# Japanese grammar notes

Jinyuan Wu September 24, 2022 This note is a more well-organized version of this note. It's a reading note of Akiyama and Akiyama (2012), Tsutsui and Makino (1989), as well as lots of books and articles listed in the reference. The methodology followed is in this note about my understanding of descriptive grammars, i.e. "largely generatively informed but surface-oriented and flat-tree in the appearance".

There is basically nothing new in the note. Sometimes you will find word-by-word copying of the books and papers in the reference. Tables are generally from Wikipedia pages.

Boxes in this note should not be considered as paragraphs: they are just there to show my opinion towards certain theoretical aspects or language-specific argumentation or learning advices. The paragraph after a box is to be considered as next to the paragraph before the box. TODO list:

- The structure of NP, especially the mutual correlation of particles
- Anything between the valency changing suffixes and the tense, polarity, politeness marker
- ullet When can appear before the te-form
- The end of clauses: what particles appear?

# Introduction

#### 1.1 The Japanese language and its history

Though this note is purely about contemporary Japanese and contains nothing about old texts, knowing a little bit of the history helps a lot in understanding, say, why there are two honorifics systems for things (§ 5.2.1), why the adjective class is large yet closed (§ 2.2.1), etc.

#### 1.2 Previous studies

Japanese is a relatively well-documented language, with a native grammar study tradition.

### 1.3 Language and culture

# Overview of Japanese grammar

#### 2.1 Phonology and the writing system

Japanese is roughly a mora-timing language, though with some deviation from the prototypical ones. Japanese has a rather trivial inventory of 5 vowel phonemes (§ 3.1) and 15 consonant phonemes (§ 3.2), which can be combined into around 50 moras, and there are three types of special moras – the syllable-final nasal, vowel lengthening, and consonant germination (§ 3.3.1).

The above features results in a native writing system, which includes two sets of mora-based syllabaries called kanas ( $\S$  3.6.3) and Japanese Chinese characters, the kanji ( $\S$  3.6.4). The spelling system used in this note is a romanization system ( $\S$  3.6.2).

#### 2.2 Parts of speech

#### 2.2.1 Lexical words: nouns and verbs, and everything else

Japanese has a clear noun-verb distinction. This can be found by looking at the morphology: nouns are subject to case marking, which is basically adding a particle to the NP which can be dropped especially in casual speech, while verbs always appear as one of the stem forms plus agglutinative endings.

The following should be recorded concerning a noun: its compatibility with honorifics affixation ( $\S 5.2$ )

The following things should be recorded about a verb: its conjugation class (§ 8.2), the valency class (chap. 9), which may also affect how the arguments are marked, TODO: unaccusative and unergative, and its lexical aspect (§ 8.8.1).

There are two adjective classes: the verbal class (or i-adjectives) and the nominal class (or na-adjectives), with different syntactic distribution (verbal adjectives may fill the predicate slot on their own; nominal adjectives never do so) and morphological appearances (verbal adjectives are more like verbs). Since a so-called nominal adjective can actually be decomposed into a nominal and a non-standard copula (TODO: ref), in this note, I'll consider nominal adjectives as  $adjectival\ nouns$ , and hence the class of verbal adjectives are simply called adjectives.

One rare property of modern Japanese is the verb class and the verbal adjective class are already closed classes: they rarely accept new members (though not entirely impossible). What makes Japanese rarer is despite being closed, the verbal adjective class is large.

The vocabulary of Japanese can be divided into three parts according to the etymology: the native words, Sino-Japanese words, and recently borrowed words. This distinction is sometimes of grammatical significance (§ 5.2.1).

#### 2.2.2 Function items

I specifically use the term function items instead of function words in the title of this section, because the word-or-morpheme-or-phrase problem is especially serious in Japanese morphosyntax (§ 8.1.2, § 8.10). In functional items, we have particles in NPs (chap. 6), SFPs in matrix clauses (§ 10.3), particles used for clause linking (§ 11.2), and auxiliary verbs (§ 8.3.3).

#### Theoretical aspect 2.1: So-called category of functional items

Though particles are in the grammar and do not really carry category labels like "noun" or "verb" and it actually makes no sense to discuss the categories of them, the traditional practice to list all particles and classify them is practically desirable, as it provides a quick way to navigate across grammatical systems.

Japanese lacks the prototypically pronoun class: so-called pronouns are customized referential nouns like 'that girl', and thus the pronoun class is not closed and strictly speaking is not a part of the grammar. The article class is also not attested.

#### 2.3 Noun phrases

In Japanese NPs, gender and number are not marked. The case is marked by an NP-final particle (§ 6.1). The information structure also receive explicit marking by particles, including the topic marker wa, and in some cases the nominative marker ga has the reading of focus marker (§ 10.1).

#### 2.4 The verb and the clause

There is a strong tendency in Japanese to use non-finite clauses for embedding (Kayne, 2003).

#### 2.5 Constituent order

Japanese has a strict modifier-first constituent order, and here the term *modifier* includes arguments in a clause ("modifiers of the verb or the verbal adjective"), and even NPs with respect to case particles.

#### Theoretical aspect 2.2: the notion of head and modifier

This notion of head and modifier is CGEL-like, and is probably related to a strong head-final tendency in the linearization: if a so-called modifier is introduced as a specifier in a functional projection with a root as the core, then obviously the root and the functional heads are realized into one unit (for example a verbal complex) and the "modifier" precedes the unit to ensure the (functional) head-final rule, and therefore in the surface-oriented analysis, we also get a modifier-head constituent order (where head means lexical heads). If there is no core root, then trivially the "modifier" is realized in a position before the spellout of functional heads, and the latter is regarded as somehow a head in the CGEL sense, and again we get a modifier-head constituent order, if we understand things like case particles as heads, which is the CGEL approach but not the BLT approach.

Despite the strict modifier-head constituent order, in the clause, the order of core and peripheral arguments and adverbials is relatively flexible, which usually reflects the information structure. Relevant mechanisms include topicalization and the ordering between wa-NPs and ga-NPs (§ 10.1), scrambling (§ 10.2), TODO: others

### 2.6 Clause combining

#### 2.7 Remarkable features

#### 2.7.1 Politeness

Some languages, like Chinese, have a hierarchy of politeness coded in the lexicon. In Japanese this kind of lexical politeness also exists (§ 4.1.1), but some components of the grammar are also about politeness (§ 5.2, § 8.6, TODO). Some parts of the grammar do not involve any category about politeness, but using them is shunned if the speaker wants to be polite (§ 8.2.2.6). Even spelling is related to politeness (§ 3.6.5).

#### 2.7.2 The role of gender

Japanese doesn't give any place to grammatical gender. However, the gender of the speaker is important: there is one dialect for men, and another for women. Grammar points involving gender of the speaker include TODO

#### 2.8 The structure of this note

#### Theoretical aspect 2.3: The organization in reference grammars

The structure of this note and the contents of chapters follow the examples set by Friesen (2017), Jacques (2021), Grimm (2021), the famous CGEL (Huddleston and Pullum, 2002), and of course Dixon's three volumes of BLT. The nominal chapters (TODO: ref), The notion of verbal complex (chap. 8) is also found in Friesen (2017).

# Phonology and the writing system

- 3.1 Vowels
- 3.2 Consonants
- 3.3 Phonotactics

#### 3.3.1 The scheme of moras

Japanese is usually analyzed as a mora language: each mora occupies one rhythmic unit and is of the same length. There are still some deviations from the perfect mora-timing model: moras with devoiced vowels may be shorter (TODO: ref), and so is geminated consonants (see below), and syllable-based language games and sound changes are observed (Tsujimura, 2013, § 3.3).

The allowed types of moras include V, CV, jV, CjV, R, N, and Q. In the following I will talk about the meaning of the symbols j, R, N, and Q.

#### 3.3.1.1 Semivowel-related moras

Here the symbol j is the glide /j/, which may appear after a non-glide consonant and before a vowel, and the sequence of the three phonemes is still one mora. The appearance of j is called 拗音  $y\bar{o}on$  in Japanese. The glide is only compatible with /a/, /u/ and /o/. The symbol N is a moraic nasal: it constitutes a single mora, called 撥音 hatsuon and never appears at the initial of a word. Thus, except for CjV, Japanese doesn't allow multiple consonants, and except for (C)VN, Japanese syllables are always open.

#### 3.3.1.2 Prolonged vowels and consonants

The symbol R means a chroneme, which prolongs the last vowel, called 長音 *chōon*. It's compatible with any vowels. Q means geminating the following consonant. It's called 促音 *sokuon*, and may be realized as "pause for a mora" before the consonant. The two abstract phonemes represent adjustment of vowel and consonant lengths, which are all distinctive in Japanese phonology.

The  $ch\bar{o}on$  and sokuon are important to understand certain morphological phenomenon in Japanese, in which the underlying form of a prolonged vowel or consonant is actually a vowel or consonant plus a suffix or prefix. For example, when o is followed by u, the two vowels are realized as a prolonged o:  $\bar{o}$  (TODO: ref).

I should focus here (especially to readers familiar with syllable languages) that N and Q are moras themselves, though the contents of them depend on the phonological environment.

#### 3.4 Accent

#### 3.5 Historical sound change

#### 3.5.1 In verbal conjugation

#### 3.5.1.1 Removing the second r or s

When two consonants meet each other (TODO: in the verbal complex only?), and the second consonant is r or s, the second consonant is removed. This is exemplified in marking of the passive and the causative (§ 8.5.1), the alternation of the ending in the terminal form (§ 8.2.2.3), and TODO.

#### 3.5.1.2 Consonant plus t

The contraction between a consonant and the sound t is relevant in the past tense (§ 8.6.1), the te-form (§ 8.7.2), and the condition form (TODO:ref), and results in a new form in the internal morphology of verbal elements (§ 8.2.2.8).

#### 3.6 The writing system

#### 3.6.1 Overview

The mora-based phonology of Japanese results in two syllabaries used to write Japanese, called kanas 仮名. There are two kinds of kana in contemporary use: one is hiragana 平仮名, the other is katakana 片仮名. Hiragana is used to write grammatical items (like inflectional endings and particles) and a subset of words with native etymology, while katakana is used for newly borrowed words. Ideophones are traditionally written in katakana, though sometimes they are written in hiragana for a softened, adorable appearance.

There exists several romanization systems for Japanese, which are called  $r\bar{o}maji \ \Box - \neg ?$  'Roman letters'. The Hepburn romanization is designed for non-native speakers, which roughly reflects the actually contemporary pronunciation. There are other systems of romanization, which are discussed in § 3.6.2.

#### 3.6.2 Differences between romanizations

Since I (and intended readers) of this note are all non-native speakers, it's a good idea to first introduce the romanization systems, and for the same reason, the system used in this note is the revised Hepburn romanization, which tells us more about the phonological structure of Japanese in the eyes of an outsider.

All systems of romanization use the same set of letters to represent the five vowels: a, i, u, e, and o. The letters for the consonants are also largely the same. Consonants without any flavor of the glide j are represented by k, g, s, z, t, d, n, h, b, p, m, r, and w.

#### 3.6.3 Table of kanas

Below is a table enumerating all hiraganas and their revised-Hepburn romaji correspondence, called  $goj\bar{u}on$  五十音 'fifty sounds':

Table 3.1: The gojūon 五十音

	a	i	u	e	O
Ø	あa	i $i$	う u	Żε	おっ
k	$カ$ $\cdot$ $ka$	ð ki	$\langle ku \rangle$	lf ke	$\subset ko$
g	が $ga$		$\c Gu$	t f ge	ご go
$\mathbf{S}$	ĕ sa	$\cup$ $si$	f su	$\forall se$	$\epsilon so$
$\mathbf{Z}$	ざ	じ	ず	ぜ	ぞ
$\mathbf{t}$	た	ち	つ	て	ح
d	だ	ぢ	ブ	で	ど
$\mathbf{n}$	な	に	ぬ	ね	の
h	は	$\mathcal{O}$	.کہ	^	ほ
b	ば	び	.3.	ベ	ぼ
p	ぱ	$\mathcal{O}_{c}$	.کژ	~	ぽ
$\mathbf{m}$	ま	み	む	め	ŧ
У	や		ゆ		ょ
$\mathbf{r}$	6	り	る	れ	ろ
w	わ	る		ゑ	を

The kana table contains some information about the underlying forms of certain moras. (That's to say, it doesn't exactly faithfully represent how modern Japaneses speak.) Certain phonological rules can already be observed in the kana-romaji correspondence in the above table.

#### Learning note 3.1: Remembering kanas

Hiraganas can be remembered by recalling the spelling of grammatical items. The nominative case particle is  $\mathfrak{D}$ . The genitive case particle is  $\mathfrak{D}$ . From the passive marker  $\mathfrak{S}$   $\mathfrak{N}$  rare and the causative marker  $\mathfrak{S}$   $\mathfrak{U}$  sase (§ 8.5.1), we recognize four kanas. The dictionary form ending of v-stem verbs is  $\mathfrak{S}$  (§ 8.2.2.3). The dictionary form ending of verbal adjectives is  $\mathfrak{V}$  (§ 8.2.6.1). The te-form of verbs ends in  $\mathfrak{T}$  (§ 8.7.2). The verb politeness markers  $\mathfrak{Z}$   $\mathfrak{T}$  masu and  $\mathfrak{T}$   $\mathfrak{V}$  mashita appear frequently (§ 8.6). TODO

The *hatsuon* is written as  $\lambda$ . The  $y\bar{o}on$  is represented as a Ci kana plus a small-sized jV kana. Thus kya is written as  $\delta \approx kiya$ .

There is no symbol representing  $ch\bar{o}ons$  explicitly: they are instead represented as two kanas representing their underlying forms. Thus  $n\bar{o}$  is written as  $\mathcal{O}$   $\mathcal{I}$  nou. The sokuon Q is written as  $\mathcal{I}$ , a small-sized  $\mathcal{I}$ .

#### 3.6.4 The Kanji

#### 3.6.5 Spelling conventions

Verbs and adjectives are written as their kanji spellings (if there are any) plus the kana representing the final mora: 来る, 青い. When conjugated, the final or sometimes the last two or even the last three kana indicates the word's internal morphology (§ 8.2). These kanas are called okurigana 送り仮名.

Certain functional items receive spelling that do not faithfully represent their pronunciations. The topic marker wa (§ 10.1.1) is written as  $\iota \sharp$ , though the kana ordinarily means ha. It's impossible to collect all these spelling conventions for functional items at the same place: I'll talk about these conventions together with the morphosyntactic distribution of the functional items

When several spelling forms of an item are possible, usually there are subtle pragmatic differences between them, including politeness (the more kanjis, the more polite), TODO

#### 3.6.6 Symbols and punctuation

TODO: punctuations, like \ and \

## Nominal classes

Theoretical aspect 4.1: How to enumerate nominal classes

The organization of nominal categories is the same as Friesen (2017, chap. 3, chap. 4).

#### 4.1 Pronouns

-11.

-itsu

'in this manner'

'this person'

koitsu

#### 4.1.1 Personal pronouns

Japanese lacks personal pronouns in the canonical meaning.

Though the so-called personal pronouns are often related to gender, it's not absolute: the correlation between pronouns and gender is more likely to be external to the grammar: though the first person pronoun boku is usually used by males, it's possible for a woman to use the pronoun because of her dialect or as a suggestion about her unique characteristics.

#### 4.1.2 Demonstratives and interrogative pronouns

Japanese demonstratives and interrogative pronouns are rather regular in their forms: almost each of them can be split into two parts, one indicating the range of the objects denoted, the other indicating the syntactic role of the demonstrative. They are shown in Table 4.1.

kodosokoredoresoreare-re'this one' 'which one?' 'that one' 'that one over there' konosonodono-no'(of) this' '(of) that' '(of) that over there' '(of) what?' konnadonnasonna-n.n.a'like this' 'like that' 'like that over there' 'what sort of?' kokosokodokoasoko-ko'there' 'where?' 'here' 'over there' corpuskochira sochiraachiradochira-chira 'this way' 'that way' 'that way over there' 'which way?'

'in that (other) manner'

'that (other) person'

'how? in what manner?'

doitsu

'who?'

Table 4.1: Japanese demonstratives and interrogative pronouns

It can be seen Japanese demonstratives are divided into three types according to what they refer to: proximal demonstratives, medial demonstrative, and distal demonstratives.

aitsu

'in that manner'

'that person'

soitsu

### 4.2 Numerals

# Nominal morphology

#### 5.1 Nominal derivations

#### 5.1.1 Suffixation

#### 5.1.1.1 The agentive -te

Only event verbs are able to take the -te suffix: verbs about states are unable to undergo such a process. This is an instance of the Japanese lexical aspect of verbs ( $\S$  8.8.1).

#### 5.2 Honorifics

#### 5.2.1 Prefixes for things

For Sino-Japanese nouns, the prefix go- is used to add politeness. For native nouns, the prefix o- is used instead. Some everyday Sino-Japanese nouns receive the o- prefix as well. TODO: how to write in kanji?

#### 5.2.2 Suffixes for people

It should be noted the honorifics suffixes can be applied to so-called personal pronouns: (TODO: ref)

#### 5.2.2.1 San

This is the most neutral title. It can be used in most situations: to address men or women, to address

#### 5.2.2.2 Sama

Sama (様, さま) is used to address someone of higher status: customers, judges, religious authorities, even deity. It also appears frequently in formal writing, but may be too polite for an ordinary conversation.

#### 5.2.2.3 Kun

The title kun ( $\Xi$ ,  $\langle k \rangle$ ) has two meanings when used to address a male or a female. It can be used for boys and men that are younger than yourself or at the same age as you, especially when you two have a close relation. For example, in workplace it's usually used by a senior member to address a relatively junior member who he or she has kind of personal relation (otherwise it may be considered rude); it's also used by males or females to address a male they have already known for quite a while, and/or have emotional attachment; in the Legislature it's used to address members.

When used for females, kun is a more respectful (and much less frequent) version of chan, with the meaning of childlike cuteness kept: the female addressed is, for example, sweet and kind, so people use kun to imply respectful endearment. It's still not a formal title.

#### 5.2.2.4 Chan

Chan is an informal title used for an endearing sense. It can be used for young children, close friends or lovers, family members, and adorable animals as well. It's sometimes used to address a young woman who is no longer a "child" – just like the generalized meaning of girl in English.

#### 5.2.2.5 Sensei

Sensei (先生, せんせい) is a title used for people mastering a skill well, especially people who would instruct others concerning that skill: teachers, doctors, lawyers, well recognized artists, politicians, the head of a martial art training center, etc.

When the focus is "high academic achievement", hakase is a better choice.

#### 5.2.2.6 Hakase

Hakase (博士, はかせ), as its kanji version directly reflects, means 'Ph.D.'

#### 5.3 Collective markers

Though Japanese lacks the category of number, these exist several collective markers.

# Particles in noun phrases

There are several systems of particles after NPs: case particles 格助詞 (§ 6.1), and adverbial particles 副助詞 (§ 6.2 – the name is actually misleading, see the relevant section).

#### Theoretical aspect 6.1: List of particles as a lookup table

Following the example of Jacques (2021), I organize all NP-final particles into one chapter for quick lookup of the distributions of case, adverbial types, etc., that is, their grammatical relations with the rest of the clause.

The systems are not completely compatible (§ 6.3). For example, a well known generalization is structural case markers – the nominative ga and the accusative o – are erased when NPs are topicalized, while inherent case markers may be kept.

#### 6.1 Case particles

Here is a list of case particles:

- Nominative: qa, appearing in certain circumstances as the focus marker ( $\S 10.1$ ).
- Accusative: o
- Dative: ni: time and location
- $\bullet$  Genitive: no
- Lative: e, used for destination direction (like in "to some place")
- Ablative: kara, used for source direction (like in "from some place")
- ullet Instrumental/Locative: de

#### 6.1.1 The accusative case o

#### 6.1.1.1 The object

The accusative case is usually used to mark the object. Note, however, that the semantically O argument may also be marked by ga and promoted to the initial of the clause, and thus there is no syntactic object in the clause (§ 10.1.3).

#### 6.1.1.2 The path

The path argument ('walk through/along/in  $\dots$ ') is marked as accusative.

#### 6.1.2 The possessive marker no

### 6.2 Adverbial particles, or miscellaneous

The so-called adverbial particle class is a catch-all class for all particles appearing in the NP but hard to classify. They don't necessarily appear on peripheral arguments: dake, for example, can appear on an object ( $\S$  6.2.1), and hodo can appear on a copular complement.

#### 6.2.1 Dake

#### 6.2.2 *Hodo*

#### 6.2.2.1 Approximation

The particle hodo may be attached to a countable NP, and takes the reading of about. The NP may be a copular complement:

(1) 1000円ほどです

Sen en hodo desu 1000 yen HODO COP.POL-PRES

'(It) is about 1,000 yen.'

### 6.3 Compatibility

# The structure of noun phrases

# The verbal complex

#### Theoretical aspect 8.1: The notion of verbal complex

In this note I use the term  $verbal\ complex$  to denote the BLT verb phrase, i.e. what fills the BLT predicate slot, i.e. the realization of the verbal functional hierarchy – from vP to CP. Periphrastic conjugation – things similar to the English is doing my project – is also included as a part of the verbal complex.

#### 8.1 Introduction

#### 8.1.1 Typological information

Japanese verbal complexes are headed by verbs or adjectives. A verbal complex headed by an adjective is more limited in the suffix chain (TODO: ref; see below for the meaning of the term suffix chain).

Japanese is typologically agglutinative: the morphemes in the verbal complex have relatively clear boundaries, each morpheme representing a grammatical category. Still, there are two important factors in Japanese that deviate away from the perfect agglutinative prototype. The first is there is still some degree of fusion, in which historically analyzable morphemes arguably already form a single fused morpheme (§ 8.6, TODO). The second is most components in the verbal complex – both the lexical head and most functional morphemes – either have *internal* morphology or alter the form of suffixes following them, depending on how you analyze it (Box 8.2). This note follows the well-accepted analysis using the notion of base forms (§ 8.2). Here the term base has its meaning in general morphology: a construction that's ready to take affixation.

As is said before, Japanese is strongly modifier-first, and hence productive inflectional morphemes in the verbal complex are predominantly after the main verb, creating the so-called suffix chain (§ 8.3.1); there are also periphrastic conjugations, created by auxiliary verbs following the main verb (§ 8.3.3). Prefixes are highly limited – they are mainly used in derivations and honorifics, the latter being "derivational" to some extends (§ 8.3.2). Some people recognize particles of complement clauses as prefixes of the verbal complex (TODO: ref); I reject this notion in the note

The head-final feature also means the differences between suffix and auxiliary verbs are somehow vague. Following the standard in the studies of Japanese in the English speaking word, I use the term *auxiliary* to cover both pure inflectional suffixes and auxiliary verbs: the latter may be seem as head verbs or parts of periphrastic conjugation forms depending on their stage of grammaticalization. In either way they appear after the main verb because they are "heads" in the sense of "head-final" typological parameter of Japanese (Box 2.2). § 8.1.2 justifies this distinction.

#### Theoretical aspect 8.2: About internal morphology of conjugation suffixes

Note that since they are both spellout of functional heads, the fact that auxiliary verbs and suffixes have almost no differences shouldn't surprise anyone. The real problem is

the inner morphology of them obviously has no correspondence in the syntactic tree. It's therefore a morphophonological phenomenon, not a morphosyntactic one. This is a mismatch between syntax and phonetic forms, and it's usually analyzed as a result of morphophonological readjustments. The English have been being assaulted would be generated by the following vocabulary insertion

[have-en]<sub>PRES, PERF</sub> [be-ing]<sub>PROG</sub> [be-en]<sub>PASS</sub> assault

plus phonetic readjustment rules of "affix lowering". The same can happen in Japanese, in an exactly the same manner, except now higher functional heads are on the right and the affix like -ing or -en which is responsible for the inner structure of auxiliaries is now passed from right to left. This makes things even easier, because now the end of each conjugation suffix is directly connected to the "affix" of the higher position conjugation suffix. Indeed, this seems to be the origin of the so-called irrealis form, which is completely unmotivated semantically (§ 8.2.2.1).

There is another way to analyze English auxiliaries. For English have been being done, we may posit the following rules. The auxiliary verb being is the default spellout of the progressive aspect: if -ing is close to a verb stem, then it goes after that verb stem, but in being done, the verb stem has already been incorporated into done, so -ing is spelt out as being. Similarly we have been, which is the default spellout of the so-called  $Asp_{en}$  head (Ramchand and Svenonius, 2014). Thus, the "stems" of auxiliary verbs in the English verb phrase are actually inserted later as a last resort. This works for English, but not for Japanese without necessary amendments: now it's the "stems" of auxiliaries that contains grammatical information, and now the continuative ending -i is inserted as a last resort, if we deem the "stem" of an auxiliary can't appear in the final output.

The two analyses have their own pros and cons. For the analysis of the continuative form – which literally appears almost all of the case before a pure conjugation suffix (i.e. "auxiliary verb" in the School Grammar) – the best approach is of course to say it comes from the last resort insertion, somehow as the default form. For the so-called irrealis form, the morphophonological readjustment is of course the best analysis. The rest of the forms are also to be discussed case by case (§ 8.2.2).

For a surface-oriented phenomenological analysis, we may say things like "an auxiliary selects a continuative form or a te-form", and we may also say "an auxiliary actually has a separable part i that moves to the component before it", and we may also say "an auxiliary triggers insertion of a vowel before it". The first wording is the most phenomenological, and the second and the third correspond to the above two approaches.

#### 8.1.2 The auxiliary verb/suffix distinction

The distinction between inflectional suffixes and auxiliary verbs – or in other words, the distinction between canonical and periphrastic conjugations – is subtle: they are both after the lexical word, intervening between them and the lexical word is disallowed, they have similar internal morphology, etc. The main criterion used to motivate a distinction between the two seems to be that the latter have lexical uses, while the former don't. This may be the reason that the School Grammar directly calls them directly as "verbs" (§ 8.10.1). That being said, a suffix-auxiliary verb distinction – essentially a morphological v.s. periphrastic distinction – can still be observed, based on comparison between one-clause constructions and clause combining constructions: what is obviously the first while still having a form resembling the latter is considered periphrastic.

Take the marking of aspect as an example: the plain aspect is marked by nothing, and with in indicative mood (§ 8.6.1) and the plain aspect, the auxiliaries (we are not sure about their nature yet, so let's use the vague name auxiliary) are added in a templatic manner, shown in Fig. 8.1(a) (§ 8.3.1). In a complement clause construction taking a te-form (§ 8.7.2), visualized as Fig. 8.1(b), things are different: now the verbal complex of the complement clause ends in te, and the main verb of the matrix clause has its own list of auxiliaries with the same rigid order. Now consider the progressive aspect (§ 8.8.2): in the progressive aspect, the templatic chain of auxiliaries after the main verb ends with te, and then comes the iru (TODO: ref), followed by its

own chain of auxiliaries which marks the tense, polarity and politeness. Its form is close to Fig. 8.1(b), though we know the -te i- segment is actually the spellout of the progressive aspect head (see Box 8.2 again). Thus, we say the progressive aspect is marked by periphrastic conjugation while the plain aspect is not, and we say in the auxiliary chain found in Fig. 8.1(a-c) is made by suffixes: there is a template of the chain, each slot of which holds one suffix, while the main verb-like ??? position in Fig. 8.1(c) is filled by an auxiliary verb. In Fig. 8.1(b), there are two verbal complexes: one is in the subordinated clause, and the other is in the matrix clause. In Fig. 8.1(c) there is only one verbal complex, but there are two suffix chains.

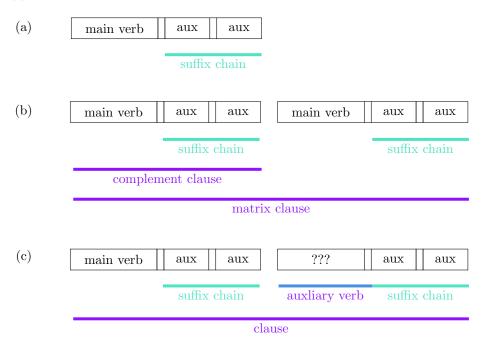


Figure 8.1: Several schemes of verbal complexes (the spaces between elements indicate internal morphology). (a) Templatic morphology (b) Complement clause (c) Periphrastic conjugation

Still, one may say the position of the auxiliary verb is also relatively rigid and therefore the auxiliary verb is also in the template of suffix chain, though some late morphophonological processes somehow "break" the chain. That's correct: after all, auxiliaries are realizations of the verbal functional hierarchy. So probably the notion of auxiliary verb/suffix distinction is more of historical interest (TODO: phonological word?).

#### 8.1.3 Organization this chapter

This chapter is organized in a bottom-up manner. First I talk about the internal morphology of verbal elements in the verbal complex, that's to say, the internal morphology of verbs, adjectives and auxiliaries ( $\S$  8.2). Then I give an overview of the whole verbal complex in  $\S$  8.3. I will talk about the suffix and prefix chains, with brief introduction of the grammatical categories marked by them ( $\S$  8.3.1,  $\S$  8.3.2). Auxiliary verbs, like the *iru* in the progressive aspect, are *not* discussed in  $\S$  8.3.1: the latter only deals with templatic auxiliaries, i.e. suffixes. They – together with grammatical constructions containing them – are introduced in  $\S$  8.3.3.

After  $\S$  8.3 is finished, I go into the structure of the verb lexeme and discuss verbal derivations ( $\S$  8.4).

Then I introduce the internal suffix chain in § 8.5. § 8.6 and § 8.7 are about the external suffix chain, in finite and non-finite clauses, respectively. Now the whole suffix chain is finished, and it's time to talk about the aspect, which is all realized by periphrastic conjugation (§ 8.8).

Previous researches, mainly the system of the School Grammar and the Education Grammar, often use seemingly incompatible though translatable terminologies to describe the verbal complex (§ 8.10). Knowing both grammar systems is important for Japanese learners, because (of course) dictionaries are edited by native speakers of Japanese and they use the School Grammar system to carry out their work. This note is a mixture of the two schools.

First have a look at § 8.2 to, then

#### 8.2 Internal morphology

#### 8.2.1 Overview of conjugation classes

Verbal internal morphology of a verbal element or 活用 is decided by its position in the verbal complex and its conjugation class (活用形). According to whether the final sound of the stem is a vowel or consonant, regular Japanese verbs can be divided into **c-stem verbs** and **v-stem verbs**. C-stem verbs are also called 五段動詞 or **group-1 verbs**, because changing the conjugation ending means the final mora may appear in every column of the kana chart (Table 3.1), and v-stem verbs are also called 一段動詞 or **group-2 verbs**, because the last or the second but last mora is always in the same column with the last mora in the dictionary form, which is the present, positive, plain form of the verb (§ 8.6).

一段動詞 can be further divided into 上一段動詞 or *iru*-verbs or **group-2a verbs** and 下一段動詞 or *eru*-verbs or **group-2b verbs**: the final vowel of *iru*-verbs is *i*, and *-ru* is actually the conjugation ending of the terminal form, and similarly the final vowel of *eru*-verbs is *e*.

There are two important irregular verbs: *suru* 'to do' and *kuru* 'to come'. Since the verb category of Japanese is closed, the two verbs are highly productive as light verbs when new verbal meanings are required. They, together with their semi-conventionalized compound with NPs, are collectively called **group-3 verbs**.

Adjectives have their own conjugation pattern (§ 8.2.6). The difference between the adjective conjugation and verb conjugations is larger than the difference between group-1 and group-2 verbs.

Japanese also has a few irregular verbs other than the group-3 verbs. TODO: more discussion The distinction between c-stem verbs and v-stem verbs is not purely phonological synchronically: in some cases, the suffix has alternations that can't be attributed to contemporary phonology depending on the conjugation class of the verbal element before it (§ 8.2.2.6, TODO: more). And there are verbs ending in *iru* or *eru* but are c-stem verbs. Though in most cases, the regular morphology of Japanese means you can find all forms of a verbal element from the dictionary form, we still need to know what the stem is – especially, whether it ends in a vowel or a consonant – to cover the full morphological pattern observed.

The internal morphology of each auxiliary verb also follows one of the patterns mentioned above, and this is even true for morphosyntactically inflectional suffixes: the latter are definitely suffixes by comparison with complement clause constructions ( $\S 8.1.2$ ), but have the same internal morphological patterns with lexical verbs. This makes the traditional School Grammar include them into the category of "auxiliary verbs" ( $\S 8.10.1$ ). It's rather weird to talk about "stems" of inflectional suffixes, but for coherence of morphophonological description, it seems necessary use the terms c-stem and v-stem for inflectional suffixes. Some auxiliaries, like the negator na-, conjugate according to the paradigm of adjectives.

#### 8.2.2 The base forms of c-stem and v-stem verbs

In this section I list the base forms of verbal internal morphology. Not all of the base forms listed in this section are on the same plane. The terminal form (§ 8.2.2.3) is actually not a part of the internal morphology: it's basically equivalent to the stem with a present tense marker -(r)u, and only appears at the end of the suffix chain, though not necessarily the end of the verbal complex (see the beginning of § 8.6.1). So is the case of the imperative form.

The irrealis form, the hypothetical form, the continuative form (§ 8.2.2.2) TODO: list are about internal morphology. However, the irrealis form, the hypothetical form, TODO: list only appear before one suffix before the end of the suffix chain. Only the continuative form appears everywhere in the suffix chain – which is also what its name implies. Also, it doesn't mean the irrealis form, the hypothetical form, etc. never appear at the end of the *verbal complex*: we can construct a *te*-form from the euphonic form and then use it to construct a progressive construction (§ 8.8.2).

#### Box 8.4: Resources on the distribution of base forms

See 顾明耀 (2004, § 3.2.4) (and references in it) for a comprehensive and kana-based description of what can appear after each internal form.

#### 8.2.2.1 The irrealis form

The **irrealis form** (未然形) can be obtained by using -a to the final of a c-stem, and by doing nothing to a v-stem. The irrealis form appears in some negative verbal complexes (§ 8.6) as well as in the causative and passive constructions and the combination of the two (§ 8.5.1).

This narrow and semantically unmotivated distribution means the irrealis form seems to be a result of interaction between the verb stem and suffixes with a as the underlying starting vowel or with a starting mora Ca. Relevant discussions can be found in the aforementioned sections.

#### 8.2.2.2 The continuative form

The **continuative form** is the default form for anything that conjugates and is not at the end of a suffix chain (§ 8.3.1), and hence the name. Apart from that, the continuative form is also used in norminalization and non-finite clauses (TODO: ref). The continuative form is also the historical origin of the euphonic form (§ 8.2.2.8).

#### 8.2.2.3 The terminal form

The **terminal form** (終止形) is obtained by attaching -u to a v-stem and -ru to a c-stem. It appears clearly as a marker of the non-past tense (§ 8.6), and frequently appears at the end of the verbal complex, and hence the name; expectedly, it's also the form appearing in dictionaries, so we also call it the **dictionary form** 辞书形. The difference between the terminal forms of c-stem and v-stem verbs seems to be a result of contraction of successive consonants, in which C-ru becomes Cu in the surface form (§ 3.5.1.1).

#### 8.2.2.4 The attributive form

The attributive form, as its name suggests, appears mainly in relative clauses (TODO: ref). Its form is exactly the same as the terminal form for regular verbs in modern Japanese, though for adjectives there are differences (§ 8.2.6).

#### 8.2.2.5 The hypothetical form

The **hypothetical form** (仮定形) is obtained by adding -e to a c-stem and do nothing to a v-stem. It appears in conditional clauses (§ 8.7.3).

#### 8.2.2.6 The imperative form

The **imperative form** ( $\Leftrightarrow \Re$ ) only appears in a "real" (i.e. not sugarcoated) command (§ 8.6.4). It's obtained by adding -e to the stem of c-stem verbs, and -ro (or -yo as a written form) to v-stems. It doesn't appear very frequently in public speaking, since as you can expect, it's rather rude.

#### 8.2.2.7 The volitional form

The **volitional form** (意志形 or 推量形) is obtained by adding  $-\bar{o}$  to a c-stem and  $-y\bar{o}$  to a v-stem. It's historically the irrealis form, and then sound changes happen. Some books call it the second irrealis form. It's used in the volitional mood (§ 8.6.3), TODO.

#### 8.2.2.8 The euphonic form

The **euphonic form** (音便形) is historically the continuative form when used together with any particle starting with t- (§ 8.6.1, § 8.7.2, § 8.7.4), but due to the phonological rule of the contraction between the final consonant of the stem and the -t- sound (§ 3.5.1.2), a new form is created.

The creation of a new form doesn't summarize the consonant contraction rules. After certain verbs, -t- becomes -d-.

#### 8.2.2.9 The potential form

The **potential form** (可能形) is obtained by adding *-rare* to a v-stem and *-e* to a c-stem. It's Historically related to the hypothetical form, TODO: how? It's used within the suffix chain to mark the possibility of the event in question (§ 8.5.2).

#### 8.2.3 The internal morphology of group-3 verbs

Compound verbs ending in suru or kuru conjugate exactly in the same way as suru and kuru. So to describe the morphology of group-2 verbs, we only need to know the cases for suru and kuru.

#### 8.2.3.1 Suru 'do'

The verb suru means 'to do'. Its internal conjugation is shown in Table 8.1. Note that there are three irrealis forms: sa is used to for valency changing constructions and also appears in some idiomatic phrases, se is used in other set phrases (and regularly in Classical Japanese) and also appears in the negative continuative, and shi appears before the negative suffix -na- (while in Kansai dialect, sa is used in negation). The imperative shiro is the spoken form, while seyo is the written form.

Table 8.1: The internal conjugation of suru

	internal morphological forms			
Irrealis	さしせ	sa shi se		
Continuative	L	shi		
Terminal	する	suru		
Attributive	する	suru		
Hypothetical	すれ	sure		
Imperative	せよ しろ	$seyo\ shiro$		
Volitional	しょう	$shiyar{o}$		
Euphonic	L	shi		
Potential	できる	dekiru		

#### 8.2.3.2 Kuru 'come'

The verb kuru (くる, 来る) means 'to come'. It's internal conjugation is shown in Table 8.2.

Table 8.2: The internal conjugation of kuru

	internal morphological forms		
Irrealis	来	Z	ko
Continuative	来	き	ki
Terminal	来る	くる	kuru
Attributive	来る	くる	kuru
Hypothetical	来れ	くれ	kure
Imperative	来い	213	koi
Volitional	来よう	こよう	$koyar{o}$
Euphonic	来	き	ki
Potential	来られる	こられる	korareru

#### 8.2.4 The "to be" verbs

#### 8.2.4.1 Da

There is only one synchronically uncontroversial Japanese copula: the irregular da. Its mostly

#### 8.2.5 Other irregular verbs

#### 8.2.6 The internal morphology of adjectives

#### 8.2.6.1 The terminal form

#### 8.3 The structure of the verbal complex

#### 8.3.1 The suffix chain

The suffix chain can be roughly divided into an internal part (on the left side) and an external part (on the right side). The external part is mainly about the marking of tense, polarity and politeness in finite clauses, with certain degree of fusion and strong interaction with external factors (§ 8.6). Japanese also has a rich class of non-finite constructions, in which the marking of tense and politeness is suppressed (§ 8.7). The internal part is about valency changing and marking of modality, the latter also involving certain degree of valency changing (§ 8.5).

In most cases, when an inflectional suffix is added, if the previous form ends in a consonant, an i is inserted after the consonant. This results in the so-called continuative form (§ 8.2.2.2). However, the valency changing suffixes -sase- and -rare- have their initial consonants removed when used together with a v-stem, and therefore effectively make the preceding element in the verbal complex into the irrealis form (§ 8.5.1).

For the sake of convenience, in the following discussion, when I say "attaching something to a continuative form", what I mean is not restricted to attaching something to the continuative form of a verb stem or an adjective stem – I also mean to attach something to an existing suffix chain whose last suffix ends in the continuative form.

The end of a suffix chain may be a complete external suffix chain (§ 8.6). But it's also possible to end a suffix chain with a partial (or null) external suffix chain, and then to use it as a subordinate clause or as a part of a periphrastic conjugation. In the latter cases, the last suffix in the suffix chain is also in the continuative form (or the euphonic form).

#### 8.3.2 Prefixes

Prefixes to verbs and adjectives are rare in Japanese. They are most likely to be honorifics prefixes or derivational prefixes.

#### 8.3.3 Periphrastic conjugation

As is said in § 8.1.2, though in Japanese, due to the strong head-final tendency, it's hard to differentiate suffixes following a verb and auxiliaries following a verb, by comparing relevant constructions with complement clause constructions, we can still draw a line between ordinary conjugations and periphrastic conjugations, though this line is mainly of historical interest and bears little synchronic significance. Japanese employs lots of periphrastic conjugations. Actually, much of the agglutinative flavor of Japanese comes from periphrastic constructions, while the purely suffixal part doesn't create incredibly long verbal complexes. Most of aspectual marking (§ 8.8), one cell in the indicative paradigm (§ 8.6.1), the  $dar\bar{o}$  form (§ 8.6.2) TODO are all periphrastic conjugations.

TODO: list of auxiliary verbs

TODO: ni particle at the end of verbal complex

#### 8.4 Stem and stem derivation

#### 8.4.1 The transitive-intransitive correspondence

TODO: verb derivation

#### 8.5 The internal suffix chain

TODO: possible template: -sase-rare-nakaQ-u?

#### 8.5.1 The suffixes *-rare* and *-sase-*, and the irrealis form

The passive suffix is -rare-, and the causative suffix is -sase-. When applied upon c-stem verbs, the r and s sounds are dropped (§ 3.5.1.1), so the passive of c-stem verbs as the irrealis form plus -re-, and similarly, the causative of c-stem verbs is the irrealis form plus -se-.

It's also possible to apply the passive to the causative: we get 'be made to do sth.' In this case, the suffix is the expected -saserare-, called the passive causative. Again, the s sound is dropped when used together with a c-stem verb. There is no internal morphology on -sase- in this case, because it's a v-stem auxiliary, but for consistency we may say the -sase- is in the irrealis form, because -rare- applies to the irrealis form of c-stem verbs and hence any v-stem verbs appearing before -rare- is also in the irrealis form.

#### 8.5.2 The potential -rare- or -e-

Adding -rare- to c-stems and -e- to v-stems means the A argument has certain capacity or possibility to do something. Essentially, this is to say to use the potential form (§ 8.2.2.9).

Note that it's not acceptable to use the potential *-rare-* and the passive *-rare-* together, probably for phonological reasons: repetition sounds awkward (Kuno et al., 1978). It's fine to just use a single *-rare-* to denote "being able to be done".

#### 8.5.3 The desiderative -ta-

The suffix -ta- has the desiderative meaning. Note that -ta- has adjectival internal morphology: for example, its non-past plain form is -ta-i.

#### 8.5.4 The potential -u-

The suffix -u- also serves as a potential marker.

### 8.6 Tense, polarity and politeness in finite clauses

The marking of categories of tense, politeness and polarity already shows certain signs of fusion, as can be seen in Table 8.3. It's still worthwhile to analyze its inner structure, however, because not all verbal complexes have the three categories marked together. In the  $dar\bar{o}$  form (§ 8.6.2), politeness may be marked in a separate auxiliary following the tense, polarity and politeness complex of the main verb: in this case, the former may or may not carry the "polite" feature (with a  $desh\bar{o}/dar\bar{o}$  alternation), while the latter is always in the plain form instead of the polite form. In non-finite moods, like the te-form (§ 8.7.2), the tense marker is forbidden to appear, and the politeness marker is largely limited, but the polarity is well marked.

The above case means the tense-polarity-politeness complex heavily depends on what follows it. Thus, this section is carried out by

#### 8.6.1 The indicative paradigm

This section introduces the complex of tense, polarity and politeness, which appears in a fully developed way in the indicative mood and is the last part of the verbal complex in the indicative mood – only SFPs may follow them. (But that's not to say the tense, polarity and politeness

marking shown below always appears at the end of the verbal complex at all times: there is, for example, a periphrastic conjugation used in the presumptive mood, in which  $dar\bar{o}$  or desho is added after the tense, polarity and politeness marking.) Table 8.3 shows the paradigm. Note again that words like "terminal form" indicate the internal morphology of the last verbal element, which may or may not be the head verb/adjective. TODO: adjective

Table 8.3: The tense-polarity-politeness complex in the indicative mood

		affirmative	negative
non-past	plain polite	terminal form continuative form plus $-masu$	irrealis form plus -nai continuative form plus -masen
past	plain polite	euphonic form plus $-ta$ or $-da$ continuative form plus $-mashita$	irrealis form plus -nakatta continuative form plus -masen deshita

Some comments should be made regarding the inner structure of each cell of the paradigm. It's easy to find the negative polite past form is a periphrastic one, made by adding deshita, the the past polite form of the copula da (§ 8.2.4.1). The past polite affirmative ending -mashita can be decomposed into -[mas-i]-ta, where -ta is the past tense marker, which, as we see in Table 8.3, is added to the euphonic form i.e. the continuative form when the stem ends in -s. Comparing this with -masu, we find -mas- is a c-stem auxiliary, and -masu can be composed into -mas-u, which is the terminal form of -mas-. By comparing -nai and -nakatta, we find a negator -na- with adjectival internal morphology (§ 8.2.6), so -nai is -na-i and -nakatta is -nakaQ-ta. The ending -masen is a contraction of historical forms; it's inner components aren't easily recognizable.

Thus, the endings mentioned in Table 8.3 can be glossed better as Fig. 8.2.

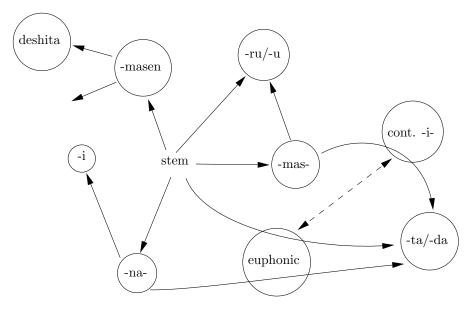


Figure 8.2: The inner structure of the tense-polarity-politeness complex

#### 8.6.2 The $dar\bar{o}$ ( $desh\bar{o}$ ) presumptive mood

There are several moods that may be called presumptive in Japanese. The  $dar\bar{o}$  form is a presumptive construction. It's obtained by attaching  $da\bar{o}$  (the plain form) or  $desh\bar{o}$  to the end of a plain form tense-polarity-politeness complex, which carries the tense and the polarity categories, but not politeness.

#### 8.6.3 The $-\bar{o}$ (-mash $\bar{o}$ ) volitional mood

The  $-\bar{o}$  form (and its polite version, the  $-mash\bar{o}$  form) may be seen as another presumptive mood, and here to connect it with the volitional form (§ 8.2.2.7), we call it the volition mood. The

volition mood is always in the non-past tense, but it's able to serve as the mood of a complete sentence, so I still regard it as a finite mood.

The  $-\bar{o}$  form is obtained by attaching  $-\bar{o}$  to a c-stem and  $-y\bar{o}$  to a v-stem. So basically, it's just the volitional form. The  $-mash\bar{o}$  form is obtained by attaching  $-mash\bar{o}$  to a continuative form.

#### 8.6.3.1 As a suggestion

The  $-\bar{o}$  form may be used as a suggestion: 'let's ...'; to be polite, the  $-mash\bar{o}$  form is actually used more frequently. This usage is still somehow abrupt and is used mostly by men (Akiyama and Akiyama, 2012, pp. 112).

#### 8.6.3.2 As a guess

It's also possible to use the  $-\bar{o}$  form as a guess of someone else's future action.

#### 8.6.4 The imperative mood

#### 8.7 Non-finite forms and norminalization

Japanese has a strong tendency to use non-finite clauses, i.e. clauses that are somehow "deficient" in the marking of certain grammatical categories when it comes to embedding. TODO: basically they are all 接续助词 forms

#### 8.7.1 The continuative form as the so-called infinitive

After a zero derivation, a verbal complex with its last suffix ending in the continuative form becomes a non-finite one.

The negative marker -zu; the particle ni of purpose – where should I place it?

#### 8.7.2 The te-form or the so-called gerund

The te-form is the euphonic form plus the particle -te, or in a more traditional account, the continuative form plus -te plus 音便 rules (§ 3.5.1.2). It's sometimes called the gerund, though the name is kind of misleading, because the term gerund hints at the possibility of a non-finite clause to fill argument positions, while te-form is usually used to fill adverbial positions.

#### 8.7.3 The -ba conditional mood

Attaching -eba to a c-stem and -reba to a v-stem

- 8.7.4 The -tara conditional mood
- 8.7.5 The -nara conditional mood
- 8.7.6 The -to conditional mood

#### 8.8 Aspects

#### 8.8.1 The lexical aspect

https://www.japanesewithanime.com/2020/08/lexical-aspect.html

Verbs with different lexical aspect yield different meanings when placed in seemingly similar constructions. In Japanese, there are roughly four kind of verbs with regard to lexical aspects: continuous verbs, momentary verbs, stative verbs and adjectival or "type-4" verbs. Stative verbs never appear in the *-te iru* construction (§ 8.8.2), while adjectival verbs never appear not being in the construction. And there are differences in the meaning of the *-te iru* construction between the continuous verbs and momentary verbs. This four-fold classification is robust with several tests (顾明耀, 2004, § 3.1), shown in Table 8.4.

Table 8.4: The four lexical aspects and their distributions and semantics

	event		state	
	continuous	momentary	stative	adjectival
-te iru imperative	imperfective +	perfect	-	(always in this construction)

#### 8.8.2 The *-te iru* construction

#### 8.9 The benefactive constructions

The giving and receiving verbs in Japanese (§ 9.3) have developed a grammaticalized use of benefactive constructions, i.e. 'someone does something for someone else' or 'someone is done a favor by someone else by doing something'.

TODO: 授受关系

#### 8.10 Notes about previous studies

#### 8.10.1 The School Grammar and "auxiliary verbs"

Here is a little terminological confusion: in the School Grammar inflectional suffixes, sometimes also auxiliary verbs, are called 助動詞 'auxiliary verb', while auxiliary verbs are called 補助動詞 'helping verbs'. The confusion of the two is easily understood, because both of them appear after the main verb and are attached closely to the main verb and have internal morphology (§ 8.2.1). The fact that the accepted writing system for Japanese doesn't distinguish words (§ 3.6.6) – whatever this term means – also contributes to native speakers' decision to call suffixes (and sometimes auxiliary verbs) "auxiliary verbs", and then they have to invent another name for more prototypical auxiliary verbs.

§ 8.2.2 is written in a School Grammar view. The difference between § 8.2.2 and traditional School Grammar is the euphonic form is included, while traditional School Grammar rejects its status as a single form and use phonological rules to cover it (TODO: ref). Though this is also an acceptable analysis, I find it inconvenient practically and problematic theoretically: other "forms" of verbal internal morphology also seem to be derivable from regular morphophonological rules, and rejecting one of them is equivalent to rejecting all of them, if we are to be very self-consistent. So I include this form anyway.

#### 8.10.2 The Education Grammar

The sections after § 8.2 are written in the spirit of the Education Grammar. So-called "forms" in the Education Grammar are actually processes. Thus, the theory of verb conjugation in the Education Grammar is actually a mixture of the Item-and-Process approach and the Wordand-Paradigm approach. The definition of each form is "removing the final kana of ... and attaching ... to its end" (for example, instead of saying "the te-form is traditionally built by the continuative form plus te", an Education Grammar book may use the following formulation: "the te-form is obtained by removing -masu from the end of the verb and then add -te"), which can be seen as a rule relating two cells in the conjugation paradigm. The difference between the standard Word-and-Paradigm approach and the Education Grammar is the so-called "forms" can be applied for more than once: we may talk about "the x form of the y form of z" and not just "the y form of z", so this is a typical Item-and-Process description. By doing so, the School Grammar avoids the notion of internal morphology for each element in the verbal complex. The price is advanced learners have to spend much more time to memorize the rules of all the different forms – essentially internal conjugation of the last element plus one or more auxiliaries attached, and the internal morphology ending may also be seen as a part of the auxiliaries (Box 8.2).

# Arguments of verbs

- 9.1 'I hit the wall  $\dots$ ': prototypical transitive and intransitive verbs
- 9.2 'I think, I feel':
- 9.3 Giving and receiving

# Clausal constituent order and information packaging

#### 10.1 Topic and subject

The difference between the so-called topic marker wa and the subject marker ga is a long problem in Japanese grammar. This section provides a tentative summary of the function of each.

#### 10.1.1 The function of wa

The meaning of NP-wa can be summarized as 'as for NP, I know ... (the rest I'm not talking about)'. Thus wa is a canonical marker of topic, and the NP it's attached to must be somehow a "known object".

When two clauses containing wa are conjoined together, we get the meaning of 'as for ..., I know ...; (but) as for ..., ...', and this naturally has a contrastive meaning, as in (TODO). Note that though it's possible that the wa-NPs in the two clauses are different, because the above construction is contrasting two clauses, not two NPs.

- (1) TODO: example of contrastive
- 10.1.2 The function of nominative ga, with or without wa
- 10.1.3 Multiple ga
- 10.1.4 Summary of constructions
- 10.2 Scrambling

#### 10.3 Sentence final particles

SFPs are useful in oral communication.

Box 10.1: Resources on SFPs

This section is based on Akiyama and Akiyama (2012, § 6.4).

#### 10.3.1 Ka

The SFP ka is the interrogative marker. It marks both open and closed questions. To make a question open, just introduce interrogative pro-forms.

#### 10.3.2 Ne

The SFP ne invites the listener to confirm a claim: '..., don't you think so?' We have the following examples:

(2) Atsui desu ne hot NE 'It's hot, isn't it?'

#### 10.3.3 Yo

The SFP yo is used to make a very strong assertion.

### Subordination and coordination

As is often the case, there are fewer information packaging devices in subordinated clauses. TODO: topicalization,

#### Theoretical aspect 11.1: Matrix clauses and subordinated clauses

From a generative perspective, both a matrix clause (which is actually a sentence in the sense of BLT, though it can still be embedded as an argument of a verb like 'say') and a subordinated clause are CPs. The structural differences between the two are mainly about the lack of certain functional projections in the subordinated clause. Speaking of so-called Force projection(s), the subordinated clause usually only contains the marking of imperative, declarative, etc., without specification of detailed speech act, which may be marked by SFPs in Japanese (and Chinese). Since topicalization is also a CP process, we can expect it's more restricted in subordinated clauses.

#### 11.1 Adverbial clauses

#### 11.1.1 Conditional clauses

#### 11.2 Clauses linked by particles

TODO: Compatibility with SFPs This section is a more annotated version of Akiyama and Akiyama (2012, § 6.3).

#### 11.2.1 Ga

#### 11.2.1.1 The concessive construction

The particle ga may be attached to the end of a clause and has the reading of 'despite the circumstance'.

A conventionalized construction in oral speech is to avoid the main clause and end the utterance with ga. In this way, it's a marginal SFP.

(1) Ikitakatta desu ga ...

#### 11.2.1.2 Neutral linking

We can also just use ga as 'and'.

#### 11.2.2 Kara

#### 11.2.2.1 The causal construction

# **Bibliography**

Nobuo Akiyama and Carol Akiyama. Japanese grammar. Simon and Schuster, 2012.

Dianne Friesen. A grammar of Moloko. Number 3 in African Language Grammars and Dictionaries. Language Science Press, Berlin, 2017. doi: 10.5281/zenodo.824016.

Nadine Grimm. A grammar of Gyeli. Number 2 in Comprehensive Grammar Library. Language Science Press, Berlin, 2021. doi: 10.5281/zenodo.4737370.

Rodney Huddleston and Geoffrey K. Pullum. *The Cambridge Grammar of the English Language*. Cambridge University Press, 2002. doi: 10.1017/9781316423530.

Guillaume Jacques. A grammar of Japhug, volume 1. Language Science Press, 2021.

Richard S Kayne. Antisymmetry and japanese. English Linguistics, 20(1):1–40, 2003.

Susumu Kuno et al. Japanese: A characteristic ov language. Syntactic typology, pages 57–138, 1978.

Gillian Ramchand and Peter Svenonius. Deriving the functional hierarchy. Language Sciences, 46:152–174, 2014. ISSN 0388-0001. doi: https://doi.org/10.1016/j.langsci.2014.06.013. URL https://www.sciencedirect.com/science/article/pii/S0388000114000540. New Directions in Universal Grammar.

Natsuko Tsujimura. An introduction to Japanese linguistics. John Wiley & Sons, 2013.

Michio Tsutsui and Seichi Makino. A dictionary of basic Japanese grammar. Japan Times, 1989. 顾明耀. 标准日语语法. 修订版高等教育出版社, 2004.