■ How to Understand Conjugation

In Japanese, words that form the predicate, such as verbs and adjectives, change form according to their meaning and function. This change of word form is called conjugation, and words that change their forms are called conjugational words.

● Yōgen (用言: roughly verbs and adjectives) Complex

Japanese predicates can be divided into several "words" when one looks at formal characteristics such as accent and breathing. (Here, a "word" is almost equivalent to an accent unit, or the smallest a unit governed by breathing pauses, and is larger than the word described in school grammar.) That is, the Japanese predicate does not consist of one word; rather it is a complex of yōgen, made up of a series of words.
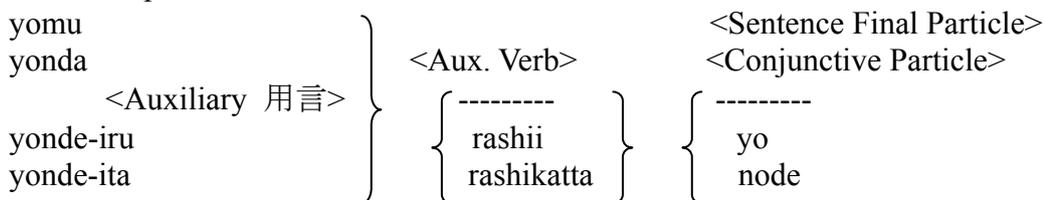
Each of the "words" that make up the predicate (i.e., yōgen complex) undergoes word form change, and words in a similar category may be strung together in a row. Therefore, altogether there is quite a wide variety of forms of predicates. Some people do not divide the yōgen complex into words, however. They treat the predicate as a single entity, and call the entire variety of changes conjugation. Some try to integrate all variety of such word form change into a single chart. This chart not only tends to be enormous in size, but also each word shows the same inflection cyclically. There is much redundancy in this approach. When dealing with Japanese, it will be much simpler if one separates the description of the order in which the components of the predicate (yōgen complex) appear and the description of the word form change of individual words.

The yōgen complex has the following structure:

yōgen proper — auxiliary yōgen — auxiliary verbs — final/connective particle

The yōgen proper, auxiliary yōgen, auxiliary verbs, and particles are all "words." There may be more than one auxiliary yōgen, auxiliary verb, or sentence final particle. Several words in one category may be strung together (in a particular sequence). Each yōgen proper, auxiliary yōgen and auxiliary verb undergoes inflection.

<用言 Proper>
yomu   <Sentence Final Particle>
yonda   <Aux. Verb>   <Conjunctive Particle>
        <Auxiliary 用言>   ---------   ---------
yonde-iru   rashii   yo
yonde-ita   rashikatta   node

When an auxiliary yōgen is attached to the yōgen proper, the two work as one unit, and the "conjugation" (in the narrow definition, explained later), which the yōgen proper normally undergoes, is performed on the auxiliary yōgen.

An auxiliary verb has its independence as a word and it undergoes word form change by itself. However, it is different from an auxiliary yōgen in that an auxiliary verb can make the preceding word to undergo word form change. What we call "auxiliary verbs" here differ from those used in school grammar in that they are independent words, and are limited to such words as *rashii*, (*kamo-*) *shirenai*, (*ni*) *chigainai*, *sōda*, *darō*, *deshō*. The majority of auxiliary verbs in school grammar (e.g., (*ra-*) *reru*, (*sa-*) *seru*, *tai*, *masu*, *nai*, and *ta*) are not "words," but are simply morphemes that are components of words, and they only function as internal affixes/word-endings to yōgen (yōgen proper and auxiliary yōgen). Similarly, there are conjunctive particles in school grammar that are simply word endings to yōgen, such as *-te*, *-nagara*, *-ba*, and *-tara*.

Yōgen proper and auxiliary yōgen not only undergo word form change, but they also are capable of deriving other yōgen proper and auxiliary yōgen.

1.a. yomu   1.b. yonda
2.a. yomaseru   2.b. yomaseta

3.a. yomareru   3.b. yomareta
4.a. yomanai   4.b. yomarenakatta

The word form change seen in 1.a. to 1.b. is called "conjugation" (in the narrow sense) of itself, whereas the generation of 2., 3., and 4. from 1. is called the derivation from 1. The derived *yogen* 2., 3., and 4. are words in their own right, and they conjugate (in the narrow sense) into 2.a., 2.b. and 2.c. respectively.

Given the relationship between the behavior of the word form and the grammatical categories of the predicates, the convention is to describe voice, politeness (*-masu*), affirmation/negation, desire, and difficulty/ease as derived yōgen; aspect and giving/receiving as auxiliary yōgen; politeness (*desu*) and part of modality as auxiliary verbs. Tense, some forms of modality, and conjunctive relationship are commonly described as "conjugation" (in the narrow sense).

● Characteristics of Conjugation in Japanese

Japanese words that conjugate do not totally change their form when they undergo conjugation. The structure of a "word" is a string of morphemes that represent meaning and function in a certain sequence, and the form of each morpheme is almost always constant. The conjugation only occurs at the boundary between morphemes.

In required grammatical categories, the unmarked meaning (such as "affirmation" in affirmation/negation) is expressed by the absence of the opposing morpheme (i.e., the existence of the zero morpheme). Only visible morphemes are significant in conjugation, and zero morphemes are ignored.

Morphemes that are part of a conjugated word can be classified by the position at which they appear: the "word-stem" that appears at the beginning of the "word," the "ending" that appears at the end, and the affixes that appear between the two. Multiple affixes may appear in a fixed sequence in a word.

For example, *yomu* can be broken down into the following morphemes: *yom-u*, *yomaseru* into *yom-ase-(r)-u*, and *yomaserareru* into *yom-* (stem), *-ase-* (affix), *-are-* (affix), and *-u-* (ending). Conjugation (in the narrow sense) can be defined as the word form change that involves the word ending and the morpheme that directly precedes it. Derivation can be defined as the word form change that involves the affix and the morpheme that precedes or succeeds the affix. However, both processes use a mechanism of the same nature as far as the form is concerned, and can be treated as the same from the point of view of word form generation. What is commonly called conjugation includes conjugation (in the narrow sense) and derivation. Conjugation in the broader sense will be discussed in subsequent sections.

Conjugation varies according to the type of yōgen.

● Conjugation of Verbs

There are various methods of sorting and presenting conjugation in Japanese.

Conjugation is a topical phenomenon that occurs at the boundary of morphemes. Thus, rather than presenting the word as a paradigm, it is easier to describe it in detail if one lists the preceding morpheme (tentatively, the preceding part (*senkō-bu*) hereafter) and the succeeding morpheme (the succeeding part (*kōzoku-bu*)) to describe what change occurs at the boundary (the middle part (*chūkan-bu*)). The reason we use the terms preceding part and succeeding part instead of stem and ending is that we need to include affixes in our discussion. The stem is always a preceding part and the word ending is always a succeeding part, but an affix becomes a succeeding part when it follows the stem, and a preceding part when it is followed by the word ending. To take the example *yom-ase-(r)-u*, the stem *yom-* is the preceding part in *yom-ase-* and the affix *-ase-* is the succeeding part, while in *-ase-(r)-u* the word ending *-u* is the succeeding part to *-ase-*, which thereby serves as a preceding part.

The simplest method to designate conjugation is simply to show the preceding, middle and succeeding parts in the order in which they occur. So-called conjugation tables place the preceding succeeding parts as the vertical and horizontal axes respectively and the middle part is

shown at the intersection of the two.   The morphological form of the verb is obtained as shown in the diagram below:

preceding part
　　↓
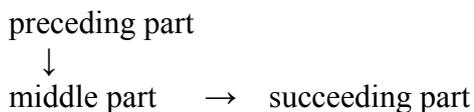middle part 　　→　　succeeding part

Chart 2-1 shows the conjugation of the contemporary common dialect.
In school grammar a verb consists of only the preceding part and middle part (the middle part is called the conjugating ending and the preceding part and middle part together are called the conjugated form), and the succeeding part is a separate entity.   However, there is no ground for including the middle part in the preceding part.

Chart 2-1:　Tentative Verb Conjugation Chart of Contemporary Japanese I		
（読）yo-	（起き）　oki- （逃げ）　nige- （読まれ）yomare- （読ませ）yomase-	
-ma- 　-mi- 　-mu 　-me- 　-me 　-ma- 　-ma- 　-mo-	----- ----- -ru ----- -ro -ra- -sa- -yo-	-nai, -zuni, -naide -nagara, -masu -ba -reru -seru -u

Chart 2-2:　Verb Conjugation Table of Contemporary Japanese in School Grammar			
読 yo	起 oki	投 nage	
(1) ma/mo (2) mi (3) mu (4) me (5) me (6) me	ki ki kiru kiru kire kiro	ge ge geru geru gere gero	nai, u/you, re/rareru, seru/saseru nagara,　　masu Noun ba

Chart 2-3: Tentative Chart of the Verb Conjugation of Contemporary Japanese II	
yom-　　　　oki- 　　　　　　nage- 　　　　　　-are- 　　　　　　-ase-	
a　　　　　　------ i　　　　　　------ ---　　　　　r ---　　　　　s ---　　　　　y	-na-(i)　　-zuni-　　-naide -nagara　　-nas(u) -u　　　-eba　　　-are-(ru) -ase-(ru) -oo

The conjugation table created by classical Japanese scholars in the Edo period, which forms the basis of the school grammar conjugation table, is created with the same principles used in Chart 2-1. It differs, however, in two points.   1) Empty columns (marked "---" in Chart 2-1) were not

recognized since they did not know the concept of zero; 2) the passive and causative forms are regarded as co-hyponyms with transitive and intransitive verbs, and are treated as separate categories.   They are not included in the conjugation table.

The school grammar conjugation table of current Japanese was not created by induction through the reality of the current usage.   Rather, it replaced the conjugation table for classical Japanese with current words without adjusting the number of columns.   Furthermore, the passive and causative forms are forcefully fit into it.   Therefore the reader will not only formulate real forms such as *yoma-nai*, *yomo-o*, *yoma-reru*, *oki-saseru*, but also non-existing forms such as **yomo-nai*, **yoma-u*, **yoma-rareru*, **oki-seru* in Row   .   In Rows   and   there are unnecessary duplications.   This table is inappropriate for use in Japanese language classrooms.   It at least has to be modified to the level of Chart 2-1.

Classical Japanese scholars in the Edo period did not have a method of transcribing phonemes. Currently, there is no reason we should rely on kana to describe the language.   Chart 2-3 is the transcription of Chart 2-1 at the phonemic level.

It is problematic that, in school grammar, the majority of regular verbs (Five-Rows Verbs, Upper One-Row Verbs, Lower One-Row Verbs) and the very few, irregular verbs, which include *suru* 'do' and *kuru* 'come', are treated as equal categories. This practice obscures the regularity that the majority of verbs exhibit.   Classical Japanese scholars called such irregular verbs "irregular case verbs (*henkaku dōshi*)" and treated them separately.   We should re-adopt their intelligent approach. The only difference between Upper One-Row Verbs (*okiru* and the like) and Lower One-Row Verbs (such as *nageru)* is that the stem ends with *-i* or *-e*, as shown in Charts 2-1 and 2-3.   Otherwise, they conjugate in exactly the same way; there is no need for differentiating the two.   If one applies the same level of differentiation to Five-Rows Verbs, one will have to separate the verbs according to the consonant at the end of the stem, e.g., *-m-* group as in *yom-* 'read', and *-g-* group as in *oyog-* 'swim', and so on.   The current One-Row Verbs used to conjugate *oki<u>z</u>u* 'get up (negative)', *o<u>k</u>u*, *o<u>k</u>uru*, and *nage<u>z</u>u* 'throw (negative)', *na<u>g</u>u*, *na<u>g</u>uru,* and so on, in classical language, and it used to be that the underlined sound in the examples had to be written out. This is the only reason these two groups of verbs are differentiated in school grammar.

● Assigning Conjugation Lexically

As shown in Charts 2-3, there are only two types of regular verbs.   The stem of one type ends with a vowel (Upper One-Row and Lower One-Row in school grammar), and the stem of the other type ends with a consonant (Five-Rows Conjugation in school grammar).

Here is a look at the verbs in Chart 2-3 in terms of consonants and vowels.

	[preceding part]	[succeeding part]	[middle part]
1.	Ends with a consonant	When begins with a consonant	One vowel
2.	Ends with a consonant	When begins with a vowel	None
3.	Ends with a vowel	When begins with a consonant	None
4.	Ends with a vowel	When begins with a vowel	One consonant

This shows that, only when one consonant is followed by another, or one vowel is followed by another at the morpheme boundary, a vowel appears between the consonants and a consonant appears between the vowels respectively.   In other conditions no action occurs at the boundary (middle part).

A simpler description is possible when one utilizes this singular manifestaton of the middle part. In Chart 2-3, let us attach the middle part to the head of succeeding part and re-organize the succeeding part as follows:

-ana-(i)	-azuni	-anaide
-inagara	-imas-(u)	
-ru	-reba	-rare-(ru)
-sase-(ru)		
-yō		

Once we have done this, we establish the rule: When two consecutive consonants or two consecutive vowels occur at a morpheme boundary, the second consonant or vowel respectively must be deleted.   Here is what we obtain by applying this rule.   («   » marks what has been deleted.)

1. yom- + yō →yom-«y »ō→yomō
2. yom- + -ana(i) → yom-ana(i) → <no change>
3. oki- + -yō →oki-yō → <no change>
4. oki- + -ana(i) → oki -«a »ana(i) → okina(i)

This way one only needs to remember the stem-ending affix, and there is no need to memorize the cumbersome conjugation table. While in school grammar one spends the same amount of effort looking up every conjugation form, this approach allows lookup in stages.   In 2. and 3. in the above list, one does not have to do anything.

● Assigning Conjugation by Types

The aforementioned approach works with the contemporary common dialect, but it does not work with other dialects, nor does it apply to various conjugation systems in historical dialects.

For example, one dialect shares *yomanai* 'read (negative)' with the common dialect, but it has *okiranai* 'get up, negative' instead of *okinai*.   Another dialect shares *yomō* 'read, volition' with the common dialect but instead of *okiyō* 'get up, volition' it has *okirō*.   In the former example, *-ana(i)* is replaced with *-rana(i)*; in the latter example *-yō* is replaced with *-rō*.   We are unable to explain where *r* in *-rana(i)* came from, nor we know why *r* replaces *y* in *-rō*.

In a dialect where *okuru* is used instead of *okiru* 'get up' or in historical dialects, the conjugation rule cannot be described by deletion of sounds at the morpheme boundary alone; stem exchange needs to be taken into consideration.

Figure 2-1 is an attempt to use a flow chart to show how to designate conjugation.   It is built on the view that the process is based on the correlation between the form and the linguistically meaningful classification (distinction between consonant and vowel, difference in meaning, etc.).

Figure 2-1:   Flow Chart for Designating Verb "Conjugation"
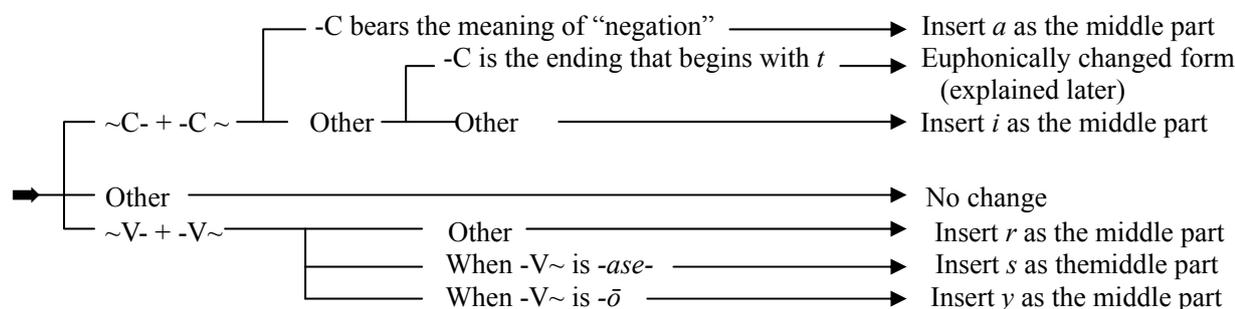
Note: C designates Consonant, V designates Vowel, ~C- means that the preceding part ends with a consonant, ~V- means that the preceding part ends with a vowel, -C~ means that the succeeding part begins with a consonant, and -V~ means that the succeeding part   begins with a vowel.
This approach is the same as the lexical approach to conjugation designation in that there is no need for processing unless consecutive consonants or consecutive vowels occur at the morpheme boundary.   The predominant feature of this flow chart is that it shows the complexity of processing

in stages by branching.   More complex processing is required if more branching is shown for the word form. The closer the word form is to the line leading to the middle line where it is marked "no change," the simpler the processing is to generate it. Other than memorizing the stem-affix-ending (Chart 2-4), one needs only to remember to insert *i* between the two consecutive consonants, and *r* between the two consecutive vowels at the morpheme boundary.   The only other things one needs to remember are the few exceptional endings and affixes and how to process them.

If there is no branching of designation by exceptions, one only needs to go back to the middle line for processing.   In a dialect that has the form *-(r)-ō* instead of *-(y)-ō*, the processing is simpler with this chart since there is no branching for *-yō*.   In a dialect where the negative form *-na-(i)* is replaced with *-ana-(i)*, it becomes clear that the inserted *a* in the middle part was included in the course of processing the succeeding part *-na(i)*.

The processing in the right column of the chart is also not limited to deletion only, and flexible handling is possible.

Please note, however, that this chart is not equipped to handle euphonically changed forms, forms which are generated when a preceding part that ends with a consonant is combined with an ending that begins with *t* (*-ta, -tara, -tari, -te*, etc.), e.g., *yonda* and *kaita*. This is because in a euphonically changed form, the preceding part and middle part are fused.   The initial sound *t* in the succeeding part may also change to *d*.

Chart 2-4: Examples of Stems, Affixes, and Endings

- Examples of Stems
- Stems ending in consonants (Five-Rows Verbs in school grammar)

yom- (yomu), *tat-* (tatsu), *oyog-* (oyogu),   *odorok-* (odoroku)
waraw- (warau —delete *w* in *wi, wu, wo* after the conjugation is completed)

- Stems ending in vowels (Upper One-Row Verbs and Lower One-Row Verbs in school grammar)

mi- (miru)   *oki-* (okiru)   *ne-* (neru)   *nage-* (nageru)

- Affixes

-ase- (causative)   *-are-* (passive)   *-e-* (potential)
-mas-   (politeness – takes special endings. They are exceptions.)

- Forms "conjugating" like adjectives when function aspreceding part , explained later.

-na- (~nai: negation) *-ta-* (~tai)   *-yasu-* (~yasui)   *-niku-* (~nikui)

- Endings

-u (ending for the so called conclusive form and adnominal form),   *-ō* (u/yō),   *-una* (prohibition)
-e/o (ending for the command form.   It shows up as *e* with the preceding part that ends with a consonant, *o* with the preceding part that ends with a vowel)
-ni (ni of purpose),   *-nagara, -ø* (cessation.   Hereafter, *-ø* denotes lack of a visible morpheme.)

- With the meaning of negation

-naide,   -zuni

- In the euphonically chaned forms (explained later)

-ta,   -tara, -tari, -te, -tewa, -tya, -temo

Chart 2-5: Euphonically Changed Form of Verbs

～m- ＋ -t～	}	→ ～Nd～	(e.g.)	yom- ＋ -ta	→ yoNda
～n- ＋ -t～				sin- ＋ -ta	→ siNda
～b- ＋ -t～				tob- ＋ -ta	→ toNda
～g- ＋ -t～	→	～Id～		kog- ＋ -ta	→ koIda
～k- ＋ -t～	→	～Id～		kak- ＋ -ta	→ kaIta

∼w- + -t∼			kaw- + -ta	→	kaQta
∼t- + -t∼	} →	∼Qt∼	tat- + -ta	→	taQta
∼r- + -t∼			tor- + -ta	→	toQta

Chart 2-6: Rules of Generating Euphonically Changed Form

- Succeeding Part
  - The preceding part ends with a nasal ([m], [n]) or a voiced consonant ([b], [g]) → [t∼] is voiced to become [d∼].
  - The preceding part ends in another sound → <[t∼] remains as is>
- preceding Part
  - The preceding part ends with [k] or [g] → The ending of the preceding part changes to [i].
  - The preceding part ends with another sound and the succeeding part begins with [t]→ The ending of the preceding part changes to /Q/
  - The preceding part ends with another sound and the succeeding part begins with [d]   → The ending of the preceding part changes to /N/.

The consonant at the end of the preceding part determines which euphonically changed form is generated.   (∼s- is an exception.   It has the regular conjugation.)   It is not too much trouble to memorize all the rules listed in Chart 2-5, but the rules can be learned separately for the preceding part and the succeeding part as in Chart 2-6.   Nasal and voiced sounds tend to affect the condition of language phenomena.   For instance, *yon* ('four') may be pronounced *yo* only when the immediately following sound is a nasal or voiced. When the succeeding sound is voiceless, the gemminate consonant (*sokuon)* /Q/ appears.   When the succeeding sound is voiced, the syllabic nasal (*hatsuon*) /N/ appears.   This phenomenon is widely seen in onomatopoeia.   The chart provides the learner with broader learning strategies than simple memorizeation of the specific rules for euphonic changes in verb forms.

- Conjugation of Adjectives

Adjectives do not pose complex problems as verbs do, because they can be cleanly split into the preceding part and the succeeding part with no middle part in between.   The succeeding part (endings) can be shown as follows:

-i	-kereba	-ku
-kute	-kuteha (kucha)	-kutemo
-katta	-kattara	-kattari

Morphologically, adjectives belong to a completely separate word type from verbs.   There is no need to group their endings with those of verbs.   Etymologically, *-katta*, *-kattara*, and so on, contain the verb *aru*, but at present these words are completely fused with the rest both morphologically and in accentuation.   In school grammar, there is the practice of creating the middle part *-kat-* in order to obtain the common endings, *-ta* and *-tara*, with verbs, but this unnecessary.

Please note that, with affixes that derive adjectives from verbs (affixes that attach to verbs but take adjectival endings), such as *-nai*, *-tai*, and *-yasui*, the verb-type conjugation occurs in the front part and the adjective-type conjugation occurs in the rear part, with an affix in between.

Conversely, there are verb-type end-of-the-word affixes that are attached to adjectives, such as *-garu*.

- Conjugation of the Copula

The word *da* constitutes a class of its own, and it is not possible to extract the stem and ending by comparing it with words in the same category.   One must simply memorize the word as a paradigm. With so-called *na*-adjectives, one must consider that morphologically the *da* part is an independent word, i.e., the copula. (*Darō* is an auxiliary verb and *nara* is a conjunctive particle, and not a variant of *da*.)

da	na	ni
de	dewa (ja)	demo
data	dattara	dattari

- Conjugation of Auxiliary Verbs

There is no conjugation pattern *per se* for auxiliary verbs.   If the auxiliary verb is of the adjective-type, such as *rashii* (conjecture), it has the same conjugation pattern as adjectives.
→ 動詞活用の見分け方 How to differentiate verb conjugation (2-M), 活用 Conjugation (7-D), 活用とアクセント Conjugation and Accent (2-B)

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<div align="right">(Yanaike Makoto)</div>