# Japanese grammar notes

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This is a reading note of Tsutsui and Makino (1989) as well as lots of books and articles listed in the reference. The methodology followed is in this note about how descriptive grammars work, i.e. "largely generatively informed but surface-oriented and flat-tree in the appearance".

## 1 Overview

### 1.1 Historical notes

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. This 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 verb 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.

# 1.2 Phonology and orthography

### 1.3 Parts of speech

Japanese has a clear noun-verb distinction: 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.

There are two adjective classes: the verbal adjectives (or i-adjectives) and the nominal adjectives (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).

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.

Function words in Japanese can be roughly divided according to the grammatical systems they express.¹ The particle class includes case markers (格助詞, kaku-joshi), parallel markers (並立助詞, heiritsu-joshi), sentence final particles (終助詞, shū-joshi), interjectory particles (間投助詞, kantō-joshi), adverbial particles (副助詞, fuku-joshi), binding particles (係助詞, kakari-joshi), conjunctive particles (接続助詞, setsuzoku-joshi), and phrasal particles (準体助詞, juntai-joshi). Here the term particle is used, instead of, say, clitic, though we can only be sure that the case ending is a grammatical word (since it appears in the level of phrases), partly because this is the tradition way to call it, partly because TODO: whether particles can receive stress, etc.

TODO: hyperlink

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.

<sup>&</sup>lt;sup>1</sup>Though particles are in the grammar and do not really carry category labels, the traditional practice to list all particles and classify them is practically desirable, as it provides a quick way to navigate across grammatical systems.

### 1.4 Noun phrases

#### 1.4.1 Unattested categories

Gender and number are not grammatical categories in Japanese.

As is usually the case, structural cases – cases assigned directly by the vP-TP-CP functional hierarchy – never appear together with the topic marker, but peripheral cases are allowed to appear with the topic marker.

## 1.5 Clauses

### 1.5.1 The template of clause structure

Japanese is basically SOV in clause constituent order, and it's also famous for allowing scrambling, i.e. not-so-radical and often pragmatically marked constituent order deviation from the prototype.<sup>2</sup> In a scrambled clause, the predicate<sup>3</sup> is still strictly at the final position (possibly with SFPs following it). The topic and the subject (or maybe we'd better call it focus – see § 1.5.3), if any, are usually in the initial position. They are dislocated only in marked cases. On the other hand, internal arguments are scrambled in a freer manner: the indirect object and the direct object can be switched without making a big difference.

### 1.5.2 The predicate

The predicate position – the so-called "V" in SOV – can be filled either by a verb or by a verbal adjective, plus a chain of function words. The mapping between slots in the predicate and the generative TP-CP structure is almost one-to-one, probably again as a result of the agglutinative nature of Japanese, where functional morphemes are just speltout as they are with no further processing. The template of the predicate is basically the main verb plus a series of so-called "auxiliary verbs" plus possible negation marker plus tense marker, and plus a possible SFP. Verbal adjectives are incompatible with auxiliary verbs.

Still, the case of the Japanese predicate is not identical to the ideal agglutinative case, because there is still interaction between function morphemes. Previous works analyze this interplay in quite different ways. The School Grammar assumes both the main verb and the auxiliary verbs may have different endings decided by morphemes in higher positions (that's to say, by morphemes following them), as in the English periphrastic conjugation have been doing sth. (§ 4.1). The position of this note, however, is to use morphophonological rules in place of this selection-and-affix-lowering approach. There are also uncontroversial phonological rules acting between morphemes in the predicate.

In copular clauses, Tsutsui and Makino (1989) analyzes the copula and the CC together as the predicate, which makes sense if we understood the CC as the predicate, and in this perspective, the copula is merely a particle indicating the predicate status of the CC, but in another perspective, the copula is obviously a verb, which takes the CC as its internal argument.

#### 1.5.3 Arguments and the nominative-accusative alignment

It doesn't take much effort to find that Japanese is nominative-accusative: for intransitive verbs, the S argument is marked in the same way as the A argument of transitive verbs, usually by the ga particle or by the wa particle. There are actually some subtlety regarding the marking of the S/A argument (§ 6.1), about the exact meaning of ga and wa. I call ga the nominative particle instead of the focus particle and follow the tradition, to place it together with uncontroversial case particles, while placing wa together with information structure marking particles TODO: exact name of the two types of particles, and the justification is done in TODO

<sup>&</sup>lt;sup>2</sup>Many scholars, especially those skeptical about generativism, often insist on "analyzing non-canonical constituent order as they are" and reject the notion of scrambling. But there are indeed evidences – from purely syntactic ones to psychological ones – for the existence of scrambling mechanism (Imamura, 2015; Imamura et al., 2016; Yatsushiro, 2003). Since this note is mostly descriptive and is about surface-oriented analysis, scrambling is to be discussed in a mostly flat-tree way in the rest of this note.

<sup>&</sup>lt;sup>3</sup>In this note the term *predicate* takes the BLT meaning.

### 1.5.4 Valency changing

The so-called Japanese passive is actually affective: in the affective construction, the A argument undergoes an action caused by others. Thus in the affective construction we can still see things like direct objects.

## 1.5.5 tense, aspect, mood (TAM) markers

Japanese has the following TAM categories: a past/non-past tense distinction, TODO: mood

### 1.5.6 Sentence final particles

SFPs are important in Japanese grammar: TODO: sfp for relative clauses? (Or in other words, clause or sentence?)

### 1.6 Remarkable features

### 1.6.1 Honorifics

## 1.7 Existing studies

TODO: school grammar and education grammar

# 2 Phonological rules

This note is mainly about morphosyntax. However, phonological rules seem to be significant in at least some parts of Japanese grammar.

# 3 Noun phrases

### 3.1 Final particles

There are basically two systems of particles after NPs. The first is the case system (case markers, 格助詞), including TODO: distribution (and the following ones)

- Nominative: ga, appearing in certain circumstances as the focus marker (§ 6.1).
- Accusative: o
- $\bullet$  Dative: ni: time and location
- Genitive: no
- Lative: e, used for destination direction (like in "to some place")
- Ablative: kara, used for source direction (like in "from some place")
- Instrumental/Locative: de

The second system is the

The systems are not completely compatible. A well known generalization is structural case markers are erased when NPs are topicalized, while inherent case markers may be kept.

# 4 The verb complex

## 4.1 Overview and previous studies

The verb complex – the content of the predicate position – is discussed in this section. Since the verb complex is the collective realization of the vP-TP-CP functional projection, a change in the verb complex may also be a change in the arguments (§ 5), TODO: list all of them. I

follow the practice in Jacques (2021) and use the verb complex as the table of content of what happens in the clause.

One astonishing aspect of Japanese is each verbal element – the main verb or the main verbal adjective, so-called "auxiliary verbs" (see below) – in the verb complex is in one of a handful of so-called conjugation forms (the name is problematic – see below), if we believe the analysis of the School Grammar. This shared morphological appearance may be seen as justification of the term *auxiliary verb*, since they have similar appearances as lexical verbs, though they can also be perceived as inflectional endings which apply to verbs already with certain degrees of inflection, which is even more likely because elements in the predicate are not subject to further syntactic operation (see below discussion on Education Grammar). From then on, I will call all morphosyntactic objects appearing in the predicate and have verb-like inflectional behaviors **verbal** elements, regardless of whether they are lexical or functional.

These conjugation forms have names like "irrealis" or "hypothetical", but the names of these forms doesn't say much about their distributions, except the imperative form (used to convey a rather rude and direct command). Thus, if we believe in the analysis of the School Grammar, the so-called conjugation forms are better understood as the so-called English ing-participle and ed-participle forms in have been doing, which would be better glossed as have-en be-ing do plus phonetic readjustment rules if we want an one-to-one correspondence between morphemes and grammatical categories. What carry grammatical categories are not the so-called conjugation ending of the irrealis form, the continuative form, etc., but the verbal elements themselves – in the case of English, have (present perfect) and be (passive).

On the other hand, the so-called "conjugation ending" of each element in the verb complex is *not* determined by agreement with the arguments or by clausal grammatical categories: the former never exists in Japanese and the latter is coded by the sequence of functional verbal items, where for inner verbal elements, the conjugation form is purely decided by the higher verbal element (in Japanese, the closest verbal element in the right), arguably by some sorts of "affix lowering". This periphrastic inflectional strategy in English *have been doing* is used in Japanese in a much larger scale, because there are lots of auxiliary verbs.

What makes Japanese and English different is the verb complex in Japanese doesn't allow intervening of things like adverbs, while in English it's pretty acceptable. Thus, the morphosyntactic standard of wordhood hints that the whole verb complex may be understood as a huge grammatical word, since once finished, it never interacts with the outer world. This indeed seems to be the convention used in many romanization solutions.

The problem, now, is that if all the above are correct, then the verb complex of Japanese is a rather weird construction: its inner makeup has certain periphrastic flavor as in has been doing, and yet it's closed for typical adjunction operations seen in periphrastic conjugation. This isn't completely impossible in principle: we may assume there is an PF rule requiring all verbal elements to spellout together, and any argument in the functional hierarchy is squeezed out. But of course it's bound to be typologically rare, and there may also be some crosslinguistic constraints forbidding such a heavy spellout strategy.

This problem with the School Grammar – ambiguity between affixes and grammatical words within the verb complex – inspired a group of scholars to find an alternative, and the result is what's known as Education Grammar today. The School Grammar analyzes the verb complex in a highly detailed and semi-analytical way, segmenting it into the verb stem, a list of auxiliary verbs, the negative marker, and the tense marker, each of them is in one of the "conjugation forms", while the Education Grammar analyzes the verb complex simply as the stem plus *one* long, long conjugation ending. The status of the so-called *te*-form of verbs as one of the basic conjugation forms, for example, is rejected by the School Grammar: it's analyzed as TODO. This means we may find more conjugation forms in Education Grammar books.

The main problem with Education Grammar is it comes to another extreme, completely ignoring the inner structure of the verb complex. (And out of some short-sighted considerations like "making second-language learners be able to at least pick up *some* Japanese in one lesson", the *masu*-form is introduced too early, ending up in endless confusions.) The approach taken in this note is a third way. I recognize that the true conjugation endings of a lexeme are not just a handful of "conjugation forms" mentioned in School Grammar, and the term *conjugation ending* is used to denote any possible combination of function items in the verb complex, and hence I recognize the so-called *te*-form is a conjugation form, so if a chain of function morphemes has developed a conventionalized meaning, it's easy to just describe it as a newly emerging

conjugation form. On the other hand, the possible forms of the verb complex are decomposed as detailed as possible, and I'll still study auxiliary verbs, though they are parts of a complex word, not a phrase. Contrary to the School Grammar, however, I'll go into the syllables and allow the deep form of morphemes – lexical or functional – to begin and end in consonants. As we will see later, this actually reduces the necessity of posting "conjugation forms for each verbal element in the verb complex", as so-called endings of verbal elements are more about morphophonological instead of morphosyntactic interaction between morphemes.<sup>4</sup>

Here is a list of School Grammar "conjugation forms" and relevant distributional information, and tentative explanations of their phonetic forms:

- Irrealis form (未然形). This form appears in
- Volitional form (意志形), which Historically originates from the irrealis form. TODO
- Continuative form or adverbial form (連用形), sometimes also called the infinitive form for its frequent appearance after other verbal elements.
- Terminal form or dictionary form (終止形, 辞书形)
- Attributive form (連体形), which, for regular verbs and verbal adjectives, is the same as the dictionary form in modern Japanese. TODO: Nominal adjectives and copula
- Hypothetical form (仮定形)
- Imperative form (命令形)

The imperative form, the terminal form and the attributive form are "finalized" forms: there can be no pure auxiliary verbs following them, though semi-auxiliary verbs like  $dar\bar{o}$  and SFPs are still possible.

In the perspective of the School Grammar, the irrealis form, the continuative form, etc. are actually conjugation stems. But this term goes in conflict with my notion of *stem* in § 4.2, and may also create confusion because auxiliary verbs also have these forms but it's rather strange to use the term *stem* for function items. So in the following, I will simply call the five or six or seven forms listed above (depending on how you count them) as **School Grammra conjugation forms**.

## 4.2 Conjugation classes and verb stems

### 4.2.1 The consonant and vowel conjugations

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 row of the kana chart, 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 row with the last mora in the dictionary form. 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'. TODO: where to discuss them, The two verbs, together with their compounding with TODO, are collectively called **group-3 verbs**.

<sup>&</sup>lt;sup>4</sup>This is actually a methodological lesson. In principle, the ideal workflow is to first recognize phonological rules (in this step morphosyntactic analysis is of course needed), and after morphemes in the deep structure are recognized, bracketing them into words and phrases should be done without depending much on phonology. In practice, though, linguists often implicitly consider large phonological units as morphosyntactic units as well without questioning if there is mismatch between phonological boundary and morphosyntactic boundary, and this often ends up in the failure of recognizing the exact meaning of alleged "morphemes". In the case of Japanese, criterions like "being made of one or more complete mora" are for phonological words, not morphosyntactic words. School Grammarians, however, never go into the structure of syllables, and they simply take the claim that a morphosyntactic unit contains integer syllables for granted. The result is the "conjugation forms" of verbal elements are completely incomprehensible. And if we then try to investigate the inner structure of School Grammar "verbal elements", we find nothing that can deepen our understanding about why things are so. As Chomsky pointed out in his early age, American structuralist partition of speech purely with intuition – a mixture of phonology and morphosyntax – is theoretically bad-informed.

### 4.2.2 The consonant conjugation

A verb whose dictionary form is not in group-3 and doesn't end in -eru or -iru is definitely a c-stem verb, i.e. a group-1 verb. Basically, by removing the final -u, we get the stem; if a verb ends in -tsu, then the stem ends in -t-. Verbs ending in -au, -iu, and -ou are also c-stem verbs, because we can assume there is a hidden w before u, which appears in some of the negative forms. TODO A handful of verbs ending in -eru and -iru are also c-stem verbs. TODO

When doing conjugation, Phonological rules deserve attention. If the stem ends in -s-, then it becomes -sh- before a suffix beginning with i. If the stem ends in -t-, it becomes -ch- before a suffix beginning with i.

Here is the relation between the stem and the School Grammar conjugation forms:

- The continuative form of a c-stem verb is obtained by adding -i to the stem.
- The terminal form and the attributive form is obtained by adding -u. Note that for v-stem verbs the ending is -ru. Since Japanese doesn't allow two successive consonants, we may assume there is a phonological rule deleting the r sound for c-stem verbs. Thus, the terminal form is just the stem plus -ru.
- The hypothetical form is obtained by adding -e.
- The irrealis form is obtained by adding -a.
- The volitional form is obtained by adding -o.

### 4.2.3 The vowel conjugation

What aren't group-3 verbs and group-1 verbs are v-stem verbs, i.e. group-2 verbs. The stem is obtained by dropping the final -ru.

The rest of the School Grammar conjugation forms of a v-stem verb are the same as the stem, except the imperative form, which is formed by adding -ro to the stem (-yo is used as an alternative in writing). This pattern hints

## 4.2.4 Group-3 verbs

dictionary form continuative form kuru ki suru shi

### 4.3 Inner structure: valency changing

### 4.4 Honorifics

TODO: -masu = -mas-u, -mashita = -mas-ita?

### 4.5 Tense

The present tense is marked by nothing. TODO: then what about the "the last word ending in dictionary form"? this is the ending of all verb complexes?

### 4.6 periphrastic conjugations

### 4.6.1 The progressive

# 5 Argument structures and alignment

This section is about subcategorization frames of verbs and the alignment.

 $<sup>^5</sup>$ Akiyama and Akiyama (2012) defines the stem as the result of directly removing the final u, and thus we would have a -ts- to -t- rule for anything else than the dictionary form or a form with a suffix beginning with i. I find this analysis uneconomical, since the t-to-ts change is easily explained by palatalization, while the inverse is mysterious.

### 5.1 Canonical transitive and intransitive verbs

# 6 Simple clauses

# 6.1 Topic and subject

The subject is often said to be both agentive and topic-like in the typological literature. What makes Japanese different is despite its accusative nature, there is still a problem concerning what exact is the subject in Japanese. The wa particle and the ga particle are commonly called the topic particle and the subject particle, respectively. This correspondence fails the predicate has a stative or habitual meaning: in that case, ga has the meaning of 'it's ... that', usually with an exhaustive meaning – only the NP before ga satisfies the predicate, and nothing else. This is probably due to the fact ga assigns focus to the NP before it: in English, YOU do the job means it's you – and only you – who does the job. Thus, ga may be better glossed as a focus marker, and this means in the surface-oriented constituent structure of main clauses, there is no such thing as the subject: anything moves to SpecTP immediately moves to a higher position in CP, making the notion subject a latent concept without its own particle. Indeed, we have so-called adverbial nominative in Japanese Endo (2007, § 6.1). Note, however, that the alignment in relative clauses is quite simple: in relative clauses the topic marker wa never appears and ga is simply the marker of nominative case.

# 7 Clause combining

# 8 Information packaging

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