

That a Fact? Reevaluation of the Relationship between Factivity and Complementizer Choice in Japanese

Author(s): Satoko Suzuki

*Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistics Society: General Session Dedicated to the Contributions of Charles J. Fillmore* (1994), pp. 521-531

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.

## Is That a Fact? Reevaluation of the Relationship between Factivity and Complementizer Choice in Japanese

Satoko Suzuki  
Macalester College

### 1. Factivity and English Complement Types: Kiparsky and Kiparsky's Analysis

The correlation between factivity and complement types was first delineated by Kiparsky and Kiparsky (1971) in the context of English. Predicates which take sentential subjects or objects were classified into two types: factive and nonfactive.<sup>1</sup> Predicates such as *be significant*, *be tragic*, *make sense*, *regret*, *be aware (of)*, and *grasp* are factive, while predicates such as *be likely*, *be possible*, *seem*, *suppose*, *maintain*, and *believe* are nonfactive. In uttering a sentence which contains a factive predicate, the speaker presupposes (i.e. assumes) that the embedded clause expresses a true proposition. On the other hand, the speaker of a sentence with a nonfactive predicate does not hold such presupposition. The following examples illustrate the contrast.

- (1) It makes sense that John is good at science.
- (2) It seems that John is good at science.

In saying (1) the speaker presupposes that it is true that John is good at science. In (2) the speaker THINKS that John is good at science, but s/he does not PRESUPPOSE so.

This contrast in meaning was correlated with syntactic behavior of the predicates. Kiparsky and Kiparsky stated that factive predicates can take certain complement types whereas nonfactive predicates cannot and vice versa. For example, it was proposed that only factive predicates allow the noun *fact* with a sentential complement.

### 2. Factivity and Japanese Complement Types: Kuno's Analysis

Kuno (1973) adopted the concept of factivity from English and applied it to Japanese without much modification. Predicates such as *higeki da* 'be a tragedy', *migoto da* 'be admirable', *wasureru* 'forget', and *omoidasu* 'recall' are termed factive whereas predicates such as *ariuru koto da* 'be possible', *uso da* 'be false', *hayagatensuru* 'form a hasty conclusion', and *yuu* 'say' are termed nonfactive.<sup>2</sup>

This distinction is then shown to be correlated with the choice of complement types. With respect to predicates which take sentential subjects, it is claimed that factive predicates allow *koto*, *no*, *to yuu koto*, and *to yuu no* as their complementizers while nonfactive predicates allow only *to yuu koto* and *to yuu no* as their complementizers. In other words, whereas *to yuu* is optionally inserted in front of *koto* or *no* in the case of factive predicates, the presence of *to yuu* is obligatory in the case of nonfactive predicates. The following examples from Kuno (1973: 219) illustrate this contrast.

- (3) John ga sono yuwaku o kippari shirizoketa KOTO/NO/  
 S<sup>3</sup> that temptation O resolutely rejected  
 TO YUU KOTO/TO YUU NO wa migoto da.  
 T admirable C  
*'It is admirable that John rejected the temptation resolutely.'*
- (4) John ga Mary o nagutta \*KOTO/\*NO/TO YUU KOTO/TO YUU NO wa  
 S O hit T  
 ariuru koto da.  
 possible thing C  
*'It is possible that John hit Mary.'*

For predicates which take sentential objects, it is claimed that factive predicates take either *koto* or *no* as their complementizer whereas nonfactive predicates take *to*. This is illustrated in the following examples taken from Kuno (1973: 217).

- (5) John wa Mary ga tsunbo dearu KOTO/NO o omoidashita.  
 T S deaf C O recalled  
*'John recalled that Mary was deaf.'*
- (6) John wa Mary ga shinda TO itta.  
 T S died said  
*'John said that Mary had died.'*

Thus Kuno suggests that there is a parallel between English and Japanese complement types. In both languages syntactic features such as choice of complementizer and complement type are sensitive to the factivity of the predicate.

### 3. Degree of the Speaker's Conviction

Kuno's analysis of the relationship between factivity and Japanese complementizers can be summarized as follows:

- (7) Predicates which take sentential subjects  
 a. Factives take *no*, *koto*, *to yuu no*, and *to yuu koto*  
 b. Nonfactives take *to yuu no* and *to yuu koto*
- (8) Predicates which take sentential objects  
 a. Factives take *no* and *koto* complementizer  
 b. Nonfactives take *to*

Examination of data collected for this study<sup>4</sup> indicates that the situation is not as clear-cut as suggested above. There are numerous cases where factivity of the predicate does not seem to be the determining factor in complementizer choice.

Because of lack of space, I will mainly discuss predicates which take sentential objects in this paper although a few examples of predicates which take sentential subjects will be mentioned to illustrate that the same analysis can be

applied to both types of predicates (For detailed discussion on both types of predicates, see Suzuki (1994)). There are two types of cases which do not follow the pattern shown in (8). First, there are cases where factive predicates occur with *to* instead of *koto* or *no*.

- (9) Kurumaya san no shukugakai ga juugoya ni moyoosareru  
Mr. Kurumaya L party S full moon night on be held
- TO shitta toki kara obidome wa kore, to kimeteita.  
found out time since sash clip T this have decided  
'Since when I found out that a party for Mr. Kurumaya will be held on a full moon night, I have decided to wear this sash clip'. (Bungei Shunjuu 1986:189)
- (10) Moshi boku ga kansensha da TO wakari, aite ga mada  
by any chance I S infected person C find partner S still
- kansenshiteinakattara, kyori o okimasu.  
if have not been infected distance O place  
'If I find out that I've been infected and if the partner has not yet been infected, then I will keep a distance from the partner'.  
(More, Feb., 1993:323)

In the above examples, *to* is used as the complementizer even though the predicates, *shiru* 'know, find out' and *wakaru* 'understand, find out' are factive. How should we explain this? Kuno notices this phenomenon, but does not give an adequate account of it. Since the behavior of these predicates contradicts the correlation between factivity and complementizer choice predicted by Kuno, we need an alternative analysis.

Note that *shiru* and *wakaru* do occur with *koto* or *no* as shown below.

- (11) Watashi no otoko tomodachi wa watashi ga onna tomodachi  
I L male friend T I S female friend
- to no ittaiichi no kaiwa o taisetsunishiteiru NO o  
with L one-on-one L conversation O value O
- shitteiru node...  
know so  
'My boyfriend knows that I value one-on-one conversation with my girlfriends, so..'. (Chiba 1988:151)
- (12) Marariakin o motteiru KOTO ga wakatteiru noni  
Malaria parasite O have O know though
- soredemo ka o korosu koto o itou hitobito ga aru.  
still mosquito O kill NOM O dislikes people S exist  
'There are people who dislike killing mosquitoes even though they know that they carry Malaria'. (Hotta 1957:78)

What differentiates sentences like (9) and (10), where factive predicates occur with *to*, from sentences like (11) and (12), where the same predicates occur with *koto* and *no*? McCawley (1978) gives a convincing account of the difference. She attributes the difference to the nature of knowledge these predicates represent. Sentences like (9) and (10) indicate that the speaker acquired the new piece of information at that very moment. What is involved in these kinds of sentences 'is not really KNOWLEDGE as such but rather SUDDEN REALIZATION' (1978:199). On the other hand, sentences like (11) and (12) present the propositions in the complement as knowledge. Thus these predicates differentiate knowledge from sudden realization by taking *koto* or *no* when knowledge is involved and *to* when sudden realization is involved.

Although this analysis is convincing as far as the above examples are concerned, it encounters difficulty when dealing with examples such as follows:

- (13) Sore wa itsuka kaettekuru TO ikura shitteite mo hakkiri  
 that T some day come back how much know even clearly

miminishuru made kesshite tenihairanai 'jikkan' datta.  
 hear until never not obtain realization C  
*'That was the "realization" which could never have been obtained  
 until I heard it clearly even though I knew it well that he was  
 coming home some day'.* (Yoshimoto 1988:106)

- (14) Chishiki toshite wa ka de wa utsuranai TTE  
 knowledge as T mosquito by T be not infected

wakatteite mo kininarimashita.  
 know even worried  
*'Although I rationally knew that it is not communicable by  
 mosquitoes, I was still worried'.* (More, Feb., 1993:327)

As the English translations show, the propositions expressed in the complements in these sentences are presented as 'knowledge', not as 'sudden realization'. Yet, the complementizer used in both sentences is *to*.<sup>5</sup>

In accounting for sentences (9)-(14), it is clear that the concept of factivity is not useful. It cannot explain why factive predicates sometimes occur with *to* (as in (9), (10), (13) and (14)) and sometimes with *koto* or *no* (as in (11) and (12)). An alternative account by McCawley attributing the use of *to* to the notion of sudden realization can account for the difference between (9) and (10) on the one hand and (11) and (12) on the other. However, it fails to explain why *to* is used in (13) and (14), where the propositions are presented as knowledge rather than something that is suddenly realized.

I would like to propose a broader concept that encompasses the notion of sudden realization. Choice of complementizers in Japanese is correlated with the degree of the speaker's conviction about the truth of the proposition expressed in the complement. When the conviction is strong, *koto* or *no* is used. When the conviction is weak or nonexistent, *to* is used.

This analysis is capable of explaining sentences (9)-(14). First, it accounts for the use of *no* and *koto* in (11) and (12) respectively. In both instances we can reasonably say that the speaker is convinced of the propositions in the complement

clauses. With respect to (9) and (10), McCawley's analysis is correct in relating the use of *to* with the speaker's sudden realization of the proposition. When somebody suddenly realizes that something is the case, s/he may still not be fully convinced of that proposition. Thus, sudden realization is an instance of the speaker's weak conviction. The concept of the degree of the speaker's conviction is more adequate than the narrower concept of sudden realization because it can also account for the use of *to* in sentences such as (13) and (14). In both of these sentences the speaker has the knowledge that something is the case, but s/he is not fully convinced of the proposition. For example, the speaker of (14) was in a country where AIDS is rapidly spreading and she was bitten by many mosquitoes. Although she has the common knowledge that AIDS is not communicable by mosquitoes, she was not totally convinced about that, probably because AIDS is still a new and somewhat mysterious disease.

In the preceding paragraphs I have discussed one type of instance where the correlation between factivity and complementizer choice shown in (8) does not hold. Namely, factive predicates take *to* instead of *koto* or *no*. There is another set of instances where the correlation does not hold. In these cases nonfactive predicates occur with *koto* or *no*<sup>6</sup> instead of *to*.

- (15) Ikura watashi ga aishiteiru KOTO o itte mo  
 how much I S love O say even

wakattemoraenai no yo.  
 understand-receive-not N F

'No matter how often I tell him that I love him, he doesn't get it'.  
 (More, Dec., 1992:330)

- (16) Demo anata no hoo koso konna katachi de wakare o tsugeru  
 but you L side indeed this kind form in farewell O say

jinsei nado zettai ni erabitanakatta KOTO o omoi,  
 life something like never A wanted-to-choose-not O think

watashi wa umarete hajimete chooji nado  
 I T born first time memorial address something like

o yomu no desu  
 O read N C

'But, thinking that you never wanted to choose a life that ends like this, I will read a memorial address for the first time in my life'.  
 (Bungei Shunjuu 1986:245)

In (15) a nonfactive predicate *itte* (a gerundial form of *yuu* 'say') occurs with *koto*. In (16) another nonfactive verb *omoi* (an infinitive form of *omou* 'think') takes *koto* as its complementizer. These sentences, in which the correlation between factivity and complementizer does not hold, can be accounted for by the analysis using the concept of the speaker's conviction. In both of these sentences even though the predicate used is nonfactive the speaker is convinced of the proposition expressed in the complement. In (15) the proposition expressed in *aishiteru* '(I) love (him)' represents the speaker's inner feeling. We can reasonably say that the speaker is



Although according to Kuno's prediction summarized in (7) the insertion of *to yuu* is obligatory with nonfactive predicates, the above sentence shows that a nonfactive predicate allows *koto* by itself as the complementizer. (19) is part of an American delegation's report quoted in Inoue's book. The report was put together by the delegation right after World War II to recommend that Japan abolish the use of Chinese characters. From this background it is clear that the writer of the report is convinced that the proposition expressed in the embedded clause of (19), *learning these Chinese characters is a burden which is too heavy for the students*, is true. The writer's strong conviction is expressed in his/her choice of the complementizer. *Koto* is used without *to yuu* in front of it.

When the speaker is not convinced of the truth of the proposition, the insertion of *to yuu* in front of *koto* or *no* is necessary. In Kuno's example (4) in which *to yuu* is shown to be obligatory, the predicate used is *ariuru koto da* 'be possible'. This predicate indicates that the speaker is not convinced of the truth of the proposition. The predicate is also nonfactive, but as we saw in (19) not all nonfactive predicates require *to yuu*. The following example illustrates how the speaker differentiates the use of complementizers depending on whether or not s/he is convinced of the truth of the proposition.

- (20) Ikitosu no hoteru ni taizaichuu dooshuku no amerikajin ga  
Iquitos L hotel in while staying same hotel L American S

nikuson daitooryoo ni chotto niteite, futari de omoshirogatta  
Nixon president to a little resemble two by be amused

NO wa jijitsu da ga, watashi ga furonto e itte sono hito no namae  
N T fact C but I S front to go that person L name

o kakuninshita TO YUU NO wa kanojo no soosaku.  
O confirmed T she L invention

*'It is a fact that when we were staying in a hotel in Iquitos, there was an American tourist in the hotel who looked a bit like President Nixon and that amused us, but it is her invention that I went up to the front desk and confirmed his name'.* (Bungei Shunjuu 1986: 153)

Although the two predicates, *jijitsu da* 'be a fact' and *kanojo no soosaku* 'be her invention', are both nonfactive,<sup>7</sup> the former takes *no* as its complementizer and the latter *to yuu no*. That is because the speaker is convinced of the truth of the proposition in the former case while the speaker is convinced of the falsity of, thus not convinced of the truth of, the proposition in the latter case.

In this section we saw that there are numerous sentences that do not express the correlation between factivity and complementizer choice proposed by Kuno. Instead, complementizer choice in Japanese seems to be determined by the degree of the speaker's conviction about the truth of the proposition represented in the complement. In the next section we see whether the concept of the speaker's conviction can be applied to other languages.

#### 4. Cross-linguistic Applicability of the Speaker's Conviction

What is true in one language is often true in other languages. Does the concept of the speaker's conviction have cross-linguistic applicability? There is an indication that it does. Givon's observation (1989) of KinyaRwanda, a language spoken in parts of Rwanda, Uganda, Zaire, Tanzania and Burundi, shows that complementizer choice in KinyaRwanda is determined by the degree of the speaker's conviction. See the following examples.

- (21) a.   ya-mu-bgiye      KO u-a-kora-ga                    cyaane  
          he/PAST-him-tell that you-PAST-work-HAB hard  
          '*He told him that you worked hard (and I don't doubt it)*'.
- b.   ya-mu-bgiye      NGO u-a-kora-ga                    cyaane  
          he/PAST-him-tell that you-PAST-work-HAB hard  
          '*He told him that you worked hard (but I doubt it)*'. (Givon, 1989:135)

Note that (21a) and (21b) are identical except for the complementizers. In (21a) the complementizer is *ko* while in (21b) it is *ngo*. The contrast between *ko* and *ngo* indicates the degree of certainty or doubt the speaker holds in relation to the truth value of the proposition expressed in the complement clause. In two unrelated languages, KinyaRwanda and Japanese, complementizer choice is determined by the degree of the speaker's conviction. This suggests that the concept is cross-linguistically and perhaps universally relevant.

That means that it may also be relevant to English. In another words, the accuracy of Kiparsky and Kiparsky's findings in English may need to be reexamined. They themselves admit that there are native speakers of English for whom the distinctions between factive and nonfactive predicates do not exist. They have chosen to ignore such speakers and concentrate on the speech of Carol Kiparsky. One cannot help but wonder what would have happened if the speech of those speakers had been included in the analysis. One of Kiparsky and Kiparsky's findings is that only factive predicates allow the noun *fact* with a sentential complement. I conducted an informal survey of native speakers of English. I asked them to rate certain sentences and found that many speakers allow certain nonfactive predicates to occur with the noun *fact*. For example, many speakers said that sentences such as (14) to (15) are acceptable.

- (14) The fact that I'm extremely jealous of his success is true.  
(15) She believes the fact that I'm against abortion.

Both of these predicates are nonfactive, but they nevertheless allow the occurrence of the noun *fact*. These sentences have two common factors which may be associated with the speaker's conviction about the truth of the proposition represented in the complement. First, the propositions express the speaker's inner feelings. Second, the predicates are compatible with the speaker's strong conviction as opposed to predicates such as *be possible*, *be false*, or *misunderstand* which are incompatible. This may suggest that the notion of the speaker's conviction may be useful in analyzing English complement types. Obviously the result of this survey cannot be taken too seriously. There are numerous problems with this type of survey. For example, intuitions of native speakers are not always

reliable. What they actually do may be different from what they say that they do. Nonetheless, the result of this survey at least suggests that the relationship between the speaker's conviction and complement types in English may need further investigation. More rigorous study on the relationship than this informal survey should be encouraged in the future.

### 5. Bureaucratization of Language

In this paper I have argued that complementizer choice in Japanese is determined by the degree of the speaker's conviction rather than by factivity of the predicate used. This issue relates to what Haiman (1991) calls the bureaucratization of language.<sup>8</sup> He theorizes that some language changes are brought about through routine repetition. Through such ritualization, language becomes standardized so that its form becomes relatively autonomous from its original stimulus. In other words, language becomes decontextualized. However, Haiman (1994) argues that because grammar is simply ritualized (or bureaucratized) verbal behavior, grammatical rules are capable of being resuscitated by the speaker so that they mean what the speaker means, rather than something to which s/he no longer attends.

This perspective helps us understand the relationship between factivity of the predicate and the speaker's conviction. Factivity may be viewed as the highest form of the speaker's conviction. The speaker is so strongly convinced of the truth of the proposition that it is presupposed. Certain predicates and complement types (the forms) have become associated with this strong conviction. Through repetition, some of these forms may have become autonomous from the original stimulus, the speaker's strong conviction. In other words, factivity may be viewed as a ritualized form of the speaker's conviction. The occurrence of certain complement types may be attributed to factivity/nonfactivity of the predicate in a sentence as if that were an inherent characteristic of the predicate. However, when we look at the actual use of language by a speaker, the choice of complement types (in Japanese at least) is not determined by the choice of predicate itself, which may or may not be associated with factivity, but by how strong the speaker is convinced of the truth of the proposition. Grammatical distinctions between factivity and nonfactivity are blurred by the speaker. This is an example of the speaker's reclaiming of the language.

In summary, I have described the original study on factivity and complement types by Kiparsky and Kiparsky and then critiqued Susumu Kuno's adaptation of the concept in the context of Japanese. My argument is that complementizer choice in Japanese is not correlated with factivity of the predicate, but rather it is determined by the degree of the speaker's conviction about the truth of the proposition. The implications of this study include the cross-linguistic applicability of the concept of the speaker's conviction and the perspective that the choice of complementizers in Japanese reflects the speaker's reclaiming of bureaucratized language.

#### Notes

<sup>1</sup>There are predicates which belong to a third type called indifferent and ambiguous predicates. They occur indifferently with factive and nonfactive complements. They are excluded from discussion for clarity of exposition.

<sup>2</sup>Just as in English, there are predicates which behave indifferently toward factivity of complement types. These predicates are excluded from discussion.

<sup>3</sup>The abbreviations used in the literal glosses are as follows:

A	Adverbial marker	C	Copula
F	Final particle	L	Linker
N	Nominalizer	O	Direct object marker
S	Subject marker	T	Topic marker

<sup>4</sup>Data used are written texts taken from books and magazines.

<sup>5</sup>In (14) *tte*, a variation of *to*, is used.

<sup>6</sup>Although I did not find an instance of *no* with a nonfactive predicate in my data, one of McCawley's sentences contains the nonfactive verbs *omou* and *kangaeru* occurring with *no*:

Toshioita haha ga furusato de watashi no seikoo o inotteitekureru  
 old mother S hometown in I L success O pray-for-me

NO/KOTO o omou/kangaeru tabini yuuki ga waitekru no desu.  
 O think whenever courage S spring out N C

*'Whenever I think of the fact that my old mother is praying for my success in my hometown, I feel invigorated.'*

<sup>7</sup>*Jijitsu da* 'be a fact' is a nonfactive predicate despite that, or rather because, it contains the noun *jijitsu* 'fact'. In using this predicate the speaker asserts that the content of the proposition expressed in the embedded clause is a fact, but does not presuppose that it is a fact. For a detailed discussion of this issue, see Suzuki (1994).

<sup>8</sup>I would like to thank John Haiman for valuable comments.

#### References

- Givon, Talmy. 1989. *Mind, code and context*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Haiman, John. 1991. Motivation, repetition and emancipation: The bureaucratization of language. *Linguistic studies presented to John Finlay*, ed. by H. C. Wolfart, 45-69. Winnipeg: Algonkian and Iroquoian Linguistics.
- Haiman, John. 1994. *Asserted Identity*. Macalester College, ms.
- Josephs, Lewis. S. 1975. Complementation. *Syntax and semantics 5: Japanese generative grammar*, ed. by Masayoshi Shibatani, 307-369. New York: Academic Press.
- Kiparsky, Paul and Carol Kiparsky. 1971. *Fact*. *Semantics*, ed. by Daniel D. Steinberg and Leon A. Jakobovits, 345-369. Cambridge: Cambridge University Press.
- Kuno, Susumu. 1973. *The structure of the Japanese language*. Cambridge, MA: Harvard University Press.
- McCawley, Noriko A. 1978. Another look at *no*, *koto* and *to*: Epistemology and complementizer choice in Japanese. *Problems in Japanese syntax and semantics*, ed. by John Hinds and Irwin Howard, 178-212. Tokyo: Kaitakusha.
- Suzuki, Satoko. 1994. The relevance of factivity to complementizer choice in Japanese. Macalester College, ms.

Suzuki, Satoko. 1994. The relevance of factivity to complementizer choice in Japanese. Macalester College, ms.

#### Text References

- Bungei Shunjuu (ed.). 1986. Mukooda kuniko futatabi. Tokyo: Bungei Shunjuu.
- Chiba, Atsuko. 1988. Nyuugan nanka ni makerarenai. Tokyo: Bungei Shunjuu.
- Hotta, Yoshie. 1957. Indo de kangaeta koto. Tokyo: Iwanami Shoten.
- Inoue, Hisashi. 1981. Shikeban: Nihonngo bunpoo. Tokyo: Shinchoosha.
- Kirishima, Yoko. 1983. Onna zakari no bigaku. Tokyo: Kadokawa Shoten.
- More: December. 1992. Tokyo: Shuueisha.
- More: February. 1993. Tokyo: Shuueisha.
- Yoshimoto, Banana. 1988. Utakata / Sankuchuari. Tokyo: Fukutake Shoten.