Semantics and Pragmatics of Noun-Modifying Constructions in Japanese
Author(s): Yoshiko Matsumoto
Proceedings of the Fourteenth Annual Meeting of the Berkeley Linguistics Society (1988), pp. 166-175

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

Semantics and Pragmatics of Noun-Modifying Constructions in Japanese¹

Yoshiko Matsumoto
University of California, Berkeley

Japanese is a verb-final language with postposed case markers. Arguments of verbs are often omitted, although verbs do not inflect according to number or person. Modifiers precede what they modify, so that clausal noun-modifying constructions in Japanese have the form of a head noun preceded by a modifying clause in which the predicate is typically in a finite form. The most often studied instances of this construction are relative clauses, which are exemplified in the (a)-sentences of examples (1) - (4); the (b)-sentences in those examples give a non-relative paraphrase of the embedded noun phrase.

- 1a) [[hon -o katta] gakusei] -wa doko desu ka.
book-ACC bought student TOP where is QUES.PART.
'Where is the student who bought a book?'
- 1b) *Gakusei -ga* hon-o katta.
student-NOM book-ACC bought
'A student bought a book.'
- 2a) [[gakusei -ga katta] hon] -wa doko desu ka.
student-NOM bought book TOP where is Q.P.
'Where is the book which a student bought?'
- 2b) *Gakusei-ga hon-o* katta.
student-NOM book-ACC bought
'A student bought a book.'
- 3a) [[hannin-ga kane -o nusunda] ginkoo] -wa doko desu ka.
criminal-NOM money-ACC stole bank TOP where is Q.P.
'Where is the bank (from) which the criminal stole money?'
- 3b) *Hannin-ga ginkoo-kara* kane -o nusunda.
criminal-NOM bank-ABL(from) money-ACC stole
'The criminal stole the money from the bank.'
- 4a) [[Taroo-ga kaisya -e iku] kuruma] -wa doko desu ka.
Taroo -NOM company-GOAL go car TOP where is Q.P.
'Where is the car (by means of) which Taroo goes to (his) company?'
- 4b) *Taroo-ga kuruma-de* kaisya -e iku.
Taroo -NOM car-INSTR company-GOAL go
'Taroo goes to (his) company in the car.'

Japanese differs from English, and many other languages, in the absence of an overt marker of the grammatical role of the head noun with respect to the predicate in the modifying clause. Thus, there is no relative pronoun, and the nominative case marker *ga*, present in the non-relative paraphrase (1b), does not appear in the relative construction in (1a). The

same is true when head nouns take oblique case markers in the non-relative paraphrases as in (3b) and (4b).

Despite the absence of an overt marking of the relation of the head noun to the predicate in the modifying clause, many analyses of Japanese relative clauses are modelled on the syntactic analysis of English relative clauses, and explain the construction in terms of a gap in the modifying clause with which the head noun is coreferent. (Inoue 1976, Okutsu 1974, etc.) This works more or less for examples (1) - (4), but does not help us when we meet similar constructions in which there is no gap in the modifying clause which should be linked to the head noun. In this paper, I will first discuss the construal of such "gapless" relative clause-like constructions as well as "gapped" relatives and argue that what is crucial for construal of such constructions is the semantic and pragmatic association between the clause and the noun. "Gapped" relatives, I will claim, are simply special cases of a larger class of clausal noun-modifying constructions. I will also consider other constructions with the same constituent structure, in the light of the general analysis.

Examples (5) - (11), which are quite different from examples (1) - (4), suggest some of the range of clausal noun modification in Japanese.

- 5a) [[atama-ga yokunaru] hon]
 head-NOM improve(v.i.) book
 'the book (by reading) which (one's) head improves'
- 5b) Kono *hon-o yomeba* atama-ga yokunaru.
 this book-ACC read (cond.) head-NOM improve
 'If (one) reads this book, (one's) head will improve.'
- 6) ?? [[atama-ga yokunaru] kuruma]
 head-NOM improve car
 ?? 'the car (by driving) which (one's) head improves'
- 7) [[genki -ga deru] kuruma]
 energy-NOM rise-up car
 'the car (by driving/owning) which (one's) energy rises'
- 8) [[yoru toire-ni ike-naku-naru] hanasi]
 night bathroom-GOAL cannot-go-become story
 'the story (because of hearing) which (one) cannot go to the bathroom at night'
- 9) [[toire-ni ike-nai] komaasyaru]
 bathroom-GOAL cannot-go commercial
 'commercials (because of) which (one) cannot go to the bathroom'
- 10) [[gakkoo-ga yasumi-ninatta] yuki]
 school-NOM closed-became snow
 'the snow (because of) which the school was closed'
- 11) [[paatii-ni korare-nakatta] syukudai]
 party-GOAL could-not-come homework
 'the homework (because of) which (you, etc.) could not come to the party'

If one is unfamiliar with Japanese, it may not be easy to construe from the gloss alone phrases such as (5) - (11). In (5a), for instance, the verb in the modifying clause is intransitive, and its subject is the noun *atama* 'head.' This leaves no apparent gap coreferent with the head noun, *hon* 'book.' In this example, a non-relative paraphrase cannot be made simply by assigning an appropriate case marker to the head noun and inserting it into the modifying clause as it could in (1) - (4). In (5a), not only a case-marker, but also a verb in a conditional form - *yomeba* 'if one reads' - which appears in a possible paraphrase, (5b), are absent. The choice of a particular linguistic form that could specify in a paraphrase the relation between the head noun and the clause is not of primary importance either for the hearer's understanding or for the linguistic analysis. In (5b), for instance, other conditional forms of the verb *yomu*, 'to read', such as *yomuto*, or *yondara* could be substituted for *yomeba* in this context without changing the conveyed relation between the clause and the head noun.

(7) - (11) are similar examples to (5a), all of which fail to be accounted for, or often even to figure in, purely syntactic accounts of relative clauses, yet which are not out of the ordinary in Japanese. Examples such as (5) and (7) - (11) are what I called "gapless" relatives, yet as with "gapped" relatives, such as (1) - (4), the head noun can be inserted into the modifying clause in a non-relative paraphrase. The only difference is that in the "gapless" examples, there is not a specific case marker that can express the relation of the head noun to the clause. This does not seem sufficient reason for excluding "gapless" relatives from the scope of the analysis of relative clauses.

In the absence of an explicit indication of the relation between the constituents (except for the fact that the clause is subordinate to the head noun), speakers of Japanese must rely on extra-syntactic factors. The construal of (5), for instance, can be analyzed as involving two separate but related steps: first is the association of 'book' with an action which has a special affinity with the book; namely, the action of reading; second is the more complex part which is the decision that the likely relation between 'reading a book' and 'one's head improving' is that of condition and consequence, or cause and effect. Note that the second of these steps requires the interlocutors to have to some degree a shared "world-view".² In other words, the hearer can construe the meaning of the construction because the situation invoked by, or inferred from, what is expressed in the two constituents of the construction is plausible in light of the hearer's knowledge of the world, and, on the other hand, the speaker in producing such an utterance is tacitly appealing to that shared background knowledge. This implies that there are constraints on what constructions can be construed in a given situation. The unacceptability of (6) in normal situations, for instance, is due to the absence of a commonly perceived link between, say, driving or owning a car and the improvement in one's mental faculties. In contrast to (6), the clause in (7) suggests a situation with which a car can readily be associated. As long as the interlocutors share in their world-view the idea that a car can be a source of psychological energy, then what the two elements of the construction convey can form one picture, so to speak, rather than remain as two

unmatched fragments, as in (6). In the terminology of frame semantics, in (5) and (7) a whole frame is "invoked" by the interpreter who assigns coherence to the text rather than simply "evoked" by the lexical and grammatical material in the text. The successful invoking of such a frame requires the appropriate knowledge and set of expectations to be part of the "world-view" that is shared by the interlocutors.

A question we may ask about the construal mechanism of these clausal noun modification constructions in Japanese is that of what relations between head noun and modifying clause are accessible. In examples (5) and (7) - (11), the head noun is associated with a cause, for which the modifying clause expresses the effect. The effect can be an expected one such as those in (7) - (9), or can be an observed consequence such in (10) - (11). (12) exemplifies a twisted version of cause and effect; in this example, it is not that eating sweets causes one not to become fat, but that certain sweets do not make one fat *even though* one eats them.³

- 12) [[hutor-anai] okasi]
 get-fat-not sweets
 'the sweets (even though one eats) which (one) does not get fat'

The head noun can represent the purpose of the action expressed in the modifying clause, as in (13) and (14).

- 13) [[biza-o totta] ryokoo]
 visa-ACC obtained trip
 'the trip (for) which (I, etc.) obtained the visa'
- 14) [[te-o araw-anaku temo ii] oyatu]
 hand-ACC wash-not O.K. snack
 'the snack (in order to eat) which you do not have to wash your hands'

The relations of simultaneity or sequentiality seem to be difficult to construe as shown in (15) and (16), except in conventionalized instances. The difficulty of construing (15) and (16) may be caused by the fact that there is no readily available frame or conventionalized situation where the action of reading a book, for example, is strongly linked to the action of walking. In other words, it is not considered conventional to associate the action of walking as being a characteristic of a book.⁴

- 15) ?? [[aruku] hon]
 walk book
 ?? 'the book (while reading) which (one) walks'
- 16) ?? [[sugu benkyoo-sita] gohan]
 immediately study-did meal
 ?? 'the meal (after) which (one) immediately began studying'

Further investigation is in order, but a preliminary examination leads me to speculate that in a construction where one element functions to

characterize the other, strong associations that can be invoked between the situations alluded to by the two elements, for example, that of cause and effect, are preferred over more incidental associations such as temporal sequence.

A second question we may consider is the degree to which construal requires shared knowledge. (8) and (9), for instance, require considerable shared background knowledge. (8) is readily understood by most native speakers of Japanese who know that, in Japan, bathrooms were traditionally outhouses, were quite dark at night and were the setting of many ghost stories. (9) relies on a more recent experience of the Japanese, that of TV commercials which are so well made that during them one does not wish to leave one's seat.

In terms of the amount of shared knowledge required for construal, (8) and (9) are near one end of a scale of which (1a) and (2a) may represent the opposite end. In (1a) and (2a), the relation between the head noun and the predicate in the modifying clause requires little shared knowledge and inference to construe. In (1a), the head represents the agent and, in (2a), the patient of the predicate. In neither case is the relation overtly marked, but in each case that predicate has an unfilled argument position which is intrinsically associated with the head noun. Thus, the head noun *gakusei* 'student' in (1a), which is repeated as (17a), denotes a person and, consequently, a possible agent of the action of buying. If the head noun in (17a) were *mise* 'store,' as in (18a), then the head noun would be typically interpreted as denoting the location, rather than the agent, of the action unless the context in which (18a) occurred provided a metonymical interpretation of *mise* 'store'. If the head noun in (17a) were *isi* 'stone' as in (18b), then the phrase would not be comprehensible to most speakers of Japanese unless it were used in very special context such as, for example, in a fairy tale.⁵

17a)=1a)

[[hon -o katta] *gakusei*] - wa doko desu ka.
book-ACC bought student TOP where is QUES.PART.
'Where is the student who bought a book?'

18a) [[hon -o katta] *mise*] -wa doko desu ka.
book-ACC bought store TOP where is Q.P.
'Where is the store (at) which (you, etc.) bought a book?'

18b)?? [[hon -o katta] *isi*] -wa doko desu ka.
book-ACC bought stone TOP where is Q.P.

In (4a), *kuruma* 'car', like the head nouns of (8) and (9), is not an argument of the verb *iku* 'to go.' But, the relation between *kuruma* 'car' and the modifying clause *Taroo-ga kaisya-e iku* 'Taroo goes to (his) company' is more readily ascertainable than in examples (8) and (9). That is to say, the knowledge required to construe (4a) is essentially just that a 'car' is a means of transportation and thus that, the most likely relation between the head noun *kuruma* 'car' and the predicate *iku* 'to go' is that the former is the instrument for the latter. Construal of (8), on the

other hand, requires a more elaborate set of assumptions. In this sense, the relation instantiated in (4a) is more semantically intrinsic than those of (8) and (9). It is no coincidence that, in a non-relative paraphrase of the complex NP in (4a), the relation between *kuruma* 'car' and *iku* 'to go' can be expressed simply by the case marker *de*. (3a) is a similar example.

As I mentioned earlier, most conventional accounts of relative clause formation in Japanese are couched in terms of deletion of the target noun along with its case marker under coreference with the head noun. Such an analysis, however, cannot explain how the deleted case marker can be recovered from the relativized construction. As the comparison between (17a) and (18a,b) shows, the possible grammatical role of the head noun with respect to the clause is determined by the meaning of the head noun and not by the syntactic requirement to fill in the missing argument position in the clause. It should be emphasized that speakers of Japanese are not inclined to interpret the phrase in (18a) as 'the store that bought a book' when a more plausible interpretation is readily available. This would be a syntactically more accessible relation, but semantically and pragmatically less natural. The importance of semantics and pragmatics is also amply illustrated by a construction whose interpretation is potentially ambiguous.

- 19) [[*watasi-ga kita*] *mati*]
 I-NOM came town
 'the town I came to/from'

As the English translation suggests, (19) may be ambiguous between (20a) and (20b), which are the possible paraphrases of (19).

- 20a) *Watasi-ga sono mati-e kita.*
 I-NOM that town-GOAL came
 'I came to that town.'
- 20b) *Watasi-ga sono mati-kara kita.*
 I-NOM that town-ABL(from) came
 'I came from that town.'

Several Japanese linguists have discussed such cases, and their interpretations as (20a) or (20b) of such sentences depend very much on the particular verbs and nouns present. For example, if *kita* 'came' in (19) is replaced by *yatte-kita* 'finally came' or 'came after a long journey', or if *mati* 'town' is replaced by *eki* 'station,' then the interpretation with the locative (GOAL) *e* is usually chosen, and most of the examples that one finds discussed are of this type. If, however, *ima* 'now' were inserted in the relative clause, for example, as in (21), the temporal expression makes possible only the interpretation (20b), i.e. with *-kara*, 'from'. Similarly, if one says (22), the associated postposition is certainly *-kara* 'from'.

- 21) [[Watasi-ga ima kita] eki] -wa totemo kondeita.
 I-NOM now came station TOP very crowded-was
 'The station which I just came *from* was crowded.'
- 22) [[watasi-ga kita] mati] -wa hito-ga oosugite...
 I-NOM came town TOP people-NOM too many
 'The town I came *from* has too many people ...'

In fact, according to Okutsu (1974), the original discussion of this type of sentence was by Yoshio Yamada (1908) in connection with the phrase *kimi-no kitareru sato*, which is interpreted as 'the village you came *from*'. The head noun being *sato* 'village' rather than *mati* 'town' may well be the reason that Yamada chose the interpretation with *-kara* 'from': general knowledge of demography would suggest movement from village to town. Some of the linguists who discuss sentences such as (19) claim that, for the verb *kuru* 'come' (*kita* 'came'), the goal of the action is more relevant than the origin (e.g. Teramura 1976), yet this is surely an oversimplification, and an interpretation can be chosen only after considering the meaning of the head noun as well as the verb.

The examples we have looked at illustrate that one of the points where English and Japanese differ crucially is that in English, the understanding of relative clauses is guided by the syntax of the construction, whereas in Japanese, the absence of an explicit marker specifying the relation between the head noun and the clause seems to indicate a higher reliance on the semantics and pragmatics. English speakers are usually forced to accept the single syntactically allowed interpretation, whereas, in Japanese, the hearer must seek the most plausible interpretation from the given linguistic clues and from comparison with what they know about the world. In this sense, the responsibility for the success of the communication in Japanese is on the hearer's side whereas in English the speaker is in principle expected to produce utterances in which relations between the constituents are explicitly encoded.⁶ Speakers of Japanese are pragmatically constrained in that they must make a correct assessment of the interlocutors' world-view in order to be able to transmit the message. In passing, a rough counterpart in English to these phenomena in Japanese is the construal of noun compounds, as discussed for instance in Downing (1977).

What I have been suggesting so far is a unified analysis of the construal of examples such as (1) - (22) in terms of frame semantics and pragmatics, in which the situations alluded to by the linguistic clues and the interlocutors' "world-view" play a significant role. Such a framework can encompass a larger class of clausal noun modification constructions, including some conventionally analyzed in very different terms, but which nevertheless share the same constituent structure. I will discuss these constructions briefly with reference to examples (23) - (28) which are along the lines of examples originally given by Teramura (1975-78).

- 23) [[tabako -o katta] oturi] -ga aru.
 cigarettes-ACC bought change (=balance of money) NOM there-is
 'There is the change from buying cigarettes'

- 24) 1960-nen-wa [[Taroo-ga Tokyoo-e kita] yokunen] dearu.
 1960-year-TOP Taroo-NOM Tokyo-GOAL came next-year is
 '1960 is the year after Taroo came to Tokyo.'
- 25) [[dareka-ga doa-o tataku] oto]-ga suru
 someone-NOM door-ACC knock sound NOM there-is
 'There is the sound of someone knocking on the door.'
- 26) [[sakana-o yaku] nioi]-ga suru.
 fish-ACC grill smell NOM there-is
 'There is the smell of fish grilling.'
- 27) [[me -o patipati-to-yaru] kuse]-ga aru.
 eye-ACC blink habit NOM exist
 '(He) has the habit of blinking (his) eyes.'
- 28) [[ippan-no simin-ga husyoo-sita] zizitu]-ga aru.
 general citizen-NOM be injured fact NOM exist
 'There is the fact that ordinary people were injured.'

(27) and (28) are instances of what are usually called appositive or noun complement constructions. Nonetheless, as we have seen, the absence of a gap in the clause does not distinguish appositive from relative clause constructions in Japanese. The head nouns that appear in (27) - (28) are semantically special and are sometimes called "content nouns." They function essentially as a label for the content of the preceding clause. In (23) to (26), the head noun marks, loosely speaking, the effect of the action expressed in the preceding clause. In contrast to the earlier examples, the construal of (23) - (28) depends in general not on how the head noun "fits into" the preceding modifying clause, but on how the preceding clause "fits into" what is referred to by the head noun. But the two types of examples are similar in that there is a range in the degree of responsibility of pragmatics for the construal of the relation between clause and head noun. The relation between clause and head noun in (27) and (28) is transparent and prototypical, while that in (23) - (26) requires more background knowledge and inference. In (23), for instance, the clause *tabako-o katta* 'bought cigarettes' denotes not the content of *oturi* 'change', but the cause or source. The connection is established both by the noun *oturi* 'change' in that (money) change is a product of some transaction, and by the clause *tabako-o katta* 'bought cigarettes' which evokes the situation of a commercial transaction.

The constituent structure of all of the examples that we have considered consists of a clause preceding a noun. Underlying the interpretation of these constructions is the assumption that the clause and noun are in some way relevant to each other. The task of construal is to discover the connection. In Japanese, unlike in English, the connection is not determined by an overt marker, but relies on a semantic and pragmatic understanding of the noun and clause. The choice of the most likely or "natural" connection between the clause and noun depends on matching with a shared "world-view" of the interlocutors. The degree of elaboration in the shared world-view that is required for understanding varies from little more than a common understanding of the semantic content of

the lexical items to a detailed set of shared expectations. In all cases, however, semantic/pragmatic acceptability is a requirement for successful construal.

NOTES

1. A shorter version of this paper was presented at the LSA Annual Meeting in December 1987. I would like to thank the members of the Japanese Linguistics Seminar at U.C. Berkeley, especially Yoko Hasegawa, Yuko Mogami and Seiko Yamaguchi as well as Claudia Brugman and Orin Gensler for their comments on earlier versions of my paper. I am especially indebted to Charles J. Fillmore and Robin T. Lakoff for their insights and for discussions on my project.
2. A "world-view" refers to a broader notion than that of "frame" and includes one's organization of experience, expectations, beliefs, etc. A "frame", as I understand it, is a slice of such a world-view, which is evoked or invoked as a consequence of the linguistic expressions used in the communication.
3. An equivalent to (12), at least in some colloquial dialects of English, is *a cake where you don't gain weight*. German *wo* and Greek *pou* seem to function similarly to the English *where* in analogous constructions. These facts were brought to my attention by Claudia Brugman, Hana Filip and Kiki Nikiforidou. Notice that unlike regular relative pronouns, neither *where*, *wo* nor *pou* marks the syntactic role of the head noun.
4. A construction is likely to be acceptable if the head noun refers to an occasion that has a duration of some considerable length, for instance, *natuyasumi* 'summer vacation,' and if the clause refers to some activity that can be characteristically associated with such an occasion. Thus, we could have [*arubaito-o sita*] *natuyasumi* 'the summer vacation (during) which (I) took a part-time job' or [*hiyakesita*] *natuyasumi* 'the summer vacation (during) which (I) got a tan.'
5. A reading in a more likely context than the fairy tale reading of (18b) would be 'where is the stone (on the subject of) which (I) bought a book.'
6. For an interesting discussion of the question of hearer's responsibility vs. speaker's responsibility, see R. Lakoff (1984).

SELECTED REFERENCES

- Chomsky, N. and Lasnik, H. 1977. Filters and control. *Linguistic Inquiry* 8. 425-504.
- Downing, P. 1977. On the creation and use of English Compound Nouns. *Language* 53, 810-842.
- Fillmore, C.J. 1976. Topics in Lexical Semantics, in R. Cole (ed.), *Current Issues in Linguistic Theory*. Indiana Univ. Press.

- _____. 1982. Frame Semantics. *Linguistics in the Morning Calm*, (ed.) Linguistic Society of Korea. Hanshin Pub. Co.
- _____. 1985. Frames and the Semantics of Understanding. *Quaderni di Semantica*. VI: 2. 222-254.
- Inoue, K. 1976. *Henkei Bunpoo to Nihongo* (Transformational Grammar and Japanese). Taishukan.
- Keenan, E. and Comrie, B. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8.1. 63-99.
- Keenan, E.D. 1985. Relative Clauses. *Language Typology and Syntactic Description 2: Complex constructions*, (ed.) T. Shopen. Cambridge Univ. Press. 141-170.
- Kuno, S. 1973. *The Structure of the Japanese Language*. MIT Press.
- _____. 1976. Subject, theme, and the speaker's empathy -- A reexamination of relativization phenomena. *Subject and Topic*, (ed.) C.N. Li. Academic Press. 419-444.
- Lakoff, R.T. 1984. The pragmatics of subordination. *Proceedings of the 10th Annual Meeting of the Berkeley Linguistics Society*, (eds.) C. Brugman, M. Macaulay et al. 481-492.
- Matsumoto, Y. 1986. Dealing with Japanese relatives. Paper presented at the Southern California Conference on General Linguistics, U.C. San Diego.
- McCawley, J.D. 1976 (1972). Relativization. *Syntax and Semantics 5: Japanese Generative Grammar*, (ed.) M. Shibatani. 295-306.
- Okutsu, K. 1974. *Seisei Nihongo Bunpoo Ron: Meishi-ku no koozoo* (On Generative Japanese Grammar: The structure of noun phrases). Taishukan.
- Teramura, H. 1975-78. Rentai-syuusyoku no sintakusu to imi (Syntax and semantics of noun modification) Nos. 1-4. *Nihongo Nihonbunka* 4-7 (The Japanese language and culture). Osaka Gaikokugo Daigaku. 71-119, 29-78, 1-35, 1-24.
- _____. 1980. Meisi-syuusyoku-bu no hikaku (A contrastive study of noun-modification). *Nitieigo Hikaku Kooza: Bunpoo* (Contrastive Studies of Japanese and English: Grammar), (ed.) T. Kunihiro. Tokyo: Taishuukan. 221-299.
- Yamada, Y. 1908. *Nihon Bunpoo Ron* (On Japanese Grammar). Hoobunkan.