the Heian periods:

- (151) a. No naru kusaki zo wakarezarikeru.

 field exists plants AP cannot be distinguished.'

 The plants in the field cannot be distinguished.'
 - b. Sawaru koto arite kikoe-sase-nu zo.
 hinder thing exist hear-CAUS-NEG AP
 'Since there is something that hinders me, I won't speak.'
- (152) a. Hitotu matu ikuyo ka henuru...
 solitary pine how many generations passed
 'Solitary pine, how many generations have you lived?'
 - b. Ki no mori no imooto mo konata ni aru ka.

 GEN guard GEN wife AP here at exist AP

 'Is the wife of the guard of Ki here too?'
- (153) a. Tuki ya aranu haru ya mukasi no haru naranu.

 moon AP not spring AP old time GEN spring is not

 'Isn't the moon the same, isn't the spring that of old?'
 - b. Hana koso tireme ne sae kareme ya.

 flower AP scatter root even die AP

 'The flowers fall of course, but will even the roots die? (No.)'
- (154) a. Tireba koso itodo sakura wa medetakere.
 scatter AP even more cherry AP appealing
 'It is because they fall and scatter around that cherry blossoms are even more appealing.'
 - b. Sake ni ukabe koso.wine in float AP'Oh, float me (plum blossom) in your wine!'
- (155) a. Imo ga misi ooti no hana wa tirinubesi.
 beloved GEN saw sandalwood GEN flower AP scattered
 'The sandalwood flowers my beloved saw will be scattered.'
 - b. Yo wa mada hukakaranu wa.

 night AP yet grow late NEG AP

 'The night has not grown late yet.'

(156) a. Sono take no naka ni moto hikaru take namu hitosuzi that bamboo of among bottom shine bamboo AP one arikeru.

exist

- 'Among those bamboos, there was one that was shining at the bottom.'
- b. Uguisu wa ueki no koma wo nakiwatara-namu. nightingale AP tree GEN between ACC sing fly-AP 'How I wish that nightingales would fly and sing between trees!'

The kakari-musubi phenomenon of the correlation between the particles and the predicate forms was still in a rudimentary state in the Nara period but reached perfection in the Heian period. In the Kamakura-Muromachi period, however, the phenomenon began to decline leading to its complete disappearance during the Edo period except for the [wa|mo...conclusive] correlation, the topic construction, which persists until today. That the degeneration of the phenomenon had something to do with the falling together of the attributive form and the conclusive form of the predicate is seen from the fact that the constructions involving the particles zo, namu, ya, which called for the attributive form, were the first to disintegrate, while the construction with koso, which called for the perfective, or realis, form, persisted until the Edo period.

Those adverbial particles that were affected by the disintegration of the kakarimusubi took two paths, either disappearing altogether or being restricted in their distribution and meaning. The particle namu went out of use and koso is now used only sentence internally, while zo, ya, and ka are used only in sentence-final position. Zo is a vocative final particle, and ka is the interrogative final particle.

The topic particles too have undergone certain changes. First, neither wa nor mo can any longer occur in final position, though some speculate as to a connection between wa and the present-day final particle wa used to soften assertions by female speakers or by speakers of the Osaka dialect. (The two are written differently, the topic particle as t^{\ddagger} (ha) and the final particle as t^{\ddagger} (wa).) Also, both wa and t^{\dagger} mo occurred more freely in combination with other particles in the past. The combination of t^{\dagger} and the accusative t^{\dagger} in the form of t^{\dagger} wo- t^{\dagger} still occurs as a dialectal form in both the Tōhoku and Kyūshū regions. Other combinations, such as t^{\dagger} and t^{\dagger} and t^{\dagger} both used for the expression of irony-rhetorical questions, and t^{\dagger} and t^{\dagger} and t^{\dagger} such that t^{\dagger} is a combination of t^{\dagger} and $t^$

emphatic so-mo, na-mo no longer survive, while the combination of the accusative wo as wo-mo is barely alive in emphatic expressions such as Kimi o-mo syootai siyoo to omotte iru 'I am thinking of inviting you too.' Thus, the topic particles too have been undergoing a narrowing of their use. This in turn has had the effect of grammaticizing their function, as in the past, both wa and mo had more diffused semantic correlations, but with the decline of the sentence-final use and of use in combination with other particles, they have shed the semantic connotation of exclamation, lamentation, desire, etc.

The origins of these adverbial particles are not at all clear (cf. Chapter 5). But there are speculations regarding the developments in more recent periods. The particles zo (< so) and koso, which have the semantic function of emphatically specifying or singling out, are generally believed to be related to the medial demonstrative so in so-re 'that thing', so-ko 'that place'. Others are generally believed to have derived from interjections. Hashimoto Shinkichi (1969) hypothesizes that interjectional particles and final particles were the first particles to develop, from which adverbial, case, and conjunctive particles were later derived. This hypothesis accounts for the general fact that in Old Japanese final particles and adverbial particles were many in number, while case and conjunctive particles were underdeveloped.

The connections between some adverbial particles and interjectional particles are fairly transparent; they have the same form and similar meaning. Interjectional particles are of course related to interjections. In fact, Morishige Satoshi (1952) has constructed a theory of adverbial particles on the basis of the development of adverbial particles from interjections along with interjectional particles. According to Morishige, the development involves the gradual incorporation of interjections into the organization of a clause. When an interjection occurring separately after a clause moves close to the end of a clause, it takes on the characteristic of an interjectional particle, which is tacked onto a clause. When these particles remain as non-integral elements of clause structure - i.e. when their removal does not alter the character of a clause - their development is arrested at the stage of interjectional particles. But some may develop further and come to take on adverbial functions. At this stage, the particles are no longer freely omissible, for they would change the character of a clause. Morishige thinks that the sentence-final use was the initial step in the development of the adverbial particles. They subsequently moved into sentence-internal position so as to focus particular constituents for the purpose of specifying the constituent that is pointed out, emphasized, questioned, etc.

Having reviewed a number of central issues concerning the adverbial particles (kakari-zyosi), we now turn to the development of case particles.

11.5.2 Case particles (w)o, ga, and no

Development of o: In the preceding section, it was stated that most of the adverbial particles are believed to have evolved from interjections or interjectional particles. Among the case particles, it is generally believed that the accusative o is related to the interjectional particle of the same sound, which in turn could have evolved from an independent interjection. While some believe that the opposite is the case, Japanese grammarians in general believe that the accusative particle evolved from the interjectional particle (see Chapter 5 on the comparison of the accusative particles among Altaic languages). Before entering this main topic, a note on the orthography and pronunciation is in order. The accusative particle is written as & (wo), which is aligned with other syllables beginning with the labial glide in the traditional Japanese syllable table. This orthographic representation is opposed to \$\text{\$\pi\$} (0), which is aligned with the other vowel syllables. From this fact, it is most likely that the accusative particle was pronounced with the labial glide in contradistinction to the simple o. However, the two began to be confused at the beginning of the Heian period and they merged in the middle of the same period, both becoming wo, which subsequently turned to o. The accusative particle has continued to be written as & (wo); in fact it is the only form in which this hiragana is used, as the syllable wo no longer exists. (Wo and o apparently used to contrast, and the former occurred in initial position as well in forms such as wotome 'maiden', now pronounced as otome.) Except when a distinction is necessary for expository purposes, here and elsewhere in this book, the accusative particle is transliterated simply as o.

The earliest records already show that the particle o was occasionally used to mark the direct object (in addition to other functions to be discussed below), but apparently it was more common not to mark the direct object at all. According to Matsuo (1944), the distribution of o in the poems and songs of the earliest extensive documents, the Kojiki (712) and the Nihon-shoki (720), is as follows: sixty-two o-marked objects and seventy-four unmarked objects. The following two examples from poems which occur next to each other in the $Man'y\bar{o}sh\bar{u}$ illustrate this optionality of object marking:

(157) a. ... aretaru kyoo mireba kanasimo
ruined capital see COND sad AP
'my heart grows sad when I see the ruined capital'
b. ... huruki kyoo o mireba kanasiki
old capiral ACC see COND sad
'how sad it is to see the old capital'

In the songs of the *Kojiki*, however, sixty instances of o of the total of seventy were for object marking. This fact is taken as evidence by Konoshima (1953) and

others for the conclusion that by the time of Old Japanese the accusative case marker o had been firmly established, though the actual marking was optional. However, subsequent developments indicate that this may not necessarily have been the case. Some reservations notwithstanding on the claim that the particle o was already a case marker, all believe that all uses of o are historically connected, and that etymological plausibility exists for the hypothesis that they go back to an interjectional particle or interjection.

The hypothesis regarding the development of the accusative o from an interjectional particle is based on the following facts: 1) as seen above, the object need not be marked by o and perhaps it was more common not to mark it (thus at an even earlier time the object was not marked at all); 2) at earlier times, a wider range of nominals participated in o-marking; and 3) there was an interjectional particle with the sound o (or perhaps wo), whose meaning (or semantic effect) was largely shared by the object-marking o. The scenario envisioned by many traditional Japanese grammarians of the subsequent development from the time when o marked the object optionally and when it had an interjectional function goes as follows. As time progressed, the interjectional/accusative o gave rise to the conjunctive particle o as well. Whereas both interjectional and conjunctive uses subsequently diminished, and the range of nominals that took on o accordingly became narrower, the need for expressing the logical relation of the object overtly was felt more strongly as the thinking process (of the Japanese of the time) became more complex, eventually leading to the present state, in which o exclusively marks the object, and in which the presence of o after an object is obligatory at least in the formal language. This development of the accusative particle, which was at first optional and then became more and more obligatory until firmly established, looks fairly simple, but in reality the progress was not as straightforward as it might first appear. Before going into this, let us first examine the connections between the accusative use of o and other uses of (or independent particles) o.

Just as in the case of adverbial particles and the corresponding interjectional particles, the criteria for distinguishing one class (or use) of particles from another are rather unclear. In the case of o, the basic criterion that distinguishes the accusative use from the interjectional use is whether or not what is marked is a grammatical object or semantic patient. Thus, those occurring sentence finally, where there is no inverted object nominal ((158a) below), and those following a constituent that is not a direct object (158b) are clear instances of the interjectional particle o.

(158) a. *le oramase o.*house stay-HON
'Stay in the house.' (Honorific)

b. Hototogisu kokoni tikaku o kinakite yo.

here near come-sing FP

'Oh, hototogisu (name of a bird), come near and sing!'

In the case of the object-marking o, however, it is not entirely clear whether it is any different from the interjectional particle o – the fact that it happens to follow an object nominal rather than other types of constituent does not by itself guarantee that it is different from the interjectional particle. Indeed it must be pointed out, though not generally acknowledged in the literature, that the object-marking o, or at least some instances of it, also had the effect that interjectional particles normally have. In fact, that the object-marking o also had an effect similar to a regular interjectional particle is a necessary assumption for the widely held view regarding the development of the conjunctive use of o from the object-marking o, which is believed to have taken place in the following manner. The interjectional o, like other interjectional particles, conveys the senses of exclamation, lamentation, or wish, and such senses are generally recognized in the object-marking ρ as well. It is such senses of lamentation and wish that paved the way for the rise of the conjunctive use of the particle o. In the following example, the o-marked nominal kimi 'my beloved' is grammatically object of the verb kin 'will wear (a garment)'. However, though there is no conjoined clause, the presence of o and the conveyed sense of lamentation lead one to imagine an implicit expression: "But it's too bad that you aren't, and that I can't do as I wish."

(159) Kakunomi ni arikeru kimi o koromo naraba sita nimo kin such a way be beloved ACC garment be if bottom at wear to aga omoerikeru.

that I think

'If you were a piece of garment, my beloved, I would have worn you underneath.'

If the implicitly conveyed meaning is overtly expressed, a full-fledged conjunctive use develops, ultimately leading to a situation in which two independent clauses are conjoined by o, as exemplified below:

(160) Asihiki no yama nimo tikaki o hototogisu tukitatu

(pillow word) mountain to close moon-rise

madeni nanika kinakan.

before why come-sing-NEG

'When the mountain is so close, why don't you,

hototogisu, come and sing before the moon rises?'

The particle o marked a wider range of nominals than the o of the later periods – a fact that leads us to the assumption that the object-marking o was an instance

of the interjectional particle o, which occurred not only sentence finally or after adverbials but also after a wide range of nominal constituents as well. The following illustrate those nominal constituents that were earlier marked by o, but which would not be so marked in later periods: in Modern Japanese (a) would have the nominative ga, (b) the genitive no, (c) the dative ni, (d) temporal ni, (e) and (f) the comitative to, and (g) the directional adverbial form ni mukatte 'towards'.

- (161) a. otomera o sode huru yama
 girls sleeve wave mountain
 'the mountain (from which) girls wave their sleeves'
 - b. miwakasi o turugi no ike no

 (pillow word) sword GEN pond GEN

 'of the pond of the sword (of miwakasi)'
 - c. Oosaka ni au ya otome o miti toeba Ōsaka in meet AP girl road ask COND 'as I asked the girl met in Ōsaka the way'
 - d. Akikaze no samuki asake o Sano no oka koyuran autumn wind GEN cold morning GEN hill cross kimi ni koromo kasamasi o.
 loved to garment lend

'In the cold morning of autumn wind, oh how I wish I could lend you some clothes when you cross the hill of Sano on such a morning!'

- c. kuyasiku imo o wakare kinikeri
 grief loved part come
 'I have parted, to my grief, from my beloved'
- f. kimi o hanarete koi ni sinubesi
 loved part love in die
 'having parted from you, I shall die of lost love'
- g. waseko ga ie no atari o yamazu hurinisi
 my wife house GEN area incessantly waving
 'my (departing) wife was incessantly waving (her sleeve) toward
 the house'

The interjectional particle o disappears during the Heian period, and the range of o-marked nominals narrows considerably, while the conjunctive particle becomes more firmly established. However, the conjunctive o too dies out during the Edo period, leaving the object-marking o as the only survivor of the earlier uses of o.

It was against the background of this generally held view on the development of the accusative particle o that Matsuo (1938, 1944) cast strong doubt on the assumption that o had already acquired the status of an accusative marker by the

time of Old Japanese, when the marking is believed to be optional. Matsuo's original interest was to determine the time when object marking by o became more frequent than leaving object nominals unmarked – this is presumably the time when people became conscious of object marking – the grammatical consciousness shared by the speakers of Modern Japanese.

Matsuo's research shows that the literary materials from the early Heian period clearly indicate that in prose as well as in poems, o-marked objects outnumber unmarked objects, indicating the use of the object-marking o. However, he also notices some inconsistency in the data he examined. In some works, o-marking is more frequent, but in some others, zero-marking is more frequent. Also there is a difference between the poetic materials and prose materials, which are believed to reflect the colloquial speech of the time; the former show more frequent marking by o than the latter. Here Matsuo raises a question: poetry writing is a more conservative activity than daily conversation, and thus if o-marking is a progressive aspect of the grammar of the time, it is strange that it occurs more frequently in the conservative domain of language use than the domain which should be more susceptible to the on-going change.

The second disturbing fact for Matsuo is that, if the generally held view that o-marking began to be applied more frequently in order to indicate the logical relation more explicitly as the sentence structure became more complex as a reflection of the progressive complication of thinking of the Heian people were indeed correct, then we would expect to see o-marking occurring in a complex structure more frequently than in a simple structure where the object occurs immediately next to the verb. However, this is not the case, and the use of o in simple structures outnumbers that of o used in complex structures. Thirdly, the hypothesis of the progressive spread of the object-marking o predicts that more types of object nominal would be susceptible to marking than those of earlier times, but the data show a contrary tendency; namely, in the Heian period the types of object nominals that take o became narrower. In particular, there is a tendency for the o-marking to be limited to (1) words relating to people, i.e. people's names and personal pronouns; (2) pronouns; (3) nominalized clauses followed by the "formal" heads koto 'that' and yosi '(they say) that', and (4) headless nominalized clauses.

These facts have led Matsuo to conclude that o was not really functioning as the accusative case marker, i.e. as an indicator of object. Although in the case of o used after nominalized clauses some functional explanation is plausible, for complex structures are functioning as objects, the cases involving personal names and pronouns, which generally are more frequent than the other cases, defy such an explanation. Instead, Matsuo suspects that o-marking had some semantic import, such as an expression of subjective feeling of the speaker/writer.

Matsuo's suspicion has been largely confirmed by two subsequent studies, which

undertook careful examination of the literary works of the middle and later Heian periods, in contrast to those from the early period examined by Matsuo. Hiroi (1957) examined the *Utsubo monogatari* (The Tale of Utsubo) (970–99) and Oyama (1958) took up the *Genji monogatari* (The Tale of Genji) (1001–10). These studies reveal that o is used frequently in: 1) those portions where the influence of Sinico-Japanese (*kanbun*) materials is obvious; 2) portions where emotional overtones exist; 3) portions depicting formal situations, especially in regard to the court; and 4) portions referring to specific or special persons. In contrast to these uses of o, zero-marking occurs frequently in the sequential descriptions of events and objects, and in sentences describing rapidly unfolding events and excited states. Also conversational materials often show zero-marking.

The influence of the Sinico-Japanese materials had been noticed by others, including Matsuo. In the reading of the materials written in imitation of Chinese syntax, word order was inverted so that the actual reading would follow Japanese syntax, and in the process relation-indicating particles were supplied so as to make the material easier to comprehend. In this Sinico-Japanese reading tradition, o was regularly employed to mark the direct object. Indeed, it is quite reasonable to assume that this use of o in fact had by far the strongest effect in the spread of the object-marking o.

The other contexts in which o-marking occurs indicate that this marking was more than a simple accusative marker; its occurrence had the effect of expressing the speaker/writer's emotional involvement or attitude in relation to the event described or in reference to the person marked by o. As pointed out by Oyama, this is nothing other than a direct development of the earlier interjectional use of o. Oyama's conclusion, thus, is that, in Old Japanese and Classical Japanese of at least the early Heian period, o was still a general-purpose interjectional particle, which, because of its frequent association with the object nominal, came to be used as an object-indicating particle in the reading of the Sinico-Japanese materials. During the Heian period, the interjectional o-marking became more specific as a means of expression of the speaker/writer's emotional involvement in the described event. As time progressed, the object-marking function of o in the tradition of Sinico-Japanese materials began to assert itself in other domains of language, leading to the present-day status of o as the accusative case particle.

Matsuo, Hiroi, and Oyama thus argue that the presence or absence of the object-marking o was not a matter of optionality; rather, in Old Japanese there was no accusative case marker, the object being zero-marked, and the "object-marking o" was none other than the interjectional particle o. The establishment of o as an accusative case particle, due to the influence of the Sinico-Japanese reading tradition, took place much later than hitherto assumed.

While the arguments by Matsuo and his followers that o was not an accusative

case marker in Old Japanese seem quite convincing, there is in fact another possible interpretation of the development of the accusative o, which has not been entertained in the writings of the traditional grammarians, but which accommodates the two views reviewed above. This interpretation assumes that o was an accusative case particle in Old Japanese, whose application was optional, as it is in the colloquial speech of Modern Japanese. The accusative marking took on semantic significance during the Heian period, when, influenced by the maturity of the court-centered society, the grammar developed systems, such as an elaborate honorific system, for expressing the speaker/writer's attitude and involvement in the event being described or in reference to the persons referred to in a sentence. Subsequently, the semantic significance attached to o faded away due to the increasing pressure to make its application obligatory, at least in the written language – this pressure being partly caused by the Sinico-Japanese reading tradition, and partly by the grammaticization of other particles.

The observation by Konoshima (1953) that sixty out of seventy uses of o in the songs of the Kojiki were used to mark the object nominal is significant, despite the fact that a larger number of object nominals were left unmarked. When 86 percent of the use of o was associated with the object function, it is hard to imagine that no relation was felt between the form and the grammatical function. It is when such an association is felt that the category status of a form is established – in this case the status of o as marking accusative case. Indeed, if such an association was not felt, we would not expect o to be employed as an object marker in the Sinico-Japanese reading tradition in the first place; otherwise, any interjectional particle could have been adopted for the purpose.

Matsuo's point concerning the fact that the most progressive aspect of the language, namely colloquial speech, was not affected by the presumed expansion of o-marking misses the point. As noted above, even Modern Japanese allows non-marking of objects in colloquial speech, despite the fact that o-marking is obligatory in the written language and in careful speech, i.e. the formal language. Thus, the expansion and the subsequent obligatoriness of o-marking have affected the domain of the written language more than that of colloquial speech, and this explains why the conservative activity of poetry writing is more associated with o than the colloquial speech of the time.

The narrowing noted by Matsuo of the range of the nominal objects which were marked by o in the early Heian period can be interpreted as an indication that o began to take on semantic significance. That is, marking of the object by o began to assert its etymological meaning associated with the original interjectional use. Thus, only those objects referring to special persons or those involved in expressions with emotional overtones came to be marked by o. The marking or non-

marking then became not a simple matter of optional marking. That a case-marking rule can be correlated with some semantic significance is not at all strange in view of the fact that in Altaic languages (e.g. Turkish) and Indo-Iranian languages (e.g. Hindi, Nepali), objects have overt accusative markers only when they are referential, e.g. definite, or animate.

The accusative marking subsequently lost its semantic significance as its use became more and more obligatory, at least in the written language, and, as noted above, this frequent use of o-marking is very likely to have been caused by the Sinico-Japanese materials. Also, in the early Kamakura period, both no and ga acquired the status of nominative case markers. This grammaticization of no and ga as case markers may have had some influence in making the status of o as an accusative marker a firmer one, eventually leading to obligatory accusative case marking.

The above interpretation of the development of the accusative case marker o assumes that a case-marking particle may take on semantic significance and may shed it along the course of its development. That this is not an unusual development can be seen when compared with the developments of the nominative particle ga and the genitive particle no, to which we now turn.

Development of ga and no: In Modern Japanese, no is used in an all-purpose attributive function that relates one nominal form to another. The semantic relationships between the two nominals thus connected may be of various kinds, but one of the most frequently encountered relationships is that of possessor-possessed and this leads us to recognize no as a genitive case marker equivalent to the English preposition of, the apostrophe s, or the genitive form of a pronoun. The particle no shares with the English genitive forms another function, namely that of marking the subject of a nominalized clause. All these functions of no go back to the Old Japanese period, but the particle no has a history of its own, part of which is shared by the present-day nominative particle ga.

The particle ga marks the subject of both independent and dependent clauses in Modern Japanese. In this regard it is comparable to the nominative case in European languages. It is also found in fossilized expressions in which it functions more like an attributive particle similar to no: e.g. wa ga ya 'my house', kimi ga yo 'Emperor's era' (the name of the Japanese national anthem), Kasumi ga seki 'misty checkpoint' (a place name in Tokyo), Hotaru ga ike 'light-bug pond' (a place name in Tokyo), etc. The marking of the subject of a nominalized clause by ga and the attributive function found in these fossilized expressions also date back to the Old Japanese period, while the function of marking the subject of an independent sentence or main clause arose in the course of its later development.

Thus, in Old Japanese, while there were two particles that marked the subject of a nominalized clause and that functioned as attributive particles, no particle existed for the marking of the subject of an independent clause. If our reasoning above concerning o is correct, then Japanese too developed its accusative marker before the nominative marker—a situation typical of accusative languages. In what follows we will review how no and ga, which had a similar function in Old Japanese, developed their distinct functions in Modern Japanese, in which no is a general attributive particle (also used to mark the subject of a subordinate (nominalized) clause), and ga is a nominative particle that marks the subject of both independent and subordinate clauses. (Before the attributive and conclusive forms of verbs merged, subordinate clauses typically had the attributive form of the verb, which had the effect of nominalizing the clause, i.e. converting a clause to a substantive. Though in most of the Modern Japanese verbal elements, no distinction is made between the attributive and the conclusive forms, we call the subordinate clauses under discussion nominalized clauses because of this historical derivation.)

As noted above, in Old Japanese both ga and no marked the subject of a nominalized clause. In Old Japanese a nominalized clause took the form of a clause with its predicate in the attributive form, which is the form used when a predicate modified a noun. The nominalized clause occurred most frequently in three forms: (1) as a headless nominalized clause; (2) as a nominalized clause with a "formal" head such as mono 'thing' or goto 'manner'; and (3) as a headed nominal clause, most typically a relative clause with its head. These are exemplified below:

- (162) a. [morobito no asobu] o mireba
 all people play ATTR ACC see COND
 'when I see the playing by all the people'
 - b. [saku hana no tirinuru] gotoki
 blooming flower fall PERF ATTR manner
 'as in the manner of blooming flowers' falling'
 - c. [imo ga misi] ooti no hana beloved see ATTR sandalwood of flower 'the sandalwood flower that my beloved saw'

Contrast these, in which the subjects of the nominalized clauses are marked by no and ga, with independent clauses in which the subjects are not marked by no or ga.

(163) a. Haru sugite natu kinikerasi
spring passed CONJ summer come appear
'Spring is gone and summer has arrived, so it appears.'

b. Wa ga sono ni ume no hana tiru
 I GEN garden LOC plum GEN blossom fall
 'In my garden fall plum blossoms.'

It is generally agreed that the particles no and ga that mark the subject of a nominalized clause are historically related to the general attributive function that these particles had in Old Japanese (see no and ga in example (163b)), but one can dispute whether these subject-marking particles should be distinguished as nominative case markers apart from the attributive marker, or whether they should be regarded as special uses of the attributive markers. Konoshima (1966), for example, considers the subject-marking use as a separate nominative case function, for he wants to distinguish the following two parsing possibilities of headed nominalized clauses:

(164) a. [akihagi no [[sakite tirinuru] hana]

bloom CONJ fall PERF flower

'the flowers of akihagi that have bloomed and fallen'
b. [[nagaki harubi no kurenikeru] wazuki]

long spring day end manner

'the way the long spring day ends'

In the first form, akihagi (the name of a flowering bush) is an attributive form relating to hana 'flower' rather than to the predicate forms sakite 'bloomed' and tirinuru 'fallen and scattered', and thus the particle no has the attributive function, which Konoshima wants to distinguish from the no in the second example, in which no marks the subject of the nominalized clause modifying wazuki 'manner'. Thus, Konoshima calls the first use of no the attributive no, and the second the nominative no.

While no one would dispute the point that Konoshima is making with regard to the different ways NP no can be related to the following elements, it is not obvious that we should be distinguishing two distinct cases associated with no/ga, which reflect the parsing difference, i.e. the nominative no/ga and the attributive no/ga. (Notice that the same question can be raised with regard to the particle no in Modern Japanese as well, in which no has a general attributive function and that of marking the subject of a subordinate clause.) The problem becomes a little clearer if we look at a comparable situation in English, where the genitive form is also used in the subject function of a nominalized clause, e.g. John's coming late. Just as we do not want to regard "John's" in this example as a nominative case form of "John", we probably should not recognize the nominative status of no/ga until these particles acquire the role of marking the subject of an independent clause

as well. Until then, the subject-marking no/ga in a nominalized clause should be considered one use of these attributive particles, so that our attention is better directed to the question of how the attributive particles have developed such a use.

Hashimoto (1969) attempts to answer this question. Hashimoto first gives some evidence that ga and no were particles that related a nominal element to another nominal element rather than to a predicative element, indicating that originally they were not nominative particles relating a nominal to a predicate. Particles such as the accusative o and the dative ni, which relate a nominal element to a predicative form, allow an adverbial particle, e.g. the topic wa, to follow them, but those elements that are related to another nominal element do not; and thus the fact that the particles ga and no do not allow an adverbial particle to follow indicates that they are relating one nominal to another nominal rather than to a predicative element. Observe the following contrast:

(165) Elements related to a predicative element

ha

I ACC AP

'as for me'

ware ni mo

I DAT AP

'as for me too'

a. ware o

ware to koso

I COM AP

'with me indeed'

b. Ware wa iku.

I AP go

'As for me, I go.'

Ware mo iku.

I AP go

'As for me, I too go.'

(166) Elements related to a nominal element

a. iku mizu (*iku wa/mo mizu) go water

'the water that flows'

b. wa ga ya (*wa ga wa ya)

I GEN house I NOM AP house

'my house'

c. wa ga misi ie (*wa ga wa/mo/koso misi ie)

I GEN saw house

'the house that I saw'

In (165a), the nominals marked by the accusative and other case markers are related to the predicate, as in ware o (ba) miru 'to look at me'. The same applies to the subject nominals in (165b), which are related to the predicate. In these cases adverbial particles may follow the nominals. However, when elements such as a verbal modifier, as in (166a), or a genitive noun, as in (166b), are related to another nominal, no adverbial particle may follow the first modifying element. Since the genitive no and ga do not allow an adverbial particle to follow them, even when they can be construed to be marking semantic subjects, as in (166c), Hashimoto concludes that their original function is to connect a nominal to another nominal, rather than to mark a subject nominal – an element that is related to the predicate form.

With regard to the development of the subject-marking function in a nominalized clause by the genitive no and ga, Hashimoto (1969) speculates that it arose from the original attributive function when the second nominal had its own modifying element and when such an element could be construed as a predicate of the first nominal connected by no and ga. For example, Hashimoto draws the following parallelism seen in (167a) and (167b):

```
(167) a. wa ga [miti]

I GEN road
'my road'

b. wa ga [iku miti]

I GEN go ATTR road
'my road to go/take'

c. [wa ga iku] miti
'the road that I go/take'
```

The phrase iku miti 'a road to go/take' could be an independent phrase with miti 'road' as its head and iku 'to go/take' as a modifier. However, semantically (167b) allows another parsing, namely the one indicated in (167c), in which wa 'I' is interpreted as the subject of the verb iku 'go/take'. Hashimoto thus makes the hypothesis that ga and no were originally simple attributive particles that connected two nominals that had various semantic relationships. The subject interpretation of the first nominal was sometimes allowed because of the above mentioned semantic parsing possibility, and this led to the regular marking of the subject of a nominalized clause by no and ga.

Hashimoto's account is tantamount to saying that no and ga were attributive markers that related two nominals that formed a larger nominal phrase; i.e. given a structure like [[nominal] [nominal]], no or ga was inserted, connecting the two smaller nominal elements, just like the preposition of or other genitive forms in English, e.g. [[the destruction] of [the city]], [[the city]'s [destruction]]. This analysis

leads us to expect that the semantic connection between the first nominal element and the second element connected by no or ga can be construed to be other than that of subject and predicate, for any two nominals could be connected by no or ga as long as their structural requirement was met. In other words, we should be able to get no- or ga-connected nominals whose first nominal can be interpreted as the object of the verb which constitutes part of the second nominal element. In reality we do not find many of such examples, but one does encounter them occasionally. For example, Ishigaki (1955) tells us that the following forms should be interpreted in such a way that the no-marked nominals are understood as objects of the verbs tukuraretarikeru 'to have made (HON)' and nasu 'to make'.

(168) a. kawara no in no omosiroku tukuraretarikeru
riverside GEN temple GEN interestingly having made (HON)
'having made (HON) the riverside temple in an interesting manner'
b. tera no ooyakedera to nasubeki
temple GEN official temple as must do
'to having to make the temple an official temple'

Even in Modern Japanese, where, as noted earlier, no normally marks the subject of a nominalized clause, there are a few examples in which no marks an object nominal, e.g.

(169) a. [sakana no yaku] nioi
fish GEN broil smell
'the smell of (someone's) broiling fish'
b. [mizu no maku] oto
water GEN spray sound
'the sound of (someone's) spraying water'
c. [kippu no kiranai] kata
ticket GEN punch-NEG person
'the person who hasn't had his ticket punched'

Thus, Hashimoto's account seems fairly convincing, and it could conceivably even be applied to the use of the genitive case for the subject of a nominalized clause in English. That is, "John's buying of books", for example, is simply a case of the genitive case connecting two substantive forms "John" and "buying of books", the subject relationship being simply inferred from the semantic plausibility. The problem here, however, is that no object-verb interpretation is allowed with the present participle form; thus, unlike the city's destruction, the object-verb relationship can not be ascribed to the city's destroying. At any rate, it seems clear that the Modern Japanese no-marking of the subordinate (formerly nominalized)

clause is a historical residue of the original function of the attributive *no*, which connected two substantives under various semantic relationships.

An indication as to how ga and no would develop subsequently is already seen in the distributional difference between no and ga in Old Japanese. Although both no and ga had a similar attributive function, no had a wider distribution, while ga typically occurred after 1) the nominalized form of a verb, e.g. iku ga kanasisa 'sadness of going', 2) personal pronouns, e.g. wa ga tuma 'my wife', and 3) persons familiar or dear to the speaker/writer, e.g. imo '(my) wife', kimi '(my) husband'. The use of ga in 2) and 3) here has had an influence on the subsequent development, leading to a difference along the deferential dimension between no and ga, but first let us see how they began to mark the subject of an independent clause.

As has been pointed out several times already, the attributive, or substantive form of the predicate, which was used in nominalized clauses, and the conclusive predicative form of the predicate began to merge in the early Kamakura period, so that the attributive form preceded the head (old function) and also ended a sentence (new function). Since the subject of nominalized clauses, which had the attributive form of the predicate, was marked by ga or no, they have now come to mark the subject of both independent as well as nominalized, dependent clauses. It must also be pointed out that even before the merger of the attributive form and the conclusive form of the predicate, there were many nominalized clauses which did not have any head, and which were no different formally from the subsequent conclusive use of the attributive form. For example, though this is not possible in Modern Japanese, Old Japanese had a frequent use of headless nominalization, which exposed the attributive form at the end of the clause, e.g.

(170) a. ... wa ga hutari nesi

I GEN two slept ATTR

'we two having slept'

b. miyosino no yama no arasi no samukeki ni...

Yoshino GEN mountain GEN wind GEN cold ATTR DAT

'in regard to the coldness of the wind of the mountain in Yoshino'

Undoubtedly these forms had some influence in determining that it was the attributive form that assumed the sentence-ending function rather than the conclusive form. This development was in turn responsible for the rise of the generalized subject-marking function of ga and no. The headless nominalized clause is formally identical with the simple nominalized verbal forms that function as simple deverbal nominals, e.g. wakare 'parting'. When these nominals function as the subject of a larger nominalized clause, it was ga, rather than no, that marked it. Thus, it was possible to have an entire headless nominalized clause as a subject and

mark it by ga; such use of ga increased considerably during the Heian period, and again it is believed that this use of ga contributed significantly to the subsequent development of ga as a nominative case particle. Also it is believed that this kind of ga, which followed a whole headless nominalized clause, gave rise to the conjunctive particle ga, which still survives in Modern Japanese (see Ishigaki 1955). In (171a), from the $Man'y\bar{o}sh\bar{u}$ of the Nara period, ga is clearly functioning as the subject marker of a nominalized clause, but in (171b), from the Genji monogatari of the middle Heian period, the interpretation of ga is somewhat controversial; in one interpretation (the first translation), ga can be understood to mark the headless relative clause functioning as the subject of the second headless relative clause, and in the other (the second translation) ga is construed to be a conjunctive particle. (Most literary interpretations of the Genji monogatari opt for the second translation, while grammarians in general believe that the conjunctive ga was not yet established during the Heian period.)

- (171) a. [haha o hanarete iku] ga kanasisa mother ACC leaving go sadness 'the sadness of leaving one's mother'
 - b. [ito yangotonaki kiwa niwa aranu] ga sugurete tokimeki
 very important rank at TOP not ATTR very was favored
 taru arikeru
 HONORIFIC existed
 - (i) 'there was (a person) who was loved conspicuously who was not of particularly high rank'
 - (ii) 'there was (a person) who was not of particularly high rank but was loved conspicuously'

In the following example, from the *Uji shūi monogatari* (Tales Gleaned at *Uji*) of the Kamakura period, we can see a fledgling conjunctive ga.

(172) Nagato Maetukasa to iikeru hito no onna hutari arikeru
as called person GEN woman two exist
ga ane wa hito no tuma nite arikeru.
but sister TOP man GEN wife as be
"There were two woman of the person called Nagato Maetsukasa

'There were two women of the person called Nagato Maetsukasa, but the elder sister was someone's wife.'

The development of the conjunctive use of ga was one result of ga's marking of a headless nominalized clause. Since no did not share this function, ga enlarged its domain of marking, which led to the subsequent development of ga as a regular subject marker. But during the Kamakura and Muromachi periods, both no and

ga still had the overlapping functions of attributive markers and subject markers (of both nominalized and independent clauses). The following examples from the Muromachi period show that both no and ga marked the subject of independent clauses.

- (173) a. Sibasen no siki ga senko no hoo ni natta zo.

 Shibasen's chronicle eternal GEN law to became EMPH

 'Shibasen's chronicle became the eternal laws!'
 - b. Tei no ogotta koto o iuta to iute warawasita zo. emperor boasting thing ACC said that saying laugh HON EMPH 'The emperor laughed saying that (someone) has said such a boasting thing!'

Despite the overlapping functions that no and ga continue to have, especially with regard to the attributive and subject-marking functions, their distributional difference becomes more pronounced as the Muromachi period progresses. In the attributive function, ga's domain is further restricted to personal pronouns and names of persons, while no continues to enjoy a wider distribution. The attributive use of ga came to an end during the Edo period, when ga started to take on a more specialized nominative function. The acquisition of the status of a nominative case particle by ga during the Edo period was thus the culmination of the division of function between no and ga; the former becoming an exclusive attributive case particle, and the latter an exclusive nominative case particle. While it is generally believed that ga and no took their respective paths of development because in the Old Japanese period no already had a wider distribution as an attributive particle than ga, this explanation suffers when we take notice of the fact that many Kyūshū dialects adopted no as the nominative and ga as the genitive particle (see below).

The difference in distribution of ga and no in their original attributive function is believed to be responsible for the subsequent development in semantic values associated with these particles. Beginning early in the Kamakura period, when both ga and no began to be used as both attributive particles and subject-marking particles, a semantic difference developed in such a way that the use of ga imparted a sense of deprecation of the referent of the ga-marked nominal, while no conveyed deference (or at least a neutral attitude) toward the referent of the no-marked nominal. This is generally believed to be due to the fact that ga tended to occur with nouns referring to familiar persons, such as oneself, one's wife, one's husband, etc. Since in the Old Japanese period, ga also occurred with nouns referring to emperors and one's mother, the deprecating connotation of ga is perhaps a later development, influenced by the elaboration of the honorific system in the Heian period.

The survival of this semantic difference between ga and no until the early Edo period is well attested in the grammatical treatises by Christian missionaries. For example, in Arte da lingoa de lapam (1604-8), the author João Rodriguez notes that:

ga is used in careful speech and it indicates that what is referred to by the noun preceding it is deprecated. It is used with a first-person pronoun or a third-person pronoun referring to a low-ranked person. Also it is used to slight or deprecate other persons. No is normally used in the relative ([nominalized]) clause marking the second- and third-person pronouns, and it connotes deference or at least non-deprecation of the referent. In the attributive function, there are two [particles]. No is used with the second- and third-person pronouns to refer to respected persons, and ga is used with the first-person pronoun and the third-person pronoun to refer to a low-ranked person, and sometimes with the second-person when that person is to be deprecated.

Rodriguez's description indicates that in his period the subject marking by no was beginning to be confined to the subordinate (formerly nominalized) clause, the main clause subject being marked more consistently with ga. It also shows that when ga and no had overlapping functions, they were associated with different semantic values that reflected the speaker/writer's attitude toward the referent of a ga/no-marked nominal.

As the functions of ga and no began to diverge more clearly toward the middle of the Edo period, the semantic differences could not be maintained, because the particles began to occur in more or less complementary distribution. Thus, when ga had acquired the exclusive status of the nominative particle, and no that of the attributive or genitive particle, the semantic significance associated with them was shed.

The earlier states of no and ga are preserved to varying degrees in Kyūshū, where many dialects use no as the nominative marker and ga as the genitive marker. In some regions, the deferential distinction between the two particles is still preserved. In Kumamoto, for example, no is used as a neutral nominative particle, as in sensei no korareta 'the teacher has come (honorific – indicated by the verbal form)', zidoosya no kuru zo 'the car is coming', while ga is used as a means to deprecate the referent of the ga-marked nominal, as in kodomo-yazu ga nakiyoru bai 'the brat is crying', oru ga nakasitattai 'I made (him) cry.' Curiously, in some regions in Miyazaki the deferential value has been reversed; in Takachihochō, Miyazaki prefecture, no is used when deference is to be shown, as in the other dialects in

Kyūshū that still retain the distinction, but in Shīnamura of the same prefecture, kwanzin no kita 'the beggar has come' is possible, but not sensei no korareta 'the teacher has come (honorific)', indicating that no is used for the purpose of deprecation (Harada 1979).

Figure 11.1 below summarizes the developments of the particles reviewed in this section.

11.6 Pragmatics of Japanese grammar

With the understanding that pragmatics concerns itself with the three-way relationship between context, sentence form, and meaning, one can arguably say that Japanese grammar offers a domain of pragmatic inquiry more inviting than that offered by English and other European languages. This is not so much for the reason that Japanese offers more interesting tri-lateral context-form-meaning relationships as for the reason that Japanese shows far more obvious variations in and restrictions on sentence form in relation to the context in which the sentence is used. Some forms are not appropriate in certain contexts and the occurrence of certain others is simply impossible under some other circumstances, while their English translations are perfectly well-formed in the same or similar contexts. Two of the most obvious among the various contextual features that contribute to the shaping of sentence form are: (1) the medium of communication, and (2) the nature of speech-act participants as well as the persons referred to in the sentence including the physical and social locations of these people. Despite the well-developed tradition and high popularity of sociolinguistics in Japan, a large number of phenomena still await the grammarian's analysis and discovery of the pragmatic principles that govern them. One of these is the obvious phenomenon of sentence-final particles that permeate colloquial speech by both male and female speakers. Only in recent years have interesting observations and analyses been attempted in this and other areas of this rich field of inquiry, and much of what follows, though original to a considerable extent, constitutes a report on the themes being pursued in the still fledgling research in Japanese pragmatics.

11.6.1 Spoken and written language

Due to the historical accident that the Japanese decided to absorb Chinese culture and adopt Chinese characters as a means to represent their language, colloquial speech and the written language took different paths of development, though some genres of writing were much closer to the colloquial speech of the time than others. The divergence between the colloquial form and the written form originates in the development of the written style called Sinico-Japanese (or *kanbun*) tradition. Sinico-Japanese developed as a response to the desire to write Japanese in Chinese

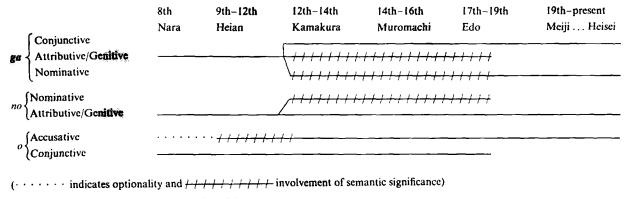


Figure 11.1 The historical development of particles

characters and in Chinese syntax! Such a desire was strongly felt during the Heian period (800–1186), when the influence of Chinese culture was at its peak. Much as Latin was cherished in the medieval world of scholarship in the West, Chinese letters were both a symbol of learning and a means of recording official matters. However, as Japanese and Chinese happened to be radically different in syntax, writing Japanese in Chinese and reading the resulting texts in the Japanese style involved a number of complications. Writing was perhaps more like translating Japanese sentences into Chinese, but reading the resulting text as a Japanese text required not only inversion in word order but also the supplying of inflectional endings and particles that were foreign to the Chinese language. It is from this cumbersome way of writing Japanese that the tradition of Sinico-Japanese has developed. Due to the imperfect learning of Chinese by the early practitioners and subsequent internal developments, Sinico-Japanese is neither pure Chinese nor Japanese, and thus neither Chinese nor Japanese are able to read Sinico-Japanese texts without special training.

Another literary tradition developed with the invention of the *kana* syllabary around the tenth century (see Chapter 6), and the language of this tradition, as represented by the language found in the *Genji monogatari* (The Tale of Genji), is believed to have been much closer to the colloquial speech of the time. However, official writing was carried out within the Sinico-Japanese tradition, and a few distinct writing styles that developed within this tradition were maintained in the written language until the late nineteenth century, when a movement for matching speech and writing (*gen-bun itti*) was started by literary men.

Today, colloquial speech and the written language are much closer than they once were, but as in most languages, the colloquial language and the written language show different characteristics, and perhaps even more so in Japanese than in English and other European languages. A major factor responsible for the differences between speech and the written language is formality. Writing in many cultures is a formal enterprise, and in Japanese culture, it is felt so even more strongly. Thus, many of the linguistic features associated with the informal setting of communication disappear in the written form, and those associated with formal environments are the hallmark of the written language. Based on this observation, one can envision a speech—writing continuum along the formality parameter. Notwithstanding the possibility of writing with a high degree of colloquialism, formal speech is indeed much closer to the written language.

One of the features that formality induces is the use of polite forms. The polite forms, characterized by the endings *desu* (for the copula *da*) and *masu* (for the verbal ending), are an addressee-oriented honorific (see section 11.6.3 below), and thus are signs of deference expressed toward the addressee. Polite language is a

feature of formal speech (regardless of the social status of the audience) as well as non-formal speech addressed to a person of social status higher than the speaker. Writing addressed to a specific person generally induces the use of polite language. Even in a letter addressed to a close friend and to a member of one's family, with whom polite language is not commonly used in conversation, one is likely to use polite language. Thus, a son asking his mother to meet him upon his arrival at the station would vary his language as follows depending on whether he is calling or writing.

(174) a. On the telephone (informal)

Mikka ni kaeru kara, mukaeni kite yo.

3rd on return for meet come FP

'(I'm) coming back on the third; come meet me, would you?'

b. In the letter (formal)

Mikka ni kaeri-masu kara, mukaeni kite kudasai.

3rd on return-POLITE for meet come give-POLITE

(lit.) 'Please do (me) the favor of meeting me, for (I'll) return on the third.'

However, when the reader is not specific, polite language is not generally used. Newspapers and scholarly writings employ the plain endings da or de aru for the copula and the ru verbal ending, though some authors prefer using polite language, especially when the books are addressed toward young readers or the general public. Novels are generally written in plain language.

One of the features that is pervasive in speech but absent in writing is particles such as ne, yo, wa, sa, etc. many of which occur both sentence internally and finally (see (174a)). The functions of these particles are not well understood (but see section 11.6.5 below)), but like you know, you see, right?, etc. in English, they monitor and regulate the progression of communication so as to insure that the speech-act participants are on the same or similar footing with regard to both propositional and extra-propositional information. The high use of these particles is the most conspicuous characteristic of colloquial speech, but they are not generally part of formal speech and are completely absent in the written language. Thus, again the formality parameter determines the occurrence of these particles.

Another difference between colloquial speech and the written form is the high degree of ellipsis associated with the former. This is also controlled by the formality factor, and thus the level of ellipsis is lower in formal speech than in daily, colloquial speech. However, in both speech and writing Japanese is highly elliptical in comparison to European languages and especially to English. The contrast is most pronounced in the ellipsis of nominal forms, recently dubbed "pro-drop".

In order to zero in on the phenomenon of pro-drop it is necessary to offer a general survey of the distribution of various kinds of empty nominal categories. Earlier we recognized some of them already, namely [e], PRO, and PROarb. In addition, we posit pro. Typical instances of these are:

```
(175) a. pro
         (pro ga) kita.
             NOM came
         'X came '
      b. PROarb
         (PROarb ga) mainiti
                               hasiru koto wa ii
                                                    koto da.
                 NOM every day run
                                      that TOP good thing COP
         'To run every day is a good thing.'
         (PROarb ga) kono miti o ike-ba, (PROarb ga) eki
                 NOM this road ACC go-if
                                                    NOM station
         ni tukimasu.
         to arrive
         'If one goes along this road, one will arrive at the station.'
      C. PRO
         Boku wa [(PRO ga) iku] tumori da.
                       NOM go intend COP
         'I intend to go.'
      d. [e]
         Taroo wa [minna
                            ga [e] sonkeisite iru]
                   everyone NOM respect
         'Taro is such that everyone respects him.'
```

In addition to these empty categories that occur in argument positions, there are two more types of sentences whose predicates do not have overt nominal arguments. One is a zero-argument predicate such as *samui* 'cold' and *atui* 'hot', which express ambient conditions. They are analogs of those meteorological expressions in other languages that typically lack a subject. The fact that these predicates do not take an argument is shown by the fact that they do not permit questions such as "What is cold?"

The other sentence type that typically lacks a subject occurs in the mini-genre represented by cookery recipes. Just as in the English analogs, it is normal to find here subjectless sentences of the type: Tugini kyuuri o kitte, sio de momimasu 'Next, slice the cucumbers and rub the slices with salt.' A major difference between Japanese recipe writing and its English counterpart is that while in the latter the sentences usually assume the imperative form, which ordinarily deletes the subject,

the former takes the form of a first-person narrative, which involves no grammaticized deletion of the subject. It is suspected that the zero-subject here is an instance of PROarb that occurs in an impersonal sentence represented by the second sentence in (175b).

These empty categories differ in their interpretations and distribution. Small prois a zero pronoun whose referent varies depending on the antecedent. Arbitrary PRO, PROarb, is severely limited in its distribution typically occurring in the subject position of a tenseless embedded clause - i.e. where a tense contrast does not obtain. and its interpretation is much like the indefinite pronouns. English one and French on. However, PROarb occurs in the main clause of an impersonal sentence, as shown in (175b). As suggested above, the zero-subject of a recipe sentence is also an instance of Proarb, though it too occurs in the subject position of a main clause. Notice that in both impersonal and recipe sentences, the tense of the clause in which PROarb occurs cannot be altered; as soon as the present tense form in these sentences is replaced by the past tense form, the pro interpretation obtains. Big PRO occurs only in the subject position of a subordinate clause, and its reference is determined by the controlling subject or object of a main clause. Finally, the [e] that is bound by a topic nominal has a freer distribution pattern but is always bound by a non-argument topic. Whereas the other categories show a high degree of similarity to their analogs in English and European languages with regard to these properties, pro's distribution is very different. Even among European languages, the distribution of pro varies from the severely restricted pattern of English to a moderately freer pattern in some Romance languages, in which the subject pronouns normally drop. An even freer pattern is observed in Ainu as well as many Amerindian languages whose verbal agreement involving subjects and objects allows both subject and object pronouns to drop (see Part 1 of this book on the Ainu situation). Japanese shows a marked contrast with these situations in that the occurrence of pro is not restricted to subject positions and Japanese has no agreement affixes on the verbal element to indicate the person, number, and gender of the referent of pro.

The high frequency of ellipsis or the occurrence of pro in colloquial speech is due to the high frequency of information exchange between the speech-act participants, where the question sentence provides an immediate linguistic context that facilitates the recovery of the elliptical elements. That the occurrence of pro is not limited to subject position is seen from the following exchanges:

(176) A: Taroo ga Hanako ni ano hon o yattandatte.

NOM DAT that book ACC gave (I hear)

'(I hear that) Taro gave that book to Hanako.'

```
B: Huun, yappari yatta no ka.

INTERJEC as expected gave that Q

'I see, as expected, it was the case that (Taro) gave (the book) (to Hanako).'
```

A: Hanako to eiga e itta no?

with movie to went that

'Was it the case that (you) went to the movie with Hanako?'

B: Un, itta yo.
yeah went FP
'Yeah, (I) went (to the movie) (with Hanako).'

Another factor that contributes to the high frequency of ellipsis in colloquial speech is the fact that the presence of both speaker and hearer is taken for granted as non-linguistically provided omnipresent accessible referents for pro. As a typical colloquial exchange involving the ellipsis of the second- and first-person pronoun, observe the following:

(177) a. Tokorode, moo kono hon yonda?

by the way already this book read

'By the way, (have you) read this book already?'

b. Un, moo yonda.

yeah already read

'Yeah, (I've) already read (it).'

With regard to the reliance on non-linguistically provided antecedents, such as the speaker and the hearer, Japanese (perhaps along with Korean) is most extreme, for other languages that allow a high degree of ellipsis and a free distribution of pro, such as Chinese and Philippine languages, tend to restrict ellipsis to situations involving linguistically provided antecedents. Thus, in these languages the (177a)type of ellipsis, which involves a non-linguistically provided "antecedent", is far less frequent than the (177b)-type ellipsis, where pros refer to antecedents provided in the preceding question. The clearest indication of this is the impossibility of whispering to one's lover the direct translations of the perfectly mundane Japanese expression aisite iru yo '(I) love (you)' in Chinese or Philippine languages, which require both "I" and "you" in such an expression. Indeed, one is struck by the difference in the frequency of occurrence of personal pronouns between Japanese and Chinese; wǒ 'I', nǐ 'you', tā 'he', etc. in Chinese are far more frequently used than the Japanese counterparts despite the fact that Japanese has a number of varieties of forms especially for the first and the second-person pronouns (see section 11.6.2 below). (Just as English allows an expression like Need some help? for *Do you need some help?* in a highly specialized setting such as being uttered by a clerk in a shop, Chinese and other languages do permit this kind of specialized ellipsis without linguistically provided antecedents.)

It appears that a wide distribution of pro in Japanese is motivated by a congeries of phenomena that help the hearer identify the referents of pros. Some recognize the role of the honorific system as a compensatory mechanism for the recovery of elliptical elements. Though Japanese lacks verbal agreement, the honorific endings indicate to a large extent whether the action is ascribed to the speaker or the hearer or a third person. The subject honorific form indicates that the missing subject is other than the speaker (or someone close to him) and the object honorific, humbling, ending indicates that the subject is likely to be the speaker (or someone close to him). Perhaps the high degree of ellipsis with reference to personal pronouns too is motivated by the presence of the honorific system. As correctly observed by Martin (Martin 1975:322), "Japanese prefer to avoid direct pronominal reference, so that such words as watasi 'I' and especially anata 'you' are heard a good deal less often than their counterparts in English." Fundamental to the honorific mechanism is avoidance of direct attribution of an event to a person. Thus, defocusing mechanisms such as pluralization of the pronouns in reference to singular persons (e.g. French vous, German Sie) are found in languages throughout the world (see Shibatani 1985). What better way is there to achieve this defocusing effect than not mentioning the person referred to? Japanese, being a language with a highly developed honorific system (see section 11.6.3 below), may thus have a good motivation for a high degree of ellipsis. (Korean also has a systematic honorific mechanism; however, though it allows the ellipsis of nonlinguistically introduced elements such as the speaker and the hearer, the degree of ellipsis appears to be lower than in Japanese, which translates to saying that Korean uses more overt pronouns, especially the third-person pronoun ku 'he/she', than Japanese.)

Deictic expressions also indicate whether the speaker is involved as a subject or goal. Japanese is particularly sensitive to the marking of the event directed toward the speaker, and this mechanism will tell that the omitted goal is the speaker (see below). Finally, Japanese is also quite sensitive to the accessibility of information such that certain information, e.g. the internal feeling of a person, which is only directly accessible to the speaker, must be marked whether it is obtained directly or indirectly. The direct form tells that the (missing) subject is the speaker, and the indirect form indicates that the (missing) subject is other than the speaker (see below). Thus, in Japanese it is likely that a fair number of phenomena, rather than a single phenomenon such as agreement, conspire to bring about a situation in which missing nominals, or pros, can be identified.

There has been a proposal for a formal analysis of some of what we have been calling pro. Huang (1984), noting that those languages such as Chinese, Korean, and Japanese, which have a wide distribution of pro despite their common characteristic of lacking verbal agreement, have a regularly occurring topic construction, proposes that those pros that have extra-sentential references (e.g. those pros in (176) and (177)) are variables bound by an empty topic operator, which is an analog of a regular phonetically realized topic. The empty topic is a topic that has been established in the discourse (setting), and that has been deleted or made into a PRO due to the chain it forms with the first topic to which it is bound. This analysis, then, appeals to the purported parallelism between the overt topic and the empty topic seen in possible answers (Ba) and (Bb) to A in (178) below.

```
(178) A1: Dare ga kono hon o
                                   vonda?
          who nom this book acc read
          'Who has read this book?'
      A2: Kono hon wa boku no hon nan daga naa.
          this book TOP I
                              of book that COP FP
          'This book is such that it is a book of mine.'
      Ba: Sono hon wa Taroo ga yonde ita yo.
          that book TOP
                               NOM read be FP
          'That book is such that Taro was reading (it).'
          [Sono hon; wa [Taroo ga [e]; yonde ita yo]]
          TOPIC
      Bb: Taroo ga vonde ita yo.
                 NOM read be FP
          'Taro was reading (it).'
          [e, [Taroo ga [e], yonde ita yo]]
          TOPIC
```

While Huang's proposal is intuitively appealing, there is in fact little parallelism between overt topic binding and the suggested empty topic binding. Firstly, in a situation like the first exchange of (176), a fairly large number of empty topics that bind the empty arguments must be posited. However, overt topics do not seem to be able to bind too many empty arguments. For example, overt topic binding like the following is not possible:

```
(179) (cf. 176)
*Taroo wa Hanako wa ano hon wa [[e][e][e] yatta]
```

The impossibility of this kind of topic binding is rooted in the recoverability condition. That is, topic binding is constrained in such a way that the semantic

roles of the bound variables must be recoverable. In particular, particles that have semantic content cannot be deleted. Thus, while the nominative ga and the accusative o may not occur before the topic particle wa, other particles are likely to remain, though the dative ni often drops. For example, the comitative to does not normally drop unless an adverb like issyoni 'together' occurs in the sentence, as indicated by the ill-formedness of (180Bb).

(180) A: Hanako to kyoo benkyoo o sita?
with today study ACC did
'With Hanako, did (you) study (with her) today?'
Ba: Iiya, Hanako to wa sinakatta.
no with TOP did not do
'No, with Hanako, (I) didn't do (study) (with her).'
Bb: *Iiya, Hanako wa sinakatta.

TOP did not do

(Intended reading as a) Bc: Iiva, sinakatta.

no did not do
'No, (I) didn't do (study) (with her).'

However, as seen in (Bc) above, the purported empty topic without the particle can bind the variable representing *Hanako to* 'with Hanako'.

The recoverability condition is quite a general condition that operates not only in topic-variable binding but also in other operator-variable binding situations. Head-variable binding in relative clauses is another instance in which the recoverability condition applies. Notice that whereas (a) below is well-formed, (b) is not.

(181) a. [Taroo ga [e], aisite iru] Hanako,

NOM love be
'Hanako, whom Taro loves'
b. *[Taroo ga [e], henkyoo o sinakatta] Hanako,

NOM study ACC did not do

(Intended as) 'Hanako, with whom Taro did not do study'

(181b) parallels (180Bb), both of which will be rendered grammatical once an adverb that improves recoverability like *issyoni* 'together' is inserted. This situation, in which operator-variable binding is constrained by the recoverability condition, is in sharp contrast with that of the pro-binding being discussed here, which does not obey the recoverability condition. And this indicates that the identification of pros or their binding is done by a mechanism rather different from that of the operator-variable binding involved in the topic construction, suggesting that

Huang's proposal is misguided. Indeed, the mechanism needed for the interpretation of the pros under discussion seems to differ little from that required in making the correct interpretations of the pronouns *he* and *him* in the following exchange.

(182) English

A: What did John do to Bill then?

B: Well, he beat him up.

(183) Japanese

A: Sorede Taroo wa Ziroo o doo sita?
then TOP ACC how did
'What did Taro do to Jiro then?'

B: Un, nagurituketa yo.
well beat up FP
'Well, (he) beat (him) up.'

Whatever the ultimate explanation is for the fact that non-agreement languages like Japanese, Korean, Chinese, and some others allow a freer distribution of pro than English and others, a mechanism of interpreting pronouns, be they overt pronouns or phonetically empty pro, must be explicated. Obviously explication of the factors for the pro-drop parameter must be part of such an account.

Another group of elements that are often missing in colloquial speech includes certain case particles and the topic particle. Case particles and the topic particle are regular features of formal speech and the written language, but certain colloquial expressions characteristically lack them. Among the particles that are most often missing are the topic wa, the accusative o, and the nominative ga, in conformity to the recoverability condition mentioned above. The simplest case of these missing particles is that of simple omission, and in this case supplying the missing particles gives us complete sentences equivalent to the original sentences without particles, as shown below:

- (184) Omission of the accusative o
 - a. Ima kono hon o yonderu nen.
 now this book read FP
 'Now (I'm) reading this book.'
 - b. Ima kono hon o yonderu nen.

ACC

- (185) Omission of the nominative ga (and o)
 - a. Taroo ø kaetteru no ø sitte iru?
 return-be that know be
 'Do (you) know that Taro's back?'

b. Taroo ga kaetteru no o sitte iru?

(186) Omission of the topic wa

- a. Kimi ø dare ga suki? you who NOM like 'Who do you like?'
- b. Kimi wa dare ga suki?

TOP

More problematic are those utterances with missing particles that do not yield complete forms with particles that are appropriate to the context. The clearest instance of this involves utterances appealing to the hearer expressing the speaker's internal feeling, such as the following:

(187) a. Watasi samisii wa.

I lonely FP
'I feel lonely.'
b. Watasi uresii no.
I glad FP
'I'm glad.'
c. Ore sukiya nen.
I like FP

I like FP
'I like (it/you).'
All these utterances lack a pa

All these utterances lack a particle after the subject. Now the problem with these is that we cannot supply them with a particle and retain the same expression. If we supply the topic particle wa after the subjects, the utterances would turn out to be judgment making, vielding fairly objectively analyzed expressions regarding the speaker. For example, Watasi wa samisii 'I feel lonely', with wa following the subject is a judgment made by the speaker about herself connoting a rational analysis behind the expression. Such a sentence is quite inappropriate when a woman is appealing to her lover, revealing her feeling to him, and thus it doesn't do the work that (187a) does. Supplying these utterances with the nominative ga will not do either. For one thing, a neutral descriptive reading does not obtain, since what is expressed are internal feelings that can be felt only by the speaker, who cannot describe them as an outside observer (see section 11.6.5 below). Therefore, the only available reading for the nominative version such as Watasi ga samisii 'I feel lonely' is one in which the nominative phrase is interpreted as a focus of new information. That is, the nominative version is only appropriate as an answer to such a question as Dare ga samisii? 'Who feels lonely?'.

Thus, utterances of the type represented by (187), which are a direct expression of the speaker's internal feeling, cannot mark their subject with any particle. An utterance of this type, which never occurs in formal speech or writing, is an agrammatical sentence in the sense that the elements constituting a state of an internal feeling are simply juxtaposed without going through the normal grammatical processes due, perhaps, to the spontaneity of the utterance.

With the above interpretation of the spontaneous utterance under consideration, we may recognize three modes of grasping a state of affairs that are reflected linguistically. The most primitive one is simple juxtaposition of the elements composing the state of affairs to be expressed. The second is the grasping of the state of affairs in an orderly manner but without involving the kind of analysis that is inherent in the judgment sentence. Here, the involved elements are processed grammatically and the resulting sentences contain appropriate grammatical elements such as the case particles. The third, and most involved manner of grasping a state of affairs is the one that involves the analysis of the involved entities in such a way that the entity to be known (the topic/subject) is clearly isolated and is related to the property to be ascribed to it in the form of a predication (see section 11.2 above).

If the type of utterance in (187) represents an agrammatical sentence whose possibility of occurrence is supported by the context of utterance, there is another type of utterance whose form is perfectly grammatical but whose interpretation depends on context to such an extent that some have been led to analyze it in a manner similar to the analysis of pronominal form, i.e. by conversion from the full form that expresses the exact meaning associated with it. This type is represented by the following example, which is regularly cited with amusement by Japanese grammarians.

(188) Boku wa unagi da.

I TOP eel COP
(lit.) 'I am an eel.'

If this sentence is uttered without a context, e.g. out of the blue, it only means what the literal translation means. But supported by appropriate contexts, it can mean a variety of things. The most likely place in which the utterance in question might be heard is in a restaurant (serving eel dishes among others). One may utter Boku wa unagi da after hearing one's companion order something else. In this context, the sentence "means" something like "I've decided on eel" or "I want to order eel." But one may utter the same sentence when one has caught an eel after one's companion has caught something else. In this context the sentence "means" something like "I caught an eel." One can think up many many contexts in which

the utterance in question is appropriate and each time it can mean something different. Indeed, this type of utterance permeates Japanese daily conversation, and one can scarcely spend a day without hearing or uttering the following kinds of expression.

(189) a. Boku wa Hansin da.

I TOP COP

'I am Hanshin; i.e. I root for the Hanshin Tigers (a baseball team), I am taking the Hanshin Railway, etc.'

b. Watasi wa Rokkoo desu.

I TOP COP

'I am Rokkō; i.e. I live in Rokkō, I get off the train at Rokkō, etc.'

c. Boku wa Tookyoo kara desu.

TOP from COP

'I am from Tōkyō; i.e. I came from Tōkyō, I depart from Tōkyō, I've been riding this train from Tōkyō, etc.'

The last example with a postpositional phrase predicate finds a superficial analog in English. But notice that whereas the English expression is extremely limited in its meaning, the Japanese counterpart is unlimited, as is the case with other expressions of the same format. The theoretically unlimited possibility in interpretation makes unlikely the analysis of this kind of sentence as arising from the full expression via a substitution or pro-predication process. A more reasonable approach is to invoke the connecting function of the topic particle wa. As discussed in section 11.2 above, the particle wa has the function of connecting a topic with its predicate much like the copula in the logical expression. The expression under consideration then is a juxtaposition of two elements connected by wa, the appropriateness of such connection - i.e. the semantic connection that licenses the connecting of the two items by wa - being supported by the context. (All the wa-connected expressions of the type being discussed contain the so-called copula da. It is, however, not clear whether this da is indeed functioning like the copula of a logical expression. It is more likely that da is simply a tense carrier, which appears when a nominal predicate, which cannot carry tense, is used. Indeed, in Japanese an adjectival predicate does not call for da, because Japanese adjectives inflect for tense.)

The wa-connected sentences discussed here epitomize the highly contextually dependent nature of Japanese expressions. Interestingly enough, another language that uses the same type of expression as freely as Japanese is Korean. Chinese also appears to have a similar kind of expression, but it seems to be used less often. Certainly the overlapping occurrences in these three languages of a topic construc-

tion, of a wide distribution of pro, and of highly context-dependent expressions of the type discussed here invite speculation on the connection of these phenomena.

11.6.2 Men's and women's speech

Besides the general contextual dependency of elliptical and other types of expressions discussed in the preceding section, Japanese expressions vary considerably depending on the nature of the speaker, of the hearer, and of the referents of the nominal arguments of a sentence. In this section we concentrate on variations dependent on the sex of the speaker (see Shibamoto 1985 for more discussion on Japanese women's speech).

There are both specific and general features that characterize the difference between men's and women's speech in Japanese. Among specific features are lexical items that are characteristic of the different sexes. Even in those languages where the sex difference is said to be reflected less in speech, some differences in the use of interjections are observed. Japanese also has a few interjections or exclamatory expressions that are exclusively used by women, e.g. maa 'Wow!', ara 'Oh!'. But the most conspicuous area in the lexicon that differs between men's and women's languages is the first-person pronominal forms.

The organization of the Japanese pronominal forms is principally controlled by the sex of the speaker and the speech level. A gender distinction is made in the third-person pronouns, while in the case of the first-person pronouns it merges with the sex of the speaker (see Table 11.1 below).

While these forms are usually identified as personal pronouns, they are characteristically different from the personal pronouns in European languages. Ety-

	Formal -			→ Informal
1st person				
Male speaker	watakusi	watasi	boku	ore
Female speaker	watakusi	watasi		atasi
2nd person				
Male speaker	anata		kimi anta	omae
Female speaker	anata			anta
3rd person				
·		<i>kare</i> 'he' <i>kanozyo</i> 'she'		

Table 11.1. Gender distinction in pronominal forms

mologically, most of the forms derive from regular nouns, e.g. watakusi 'I' (<'private (thing)'), kimi 'you' (<'emperor'), anata 'you' (<'yonder'). Secondly, the use of pronouns is severely limited. As indicated by the fact that different forms are controlled by the level of speech, the use of pronominal forms constitutes part of the honorific system. One characteristic of the Japanese honorific system is non-reciprocity such that, in a speech setting involving a social superior and an inferior, the superior can use either formal or informal language, but the inferior can only use formal, honorific language even if the superior opts for informal language. The use of personal pronouns also reflects this non-reciprocal property of the honorific system. Thus, none of the second-person pronouns is quite appropriate when addressing a person of socially higher status. Instead of anata, the form anata-sama with an honorific ending is infrequently used, or, if possible, the reference is avoided altogether. Other forms such as kimi, anta, and omae can never be used if the speaker wishes to show his deference to the addressee. The second-person pronouns listed, then, are usable only by a person addressing a social equal or inferior.

The lacuna created by this non-reciprocity condition on the use of the secondperson pronouns is, as we pointed out earlier, one of the factors contributing to the wide distribution of the zero pronoun, or pro. However, a need surely arises to fill the lacuna. The non-availability of the second-person pronouns with reference to a superior is covered by the referential terms derived from the social relationships between the speaker and the addressee. Thus, the superior is typically addressed or referred to by his/her title, e.g. sensei 'teacher, Professor, Dr.', syatyoo 'company president', butyoo 'division head', or by his/her kinship terms, e.g. otoosan 'father', ojiisan 'grandfather', obasan 'aunt', oneesan 'elder sister'. The titles are often used in combination with the last names, e.g. Takagi-syatyoo 'President Takagi', Kakehi-sensei 'Prof. Kakehi'. Again, the use of the referential terms is non-reciprocal such that the terms designating the inferior positions or kinship relationships cannot be used as addressing or referring terms by the superior. That is, a teacher cannot address his student by the term seito 'student', while the latter can address the former by the term sensei 'teacher' (see Suzuki 1973 for an illuminating discussion on this topic). The use of the referential terms is an integral part of the honorific system and is accordingly governed by the principle of non-reciprocity, which is an important feature of the Japanese honorific system.

A similar observation can be made with regard to the third-person pronouns *kare* 'he' and *kanozyo* 'she', whose use is also generally avoided. These can be used by a speaker in reference to either a social equal or inferior. In other cases, a deferential nominal expression such as *ano kata* 'that person' (etymologically

'yonder') or the name with the honorific suffix san or in combination with a referential term is used.

Notice that in all the pronominal forms, the sex difference of the speaker is not reflected in the forms used in the formal speech level. This is a general characteristic of stylized expressions. That is, many of the distinctions made in plain speech are neutralized in stylized forms. For example, as we will see below, the deictic distinction made by the verb *iku* 'go' and *kuru* 'come' is lost in the subject honorific form *irassyaru* 'come/go' and the object honorific form *mairu* 'come/go'.

Another class of lexical items that reflect the sex difference of the speaker is sentence-final particles. The final particle wa (with a rising intonation, to be differentiated from the final particle wa of the Ösaka dialect, which is used by both male and female speakers and has a falling intonation) is exclusively used by female speakers, whereas ze and zo are found only in men's rough speech. Women's speech is also characterized by special endings, which are relatable to the process of clausal nominalization. The clausal nominalizers no and koto, which correspond to the English subordinator that, may end women's utterances which convey some sense of surprise or mild exclamation, e.g. Maa, kireina koto 'Oh, how pretty!', Utukusii no nee 'Isn't it pretty!' The dubitative ending kasira is also a characteristic of women's speech, e.g. Ame huru kasira 'I wonder if it'll rain'.

Interesting is the exclusive possession by female speakers of a syntactic rule which is triggered by the presence of the final particle yo. This rule deletes the copula da when it is followed by the final particle yo, but it is operative only in women's speech. Thus, where men would say (190), women would say (191), the forms lacking the copula.

```
(190) a. Kirei da yo.
pretty COP FP
'It's pretty.'
b. Kare wa isya da yo.
he TOP doctor COP FP
'He is a doctor.'

(191) a. Kirei yo.
pretty FP
'It's pretty.'
b. Kare wa isya yo.
he TOP doctor FP
'He is a doctor.'
```

When women use the (190)-type form, it sounds rather blunt and masculine. But that the copula is included underlyingly in all these expressions is indicated by the

fact that they surface in the polite forms, such as *Kirei desu yo* 'it's pretty' and *Kare wa isya desu yo* 'he is a doctor', both of which can be used by both sexes.

Overall, women's speech is characterized by softness and politeness. The impression of softness in women's speech derives from the less frequent use of Sino-Japanese forms in preference to native Japanese forms and from the general avoidance of the rough forms used by men.

Women assume a higher politeness level than men in that they use more polite language than men to describe the same situation. A conspicuous manifestation of politeness in women's speech is the use (or sometimes over-use) of the beautification prefix o-, which is related to the honorific prefix o- that occurs in subject and object honorification (see below) as well as in an expression referring to an object belonging to a respected person, e.g. sensei no o-boosi 'teacher's hat'. In many cases the beautification prefix is to be distinguished from the honorific o- in that it attaches even to those items that belong to the speaker, a situation in which honorification is not triggered. Thus, forms like watakusi no o-saihu 'my purse' and watakusi no o-uti 'my house' are clear instances of the beautification o-. Language purists sometimes raise an eyebrow at the extreme uses of the beautified forms represented by o-biiru 'beer', o-genkan 'entrance', o-daidokoro 'kitchen', o-nyuugaku '(children's) entrance to a (prestigious) school', etc., but they are creeping into men's speech as well, especially that of salesmen who deal primarily with female customers.

Though the use of the beautification o- needs to be distinguished from the honorific o- in many cases, their connection and even synchronic overlap must be recognized, for the beautification o- has not crept into the expressions referring to inalienably possessed objects of the speaker, while it (or perhaps the honorific o-) is used for similar objects belonging to the addressee or a third party. That is, while okusama no o-yubi 'your finger' (literally 'the wife's finger') and sensei no o-asi 'the teacher's leg' are possible, watakusi no o-yubi 'my finger' and syuzin no o-yubi 'my husband's finger' are not possible. Thus, whereas the indiscriminate use of the beautification o- represented by the form o-biiru 'beer' shows that it is being freed from the honorific connotation, its inapplicability to objects highly personal to the speaker shows that the honorific bondage of the beautification o- is not completely broken.

More than anything, the politeness in women's speech derives from the higher frequency of the use of the honorific forms, the topic to which we now turn.

11.6.3 Honorifics and speech levels

The beautification of speech by the use of prefix o- is a derivative of the honorific system. In the section on syntactic structure, we have already introduced subject

honorification and object honorification. As the discussion there makes clear, these honorification processes are triggered by the referents of nominal constituents of a sentence. Though very often the subject happens to be identical with the addressee, these referent-controlled honorification processes must be distinguished from addressee-controlled honorification, which is far more wide-spread. In other words, Japanese possesses two types of honorification processes along the speaker-addressee axis and the speaker-referent axis. In Japanese grammar the honorification controlled by the speaker-addressee axis is called teinei-go 'polite language', and that controlled by the speaker-referent axis is divided into sonkei-go 'respect language' (our subject honorifics) and kenzyoo-go 'humility/humbling language' (our object honorification).

As mentioned above, polite language controlled by the speaker-addressee axis is fairly wide-spread throughout the world (e.g. the use of French vous and German Sie). Between the two types of referent-controlled honorifics, subject-controlled honorification is more common than the object-controlled honorifics. Thus, Korean has both polite forms and subject honorifics, but lacks productive object honorifics. Likewise, many dialects of Japanese lack object honorifics.

The polite forms in Japanese involve the verbal endings of -masu (present tense) and -masita (past tense) attached to the adverbial forms of verbal stems, and the copula forms of desu (present) and desita (past). There are two subject honorification processes. One involves a form of circumlocution expressing the idea of making indirect reference to someone's doing something by means of a form that directly translates as someone's "becoming to do something." Formally, the nominalized verbal form with the honorific prefix o- (together with the verb's arguments) assumes the role of an adverbial complement of the verb naru 'become'. The other subject honorific process simply attaches the suffix -rare, which is homophonous with the passive, the potential, and the spontaneous suffix. In the object-honorific form, the nominalized verbal form with the honorific prefix o- (together with the verb's arguments) is made the object of the verb suru 'do'. In both subject and object honorifics, however, suppletive forms are frequently seen. The formal relationships between the plain forms and the corresponding polite and honorific forms are shown in the following examples:

(192) Polite form (addressee-controlled)

a. Taroo ga ki-ta. (plain)
NOM come-PAST

'Taro came.'

b. Taroo ga ki-masi-ta. (polite)
NOM come-POLITE-PAST

- (193) Subject honorifics (referent-controlled)
 - Sensei ga warat-ta. (plain) teacher NOM laugh-PAST 'The teacher laughed.'
 - b. Sensei ga o-warai ni nat-ta. (honorific)
 teacher NOM HON-laugh ADV become-PAST
 (Where ADV = adverbializer)
 - c. Sensei ga warawa-re-ta. (honorific) teacher NOM laugh-HON-PAST
- (194) Object honorific (referent-controlled)
 - a. Taroo ga sensei o tasuke-ta. (plain)

 NOM teacher ACC help-PAST

 'Taro assisted the teacher.'
 - b. Taroo ga sensei o o-tasuke si-ta. (honorific)

 NOM teacher ACC HON-help do-PAST

Notice that the speaker-addressee axis and the speaker-referent axis are independent axes, though when the subject or the object of a sentence refers to the addressee or the speaker, the two merge. Being independently controlled, the polite and honorific forms can be used independently of each other. (192b) is a non-honorific polite form, usable by a student addressing a teacher, (193b,c) are plain subject honorific forms, usable between classmates, and (194b) is a plain object honorific form, usable between classmates. However, more often than not the polite and honorific forms are used in combination. This happens most commonly when the speaker-addressee axis and the speaker-referent axis merge, as when the addressee and the referent are identical and represent someone worthy of respect. Some representative combinations are:

- (195) a. Polite subject honorific (subject = addressee)

 Itu o-kaeri ni nari-masu-ka?

 when HON-return ADV become-POLITE-Q

 'When are (you) coming back?'
 - b. Polite subject honorific (subject ≠ addressee)
 Kakehi sensei ga o-kaeri ni nari-masi-ta.
 prof. NOM HON-return ADV become-POLITE-PAST
 'Professor Kakehi returned.'
 - c. Polite object honorific

Taroo wa sensei o o-tasuke si-masi-ta.

TOP teacher ACC HON-help do-POLITE-PAST
'Taro assisted the teacher.'

Notwithstanding the independence of the speaker-addressee and speaker-referent axes, the use of the polite forms and honorifics is governed by a general requirement of concord or harmony over the use of honorific and polite forms. Especially, when polite language is used, the referent honorific is also normally used when the referent is appropriate, while the reverse is not always the case. This means that the nature of the addressee tends to set the whole tone of speech. Thus, while forms such as (193b, c) and (194b) are common enough, the following is more unusual, where polite language is mixed with a non-honorific form and where the referent is appropriate for honorification (but see below).

(196) (A secretary speaking to a division manager)
'Syatyoo ga warai-masi-ta.

president NOM laugh-POLITE-PAST
'The company president laughed.'

As pointed out earlier, the speech level is controlled by the formality factor. A formal occasion calls for polite language. The factors that contribute to formality vary, but the nature of the addressee, the formality of the occasion, the nature of the topics of discussion, and the nature of the bystanders are some of the obvious ones (see Ide 1982 for further discussion of various sociolinguistic aspects of the Japanese honorifics system).

Informality of the occasion lowers the level of speech by freeing the speaker from the use of polite language, but, even in family talk, honorifics are used in reference to a respected third party. Thus, while it is true that a formal setting calls for polite and honorific speech, it is not the case that informality is incompatible with honorifics. When the level is lowered enough to include vulgar expressions, even honorifics disappear, as in a conversation between drunken salaried men. The following examples, presented in ascending order of the level of speech, give a flavor of the levels of speech and the ways in which honorific speech is realized.

meet-POLITE FP

(197) a. Vulgar

Ore aitu ni au yo.

I that fellow to meet FP
'I'll see that fellow.'

b. Plain, informal

Boku kare ni au yo.

I he to meet FP
'I'll see him.'

c. Polite, informal

Boku kare ni ai-masu

'I'll see him.'

d. Polite, formal

Watakusi kare ni ai-masu.

T

'I'll see him.'

e. Polite, formal, object honorific

Watakusi kare ni o-ai-si-masu.

HON-meet-POLITE

'I'll see him.'

f. Polite, formal, object honorific, honorified 'he'

Watakusi ano kata ni o-ai-si-masu.

that person

'I'll see that person (lit. "yonder").'

g. Polite, formal, super object honorific, super-honorified 'he'

Watakusi ano o-kata ni o-me ni kakari-masu.

that HON-person HON-eye to involve-POLITE

'I'll see that person; (lit.) I'll be humbly involved in the eye's (seeing) that honorable vonder.'

The presence of the final particle yo 'you see?', 'all right?' marks the informal nature of (a)-(c). (d) would not be appropriate if the person referred to is a respected person, in which case the plain kare 'he' would not be appropriate and neither would the non-object honorific ending. Thus, (d) is appropriate only when the referent is either equal or inferior to the speaker and the hearer in social standing. (e) represents a fairly standard form of polite, formal speech, whereas (f) and (g) are highly stylized. Notice that referring to someone with ano kata 'yonder/ that person' is not often still acceptable; if the title of the person is known, using it is preferred. The title of sensei is a favorite form for a teacher, professor, author, politician, or professional in general. Notice also that the male first-person pronouns ore and boku disappear as the level of speech is raised. Starting with (d), then, the characteristics that differentiate the sex of speakers disappear and the same expressions can be used by either sex.

With the above description of the grammatical aspects of honorifics and the polite forms, we now turn to a more sociological aspect of stylized language. In agreement with Fillmore (1975), honorifics (including the polite forms) can be considered as deictic expressions by virtue of their role of anchoring the referent and the speech-act participants in particular social locations, i.e. statuses. The Japanese honorific system performs this at two levels.

The deictic function performed by honorific forms by virtue of their use in relation to the social statuses of the referent and the speech-act participants is

perhaps universal. What is interesting in the Japanese honorific system is that it is relativized with regard to an insider-outsider distinction.

The honorific system appears to be ultimately explainable in terms of the notion of (psychological) distance. Honorifics (inclusive of the polite forms hereafter) are used in reference to someone who is psychologically distant. The formality factors that tend to trigger honorifics contribute to creating a sense of distance between people. The use of honorifics toward someone unfamiliar, regardless of the addressee's social standing, and the non-use of honorifics toward someone familiar, even if the addressee's social standing is higher, are both controlled by the factor of psychological distance. One of the characteristics of the Japanese honorific system is that this notion of distance is relativized in such a way that the same person can be distant or close depending on the distance between the speaker and the addressee. When the speaker and the addressee are close, and the referent is distant, then referent honorifics (subject or object honorifics) will be used. Thus, when a mother and daughter are speaking about the father, honorifics in reference to the father are or can be used (depending on how strict the family is). However, the daughter is not supposed to use honorifies in reference to her father when she is speaking to someone outside her family. Likewise, in reference to the company president, colleagues would use honorifics when speaking among themselves. But when they are speaking to an outsider, e.g. a customer, the president is placed on the speaker's side, and no honorifics would be used in reference to the president. Thus, by hearing the following sentences uttered by a secretary, we know whether she is speaking to an insider or an outsider (trusting that the secretary is following the (Japanese) rules of honorifics).

- (198) a. Syatyoo-san wa ima o-dekake ni natte i-masu.

 president-HON TOP now HON-go out HON be-POLITE

 'The president is gone out now.'
 - b. Syatyoo wa ima dekake-te ori-masu.
 president TOP now go out be-POLITE (same as a)

The plain polite form in (b) is the one a secretary is supposed to be using when speaking to an outsider. Now, we have been using the phrase "is supposed to be using" above. This is because this particular rule of relativizing the distance of the referent with respect to the addressee is something that seems to be learned fairly late. Though the regular use of the polite and honorific forms is learned fairly unconsciously if the child's environment is one in which honorifies are frequently used, the rule of relativizing the distance is often taught at school or home and learned fairly consciously. Indeed, this rule is often one of the things new employees,

especially secretaries and receptionists, are trained in as they enter the business world.

The secondary nature of the rule of relativizing the referent or placing the referent as an insider or an outsider is also revealed by the fact that some other languages with fairly rigid honorific systems do not have such a rule. For example, Korean is one such language, though the system may be beginning to fluctuate a little now – some young Koreans show signs of relativizing their honorific system along the lines of Japanese. In Korean, one can use the subject-honorific form in reference to one's own father or boss regardless of the addressee. Indeed, some Koreans find a form such as (198b) to be quite inappropriate under any circumstance.

The relative honorific system of Japanese, as opposed to the Korean-type absolute system, then functions to indicate the relative social and psychological distance of the referent with respect to the speaker and the addressee, thereby functioning as social deixis at a secondary level. Indeed, the location of the referent, i.e. whether closer to the speaker (insiders) or farther from the speaker (outsider), is an important parameter in Japanese discourse. This notion bridges the honorifics phenomena and other more general deictic phenomena to which we now turn.

11.6.4 Deictic expressions

In Japanese the deictic distinction between "go" and "come" is indicated by the verbs iku 'go' and kuru 'come'. However, the Japanese use of kuru 'come' anchors the speaker more rigidly to the place of speech than does "come" in English. Thus, the form "I'm coming" is not usable when, for example, called to the dinner table; only "I'm going" with iku is possible. When the subject referent and the speaker are different, it is possible under certain conditions to take the addressee as a locus of speaker's viewpoint and use kuru 'come'. For example, one may take the addressee's viewpoint as a way of showing deference, especially when a favor is being asked of the addressee, as in (a) below. Also, when certain adverbial particles and other expressions that favor taking the goal as a locus of viewpoint occur, the verb kuru 'come' can be used for the motion away from the speaker, as in (b) below:

- (199) a. Musuko ga ki-masitara yorosiku onegai si-masu.

 son Nom come-Polite kindly beg do-Polite

 'If my son comes (to you), I beg you to be kind to him.'
 - b. Ima kara iku kara, boku ga kuru made mattete ne.
 now from go because I NOM come until wait FP
 (lit.) 'Since (I'm) going now, wait until I come.'

The (b) expression above combines a request and the particle *made* 'until', which favors taking the goal's viewpoint. Notice that *iku* 'go' and *kuru* 'come' cannot be interchanged in this expression.

Just like English go, the verb iku 'go' is unmarked or used more generally, while kuru 'come' is usable only when the movement is directed to the locus of the speaker's viewpoint. Thus, when someone moves from a place A to a place B, which are equally distant from the speaker, the verb iku 'go' will be used. Likewise, if this person moves away from the speaker's vicinity, iku is used. The verb kuru is usable only when someone moves to the locus of speaker's viewpoint. This marking of movement typically toward the speaker, or more generally, an event involving the speaker, appears to be quite important in the case of Japanese, for a number of phenomena correlate with this factor, as we shall see below.

Now, one of the major factors that controls the detachability of the speaker's viewpoint is the social distance between the speaker and the referent or addressee. Members of the family, relatives, friends, and colleagues, i.e. insiders, are easier for the speaker to identify with and to use as the locus of his viewpoint. A crucial point here is that, while the placing of the viewpoint on the starting point of the action is not constrained, as reflected in the freer usage of iku 'go', the marked placement of the viewpoint in the goal, which calls for the marked form kuru 'come', is more constrained. One can loose the physical deictic anchoring of the viewpoint and use kuru 'come' when the addressee is socially close to the speaker. Thus, when speaking on the telephone to a nephew, who lives away from the speaker, one can use expression (a) below with kuru even if the teacher lives closer to the speaker than the nephew, while (b) with the teacher's place as the locus of the speaker's point of view is not possible unless the teacher lives close to the speaker.

```
(200) a. Sensei ga kitanda-tte nee.
teacher NOM come-I hear FP
'I hear that the teacher came (to your house).'
b. Sensei'n toko kitanda-tte nee.
teacher's place came-I hear FP
'I hear you came to the teacher's place (i.e. house).'
```

The marking of an event that involves the speaker (and the insider members of his social group) occurs also in the use of the two versions of "give", yaru and kureru and their respective honorific synonyms. Yaru is like go in that it describes the act of giving from both the giver's and a neutral point of view. The use of kureru is more constrained in that the speaker must take the recipient's point of view. Thus, (c) below is either neutral, both Taro and Jiro are equally distant or close to the speaker, or else Taro is closer to the speaker, while (d) is possible only when Jiro is socially closer to the speaker than Taro.

```
(201) a. Boku ga Taroo ni hon o yatta/*kureta.

I NOM DAT book ACC gave/gave
'I gave a book to Taro.'
```

b. Taroo ga boku ni hon o *yatta/kureta.

NOM I DAT book ACC gave/gave

'Taro gave me a book.'

c. Taroo ga Ziroo ni hon o yatta.

NOM DAT book ACC gave

'Taro gave a book to Jiro.'

d. Taroo ga Ziroo ni hon o kureta.

NOM DAT book ACC gave

'Taro gave a book to Jiro.'

The verbs iku/kuru 'go/come' and yaru/kureru 'give' can be used as something like auxiliary verbs that indicate the direction of an action, and their use is much like their main verb functions. Combinations such as aruite kita 'come walking', aruite itta 'went walking', kaite yaru 'give/do (the favor of) writing', and kaite kureru 'given (the favor of) writing' abundantly occur. In fact, an event directed toward the speaker (or an insider of his social group) is normally marked by the verb kuru 'come', while other situations do not require such marking. Thus, whereas both (a) and (b) below are perfectly well-formed, (c) sounds blunt and odd; instead, (d) with the marking of the speaker orientation of the event is preferred.

(202) a. Boku ga Hanako ni denwa o kaketa.

NOM to telephone ACC call

'I telephoned Hanako.'

b. Taroo ga Hanako ni denwa o kaketa.

'Taro telephoned Hanako.'

c. Taroo ga boku ni denwa o kaketa.

I

'Taro telephoned me.'

d. Taroo ga boku ni denwa o kake-te kita.

call-conj came

'Taro telephoned me; (lit.) Taro came telephoning me.'

Again by using the "come"-form as in (d) with the recipient other than the speaker, one identifies the recipient as an in-group member. That is, the (d) form with Ziroo ni 'to Jiro', instead of boku ni 'to me', is usable only when Jiro is in the speaker's in-group.

Finally, the *iku/kuru* 'go/come' distinction is exploited in indicating the distance between the speaker and the event. The "go"-form is used when the speaker distances himself from the described event as in reminiscing about an event, while the "come"-form describes, in a vivid manner, an event in which the speaker is directly

involved. For example, (a) below is a good description of a reminisced event, but not when the speaker is reporting the imminence of a flood as a concerned party, for which (b) must be used.

- (203) a. Mizu ga dondon hue-te itta.

 water NOM rapidly increase-CONJ went

 'The water rapidly went on increasing.'
 - b. Mizu ga dondon hue-te kita.

came

'The water keeps increasing rapidly.'

Thus, deictic expressions are used not only for anchoring the speech-act participants and the referent in terms of physical location but also for locating the referent in reference to the social grouping. The parameter used in the latter function is the same as that used in honorific marking. Especially important in Japanese is whether the referent is an in-group member or not; if he is, he is treated in the same manner as the speaker himself with respect to outsiders. Instead of subject-honorific forms, object-honorific or humbling forms are used in reference to such a person when the addressee is an outsider (see (198)). The importance of what is relevant to the speaker is also manifested by the marking by the "come"-form of an event that is directed toward the speaker or that involves the speaker more directly. (See Kuno 1973, 1987 for a more thorough discussion on the nature and use of deictic verbs.)

11.6.5 Accessibility of information and mutual knowledge

Another area in which Japanese makes clear distinctions concerns the world of information acquisition and the distribution of knowledge, and here again the speaker figures importantly. Many languages have a system of evidentiality that marks how information is acquired or the certainty of information, i.e. directly or indirectly, through visual perception or otherwise, truthful or likely to be false, etc. Though Japanese does not have a grammaticized verbal category of evidentials, it shows as strong sensitivity to the accessibility of information as the languages with well-developed evidential systems.

One area in which Japanese and English differ is in the presentation of information regarding the internal feelings or psychological state of a person. Whereas English treats such information as accessible to others, Japanese treats it as accessible only to the person concerned. In other words, in Japanese the speaker cannot report in a direct form the psychological state of anyone but himself. Thus, only the first-person subject is possible in a sentence that directly describes a psychological state.

(204) a. Boku wa kanasii/uresii/samui.

I TOP sad/glad/cold

'I am sad/glad/cold.'

b. *Taroo wa kanasii/uresii/samui.'Taro is sad/glad/cold.'

(205) a. Boku wa kono hon ga hosii.

I TOP this book NOM want 'I want this book.'

i want tins book.

b. *Taroo wa kono hon ga hosii.
'Taro wants this book.'

(206) a. Boku wa Yooroppa e iki-tai.

TOP Europe to go-want
'I want to go to Europe.'

b. *Taroo wa Yooroppa e iki-tai. 'Taro wants to go to Europe.'

(207) a. Boku wa Yooroppa e iku-tumorida.

I TOP Europe to go-intend 'I intend to go to Europe.'

b. *Taroo wa Yooroppa e iku-tumorida.

'Taro intends to go to Europe.'

The non-accessible information can be expressed by using forms that indicate the indirect nature of information acquisition, such as -garu 'show signs of', rasii 'seems', soo da 'looks as if', soo da 'I hear', etc. Or, if there is sufficient evidence that leads the speaker to be able to make a definitive judgment, then judgment marking by means of nominalization and predication by the copula da occurs. Also, since the past state can be learned separately, the past tense form is permitted with information that is not directly accessible. Any of these methods has the effect of indicating that the state described is not directly experienced by the speaker and allows grammatical sentences to be formed, as below:

(208) a. Taroo wa samisi-gat-te iru.

TOP sad-signal-CONJ be
'Taro shows signs of being sad.'

 b. Taroo wa samisii-rasii/yoo da. seem/looks like
 'Taro seems/looks like being sad.' c. Taroo wa samisi-soo da.

looks as if

'It looks as if Taro is sad.'

d. Taroo wa samisii soo da.

l hear

'I hear that Taro is sad.'

e. Taroo wa iku-tumori-rasii.

go-intend-seem

'Taro seems to be intending to go.'

f. Taroo wa samisii no da.

NOMI COP

'It is the case that Taro is sad.'

g. Taroo wa samisi-katta.

PAST

'Taro was sad.'

Indeed, it is the case that the direct forms can be used only when the information is had first-hand or obtained indirectly, but with firm evidence to support it. Indirectly obtained information must be so marked by one of the devices noted above. Thus, the following are utterable only when the speaker has first-hand information.

(209) a. Taroo wa byooki da.

TOP sick COP

'Taro is sick.'

b. Ame ga hutte iru.

rain NOM fall be

'It is raining; (lit.) the rain is falling.'

Conversely, the speaker is limited in his observation of the world in that he cannot describe as an outside observer an event he himself is involved. Sentence (a) below, with the so-called ga of neutral description is, therefore, not possible, while the judgment sentence in (b) is possible, since the speaker can make a judgment about himself. This is a corollary of the distinction between the perceptual judgment and the experiential judgment discussed earlier in connection with the use of the particles wa and ga (see section 11.2 above).

(210) a. *Boku ga hasitte iru.

I NOM run be
'l'm running.'

b. Boku wa hasitte iru.

TOP
'I am running.'

One of the prevalent constructions in Japanese is the topic construction marked by the particle wa. As discussed earlier, the occurrence of the topic construction is controlled by the condition that the topic be known to the hearer (see section 11.2 above). This condition involving the concept of mutual knowledge figures importantly in a number of other types of Japanese expression. We shall illustrate this in the remainder of this chapter.

It has been pointed out that Japanese informal speech is characterized by the frequent occurrences of sentence-internal and final particles. Indeed, it is exceedingly rare to hear an utterance that is not marked by a final particle of one kind or another. The roles of the particles are not well-known, except they somehow monitor the progress of the conversation by confirming a statement, by calling for the hearer's attention, etc. Some progress, however, has recently been made with regard to some of the particles. Kamio (1979) points out that the particle yo is used when the information is exclusively that of the speaker, while ne is used with regard to shared information. Thus, (a) below is used to inform the hearer of the weather, while (b) is used in confirming mutual knowledge.

(211) a. Ame ga hutte iru yo.
rain NOM fall be FP
'It is raining, I tell you.'
b. Ame ga yoku huru ne.
rain NOM lot fall FP
'It rains a lot; don't you think?'

In referring to a person or a thing, English makes no distinction as to whether the referent is known only to the speaker or mutual knowledge. Thus, one can refer to oneself directly as "This is Mr. Smith" when calling someone for the first time. However, as first pointed out by Takubo (1984), Japanese allows such direct referencing only when the referent is mutual knowledge; otherwise, a referential expression must be marked by the quotative expression, ... to yuu. That is, when one is calling someone for the first time, identification is made in the form of Shibatani to moosi-masu ga, ... 'I am called Shibatani, but ...' (moosi-masu is a combination of the suppletive humble expression of yuu 'to say, to be called' and the polite ending). It is only when calling someone whom one knows that one can refer directly, as in Shibatani desu ga, ... 'This is Shibatani, but ...' This applies to other situations in making reference. Thus, Yamada-san ga kita 'Mr. Yamada

came' is only possible when the identity of Mr. Yamada is mutual knowledge; otherwise, the expression Yamada to yuu hito ga kita 'A person called Yamada came' must be used. By the same token, a linguist cannot begin his lecture with the expression Henkei-bunpoo wa ... 'Transformational grammar is ...', unless he assumes that the audience knows what transformational grammar is; otherwise, Henkei-bunpoo to yuu riron wa ...' A theory called transformational grammar is ...' must be used.

Finally, we shall point out the connection between the deictic system and the notion of knowledge. Japanese has three series of demonstratives, each series beginning with ko-, so-, and a-. The ko-series refers to a thing, person, etc. close to the speaker, the so-series refers to those items closer to the hearer, and the a-series refers to those away from both speaker and hearer. Thus, we find kore 'this', sore 'that', and are 'that one over there'; koko 'here', soko 'there', and asoko 'over there'; kono hito 'this person', sono hito 'that person', and ano hito 'that person over there', etc.

What is interesting is that the medial and distal series so- and a- are used anaphorically in such a way that the difference in use reflects the nature of the knowledge of the speaker and the hearer regarding what is referred to anaphorically. Discussion in Kuno (1973) indicates that the a-series is used when the referent is mutual knowledge, while the so-series is used when the referent is not mutual knowledge. That is, one can anaphorically refer to someone by ano hito 'that person' only if the referent is well-known to the speaker and the hearer; otherwise, sono hito 'that person' with the medial so-form must be used. Further studies by Kuroda (1979) and others indicate that there are certain complications here, but the fact uncovered by Kuno seem to be basically correct. However one deals with the remaining complications, there appears to be a certain connection between the demonstrative use of these deictic forms and the anaphoric use of them. The former use is controlled by the distance of the object in relation to the speaker and the hearer, and the latter by the nature of the knowledge of the referent on the part of the speaker and the hearer. The key to this connection appears to lie in the accessibility to the object or person pointed out or referred to. In the deictic use, the proximal ko-series points out an object that is close to the speaker, and, accordingly, it is not as accessible to the hearer as to the speaker. The medial so-series, on the other hand, points out an object lying closer to the hearer, which is therefore more accessible to the hearer than to the speaker. In distinction to these two series, the distal a-series points out an object that is mutually accessible. The anaphoric use of the a-series in reference to a mutually known object or person is perhaps derivative of this deictic use for pointing out a mutually accessible object. Much of this is speculation at the moment, but some possible explanation along these lines seems to be in the offing for the connection between the two uses of the deictic expressions.

In all the topics that have been dealt with in this section, the speaker figures prominently. Indeed, the relation of the speaker to the various elements that make up the discourse seems to determine to a very large extent the form of the discourse in Japanese. The factor that controls this is the notion of distance, psychological and social as well as physical. The variations in speech form in Japanese are manifestations of the variegated patterns in which different discourse elements are related to the speaker along the parameter of distance.

Epilogue

Having examined the details of certain grammatical features of Japanese, we are now in a position to return to the myths about Japanese pointed out in the introduction, namely that Japanese is a unique, illogical, vague, and difficult language. In what sense is Japanese said to be illogical and/or vague? There are two kinds of equivocation involved here. One is the failure to distinguish the language from the Japanese culture including its speakers. The other is the distinction between the linguistic structure and its use in context. As for the first point, it must be pointed out that all languages are equally sufficient in expressing logical relations that obtain in the mundane sphere of daily life. Yet, each culture has its own standard as to how explicitly such relations must be stated. In other words, what is logical or illogical is not the language itself but the cultural patterns that are responsible for what may appear to outsiders to be illogical or vague usage.

In the case of Japanese, the linguistic structure itself can be argued to be superior in having a salient mechanism for the expression of certain logical relations more clearly than Western languages. As detailed in Chapter 11, the existence of the topic construction allows the speaker of Japanese to distinguish between a generic expression, which represents the logical relationship of the subject matter and its attribute in terms of the subject—predicate structure, and a simple descriptive statement that describes an on-going event. The difference in the use of the particles wa and ga is strict and strongly correlated with the differences in the way a particular state of affairs is apprehended. While such a mechanism involving the so-called topic construction is by no means unique to Japanese, Japanese is better equipped than European languages in the sense that the kind of distinction pointed out here and detailed in Chapter 11 is overtly manifested.

How clearly the Japanese express themselves through the use of their language is entirely another matter. There are at least two cultural factors that are responsible for making Japanese speech or writing less clear to the ears or the eyes of a non-Japanese than might be the case in a European language. One is the Confucian tradition, which emphasizes deeds over words. Eloquence has not been one of the virtues

people have been encouraged to cultivate in Japan. The European tradition of rhetoric as an art of persuasion is not taught in Japanese schools, which emphasize more the learning of the skills that produce artistic effects. In fact, persuasion of others by means of linguistic skills is largely discouraged as direct confrontation in general is avoided. Thus, another cultural factor that affects the form of discourse is the favored pattern of indirect transmission of the intended meaning. In Japan, the art of persuasion takes the form of "beating about the bush", whereby the listener is expected to make good guesses and to arrive on his own at the conclusion intended by the persuader. It is the person's ability to arrive at an intended conclusion rather than the persuader's logical presentation that is evaluated. Thus, one who does not get the point by merely hearing hints is considered a dull person.

Due to avoidance of direct confrontation, which is part of the politeness mechanism that dictates the behavior of the Japanese, straightforward replies are sometimes hard to draw. A famous anecdote among international businessmen refers to the Japanese expression Kangaete okimasu 'I'll think it over', which, when uttered at the conclusion of a business discussion, actually means "No"! Hedges and other ambiguous expressions are also favored, especially among politicians, to avoid any ensuing responsibility that a clear statement may engender. In other words, in Japan there is another kind of rhetoric that is perhaps diametrically opposed to the European rhetorical tradition – the former emphasizes vagueness that invites the addressee to search for answers, whereas the latter emphasizes clarity that leaves no room for the addressee to wonder. In both traditions there is a logic internal to each, but they are not entirely commensurable.

Another factor that contributes to the seeming vagueness of Japanese is the high degree of contextual dependency that Japanese expressions show. As discussed in Chapter 11, a variety of contextual factors dictate the form of a Japanese expression, but the most striking structural feature relevant here is the absence of understood elements from the surface expression. Where many other languages may have pronouns, Japanese simply uses no overt expression. The absence of overt pronominal forms is often compensated for by agreement features in European, especially Romance languages, but Japanese leaves no such trace. Thus, the lack of agreement and the absence of expected pronominal forms are often equated with the absence of the grammatical subject and hence the lack of logic and the obvious vagueness a subjectless structure entails. It is true that the presence of overt pronouns and/or agreement features is helpful in some contexts, for they tell us at least the person and/or gender of the referent. Yet, even when these clues are provided, an independent system for identifying the referent of a pronoun is needed, and such a system, as suggested in Chapter 11, seems to differ little from what is needed in

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a zero-pronoun language like Japanese. Just as pronouns are used where correct identification is possible, a zero pronoun is used only where its antecedent can be recovered. What is not obvious is the mechanism by which the hearer identifies the pronouns, whether they be overt pronouns or zero pronouns. And this is one of the areas where professional linguists have not been able to offer a satisfactory account. Once the mechanism of pronoun identification is explicated, it is expected that Japanese will turn out to be no vaguer than those languages that involve overt pronouns and/or agreement features.

Another characteristic expression type of Japanese that strikes non-Japanese as illogical or strange is that represented by Boku wa unagi da (lit.) 'I am an eel', which, in its literal sense, is totally illogical, going beyond the range of logical relationships between the subject and the predicate nominal that a copular sentence normally expresses. Again, the correct interpretation of this kind of sentence, as detailed in Chapter 11, depends on the context. Thus, the notion of vagueness or logic of a given expression can not be determined without knowledge of the context in which the expression actually occurs. It can arguably be said that Japanese is more contextually dependent than other well-studied languages, but, aside from a lack of full understanding of the relationship between language structure and context, contextual dependency is not to be confused with vagueness or a lack of logic associated with the linguistic structure of the language as a whole. All languages are used in context, but they may differ with regard to the extent in which the form of surface expressions depends on contextual features. In languages like Japanese, in which the form of expression is affected considerably by the context, isolating a particular expression from the context necessarily results in a vague expression.

The above discussion may already point out some aspects of Japanese that can be a potential obstacle for a learner of Japanese as a foreign language. But the claim that Japanese is a difficult language is generally based on other observations. One is that there are still relatively few Westerners, even among those who live in Japan, who have mastered the language to the level of near perfection. This can be attributed to two factors: one, the cultural/psychological factor, and the other, the linguistic factor. It is only recently that Westerners began to feel it desirable or even necessary to speak Japanese in Japan. For a long time, they tended to be complacent in their attitude, pointing out they were not expected to speak Japanese due precisely to the myth the Japanese have about their language; namely, that it is a difficult language.

While the difficulty of learning a particular foreign language is a relative matter, depending on the learner's linguistic background and motivation, as well as the learning environment, there do exist certain grammatical and extra-grammatical features that make Japanese a difficult language for at least some non-Japanese to

learn. One feature that immediately comes to mind is the writing system. Learning Chinese characters is a task that all Japanese children must contend with, but it also presents the biggest obstacle for foreign learners other than Chinese and Koreans, whose languages share a large number of characters with Japanese. Mastering all four language skills requires more time in Japanese than other languages due primarily to the presence of Chinese characters. It is commonly said that it takes more than nine years of school education before Japanese children can read a newspaper satisfactorily. Thus, Japanese, perhaps along with Chinese and Korean, is a difficult language with respect to the learning of writing and reading.

As pointed out in the introduction and as shown in detail in the preceding chapters, Japanese permits as well as requires a greater variation in the form of expression in the lexical and syntactic domains as well as in the domain of orthography. It is this feature, rather than phonological or structural features, that causes the greatest difficulty in mastering Japanese for non-native speakers (and, to a certain extent, for native speakers). The variation along the honorific axis epitomizes the nature of contextual dependency the Japanese language exhibits. Native speakers of Japanese also find the correct use of honorifics most difficult to master. For foreign learners, other difficult features include the use of particles, especially sentence-final particles of various kinds. The difficulty of Japanese, in other words, lies not so much in learning its grammatical or phonological structure, but in learning the ways in which an expression must be altered in relation to the context of speech.

The foregoing discussions indicate that, while the details show some interesting features, the overall structure of Japanese is not quite as unique as is often thought. However, the high degree of contextual dependency entails considerable latitude in the form of expression. It is in the multitude of nearly synonymous, but contextually differentiated expressions that such latitude entails that a unique feature of Japanese lies, and it is the complexity of the contextual factors determining the appropriate choice that makes the learning of Japanese very difficult for non-Japanese. The foregoing survey has, it is hoped, examined the main grammatical features that delineate a number of salient aspects of the Japanese language. Examination of pragmatic effects on the language structure has revealed that, while a language and the culture that uses it must be clearly distinguished, the truism remains that language is deeply embedded in culture. Thus, far more must be done, going beyond strictly grammatical matters, in providing a satisfactory answer to the seemingly simple question: "Is Japanese a unique language?"

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