

Japanese Grammar Rainbow

New vistas on Japanese morphology and syntax

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[01/29/10 revision: fixed typos, still contains several TBDs]

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PROLOGUE

So, you're looking for Japanese language-study materials! You're in luck. There's a veritable feast of publications on the market. In the following table, I attempt to convey the breadth and variety of the smorgasbord

RESOURCE	Drill-oriented, exercise/quiz-intensive	Practical (and serious)	Practical (and whimsical)	Theoretical, solid	Theoretical, weak	Theoretical, aesthetic	Contemplative, philosophical
Taeko Kamiya, <i>Japanese Particle Workbook</i> ⁽¹⁾							
AJALT, <i>Japanese for Busy People</i>							
Susumu Nagara et al, <i>Japanese for Everyone</i>							
Kakuko Shoji, <i>Basic Connections: Making Your Japanese Flow</i>							
Rita Lampkin, <i>Japanese Verbs & Essentials of Grammar: A Practical Guide to the Mastery of Japanese</i>							
Taizo Ishizaka, Preface to <i>All-Romanized English-Japanese Dictionary</i>							
Nobuo Sato, <i>The Magical Power of Suru: Japanese Verbs Made Easy</i>							
Kaiser, Ichikawa, Kobayashi & Yamamoto, <i>Japanese: A Comprehensive Grammar</i>							
Masayoshi Shibatani, <i>The languages of Japan</i>							
Akihiko Yonekawa, <i>Beyond Polite Japanese: A Dictionary of Japanese Slang and Colloquialisms</i>							
<i>Mangajin's Basic Japanese through comics</i> ⁽²⁾							
Jay Rubin, <i>Making Sense of Japanese: What the Textbooks Don't Tell You</i>							
Haruhiko Kindaichi, <i>The Japanese Language</i>							
Various treatises on Transformational Generative Grammar, where "Japanese word order" figures as a perennial straw-dog.							
This book, <i>The Japanese Language — in its Own Image</i>							

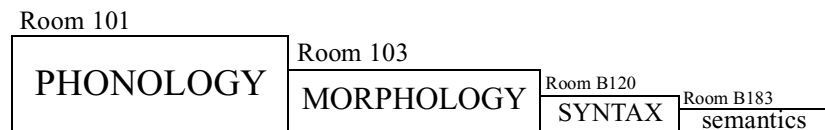
1. For details, please see **References** on page 80.
2. This is by way of representing various primary sources such as periodicals, comics, movies, novels — all those materials that just "are," with no scholarly agenda or academic *ism* served.

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In the bottom row of the table (previous page), I show where this book might fit into the mix. By design, it leans in the direction of aesthetics and contemplation: Japanese grammar as an *objet d'art*. Overall, it's the sort of thing you might peruse for relaxation, in-between sessions with a more serious learning tool.

However, there is a serious side, too: The longish section entitled **Examples of Japanese Morphology in Action** is standard pedagogical fare, chock full of unmediated Japanese from various sources. Likewise the chapter on syntax which comprises the second half of the book.

A word about morphology and syntax. The linguists I knew years ago tended to view those topics this way...

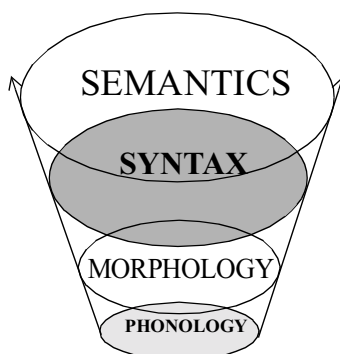


... in a context where phonology reigned supreme.

Since phonology overlaps with biology and acoustics, perhaps there was a feeling that it would help establish the fledging field of Linguistics “as a science”? Later, by casting syntax in the guise of pseudo-mathematics, the Linguistics Establishment could add that to their repertoire and still look respectable (= ‘heavy’, intellectual, manly)? Whereas, semantics would still be regarded as relatively soft, feminine and “unscientific,” hence unsuitable for a position in the vanguard of Linguistics?

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At any rate, for those of us in the commonsensical world, the true relationship of the parts has always seemed closer to the reverse...



...with all forces aligned in the service of Queen Semantics in her aerie.⁽¹⁾

For the topics covered in this book — Morphology and Syntax — these pictures don't matter all that much, since both of my topics will always fall close to the center of the typological spectrum. Still, just for fun, I thought I'd try locating them in linguistic space.

But what *is* morphology?

To some of us, 'morphology' might sound about as useful as side-pockets on a cat, as vexing as 'firmware' in a computer, wedged in-between hardware and software, when all those years you had been told that the paradigm was a hardware/software dichotomy; or, bringing it back to language: when all those years you had been told

-
1. There is evidence that Semantics may finally be coming into her own: In Li & Thompson (p. 19-20), the authors actually allow *meaning* a kind of veto power over syntactic theory as they work their way toward a suitable word-order typology for the Chinese language. (For my own example of everything-else-in-the-service-of-Semantics, see *Appendix E: The Truth About Small Talk* on page 115 below.) But in the heyday of TGG, would the concept have been heresy? We honestly can't say. In summarizing or introducing TGG, some are willing to give it credit for beginning to bring semantics into the fold (Lakoff p. 4; Pinker p. 99) as an integral part of syntactic analysis. Others are equally certain that TGG took an "uncompromising stand" favoring "the exclusion of semantic considerations from grammatical description" (Weinreich, p. 145; Liles passim). (Implicitly, Li & Thompson would be coming at it from the latter direction, as though going against a well-known party-line.)

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that the paradigm was Pronunciation and Grammar. Who needs Morphology in the middle? The very word itself is ugly and irksome. Indeed, it appears that even some professional linguists eschew it, preferring to write a chapter about “Word formation” (Shibatani, p. 215-256) or “Word Structure” (Li and Thompson, p. 28-84).

Here I’ve approached the subject in a grass roots way, just playing with Japanese parts of speech as an outsider, not as part of the Linguistics Establishment (with which I was affiliated years ago as an erstwhile sinologist). And that led naturally to a chapter on syntax. Or rather, a chapter on the two separate *layers* of Japanese syntax, as I see it.

The rainbow analogy: Picture a grade school classroom. It contains, say, six sets of crayons, each comprised of 24 colors. At the conclusion of a recent project, all the crayons wound up in a single heap. For whatever reason (reward, punishment, neutral activity to pass the time), the teacher asks you to help her organize the heap of 144 jumbled crayons. She has a bias: She requests that you sequence the crayons alphabetically by their labels. That way, such terms as FOREST GREEN and TURTLE GREEN can be matched against her manual list or a computerized inventory of classroom supplies. By contrast, sorting the heap by rainbow order would be a nonverbal activity, and it would not be computer-friendly, only kid-friendly. So the teacher doesn’t mention that alternative approach. Moreover, at your tender age it may not even occur to you to that such an approach exists.⁽²⁾ Imagine your surprise upon realizing, in your own time, that such a collection of crayons might also be sorted naturally, by rainbow order, in a sort of self-organizing process.

If the conventional Japanese curriculum is populated by books that “sort alphabetically by color-name label, then this book is probably unique in showing how the same material could be sorted instead “by rainbow order.” Not to say any random language would be amenable to this approach. Spoken Japanese has a special kind of beauty and logic that

2. After all, “a rainbow has [only] five colors,” not 24, with black, white and grey into the mix, further confusing the issue. Also, while attempting to do the rainbow sort visually, one might be confused by the labels ‘RED VIOLET’ and ‘VIOLET RED’. Don’t they suggest that the rainbow must somehow loop back on itself to accommodate them? The notion of a color circle might be confusing at this age. Sixty years later it might occur to you why those two color names are so memorable: it’s *because* they imply a circular rainbow, which is nonsensical in the physics lab at least. Meanwhile, those two color names remain locked in a kind of grade school ghetto or magic bubble, good for triggering childhood nostalgia, but not much else.

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makes it suitable for being taken apart and fitted back together in this particular way. But lest one think this is all about aesthetics, we hasten to add that there are practical consequences too when one lets the language “speak for itself.” An example is the presentation of adjective inflections on page 46 below, which is far superior to the conventional scheme.

1.0 JAPANESE WORD FORMATION

1.1 The Morphology Gradient

Eventually, most students of the language *will* develop in their mind's eye a picture of Japanese grammar that is not too different from the one I present graphically on page 16. What sets this book apart is (a) its articulation off the “rainbow” and (b) its introduction of such a unifying concept sooner rather than later in the curriculum. This way, the student has a pleasant framework for tackling the more conventional topics such as verb conjugation and adjective inflection, which we cover on pages 21-52).

Not that English seems lacking in morphemic variation,⁽³⁾ but when I think of Japanese parts of speech, I envision a spectrum of word-types that is at once broader and more fluid than our own; a place where any element — seemingly — can transmute readily into its neighbor on the roomy continuum.⁽⁴⁾ By contrast, when I think of English word-formation, I recall the contentious cases such as *finalize* and *interface*. Despite their utility and popularity in many quarters, such words pass through decades of chest-beating opposition before they are accepted into Canonical English; and even then, perhaps it is only because

3. E.g., we can take the words *subtle/subtly/subtlety* or *drive/drove/driven* and devise rules to explain their behavior as they ‘morph’ into one another. (The status of ‘morph’ as a verb may be questionable, but it provides a much needed contrast to the forbidding word ‘morphology’.)

4. In Linguistics, the technical term for this sort of thing is “[being] productive,” as in: “Compounding is by far the most productive process of new word creation. In Japanese, compounding is a particularly productive process for it combines all categories of elements...” (Shibatani, p. 237).

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those beating their chests have grown old and feeble, and are no longer heard.⁽⁵⁾

Subjectively, at least, the climate of English seems restrictive, while that of Japanese seems wide open and accommodating.

But “wide open” can become another kind of problem in its own right: To the native speaker, “wide open” might mean uttering *Akakattaroo*⁽⁶⁾ just for fun, as a natural and effortless modulation of *akai* (red). To the foreign student, this same conversational event might mean invoking a rule about dropping *-i* and adding *-ku* to transform *akai* into *akaku* (‘redness’), which in turn must be inflected one of seven ways from Sunday, to express the correct state of ‘possessing redness.’ (And, at which level of politeness, please?) All of that just to convey something vague and inconsequential: “Um, it was red, wouldn’t you say?”

To help establish where Japanese lies in “grammatical space,” let’s take a look at the same thought expressed in Chinese. As a student of Mandarin Chinese, one might cobble together an English-to-Chinese translation in one of the following ways:

.M, dǎgǎi .shi hōng.de.ne
probably COPULA red PARTICLE
‘Mm, probably it was red.’

Bù.shi hōng.de.ba?
not COP. red PARTICLE
‘Wasn’t it red, most likely?’

.Shi hōng.de, duì.bu.duì?
COP. red correct-not-correct
‘It was red, wouldn’t you say?’

Note of interest to the Chinese major only: The copula *shì* often takes neutral tone (.*shi*). Meanwhile, its negation, *bù*, becomes *bù*, following tone sandhi, the neutral tone on .*shi* notwithstanding.

5. In the early 1950s, Dwight Eisenhower coined the term *finalize* (= “to place a draft in its final form, suitable for distribution”). From there, it spread rapidly through the business community. There followed an outcry from all Guardians of the Language, one of whom happened to be my mother: “How can they do that to an *adjective*? Is nothing sacred to these boors?” she would complain, referring to her boss and sundry others at Del Monte circa 1957. As of 2003, the word *finalize* sits quietly in the dictionary without giving the slightest hint that it was once the center of such bitter contention, a word guaranteed to make an English major from Berkeley feel queasy whenever it was spoken by her boss in the City. For the word *interface*, it was a different issue: Here, Guardians of the Language found themselves colliding head-on with the computer science subculture of the 1980s. There were many new entities and processes that *needed names*, that’s all. Simple as that. But Guardians of the Language treated the explosion of vocabulary as a conspiracy, a sign of moral weakness, a sky that might be falling: as if morally strong writers with good dictionaries would find a way to express *interface* (as a verb) properly, in old-fashioned English. When instead, the Guardians should have been, if anything, thankful that someone had supplied such words to fill gaping holes in our language. This is not to deny that Japanese has its own Guardians of the Language. But the issues there are different. See the note about ‘* *hana shiroi*’ versus *shiroi hana* on page 108.
6. Orthography note: I use the spelling convention where long vowels are represented by doubling (oo) rather than by a macron: *Akakattarō*. In this instance, I’ve applied a capital ‘A’ to the word as a reminder that an adjective may function as a full sentence in Japanese, more especially when the adjective happens to have been inflected to this extent, thus taking on a verb-like quality.

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Thus, the friendly sandbox of Chinese. A place where one can toy pleasantly with this and that linguistic gadget until the right “handles” have been attached to **hōng** and the utterance sounds passable? So it may seem from a certain angle. For like the proverbial Country Lawyer, Chinese grammar may appear simple, even clunky on the surface; but really it abounds with careful nuances and distinctions of its own, hidden just beneath the surface, and never will they manifest themselves in something so obvious as a neat set of rules. For example, Chinese turns out to be an “aspect language,” which means it is free of any tense markers; however, what it does have is a perfective particle *-le* that is easily misperceived as (or misused as if it were) a “past tense marker” by the Beginning, the Intermediate, and the Advanced student alike. So great is the potential for confusion about this particle that Li & Thompson devote a whole section to “Where Not [!] to Use *-le*.”⁽⁷⁾

By comparison, Japanese grammar carries on its sleeve the allure of a grammar that is immediately complex but also elegant and crisp (“Learn *these* rules, and you’ll *know* how to inflect an adjective...”). To some of us, its beauty might even be blinding. By the time we recognize its restrictive and quirky and unforgiving qualities, it’s too late. We’ve been smitten! In the current example (expressing in Japanese the opinion that “It was red, wouldn’t you say?”), one is confined to that one word *akai*: somehow, *whatever* it is we’re going to say, it must be expressed as a grammatical variation *on* the one word *akai*. There are none of those Chinese “handles” to play with. What happened to “wide open” and my “roomy continuum”? For the nonce, it feels like claustrophobia instead — this closely fitted clockwork of the Japanese grammar machine.

7. Li & Thompson, p. 202-207. By reading their subsection “A Perfectivizing Expression Takes the Place of *-le*” (p. 205-207) along with Y.R. Chao’s examination of the Assertive Mode for adjectival predicates (Chao p. 88-90; also p. 721: the assertive predicate), we can begin to glean that the presence of the assertive prefix **shǐ** (copula) before the adjectival predicate **hōng** is what helps lend a perfective flavor to this sentence. (I.e., this makes it — in my mind — an example of “Where Not to Use *-le*”, even though **shǐ** is *not* on Li’s list of perfectivizing expressions that take the place of *-le*; hence my foray into Chao’s compendium, which is a comprehensive and well-indexed gold mine, yes, but distinctly Old China in its desultory organization.) Why do I waffle by saying “helps lend” instead of plain “lends”? Because the sentence could just as well translate English present tense, “Mm, probably it is red” instead of “Mm, probably it was red.” Why did I append the particle *.ne*? Simply because *without* it the first sentence would have felt naked. In Li & Thompson, pages 300-305 are devoted to “*ne* as ‘Response to Expectation’,” which covers the flavor of my appended *.ne*.

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Chinese or Japanese? If you're just starting out, pick your poison carefully, for the flavors are sharp in their contrast, and not likely to appeal both at once to a single person's taste.⁽⁸⁾

Getting back to the topic at hand: What, after all, *is* 'Akakattaroo'?

Is it an adjective with a verbal appendage?

A verb with an adjectival root?

A full sentence masquerading as a word?⁽⁹⁾

The best answer is: all the above. And it's our fault if those boxy categories (adjective? verb? word? sentence?) lead to apparent complexity or paradox in the analysis.

That was one version of what I call the Japanese Adjective Experience: seeing a word you thought was "only an adjective" now festooned by an inflectional ending. But for the full Japanese Adjective Experience, you need to encounter something like the following, which is a plausible response to the utterance above:

Akakunakatta desu.

[No,] it wasn't red.

Literally, "[It] is [a case of] redness-wasn't."

-
8. Albeit many degree programs force you study both, mainly because of tradition, as if to say: "Well, that's what we had to do; so you do it, too: pay your dues." For example, most of my Japanese studies were forced on me during a 15-year period of being (in my own mind) "a Chinese major." Often I went to the Japanese classes reluctantly, sometimes with fear and loathing. It was twenty-five years after I had earned the doctorate in Chinese that I decided Japanese was my passion, too late to be my major. Indeed, "the moon in foreign lands is rounder than the Chinese moon."
 9. Japanese is a long way from having full-blown Eskimo or Lakota flavor, where a "word" sometimes looks more like a paragraph; but in passing one should note the following subheading in Kindaichi: "Japanese words are long." It's a whimsical section where Kindaichi thinks out loud about the resemblance or lack thereof between his language and the Polynesian languages. True, one can say Japanese has the *potential* for going that direction, as suggested by this ancient name for the Japanese nation: *Toyoashihara-no-chiihoaki-no-nagaihoaki-no-mizuho-no-kuni* (Kindaichi p. 141). But in general, no sooner has the language formed a new compound than it ruthlessly chops it back down to "ideal size" (2 to 4 moras). For example: 'personal computer' => *paasonaru-konpyuutaa* => *pasokon*. This phenomenon is discussed in amusing detail in Shibatani, p. 254-256.

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Not only do Japanese adjectives “inflect like verbs”; part of their interest lies in the fact that they often bring about the juxtaposition of past tense (*-nakatta*) and present tense (*desu*).⁽¹⁰⁾ This odd bit of packaging is what tickles the brain of the English-speaking student. And when you think about it, it also has far-reaching consequences for how one poses or answers a simple question about... oh, let’s say, last week’s weather that wasn’t so great. (See *Appendix E: The Truth About Small Talk*.)

Those were two quick examples of an adjective “acting like a verb.” Fairly early on, the student will have heard something about that feature of Japanese already. But there’s overlap in the other direction, too, and this is where it gets interesting: Turn to the place where our *verb* conjugations begin, on page 21, and what’s the very first thing you see? The ending *-nai*, followed by *-nakatta*, *-nakattara*, *-nakereba*, and other forms — all of which look pretty darn *adjectival* (to anyone who has ever crossed paths with a Japanese adjective). Indeed, the negative ending *-nai* is classified by Lampkin and others as a True Adjective!⁽¹¹⁾

Conversely, one of very first items in Ishizaka’s section on “adjectives” is the word *tooku*, derived from *tooi*; he presents it in a proverb, where the word *tooku* (‘distance’) features “as a noun by itself”:

- Tooku no shinrui yori chikaku no tanin.

Better a “stranger” of the vicinity than a brother in the distance. (after Ishizaka p. 12)

Lit. “A relative in the distance than, an unrelated person of the vicinity [is better].”

On a related note, Rita Lampkin devotes a section to “Adverbs as Nouns,” the idea being that a word such as *tooku* actually passes through two stages of metamorphosis to become a noun: adjective ==> adverb ==> noun. Here is one of her examples (Lampkin p. 87):

- Mainichi asa hayaku kara yoru osoku made hatarakimasu.

Every day I work from early [in the] morning until late at night.

10. Not that the word *desu* is required for conveying the meaning in this case. It’s just that *Akakunakatta desu* happens to be a Normal/Polite version of *Akakunakatta* (whose tone sans *desu* would be Casual, bordering on Impolite). Another Normal/Polite version is: *akaku arimasen deshita* (literally, “redness, there was none”). See section 1.2.2 for the full story on how adjectives are inflected.

11. Other verb endings that are regarded as True Adjectives are *-hoshii*, *-tai*, *-nikui*, *-yasui*, and *-hoshii*. Together these form a subcategory of endings that are known as Auxiliaries. See Lampkin, pages 43 and 79.

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Adjectives that would rather not modify nouns but want to *be* nouns, all on their own?

Nouns that hover on the threshold, ready to fall back into an adverbial state?

Verb endings that exhibit all the behavior of True Adjectives...

...which themselves are described elsewhere as conjugating like verbs?

Yes, it's all circular if you like. And at some point you have to ask yourself: Is the standard verb/adjective/noun distinction even *real* in Japanese, or is it just a foreign taxonomy forced on the language by some long-ago scholar in a desperate attempt to navigate the lexicon? (One pictures the 16th century missionary João Rodriguez in a tent, working by an oil lamp in the small hours.) In considering this question, I have not been able to attain a clear sense of direction: On the one hand, there is considerable evidence that the noun/adjective/verb paradigm is indeed real for Japanese parts of speech (i.e., that it is linguistically and culturally legitimate; part of how Japanese scholars have been analyzing their own language for the past two hundred years). On the other hand, there are hints now and again of an alternative analysis that would be better and more truly Japanese, if only one could discover what it was. Let's call it a Unified Theory of Japanese Morphology (UTJM). That's what one would like to stumble on or devise. That was the impetus for writing this chapter, the idea being that by assembling various verb and adjective conjugatives and "massaging" the data I might come a little closer to discovering a UTJM. Instead, I got no further than the gradient (or "rainbow") notion presented in this section (which is supported by the concrete examples in sections [1.2.1](#) and [1.2.2](#)).

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From a great distance, the general outline of Japanese grammar might be depicted this way:

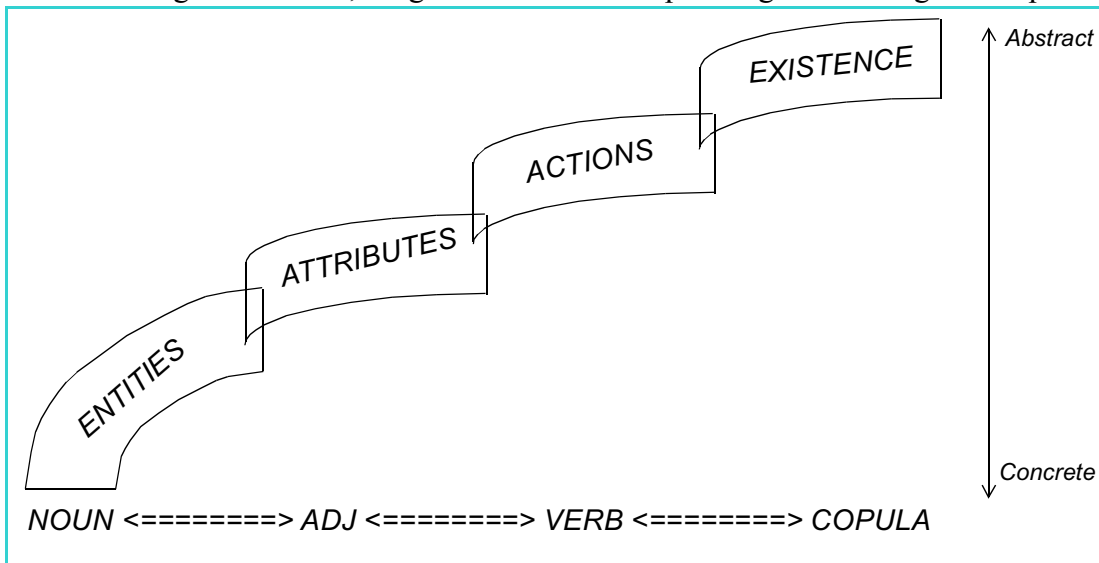


Fig. 1: The parts of speech as seen from a distance

We have discreet parts of speech (NOUN, ADJECTIVE, VERB, COPULA) that correlate with qualities along a more subjective axis (CONCRETE to ABSTRACT). And the two axes interact to produce the following list of grammatical topics:

- *entities* that are denoted by NOUNS
- *attributes* (of the entities) that are given by ADJECTIVES
- *actions* (of the entities) that are described by VERBS
- *existence* (of the entities) as asserted by the COPULA

As suggested by the slightly overlapping shapes in **Figure 1**, a member of one category can sometimes be transformed into a member of an adjacent category. However, depicted in such generalities, this notion of the parts of speech could just as well apply to various other languages. In English, for example, one could say there is an “overlap” of sorts between adjectives and nouns, in the sense that we can suffix *-ness* to *willing* and produce a noun, *willingness*, on the fly if need be (or suffix *-ize* to *final* and spend some years trying to have *finalize* accepted as a verb). Only when we descend for a closer look at the “rainbow” do the uniquely Japanese characteristics emerge (see **Figure 2**). The feeling I get is that the progression of categories is smooth and continuous in Japanese, jerky and discontinuous in English (granted, the difference is probably more perceived than real). Reading up the list in a northeasterly direction, it’s the step that takes us from *akakunakute* to *yomitakatta* that

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I find most telling. Technically, the one is a type of adjective and the other a type of verb, but common sense tells us that they possess a close affinity by virtue of the shared pattern, “2-syllable base + 4-syllable inflection.” At dead center is *kakanakereba*, whose ending *-nakereba* I remark on under *e*-form + *ba* on p. page 37; see footnote to *ikanakereba*.

Mini-essay on *rainbow order*: Picture yourself back in a grade school classroom. It contains, say, six sets of crayons, where each set is comprised of 24 colors. At the conclusion of a recent class project, all these crayons have landed together in a single disordered heap. For whatever reason (reward, punishment, neutral activity to pass the time?), the teacher asks your help in organizing this collection of 144 crayons. But she has a bias: She requests that you sequence the crayons alphabetically by their labels. That way, such terms as FOREST GREEN and TURTLE GREEN can be matched against a manual check list or, better yet, a computerized inventory of classroom supplies. By contrast, sorting the heap by rainbow order would be a nonverbal activity, and as such it would not be computer-friendly, only kid-friendly. Accordingly, the teacher doesn’t mention that alternative approach — the one involving the rainbow. Moreover, at such a tender age it may not even occur to a child that such an approach exists; after all, one has been taught that the rainbow has five or six colors, not 24. Imagine, then, your surprise upon realizing, in your own time, that such a collection of crayons certainly *could* be sorted by rainbow order, in a kind of *self*-organizing process, one that would feel more natural and pleasant than dry alphabetization (granted that certain oddball colors such as BLACK, WHITE, GRAY and SILVER will always be handled more comfortably by the latter approach; each has its merits).

The analogy: If the conventional Japanese curriculum is populated by books that “sort alphabetically by label,” then this book is unique in showing how the same materials may be sorted instead by their natural rainbow order, as it were, against a single overarching principle. That is the idea behind Figures 2 & 3: They provide a kind of “comfort level” to the student, as preparation for the hard work that lies ahead.

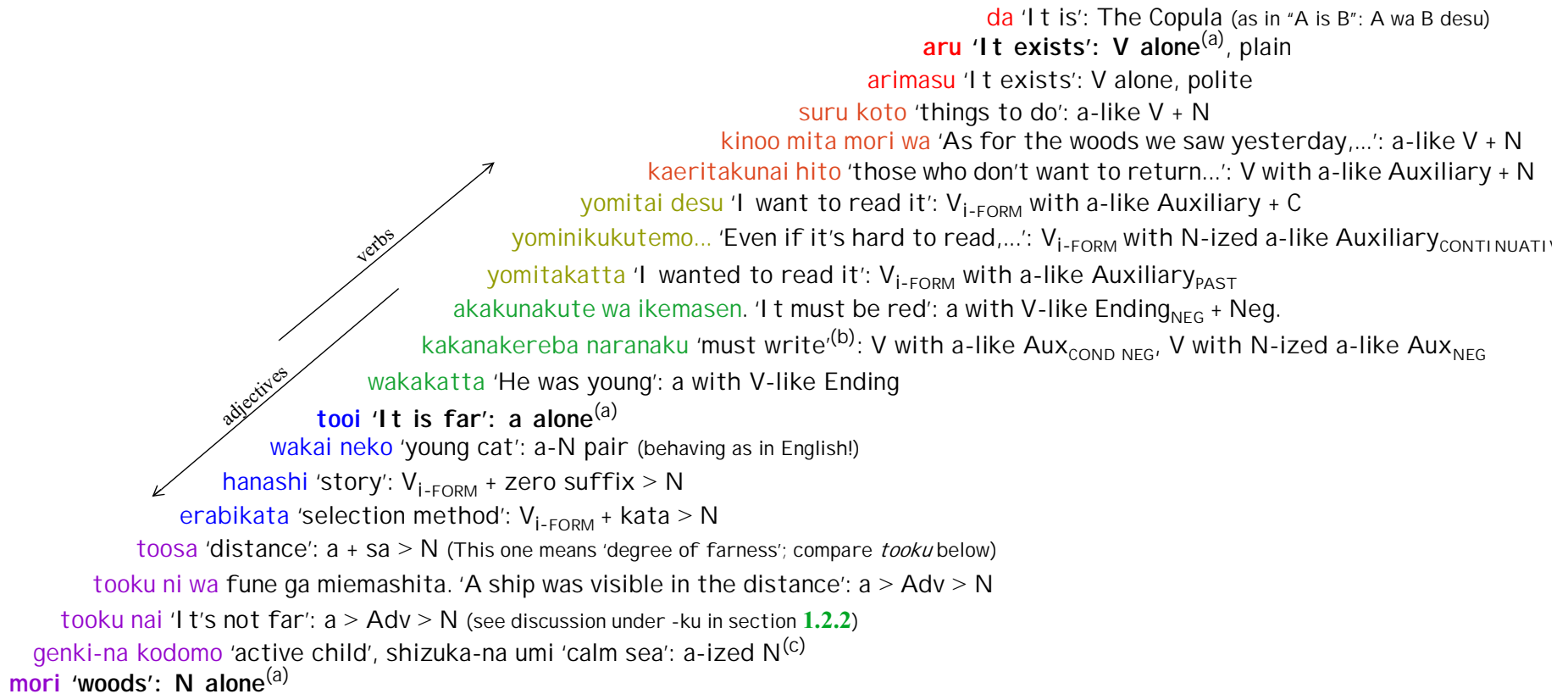
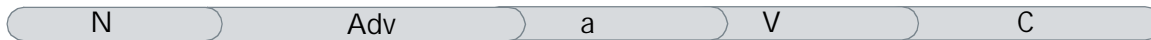


Fig. 2: The morphology gradient (Japanese Grammar Rainbow)^(d)

KEY: N=Noun, Adv=Adverb, a=adjective, V=Verb, C=Copula, '>' = combine to become...

(a) "Alone" is meant in the sense of morphologically alone, i.e., this item has in no way been modulated, morphed or otherwise tweaked on the C <====> N axis. Footnote a is repeated later to highlight two related items: **tooi** and **mori**. Note that *tooi* counts as a complete sentence in Japanese (casual tone).

(b) For a similar but more complete example of the double neg. meaning 'must' see *-nakereba naranaku* under **a-form list — endings that work with kaka-/tabe- base**.

(c) *shizuka* is a "na-adjective" as distinct from an "i-adjective" (= True Adjective). The *na*-adjectives are also called "adjectival nouns," a term that is best understood as referring to a case such as *genki-na* 'healthy' < *genki* 'health, vigor'; but only a few of the *na*-adjectives are "pure" to this degree, yielding a (true and usable) noun when *na* is dropped. For instance, the equivalent of our noun 'calmness, tranquillity' is *shizukesa*, not *shizuka*.

(d) To minimize the clutter of this busy figure, I've dropped the square brackets that would normally go around elements such as implicit [it], and so forth.

Here is the same material again, now with the illustrative words (*da, aru...*) playing second fiddle to the grammatical theme song (The Copula, V Alone, etc.), and with the translations and comments taken out to reduce the clutter:

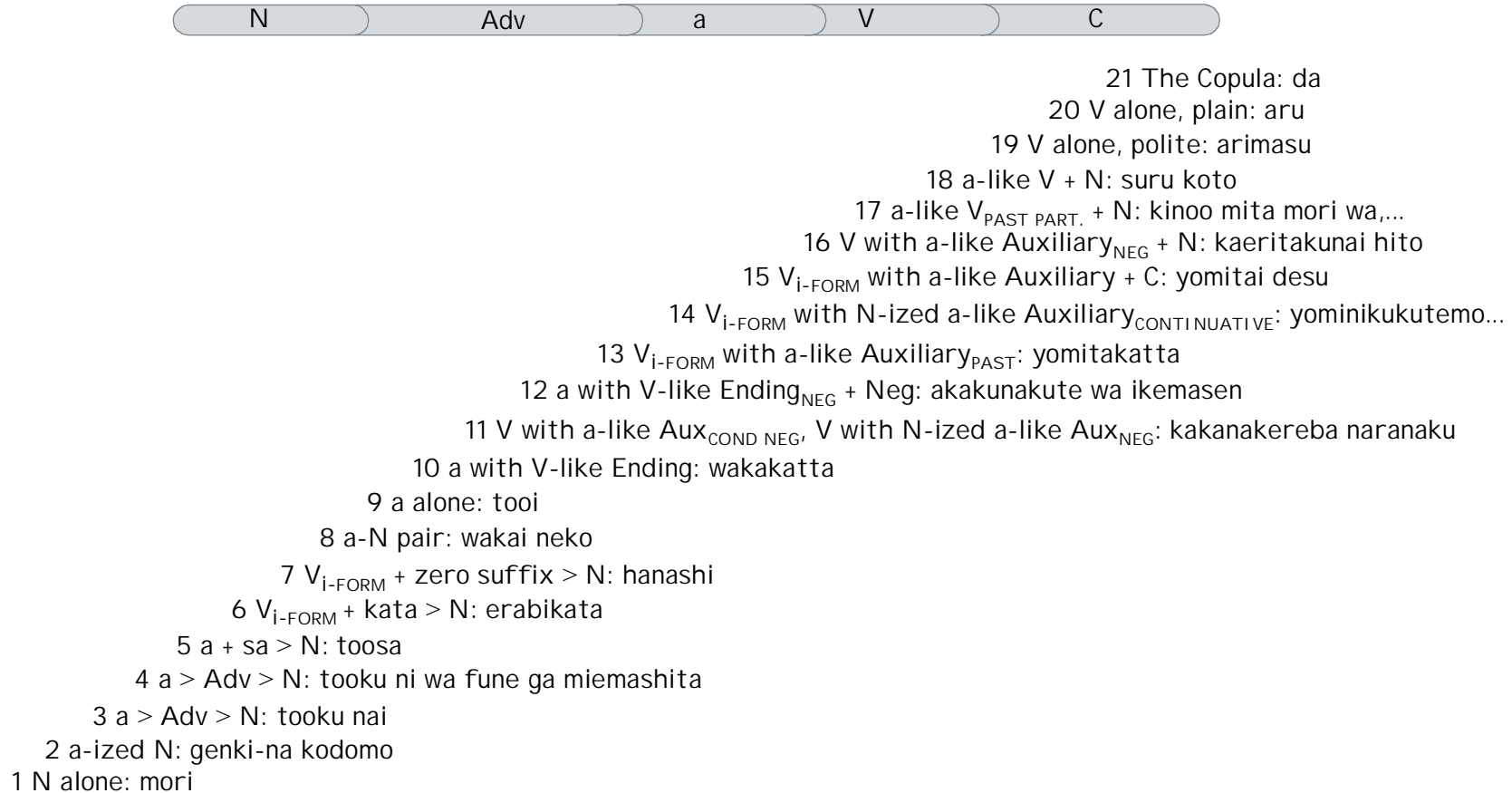


Fig. 3: The morphology gradient — second view, numbered for reference

Both views are important. **Figure 3** emphasizes the grammatical terrain itself; **Figure 2** makes it “real” in terms of the Japanese words you know and love (or will know and love soon, if you’re just beginning the journey).

Japanese Grammar Rainbow

In this scheme (Figure 2 and Figure 3 above), there's an implied right-to-left flow of (potential) metamorphosis: Except for type C, any type can be transformed, by a suffix or by context, into its closest neighbor (or a distant neighbor) to the left:

- *V* can become *a*-like by suffixing *-tai* (or, for that matter, a verb can become adjectival by way of simple juxtaposition: *uru mono* = 'selling-things' = 'things for sale')
- *V* can become *N* by suffixing *-kata* (e.g., *erabu* => *erabikata* 'selection method')
- *a* can become *Adv* by suffixing *-ku* (e.g., *tooi* => *tooku* 'in the distance')
- *Adv* can become *N* by a combination of context and transformation, envisioned (right-to-left) as: $N \leq Adv \leq a$. (See discussion under *-ku* in section 1.2.2)

Thus, one may read Figures 2 & 3 as having a kind of "gravity" that can pull certain grammatical forms from upper-right toward lower-left. (In the book's cover graphic, the arrow labeled "gravity" refers to this same idea, since leftward motion along the rainbow's curve is equivalent to downward motion on the page; shades also of *Gravity's Rainbow* by Thomas Pynchon?)

In this context, how shall we treat the more conventional concept that "Japanese adjectives conjugate just like verbs"? With caution, since it is premised on the following Western-biased hierarchal notion: "It is natural for verbs to conjugate, and it is unnatural for adjectives to conjugate. If adjectives conjugate, too, then they're trying to act like verbs." I call the conventional view hierarchal because it takes the verb as primary and relegates adjectives to a secondary position. I think it is worth trying this approach instead: "In Japanese, both adjectives and verbs undergo inflection." Period. With no opinion stated or implied as to which type might be imitating the other.

Many nouns can be paired with the dummy verb *suru* to "become verbs" (e.g., *benkyoo suru* 'to do studying' = 'to study'), so this phenomenon, too, might be counted as a kind of left-to-right metamorphosis, going "against gravity."¹²

12. For this kind of pairing, the noun tends to be an (old) Chinese loan word such as *renraku* 'contact' or a relatively recent English loan word such as *ookee* 'OK'. The effect is not unlike that of the moderately productive "do drugs/do lunch" construction in English. See *Appendix A: The a-form, i-form... verb classes, Part 1: Origins* where I offer in passing a few comments on Nobuo Sato's *The Magical Power of Suru*.

Japanese Grammar Rainbow

When we zoom in for a view that is even more detailed (in **Figure 4** on page 20), perhaps we can now claim some slight pedagogical value, but with a caveat: At first glance, it might appear in **Figure 4** that we've crossed the boundary into syntax. True, the arrangement of the components left to right mimics a syntactic sequence, but its nature is still morphological — i.e., our focus remains on (pre-syntactic) Parts of Speech, and only in passing do we touch on syntax itself. Putting it another way, in **Figure 4**, we're somewhere on the border between morphology and syntax not quite solidly in one realm or the other. For calling out the various metamorphoses in **Figure 4** (e.g., the metamorphosis of an *a*-like verbal *yomitai* into the verbish adjectival *yomitaku*), I use curved arrows. (With this notation we differentiate the current graphic from **Figure 8** and others in section 2.0 where straight arrows are used to clarify the LEAF-stem vs. stem-LEAF relationships of Japanese syntax.)

For all the detail, the main point of Figures 1-4 is the marvelous fluidity of the parts of speech — their chameleon-like beauty; that's all. So, if you're ready to get down to brass tacks, turn now to the examples in sections **1.2.1** and **1.2.2**, where the layout of the conjugations is heavily influenced by Rita Lampkin's *Japanese Verbs & Essentials of Grammar*, a practical, no-nonsense tour of the same territory.

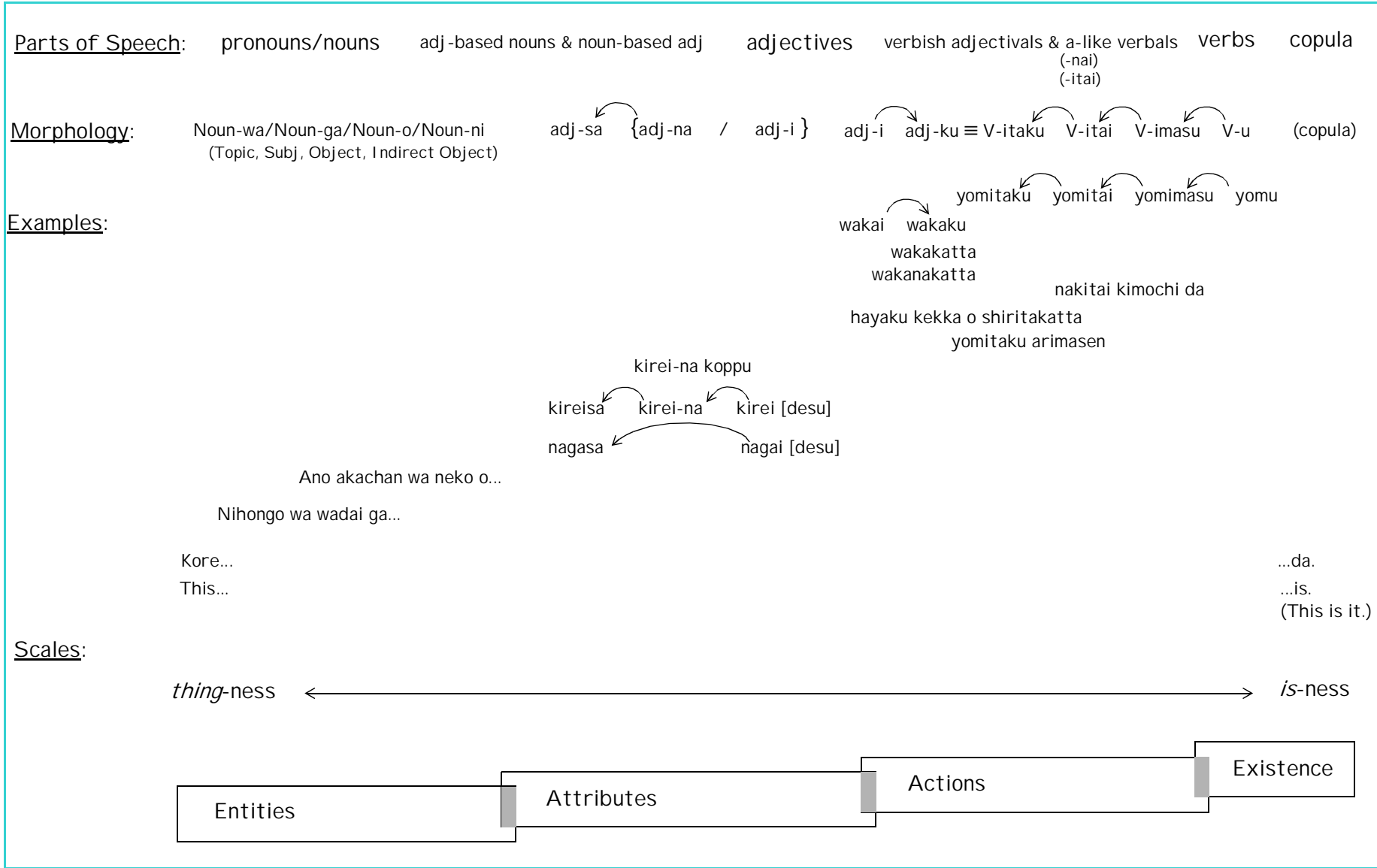


Fig. 4: The morphology gradient — third view

1.2 Examples of Japanese Morphology in Action

1.2.1 Verb Conjugation in *aiueo* order

Our examples of verb conjugation are classified according the following scheme:

a-form list — endings that work with *kaka-/tabe-* base

i-form list — endings that work with *kaki-/tabe-* base

u-form list — endings that work with *kaku/taberu*

e-form — endings that work with *kake-/tabere-* base

oo-form — endings that work with *kakoo-/tabeyoo-* base

te-form — endings that work with *kaite-/tabete-* base

ta-form — endings that work with *kaita-/tabeta-* base

Regarding my “*aiueō*” nomenclature, see [Appendix A: The a-form, i-form... verb classes, Part 1: Origins](#) and [Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion](#).

a-form list — endings that work with *kaka-/tabe-* base

Using the verbs *kaku* and *taberu* as our *u-verb* and *ru-verb* examples, their respective *a-forms* would be *kaka-* and *tabe-*. The corresponding *a-forms* for the Irregular verbs *kuru* and *suru* are *ko-* and *shi-*. (Synonyms for *a-form* are *1st Form*, *Base 1*, and *Negative Base*.)

Endings that work with **a-form** include *-nai*, *-naide*, *-naide kudasai*, *-nakatta*, *-nakattara*, *-nakereba*, *-nakereba narimasen*, *-nakute*, *-nakute mo*, *-nakute mo ii*, *-nakute [wa] ikemasen*, *-seru/saseru*, *-reru/rareru*, *-zu ni*, as illustrated below. each in turn.

These forms relate to items 11-14 in [Figure 3](#) on page 17 above.

- *nai*

* NEGATIVE [CREATES A TRUE ADJECTIVE]

- Kono mado wa dooshite mo akanai. (Casual)

This window won't open.

- Yooshoku wa tabenai desu.

[He] doesn't eat Western food.

- Kasa ga nakute⁽¹³⁾ komatta.

Lacking an umbrella, I was in [a bit of] a fix.

13. Two special cases: (a) Rather than take *-nai* as an ending, the verb *aru* (or *arimasu*) simply becomes *nai*, which conjugates to *naku*, *nakute*, etc. (b) In the ensuing example, *desu* becomes *dewanai* or *janai*.

Japanese Grammar Rainbow

- Watashi no dewanai / Watashi no janai desu.

It is not mine.

- naide

- * NEGATIVE: WITHOUT DOING

- Nani mo iwanaide, heya kara dete itta.

Without saying anything, [he] left the room.

- Saboranaide, shigoto o chanto yari nasai.

Do the job properly without loafing.

Note: Many Japanese verbs are formed by combining a foreign noun with *suru* (e.g., *benkyoo suru* ‘to study’ is built on the medieval Chinese import *mi ʔnqi ʔng* ‘to manage with an effort’); this type is conjugated simply by conjugating *suru*. Other Japanese verbs are formed by welding *-ru* directly on to a foreign noun; in these cases, the resultant verb is conjugated just like any other *ru*-verb: e.g., sabotage => *saboru* (‘to loaf or play truant’) => *saboranai* (the current example); Denny’s => *deniru* => *deniranai* (see example on page 44).

- naide kudasai

- * IMPERATIVE NEGATIVE, POLITE

- Kabe ni e o kakanaide kudasai.

Please don’t draw pictures on the wall.

- Kabe ni e o kakenaide kudasai.

Please don’t hang pictures on the wall.⁽¹⁴⁾

- nakatta [desu]

- * NEGATIVE PAST, INFORMAL

- Eigo ga wakaranakatta. (Casual)

[I] didn’t understand English.

- O-tomodachi wa kinoo konakatta desu.

Your friend did not come yesterday.

- Okane ga nakatta desu.

[I] didn’t have any money.

- Watakushi no dewanakatta. (Watashi no janakatta desu.)

It was not mine.

- nakattara

- * CONDITIONAL NEGATIVE: WERE I NOT TO...

- Ikanakattara, okaasan wa okoru deshoo.

If I didn’t go, Mother would probably get angry.

14. As a reminder that we’ve abstracted (perhaps unwisely) the *kaku* verbs and *taberu* verbs as “one thing,” here I’ve juxtaposed a pair of examples that brings out the potential for confusion between *kaku* (=> *kaka*-) and *kakeru* (=> *kake*-).

Japanese Grammar Rainbow

- Byooki de nakattara, ryokoo e ikeru n da ga.

If I were not ill, I'd be able to go on the trip.

- Watakushi no dewanakattara, tsukaimasen.

I wouldn't use it if it weren't mine.

- nakereba

* CONDITIONAL NEGATIVE: IF I DON'T...

- Kikanakereba wakarimasen.

You won't know if you don't ask.

- O-tomodachi ga konakereba, denwa o shite kudasai.

If your friend doesn't come, phone me.

- Okane ga nakereba komarimasu.

If you don't have any money, it'll be a problem.

- Kaiin denakereba, haitte wa ikemasen.

If you are not a member, you can't go in.

- nakereba narimasen / nakereba naranai

* OBLIGATIONAL (CONDITIONAL DOUBLE NEGATIVE)

- Kyoo wa hayaku kaeranakereba narimasen.

Today I have to return early.

- Juppun ijoo denakereba narimasen.

It has to be more than ten minutes.

- Jitsu wa, chichi ga nakunatte, hatarakanakereba naranaku natta kara desu.

The fact is, my father has died and I have to go to work.

- nakute

* NEGATIVE: WITHOUT DOING; NOT X BUT Y

- Iya nara tabenakute mo ii desu yo.

If you don't like it, you needn't eat it.

- Tegami o kakanakute, denwa o shimashita.

I didn't write a letter; I telephoned.

- Nihonjin dewanakute, Chuugokujin desu.

He is not Japanese; he is Chinese.

- nakute mo

* NEGATIVE: EVEN IF I DON'T

- Kaisha ni ikanakute mo, shigoto o shite imasu.

Even if I don't go to the office [lit. company], I still have to work.

- Isha dewanakute mo, shujutsu o shimashita.

He operated, even though he is not a doctor.

Japanese Grammar Rainbow

- nakute mo ii [desu]

* NEGATIVE: IT'S OKAY NOT TO

- Kusuri o nomanakute mo ii desu.
*You don't have to take the medicine.
(Even if you don't take the medicine, it's all right.)*
- Sumire janakute mo ii desu.
It's okay if they're not violets. (Another flower will do.)

- nakute [wa] ikemasen/dame desu

* OBLIGATIONAL (DOUBLE NEGATIVE)

- Sanji ni o-cha o nomanakute wa ikemasen.
I must drink tea at 3:00.
- Sofu mo konakute wa dame desu.
*Your grandfather has to come, too.
(Lit. If your grandfather, too, doesn't come, it will be bad.)*
- Shiroi kabe dewanakute wa dame desu.
They have to be white walls.

- seru/saseru

* CAUSATIVE/LET⁽¹⁵⁾

- Sobo wa yooji ni kusuri o nomasemashita.
The grandmother made the infant take the medicine.
- Kachoo ga hisho ni hanashi o sasete kuremashita.
The section chief [kindly] allowed the secretary to speak.

- reru/rareru

* PASSIVE

- Seijika wa minna ni shirarete imasu.
Politicians are known by everyone.
- Urareru mi nimo natte miro.
Suppose you are to be sold yourself. (Let you be the one who is sold.)

* POTENTIAL/PASSIVE (ICHIDAN VERBS): CAN DO, CAN BE DONE

- Sofu wa aisu-kuriimu ga taberaremasen.
*My grandfather cannot eat ice cream.
(As for my grandfather, ice cream cannot be eaten.)*

15. The concepts of “making you do something” and “letting you do something” overlap in Japanese. Suffix -seru is *primarily* a causative, but it's also a “let-tative.” Those who are conversant with Chinese will feel right at home with this since Chinese *jiaw* + verb likewise means to cause *or* to let a person do something.

Japanese Grammar Rainbow

- Rainen tabako o yamerareru to omoimasu.

I think I can quit smoking next year.

(Next year tobacco can be quit — is what I think.)

- Kyoo ichinichi de minna urareru ka na?

Do you think they (you) can sell them all in the course of today?

* HONORIFIC

- Ano kata mo tootoo ie o urareru.

He also will sell his own house at last.

- zu ni

* NEGATIVE: WITHOUT DOING

- Kinoo wa hiru-gohan o tabezu ni asa kara ban made hatarakimashita.

Yesterday [he] worked from dawn till dusk without eating lunch.

- Nanimu iwazu ni nakidashimashita.

Without saying a word, he started crying.

- Benkyoo sezu ni gakkoo ni dekakemashita.

He went off to school without studying.

Japanese Grammar Rainbow

i-form list — endings that work with *kaki-/tabe-* base

Using the verbs *kaku* and *taberu* as our *u-verb* and *ru-verb* examples, the *i-forms* would be *kaki-* and *tabe-*. The corresponding *i-forms* for the Irregular verbs *kuru* and *suru* are *ki-* and *shi-*. (Synonyms for *i-form* are 2nd Form, Base 2, Noun-forming, and Continuative.)

Endings that work with *i-form* include *-agaru*, *-ageru*, *-dasu*, *-hajimeru*, *-kata*, *-komu*, *-masu*, *-nagara*, *-nasai*, *-ni iku/kuru*, *-nikui*, *-owaru*, *-soo*, *-sugiru*, *-tagaru*, *-tai*, *-tsuzukeru*, *-yasui*, as illustrated below, each in turn.

Ending *-kata*, relates to item 6 in **Figure 3** on page 17 above. Ending *-nikui* relates to item 14; ending *-tai* relates to items 13, 15 & 16; “suffix-zero” on page 29 relates to item 7.

- agaru

* DO UP[WARDS], BE FINISHED

- Kono apaato wa dekiagaru made ni dono-kurai kakarimasu ka?
How long will it take for this apartment building to be completed?
- Gakusei wa isu kara tachiagatta.
The students stood up from their chairs.

- ageru

* DO FOR, DO UP[WARDS], FINISH DOING (TRANSITIVE)

- Oka no ue made oshigemashoo.
Let's push it up to the top of the hill.
- Kono shigoto wa kyoo-juu ni shiagemasu.
I am going to finish this work today.

- dasu

* DO SUDDENLY, SUDDENLY START DOING

- Kotori wa patto utai-dashimashita.
The little bird suddenly sang.

- hajimeru

* BEGIN DOING

- Moo osoi desu kara, benkyoo shihajimenakute wa ikemasen.
Since it's late, I have to start studying.

- kata

* WAY OF DOING, HOW TO [CHANGES THE VERB INTO A NOUN]

- Senbazuru no tsukurikata o oshiete kudasai.
Please teach me how to make “1000 cranes” [a kind of origami].
- Shikata ga arimasen. (~ Shiyoo ga nai; idiomatic)
It can't be helped.

Japanese Grammar Rainbow

- komu

* DO IN/INTO

- Denwa bangoo o koko ni kakikonde kudasai.
Please write your phone number here.
- Watashi wa sono kontesuto ni sanko o mooshikonda.
I applied to take part in the contest.

- masu⁽¹⁶⁾

* POLITE ENDING

- Nara e wa ikimashita ka?
Did you go to Nara?

- nagara

* CONCURRENT ACTIONS (LITERAL ‘WHILE’)

- Kangaegoto o shi-nagara aruite imashita.
While walking along, he was absorbed in thought.

* WHILE (IN FIGURATIVE SENSE OF ‘ALTHOUGH’)

- Kenkoo ni warui to shiri-nagara, tabako wa yameraremasen.
Although I know it's bad for my health, I can't give up smoking.

Note: Closely akin to figurative ‘while’ meaning ‘although’ in English. *-nagara* may also be suffixed to a noun; see the example that occurs in passing in the section devoted to *-nikui* below. See also *-nagara* on page 52.

- nasai

* IMPERATIVE AFFIRMATIVE, ABRUPT

- Nan de mo hoshii mono ga attara, ii-nasai.
If there is anything you need (lit. want), just mention it.
- Nana-ji-han ni ie o denasai!
Leave the house at 7:30.

- ni iku/kuru

* GO/COME [SOMEWHERE] TO DO

- Shihainin to hanashi ni kimashita.
She came to speak with our manager.
- Kanazawa e kuruma o uri ni ikimashita.
She went to Kanazawa to sell her car.

16. As it happens, the “ending” *-masu* behaves like a verb in its own right, conjugating in turn to *mashita*, *masen*, *masen deshita*, *mashoo*, *mashoo ka*. However, since this little byway of the great Verb-Conjugate system is what the hapless foreign student learns first (thinking — alas — that this is the whole landscape?), it should already be quite familiar and we’ll only note it in passing rather than illustrate it lavishly. (Indirectly, this ending is represented in **Figure 3** by item 19.)

Japanese Grammar Rainbow

- nikui

* DIFFICULT TO [CREATES A TRUE ADJECTIVE]

- Daidokoro-doogu-nagara, tsukai-nikui.
While it is [only] a kitchen utensil, it is difficult to use.
- Tegami wa yominikukatta desu ga, omoshiroku natte kimashita.
The letter was difficult to read, but I found it interesting.

- owaru

* FINISH DOING

- Oshare o shi-owatte, deeto ni dekekemashita.
S/he finished getting dressed up and went out on a date.

- soo

* LOOKS LIKE [CREATES A QUASI ADJECTIVE]

- Akanboo wa okisoo desu.
The baby looks like s/he is about to wake up.
- Kare wa waraisoo na kao o shite imasu.
He looks like he is going to laugh.

- sugiru

* DO TOO MUCH

- Kono piano wa omosugite, hakobenai.
This piano is too heavy to move.
- Kesa yomisugimashita kara, me ga warui desu.
Having read too much this morning, I've strained my eyes.

- tagaru

* EAGERLY DESIRE

- Kodomo wa haha ni aitagatte iru.
The child is eager to meet his mother.
- Sonna ni uritagaru nara urashite (ura-seru) yaru sa.
If he is so eager to sell, let him do as he would.

- tai [desu]

* WANT TO [CREATES A TRUE ADJECTIVE]

- Kyoo wa ikitaku arimasen.
I don't wish to go today.
- Enshutsu-sha ni naritakatta desu.
She wanted to become a director.
- Uritai nara o-uri nasai.
If you would sell it, do as you like. (Sell it if you would.)

Japanese Grammar Rainbow

- Nakitai kimochi da.

I feel like crying.

- tsuzukeru

- * CONTINUE DOING

- Sofu wa sake o nomitsuzukemashita.

The grandfather continued drinking the rice-wine.

- yasui

- * EASY TO [CREATES A TRUE ADJECTIVE]

- Pasokon wa tsukaiyasunakatta desu.

The PC was not easy to use.

- Kore wa koware-yasui kikai da to omotte imasu.

I'm thinking this is a machine that's apt to break down.

- zero⁽¹⁷⁾

- * MAKES A VERB INTO A NOUN

- Yomi-kaki soroban wa juu-nenkan naraimashita.

They studied the three R's for ten years.

- Kare no nerai wa Sapporo no shisha ni utsusu koto ni shimashita.

As for his aim, he's determined to get transferred to the Sapporo branch.

- Tootoo ano ie mo uri ni deta.

That house is put up for sale at last.

- zero

- * CONTINUATION FORM (ADVERBIAL); MORE LITERARY FLAVOR THAN TE-FORM

- Ie o uri, hatake o uri, tootoo kyoori o dete shimatta.

Selling the house, and then the farm, he left his native village at last.

- Yuushoku o tabe, ato wa oboete imasen.

I ate dinner, and [what happened] afterwards I don't remember.

- Kyooto wa mukashi Nihon no miyako deari, bunka no chuushin ni narimashita.

Kyoto is the ancient capital of Japan and became [therefore] the cultural center.

17. In general, the point of cataloguing a-form, i-form, etc. is to show what happens when various endings are combined with certain “bases,” but sometimes the base form can stand alone: *kaki* is an example, as in *yomi kaki soroban* = Reading, Writing and Arithmetic. In such a case we have a zero-suffix, as it were, which falls conveniently at the end of an alphabetized list of endings (suffixes).

Japanese Grammar Rainbow

- zero

* COMPOUND VERB COMPONENT

- Jikan ni maniattara, kooen o arukimawarimasu.
If we're on time, we'll [have time to] walk around the park [first].
- Mata denwa shite yoyaku shi-naoshimasu.
I'll call again to change (re-do) the reservation.

- zero

* COMPOUND NOUN COMPONENT

- hana-uri, uri-isogi, uri-kire, uri-dashi, yobi-uri
a flower seller, selling in a hurry, being sold out, opening sale, street-hawking

Japanese Grammar Rainbow

u-form list — endings that work with *kaku/taberu*

u-verb and ru-verb examples of the u-form: kaku, taberu. Irregular verbs: kuru, suru. (Synonyms for u-form are 3rd Form, Base 3, and Dictionary Form.)

u-form combines with -hodo, -kagiri, -kawari, -ki ga aru/ki ga suru, -ki ni naru, -koto ga aru, -koto ga dekiru, -koto ni naru/yoo ni naru, -koto ni suru/yoo ni suru, -made, -made ni, -mae [ni], -mai, -mono, -na, -rashii, -tame [ni], -to, -tochuu, -tokoro, -to shitara/to sureba/to suru to, -to shite mo, -tsumori [desu], -yoo ni, -yoo ni naru/yoo ni suru, -yotei [desu], as illustrated below.⁽¹⁸⁾

“Suffix-zero” on page 36 relates to item 18 in Figure 3 on page 17. Indirectly, the -koto forms also relate to item 18.

- hodo

* EXTENT

- Tsukarete moo ippo mo akukanai hodo datta.
I was so exhausted that I was unable to take even one more step.
- Chiheisen demo mieru hodo harete kita.
It has become so clear that even the horizon is visible.

- kagiri

* EXTENT

- Miwatasu kagiri, umi ga hirogatte ita.
The sea extended as far as the eye could see.
- Dekiru kagiri, gaman shi-nasai.
To the extend possible, please try to make do (endure it).

- kawari [ni]

* INSTEAD OF

- Kare ga utawanakereba, watashi ga kawari ni utaimashoo.
If he is unable to sing it, I can probably sing it instead.
- Furu-shimbun o dasu kawari ni toiretto-peepaa o kuremasu.
You put out old newspapers, and get toilet paper in exchange [in this municipality].

- ki ga aru, ki ga suru

* FEEL LIKE DOING: BE OF A MIND TO

- Tenisu o suru ki ga areba, issho ni shimashoo ka?
If you're of a mind to play tennis, shall we play together?
- Kyoo byooki de, shigoto o suru ki ga shimasen.
Today I am sick and don't feel like working.

18. To dash or not to dash? For the u-form endings (and for the endings in certain other forms), Lampkin drops the leading dash. I agree with the implied nuance, i.e., that some “endings” feel less like true (agglutinated) suffixes than others; nevertheless, for the sake of visual continuity, I use the leading dash in all forms throughout.

Japanese Grammar Rainbow

- ki ni naru

* BOTHER, GET ON ONE'S NERVES

- Kare no itta koto ga ki ni naru.
What he said bothers me.

- koto ga aru

* EVER DO, OCCASIONALLY DO

- Kyuuni kaigi ni yobidasareru koto ga aru no de, ...
At times I might suddenly be called to a meeting, so...
 - Tama ni sampo ni irassharu koto ga aru n desu.
Sometimes he goes for a walk. (Honorary form of iru: irassharu)
- Note: *u-form + koto ga aru* is less common than *ta-form + koto ga aru*. See below.

- koto ga dekiru

* POTENTIAL (WITH U-FORM): ABLE TO DO, CAN DO

- Hon ga totemo furukute, fureru koto ga dekimasen deshita.
Since the book was terribly old, we could not touch it. (were not allowed)
- Toshō-shitsu ga arimasen keredomo benkyōo dekimasu.⁽¹⁹⁾
We have no library [at our school], but we're able to study.

- koto ni naru, yoo ni naru

* COME ABOUT, COME TO PASS

- Rainen kara, Toruko-go o benkyōo suru koto ni narimashita.
It's been decided that she will study Turkish starting next year.
- Akachan wa arukeru yoo ni narimashita ka?
Has your baby started walking?

- koto ni suru, yoo ni suru

* MAKE IT A RULE TO/MAKE AN EFFORT TO

- Kookoku o mi-nagara, kanji no benkyōo o suru koto ni shite imasu.
What I do is study the kanji while looking at the advertisements [on subway]
- Maiasa bitamin-zai o nomu yoo ni shite imasu.
I make it my practice to take vitamin pills every morning.
- Motto kanji o oboeru yoo ni shimasu.
I'll make an effort to learn more Chinese characters.

19. From *benkyōo (o) suru*. Verbs of this type (noun + suru) have a special form in this context: *koto ga* is omitted, and *dekiru* replaces *suru*. Also, if the direct object particle *o* is normally used (*denwa o suru*), it is replaced by *ga*.

Japanese Grammar Rainbow

- made

* UNTIL [I] DO

- Shimbun o yomu made sono jiken no koto wa shiranakatta.
Until I read the paper, I didn't know about the incident.
- Kare ga kuru made koko de matte imasu.
I'll wait here until he comes.

- made ni

* BY THE TIME

- O-kyakusan ga kuru made ni wa, owaru deshoo.
We'll probably finish by the time the guests arrive.

- mae [ni]

* BEFORE DOING

- Kaeru mae ni o-mise ni yotte kudasai.
Please go by the store before coming home.
- Kochira ni kuru mae ni, Hawaii ni sunde imashita.
I was living in Hawaii before coming here.

- mai⁽²⁰⁾

* NEGATIVE SUPPOSITION OR DETERMINATION

- Iya, ano ie wa uru mai.
Really? I think he won't sell that house.
- Tabun soo de wa aru mai.
I suppose not.
- Konna mono wa inu de mo tabemai.
Even a dog wouldn't eat stuff like this.
- Kare ni wa ni-do to aumai to omotte imasu.
I am determined never to meet him again. (Lit. meet twice with...)

- mono

* THING: MAKES RELATIVE CLAUSE OR EMPHATIC SUGGESTION

- Taberu mono wa arimasen ka?
Don't you have anything to eat?
- O-toshiyori wa, yukkuri yasumu mono desu.
Being older, you should get plenty of rest.

20. If you put Form 3 in *Ishizaka* beside Base 3 in Lampkin, a curious pattern emerges. Lampkin gives 24 Endings for her Base 3 presentation on p. 28-31; meanwhile, for Form 3, *Ishizaka* gives (i) *-rashii*; (ii) *-mai*; (iii) modify a noun; (iv) predicate a sentence; (v) serve as the representative form of the conjugative (i.e., serve as the “dictionary form”). But the Lampkin list of 24 endings and the *Ishizaka* list of 5 items (*Ishizaka*.7) share not a single item between them; so I've merged the two lists in this presentation.

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- na

* IMPERATIVE NEGATIVE, ABRUPT

- Gomi o suteru na!

No littering!

- Amari osoku kaette kuru na yo.

Don't be too late coming home!

- rashii (20)

* SHOW LIKELIHOOD

- Ano ie o uru rashii.

He seems to (be going to) sell that house.

- tame [ni]

* IN ORDER TO, FOR THE SAKE OF

- Kaigi ni deru tame ni, raishuu Oosaka e shutchoo suru koto ni narimashita.

In order to attend a meeting, we're supposed to go to Osaka next week.

- Chuugokugo o oboeru tame ni wa, yahari Taiwan ni ryuugaku shita hoo ga ii deshoo ne.

In order to learn Chinese, I suppose it would be better after all to attend school in Taiwan, right?.

- to

* IF(21)

- Kono guriin botan o osu to, kippu ga dete kimasu.

If you push the green button, a ticket comes out.

- Kado o magaru to, gasorin sutando ga arimasu.

If you turn the corner, there's a gas station there.

- tochuu [desu]

* EN ROUTE

- Gakkoo kara kaeru tochuu honya ni yotta.

I dropped into a bookstore on my way back from school.

- Yuubinkyoku wa eki e iku tochuu ni arimasu.

The post office is on the way to the station.

-
21. Coming at it this way, you'll have a better understanding of why the dictionaries cannot (or should not) offer a simple equivalence such as "English *if* = Japanese *to*." On the Japanese side, the various suffixes that turn out to mean *if* are context sensitive: when a u-form verb precedes *to*, it's probably safe to say "*to* means 'if' " but elsewhere *to* can mean 8 other things (by Taeko Kamiya's count), such as 'and', 'with' and quotation. (Note that "*suru + to*" is a special case, listed further down as "*to suru to*" under the entry for "-to shitara," the Conditional Emphatic.) For other ways to express 'if' see a-form + *nakattara* and *nakereba* on [page 22](#); e-form + *ba* on [page 37](#); ta-form + *ra* on [page 44](#); and adj + *-kereba* on [page 49](#).

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- tokoro [desu]

* ABOUT TO, AT THE POINT OF, IN THE PROCESS OF

- Kore kara, dekakeru tokoro desu.
I'm just about to leave now [so it's a bad time].
- Ashita shiken ga aru no de, ima sono benkyoo o shite iru tokoro desu.
There's a test tomorrow, and right now I'm in the middle of studying for it.
- Watakushi no shitte iru tokoro de wa...[idiomatic]
As far as I know...

Note: *ta*-form also combines with *tokoro*; see page 45.

- to shitara, to sureba, to suru to

* CONDITIONAL EMPHATIC: IF [I] WERE TO...

- Kare ga yameru to sureba, dare ni kono shigoto o tanomoo ka?
If he were to quit, who would we ask to do this job?
- O-tomodachi ga kuru to sureba, gogatsu deshoo.
If your friend does come, it will probably be in May.
- Moshi Hawaii ni tomaru to suru to, hitoban dake deshoo.
If we do stop in Hawaii, it will probably be only one night.

- to shite mo

* EVEN IF

- Okaasan ni kiku to shite mo, otoosan ga sansei shinai to omoimasu.
Even if we ask Mother, I think Father will not approve.

- tsumori [desu]

* INTEND TO

- Watashi-wa shiken ni ukaru tsumori desu.
I expect to pass the exam.

- yoo ni

* IN ORDER TO

- Minna ni kikoeru yoo ni ooki-na koe de hanashite kudasai.
Please speak loudly so that everyone can hear.
- Dare demo yomeru yoo ni, ji o kirei ni kaite kudasai.
Please write your letters clearly, such that anyone can read them.

Japanese Grammar Rainbow

- yoo ni naru, yoo ni suru

* [SEE UNDER “koto ni naru” and “koto ni suru”]

- yotei [desu]

* PLAN TO

• Ashita rinjin to oshaberi o suru yotei desu.

Tomorrow I plan to have a chat with my neighbor.

- zero

* MODIFY A NOUN

• Hoka ni uru mono ga nai.

I have nothing else to sell. (Closer to literal: “I have no other sell-things.”)

• Mukashi, aru⁽²²⁾ tokoro ni...

Long ago, in a certain place...

• Aru heppoko sensei.

There was once a ne'er-do-well teacher. [and now the story about him...]

- zero

* PREDICATE A SENTENCE (CASUAL)

• Watashi no mono o uru.

I'll sell my own things.

- zero

* REPRESENTATIVE FORM, DICTIONARY FORM

• Uru to iu dooshi wa aiueo-branch no go desu.

The verb uru belongs to the “aiueo-branch.”

22. Okay, I'll admit I've gone out on a bit of a limb here. Dictionaries are scrupulous in treating *aru* 'a certain...' as a different word from *aru* 'to exist.' I wonder if the former couldn't have been spun off from the latter, i.e., I wonder if *aru* 'a certain [noun]' isn't a special case of u-form + N: “Once upon a time, in a certain [existent] place...” That would lend more flavor to the word, especially as it is used in fairy tales. By including '*aru tokoro*' among these examples, I'm insinuating a genetic link between *aru* 'a certain' and *aru* 'to have'.

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e-form — endings that work with *kake-/tabere-* base

Using the verbs *kaku* and *taberu* as our *u-verb* and *ru-verb* examples, the *e-forms* would be *kake-* and *tabere-*. The corresponding *e-forms* for the Irregular verbs *kuru* and *suru* are *kure-* (and *kore-*) and *sure-*. (Synonyms for *e-form* are 4th Form, Base 4, Conditional Form, and Provisional Form.)

Endings that work with *e-form* include *-ba*, *-ba yokatta [desu]*, *-ru*, as illustrated below. Ending *-ba* is represented by item 11 in **Figure 3** on page 17.

- ba

* IF/WHEN

- Moo sukoshi ganbareba dekita to omoimasu.
I think I could have succeeded if I had tried a bit harder.
- Sobo naraba issho ni utatta mono da.
If it was his grandmother, they would always sing together. (desu ==> naraba)
- Ima ikanakereba⁽²³⁾ maniaimasen yo!
If we don't leave now, we'll be late!
- Ano hon o ureba moo uru mono wa nai.
If I sell that book, I'll have nothing else to sell.

- ba yokatta [desu]

* BETTER IF [I] HAD DONE

- Senshuu yuki ga fureba yokatta n desu ga.
If only it had snowed last week.

- ru

* POTENTIAL (u-VERBS AND **kuru** ONLY)

- Sumi de kakemasen. (< kakeru < kaku)
I can't write with sumi [and a brush]. (kaku => kakeru)
- Chuugokugo no shimbun wa yomemasen ka?
Can't you read Chinese newspapers?
- Chuushoku no ato de koremasen ka?
Can't you come after lunch? (kuru => koreru)
- Mukoo no hikooki ga miemasu ka?
Can you make out the airplane in the distance?

23. Depending how you look at it, a form such as *ikanakeraba* belongs in the section on adjectival inflections, since we're inflecting adjectival *-i* (in *ikanai*) to become *-kereba*; OR, it belongs here with other verb conjugations, since we're transforming the pseudo-verb *naku* (from *ikanai*) into *nakereba*. It's one of those pivotal cases that makes you wonder if the whole notion of "verbs and adjectives" isn't somewhat forced in the Japanese context (as discussed earlier in connection with Figures 1-3).

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Two special cases: The verb **mieru** ‘be visible’ is a dictionary entry in its own right, distinct from the verb **miru** ‘to see’. The verb **kikoeru** ‘be audible’ likewise exists in lexical form rather than as a syntactic variant on the verb **kiku** ‘to hear’.

- zero

* IMPERATIVE AFFIRMATIVE, ABRUPT

- Hanase! Damare! Yame! Koi! Benkyoo seyo! [Benkyoo shiro!]

Let go! Shut up! Quit it! Come here! Study!

oo-form — endings that work with *kakoo-/tabeyoo-* base

Using the verbs *kaku* and *taberu* as our *u-verb* and *ru-verb* examples, the *oo-forms* would be *kakoo-* and *tabeyoo-*. The corresponding *oo-forms* for the Irregular verbs *kuru* and *suru* are *koyoo-* and *shiyoo-*. (Synonyms for *oo-form* are *5th Form*, *Base 5*, and *Conjectural [Let's]*.)

Endings that work with oo-form include -ka, -to omou, -to suru, as illustrated below:

- ka

* SHALL WE? (CASUAL)

- Rokuji-han ni tabeyoo ka?

Shall we eat at 6:30?

- Raishuu mata koyoo ka?

Shall I come again next week?

- kanaa (- kashira)

* I WONDER

- Yasuku naru-nara kaoo kanaa.

If the price comes down a bit, should I buy it I wonder?

Note: -kanaa is used by both sexes; -kashira is used only by women.

- to omou

* I THINK I WILL

- Isha ni naroo to omoimasu.

I think I'll become a doctor.

- Raishuu issho ni koyoo to omotte imasu.

We're thinking we will come together next week.

- to suru

* BE ABOUT TO

- Kaigi o hajimeyoo to shite imasu.

I'm about to start the meeting.

- Satsuei shiyoo to shite imasu.

He is about to take a picture.

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- zero

* LET'S (INFORMAL INCLUSIVE COMMAND; CASUAL)

- Mada hayai kara, kaeroo.
It's still too early [to get in], so let's return home.
- Koko kara chikakute, chuusha shiyoo yo.
It's close to here, so why don't you park now.

- zero

* IF

- Uroo to iu nara watashi ga kaoo.
If he would sell, I would buy it. (Lit. If he says he will sell, I will buy it.)

- zero

* VOLITION

- Uroo. Anna mono motte ite mo shiyoo ga nai.
I'll sell it. Such a thing is not worth keeping.
- Uroo to uru mai to sore wa anata no kangae da.
To sell it or not, that depends upon your own will.

te-form — endings that work with *kaite-/tabete-* base

Using the verbs kaku and taberu as our u-verb and ru-verb examples, the te-forms would be kaite and tabete. The corresponding te-forms for the Irregular verbs kuru and suru are kite and shite. Synonyms for te-form are 6th Form, and Base 6.

The te-form combines with various words in a way that feels less like true suffixation than in some of the other forms; see footnote on page 31 above.

Ending *-mo* is represented by item 14 in **Figure 3** on page 17. Ending *-wa ikemasen* is represented by item 12.

- ageru, yaru

* DO FOR

- Kare ni kasa o kashite agemashoo ka?
Shall I lend him an umbrella?

- aru

* HAS BEEN DONE

- Kuruma wa moo utte arimasu.
The car has been sold already.
- Mado wa moo shimete arimashita.
The windows had already been closed.

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- hoshii [desu]

* WANT [SOMEONE] TO; CREATES A TRUE ADJECTIVE

- Kyuuryoo o agete hoshii desu.

I would like to have my pay raised.

- Sobo ni tuskatte hoshikatta desu.

I wanted Grandmother to use it.

- iku

* DO AND [THEN] GO, DO BEFORE GOING (<== N.B.)

- Penguin o mite ikimashoo.

Let's look at the penguins, and [then] go. [≠ Let's go look at...]

- Iroiro na tabemono o motte itta.

We took along various things to eat.

- iru

* CONTINUING ACTION OR RESULTING STATE

- Yuki ga tsumotte imasu.

The snow is piled deep.

- Chuugokugo o oshiete imasu.

She teaches Chinese.

- Mado ga hiraite ita.

The window was open.

- itadaku, morau

* HAVE [SOMEONE] DO

- Nihongo de tegami o kaita n desu ga, mite itadakimasen ka?

*I've written a letter in Japanese. Would you check it for me please?
(More literally, "Won't you do me the favor of looking at it?")*

- Anata **ni** soko e itte moraitai.

I would like you to go there.

- Kanojo **ni** tegami o taipu shite moratta.

I had her type the letter for me.

- kara

* AFTER DOING

- Shatsu o katte kara, Shinjuku e iku yotei desu.

After I buy [this] shirt, I plan to go to Shinjuku.

- Ojigi o shite kara, ima ni ikimashoo.

After bowing, they'll probably go into the living room.

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- kudasai

* IMPERATIVE, POLITE (PLEASE DO, SOFTER WITH KA, SOFTER YET IN NEG.)

- Koko ni go-juusho o kaite kudasai.
Please write your address here.
- Moo sukoshi yukkuri hanashite kudasaimasu ka?
Can you speak more slowly please?
- Raishuu no mokuyoo made ni serifu o anki shite kudasaimasen ka?
Could you please memorize your lines by Thursday of next week?

- kuru

* DO AND COME [BACK], DO BEFORE COMING (<== N.B.)

- Puroguramu katte kimasu kara, chotto matte kudasai.
I'll go buy a program. Wait a minute.
(Lit. I'll come back having bought a program.)
- Kashu to chotto hanashite kimasu.
I will talk with the singer for a moment and be right back.
- Sumimasen, chotto itte kimasu.
Excuse me, I'll be right back. (Lit. I'll come, having gone)
- Yachin o wasurete kimashita.
I forgot to bring the rent money.

- miru

* DO AND SEE, TRY DOING

- Atarashii pasokon wa tsukatte mimashita ka?
Have you tried using the new PC?
- Tako wa oishii desu kara, tabete mite kudasai.
The octopus is delicious, so try some and see.

- mo

* EVEN IF [I] DO

- Tomodachi ga kite mo, dekakete wa ikemasen.
Even if your friend comes, you are not allowed to go out.
- Hashitte mo, maniwanaai to omoimasu.
Even if we run, I think we won't make it on time.

- mo ii [desu]

* IT'S OKAY TO⁽²⁴⁾

- Enzetsu shite mo ii desu ka?
Is it okay if I make a speech?

24. Variations: *mo daijoobu desu, mo kamaimasen.*

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- Tochoo-gesha shite mo ii desu.

It's okay to stop over [on this train journey].

- morau: see itadaki

- oku

* DO FOR A LATER PURPOSE, DO AND SET ASIDE, GO AHEAD AND DO

- Sobo ga sugu kuru kara, doa o akete oite kudasai.

Grandma is coming over soon, so please leave the door open.

- Raishuu tsukau no de komban katte okimashoo.

We're going to use it next week, so let's go ahead and buy it this evening.

- Fukuzatsu de, keikan ni itte okimasu.

It's complicated, so I'll tell the policeman and leave it in his hands.

- shimau

* DO COMPLETELY/IRREVOCABLY/IRRETRIEVABLY

- Moratta tokee o nakushite shimatta.

I have lost the watch presented to me.

- Ukkari garasu o watte shimatta.

I carelessly went and broke the glass.

- Kangaenakute, itte shimaimashita.

Without thinking, I said it right out.

- wa ikemasen, wa dame desu

* IT'S NOT OKAY TO, [I] HAD BETTER NOT

- Neko o ijimete wa ikemasen.

You must not tease our cat.

- Sake o nonde wa dame desu.

You shouldn't drink.

- yaru: see ageru

- zero

* SERIES, MORE OR LESS IN SEQUENCE

- Kanazawa e kaette, Kitamura-san o hoomon shita.

He returned to Kanazawa, and [then] called on Miss Kitamura.

- Shimbun o yonde kimashita.

I read the paper and [then] came over.

- Ano hito wa Chuugokujin de, kanji ga dekimashoo.

That person is Chinese, and can probably read our Sino-Japanese characters.

Note: Mild cause/effect implication is common.

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- zero

* IMPERATIVE

- Sore o utte yo.
(illustrates use by a woman)
Please sell it.
- Omae kaettara soo itte yo ne.
(illustrates use by a man – less likely to occur)
Tell him so when you go home.

ta-form — endings that work with *kaita-/tabeta-* base

Using the verbs kaku and taberu as our *u-verb* and *ru-verb* examples, the *ta-forms* would be kaita and tabeta. The corresponding *ta-forms* for the Irregular verbs kuru and suru are kita and shita. (Synonyms for *ta-form* are *Base 7* and the *Perfect Conjugation*; see **Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion** for an alternative approach to *ta-form*.)

- ato

* AFTER HAVING DONE

- Zuibin nonda ato, dekakemashita.
After drinking a lot, I went out.

- bakari [desu]

* HAVE JUST DONE

- Nihon ni tsuita bakari de, mada nani mo mite imasen.
I've just arrived in Japan, so I haven't yet seen anything.
- Sofu ga tsuita bakari da to omoimasu.
I think Grandfather has just arrived.

- ka doo ka wakarimasen

* WONDER, DOUBT, DON'T KNOW IF...

- Ano koro wa Nihon wa ima hodo okane mo gijutsu mo arimasen deshita kara, yoi jootai de hozon dekita ka doo ka wakarimasen shi ne.

Because in that period they lacked the wealth and technology of modern Japan [that we take for granted now], I don't know if they had the right conditions for taking care [of such art treasures].

The flavor of *...ka doo ka wakarimasen* strikes me as being slightly stronger than 'wonder if...', but not so direct (blunt) as 'doubt that...'; here I avoid that choice, though, by translating it loosely as 'don't know if...'

- koto ga aru

* HAVE [EVER] DONE, HAD THE EXPERIENCE OF DOING

- Ee, mae ni, shita koto ga arimasu.
Yes, I've done that before.

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- Kono eiga o mita koto ga aru.

I've seen this film before.

- Hirano-san ni , atta koto ga aru?

Have you ever met Mr. Hirano? (colloquial, with -ga and -ka omitted).

Note: *u-form + koto ga aru* also exists; see above.

- mono desu

* EXISTENCE OF EVENT

- Senshuu wa mago ga asobi ni kureba , yuuenchi ni tsurete itta mono desu.

Last week, whenever our grandchild visited us, we took him to the amusement park.

- n desu

* EXPLANATORY 'NO' SHORTENED TO 'N'

- Deniranai de kaeru tsumori datta n desu ga...

We intended to go straight home without stopping at Denny's, but...

More literally, intended to return without doing Denny's. (See discussion of special *ru*-verbs on page 22.)

- ra

* IF [I] DO/DID (SUBJUNCTIVE FUTURE), WHEN [I] DID

- Shachoo o gokai shitara , doo shimasu ka?

What if we've misunderstood the president?

- Mizu ga nakunattara , komarimasu.

If we ran out of water, we'd be in trouble.

- Moshi ashita ame ga futtara , tennis no shiai wa arimasen.

If it rains tomorrow, there will be no tennis match.

Note: In this case, *moshi + ...tara* work together to provide the 'if' flavor. In a similar way, *moshi + ...ADJ-kereba* can be used to bookend an *if*-phrase; likewise, *moshi + ...nara* (the conditional form of *desu*), as in *moshi tabetaku nai nara, tabenakute mo ii desu yo* ("If you don't want to eat, you don't have to" Lit. Not eating is good too.) [BJS.487] For more on *moshi...tara*, see the reference to Rubin on page 77 below.

- rashii

* LIKELIHOOD

- Ano ie o utta rashii.

He seems to have sold that house.

- ri

* SERIES OF ACTIONS (OFTEN NONSEQUENTIAL, USUALLY NONEXHAUSTIVE)

- Sono heya ni wa hito ga detari haittari shite ita.

Some people were going into the room, and others were coming out.

- Uttari , kattari , shite kurashi o tatete iru.

He supports his family by buying and selling things.

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- roo

* SUPPOSITION, RELYING ON A FACT ALREADY RECOGNIZED

- Sore jaa ano ie mo moo uttaroo.

If so, he must have sold that house now.

- Ne! Wakattaroo?

You see?

- tame [ni]

* BECAUSE, OWING TO

- Bukka ga agatta no wa infure no tame da.

The increase in prices is due to inflation.

- Basu ga okureta tame ni, chikoku shimashita.

I was late because the bus was delayed.

- Yoku nenakatta tame ni, kibun ga warui desu.⁽²⁵⁾

I didn't sleep well, so I feel out of sorts.

- tokoro [desu]

* JUST DID, [BE AT] THE POINT OF HAVING DONE

- Watashi mo tatta ima kita tokoro desu.

I just got here, too. [Lit. just at the point of having come]

Note: *ru*-form also combines with *tokoro*; see page 35.

* EVEN IF

- Dame datta tokoro de, motomoto desu.

Even if we fail, we will lose nothing.

- zero

* AS AN ADJECTIVE

- Kinoo utta hon wa minna de 30-satsu datta.

The books I sold yesterday were 30 volumes in all.

- zero

* PAST TENSE, INFORMAL

- Kusuri o nonda. (Casual)

I took the medicine.

25. *neru* => *nenai* => *nenakatta*. The verb *neru* 'to lie down' is often used with the meaning of *nemuru* 'to sleep'.

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1.2.2 Adjective Inflections in alphabetical order

The way to think about Japanese adjectives is just like this (Accept No Substitutes!):

PRIMARY FORMS	ALTERNATE FORMS	FUNCTION	ENG. EQUIV.
1. akai desu	—	PRESENT AFFIRMATIVE	is red
2. akakatta desu	—	PAST AFFIRMATIVE	was red
3a. akakunai desu	3b. akaku arimasen	PRESENT NEGATIVE	isn't red
4a. akakunakatta desu	4b. akaku arimasen deshita	PAST NEGATIVE	wasn't red

Fig. 5: Adjective Inflections

When the adjective inflections are arranged this way, there are two patterns that almost jump off the page at you:

(a) in column 1, the ending *-i* is dropped and replaced by *-katta* (two times, first for the affirmative forms, again for the negative forms);

(b) the word *akaku* serves as a kind of anchor for all four of the negative forms (3a, 3b, 4a, 4b): it's a (derived) noun whose existence is then denied by the various negative endings: *nai* (or *arimasen*), *nakatta* (or *arimasen deshita*).

Nice, isn't it?

Everything fits together like reeds of a woven basket, right?

Incredibly, many textbooks manage to bungle the **Figure 5** pattern in *two* ways. First, there appears to be an unthinking tradition that says, “first handle Present Tense items, then handle Past Tense items,” per a subconscious western bias. Thus, instead of following the inherent sequence (1, 2, 3, 4), the textbook author wrenches it around into this sequence of rows: 1, 3, 2, 4. Already, the pattern is buried. It gets worse. The author often feels compelled to warn you about the importance of forms 3b and 4b relative to forms 3a and 4a (because the latter are used *slightly* less frequently than the former).

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Thus, the order of presentation might be 1, 3b, 3a, 2, 4b, 4a, which is bad enough, or it might be 1, 3b, 2, 4b — with 3a and 4a ignored for the nonce, apparently on the premise that “we shouldn’t bother the student with them yet; we’ll make it easier and present only four forms instead of six.”

Easier? The 1-3b-2-4b style of exposition for Japanese adjectives is an abomination! This is not to say 1-3-2-4 doesn’t have its place later. For example, in working out a truth table for the 16 ways of doing small talk (e.g., about the weather), the natural sequence would be 1-3-2-4 because the tense of the answer must match the tense of the question; see *Appendix E: The Truth About Small Talk*.

The tempest in the teacup that I’ve raised above is all about the bare *minimum* Inflection of Adjectives that will turn up somewhere in every textbook or overview or “review” of Japanese grammar. But there’s much more to know about adjectives, so now we turn to an amalgamated list of *other* adjective endings, gathered from two sources. What follows is essentially the Lampkin list of endings and examples, substantially enriched by additions from Ishizaka p. 12-13. (For a different way of organizing this set of inflections, see *Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion*.)

The Adjective Suffixes, in alphabetical order

The endings illustrated in this section relate to items 3 through 5 and items 8 through 14 in **Figure 3** on page 17 above.

- i⁽²⁶⁾

* DICTIONARY FORM

- akai

red (This also counts as a full sentence in Japanese: “It is red.”)

* PREDICATE

- Nishi no sora wa yuuhi de akai.

The western sky is aglow with the setting sun.

* ATTRIBUTE OF NOUN

- Sono akai hana ga hoshii.

I’d like to have that red flower.

* SUPPOSITION (WITH RASHII)

- Ano shoonen wa sukoshi akai rashii.

That boy seems to have reddened [with emotion].

- karoo

* SUPPOSITION (WITHOUT RASHII)

- Sore wa sukoshi akakaroo.

That may be a little too red [don’t you think?]

- katta⁽²⁷⁾

* PREDICATE (PERFECT)

- Sono hana wa minna akakatta.

Those flowers were all red.

* ATTRIBUTIVE TO A NOUN (PERFECT)

- Ima made akakatta hana ga atto iu ma ni kuroku natta.

Those flowers that had been red to that very moment, turned black in the twinkling of an eye.

26. Perhaps this very first item on the list requires a bit of explanation: It might seem odd to call “-i” a suffix since “-i” is simply “how an *i*-adjective ends” (as distinct from a *na*-adjective). The logic would go like this: before applying any of the other suffixes, one must first “drop the -i” to obtain a base form, such as *aka-* or *akaku-*. Therefore, “-i” is a suffix, just like the others.

The other question that might be raised is: Why repeat this form from **Figure 5**? The reason for listing it again is that now we are showing *all* of its functions, not just the rudimentary PRESENT TENSE AFFIRMATIVE function introduced in **Figure 5**.

27. *-katta* occurs again under *-kereba yokatta desu* (special usage).

Japanese Grammar Rainbow

- kattara

* COND (PERFECT)

- Sonna ni akakattara sorya nise mono da yo.

If it was so red it must be (have been) a crude imitation.

- Muji no shirokattara, kaimasen.

If it were plain white, I wouldn't have bought it.

- kattari

* JUXTAPOSING ADVERBIAL (PERFECT)

- Akakattari, aokattari iroiro desu.

Some being red and others blue, they are various in color.

- kattaroo

* ASSURANCE OF PAST FACT (PERFECT)

- Sono hon no hyooshi wa akakattaroo.

The cover of that book was red, wasn't it?

- kereba

* IF IT IS

- Ashita akarukereba, shashin o torimashoo ka?

If it's clear tomorrow, shall we take pictures?

- kereba [Adj] hodo

* THE MORE [ADJ] THE BETTER

- Nomimono wa tsumetakereba, tsumetai hodo ii to omoimasu.

As for drinks, the colder the better, I think. (Lit. If the drink is cold, cold is better.)

- kereba yokatta desu

* BETTER IF IT WERE/I WISH IT WERE

- Suutsu ga ookikereba, yokatta desu.

It would be better if the suit were a large size.

(Lit. Were the suit large, that would have been good)

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- ku

* ADVERB (<ADJ)

- Kanojo wa kami o mijikaku shite iru.

She wears her hair short.

- Watashi wa tsumetaku atsukawareta.

I got the cold shoulder. (Lit. I was coolly treated.)

* NOUN ALONE (NOUN <ADVERB < ADJ)

- Kono chikaku ni wa suupaa ga takusan arimasu.

There are a lot of supermarkets around here. (Lit. In this nearness,...)

* WITH NEGATIVE ENDING -NAI OR -NAKATTA⁽²⁸⁾

- Fukaku-nai desu. Fukaku-nakatta desu.

It is not deep. It was not deep.

[Opp: Fukai desu. It is deep. Fukakatta desu. It was deep.]

- kunakattara

* IF IT WERE NOT/WAS NOT

- Yasukunakattara, karite mo ii desu.

If it's not cheap, it will be OK to rent one [instead of buying].

- kunakereba

* IF IT IS NOT

- Raishuu isogashikunakereba, umi de oyogimashoo ka?

If things are not busy next week, shall we go swimming in the ocean?

- kunakute

* NOT BEING, IS NOT [ADJ] BUT [ADJ]

- Kore wa oishikunakute, daremo tabetakunai to omoimasu.

This doesn't taste good, and nobody wants to eat it, I think.

- kunakute wa ikemasen/dame desu

* MUST BE, HAS TO BE (< DOUBLE NEG.)

- Takusan no hito ga kimasu kara, heya wa hirokunakute wa ikemasen.

A lot of people are coming, so the room has to be big (wide).

28. Here, too, one may think of *-ku* as producing a kind of noun (Adj => Adv => Noun), whose existence can then be *nai*-denied: *fukaku* (deepness...) *nai* (...there is none). Students are usually introduced to this *-ku* first since without it you can't even express such basic ideas as "not cold" or "not busy." But in a survey of the grammatical landscape, it's the adverbial function of *-ku* that tends to stand out as primary, with the other two as secondary, hence the sequence I chose above. For a more complete discussion of "Adverbs Made from Adjectives," "True Adverbs," and "Adverbs as Nouns," see Lampkin p. 85-87.

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- kunaru

* BECOME [ADJ-ku + naru]

- Umi wa kyuu ni fukakunarimashita, ne.
The ocean suddenly became deep, didn't it?

- kusuru

* MAKE [ADJ-ku + suru]

- Moo chotto yasukushite kudasaimasen ka?
Won't you make it a little cheaper?
- Keikan wa jijoo o muzukashiku shimashita.
The police made the situation difficult.

- kute

* TE-FORM, FOR SERIES OF ADJECTIVES OR ADJ/VB SEQUENCE

- Heya wa hirokute akarui desu.
The room is spacious [and] bright.
- Tako o tabetakute, chikaku no shokudoo ni ikimashita.
Hankering for some octopus, I went to a nearby eating place.

- kutemo

* EVEN IF IT IS

- Baiorin de hikinikukutemo, hikanakereba narimasen.
Even if it's difficult to play on the violin, you must do it. (< hiku + nikui)

- kute tamarimasen

* UNBEARABLY

- Kyoo wa isogashikute tamaranai, ne.
Today is unbearably busy, isn't it?

- kute wa ikemasen/dame desu

* MUST NOT, SHOULD NOT BE

- Donna ni kirei demo, takakute wa ikemasen.
No matter how pretty it is, it musn't be expensive. (Lit. being expensive won't do)
- Burausu ga midori desu kara, sukaato wa aokute wa dame desu.
Since the blouse is green, the skirt shouldn't be blue. (Lit. being blue would be bad)

- kutte⁽²⁹⁾

* ADVERBIAL

- Sono kimono wa akakutte boku iya da naa.
The red color of the clothes is not to my taste. (being red, they're not to my taste)

29. -kutte wa (as in "Akakutte wa") is usually contracted to -cha (<tya <tea) in colloquial speech. Ishizaka p.12-13.

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* AS NUCLEUS FOR THE PERFECT CONJUGATION [IN ISHIZAKA]

Illustrated above; see the suffixes -kattari, -katta, -kattara, -kattaroo.

- nagara

* WHILE (IN FIGURATIVE SENSE OF ‘ALTHOUGH’)

- Kono kamera wa chiisai-nagara, seenoo ga ii.

While small, this camera works well.

Closely akin to figurative ‘while’ meaning ‘although’ in English. See also *-nagara* on page 27.

- sa

* MAKES THE ADJ INTO A NOUN (“-NESS”)⁽³⁰⁾

- Atsusa wa choodo ii to omoimasu.

The [degree of] heat is just right, I think.

- soo

* LOOKS: CREATES A QUASI ADJECTIVE.

- Kono yubiwa wa taka-soo da.

This ring looks expensive.

* SEEMS: FOR APPLYING A “FEELING ADJECTIVE” TO OTHERS

- Sobo wa sabishi-soo desu.

Our Grandma looks forlorn.

- sugiru

* TOO [ADV]

- Kono hako wa omosugite, hakobenai.

This box is too heavy to carry.

- Kiree desu ga, takasugiru to omoimasu

It's pretty, but I think it's too expensive.

- yoo

* SEEMS: FOR APPLYING A “FEELING ADJECTIVE” TO OTHERS

- Kitamura-san wa ureshii yoo desu.

Miss Kitamura seems to be happy.

1.2.3 Auxiliaries and their Inflections

Our Auxiliaries are treated ‘in-line’ in 1.2.1 and 1.2.2 above. See **Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion** for some remarks about “Auxiliaries” as distinct from “Suffixes.”

30. *-sa* is used mostly to turn a True Adjective (*i*-adjective) into a noun. Among the *na*-adjectives that sometimes take the *-sa* ending are: *benrisa* (convenience), *kanpekisa* (perfection), *shinsensa* (freshness). For more, see RL.83. See also *shizukesa*, cited in note (c) on page 16 above.

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...und ich habe bemerkt, dass auch die klärste Schrift gemischdeutet wird
...and I have noticed that even the clearest writing will be misconstrued
— *Ludwig Van Beethoven, 1810*

2.0 JAPANESE SYNTAX — THE *REST* OF THE STORY

2.1 Of Stems and LEAVES

In fitting grammars of the world into a typological scheme, one approach is to use word order as the sorting criterion. For example, since English is characterized by constructions of this kind...

A bird pecks an egg.		
SUBJ	VERB	OBJECT

...it can be tentatively sorted into the SVO (SUBJECT-VERB-OBJECT) bin.

Since Japanese contains many constructions of this kind...

<i>Tori-ga</i>	<i>tamago-o</i>	<i>tsutsuku.</i>
SUBJECT	OBJECT	VERB
bird	egg	pecks

... it can be tentatively sorted into the SOV (SUBJECT-OBJECT-VERB) bin.

Next, dependent on training, bias, or temperament, some writers will embrace the notion of an SVO/SOV “opposition,” and advocate this tidy model...

English	Japanese
SVO	SOV

...while other writers will treat such a pretty picture with due circumspection. For an example where the author might *seem* to embrace the simple model, consider the first sentence in the chapter on “Grammatical structure” in *The languages of Japan* by M. Shibatani:

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Japanese is the ‘ideal’ SOV (Subject-Object-Verb) language in the sense that the word order of ‘dependent-head’ is consistently maintained with regard to all types of constituent.

Shibatani, p. 257

But realize that Shibatani spends the next one hundred plus pages examining all the ways Japanese grammar is *not* just a matter of simple SOV.⁽³¹⁾

For an example that implicitly rejects the idea of SOV from the git-go, see *Basic Connections* by Kakuko Shoji. Her book begins on this sobering note:

There are two basic types of sentences in Japanese...

Shoji, p. 11

She calls them “A is B” type (where A and B are joined by the copula, as *A-wa B-da*) and “A does B” type, meaning TSOV⁽³²⁾ which is reducible to TOV by omission of S, or reducible to TSV by omission of O. So much for the little fantasy of English:Japanese::SVO:SOV. Instead we have this...

English	Japanese
SVO	1. <i>A-wa B-da</i>
	2. TSOV ==> TOV, TSV

...and we’re only a few pages into her 152-page book (Shoji, page 15).

In *A Dictionary of Basic Japanese Sentence Patterns*, Naoko Chino takes a similar approach, but speaks in terms of three basic types: the *noun* sentence, *adjective* sentence, and *verb* sentence (see Chino p. 30 f. and p. 121 f.) — a scheme that can be arrived at by breaking Shoji’s first type into two subtypes.

31. For example, he covers *backward gapping* and *forward gapping* (the latter permitted in Turkish but not Japanese), also *scrambling* and *fronting*. In particular, he delves into **topics** (as distinct from subjects) in Japanese; see Shibatani p. 92, 262-280, and 333.

32. Short for Topic-*wa* Subject-*ga* Object-*o* Verb-*ne*, where I’ve used *ne* as a stand-in for the various sentence-final particles such as: *yo*![], *ka*![?], *naa*, *ga*, etc.

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Here is another approach to language typology. At the level of phrase-structure, one might classify the patterns as stem-LEAF or LEAF-stem. English exemplifies the stem-LEAF⁽³³⁾ type, which we abbreviate as ‘s-L’ (with or without a dash or connecting arrow):⁽³⁴⁾

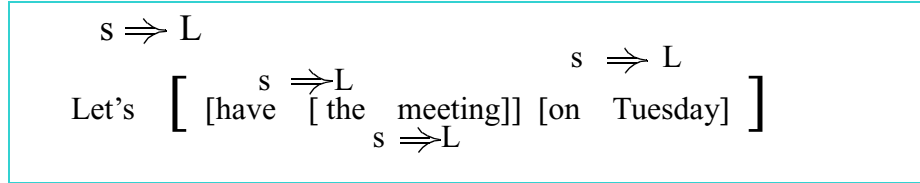


Fig. 6: Example showing 4 instances of stem-LEAF in English

In a stem-LEAF construction, each “stem” is an element of relatively small semantic weight that *leads the way* (left-to-right) toward an element of relatively great semantic weight (the notional LEAF); see **Figure 6**.

In a LEAF-stem construction, each “stem” is an element of relatively small semantic weight that *points back* (right-to-left) toward an element of relatively great semantic weight — the notional LEAF, with which it has been bonded (or agglutinated), rather in the mode of an afterthought. Consider the next two figures.

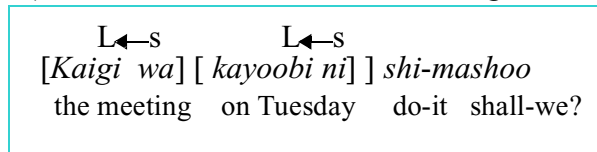


Fig. 7: Example showing two LEAF-stem substructures in Japanese

33. If you are familiar with the term *dependent-head* (as cited earlier in connection with Shibatani, p. 257) or with the synonymous terms *head-last* or *modifier-HEAD* elsewhere in linguistics, you’ll wonder why I’ve proliferated the terminology, adding my own labels, *stem-LEAF* (‘s-L’) and *LEAF-stem* (‘L-s’). I’ve tried to treat this as a tangential issue, as though it were just a matter of notational preference. But there is a substantive issue behind my rejection of ‘modifier-HEAD’; for this reason, even though I’ve buried this topic in an appendix (*Appendix C: Greenberg Universals, as usurped by the TG Grammarians*), it does resurface from time to time in the body of the book.

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$$\begin{array}{ccccccc} & & L \leftarrow s & L \leftarrow s & L \leftarrow s & & L \leftarrow s \\ \left[\left[[O\text{-}kyakusan] \right] \right. & ga & [kuru \text{ } made] & ni, & dekiagaru & \left. \right] & to \left. \right] omoimasu. \\ & & & & & & s \Rightarrow L \end{array}$$

I think I will be finished by the time the guests come.

$$\begin{array}{ccc} L \leftarrow s & & L \leftarrow s \\ [Ushiro \text{ } kara \text{ } osanai \text{ } de] & & kudasai. \\ & & s \Rightarrow L \end{array}$$

Don't push from behind.

Key:
 $L \leftarrow s$ means s bound to L as an agglutinative particle.
 $s \Rightarrow L$ means s bound to L as a modifier.
 To further clarify the structure, we place the L-s labels above the text and s-L labels below the text. Each L-s is in the nature of an afterthought, a tag. Each s-L is a "vector": it has mass, direction, impetus, so to say.

Fig. 8: More examples of LEAF-stem structures in Japanese

Figure 7 is intended to represent all the L-s structures such as Subject-*wa*, Object-*o*, Verb-*ka* that abound in Japanese. **Figure 8** represents all those *other* L-s constructions whose role is auxiliary to (even oblivious of) the SOV skeleton, such as ...*to*, ...*tte* (= *to iu no wa*), ...*ni mo*, ...*de*, ...*made ni*, ...*kara*, ...*nado*.⁽³⁵⁾

34. About my notation scheme, I wish I could just say this:
 "I use nested labeled brackets to show what would often be expressed (in the post-TGG world) by vertically grown structure-trees (like the one in Figure 23[a] on page 75)."
 But there's considerably more at work here. As with stem-LEAF vs. modifier-HEAD, there is a philosophical difference that accompanies my choice of brackets over trees. Yes, if I wanted them to, my nested brackets *could* be employed to represent the relationships found in a typical structure-tree (and they could do it more compactly and without the need for computer-drawing tools, I might add). But the structures I see in language, through the lens of my stem-LEAF analysis, are not quite the same as what the Linguistics Establishment sees. Granted, many of "their structures" and "my structures" coincide, since we're all looking at "the same thing"; but it is important to realize that I'm not merely proposing a new notation system; I'm also trying to advance a different way of thinking about syntax itself, starting from an "outsider's" view of its grass-roots constituents.
 I acknowledge that any nested bracket notation (as part of a computer programming language for example) has a quality about it that can be off-putting at first (perhaps because it is tersely 1-dimensional, not 2-dimensional like a structure-tree?) Therefore, I'll often use a variation on it that employs arrows (as in Figures 6-7 and 10-11) or overlapping rounded oblongs (as in Figure 12). For grasping the general intent of the notation scheme, it might be helpful to look ahead now and compare Figure 19 to Figure 20 — essentially the same thing expressed two ways, first in pictures, then via the bracket notation.

L ← s

[*Moo hitotsu shuuri no yakusoku ga arimasu*] *kara*.

It's because I have another repair appointment [that I can't come just now].

Note: Out of context, this may appear to be a fragment (i.e., the first part of a structure like "On account of A, B"), but actually it's a complete sentence, terminated by *kara* as the 'stem'.
Source: AJALT III.115.

Fig. 9: Yet another example of 'LEAF-stem' in Japanese

So, could it be that English is a "stem-LEAF *language*" while Japanese is a "LEAF-stem *language*"?

In Figures 6 through 9 my use of nested brackets and s-L/L-s labels might seem to suggest I believe this is the case. In **Figure 6**, the s-L labels even seem to work at multiple levels. At first, they provide a way of characterizing the structure of such low-level phrases as 'the meeting' and 'on Tuesday,' but the concept is then reapplied at the sentence level: 'Let's' is a "stem" that leads into an SVO sentence, which, if spelled out, would be this: "[You and I] have the meeting on Tuesday." (See also **Figure 12**.) Meanwhile, in **Figure 7**, isn't *-mashoo* a stem-like element⁽³⁶⁾ that points back at the whole verb-phrase to its left, thus forming the mirror image of "Let's..." in the English example?

For those who might be enamoured of the strict mirroring idea, this train of thought is followed to its ultimate conclusion in *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*.

35. In '*dekiagaru to*', the particle *to* is quotative, roughly equivalent to "is what" in the English construction: "'....,' is what I'm thinking." Note the nested 'L-s' structure of '*kuru made ni*', which goes a level deeper still in the following variation on Figure 8:

[*O-kyakusan ga [[kuru] made] ni*] *wa, owaru deshoo* ('We'll probably be done by the time the guests arrive'); after Nagara p. 150.

36. The verb suffix *-mashoo* is ubiquitous in Japanese, used to express "probably" or "let's", dependent on context. It also corresponds to English "I wonder," when followed by *ka*, or sometimes to another flavor of uncertainty not found in English: A boss calls his underling, who responds with, "*Hai, nan deshoo ka?*" Literally, "What is it, probably?" but functionally it's more like "What can I do for you?" or "What seems to be the problem [that I might have caused]?" (AJALT III.89)

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Back here in the real world, what we need to acknowledge immediately is this:

There's a construction in Japanese that goes the *other* way, too: namely adjective-NOUN, which behaves exactly like an adjective-NOUN (stem-LEAF) construction in English:

[1] *akai jitensha* (a red bicycle)

[2] *nagaii aida* (a long while)

In fact, the Japanese use of adjective-NOUN is far more consistent and unbendable than in English, as it maintains in all cases the stem-LEAF pattern; that is to say, it never flips over to a gangly, LEAF-stem construction as occurs in the English for examples [3]-[5] of the series:

[3] *kaeritakunai hito* (lit. [return want-not] people, a stem-LEAF construction in Japanese which becomes a LEAF-stem construction in the corresponding English: "people who don't want to go back")

[4] *ki ga tsukanai hito* (lit. [energy focus-not] people, a stem-LEAF construction in Japanese which becomes a LEAF-stem construction in the corresponding English: "people [who don't pay attention]")

[5] *eiga sutaa ni mitorete inu no ashi o funzuketa otoko* (A man who stepped on a dog's foot, being fascinated by a movie star.) Kindaichi p. 242

This remarkable uniformity of texture in Japanese (*within* the realm of adj-NOUN) is what inspires Shibatani's statement already cited: "...the word order of 'dependent-head' is consistently maintained".⁽³⁷⁾

37. In other words, switching over to my own terminology, what Shibatani (p. 257) seems to be asserting is that "Japanese is a stem-LEAF language" (with negligible admixture of LEAF-stem constructions). Striking a similar note, Kindaichi (p. 236) writes, "Japanese word order is consistent and based on the ironclad rule: 'If words and phrases called A are dependent on words and phrases called B, A always comes before B.' "

But the way I see it, these kinds of ostensibly global statements about Japanese ignore half the language! As I've illustrated in Figures 7 and 8 already, Japanese is just as much a "LEAF-stem language" as it is a "stem-LEAF language." It is rich with both constructions, and there is no way to make one of these categories collapse (legitimately) into the other. While Shibatani provides many qualifications to his initial flat statement about Japanese being "the 'ideal' SOV language" I don't see where he rectifies the equally flat statement about *dependent-head*. To the contrary, on the same page, he blithely cites postpositional particles as though in *support* of the statement. *Eventually*, he treats all such particles and their historical antecedents in exquisite detail (p. 333-357); yet never does he justify their initial appearance (in sentence 1[a] on p. 257), where they seem strangely and silently antithetical to the argument at hand. For more on this subject, see *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*.

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Next consider **Figure 10** (after Yonekawa, p. 32). At the lowest level it is incessantly LEAF-stem-ish (*kao-mo, sutairu-mo, waruku-nai no ni, seekaku-busu*). Yet, at a higher level, it is informed by stem-LEAF patterns, culminating in the predicate-copula pair, *yatsu da*, of which one can say, “This is the [basic] sentence”:

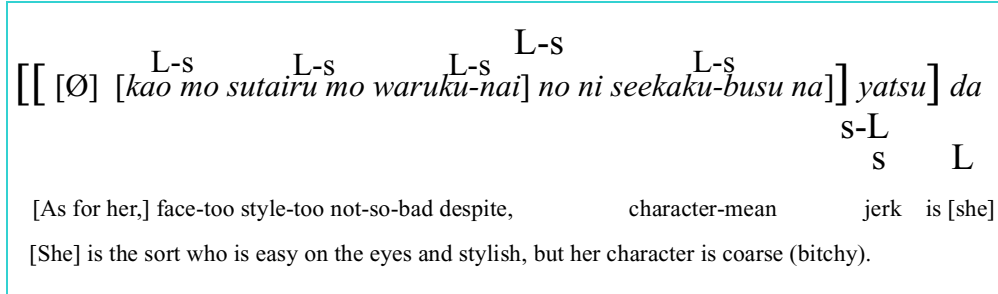


Fig. 10: stem-LEAF/LEAF-stem counterpoint in Japanese

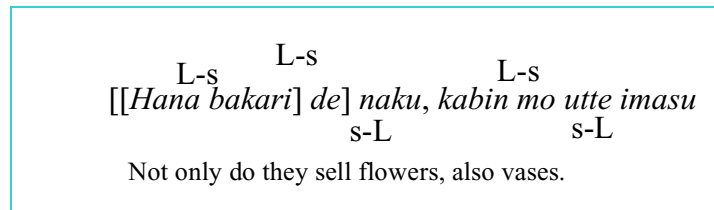


Fig. 11: More stem-LEAF/LEAF-stem counterpoint

For more about modifiers that follow nouns (such as *bakari, demo, hodo*), see Lampkin p. 90.

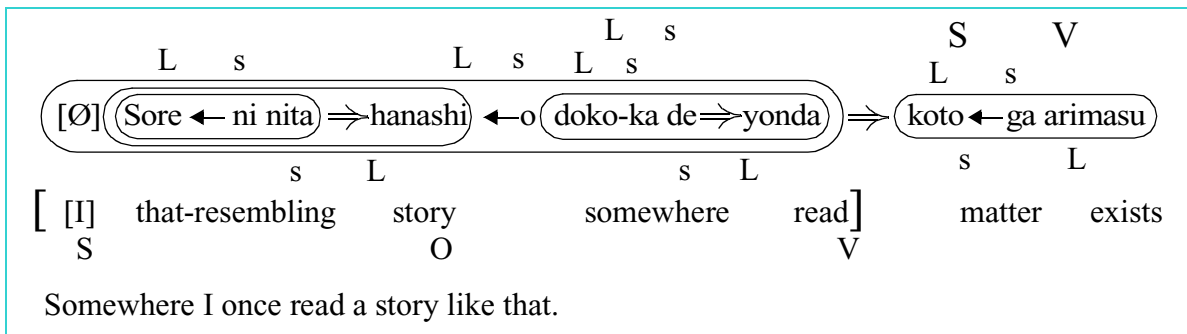


Fig. 12: Still more stem-LEAF/LEAF-stem counterpoint

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In **Figure 12**, the basic sentence is simply *koto ga arimasu* (“A matter exists.”) The SOV sentence to the left of *koto* is one gigantic ‘stem’, taking *koto* as its LEAF. Not bad, eh, for a (putatively) LEAF-stem language? Nor is this an unusual construction; to the contrary, it’s a characteristic Japanese construction,⁽³⁸⁾ forcing one to wonder: Just how LEAF-stem-ish *is* Japanese after all?

Or, does it seem that I’ve left something out — the explanation of how I *know* that *yatsu da* (noun copula) and *utte imasu* (gerund verb) and *koto ga arimasu* (noun-phrase verb) are to be interpreted as ‘s-L’, not ‘L-s’? Here we return to the subject of SOV: It’s not that we have SOV as an unadorned permutation of SVO in Japanese; rather, strictly speaking, the schema should be written using two small letters and a capital — **soV** — as a constant reminder that the verb is paramount in this language.⁽³⁹⁾ Thus, along with adjective-NOUN, the very SOV backbone of the language likewise falls into the stem-LEAF pattern. Putting it another way: although the L-s pattern exists elsewhere in abundance, when it comes to sentence-final verbs, *they* are not to be interpreted as ‘stems’ subordinate to other elements. Quite the opposite.

Granted, when you get down to a certain level regarding these s-L/L-s assumptions, where the rubber meets the road, I cannot see a way to “prove” them. All I can hope to do is toss the ball in the air and hope others help keep it aloft because, “Yes, that makes sense.” Consider the case of cadences in music:

We have the dominant-tonic “authentic” cadence: V–I

We have the subdominant-tonic “plagal” (or “church”) cadence: IV–I

We have the “deceptive” cadence, from dominant to submediant: V–vi

38. Moreover, to many complete sentences of the kind just given, one can append, on the fly, something like this, to make them ramble on pleasantly just a bit longer:

“...” *to omotte imasu ga...*

(“...” *is what I was just thinking, although [maybe I just imagined it?]*) And *still* it will be a well-formed Japanese sentence (as it would be in English for that matter, except this “afterthought” mannerism strikes me as more characteristically Japanese, not quite so likely to occur in English).

39. In putting this particular flavor on the Japanese (version of) SOV, we are supported by Kindaichi, p. 228-229, Lampkin, p. 53, and others. However, for the sake of smoother typography and readability, I’ll settle for using plain ‘SOV’ in most parts of this book.

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And many more, with triad inversion, with added ninth, with an imaginary root, and so on. Scholars are paid to teach classes and write books that involve, among other things, the theory and practice of these cadences. So many varieties of cadence to explain! Today and seven centuries ago.

Meantime, has anyone ever “seen a cadence in nature” (the way we might see a raccoon in nature, and thus be reassured of its existence)? Can professors of occidental music prove that their cherished cadences exist? No. The whole taxonomy exists only by cultural convention. *Because* 99.99% of one’s colleagues will say, “Yes, I understand this concept of a musical cadence,” *therefore* are they “real.” That the physics of acoustics might someday “explain” after the fact why the tonic resolves the dominant is quite beside the point. At the end of the day, it all hinges on cultural convention, as when we agree that a certain kind of paper is worth one dollar, unless it should fail to match the size of other such papers in one’s billfold, in which case one would immediately suspect play money or a counterfeit. On the one hand, it’s “only a convention,” wherein old tattered paper buys the same thing as a crisp new note. La-dee-dah. On the other hand, the convention has surprising rigor: even a $1/32$ inch divergence from the convention of $6-5/32 \times 2-5/8$ inches would raise a red flag and cause one to hand the bill back, indignant at the fraudulence.

In *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*, I’ve gone to some trouble to explain what I think the significant difference is between the established *head-last* analysis and my own *stem-LEAF* analysis, and why I believe the latter is preferable (because it’s more than just a matter of notation). But beyond a certain point, I won’t attempt to “prove the existence of s-L/L-s substructures,” for the same reason it would be futile, beyond a certain point of diminishing returns, to try “proving the existence of musical cadences” or “proving the value of a dollar bill.” My s-L/L-s notation is put forward as “only a convention” but it’s a convention that I hope will “make sense” and be accepted on its self-evident merits by the reader.

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On the one hand, my s-L/L-s observations seem almost too obvious to warrant discussion. (“Of course that’s how language works; and your point is...?”) On the other hand, one whole wing of the TGG house of cards was erected on a misperception of how s-L/L-s works in English and in Japanese (bass-ackwards from my own), and this would suggest that it is a topic worthy of clarification.

In Japanese, I contend that the very notion of “*the* syntax” fails us and must be broken down into two separate, coexisting strata of syntactic activity, each with its own “voice” and temporal identity (either with or against the grain of time). Partly to raise the ante, partly to provide variety, partly to allay the reader’s suspicion that I’m “just an American showing us his reaction to Japanese, specifically,” I will next present two examples from German in support of my position regarding s-L/L-s analysis and my notion of syntax flowing in both directions at once.

2.2 The German lesson

Like Japanese, German abounds with what I call “the counterpoint of moving right and left at once.” For example, in German,⁽⁴⁰⁾ as perceived via the lens of simple SVO/SOV, one could often have the impression that an SOV sentence has been welded into the O-socket of an SVO matrix...

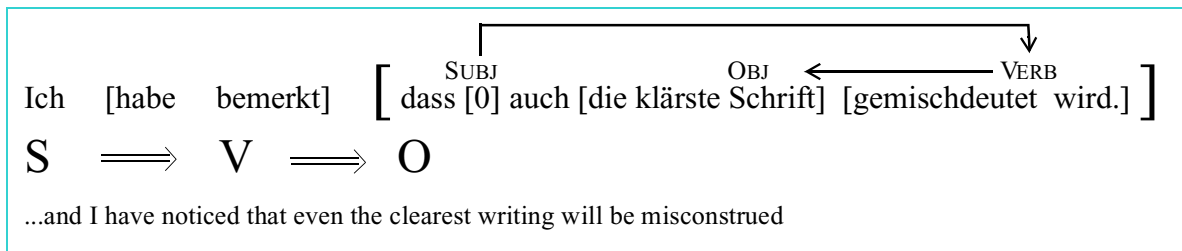


Fig. 13: Both ways at once in German (SVO and SOV)

... when really it’s just a matter of observing a little rule about clauses beginning with *dass*.

40. It’s the German of Beethoven in this instance, as quoted by Prof. Dr. Wilh. Altmann, on page IV of his introduction to the *String Quartet Opus 74* (Edition Eulenburg No. 22, 1911). When Beethoven complains about “the clearest writing” being misconstrued, he is referring to the problems of getting his music manuscripts to press without an undue number of copying errors and typos. I was drawn to this passage because its grammatical structure succinctly makes the point about SVO and SOV coexisting on different levels within a single sentence.

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In German, you can flip a sentence around to *look* like “A is B” when really what it says is “B is A”, thus coming close to a sort of “OVS” effect:⁽⁴¹⁾

A	$\xleftrightarrow{\hspace{1.5cm}}$	B
Jawohl, und noch [merkwürder] ist, [dass das jeder Esel gleich hört.]		
	S	\implies V

Yes, and what is still more extraordinary yet is that any fool can hear [it].

Fig. 14: ‘A is B’ and ‘B is A’ in German

In **Figure 13**, the entire quotation might seem to be SVO, in the sense that everything from *dass* down to *wird* is the object of the verb *bemerkt*. But tucked inside that lengthy object, we find an equally noteworthy SOV structure, with the verb *gemischdeutet wird* twisting back toward *Schrift* as its local object. Meanwhile, the subject that goes with *gemischdeutet* (misconstrue) is a zero subject, which, from context, we can reconstruct this way: “a music editor (of the kind who keeps bungling the publication of my manuscripts).”

Skimming over the surface of the sentence in **Figure 14**, one has the impression that its structure might be *merkwürder ist [dass...hört]* (“A is B”), but semantically, what it really says is *[dass...hört] ist merkwürder* (“B is A”). Syntactically, too, we can see that’s what the sentence is doing, of course, once we look more closely. Not that such a syntactic formation is absolutely forbidden in our language [“and still more extraordinary \leq *is* \leq that any fool can hear it”], but it would be uncharacteristic *and* it would still lack that certain music, that *je ne sais quoi* possessed by the German, so why bother? Accordingly, the translator renders it as indicated in **Figure 14**: flat, that is to say, with no trace remaining of that special Germanic flavor. And yes, that’s a proper translation, all things considered.

41. This time it’s Brahms, as quoted by the ubiquitous Prof. Dr. Wilh. Altmann, on page VIII of his introduction to Brahms’ *Symphony No. 1* (Edition Eulenburg No. 425). Brahms is reacting to someone’s observation that one of his themes bears a slight resemblance to a celebrated Beethoven theme, likewise “of the people.”

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The theory is that case makes German relatively flexible compared to English, in the following sense: to shift the emphasis in a sentence, the German speaker may rearrange its constituent parts at will (since case identifies their intended syntactic relationship, “regardless of order”), whereas an English speaker might feel constrained to switch to a passive construction to achieve a similar shift in emphasis. Thus, when I say that the sentence in **Figure 14** seems to twist back on itself, this is admittedly an outsider’s view, tainted by some subjectivity. Perhaps to the native German speaker, there is no such thing as “twisting” of syntax? Indeed, a German grammar is likely to mention the auxiliary verb *werden* (*wird*) coming after the main verb as though this were the most natural and unremarkable thing in the world, not the hallmark of German’s “long and backward” flavor. (Regarding auxiliary verbs in German, see Durrell, p. 471. For an example whose syntax is parallel to that of our *Schrift* clause in **Figure 13**, see Durrell p. 310: *Es besteht darauf, dass ihm geantwortet wird*. ‘He insists on being answered.’) If forced to, I’ll shift my argument from the syntactic plane to the semantic plane, then: relative to the forward direction of time, there is “twisting” somewhere in that sentence, at least in the semantic plane, if not in the syntactic plane.

[later draft, to be integrated/merged into preceding paragraph:]

German word order is often described as “flexible” because the case indicators allow one to “arrange the pieces in any order.” The word *flexible* is easily misconstrued in that context to suggest more freedom than actually exists. I would rather say German word order is pleasantly *variegated*, following certain rules toward the early part of a sentence that can indeed be relaxed to move the pieces around for the sake of shifting the emphasis; and following other rules as you approach the latter “half” of a sentence, ones that remain fairly strict. Thus, in a subordinate clause that begins with *weil*, *wenn*, *als*, etc. the verb goes at the end, and this is not because “German is an SOV language”; it is simply because of a rule about clauses beginning with *weil*, *wenn*, *als*, etc. that happens to throw such verbs into high relief,⁽⁴²⁾ ending the sentence as well as the clause, and thus possibly suggesting to the casual observer that the language overall has an SOV-ish flavor.

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Like the view of Japanese as a topic-prominent language, where TOV appears “out of nowhere” to upstage SOV (see discussion in fn **TBD**), the variegated quality of German word order should likewise serve as a reminder that SVO/SOV is not always a good sorting criterion for the classification of a “whole language.”⁽⁴³⁾

2.3 Linguistic space, linguistic time

Viewed in terms of its “communication channel needs,” language is surprisingly modest: all that’s required to get the syntactic message across is a 1-dimensional aural space:

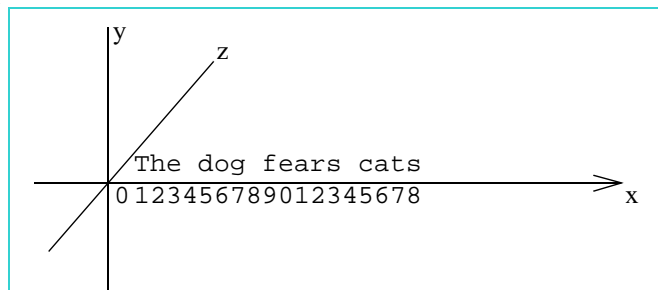


Fig. 15: Syntax requires only 1-dimension of aural space

If you ask me where the subject and verb are in **Figure 15**, all I need to tell you is, “On the x-axis, at coordinates 5 and 9, respectively.” There’s nothing hiding on the y-axis or z-axis that will tell you an iota more.⁽⁴⁴⁾

By contrast, a Beethoven *Duo* for Clarinet and Bassoon requires two communication channels, for getting the “message” across (to humans). Not that our 1-dimensional aural space doesn’t have folded *into* it all those notional “dimensions” of phonology, morphology, syntax, semantics and emotional nuance

42. In English, speaking in a certain uncommunicative mode, a teen might “answer” a parent’s question by saying, “I’m going into town because I’m going into town.” Presumably her teen counterpart in Germany would be more likely to mumble, *Ich fahre in die Stadt weil ich in die Stadt fahre*, thus missing out on the repetitive quality of the English but compensating for this loss by exhibiting at a tender age a more “sophisticated” flavor of hectoring petulance? All thanks to that same little rule about a *weil*-clause.

43. In fact, at least the following four major languages of the world all wreak havoc with Greenberg’s neat scheme: English, Chinese, Japanese, and German; for more about this, see **Appendix C: Greenberg Universals, as usurped by the TG Grammarians**.

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that are roughly equivalent in complexity to a Beethoven *Duo*. Clearly it does.⁽⁴⁵⁾ But the point is, *as* a communication channel, *as* exercised in its normal humdrum state day to day, all that language *requires* is the 1-dimensional aural channel, while music *requires* two or more dimensions.⁽⁴⁶⁾

Please forgive me if all this seems obvious to you; I'm gambling that some readers, at least, may be startled to realize that something so seemingly complex as syntax can "live" — from a certain perspective⁽⁴⁷⁾ — in a space that would be boring and humiliating even to a lowly Flatlander (2-Dimensional creature).

But wasn't that Alan Turing's point? That even a 1-dimensional computational device (Universal Turing Machine⁽⁴⁸⁾) could handle any problem, no matter how complex — albeit on a cosmic time scale perhaps, as a ribbon of infinite length (if need be) gliding to and fro over its tape-reading "eye"?

Yes, that was his point. So there we have a less obvious kind of "folding" of great complexity into a medium that looks linear and bland: a mere string of 1s and 0s. It's when you put the 1-dimensional Turing Machine view of aural space together with the time dimension that it starts to become (genuinely, inherently) interesting (see **Figure 16**).

44. For the sake of its graphic appeal, one is tempted to use a geometric analogy, as in Figure 15; but the analogy would be slightly more accurate had we borrowed the terms *1-dimensional*, *2-dimensional*...as used in software engineering to describe different kinds of array. Internally, a 1-dimensional computer array is truly flat, requiring only a string of 0's and 1's to define it; but conceptually, the programmer is inclined to think of it as an object with considerable "thickness," having this appearance

T	h	e		d	o	g	
---	---	---	--	---	---	---	--

 etc.

We all know that really it's 0s and 1s in the computer, not 'T' 'h' 'e'... and that's why it is truly 1-dimensional. What about human speech, though? The analogy holds because no one knows exactly how speech is encoded/decoded. For all we know, my encoding step and your decoding step entail a translation process that is just as linear as that of two computers. This is *not* to say, "the mind is like a computer." (For a debunking of that school, I recommend Penrose, *The Emperor's New Mind*.) We're talking only about the physical communication channel, not "the mind" as such.)

45. Similarly, a radio transmitter taking to a radio receiver can fold it down temporarily into a single channel, or one computer sending the *Duo* to another computer can project it onto a 1-dimensional bit-stream of 0's and 1's.

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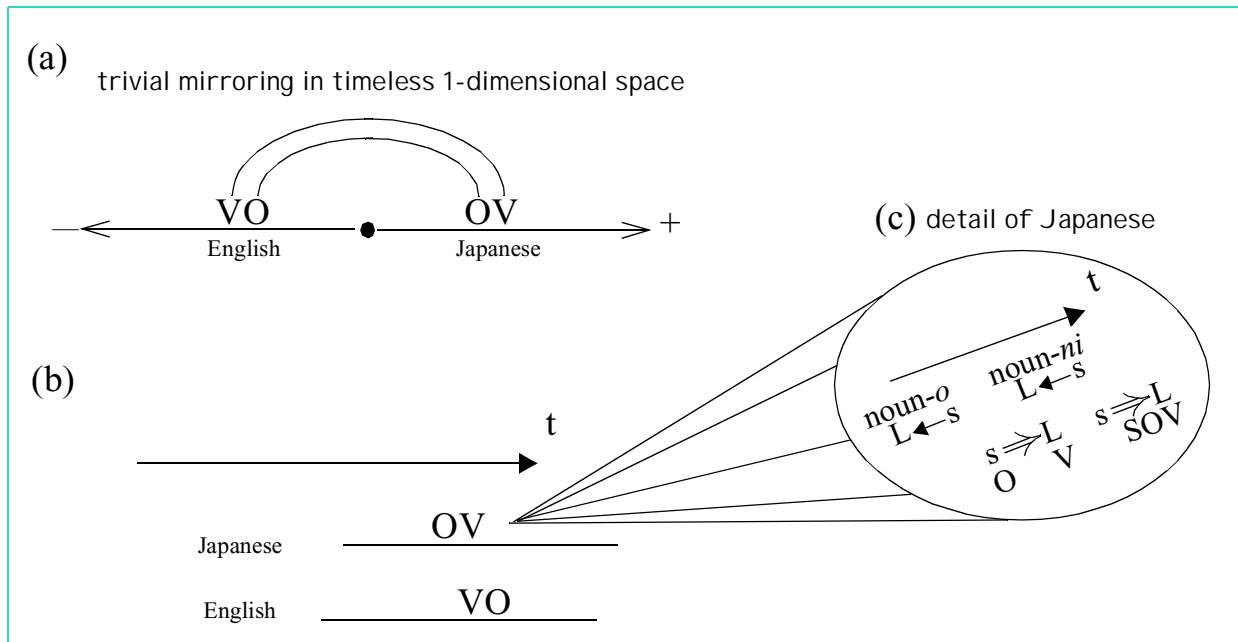


Fig. 16: Absent the time line, 1-D “mirroring” is trivial

Even a Turing Machine, “simple” though it is, has an interest in moving its tape left or right, to see old characters or to write new ones — possibly on a segment of the tape that is light-years away at the moment when the Turing Machine decides to recall it (from wherever, in the vastness of its notional space). Humans likewise care about “syntactic direction” as I call it, and sometimes they (in Japanese or German, for instance) even want to “look back” — not very far back — only a modest, half-a-second back.

46. Presumably a conductor rehearsing György Ligeti’s *Atmosphères* is making a heroic attempt at 77-dimensional aural space, since that’s how many staves there are in that outsize score; and, at times, *each* of them is occupied by slightly different musical pattern. (Point of reference: A “normal” orchestral score would be only 10 to 25 staves deep, and with only 4 or 5 distinct “listening channels” required during much of the symphony or opera.)
47. To make a point, I’m cheating a bit by leaving out, temporarily, all those things we think “about” a syntactic structure and its semantic payload; all those things that do, in fact, require something like a “multidimensional *thought* space” if not a “multidimensional syntactic space.”
48. Conceptually, the Turing machine is a creature with one eye that can distinguish ‘0’, ‘1’ or ‘blank’, wielding a pencil with an eraser that can write or erase 0’s and 1’s on the tape, to solve all the problems of the world (eventually). Every time we power on a PC and see the text spring back to life, we are partaking, just a little, of Turing’s grand vision, that goes beyond the relatively simple (!) problem of writing a word processing program that stores documents on a disk — literally into the far reaches of intergalactic space because that’s how lengthy the theoretical tape would have to be for the more difficult problems.

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For example, if a syntactic LEAF is *led up to* by its stem, the human's syntactic engine keeps moving forward and doesn't look back; natural time and human perception are in harmony.

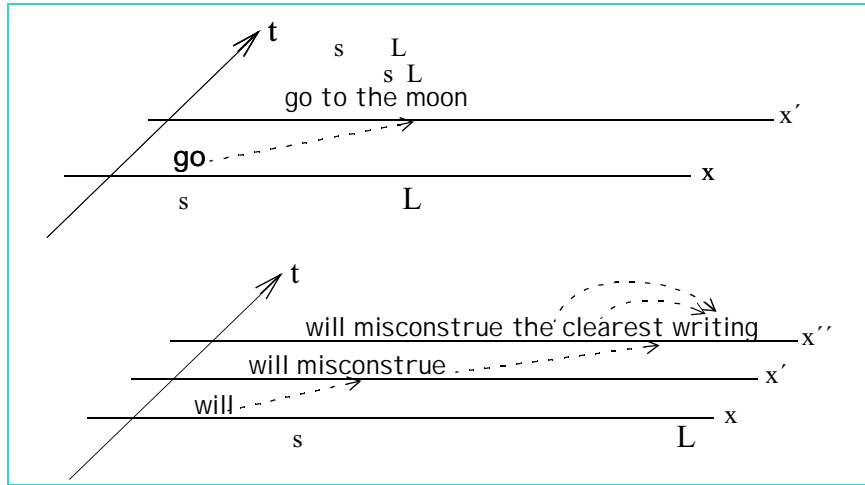


Fig. 17: stem-LEAF progression of English has no “looking back”

However, if a stem is *appended to* its LEAF, one looks *back* to see the effect of the agglutination — to see how the whole has jelled; to register the Gestalt, if only for a split second:

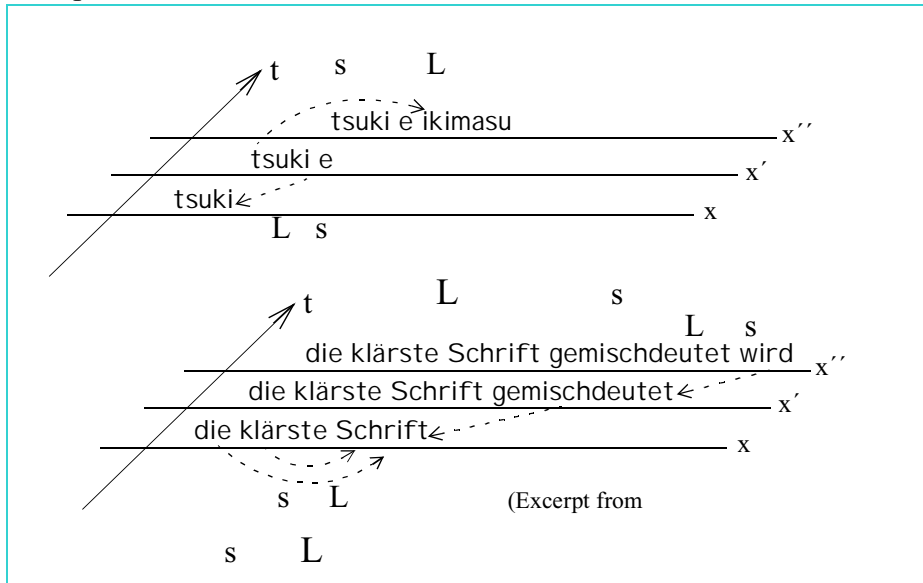


Fig. 18: LEAF-stem layer of Japanese/German involves the “backward glance”

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This matter of (sometimes) “waiting” and “looking back” (however briefly, typically just a small fraction of a second) makes Japanese and German qualitatively different from a language like English, where the need for such “waiting” arises only rarely.

How many dimensions? I haven’t changed my mind about how many dimensions: In **Figure 17** and **Figure 18**, syntax itself is still residing 1-Dimensionally on the x-axis. But we now acknowledge another facet of the mind, the one that keeps track of the line x at different times (represented by x , x' , x'' ...) And surely there are many other notional dimensions (i , j , k ...) we could play with to account for semantic content, for degree of irony, for humor, etc., so that eventually we would be looking at the “proper number of dimensions” to match how we feel about the “inherent complexity of language,” but they aren’t relevant to this discussion.

Editing note: There used to be a section called “Handedness,” and it began here. Need to edit what follows to fit new context?

Many of the objects in mathematics have no handedness. They exist in a pristine, timeless place where Symmetry is at one’s beck and call. By analogy with certain kinds of mathematics, some theoreticians wish to impose a pristine Symmetry and Timelessness on language where no such qualities can possibly exist. Language is alive. Language has handedness. It flows left-to-right through time. (Or down the page, top to bottom, if you prefer to picture it in terms of Sino-Japanese writing.) The linguistic direction matters. It’s not a variable ‘ x ’ to be finessed, merely by doing a sign-change operation on it.⁽⁴⁹⁾

49. All of us understand immediately that the transformation of a right-handed glove into a left-handed glove is not to be had simply by flipping it over on the kitchen table. But what *would* it take, exactly? Not mirrors or mathematics; rather, some physics, some hard work and travel to faraway places: Either you take the glove “up” to the 4th dimension to turn it around, and then bring it “back down”; or, if that sounds too arduous, you could take it through the full extent of a lowly 3rd dimensional space that has been twisted into a Klein Bottle’s shape. For an illustrated primer on the subtly difficult (and ultimately mind-boggling) subject of handedness, see George Gamow, *One Two Three... Infinity*, Dover, 1988 [1947], p. 59-63.

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When Omar Khayyam says, “The Moving Finger writes; and, having writ, Moves on,”⁽⁵⁰⁾ this isn’t just a Kodak Moment for Persian poets; the guy is trying to teach us something about the nature of language.

In my own illustrations, I too show various grammatical structures as mere inversions of one another; e.g., I’ve constructed **Figure 7** to look like “**Figure 6** backwards.” Yes. But in doing so I’m *not* trying to wring time out of the equation! To the contrary, my contention is that the implied context (movement through time) makes these figures more than what they appear to be — more than simple mirror images of one another.

Let’s put the movie in slow motion, and see what really happens during the formation of a Japanese sentence, frame by frame, as it were. Please refer to **Figure 19**. (By now, the reader won’t find it strange, I trust, that one kind of structure involving leaves and stems will grow in retrograde motion: first a LEAF, then its stem, now another LEAF, followed by its stem. We’re not trying to confuse the issue; this is simply how Japanese works, quite “naturally” as you’ll come to feel it, with time.)

50. From the *Rubaiyat of Omar Khayyam*, translated by Edward Fitzgerald: The Moving Finger writes; and, having writ, / Moves on: nor all your Piety nor Wit / Shall lure it back to cancel half a Line, / Nor all your Tears wash out a Word of it.

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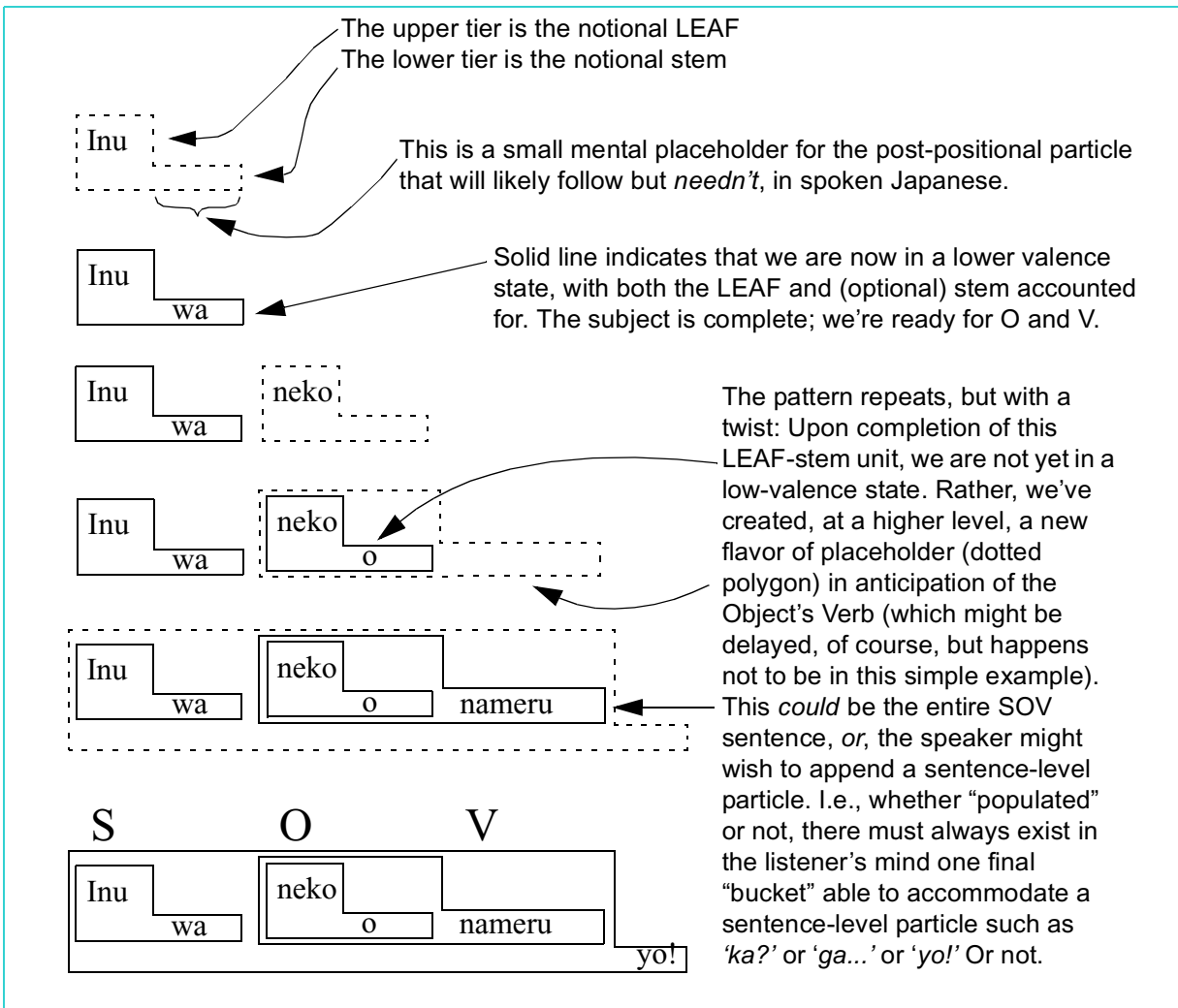


Fig. 19: A short LEAF-stem "movie" in slow motion

In a perfect world, I might prefer the notation in **Figure 19** over my bracketty one in **Figure 20...**

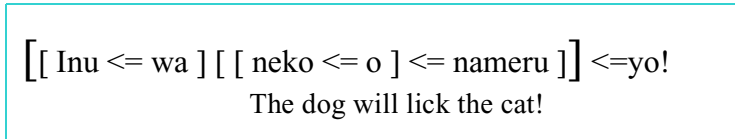


Fig. 20: The LEAF-stem movie again using bracket notation

...except the depiction of the levels in the **Figure 19** notation is both arbitrary (at times) and cumbersome, not to mention space-, toner-, and paper-intensive. In **Figure 20**, this is what my left-pointing "semantically" oriented arrow is intended to convey: "This particle *wa* means nothing on its own; it forms a (retrograde) bond

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with *inu* on its left to take on meaning: *the dog*” (i.e., ‘the-dog-as-subject’ since we’ve interpreted this as an SOV sentence, not TOV,⁽⁵¹⁾ in which case the same particle *wa* would have marked *inu* as ‘the-dog-as-topic’; in any event, not *a dog*, new to the neighborhood). Therefore, *inu* is “waiting for” a particle to arrive.

Returning to **Figure 19**, this is what the notation is meant to convey graphically: “As soon as I hear *inu* I open up a space in my mind (a “bucket” as one might say in the software world) to hold *something else*, and I don’t let loose of *inu* UNTIL that something else has appeared and bonded with it, like: *inu-wa* or *inu-ga* or *inu-mo*.⁽⁵²⁾ Now I can start listening for another semantic chunk that will occupy the same plane of importance as *inu*, namely *neko* in this example.” For my money, **Figure 19** is slightly closer to the actual look-and-feel of Japanese, but **Figure 20** is good enough, and it has the advantage of being quick and succinct (once you’ve grown accustomed to it, like the nested bracket notation used in many computer languages, which is daunting at first).

The time dimension matters.

One more alternative notation (another non-bracketty one), then we’ll move on. These next two graphics are meant to drive home the point that language is alive, messy, caught in a web of flowing time; not a static entity floating in a timeless mirrored pristine vacuum. If the TG Grammarians have more the viewpoint of a

51. Regarding the shadowy but very real question of Topics vs. Subjects in Japanese, see Shibatani p. 262-280.

52. But of course it isn’t quite that simple. *Nothing* is the final possibility that I omit, to simplify the discussion: In spoken Japanese, one may simply drop such particles, as soon as a bit of context has been established by the dialogue.

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Mathematician (“Into what timeless, pristine boxes can we shoehorn language?”), exemplified by **Figure 26**, mine is more like that of a Physicist (“What’s actually going *on* in there?”). In **Figure 21** and **Figure 22** I try to convey the latter viewpoint by treating a sentence as a solid “object” with side view and top view.

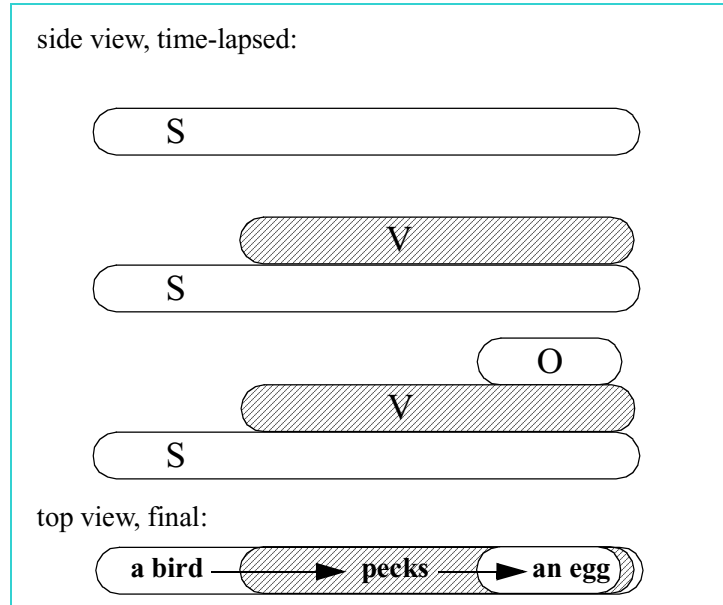


Fig. 21: Semantic rhythm in an SVO language

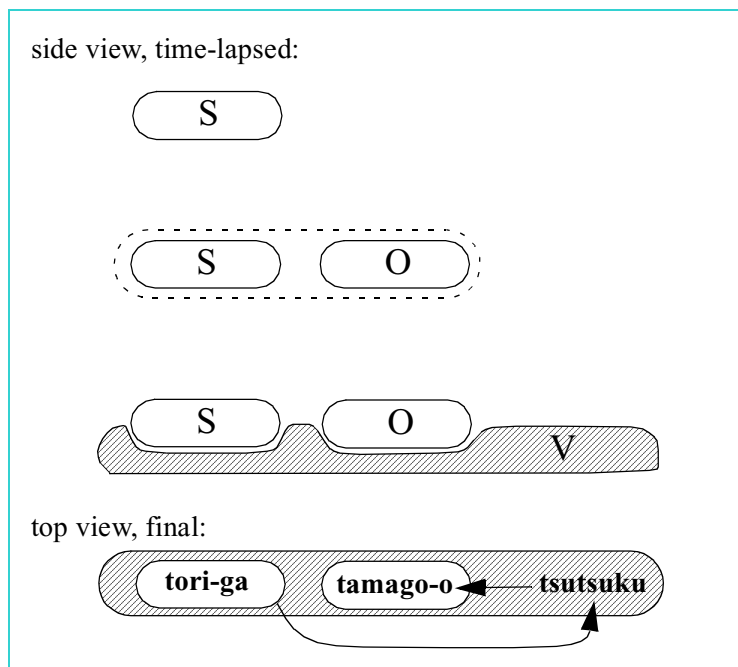


Fig. 22: Semantic rhythm in an SOV language

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In **Figure 21**, a semantic foundation is immediately laid down: the long piece labeled ‘S’ for subject. And everything else fits comfortably “on top of it.” With the foundation in place, we move on, *with the grain of time*; we don’t look back. There’s nothing “back there” to see. By contrast, in **Figure 22** one must wait for the subjectively “long” piece to arrive. Everything floats in the air until the ‘V’ of **soV** has arrived⁽⁵³⁾, and then one glances back, as it were, *against the grain of time*, to see how this verb must interact with its object. The point is, even in Japanese, a verb does (eventually, ultimately) *act on* its object.⁽⁵⁴⁾ In other words, one doesn’t hypothesize that the object *tamago* somehow “acts on” the verb *tsutsuku*, just because the former precedes the latter on the time line. Thus, **Figure 21** and **Figure 22** are far from being looking-glass reversals of one another. They are qualitatively different. Their difference is genuine, not a function of notational preference.

53. Regarding the upper/lower case spelling of ‘**soV**’, see footnote 39 on page 60.

54. The particle *-o* generally denotes a direct object but it can also denote a location, as in *kado-o magaru* ‘turn a corner’ (Δ.1110).

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For variety, let's switch to structure-tree notation for a moment.

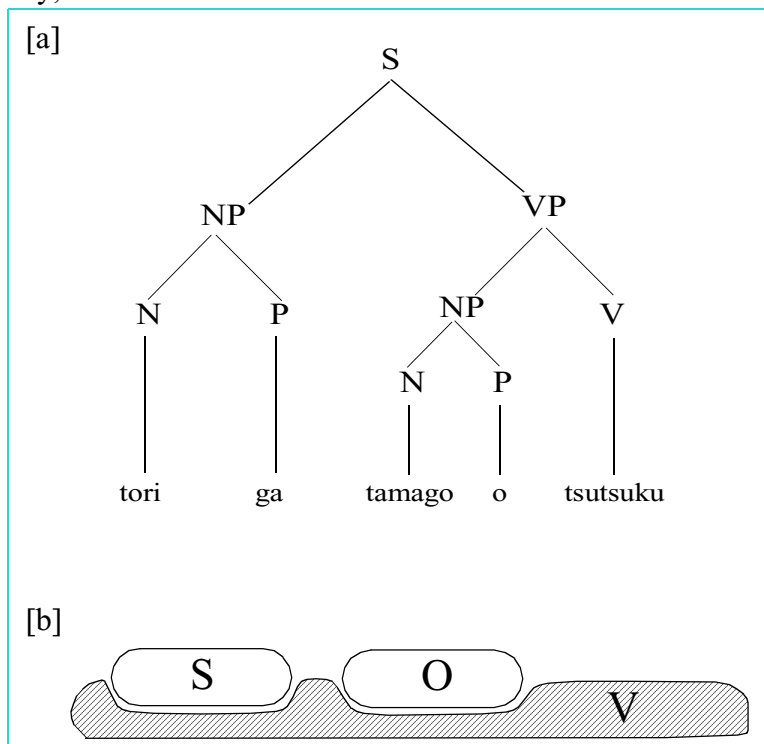


Fig. 23: Two views of “Tori-ga tamago-o tsutsuku”

In **Figure 23**[a], we follow the TGG labeling convention where S = sentence, NP = noun phrase, VP = verb phrase, and P = particle. In **Figure 23**[b], we see part of **Figure 22** repeated, for the convenience of juxtaposition and comparison.

In **Figure 23**[b] (more so in **Figure 22**), we suggest a certain affinity between *tori* and *tamago* because together they must “wait for the verb” that will define their relationship and crystallize the meaning of the sentence; whereas, the conventional analysis represented in **Figure 23**[a] segregates the noun phrase *tori-ga* as the subject, meanwhile binding *tamago-o* tightly to *tsutsuku*, taking these as the dual components of a verb phrase. Language has many facets. I maintain that **Figure 23**[b] is also a fair representation of one facet of Japanese, which I call “semantic rhythm” to help distinguish it from a conventional syntactic x-ray of the sentence. (That these are not cut-and-dried matters one can see by reading Shibatani; see for example his circumspect discussion of Sentences 77a-b on p. 298 and 301-302.)

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Language moves “forward in time” or it moves “left to right” or “top to bottom” (in written Chinese and Japanese). Whatever that underlying “linguistic direction” is, only one of the two figures — **Figure 21** or **Figure 22** — can be said to be with-the-grain of its natural flow. The other one must be moving against the grain. Specifically, **Figure 21** is with the grain; **Figure 22** is against the grain. This is not to say Japanese doesn’t *also* have many with-the-grain constructions (such as *ii tenki* and *shiroi hana*). To my ear, Japanese plays the music in both directions at once, so to say, thus creating the potential in every utterance for a kind of natural counterpoint. We’ve seen that German does something similar. These traits are summarized in a table:

Language	stem-LEAF/LEAF-stem characteristics
English	For the most part, this is a <i>stem-LEAF</i> language, with <i>LEAF-stem</i> constructions permitted only as a rarity: the sentence-final jolt used in Valley Girl talk (“He’s really handsome... <i>not!</i> ”; archaisms such as “I thee wed”; the retrograde structures and fanciful exoticisms of Yoda-speak in the film <i>Star Wars</i>).
Japanese	At the micro-level of SUBJ- <i>ga</i> OBJ- <i>o</i> VERB- <i>ne</i> , this language possesses a strong <i>LEAF-stem</i> rhythm; but at the macro-level of soV , ‘so’ stands in a <i>stem-LEAF</i> relation to ‘V’; and, likewise, ADJ-NOUN (<i>ii tenki</i>) is prominent as the quintessential <i>stem-LEAF</i> construction. Thus: <i>both ways at once</i> .
German	German contains many <i>SVO constructions</i> such as <i>Ich liebe dich</i> , but that doesn’t make it an <i>SVO language</i> . To the contrary, it is also well known for its long complex sentences that postpone the verb and its auxiliary till the very end, sometimes giving this effect: “by an algebraic substitution for ‘O’ in <i>SVO</i> , we obtain <i>SV[SOV]</i> .” Although, the native speaker’s rules that bring us to this point have an entirely different impetus, such as: “In a <i>dass</i> -clause, put the verb at the end.” At any rate, we often see <i>SV</i> near the start of a sentence, moving “with the grain of time,” and <i>OV</i> at the end, moving “against the grain.” Thus, by my lights, it’s another case of “both ways at once.” Which makes it somewhat reminiscent of Japanese.

How can we be so confident that the speaker of an SOV sentence is in a “waiting” or “glancing back” mode? In Japanese, there’s a class of words that Jay Rubin calls *early-warning* elements,⁽⁵⁵⁾ their sole purpose being to relieve the listener of a sentence-end jolt. For example, whenever a sentence ends with a verb that carries the

55. See Rubin p. 107; also p. 40-41 for more about the time dimension of syntax, which I agree has been ignored by most writers.

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conditional ending *-tara*, one may throw *moshi* onto the front of the sentence, as a warning that the whole upcoming thought is conditional, speculative. (See our example under *-ra* on page 44.) Thus, one has some options to consider: If you want suspense (in a play), you leave *moshi* off; if you want to be nice (in some other context, e.g., to minimize a boyfriend's / girlfriend's discomfort at hearing the opposite of what they were hoping for), you prepend *moshi*. The existence of the *moshi*-option supports my contention that OV is not the mirror image of VO. (See also the discussion of *Maru-de...* and *Tada...* in Rubin, p. 107-108.)

Editing note: Apply this to L-s too (same thing on smaller scale): tamago “waits for” -o.

Editing note: There's an even better ex in Kindaichi 244-245

Always, *always*, the verb reigns supreme did we say? It does until we say it doesn't. In the fall of 1689, Bashō was making his way down the west coast of Honshū, through Kanazawa and Komatsu, where a relic at Tada Shrine induced him to write the following sentence:

<i>Muzanya-na kabuto no shita no kirigirisu</i>		
	T	
[[[The tragic helmet's] underside's] grasshopper]	[O] [Ø]	[V] [Ø]

Fig. 24: A counterexample: “verbless Japanese”?

Syntactically speaking, the “sentence” in **Figure 24** has to be one of the most butt-ugly specimens in existence. Just look at it: a verbless noun, preceded by a string of modifiers that clank along behind it like so many tin cans tied to the tail of a cat. A more hideous and unJapanese construction I can't conceive. Just as hairless cats exist (in someone's nightmare), so the travesty of verbless Japanese would seem to lurk on certain bookshelves. And yet, there is an implied rumination that makes it okay, an invisible component that makes it ultimately “a Japanese sentence,” a famous one⁽⁵⁶⁾ at that:

[As for] the tragic helmet's underside's grasshopper, [it moves me in ways you'll understand, if you know — and of course the gentle reader *would* know — who the warrior Sanemori was, owner of said helmet].

All that stuff is so obvious, Bashō had no need to say it. So, yes, there are exceptions to the rule (but even they fit, if you know how to read between the lines).

To conclude, let's consider the following bit of dialogue that occurs in a novel by Haruki Murakami (*Kokkyoo no minami, taiyoo no nishi*, page 162-163):

T
[S]
O
V
S
V
Demo mochiron, [sono uchi no ikuraka wa] [[Ø] chanto [umi-ni] [todori-chaku]] daroo.
s
L

But of course, I should think that some of them would make it all the way to the sea, as intended.

(From context, 'them' would refer to the ashes of a deceased infant, just now scattered in the river.)

Philip Gabriel translates the sentence this way: "But even so, some of it would, eventually, reach the sea."

His rendition (on p. 117) does a reasonably good job of conveying *some* of the halting, ruminative quality of the original.

Fig. 25: A sentence built on *daroo*: 'probably exists'

In essence, it's just the verb *daroo* ('probably exists') with many other elements crowding in from the left to explain *what* it is that probably exists: 'a proper/definite arrival in the sea', to the left of which we find the topic *sono uchi no ikuraka wa* ('some among them'), preceded by the prefatory phrase *Demo mochiron* ('But, naturally...'). Here we have both layers of syntax clearly in evidence: The simple s-L magnetism of *daroo* as 'LEAF'; the complexity of an L-s superstructure built upon its very long 'stem.' True, this sentence has *in* it an SOV component (with an implied zero-subject, 'they'); but the sentence overall is anything but.

Is Japanese "an SOV language"? Only to a degree. If one were to insist on a neat label, a better one for Japanese would be T/[S]OV. I.e., like Chinese, it often has a Topic, in the wake of which the Subject slot is reduced to a ghostly zero [Ø]. Thus, the oft-cited example of *Boku wa unagi desu*, which, in the vast majority of cases would mean, "As for me, [it]'s the eel {that I ordered already or intend to order now}," where "me" is the Topic; "[it]" is the zero-Subject of the copula (apostrophe *s*); and the *that*-clause in curly braces represents

56. Thus, those with a literary bent might prefer my poetic rendition of the well-known haiku to my hatchet job in Figure 24:

A cruel fate
For the great warrior's helmet:
Home to a grasshopper.

Of course I was only feigning shock about the verblessness of the original. Many poems and proverbs work just this way, e.g., *Neko ni koban* 'Coins before a cat' (~ Pearls before swine); see also the proverb on page 12 above.

Flip side: Add note **TBD** about the distinction between "talking without a subject" vs. "subject is missing", pointed out in Kindaichi p. 271 and in Rubin p. 25-31: The Myth of the Subjectless Sentence.

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not a linguistic subcomponent but the real-life context that would make the intent clear in an actual conversation. But given the right context, it *could* mean, “As for me, [I]’m the eel.” More by circumstance (the scarcity of people who are eels) than by grammar is it prevented from carrying the second meaning.

In the semantic plane, one quickly becomes aware how treacherous the “equivalents” can be between languages. For example, Lampkin (p. 105) points out that while *wakaru* means ‘understand’ it is more often used where the word ‘know’ would occur in English. (See example under *ta*-form on page 43.) In syntax, there are similar pitfalls, less readily discerned at first: Coming from the world of VO or HEAD-modifier, one might wish to conclude that a certain foreign tongue was an OV language or a modifier-HEAD language, i.e., that the relationship between the foreign tongue and one’s mother tongue was characterized by pristine mirroring and abstraction into a Super-Rule.

Where Japanese and English are concerned, that train of thought could only lead to embarrassment and regret.

Turkish and Thai, yes.

Japanese and English? Never.

The only such pattern that I’m aware of is non-linguistic. It’s the mirroring of TGG *absurdity* on one side of the Pacific (“Prepositional phrases have HEAD-modifier structure”) by a perfectly matching TGG *absurdity* on the other side of the Pacific (“Postpositions have modifier-HEAD structure”). To increase your appreciation of these rather odd-sounding (incorrect) assertions, please refer to *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*.

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I include this as a counterexample to the "strong TGG" of Chomsky, Pinker, et al. This is a relatively sane account of TGG as applied only to English, which saves the author from having any incentive for misquoting or misrepresenting Greenberg. Nor does he have an incentive to do funny things with Prepositional Phrases. Rather, he speaks in terms of "adverbials of place" and "adverbials of time" (p. 14-16), surprising us that a TGG advocate can think so clearly. In short, TGG itself is not the culprit; it's a certain messianic use of TGG that leads to the absurdities I document in *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*.
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Rubin, Jay. 1998 [1992]. *Making Sense of Japanese: What the Textbooks Don't Tell You*. [Previously published as *Gone Fishin'*.] Kodansha International. 136 p.

Sato Nobuo. 1995. *The Magical Power of Suru: Japanese Verbs Made Easy*.

Charles E. Tuttle. 176 p.

See remarks in **Appendix A: The a-form, i-form... verb classes, Part 1: Origins**.

Shibatani Masayoshi. 1990. *The languages of Japan*. Cambridge University Press. 411 p.

Covers the Ainu language first, then Japanese (p. 87-392). The writing is both solid like steel and subtle at the same time. Looks like the sort of work that a specialist (provided he were of the proper academic stripe to line up with its author) would declare as “the definitive description of the language” or “the ultimate authority.”

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APPENDIX A: The a-form, i-form... verb classes, Part 1: Origins

(Note: This appendix and *Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion* should be read together.)

Japanese grammar is complex. That's a given. The question is: How should this complexity be *presented* to the student?

In *The Magical Power of Suru*, the author says in effect, “Verb conjugations are way too confusing for those poor foreign students of my language. I’ll take pity on them and give them a grand tour of [noun plus] *suru*, then they can pretty much relax about conjugating all those other verbs. They’ll need only to *understand* the various conjugations that are used by others, not actually *produce* them.” Fair enough. I agree with the implied premise of Mr. Sato’s book, but the implementation seems flawed. Implicitly, *Magical* is giving us an exhaustive conjugation of *suru*, since the whole book is so narrowly focused on that one verb alone. The book is literally *all* about *suru*. But as it turns out, its conjugation of *suru* (laid out in Sato p. 14-18) is incomplete. To the list in *Magical* (*suru* [*shimasu*], *shi-nai* [*shimasen*], *shi-ta*, *shinakatta*, *sa-seru*, *sasenai*, *sa-reru*, *sarenai*, *shi-te*, *shite inai*, *shite kudasai*, *shinaide kudasai*, *shi-tai*, *shitakunai*, *shi-nagara*, *su-re[ba]*, *shinakereba*, *se-yo* [*shi-ro*], *suruna*, *dekiru* and *dekinai*) one must add the following to get the full conjugation: *shi-tara*, *shi-tari*, *shi-yoo*, and *saserareru* (per Webster.1107). One might also want to add *sezu* [*ni*] ‘without...-ing’ (as covered in AJALT III.117 and in Lampkin p. 22).

More to the point, one must also observe that many of the [noun +] *suru* “alternates” proposed in *Magical* are *not* really alternates at all, because they’re so forced or unidiomatic. Consider the following one given in Sato page 59 as a substitute for *hajimeru*, ‘to start, to begin’: *kaishi-suru*. Yes, one *could* use *kaishi-suru*. Absolutely. No question. But I personally would feel silly doing so, knowing that everyone else in the world would still be using *hajimeru*. I would estimate that about one half of all the “alternates” proposed in *Magical* are of this nature: not realistic, not practical. (You bring in a Sino-Japanese loan

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word that can substitute — theoretically — for its Japanese indigenous equivalent, by welding it onto *suru*. But only some of the resultant compounds look real; many look synthetic.) Still, it's a fun idea, and the Appendix (Sato p. 162-176) is useful as a mini-dictionary of *possible* noun + *suru* combinations.

In *Japanese Verbs & Essentials of Grammar*, Rita Lampkin takes a different approach to the problem of complexity. She provides a separate chapter per 'Base' (explained in a moment), and each such chapter is prefaced with a table. The table at the beginning of her *Base 1* chapter is...

<i>Godan</i> kau matsu shiru kaku oyogu hanasu shinu yomu asobu	kawa- mata- shira- kaka- oyoga- hanasa- shina- yoma- asoba-
<i>Ichidan</i> taberu miru	tabe- mi-
<i>Irregular</i> kuru suru	ko- shi-

The table at the beginning of her *Base 2* chapter is...

<i>Godan</i> kau matsu shiru kaku oyogu hanasu shinu yomu asobu	kai- machi- shiri- kaki- oyogi- hanashi- shini- yomi- asoba-
<i>Ichidan</i> taberu miru	tabe- mi-
<i>Irregular</i> kuru suru	ki- shi-

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...and so forth, on through *Base 7*, at which point one will have traversed — with a minimum of pain — the full verb table. (In the tables above where I summarize Lampkin’s approach, I use the traditional term *Godan* in opposition to *Ichidan*. In Lampkin’s own book, an obscure variant *Yodan* is used in lieu of *Godan*.)

Present the full table all at once, and the student is likely to be overwhelmed, disbelieving, repelled (as by a Latin grammar), or all the above. Kindly abridge the table, pretending the complexity isn’t there, and you do the student a disservice, merely postponing the inevitable confusion about *matsu* ==> *mata* and other such matters.⁽¹⁾

I’ve praised the arrangement of Lampkin’s verb inflections as “optimal,” but I’ll confess now that her nomenclature felt a bit abstruse and irritating to me at first, not because it doesn’t work, but because one finds no clue in her book about its history (or lack thereof): Verbs are analyzed into *Stem + base + ending*; then we are taken through a series called *Base 1, Base 2... Base 7*, as indicated above. *Probably* this scheme has roots in a tradition of the Japanese or Western linguists; *might* be Lampkin’s own invention out of whole cloth, for all the reader knows, reading her book in relative isolation.

Put her taxonomy (1995) beside something like Ishizaka’s introduction to the HRK dictionary (1961), and the mists begin to clear: Apparently there has existed for a long time a taxonomic scheme known as *1st Form, 2nd Form...6th Form*. Not that Mr. Ishizaka explains the origin either! But at least we can see that Lampkin’s *Base 1* looks to be a close relative of *1st Form* in the HRK dictionary, *Base 2* is a close relative of *2nd Form*, and so forth. And yet, there are significant differences, too; so much so, that I felt the need to have

1. Admittedly, that’s exactly what I do in section **1.2.1**: I abridge the table. Thus, in the preface to **a-form list — endings that work with kaka-/tobe- base** I offer only *kaka-*, *tobe-*, *ko-* and *shi-* as the bare-bone representatives of that form, not the full list; and so forth. If I regard Lampkin’s way as *the* optimal scheme, why have I departed this far from it? That’s a reasonable question. Answer: Her book is precise and pragmatic; its subtitle is “A Practical Guide to the Mastery of Japanese.” By contrast (and as mentioned in the **Prologue**), this book is less practical in its intent: The *raison d’être* for my section 1.2 is to support the “rainbow” idea in 1.1 with concrete examples; only secondarily is its purpose to take the student on a tour of the Japanese conjugations.

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those two views of the conjugation organized and amalgamated in one place; hence my combined presentation in sections 1.2.1 and 1.2.2 above. (For an example of how different the Ishizaka conjugation can be, sometimes, from the Lampkin conjugation, see my footnote to the *-mai* ending under **u-form list — endings that work with kaku/taberu.**)

I'm sure there are many places to find an answer to the *Form 1, Form 2...* riddle, but for me it happened to be on page 222 in *The languages of Japan* by Masayoshi Shibatani.

According to Mr. Shibatani, the six-forms scheme dates back the early nineteenth century, notably to the efforts of Gimón (1786-1843). But in the interim, there have been (and continue to be) controversial variations on the theme. And this reminds me that I should explain my own version of it, using the *a-form, i-form...* nomenclature.

I derive the names from the *aiueo*-Branch of the conjugation, as presented in Ishizaka page 5. My names mean the same thing as *1st Form, 2nd Form...* in Ishizaka or *Base 1, Base 2...* in Lampkin. I prefer letter designations (*a-form, i-form...*) to numeric tags because the former convey information (i.e., they are more than just arbitrary labels) and they resonate nicely with *a-i-u-e-o* of the *hiragana* array that we all know. Also, through all the long controversy about how to classify the inflections and how they relate to morphology, there *has* been a constant: there have always been at least *one* form ending in *-a*, at least *one* form ending in *-i*, at least *one* form ending in *-u*, at least *one* form ending in *-u*, at least *one* form ending in *-o* — and this makes my nomenclature relatively immune to the Linguistics Wars (where a typical point of debate would be the proper *number* of u-forms to allow in the paradigm, not the *existence* of the u-form itself; see Shibatani p. 226-232 if you think that distinction sounds exciting).

In chapter 1.0, I try to give the “big picture” of Japanese morphology in a way that is engaging and nonthreatening. Like so many things Japanese, even the lowly parts of speech turn out to be exquisitely, subtly beautiful...*if* you can see past my clunky nomenclature (*A-ized N, N-ized A...*), that is.

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Someone might ask, “Why doesn’t he just say ‘adjectival noun’ like a normal person?” In developing my own nomenclature scheme, I had two goals in mind: First, compactness: I wanted the terms to be compact so that I could fit a wealth of information on the one page that is the rainbow presentation (Figure 2). That consideration argues against traditional terms such as “adjectival noun.” Second, clarity. I think that much of the traditional terminology is murky, so I would just as soon throw it out anyway!

Case in point, what is an “adjectival noun” anyway? In the context where that term is always used, to talk about words such as *shizuka-na* and *kirei-na* and *genki-na*, I find the term nonsensical: Hello, we’re talking about adjectives (of *some* kind); we’re not talking about nouns (of *any* kind).

(The term is apparently so troublesome that one dictionary editor gave up on it and used “adjective-verb” instead for this class of adjectives; see BJS, page 935.)

In short, my nomenclature may look funny (and I’ll grant you it’s not pretty), but it was devised for a reason, and with loving care.

For more on this subject, please refer to *Appendix B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion*.

APPENDIX B: The a-form, i-form... verb classes, Part 2: Leveling and Recursion

In database design and Systems Engineering one speaks of “leveling” considerations, meaning:

- (1) Have I chosen the right *number* of levels to represent the data or process?
- (2) Have I placed things where they belong — at the *proper* level?

In sections [1.2.1](#) and [1.2.2](#), we present Japanese verbs in terms of various “forms” and “suffixes” (\approx stems, bases, and endings, in Lampkin’s parlance.) Fine. At a high level of abstraction, that describes the situation well enough. But some of our “suffixes” are mere suffixes while others turn out to be tiny worlds unto themselves, taking the notion of “suffix” to an extreme.

Example: *-nai* is a suffix that goes with the *a-form*, as *uranai* “[I] don’t sell [it].” True statement. Can anyone dispute it? However, *-nai* may also be analyzed as a special kind of ending called an Auxiliary. An Auxiliary is a secondary verb (“helper” verb) or adjectival nucleus that may in turn be taken through its own series of conjugations, such as *-nakatta*, *-nakattara*, *-nakereba*, and so forth. Strictly speaking, these latter forms reside “at a lower level” than *-nai* itself, which is rather like their “parent node” (if we borrow some more database terminology).

But life is short and do we really care about all these nuances of “leveling”? Sometimes we don’t, and we say “let’s just pretend that all the endings are peers — denizens of the same level.” This is how (implicitly) Lampkin handles her presentation of *-nai*, *-nakatta*, *-nakattara*, *-nakereba*, etc., and I have followed suit. (For the record, the list of Auxiliaries given in Ishizaka p. 13-14 is: *tagaru*, *reru*, *rareru*, *seru*, *saseru*, *tai*, *rashii da*, *desu*, and *masu*. Compare and contrast that with Lampkin’s reminder [p. 79] that True Adjectives include the verb endings *nai*, *tai*, *nikui*, *yasui*, *hoshii*, and *mitai/rashii*, and tell me you aren’t beginning to feel a bit confused about how these pieces all fit together! Something like the neck of a Klein bottle?)

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Closely related to the subject of “leveling” and auxiliaries, there is the question of how to traverse the two great classes of Japanese verbs. There are many confusing synonyms for these two classes, which I’ve tried to summarize in the following table. I’ve arranged the rows so that the more concrete names are handled early in the table, and the abstract ones are treated last. For the moment, we ignore the Irregular class containing *kuru* and *suru*:

Type I Ex: <i>kau</i> , <i>shinu</i>	Type II Ex: <i>miru</i> , <i>taberu</i>	Where Used/Comments
<i>u</i> -verbs (<i>u</i> -dropping verbs)	<i>ru</i> -verbs (<i>ru</i> -dropping verbs)	Used by Nagara, p. 18 N.B. At first sight, this <i>u</i> -verb/ <i>ru</i> -verb nomenclature may seem to be the most descriptive, commonsensical and practical. But even here at the most “concrete” end of the scale, we have a pitfall to consider already: Some apparent <i>ru</i> -verbs are actually <i>u</i> -verbs. E.g., <i>iru</i> ‘to be’ is a <i>ru</i> -verb (with negative form <i>inai</i> as expected), but <i>iru</i> ‘to need’ turns out to be a <i>u</i> -verb (with negative form <i>iranai</i>).
<i>aiueo</i> -Branch	<i>rureyoo</i> -Branch	Used by Ishizaka, p. 5-11. As an organizing principal tailored specifically to section 1.2.1 in this book, I’ve abstracted <i>aiueo</i> and <i>rureyoo</i> up to a <i>single</i> series of “buckets” that I call <i>a</i> -form, <i>i</i> -form, etc., as explained below in this Appendix.
Consonant-stem verbs	Vowel-stem verbs	Used in the Merriam-Webster J-E Dictionary. At first it will seem odd that the group with “Consonant stems” includes the likes of <i>au</i> , <i>iu</i> , <i>kau</i> , <i>omou</i> , and <i>utau</i> . The explanation lies in the fact that all of these once had ‘w’ before ‘u’ (Δ.1106).
Godan verb (quintuple-step verb)	Ichidan verb (single-step verb)	Used by Lampkin, p. 9 f., where the former is spelled as ‘ <i>Yodan</i> ’ in lieu of ‘ <i>Godan</i> ’. (The impetus for this substitution is still a unclear to me. Vexingly, many J-E dictionaries don’t even include definitions of the established terms <i>godan</i> and <i>ichidan</i> themselves, <i>as they pertain by long tradition to verb typology</i> . Meanwhile, if you find the rather obscure word <i>yodan</i> in a J-E dictionary, it will be defined per four distinct kanji pairs as meaning [1] ‘prediction’ or [2] ‘sequel’ or [3] ‘business conversation’ or [4] ‘important talk’ — none of these having any conceivable connection with verb typology that I can see. Nor have I seen <i>yodan</i> defined as a [archaic?] synonym for <i>godan</i> , nor have I seen it listed as an alternative [learned?] pronunciation for <i>godan</i> .)
Regular I	Regular II	Used in AJALT Volume I, page 130 and <i>passim</i> .
—	—	In his section on verb inflection, Shibatani is at pains to step over <i>all</i> such nomenclature, as though it were so many animal droppings. He silently acknowledges the existence of the two categories by framing his discussion in terms of <i>shinu</i> (to die) and <i>miru</i> (to look at), using these two concrete verbs as implicit proxies for the usual pair of abstract verb-type labels, none of which does he allude to even once; see Shibatani p. 221-235. Depending how you look at it, his approach is the most concrete or the most abstract of all.

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In most presentations, one traverses the Type I, Type II and Irregular conjugations separately, in sequence.⁽²⁾ By contrast, Lampkin says, in effect, “We’re going to conjugate this puppy only once, and for each step of the conjugation (Base 1, Base 2...) we’ll traverse *all* classes — Godan [Yodan], Ichidan, and Irregular.”

The reader will see that once again I’ve followed Lampkin’s philosophy on this, in that I “do the conjugation only once,” but with plenty of footnotes and other tangents along the way, to acknowledge some of the features I’m hiding.

The name “*a-form*” I derive from the ‘a’ in *aiueo*-Branch. It strikes me as a fine name for that part of the conjugation that contains verbal permutations such as *kawa-nai*, *mata-nai*, *shira-nai*, *kaka-nai*, etc. I like the name *a-form* in this role because it has more flavor and more mnemonic value than “1st Form” or “Base 1”. It leads naturally to “i-Form,” “u-Form,” and so forth, and these in turn resonate rather surprisingly with good old *ka-ki-ku-ke-ko* in the hiragana/katakana array, quite literally in the case of the verb *kaku*:

kaka, kaki, kaku, kake, kakoo

Well, almost: that long ‘o’ in *kakoo* breaks the pattern.

Moreover, categories named *a-form*, *i-form*, etc. are relatively safe from the Linguistics Wars, as explained in [Appendix A: The a-form, i-form... verb classes, Part 1: Origins](#).

However, if I want to use this *a-form* nomenclature, there’s a price to pay: I must immediately explain that I’m including cases from the faraway *rureyoo*-Branch, the home of words such as *tabe-* + *-nai* (‘won’t eat’) where the letter ‘a’ doesn’t even occur in the negative base, and I’m also folding in, along the way, the Irregular verbs *kuru* and *suru*. Mine is admittedly a very high-level abstraction, intended to hide, temporarily, certain complexities of the language — hide, but not bury.

2. However, Ishizaka treats the Irregulars *kuru* and *suru* as a special case *within* the *rureyoo*-Branch. Compare the BJS approach, where they treat *kuru* and *suru* as members of a Type III class, thus providing a home also for *kudasaru*, *ossharu*, *irassharu*, *nasaru* and *gozaru* (BJS.937).

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Recursion. In passing, it should be noted that there is an aspect to both verb conjugation and adjective inflection in Japanese that is recursive (or ‘fractal’ if you like). This recursive aspect is undoubtedly of interest to professional Japanologists and linguists, but I don’t think it helps the student much. Following Lampkin’s lead again, I flatten it out and make it vanish in sections 1.2.1 and 1.2.2.

For the record, here’s how it works. Ishizaka has 1st Form through 6th Form, corresponding to our *a-form* (*ura*) through *te-form* (*utte*); but what about the likes of *uttari*, *utta*, *uttara* and *uttaroo* = our *ta-form* = Lampkin’s Base 7? In the Ishizaka scheme of things, verbs that end that way are handled as a tangent off the 6th Form. The tangent is called the Perfect Conjugation, and it starts up a 1st Form, 2nd Form... series of its own, at a lower level, so to say. (Note: For the scheme to work, one must posit two zero positions. Thus, at the beginning of the tangent we have, “1st Form does not exist,” and at the end we learn that “6th Form does not exist” either.)

Similarly, Ishizaka’s scheme for adjectives includes a tangent off the 6th Form (*akakutte*). Again the tangent is called the Perfect Conjugation, and again it starts up its own 1st Form, 2nd Form... series at a lower level, now to handle adjectival flora such as *akakattari*, *akakatta*, *akakattara*, *akakattaroo* (= 2nd Form through 5th Form, again with two zero positions in the paradigm: 1st Form and 6th Form. It may be byzantine, but it’s consistent!)

It’s not so much that Lampkin wants to skip these interesting and useful forms; rather, her interest lies implicitly in presenting them “on the same level” as other forms, eschewing the recursive twist that some may find confusing and pointless (and somewhat forced?).

I follow suit. But I supplement her list by picking up *-rashii* and *-roo* from Ishizaka (p. 9) since those ones are missing from her Base 7. And for the inflection of adjectives, I supplement the Lampkin list with the following from Ishizaka p.11-13:

- i (in all four of its functions, followed by:)
- karoo
- katta
- kattari
- kattaroo
- kutte

I also add *-nagara* to the list (supported by Δ.617 and other sources).

APPENDIX C: Greenberg Universals, as usurped by the TG Grammarians

Joseph Greenberg has given us a classic — a classic in the Mark Twain sense of: “...something that everybody wants to have read and nobody wants to read.” Nowadays, Greenberg 1963[b] is out of print, so at least the TG Grammarians have an excuse of sorts for not reading him. In the past, I don’t doubt that many read his paper, but the problem is they took it in selectively, hearing only what they wanted to hear — something to the effect that “the HEAD-modifier/modifier-HEAD correlation is an especially powerful criterion for organizing and sorting languages, and it pertains equally to all languages world-wide” — which is actually quite different from what Greenberg himself ever said.

In setting up his famous correlations, Greenberg was delicate and circumspect, avoiding the grandiose generalization. True, there is the word ‘Universal’ that he used, perhaps unwisely, but he meant it in a very special (limited) sense. Here’s an analogy:

We observe that a certain nation, R, builds its cars with the steering wheel on the right and the passenger door on the left side of the car; we observe further that certain nations S, T, U likewise build their cars with the steering wheel on the right. We observe that in all four of these nations, the motorists drive on the left side of the road. This seems to be an important correlation; therefore, to draw attention to it, we call it Transportation Universal #1.

Note that we were silent about the opposite case (steering wheel on the left, driving on the right), nor did we say anything about steering wheels in the center. Our Universal #1 is stated *specifically* in terms of steering wheels *on the right*. Yes, to one who has passing familiarity with cars, it will surely imply the opposite (and that’s fine). Yes, this correlation regarding hypothetical nations R, S, T, U is a strong one, but it is not a universal in the normal sense of (an assertion that) “*all* cars have 4 wheels” or “*all* cars have steering wheels.” Each of Greenberg’s ‘Universals’ is of the R, S, T, U variety: each is a correlation

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good-enough-that-I’d-like-to-spotlight-it-by-calling-it-a-‘Universal’. On this point he is crystal clear (although out of context, his term ‘Universal’ has the potential for being misconstrued as something ponderous and tendentious, just the sort of thing that a TG Grammarian would find attractive).

Of Greenberg’s 45 Universals, there are four that are especially relevant to an unravelling of TGG doctrine, and those four can be summarized as follows...

Table 1: Greenberg Universals #2, 4, 17, 24

Source (Pg # and Universal # in Greenberg 1963[b])	Row#	I	II	III
page 79, U# 4 (SOV, Po)	0	VSO	SVO	SOV
	1	⋮	Pr	↕ Po
page 78, U# 2 (Pr, Po)	2	⋮	NG	↙ ↘ GN
	3	Na	Na (61%)	aN (54%)
page 85, U# 17 (VSO, Na)	4		Nr	↕ rN
page 91, U# 24 (aN, rN)				

...where Pr = Preposition, Po = Postposition, NG = Nominal Genitive, GN = Genitive Nominal, Na = NOUN-adjective, aN = adjective-NOUN, Nr = NOUN-relational-clause, and rN = relational-clause-NOUN (≈ Greenberg’s notation, which I’ve modified slightly to harmonize it with the notation I use in section 1.0).

Here is the crucial point about **Table 1**: The abbreviations in parentheses following the U#’s indicate *the terms in which Greenberg states the ‘Universal’*. E.g., U#4 is stated in terms of SOV and Po, and it implies the corresponding pattern for SVO and Pr (because of statements elsewhere in his paper). U#24 is stated “vertically” in terms of aN and rN, within the SOV column, though with implications for Na and Nr in the SVO column. U#17 is stated in terms of VSO and Na only, with no implications for other cells of the matrix. (Why so limited? Because that’s the way Greenberg defined it, based on the data he had available.)

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Of the four Greenberg Universals represented in **Table 1**, the ones of special interest in understanding the history of TGG are U#2 and U#17. The U#2 issues we'll tackle later, in connection with **Table 3**. For now we'll focus on U#17:

Now the TG Grammarians have a notion of pristine 'Na/aN' as the very cornerstone of their Temple (where it is abstracted up to the level of 'HEAD-modifier/modifier-HEAD'), so it is important to see what we have exactly, all the way across row 3 of **Table 1**. As mentioned earlier, many of Greenberg's Universals have strong implications that are meant to radiate to a neighboring cell or distant cell in the matrix. But U#17 is constructed in such a way that it carries no such implication for neighboring rows or columns. It's purely a statement about Na *within* the handful of VSO languages he sampled. How, then, have I managed to populate the corresponding cells for SVO and SOV? On the basis of Greenberg's Table 5 (\neq U#17), which says, in effect: "8 out of my 13 SVO languages had Na" (a ratio that I've here generalized to 61%) and "6 out of my 11 SOV languages had aN" (a ratio that I've generalized here to 54%).

Next question: Since TG Grammarians like to talk so often about English and Japanese, where/how well do those two languages fit against the framework of row 3 of **Table 1**?

Answer: Japanese has aN, and is therefore in harmony with the 54% majority who populate the row 3/SOV cell⁽³⁾.

Answer: English *also has aN*, and therefore falls outside the 61% majority who populate the row 3/SVO cell⁽⁴⁾.

-
3. And, significantly, Japanese also happens to be one of the 11 languages represented in that cell — it was part of Greenberg's study.
 4. i.e., it would have to be classified as part of the 39% minority excluded from that cell...*if* English were one of the 13 languages tabulated for that cell, which it happens not to have been. Neither Chinese nor English figured among Greenberg's 30 languages.

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In contrast to the TG Grammarians who like to “quote Greenberg,” the man himself was keenly aware of the anomalous stance of English relative to the taxonomy he was at pains to develop. Early on in his paper (1963[b] p. 76), he remarks on Turkish as a perfect example of...

aN, OV, GN, Po

...and he remarks on Thai as the opposite type...

Na, VO, NG, Pr

...and then he says this (which is what no one wants to hear):

The majority of languages, as for example English, *are not as well marked in this respect.*⁽⁵⁾ In English, as in *Thai*, there are prepositions, and the noun object follows the verb. On the other hand, English resembles *Turkish* in that the adjective precedes the noun. Moreover, in the genitive construction *both* orders exist⁽⁶⁾...[emphasis added]

TG Grammarians ignore all these inconvenient “details” and rationalize English *as though* it were as similar to Thai as Japanese is similar to Turkish, so that tidy “mirror images between English and Japanese” can be flashed at the reader and then abstracted into a Super-Rule. But of the two, only Japanese was ever at home in Greenberg’s scheme. We’ve seen where Greenberg himself said English doesn’t fit the matrix; indeed, it fails over 1/2 of the criteria for a “normal” SVO language, as shown in **Table 2**.

-
5. The term ‘marked’ is a bit jargon-y. What he means to say is this: English [like the majority (!) of languages of the world] does not fall into the neat aN/Na mirroring that exists so prettily for Turkish and Thai (or, for that matter, for Japanese and Thai, since Japanese has the same typology as Turkish).
 6. For the details about NG vs. GN, see row 2 of Table 2.

Table 2: English/Japanese Checklist for Pr, NG, Na, Nr, VA

Row#	SVO	Is it true for English?	SOV	Is it true for Japanese?	Comments
1	Pr	Yes	Po	Yes	English has prepositional phrases. Japanese has postpositional particles.
2	NG	No	GN	Yes	Like Japanese, English is generally GN ('the cat's face'); only <i>occasionally</i> will English employ NG ('the face of the cat'), the theoretically "correct" form for an SVO language.
3	Na	No ⁽¹⁾	aN	Yes	First, the TG Grammarians pretend Na is 'Yes' for English (when only Nr is), which is already bad enough. But they go on to convince themselves that the structure of a Prepositional Phrase is homologous to that of Na/Nr, such that the whole language might be characterized simply as 'HEAD-modifier'. Absurdity piled on absurdity.
4	Nr	Yes	rN	Yes	To the right of a noun, English contains many long 'which' clauses (most of which ought to be 'that' clauses per the style manuals). Meanwhile, Japanese packs all such qualifiers to the left of a noun, come what may.
5	VA	Mixed	AV	Yes	The question of where the adverb falls relative to the verb (abbreviated here as VA vs. AV) is <i>not</i> a criterion Greenberg used. Possibly he regarded it as redundant with some other pair, such as Nr/rN, and therefore excluded it? But the VA/AV pair is strongly implied by his overall scheme, and I introduce it here as further evidence that English is a "misfit." English tends toward 'run quickly' (= the "correct" form for an SVO language), but it also allows 'gladly go' (= the "correct" form for an SOV language). Thus, another migraine for the Minister in Charge of Super-Rules.

1. Unless you count "...and his *fiddlers three*" from the archaic ditty about Old Kind Cole, or the song title, *Mood Indigo*; but these would be exceptions that prove the rule: they stand out in one's memory precisely because adjectives so rarely follow nouns in English, nowadays. But this is where the TG Grammarians look the other way as their Emperor starts parading in fraudulent garments, daring the world to remark on it. The big lie: that English *is* a proper Na language.

Given that circumstance, can anyone take English seriously as a candidate for being the mirror image of Japanese, which comes through as one of Greenberg's pristine "Turkish"-style languages? For those who chant the TGG mantra, the answer is: Yes, someone can.

Before exploring the TG Grammarians' distorted view of the world, let's review the summary of Greenberg given by Li & Thompson, which acknowledges the TGG Zeitgeist without falling prey to the kind of fallacy usually exhibited by its hard-liners. In their chapter called "Typological Description" [of Mandarin Chinese], they summarize Greenberg by constructing a table that has this general form:⁽⁷⁾

Table 3: Greenberg as summarized by Li & Thompson

KEY TO ROW# & ACRONYMS IN PRECEDING TABLES	VO LANGUAGES	OV LANGUAGES
--	<i>HEAD-modifier correlations:</i>	<i>modifier-HEAD correlations:</i>
5: VA-AV	VERB-Adverb	Adverb-VERB
3: Na-aN	NOUN-Adjective	Adjective-NOUN
4: Nr-rN	NOUN-Relative Clause	Relative Clause-NOUN
2: NG-GN	NOUN-Possessive	Possessive-NOUN
--	<i>Other correlations:</i>	
--	Auxiliary-VERB	VERB-Auxiliary
1: Pr-Po	Preposition-NOUN	NOUN-Postposition
--	No sentence-final question particle	Sentence-final question particle

Rather than burying Greenberg’s warnings that English is an exception to the expected/predicted patterns of his VO/OV matrix, Li and Thompson break out of the TGG mold and repeat the original warnings. (See the footnotes to Table 2.1 in Li & Thompson p. 18.) Eventually, their interest will be to see how Chinese fits the scheme. Does it?

No. To their credit, Li & Thompson bravely identify Chinese as the misfit it is, relative to the Greenberg matrix. Like English, Chinese turns out to be a renegade language, a messy “exception” to the VO/OV schema. (See “Word Order in Mandarin,” Li & Thompson, p. 19-27.)

But in my mind, the real issue isn’t whether a given language such as English or Chinese fits comfortably in the VO/OV schema. Rather, it is a faint nagging dissonance deep *within* the schema itself that concerns me. It lurks like a cancer in row 1, the row that has fallen almost to bottom in **Table 3**, as Preposition-NOUN/NOUN-Postposition, under “Other correlations.”

7. After Table 2.1 FEATURES THAT CORRELATE WITH THE RELATIVE POSITION OF VERB AND OBJECT, as summarized from Joseph Greenberg (1963) by Li & Thompson (1981), page 18. Here I’ve introduced an ALL CAPS/Initial Cap distinction to highlight [1] the vertical relationship of the “Other correlations” to the main correlations and [2] the horizontal relationship of VERB (PRIMARY) to Adverb (secondary), and the like — for reasons that will become evident in a moment.

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Why the little ghetto of “Other correlations” do you suppose? Because the hoped-for homogenous pattern of *all* secondary-PRIMARY for OV (and *all* PRIMARY-secondary for VO) is frustrated at this point, by virtue of the fact that NOUN-Postposition is PRIMARY-secondary. (This is why I’ve added the ALL CAPS/Initial Cap distinction in the table, to help bring out these PRIMARY-secondary reversals in the pattern.) As viewed by the TG Grammarian, HEAD-modifier, the proper home for NOUN-Postposition, is “way over there in the wrong column,” the one for VO, not OV.

What to do?

Ignore reality, that’s what. Such is the Way of TGG. In their desperate search for a Super-Rule that doesn’t exist, they’ll just ignore reality, and “anyone who criticizes us for it — well, they’re just not intellectual enough to understand our Grand Plan; don’t mind them.”

With a phrase of the form *in the head* or *of the world*, I don’t care whether you try forcing it into the HEAD-modifier mold (thus taking *of* as the supremely important element to which *the world* is a mere appendage) or you boot it out of the VO column and try placing it under modifier-HEAD in the OV column (thus claiming that “of” somehow modifies the ensuing noun phrase), *none* of it feels right to a person with commonsense.

At best, a reasonable person would have to acknowledge that the OV column contains an untidy collection of modifier-HEAD *and* HEAD-modifier elements together. Commingled. At worst, a reasonable person would have to concede that using “modifier-HEAD/HEAD-modifier” as the organizing principle was a mistake — a failed experiment.

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To sidestep their dilemma, what the TG Grammarians do, in effect, is this: They take Preposition-NOUN and dress it up as PREPOSITION-Noun — which, after the dust settles, will have to count as one of the most mind-boggling bits of absurdity in the history of thought.⁽⁸⁾

Already in the thrall of their self-fulfilling prophecy that “English is a HEAD-modifier language” (a flat contradiction of Greenberg), they analyze “of metal” or “at the beach” as follows: *of* is the ‘HEAD’, *metal* is its ‘modifier’; *at* is the ‘HEAD’, *the beach* is its ‘modifier’. Which leads to the delicious absurdity of *in* as ‘HEAD’ and *the head* as its ‘modifier’ — in their analysis of the phrase “in the head”. And if asked why, their answer could only have been modeled on that of the parent who has just slaughtered her own babies: “God made me do it” (i.e, the religion of a Super-Rule in the Sky made me do it).

Even back in the 1970s, many of us sensed that we had before us a real-life example of the fairy-tale about the Emperor’s Clothes. But where to gain purchase on such a close-woven cotton-candy tower? And in attacking such an edifice, wouldn’t one run the risk of getting sticky, of sounding almost as crazy as those who built it? Hence, its *slow* melt over the decades instead of the immediate destruction it deserved.

To break out of their dilemma and move safely in the direction of the siren song (about a Super-Rule), what they needed was something reasonably neutral like my ‘stem-LEAF’ nomenclature (introduced in connection with **Figure 6** on page 55). My nomenclature says merely, “something *secondary* is followed by something *PRIMARY*” and there it stops. Being bland and neutral, it does not tempt one to overload it with unwarranted claims about other facets of the relationship that binds ‘of’ to ‘metal’ (s-L) or *tetsu* to *de* (L-s).

8. Meanwhile, what did Greenberg have to say in this regard? In formulating U#2, he makes no such attempt to cast Pr (Preposition) as a variety of Na (NOUN-adjective); nor the greater absurdity, if greater is possible: to cast Po (Postposition) as a variety of aN (adjective-NOUN). Rather, he accepts the members of each of these pairs as distinct forms — which commonsense tells us they surely are: not only are Po and aN distinct forms, they’re something like opposites; not only are Pr and Na distinct forms, they’re something like opposites!

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Does my nomenclature contain no hidden bias? The only way my stem-LEAF/LEAF-stem nomenclature is biased is with regard to the flow of time, but this bias is integral to nature and to language itself, so it is a permissible bias, even a desirable one: whenever we see ‘LEAF-stem’ we are reminded that something PRIMARY came first on the time-line, ahead of something secondary, and to that extent we’re looking at a *retrograde event* (in the semantic plane, so to say). The analogy is carefully chosen to work with all aspects of the problem at hand, not just a few of them.⁽⁹⁾

Again, note that my objections to the VO/OV schema are based on the internal workings (flaws) of the schema itself, even before we encounter something troublesome like English or Chinese that will register as an “exception to the rule.” Thus, when Pinker sets up English and Japanese as looking-glass sisters,⁽¹⁰⁾ separated only by “a single bit of information” (= how to set the HEAD-modifier / modifier-HEAD parameter), he commits a compound error:

First, even for those who seem to accept Greenberg’s overall VO/OV paradigm, English must be rejected as an exception; it’s *not* a good SVO specimen to hold up, especially as the supposed mirror for Japanese, “the ‘ideal’ SOV language.”

Second, the VO/OV paradigm is itself fatally flawed because of [a] its own internal contradictions and [b] the temptation it presents to force Preposition-NOUN to become PREPOSITION-Noun, which leads immediately to the still greater absurdity of forcing NOUN-Postposition to become Noun-POSTPOSITION in the OV column.

9. The only thing I don’t like about my stem-LEAF/LEAF-stem nomenclature is the possible confusion with ‘stem’ in the sense of a “[primary] base to which something [secondary] is attached.” But the dictionary has only so many words in it, and I was unable to think of another set of terms that works as well. This was the one drawback of the stem-LEAF/LEAF-stem nomenclature to be weighed against its many advantages.

10. Pinker (2000) page 104. In fairness to Pinker, one should point out that he exhibits subtlety and finesse elsewhere, as in his examination of six (supposedly) un-English traits on p. 232-241. Still, the bald statement about English and Japanese is there on page 104. I didn’t make this up. It is troublesome and needs to be dealt with, redolent as it is of the TGG obsession with “Super-Rules” at any cost.

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I know it must sound implausible on the face of it, but if you look at footnote 37 on page 58 above, you'll see how far the sickness has spread. In general, Shibatani is my North Star, my Bible. But even he is not immune to modifier-HEAD think, as evidenced by his irrational treatment of the case frame *X-ga Y-ni Z-o* (Shibatani, page 257). Rather than acknowledge these quintessentially Japanese structures for what they are, he adopts the TGG pretense that they fit — somehow — under the modifier-HEAD rubric, when clearly, screamingly obviously they are all HEAD-modifier entities (i.e., 'L-s' using my notation scheme). One can only conclude that by the 1980s (when Shibatani would have been working on *The languages of Japan*) the TGG movement had performed a kind of mass hypnosis upon the Kingdom of Linguistics worldwide, and no one dared observe that the Emperor had no clothes. Not even Shibatani. Not that he makes any direct reference to Greenberg or Chomsky, but their longtime influence is evident in his offhand use of their terminology (on p. 257 and 276), and in the structure-trees he employs to clarify the *wa/ga* analyses on p. 273-301, *passim*. (Irony alert: Just as I'm not thrilled by the signs of TGG regimentation in Shibatani's treatment of syntax, so Shibatani conveys mild distaste for the "hallmark of generative phonology" that he detects in McCawley's morphology; see Shibatani p. 226.)

All that, for the sake of a *neatly* mirrored HEAD-Modifier/Modifier-HEAD scheme! Like the Mafia, this TGG gang will tolerate no loose ends (and no back-talk). Nothing untidy. And in their way, the TG Grammarians are indeed scoundrels, when you think of all the ink spilt and time squandered trying to "understand" something that is fundamentally unworthy of the effort, something that is, in the end, the worst kind of obscurantism for which "pointy-heads" are rightly castigated by real people.

How do we travel from Greenberg's level of clarity down to the level where English and Japanese are defined, supposedly, by a bit-flip deep in the brain of the toddler? Here's how (the trip "has its moments," so there's probably no harm in going there once for the experience):

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For the sake of *slightly* reducing the inherent complexity⁽¹¹⁾ of the discussion to follow, we'll assume for a moment that the TG Grammarian uses my stem-LEAF terminology instead of the conventional *head-last* (modifier-HEAD) terminology. Then, looking at **Figure 6**, our hypothetical TG Grammarian might ruminate as follows:

“The fact that the stem-LEAF construction is able to explain linguistic events at different levels (at ‘Let’s’, again at ‘have’, again at ‘the’ in **Figure 6** on page 55) makes it seem a stronger theory than if it worked on one level only. The fact that its mirror image (LEAF-stem) is found in a non-English language, Japanese, makes the theory seem stronger yet (**Figure 7** and **Figure 8**).”

Moreover, the theoretician might spot a way to tie the relatively modern stem-LEAF/LEAF-stem paradigm back to the older VO/OV paradigm, musing thus:

“Isn’t the difference between VO and OV reminiscent of the difference between stem-LEAF and LEAF-stem? Yes, one might regard the difference between ‘*write a letter*’ (VO) and ‘*tegami-o kaku*’ (OV) as a variation on our stem-LEAF/LEAF-stem theme (‘*write => a letter*’ vs. ‘*tegami-o <= kaku*’).”

Noting this area of overlap between [a] the [S]VO/[S]OV paradigm and [b] the stem-LEAF/LEAF-stem paradigm, the theoretician is even more pleased. “Hm, how can we make the theory still *more* powerful?” he or she wonders. “Could we perhaps classify VO/OV as a special case of s-L/L-s?”

Thus, if we allowed s-L/L-s to be a higher abstraction representing both the original s-L/L-s constructions and VO/OV constructions together, we would suddenly have accounted for a vast percentage of the total grammatical terrain. At this point, a certain kind of theoretician will be unable to resist the temptation of taking it just one step further, saying, in effect:

“Since we’ve all *agreed* that s-L is *merely* the mirror image of L-s, why not collapse these two patterns into a single Grand Abstraction, sort of a Unified Theory of Grammar? We could call it, oh say, **X**, for instance.”

“And where would X live in the brain?” I ask.

“Oh, somewhere way down below, in the... in the... *Universal Grammar*. That’s it!”

And this is what we finally get after 30 years of TGG:

11. The labyrinth into which we’re about to descend — that of the TGG cult — brings to mind the adage: “Don’t stop to talk to a crazy person on the street corner or you’ll sound crazy too.” Even to explain what I think is wrongheaded in the TGG cult, I must run the risk of sounding somewhat TGG-infected myself for the duration.

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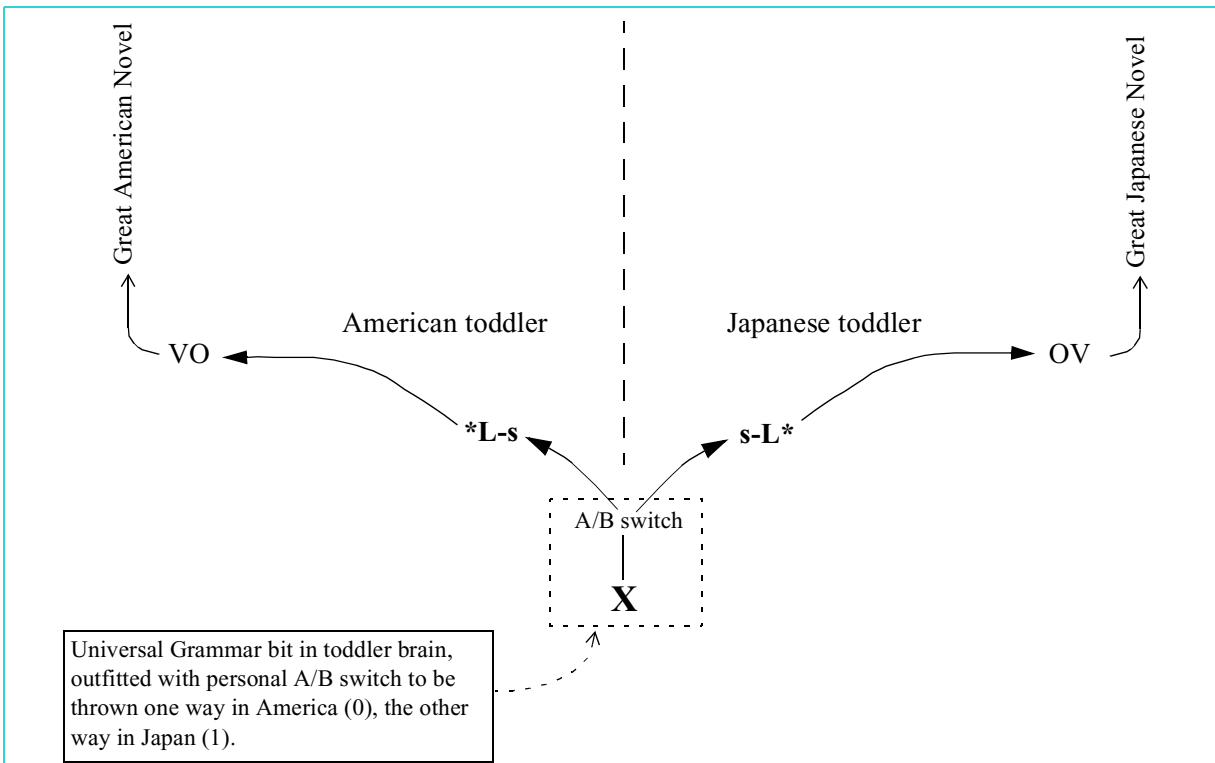


Fig. 26: X in the basement of the Universal Grammar

Whimsied though it may seem, my picture (**Figure 26**) is based closely on the verbal description given in Pinker, *The Language Instinct* (2000), pages 103-104, with one important exception regarding the *L-s/s-L* labeling scheme. The asterisks fore and aft are a warning that if this were a 100 percent pure representation of the TGG model, two things would differ:

1. Instead of my LEAF-stem/stem-LEAF nomenclature they would use *head-first/head-last* (which is to say HEAD-modifier/modifier-HEAD, rephrased in terms of the Greenberg table above).
2. Where I would have asserted L-s as the primary flavor for Japanese syntax (modulated by a very strong *secondary* presence of s-L), they posit *pure* s-L for Japanese (i.e., *head-last* if we revert to their own notation). Conversely, where I would have asserted s-L for English, they posit L-s for English (i.e., *head-first* in their notation). In short, they get it all (very consistently) backward, so that even English is thrown back as an unrecognizable monstrosity in their Fun House mirror.

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Speaking of mirrors: The term ‘mirroring’ would best be reserved for 2-D and 3-D environments, I think. If J.S. Bach or Anton Webern turns a contrapuntal theme upsidedown (or backwards or upsidedown and backwards), that’s what I would call true mirroring. But if one language adopts the LEAF-stem rule and another goes crawling off in the stem-LEAF direction, this seems less noteworthy. After all, on a geometric line (the place where syntax lives), you only have these simple choices: go left or go right (or do nothing).

To the time dimension, the TG Grammarians give short shift. Conversely, by the “discovery” of *some* mirroring in their diminutive 1-D kingdom⁽¹²⁾ they become unduly excited. Then, having raised the banner of Mirroring for a cavalry charge over the cliff, they become blind to anything else that might contradict *one hundred percent* mirroring in *all* the languages of the *world* that henceforth must be *Unified* under said banner. When you think about it, the arrogance is stupendous.

Anyway, now that we have this picture of “X in the basement” (Figure 26), what do we do with it? To set the machinery in motion, all the toddler has to do is reach down (reach up?) and flip the mighty blade switch. Or, putting it more in terms of software (since generative linguists have a big crush on Computer Science), she’ll quietly set her variable to ‘L-s’ if she finds herself in Japan, and soon be burbling away in SOV sentences such as: “*Haha wa o-tegami o kaku yo!*”

Or, she’ll set her variable to ‘s-L’ if she finds herself in America, and soon be burbling away in SVO sentences such as: “*Look! My mommy writes a letter!*”

At the point where we collapse the two branches to ‘X’ and we have the toddler flipping a switch or setting a variable to 0 or 1, that’s where I would feel at odds with the party line — *even if* I had bought their theory of SVO/SOV s-L/L-s lock-step parallelism, and *even if* I had bought their dependent-head analysis which applies HEAD-tail where I see its opposite, stem-LEAF, and vice versa. The trouble is this: Their overall scheme is too tidy

12. See 2.3 Linguistic space, linguistic time on page 65.

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to be credible. It's too (obtusely) clever like a sophomore's essay. But I've taken you down their rabbit hole anyway, as if it were my own, so that you could experience directly the allure and the headiness of TGG-think. Yes, it has its moments... But it's wrong. It's a false Nirvana.

If you are aware of TGG only as “a 1970s phenomenon” or as “a dinosaur that seemed about to collapse of its own weight in the 1980s,” then my attempt to refute the TGG school in this Appendix will seem quixotic. If you are aware of the relatively recent writings by Jackendoff (*Patterns in the Mind*) and Pinker (*The Language Instinct*), then my effort will seem less peculiar. It really needs to be put to bed once for all.

If you now go back and look again at Figures 6 and 7 where I introduce the stem-LEAF/LEAF-stem nomenclature, you'll see why I eschewed the terms *head* and *tail* as damaged goods, no longer suitable for *any* such a discussion, no matter *what* its direction or purpose might be. To reiterate, this is how English and Japanese work; just this way, and in no other conceivable way:

A note about the implicit direction of L-s and s-L:

In nature, the stem grows first, and out of it develops the leaf. When I apply ‘L-s’ to *inu-wa*, isn't this “backwards” in the sense that the noun comes first in time, followed by the particle? No, the symbolism is apt, for retrograde motion is exactly the point we wish to make. An agglutinative language such as Turkish or Japanese is not just “backwards” in a subjective sense of “it's the reverse of English; how exotic!” It's backward in the objective sense of: First comes the main event (noun), then comes its case-marking particle as an (optional) appendage.

Now look at the s-L case: here we find ourselves going *with* the grain of time, first growing the stem, then growing the LEAF, or first growing the adjective, then growing the NOUN. The symbolism works both ways. By contrast, even when properly applied, tail-HEAD (or modifier-HEAD) doesn't work as well as stem-LEAF because the symbolism of tail-HEAD is backward relative to nature, where a creature does not grow “out of its tail,” as a leaf grows out of its stem, but the other way around: the tail “out of the creature.”

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When the linguistic structure is growing *with* the grain of time (adjective-NOUN, article-NOUN, etc.), my s-L notation mirrors that progression (by virtue of its analogy to stems supporting leaves in nature).

When a linguistic structure is growing *against* the grain of time (in the sense that *HEAD* is followed by a *modifier* that “looks back” at *HEAD* “against the flow of time”), the symbolism of the HEAD-tail nomenclature contradicts the (right-to-left) events as it points (inappropriately) left-to-right: HEAD==>tail. Likewise, when a linguistic structure is growing *with* the grain of time (as in ‘quickly WAGS’: adverb-VERB), the symbolism of the tail-HEAD nomenclature contradicts the events (left-to-right) by pointing the wrong way: tail<==HEAD.

Accordingly, my s-L/L-s nomenclature is preferable to tail-HEAD/HEAD-tail not only for historical reasons (to avoid the taint of the TG Grammarians’ wholesale data-fudging and their indirect smearing of the Greenberg name); it is inherently preferable as well. The reasons are summarized in the following table:

Sample phrase:	TENKI-wa as for the WEATHER	akai-JITENSHA a red BICYCLE	Comments
Parts of speech:	NOUN-postposition	adjective-NOUN	
Objective direction (with or against the grain of time)	<==== retrograde	====> progressive	
Analogy 1: via LEAF-stem notation	L<=s	s=>L	Matches the objective direction.
Analogy 2: via HEAD-tail notation	H=>t	t<=H	Contradicts the objective direction.

The arrows indicate how the object being analogized grows in nature: first the stem, then the LEAF; first the HEAD (body), then the tail. Analogy 1 matches the objective direction. Analogy 2 is at odds with the objective direction, and is therefore an inferior notation scheme.

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That's the foundation. The mirrored pair correctly stated. From there, one proceeds on a firm footing to other questions, such as: "Can English be *characterized* or type-cast as 'a stem-LEAF language' [in the broadest sense, not just down at the level of phrase-structure]?" and "Can Japanese be *characterized* or type-cast as 'a LEAF-stem language' [in the broadest sense, not just down at the level of phrase-structure]?" Those are the more absorbing issues that I explore elsewhere in this book.

Here is one way to characterize Japanese:

The SOV backbone of Japanese grammar, comprised of subassemblies such as Subject-ga, Object-o, IndirectObject-ni, Destination-e, Sentence-yo, Sentence-naa and the like, is (blatantly, obviously) informed by LEAF-stem-ness, not by stem-LEAF-ness.

In saying that, I do not deny that *elsewhere* in the language (in counterpoint to the "SOV backbone"), there are innumerable instances of stem-LEAF. In fact, operating on different levels, Japanese often goes both directions — left-to-right for stem-LEAF, right-to-left for LEAF-stem — at once; likewise German, although in a different way, with a flavor all its own.

By contrast with the TG Grammarians' (mis-)use of the HEAD-modifier (*head-first*) concept, my inverse application of stem-LEAF works across the board at all three levels, *and* it actually makes sense, *and* it feels right; see [Figure 6](#) and [Figure 27](#).

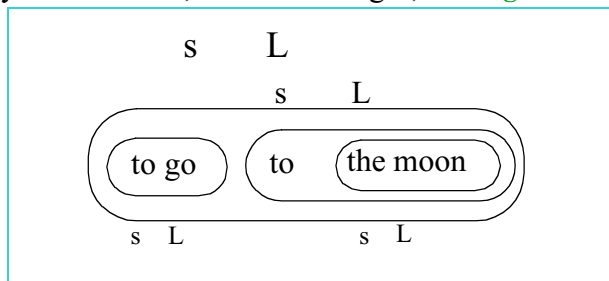


Fig. 27: stem-LEAF analysis applied to English

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The next question is: How would my scheme for English hold up if applied to Japanese? Do I also get “looking-glass versions” out of Japanese (as Pinker does on p. 111), relative to the corresponding English patterns? The answer is: In many cases, yes; but not with robotic regularity:

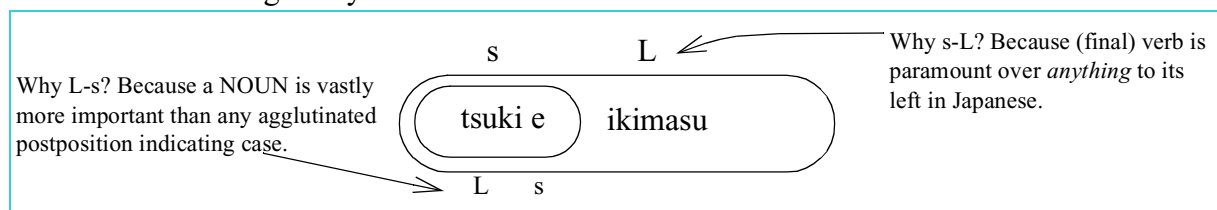


Fig. 28: LEAF-stem analysis applied to Japanese

Notice that I apply the L-s pattern *only* where it works (on *tsuki e*, lit: ‘the moon to’); I don’t force it where it won’t work, at the Object-Verb level of *tsuki ikimasu*.

Even though I explain so many parts of the language (Subject-*ga*, Destination-*e*, IndirectObject-*ni*, Object-*o*, Sentence-*ne*) in terms of LEAF-stem, I do not let this prevent me from seeing other parts of the Japanese grammatical landscape where the opposite pattern, stem-LEAF, is the thunderously obvious principle at work. (I.e., same pattern as in **Figure 27**, not its opposite.) Here are some more examples of stem-LEAF, a pattern that has nearly as strong a role in Japanese as LEAF-stem:

shiroi hana (a white flower⁽¹³⁾)

shoometsu-shita zoo (vanished elephant)⁽¹⁴⁾

yukkuri nemuremashita (slept well; lit: long-and-well slept)

sore ni nita hanashi (a story like that one; literally: *that-to-resembled story*, where ‘story’ is the LEAF and ‘that-to-resembled’ is its stem, excerpted from the full sentence seen already in **Figure 12**).

-
13. “Ah, just like English” one will have noted, perhaps with a sigh of relief. But even here we must add a caveat: In English, we sometimes turn the adj-NOUN structure around, French style, as in “mood indigo,” “a woman scorned” or “fiddlers three” whereas in Japanese the adj-NOUN word order happens to be sacred ground, not to be tampered with. Which is not to say you can’t try all kinds of astonishing shenanigans *elsewhere* in the grammatical landscape; you may. Just don’t try **hana shiroi* (a flower white) or **kibun aoi* (a mood blue). It will probably fall flat. I’ll wager that few will be impressed by your “creativity.” (Compare the two passages quoted from Kindaichi on page 109.)
14. From a novel by Haruki Murakami, as quoted in Rubin, p. 120.

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Once they have their sugarplum visions of how “pure” and how “ideal” Japanese (supposedly) is in its tail-HEAD (*‘head-last’*) behavior, the TG Grammarians run especially fast and far with the notion. However, they are by no means alone in exhibiting this tendency. The Japanese themselves are susceptible to the same lure. Kindaichi (p. 236) quotes the poet Hagiwara Sakutaroo who in turn quotes his grandfather, to this effect:

Japan is the only country in the world that walks on the path of righteousness. Consider — both Western and Chinese words are read upside down [syntactically speaking]. Japanese is the only language that is rightside up and not on its [logical] head.

No sooner has Kindaichi issued the obligatory guffaw (as if to say, “Oh, what do you expect of a poet’s wonky grandfather; the things they’ll say!”) than he turns around to wheedle, in effect (at his Japanese readership ca. 1957), “But you know, there is something to it, just the same. Our Japanese language really *is* more logical, more natural, more well-behaved than the others.” And thus goes Kindaichi, to partake of the same folly as the TGGers:

Japanese word order is consistent and based on the ironclad rule: ‘If words and phrases called A are dependent on words and phrases called B, A always comes before B.’ Take, for example, *shiroi hana* (a white flower). In this case *shiroi* (white) is dependent on *hana* (flower), because *shiroi hana* is a kind of *hana* and not a kind of *shiroi*...

Kindaichi p. 236

What is it about Japanese that inspires this kind of lunacy, I wonder, among native scholars and foreign analysts alike⁽¹⁵⁾? (See also footnote 37 on page 58, where we touched on this subject in passing already.)

If the TG Grammarian says this...

If there’s simplicity at the beginning, then nothing all **that** complex can happen later on. We’ve got it under control, we’ve reverse-engineered the algorithm.

15. Now you see where my own *shiroi hana* example came from. Yes, the rule is ironclad regarding *adj-NOUN* constructions. The mistake is to imagine that this kind of tyranny extends to everything else across the entire vast landscape of Japanese grammar. Absolutely not! And yet, I understand Kindaichi’s excitement. It’s the same excitement that has me writing a section called **1.1 The Morphology Gradient**. In that chapter, which is my own sort of “unified theory of Japanese [something],” we take a close look at Japanese word formation, and we find that the language does contain exquisitely beautiful patterns, *sometimes* suggestive of the mathematical “simplicity” for which the Transformational Syntactician seems to yearn at all cost (even commonsense); other times suggestive, rather, of the variety and the whimsy and the near-chaos of Nature. While I too have been bitten by the bug, I’ll claim that my way of lining up the ducks is more “objective,” more “reasonable,” and “without an agenda.”

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... what I would counter is this: But everything from music composition to chaos theory to the technique for making *mille fiori* beads all points the other way, where one should be noticing this instead:

Just because initial conditions are simple, don't assume we can't create, from those initial conditions, fantastic complexity, after a surprisingly modest number of iterations.

On the surface, this latter statement (“Just because...”) might sound like the mantra of TGG itself, but what I'm saying has the opposite perspective, really, more along the lines of: “...as simple as possible, but *not* simpler” (Albert Einstein).

In connection with **Figure 26** (which is based on Pinker [2000] pages 103-104) I expressed skepticism about the existence of ‘X’ in a Universal Grammar equipped with ‘a toddler switch’ for choosing LEAF-stem or stem-LEAF. It's not that I dispute the notion that the toddler is a “linguistic genius.” Yes, something truly amazing happens as the toddler acquires language (covered well in Pinker, p. 265-301). But I think there are other ways to hypothesize about it than with an A/B switch in the skull.

First, intuitively the A/B switch just doesn't feel right. It's too computer-geeky, too redolent of a social-scientist wanting to run in the Tall Grass with the Big Dogs (= hard scientists), only to embarrass himself.

Second, I hope I've persuaded the reader that LEAF-stem in the Japanese SOV backbone is not just the opposite of stem-LEAF in English. It's more complex than its English counterpart. It's qualitatively different “stuff.” So even if there *were* an A/B switch in his/her brain, it wouldn't be doing the toddler much good if it delivered only the unadorned inversion of English stem-LEAF to the toddler faced with Japanese LEAF-stem.

Third, we've seen evidence that Japanese does a lot of “LEAF-stem things” and “stem-LEAF” things all at once. So again, that simple A/B switch, even if it existed, wouldn't buy the toddler much since the switch would want flipping “both ways at once” — a nonsensical state of affairs.

Fourth, there's this little matter of bilingualism.

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If we accept the A/B Switch theory, how can we explain bilingualism — a toddler growing up in Japan in a bilingual household where she will be learning both Japanese and English in parallel? We can't.

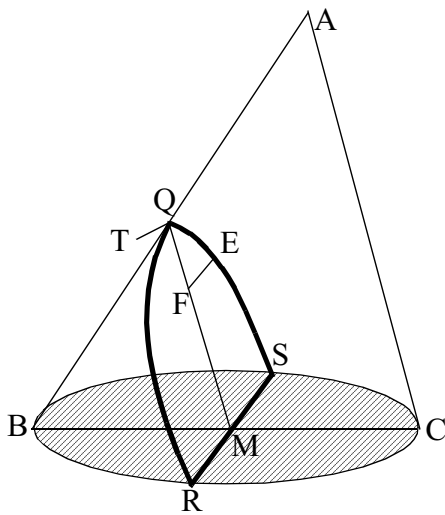
What is my alternative explanation for the toddler's linguistic genius? Mine will be less glamorous and pseudo-mathematical in its outline, but it works as well or better: The toddler has both a very powerful LEAF-stem toolkit and a very powerful stem-LEAF toolkit on hand at all times. If the toddler is in America, she employs the stem-LEAF toolkit most of the time, and hardly touches the other one. If the toddler is in Japan, she employs the LEAF-stem toolkit to navigate the soV backbone of the language, but otherwise uses the stem-LEAF toolkit much of the time. Having a very powerful LEAF-stem toolkit *and* a very powerful stem-LEAF toolkit on hand is a fairly amazing concept, I'll admit, but it's considerably less strange than positing a Universal Grammar that subsumes them both — until that magic moment when Baby reaches up to set the position of the switch.

[Editing note: The argument of the above paragraph is not very convincing.](#)

APPENDIX D: Notation Matters

In *Appendix C: Greenberg Universals, as usurped by the TG Grammarians*, we looked at the specifics of the modifier-HEAD issue. The focus there was chiefly on linguistic analysis, and only intermittently on the notation adopted to convey the analysis. Here we bring notation itself into the limelight, for a discussion of broader issues that are pertinent outside the field of Linguistics.

Let's begin by describing a curve. How does one convey the notion of a parabolic curve? Here is one way:



Let a cone be cut by a plane through the axis¹, and let it be also cut by another plane² cutting the base of the cone in a straight line perpendicular to the base of the axial triangle³, and further let the diameter of the section⁴ be parallel to one side of the axial triangle; then if any straight line⁵ be drawn from the section of the cone parallel to the common section of the cutting plane and the base of the cone as far as the diameter of the section, its square will be equal to the rectangle bounded by the intercept made by it on the diameter in the direction of the vertex of the section and a certain other straight line⁶; this straight line will bear the same ratio to the intercept between the angle of the cone and the vertex of the segment as the square on the base of the axial triangle bears to the rectangle bounded by the remaining two sides of the triangle⁷; and let such a section be called a parabola.

The punch line

1. In Figure 1, a cone is represented by circle BC and apex A. Triangle ABC represents a plane that intersects the cone.
2. A second intersecting plane is represented by QRS, which we imagine both as an etching on the surface of the cone, and as a blade that slices the solid, forming a conic section.
3. The triangle ABC.
4. The line QM, which is drawn parallel to AC.
5. "any straight line": such as EF in Figure 1, for example, where point E can be any point on QRS, chosen at random, and EF is then drawn parallel to SR (= "the common section").
6. For our purposes, the "certain other straight line" is QT, drawn perpendicular to QM. Drawn how far out? See next note.
7. I.e., we are to imagine the lines BA and AC rearranged to become perpendicular, then we are to imagine the rectangle they could form that way. Finally, we extend QT such that the ratio of QT to FQ matches the ratio of BC² to BA * AC. Now, given all the above constraints, it happens that for any line EF, the following holds true: EF² = QT * FQ. (If this discussion seems to have gone a bit far afield, here's what the Old Greek is up to: All in one step, he is both inventing the notion of a parabola *and* setting up the infrastructure for a proof of its generality — but the proof itself has been mercifully omitted by yours truly.)

Fig. 29: Definition of a Parabola

Here is another way...

$$y = x^2$$

... immediately recognizable as such to any student of grade school algebra.

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Moreover, we can get quite specific about our parabolas if necessary, in ways unimaginable to the old Greek slaveholder, and *still* we need only a few characters to do it, instead of a full page of tendentious blather. For example, if we use this enhanced version of the parabola formula...

$$y = ax^2 + bx + c$$

...we can specify any or all of the following: the curve's *steepness* (determined by a); the horizontal location of its *axis of symmetry* (determined by b); the vertical orientation of its *vertex* (determined by c). And, if we use the following version of the formula (a variation on $y = ax^2 + bx + c$, where $b=0$ and $c=0$)...

$$y = .25p(x^2)$$

...we can even specify a curve with a particular *focus*, the one whose focus happens to be p units away from zero on the y axis.

Granted, I've set up a straw man in the following sense: the contrast between our formula " $y = x^2$ " (for one mirrored half of a parabola) and the verbiage of Apollonius of Perga⁽¹⁶⁾ reflects not only a notation difference but a difference in the total mathematical landscape: In particular, without the concept of a cartesian plane, there is no way Apollonius could have formulated our improved description of a parabola, even if he devoted a whole extra month to rewriting his treatise with an eye to brevity and elegance. The necessary pieces of

16. This has been a much embellished version of a comparison proposed by W.M. Priestley, in *Calculus: A Liberal Art* (1998), p. 55. The text in our Figure 29 comes from Proposition 11 in the treatise on *Conics* by Apollonius of Perga, as quoted in James R. Newman, ed., *The World of Mathematics* (1956), Volume I, p. 203-204 (whence, indirectly, the footnotes tying the text to the picture).

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the puzzle simply weren't available to the Hellenic Greek. However, to dramatize the issue, we can pretend that Apollonius and Decartes (1596-1650) were contemporaries, rather in the way that Newton and Leibnitz *were* in fact contemporaries, with competing notation systems:

Newton denoted the fluxion of x by " \dot{x} ", and the fluxion of the fluxion (the acceleration) of \dot{x} by " \ddot{x} ". It is obvious that this notation becomes awkward when we have to consider fluxions of higher orders; and further, Newton did not indicate by his notation the independent variable considered. Thus, " \dot{y} " might possibly mean either dy/dt or dy/dx . We have $\dot{x} = dx/dt$, $\ddot{x} = d\dot{x}/dt = d^2x/dt^2$; but a dot-notation for $d^n x / dt^n$ would be clumsy and inconvenient. Newton's notation for the "inverse method of fluxions" was far clumsier even, and far inferior to Leibniz's " \int ".

— Phillip E.B. Jourdain, *The Nature of Mathematics*
reprinted in *The World of Mathematics* (1958) I: 58

Those who know something of Leibniz's work know how conscious he was of the suggestive and economical value of a good notation. And the fact that we still use and appreciate Leibniz's " \int " and " d ," even though our views as to the principles of the calculus are very different from those of Leibniz and his school, is perhaps the best testimony to the importance of this question of notation. This fact that Leibniz's notations have become permanent is the great reason why I have dealt with his work before the analogous and prior work of Newton.

Jourdain, p. 57-58

...And thus, while the Swiss mathematicians, James Bernoulli (1654-1705), John Bernoulli (1667-1748), and Leonhard Euler (1707-1783), the French mathematicians d'Alembert (1707-1783), Clairaut (1713-1765), Lagrange (1736-1813), Laplace (1749-1827), Legendre (1752-1833), Fourier (1768-1830), and Poisson (1781-1850), and many other Continental mathematicians, were rapidly extending knowledge by using the infinitesimal calculus in all branches of pure and applied mathematics, in England comparatively little progress was made [because of chauvinistic resistance to Leibniz's notation]. In fact, it was not until the beginning of the nineteenth century that there was formed, at Cambridge, a Society to introduce and spread the use of Leibniz's notation among British mathematicians: to establish, as it was said, "the principles of pure d -ism in opposition to the dot -age of the university."

Jourdain, p. 59

APPENDIX E: The Truth About Small Talk

The truth is: even “small talk” is complex. The logic grid below shows how we formulate our questions and answers. It applies to even the smallest question (e.g., about the weather). Residing in the semantic plane (above it all, so to say, as suggested on page 5), it applies across all languages; nothing to do with Japanese, yet. For convenience only, we use English to label the cells, although the (true) content of this table is conceived as *language-independent*:⁽¹⁷⁾

Antonym Choice ^(a)	FAST								SLOW							
Pos./Negative Quest. Mode ^(b)	FAST?				NOT FAST?				SLOW?				NOT SLOW?			
Truth Cells ^(c)	YES, I agree		NO, I disagree		YES, I agree		NO, I disagree		YES, I agree		NO, I disagree		YES, I agree		NO, I disagree	
Answer Space ^(d)	Yes, fast a01	Yes, not slow a02	No, not fast a03	No, slow a04	Yes, not fast a05	Yes, slow a06	No, fast a07	No, not slow a08	Yes, slow a09	Yes, not fast a10	No, not slow a11	No, fast a12	Yes, not slow a13	Yes, fast a14	No, slow a15	No, not fast a16
Redundancy ^(e)									(=a06)	(=a05)	(=a08)	(=a07)	(=a02)	(=a01)	(=a04)	(=a03)

- “Antonym Choice” means: “How shall I phrase my question — in terms of fast or slow, in terms of good or bad?”
- You’ve decided to ask a question about whether something was fast; but now you have another choice to make: Shall I ask a direct question about “fast?” or shall I ask an indirect question based on “not fast?” Example: To a professional logician, [1] “Was the weather good?” and [2] “Wasn’t the weather good?” are opposite-sounding questions, but in terms of *human* logic, either [1] *or* [2] may be used in the very same situation (viz., the speaker already believes the weather was probably good and merely seeks to confirm this); choosing the positive or negative mode is just a matter of style or the mood of the speaker.
- Truth Cells: Depending on whether the listener agrees or disagrees with the question (built on Question Mode M1, M2, M3, M4), he will align himself with a positive (YES) response or negative (NO) response. At this stage it’s just an abstraction; these aren’t the actual “answers” yet.
- This is where the actual answers (to questions formed around M1, M2...) are represented in the table, labeled arbitrarily as a01, a02.... For a given value in the Truth Cells row, one may express the idea either directly (“Yes, fast”) or indirectly (“Yes, not slow”). (Some of these may seem implausible, but sooner or later they all turn up in conversation, given the right context.)
- At first there appear to be 16 possible answers, but a09 = a06 and a10 = a05, etc., so there are only 8 unique ‘strings’ in the answer space (although with 16 meanings, dependent on context.) See discussion below.

17. Why “conceived as”? That’s my way of acknowledging that there may be a language or two somewhere in the world in which it would be impossible to express the contents of this table. But for the vast majority of languages the statement holds: this is language-independent.

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Part 1: Japanese sentences to illustrate M1-M4 and a01 through a16

Preliminary steps:

- Am I using an *i-adjective*? If yes, continue (otherwise it's a *na-adjective*, outside the scope of this discussion)

- Is my question about the Present (/Future)? If yes, consult the ensuing table; if not, jump to Part 2 (Past Tense).

Query Mode/ Answer Type	Questions & Answers	Translation/Comments
M1	Neko wa hayai desu ka?	"Is the cat fast?"
a01	Ee, hayai desu.	This instance of 'a01' corresponds to row 1 in Figure 5 on page 46.
a02	Ee, osokunai desu. (or: Ee, osoku arimasen.)	"Yup, it's no slowpoke" [so you might have to worry about its outrunning your pet mouse].
a03	Iie, hayakunai desu. (or: Iie, hayaku arimasen.)	This instance of 'a03' corresponds to cells 3a/3b in Figure 5 on page 46.
a04	Iie, osoi desu.	"No, it's a slow cat" [so you needn't worry about it outrunning your pet mouse].
M2	Neko wa hayaku arimasen ka?	"Is the cat <i>not</i> fast?" or "Isn't the cat fast?"
a05	Ee, hayakunai desu.	Lit. "Yes, it isn't fast" which is functionally equivalent English: "No, it isn't fast". ^(a)
a06	Ee, osoi desu.	Lit. "Yes, it's slow," which is functionally equivalent to English: "No, it's slow."
a07	Iie, hayai desu.	Lit. "No, it's fast," which is functionally equivalent to English: "Yes, it's fast." (<i>Iie, hayai desu yo!</i> to emphasize the disagreement)
a08	Iie, osokunai desu.	Lit. "No, it's not slow," which is functionally equivalent to English: "Yes, it's not slow."
M3	Neko wa osoi desu ka?	"Is the cat slow?"
a09	Ee, osoi desu.	Note that a09 is identical to a06. ^(b)
a10	Ee, hayakunai desu. = a05	
a11	Iie, osokunai desu. = a08	
a12	Iie, hayai desu. = a07	
M4	Neko wa osoku arimasen ka?	"Is the cat <i>not</i> slow?" or "Isn't the cat slow?"
a13	Ee, osokunai desu. = a02	Lit. "Yes, it's not slow." = English "No, it's not." ^(a)
a14	Ee, hayai desu. = a01	Lit. "Yes, it's fast." = English "No, it's fast."
a15	Iie, osoi desu. = a04	Lit. "No, it <i>is</i> slow." = English "Yes, it is." (<i>Iie, osoi desu yo!</i>)
a16	Iie, hayakunai desu. = a03	Lit. "No, it is fast." = English "No, it is fast."

- There's an added twist because English illogically ignores an M2/M4 query, and comments instead on the attribute (fast or not? slow or not?). See **Part 3: Ee, banana ga arimasen yo!**
- In other words, as we reach the halfway point in the table, pieces start to get re-used. So, if it provides you any solace, there are only eight distinct utterances (per tense) to produce/recognize in connection with queries regarding good/bad weather, or a fast/slow cat, or whatever. *However*, to employ these 8 effectively, you must know where you are in the 16-part truth table.

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Part 2: Japanese for M1-M4 again, now in the Past Tense:

Query Mode/ Answer Type	Questions & Answers	Comments
M1	Neko wa hayakatta desu ka?	“Was the cat fast?”
a01	Ee, hayakatta desu.	This instance of ‘a01’ corresponds to row 2 in Figure 5 on page 46 (past tense).
a02	Ee, osokunakatta desu. (or: Ee, osoku arimasen deshita.)	Regarding the “unholy union” of past tense with present tense, see page 12.
a03	Iie, hayakunakatta desu. (or: Iie, hayaku arimasen deshita.)	This instance of ‘a03’ corresponds to cells 4a/4b in Figure 5 on page 46 (past tense negative).
a04	Iie, osokatta desu.	
M2	Neko wa hayakunakatta desu ka?	“Was the cat not fast?” or “Wasn’t the cat fast?”
a05	...	
a06	...and so forth, traversing M3 and M4 again	

Part 3: Ee, banana ga arimasen yo!

Here we enter the realm of “Yes! We have no bananas” (as the direct translation of a Spanish response to “Have you no bananas?”) But that example, made famous by an eponymous song in the 1922 Broadway revue “Make It Snappy,” only scratches the surface of the problem. And it does so in a way that seems to suggest something comical or lacking (have I only imagined this?) in the foreign language itself, as distinct from the mere circumstance of two cultures juxtaposed. But English is the absurd one, as we must realize eventually when fully exploring the phenomenon as it pertains not just to nouns (existence/nonexistence of bananas) but to adjectives, which so often come in antonym pairs. In other words, to a question such as this: “Wasn’t the weather bad?” one may answer *either* in terms of ‘bad’ (“No, it wasn’t so bad.” “Yes, it was bad.”) *or* in terms of ‘good’ (“No, it was good.” “Yes, it was far from good.”)

Here is a pair of truth tables summarizing those four possible responses:

GOOD	BAD
GOOD	BAD

NO	YES
NO	YES

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The tables are symmetrical and reasonable. So far so good. Next, consider the following question and trio of responses:

“Was the weather not good?”

[x] “Yes, it was terrible.” [rare in English, but comprehensible]

[y] “No, *it* is was good...” [but something else wasn’t]

[z] “*No*, it was *terrible*.”

Here are the corresponding truth tables, which are now both asymmetrical and illogical:

BAD	—
GOOD	BAD

YES	—
NO	NO

Note how the English speaker throws ‘Yes’ and ‘No’ back freely, sometimes as a proper response to the query itself (as in Spanish), more often as the proxy for an attribute (yes = good, no = bad; yes = fast, no = slow; etc.) Thus, English fosters sloppy thinking by constantly “crossing levels”: In [z], we cross from sentence-level [the query] down to word-level (the answer ‘no’ as proxy for ‘not good’). How in the world do we map this swampy mess of illogic into so “clean” a language as Spanish or Japanese? Only with difficulty. Responses such as [z] must be left behind. One must train oneself to respond (and to hear responses) only in mode [x] or [y]; meanwhile, our favorite mode, [z], simply doesn’t exist in Japanese.⁽¹⁸⁾

Aren’t there some Sapir-Whorf implications lurking here? Something in the language itself that encourages sloppy thinking? It seems that way to me. Sapir-Whorf may have been right for the wrong reason; but, they were right!

18. Nor does it exist in Chinese. See Li & Thompson p. 562-3.

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While the truth table at the beginning of this appendix is *itself* language-independent, it is crucial that you know where you are *in* that table when dealing with a pair of languages where one behaves logically, succinctly and politely (Japanese, Spanish) and the other exhibits illogic, redundancy and impudence (English).

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