

# LIKE/TYPE, SAY, AND C\*

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## 1 Introduction: Japanese *-teki*

In Japanese, the bound morpheme *-teki* ‘like’ takes a nominal complement, and forms an adjectival phrase (e.g. Kaiser et al. 2001). This is illustrated in (1) and (2).

- |               |                |              |               |
|---------------|----------------|--------------|---------------|
| (1) a. zyosee | b. zyosee-teki | (2) a. seizi | b. seizi-teki |
| woman         | woman-TEKI     | politics     | politics-TEKI |
| ‘woman’       | ‘womanly’      | ‘politics’   | ‘political’   |

However, the use of *-teki* is not limited to the canonical use shown in (1) and (2). In its more recent and innovative use, *-teki* can be attached to sentential complements, as in (3).

- (3) [minna-ga ya-ttei-ru-kara watasi-mo ya-ru]-teki-na hassoo  
everybody-Nom do-Prog-Pres-because I-also do-Pres-TEKI-Cop idea  
lit. ‘I will do so because everyone does so’-like idea (Yamashita 2000: 61)

Furthermore, in colloquial speech (especially among younger generations), *-teki* can also appear in relative clauses. As shown in (4b), it occurs between a relative clause and its head. In the following, I will refer to this construction as *-teki* relatives.

- |                                     |  |
|-------------------------------------|--|
| (4) a. Unmarked relative clause     | b. <i>-Teki</i> relative               |
| okaasan-ga tuku-tta karee           | [okaasan-ga tuku-tta]-teki-na karee    |
| mother-Nom cook-Past curry          | mother-Nom cook-Past-TEKI-Cop curry    |
| ‘the curry which the mother cooked’ | ‘curry like the one the mother cooked’ |

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There is an interpretational difference between unmarked relatives and *-teki* relatives.

- (5) a. John-wa [okaasan-ga tuku-tta karee]-o tabe-ta  
 John-Top mother-Nom cook-Past curry-Acc eat-Past  
 ‘John ate the curry the mother cooked.’  
 b. John-wa [okaasan-ga tuku-tta-teki-na karee]-o tabe-ta  
 John-Nom mother-Nom cook-Past-TEKI-Cop curry-Acc eat-Past  
 ‘John ate curry like the one the mother cooked.’

In (5a), the speaker asserts that the curry in question was cooked by the mother, while in (5b) this does not have to be the case. In other words, in (5b), it may be the case that the mother did not cook the curry, as indicated by the translation; *-teki* expresses some similarity between the curry in question and typical curry the mother cooked (cooks). Yamashita (2000) suggests that a semantic function of *-teki* that attaches to sentential elements is exemplification, given cases like (1). It should be noted that Yamashita (2000) discusses pure complex nouns like (1), not *-teki* relatives, but her observation carries over to *-teki* in *-teki* relatives, i.e. it expresses similarity and/or exemplification.

Also, when the head of a *-teki* relative is a person (or anything that has thought), we obtain another interpretation. As illustrated in (6), *-teki* relatives can express an utterance or an attitude of the referent of the head noun.<sup>1</sup>

- (6) [watasi-ga itiban kawaii-teki]-na hito  
 I-Nom most cute-TEKI-Cop person  
 ‘a person who is like “I’m the cutest.”’

In this paper, I first investigate morphological and syntactic properties of *-teki* relatives (section 2). I claim that there is a phonologically null element encoding the notion of speech (specifically, a speech root  $\sqrt{\text{SPEECH}}$ ) with *-teki* relatives (section 3). I then extend the analysis proposed for *-teki* relatives to *toiu* in Japanese, which has been assumed to be a complementizer (Section 4.1). Finally, I show that the idea of the speech root enables us to investigate certain types of multifunctional items within a broader picture, more precisely language change/grammaticalization involving speech verbs. Section 5 is the conclusion.

## 2 Clausal Complement of *-teki*

In this section, I will discuss similarities between *-teki* relatives and clausal complements of speech verbs. I will demonstrate that the two show parallelism regarding the distribution of the imperative, volitional, and politeness marker (section 2.1); the availability of relativization of certain types of adjuncts (section 2.2); and nominative-genitive conversion (section 2.2).

<sup>1</sup> In the following, the word “speech” is used as a cover term for an (actual) speech/utterance and an attitude. The notion of speech here should be understood in a broad sense, including inner speech (cf. Vygotsky 1962). *-Teki* does not require an actual occurrence of the relevant utterance; for example, (6) can be used even when the person in question does not make an actual utterance. Notice that the same holds for *like* in English. (i) can be used even when John did not say “I wanna go back home!” at the party (cf. Buchstaller 2004).

(i) At the party, John was like “I wanna go back home!”

## 2.1 The Imperative, Volitional, and Politeness Marker

In this subsection, I will show that *-teki* relatives behave differently from unmarked relatives, by investigating the distribution of the imperative, the volitional, and the politeness marker in Japanese. These elements can appear in *-teki* relative clauses even though none of them can appear in unmarked relative clauses.

Miyagawa (2012) suggests that the Japanese politeness marker *-mas/des* is an instance of “root phenomena”. However, apart from matrix clauses, Miyagawa notes that the politeness marker is also found in clausal complements of speech verbs (specifically, Class A verbs under Hooper and Thompson’s 1973 classification). Imperatives and the volitional marker *-(y)oo* show a distribution similar to the politeness marker. They appear in complements of speech verbs, but not in those of other types of verbs (with some potential exceptions regarding verbs of thinking, which can embed them: e.g. *negau* ‘wish’, *norou* ‘curse’). For example, consider (7), where these elements are embedded in the clausal complement of *iu* ‘say’. Notice that the possibility of direct quotation is excluded by the given interpretation of the embedded pronoun *watasi* ‘I’, which refers to the speaker of (7), not John.

- (7) a. Imperative  
 John-ga Mary-ni [watasi-no ronbun-o yom-e to] i-tta  
 John-Nom Mary-to I-Gen paper-Acc read-Imp C say-Past  
 ‘John said to Mary that she should read my paper.’
- b. Volitional  
 John-ga [watasi-no ronbun-o yom-oo to] i-tta  
 John-Nom I-Gen paper-Acc read-Vol C say-Past  
 ‘John said that he would read my paper.’
- c. Politeness marker  
 John-ga sensei-ni [watasi-no ronbun-o yomi-mas-u to] i-tta  
 John-Nom teacher-to I-Gen paper-Acc read-Pol-Pres C say-Past  
 ‘John said to the teacher that he would read my paper.’

These elements cannot appear in the clausal complement of other types of verbs. For example, the imperative, the volitional, and the politeness marker cannot appear in the clausal complement of *hiteisuru* ‘deny’.<sup>2</sup>

- (8) a. Imperative  
 \*John-ga [kimi-ga watasi-no ronbun-o yom-e koto/no]-o hiteisi-ta  
 John-Nom you-Nom I-Gen paper-Acc read-Imp fact/NL-Acc deny-Past  
 ‘John denied that you should read my paper.’

<sup>2</sup> *Hiteisuru* ‘deny’ can apparently take a clause headed by *to* as in (i) (cf. (7)). However, the syntactic position of the *to*-clause in this context is controversial. For example, Saito (2015) suggests that this clause is an adjunct, not the clausal complement of ‘deny’. Also it should be noted that the interpretation is different from the English counterpart. The clause headed by *-to* expresses what John said, not the proposition denied by John’s utterance.

- (i) John-ga [Mary-ga ku-ru to] hiteisi-ta  
 John-Nom Mary-Nom come-Pres C deny-Past  
 ‘John denied (something) saying Mary will come.’  
 \*‘John denied that Mary would come.’

## b. Volitional

\*John-ga [watasi-no ronbun-o yom-oo koto/no]-o hiteisi-ta  
 John-Nom I-Gen paper-Acc read-Vol thing/NL-Acc deny-Past  
 ‘John denied that he would read my paper.’

## c. Politeness marker

\*John-ga [watasi-no ronbun-o yomi-mas-u koto/no]-o hiteisi-ta  
 John-Nom I-Gen paper-Acc read-Pol-Pres thing/NL-Acc deny-Past  
 ‘John denied that he would read my paper.’

The imperative, the volitional, and the politeness marker behave differently in unmarked relative clauses and in *-teki* relatives. In Japanese, these elements cannot appear in unmarked relative clauses.

## (9) a. Imperative

\*[asita a-e] hito  
 tomorrow meet-Imp person  
 ‘the person who (you) should meet tomorrow’

## b. Volitional

\*[asita a-oo] hito  
 tomorrow meet-Vol person  
 ‘the person who I will meet tomorrow’

## c. Politeness marker

\*[asita ai-mas-u] hito  
 tomorrow meet-Pol-Pres person  
 ‘the person who I will meet tomorrow’

Importantly, imperatives can appear in *-teki* relatives (Magdalena Kaufmann, p.c., attributing the observation to Masahiro Yamada). The same holds for the volitional and the politeness marker. The imperative, the volitional, and the politeness marker can all appear in *-teki* relative clauses.

## (10) a. Imperative

[asita a-e]-teki-na hito  
 tomorrow meet-Imp-TEKI-Cop person  
 ‘(a) person like the one who (you) should meet tomorrow’

## b. Volitional

[asita a-oo]-teki-na hito  
 tomorrow meet-Vol-TEKI-Cop person  
 ‘(a) person like the one who I will meet tomorrow’

## c. Politeness marker

[asita ai-mas-u]-teki-na hito  
 tomorrow meet-Pol-Pres-TEKI-Cop person  
 ‘(a) person like the one who I will meet tomorrow’

Above, we have observed a difference between unmarked relatives and *-teki* relatives regarding the distribution of the imperative, volitional, and politeness marker. These items can appear only in the latter environment. In terms of the distribution of these three morphemes in embedded environments, *-teki* relative clauses pattern with clausal complements of speech verbs, not with unmarked relative clauses.

One note is in order here. One might wonder whether *-teki* can involve true embedding or not, given that constructions that resist embedding in normal relative clauses can appear under -

*teki*. The answer is positive; *-teki* relatives can involve true embedding, as tested by the diagnostics below (see e.g. Anand 2006).<sup>3</sup>

## (11) Pronoun

John<sub>1</sub>-wa Mary-ni [kare<sub>1</sub>-no mise-de tabe-ro]-teki-na mono-o tutaeta-ta  
 John-Top Mary-Dat he-Gen store-at eat-Imp-TEKI-Cop thing-Acc tell-Past  
 ‘John<sub>1</sub> told Mary what she should eat at his<sub>1</sub> restaurant.’

(12) Embedded *wh*

John-wa Mary-ni [dare-ni a-e]-teki-na basyo-o tutaeta-no?  
 John-Top Mary-Dat who-Dat meet-Imp-TEKI-Cop place-Acc tell-Past-Q  
 ‘Who is the person x s.t. John told Mary the place (like) where she should meet x?’

In (11), the embedded pronoun *kare* ‘he’ refers to John; this interpretation should be impossible if (11) involves only direct quotation. The embedded *dare* ‘who’ takes the matrix scope in (12). All these diagnostics show *-teki* relatives can involve true embedding. The same holds for the volitional and the politeness marker; for example, the embedded temporal indexical *asita* ‘tomorrow’ in (10) can be interpreted with respect to the actual context when the noun phrases with the *-teki* relative in (10a-c) appear in a sentence.

To sum up, we have seen that *-teki* relatives behave like clausal complements of verbs of saying regarding the distribution of the imperative, the volitional, and the politeness marker. The possibility of these items occurring in *-teki* relatives shows that *-teki* relatives are different from unmarked relative clauses.

## 2.2 Relativization of True Adjuncts

In this subsection, I will show that the same contrast in the availability of relativization of certain types of adjuncts is found in *-teki* relatives and relativization out of clausal complements of speech verbs.

*-Teki* relatives are highly productive in a sense that *-teki* can appear between the relative clause and the head noun in many types of relative clauses, as exemplified in (13).

- (13) a. kanarazu tabe-ro-teki-na mono (argument; object)  
 by.all.means eat-Imp-TEKI-Cop thing  
 ‘something like the food you should eat by all means’  
 b. kanarazu tesuto-o uke-ro-teki-na basyo (adjunct; place)  
 by.all.means exam-Acc take-Imp-TEKI-Cop place  
 ‘the place like where (you) should take the exam’

<sup>3</sup> Notice that *-teki* can also take a direct quote. For example, in (i), *ore* ‘I’ can refer to John. See also (3) and (6). What is important for us is that even when truly embedded, the imperative/politeness/volitional marker can appear in *-teki* relatives.

(i) John-no [ore-ga itiban kakkoi-n-da]-teki-na taido  
 John-Gen I-Nom most handsome-NL-Cop-TEKI-Cop attitude  
 ‘John’s attitude like “I’m the most handsome.”’

- c. kanarazu tesuto-o uke-ro-teki-na zikan (adjunct; time)  
 by.all.means exam-Acc take-imp-TEKI-Cop time  
 ‘the time like when (you) should take the exam’

However, relativization of certain adjuncts is not allowed in *-teki* relatives; specifically, reason and manner cannot be relativized in *-teki* relative clauses.<sup>4</sup>

- (14) a. \*kanarazu tesuto-o uke-ro-teki-na riyuu (reason)  
 by.all.means exam-Acc take-imp-TEKI-Cop reason  
 ‘the reason like why you should take the exam’  
 b. \*kanarazu tesuto-o uke-ro-teki-na hoohoo (manner)  
 by.all.means exam-Acc take-imp-TEKI-Cop way  
 ‘the way like how you should take the exam’

In (13) and (14), we observe an asymmetry regarding types of adjuncts; place and time can be relativized out of *-teki* relative clauses, while reason and manner cannot be. This kind of contrast is in fact found in other environments as well; “quasi adjuncts” (place/time) can be relativized long-distance, while “true adjuncts (reason and manner) cannot be, as illustrated in (15) (see Saito 1985, Murasugi 1991).<sup>5</sup>

- (15) a. [John-ga [Mary-ga e<sub>i</sub> sentakusi-ta] to i-tta] hi<sub>i</sub> (time)  
 John-Nom Mary-Nom wash-Past C say-Past day  
 ‘the day<sub>i</sub> that John said that Mary washed e<sub>i</sub>’  
 b. [John-ga [Mary-ga e<sub>i</sub> mondai-o toi-ta] to i-tta] tokoro<sub>i</sub> (place)  
 John-Nom Mary-Nom problem-Acc solve-Past C say-Past place  
 ‘the place<sub>i</sub> that John said that Mary solved the problem e<sub>i</sub>’  
 c. \*[John-ga [Mary-ga e<sub>i</sub> sentakusi-ta] to i-tta] riyuu<sub>i</sub> (reason)  
 John-Nom Mary-Nom wash-Past C say-Past reason  
 ‘the reason<sub>i</sub> why John said that Mary washed e<sub>i</sub>’  
 d. \*[John-ga [Mary-ga e<sub>i</sub> mondai-o toi-ta] to i-tta] hoohoo<sub>i</sub> (manner)  
 John-Nom Mary-Nom problem-Acc solve-Past C say-Past way  
 ‘the way<sub>i</sub> that John said that Mary solved the problem e<sub>i</sub>’ (Murasugi 1991: 133-134)

Hence, *-teki* relativization and long-distance relativization (out of clausal complements of speech verbs) show the same kind of contrast regarding the difference between quasi and true adjuncts. Relativization of quasi adjuncts is allowed in *-teki* relatives and in long-distance relativization, while relativization of true adjuncts (reason and manner) is not.

<sup>4</sup> Note that (14a) and (14b) are ungrammatical under the intended interpretation. These types of examples are grammatical with the interpretation where the relative clause describes the content of *riyuu* ‘reason’ and *hoohoo* ‘way’ (i.e. the appositive reading) (this reading is semantically/pragmatically hard to obtain in (14)).

<sup>5</sup> In (15) and the following, *e* indicates a gap in the relative clause which corresponds to the relative head. I leave aside here the issue of the exact derivation of relative clauses (via movement vs. (null) resumptive pronouns).

### 2.3 Nominative-genitive Conversion

It is well known that the subject in unmarked relative clauses in Japanese can be optionally marked by genitive case, instead of nominative as in (16) (*nominative-genitive conversion*, NGC henceforth; see e.g. Maki and Uchibori 2008 for an overview).

- (16) okaasan-**{ga/no}**   tuku-tta   karee  
 mother-Nom/Gen cook-Past   curry  
 ‘the curry which the mother cooked’

However, NGC is impossible in clausal complements of speech verbs (and matrix clauses).

- (17) a. John-ga   [Hiro-ga/\*no   aisutii-o   nom-u   to] i-tta  
 John-Nom Hiro-Nom/Gen iced.tea-Acc drink-Pres C say-Past  
 ‘John said that Hiro drinks iced tea.’  
 b. Hiro-ga/\*no   aisutii-o   nom-u  
 Hiro-Nom/Gen iced.tea-Acc drink-Pres  
 ‘Hiro drinks iced tea.’

Crucially, NGC is impossible in *-teki* relative clauses, in contrast to normal relative clauses.

- (18) itumo   okaasan-**{ga/\*no}**   tuku-ru-teki-na   karee  
 always mother-**{Nom/Gen}** cook-Pres-TEKI-Cop   curry  
 ‘curry like the one the mother always cooks’

Hence, in terms of NGC, *-teki* relative clauses behave like the clausal complements of speech verbs (and matrix clauses), rather than canonical relative clauses, where NGC is allowed. In section 2.1 and 2.2, we have seen phenomena that are possible in *-teki* relatives and clausal complements of speech verbs but not in unmarked relatives, i.e., the imperative, the volitional, and the politeness marking. Here, we have the opposite situation; a phenomenon that is licensed in normal relative clauses but not in *-teki* relatives or clausal complements of speech verbs, namely NGC.

To sum up, we have seen that *-teki* relatives behave differently from unmarked relative clauses in several respects. They, however, show parallelisms with clausal complements of speech verbs.<sup>6</sup>

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<sup>6</sup> This paper focuses on *-teki* relatives but other evidential markers or morphemes expressing similarity (e.g. *-yoo*, *-ppoi*, *-mitai* ‘seem’) can appear in relative clauses as well, as in (i).

- (i) okaasan-ga   tuku-tta   {yoo-na/ppoi/mitai-na}   karee  
 mother-Nom cook-Past {seem-Cop/seem/seem-Cop}   curry  
 ‘curry like the one Mother cooked’

*-Yoo* and *-ppoi* are different from *-teki* in that in *-yoo* and *-ppoi* relatives: (a) the imperative/volitional/politeness marker cannot appear, (b) nominative/genitive conversion is allowed, and (c) the asymmetry between true and quasi adjuncts is not found. Another evidential marker *-mitai* is rather similar to *-teki*. In *-mitai* relatives: (a) the imperative/volitional/politeness marker can appear, (b) nominative-genitive conversion is not allowed, and (c) there is a quasi vs. true adjunct asymmetry. Importantly, *-mitai* is morphologically related to the verb *miru* ‘see’ (see also

### 3 Hidden Say

In this section, I propose an analysis of *-teki* relatives which accounts for the observations in the previous section, which are summarized in the table below.

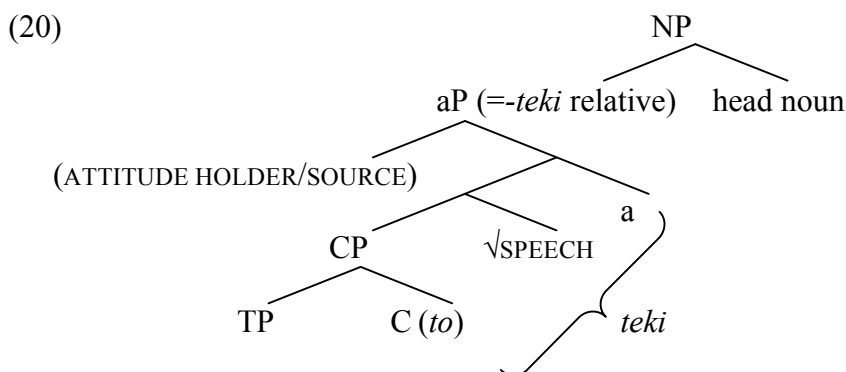
(19)

	<i>-Teki</i> relatives	Unmarked relatives	Clausal complements of speech verb
Imperative	✓	*	✓
Volitional	✓	*	✓
Politeness marker	✓	*	✓
True vs. quasi adjunct asymmetry	YES	NO	YES (long distance)

As shown in (19), we have seen that *-teki* relatives behave parallel to clausal complements of speech verbs, rather than unmarked relative clauses. To capture the parallelism between *-teki* relatives and clausal complements of speech verbs, I propose that there is a covert element encoding information of speech, hidden “*say*”, which introduces a complement clause. I further suggest that this hidden *say* is not fully verbal; even though it introduces a clause, it is more adjectival in nature given its morphology, syntax, and semantics, as discussed in detail below.

To implement this idea, I assume the framework of Distributed Morphology (Halle and Marantz 1993). Following Pesetsky (1995) and Marantz (1997), I assume category-neutral roots ( $\sqrt{\text{ROOT}}$ ) and category defining heads in the syntax (e.g. *n*; a nominalizer, *v*; a verbalizer). I also assume that the phonological realization of syntactic terminals is determined by post-syntactic Vocabulary Insertion, following Halle and Marantz (1993).

Specifically, I suggest the structure in (20) for *-teki* relatives. In (20),  $\sqrt{\text{SPEECH}}$  is an acategorical abstract speech root, which encodes information of speech in general (see footnote 1), but it does not have to be identical to the root  $\sqrt{\text{SAY}}$ . Being a speech root, it selects CP which other speech verbs also take as their complement (usually spelled out as a CP headed by *to*). On the top of the structure, an adjectivalizer *a* is present to capture *-teki*’s adjectival behavior.



Further, I suggest the Vocabulary Insertion Rule in (21). The basic idea is that the combination of *C (to)*,  $\sqrt{\text{SPEECH}}$ , and *a* is spelled out as *teki*.

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the discussion in section 4.2). I focus on *-teki* in this paper because here we can observe speaker variation regarding its innovative use (e.g. (3), (4b)) which indicates that it is undergoing a change. Speaker variation regarding certain uses of similar multifunctional items is observed in other languages too (see e.g. section 4.2 for *tipo* in Italian).



- (21) a. [*to*,  $\sqrt{\text{SPEECH}}$ ]  $\leftrightarrow \emptyset$  /  $\_\_ a$                       b.  $a \leftrightarrow \text{teki}$

Given the structure in (20), the clause which is apparently introduced by *-teki* is in fact a clausal complement of the speech root. Notice that the clause under *-teki* should have exactly the same syntactic status as clausal complements of speech verbs, because the latter are also complements of a speech root (e.g.  $\sqrt{\text{SAY}}$ ), based on the assumption that a verb is a combination of an acategorial root and a verbalizer. Hence, the parallel syntactic behavior of clausal complements of speech verbs and *-teki* relatives is expected.

First, let us consider the parallelism between *-teki* relatives and clausal complements of speech verbs regarding the imperative, the volitional, and the politeness marker. As observed in the previous section, they can appear in clausal complements of speech verbs even with an indirect quote interpretation, but not in relative clauses. Under the current analysis, the clause introduced by *-teki* is in fact a complement of  $\sqrt{\text{SPEECH}}$ , so it is expected that the imperative, the volitional, and the politeness marker should be found in *-teki* relatives. Also, we expect that *-teki* should be able to introduce a direct quotation as well as an indirect quote, because of  $\sqrt{\text{SPEECH}}$ , in parallel with normal speech verbs. As observed in footnote 3, this is in fact the case.

Second, consider the true/quasi adjunct asymmetry in *-teki* relatives and in long-distance relativization. As observed in the previous section, true adjuncts (reason and manner) cannot undergo long-distance relativization. Schematically, we have observed the situation in (22).

- (22) \* $[\text{NP} [\text{Relative Clause} [\text{vP} (\text{Subj}) [[\text{CP } e_{\text{reason/manner}}] \sqrt{\text{SAY}} v ]]] \text{N}(\text{reason/manner})]$

Descriptively, the dependency between the gap in the relative clause (the empty category) and the relative head cannot cross over the clausal complement of  $\sqrt{\text{SAY}}$ . In *-teki* relatives, we have a similar situation.

- (23) \* $[\text{NP} [\text{aP} [ [\text{CP } e_{\text{reason/manner}} ] \sqrt{\text{SPEECH}} a ]] \text{N}(\text{reason/manner})]$

In (23), the embedded CP is a clausal complement of  $\sqrt{\text{SPEECH}}$ , and the dependency between the gap in this CP and the relative head yields ungrammaticality. Hence, whatever the account for this ungrammaticality and the asymmetry between true and quasi adjuncts is (see e.g. Murasugi 1991), the parallelism between *-teki* relatives and clausal complements of speech verbs is expected.

As for NGC, it is disallowed in clausal complements of speech verbs (see (17a)). Hence, NGC should be disallowed in *-teki* relatives. As observed in the previous section, this is indeed the case (see also (18)).

- (24) \*(itumo) okaasan-no   tuku-ru-teki-na                      karee  
           always mother-Gen cook-Pres-TEKI-Cop                      curry  
           ‘curry like the one the mother (always) cooks’

Notice that NGC is impossible in the clausal complement of a speech verb which is further embedded in a relative clause, as in (25). This is the closest counterpart to *-teki* relatives; the difference is the nature of the categorizer attached to  $\sqrt{\text{SPEECH}}$ ; *v* in (25) and *a* in *-teki* relatives.

- (25) John<sub>i</sub>-wa [[[kare<sub>i</sub>-no okaasan-**{ga/\*no}** karee-o tuku-tta to] i-tta]  
 John-Top he-Gen mother-**{Nom/Gen}** curry-Acc cook-Past C say-Past  
 hito]-ni a-tta  
 person-Dat meet-Past  
 ‘John<sub>i</sub> met the person who said that his<sub>i</sub> mother cooked curry.’

Let us discuss the presence of the adjectivalizer *a* in (20). Morphologically, when *-teki* attaches to the nominal complement, it yields an adjectival phrase, as in (1) and (2) (specifically, a nominal adjective). The copula attaching to *-teki* here inflects as *-na* in the prenominal position, *-da* in the predicative position, and *-ni* in the adverbial position. This inflectional pattern carries over to *-teki* in *-teki* relatives, as in (26).<sup>7</sup>

- (26) a. Prenominal [okaasan-ga tuku-tta]-teki-**na** karee  
 mother-Nom cook-Past-TEKI-NA curry  
 ‘curry like the one the mother cooked’  
 b. Predicative Ano karee-wa [okaasan-ga tuku-tta]-teki-**da**  
 that curry-Top mother-Nom cook-Past-TEKI-DA(Pres)  
 ‘That curry is like the one the mother cooked.’  
 c. Adverbial [Rikei-igai-wa kagaku-zya-nai(-nda)-teki-**ni**]  
 natural.science-except-Top science-Cop-Neg(-Cop)-TEKI-NI  
 bunkei-no gakka-ga tubus-are-tei-ru  
 humanity-Gen department-Nom crush-Pass-Prog-Pres  
 lit. Humanity departments have been closed, like “nothing but natural  
 science is science”.

The adjectival status of *-teki* is not limited to its inflection. The degree of similarity expressed by *-teki* can be modified by adverbials. Thus, in (27), the intensifier *mettya* ‘very’ modifies *-teki*. Furthermore, comparatives of *-teki* relatives are possible, as in (28). In (28), the degree of likeliness is compared.

- (27) mettya okaasan-ga tuku-tta-teki-na karee  
 very mother-Nom cook-Past-TEKI-Cop curry  
 ‘curry which is really like the one the mother cooked’  
 (‘curry like the one the mother cooked a lot’)  
 (28) Ano karee-wa kono karee yori [okaasan-ga tuku-tta]-teki-da  
 that curry-Top this curry than mother-Nom cook-Past-TEKI-Cop  
 ‘That curry is more like the one the mother cooked than this curry.’

Here, I suggest that the adjectival head *a* is syntactically and semantically responsible for the availability of intensification and comparatives. In the case of intensification, intensifiers target an adjectival phrase in the syntax and in the semantics. Also, the syntax and the semantics require an adjectival element to form comparatives.

<sup>7</sup> The inflection on *-teki* (*-na*, *-da*, and *-ni*) can be considered as a copula or conjugation of *-teki* itself. I assume that it is a copula, but the analysis of the inflection is not relevant to the analysis presented here. See e.g. Nishiyama (1999) for relevant discussion.

Hence, a *-teki* relative as a whole behaves like an adjective in terms of morphology, syntax, and semantics. I suggest that the adjectivalizer *a* is responsible for this aspect of *-teki*. Since the category of *-teki* relative clause in (20) is an aP as a whole, it behaves as an adjective/AP morphologically, syntactically, and semantically.

Finally, the interpretation of *-teki* relatives can also be derived under the current analysis. For example, (29) is interpreted as *curry x such that the attitude holder is like “the mother cooked x”* or *curry the mother cooked according to someone (the attitude holder)* (see the discussion below for the attitude holder of *-teki*).

- (29) Okaasan-ga   tuku-tta-teki-na       karee-o   tabe-ta     (see (4b))  
 mother-Nom   cook-Past-TEKI-Cop   curry-Acc eat-Past  
 ‘(I) ate curry like the one the mother cooked.’

This captures *teki*'s exemplification-like interpretation. Curry someone says/thinks that the mother cooked should be like the one the mother cooked. This allows *-teki* relatives to have a range of interpretations. For example, (29) can be interpreted as ‘curry which tastes, looks, or smells like the one the mother cooked’. Also, I assume that  $\sqrt{\text{SPEECH}}$  semantically requires its salient attitude holder, as illustrated in (20) (cf. Speas and Tenny 2003). Usually, the attitude holder in the relevant sense is the speaker. In (29), the speaker believes that the relevant curry is similar to the mother’s curry. It should be noted that the attitude holder can vary depending on the syntactic/semantic context. For example, in (11), repeated below, the relevant attitude holder is John, the reported speaker (not the actual speaker of (30)). In other words, John told Mary food (like the one) he thinks she should eat.

- (30) John<sub>i</sub>-wa   Mary-ni   [kare<sub>i</sub>-no mise-de tabe-ro]-teki-na     mono-o   tutae-ta  
 John-Top   Mary-Dat   he-Gen store-at   eat-Imp-TEKI-Cop   thing-Acc tell-Past  
 ‘John<sub>i</sub> told Mary what she should eat at his<sub>i</sub> restaurant.’

Also recall that when the head of a *-teki* relative is a person, another interpretation is available. As illustrated in (6), repeated in (31), *-teki* relatives can express an attitude or an actual speech of the referent of the head noun.

- (31) [watasi-ga   itiban kawaii-teki]-na hito  
 I-Nom       most   cute-TEKI-Cop   person  
 ‘a person who is like “I’m the cutest.”’

This follows from the proposed analysis. In (31), the attitude holder of *a* is the relative head, as shown in (32). Hence, it describes the head noun’s inner/actual speech.

- (32) [NP [aP(*teki* relative) ATTITUDE HOLDER = person<sub>1</sub> [ [“I’m the cutest” (*to*)]  $\sqrt{\text{SPEECH}}$  a ] person<sub>1</sub> ]  
 spelled out as *teki*

To sum up this section, I have proposed an analysis of *-teki* relatives which accounts for its morphological and syntactic behavior observed in the previous section. I have argued that there is a hidden speech root (hidden *say*) in the syntax of *-teki* relatives.

## 4 *Say* and C+more

In this section, I will extend the analysis proposed in the previous section to Japanese *toiu*, which has been typically assumed to be a complementizer, and claim that *toiu* is in fact morphologically complex. I will then discuss relevant multifunctional items (which can work as e.g. a speech verb, a complementizer, a quote introducer, and a word expressing similarity) on the basis of the idea of hidden *say*.

### 4.1 “Complementizer” *Toiu*

In this section, I will argue that *toiu*, which is often glossed as a complementizer, is in fact morphologically complex, consisting of a complementizer *to* and a speech verb *i-u* ‘say-Pres’.

*Toiu* appears in (pure) complex NPs as in (33); it has been typically assumed to be a complementizer since Kuno (1973).

- (33) [[John-ga paatii-ni kur-u] toiu] uwasa  
 John-Nom party-to come-Pres TOIU rumor  
 ‘the rumor that John will come to the party’

Even though *toiu* appears to work as a complementizer, I suggest that *toiu* itself is not a complementizer, but rather it has a complex structure which consists of the complementizer *to* and the verb *i-u* ‘say-Pres’. What is important here is that *toiu* is not morphologically simple.

In the Osaka dialect of Japanese, the complementizer *-te* (which corresponds to *-to* in Tokyo Japanese) can be optionally dropped, as in (34) (Saito 1987, Uchibori 1997).

- (34) Taro-ga [Hanako-ga asita Kobe-ni ik-u (te)] yuu-ta  
 Taro-Nom Hanako-Nom tomorrow Kobe-to go-Pres C say-Past  
 ‘Taro said (that) Hanako would go to Kobe the next day.’ (Uchibori 1997: 402)

Crucially, *-te* in *teyuu* in this dialect (the counterpart of *toiu* in Tokyo Japanese) can be dropped.

- (35) [[John-ga paatii-ni kur-u] (te)yuu] uwasa  
 John-Nom party-to come-Pres TOIU rumor  
 ‘the rumor that John will come to the party’

The parallelism in the complementizer drop between (34) and (35) suggests that *to* in *toiu*, rather than *toiu* itself, is the complementizer.

Furthermore, *iu* in *toiu* can be inflected like the speech verb *iu* ‘say’, as in (36).

- (36) John-ga party-ni kur-u toitta uwasa  
 John-Nom party-to come-Pres TOIU(Past) rumor  
 ‘the rumor such as that John will come to party’

The observations from (35) and (36) indicate that *toiu* actually consists of *to* ‘C’ and *i-u* ‘say-Pres’. I propose an analysis similar to the one argued for above for *-teki* relatives, as shown in

(37). The difference between (20) and (37) is that there is no adjectivalizer in (37), and that *v* and T heads are present in (37). (They are responsible for the inflection of *iu*, see (36).)

(37) [NP [Relative Clause  $e_{1(\text{rumor})}$ ] [vP (t<sub>1</sub>) [[CP TP C(*to*)] √*iu*] v] T] rumor<sub>1</sub>  
 “*toiu*”, “*toitta*”

Under this analysis, even what is typically assumed to be a pure complex NP in fact involves a relative clause. Notice that the analysis in (37) captures the interpretation of (33); (33) means *the rumor which says that John will come to the party*. Notice furthermore that like *-teki*, *toiu* does not require an actual utterance (see footnote 1). In this sense, the semantics of *iu* ‘say’ in *toiu* is bleached. Still, there is actually a speech verb (or speech root) in its syntax.

To sum up, I have claimed that *toiu* is morphologically complex in that it involves the complementizer *to* and the speech verb *iu* ‘say’. However, *toiu* does not require any (actual) speech event. In this sense, *toiu* is grammaticalized to a functional element.

## 4.2 Like/Type, Say, and C

In the previous subsection, we have seen that *toiu* in Japanese shows (apparent) multifunctionality as a complementizer and a speech verb. (Note that under the analysis proposed in section 4.1, *toiu* itself is not a complementizer. Rather, it includes the complementizer *to*.)

In fact, in many languages, complementizers are (morphologically) related to the verb *say* (see e.g. Lord 1976, Simpson and Wu 2002). However, cross-linguistically, this type of connection is not limited to speech verbs and C. For example, Lefebvre and Loranger (2015) observe that *táa* in Saramaccan and *d̥* in Fongbe have multiple functions as a verb, complementizer, quote introducer, and marker conveying similarity (and manner). This is a similar situation to what we have observed for *-teki*. As shown in the previous sections, although *-teki* ‘like’ usually expresses similarity (and manner), it also appears to introduce a direct or indirect speech (see e.g. (11) and footnote 3). We thus observe multifunctionality of *-teki*. It can be used like a complementizer, a (direct) quote introducer, and a word expressing similarity. The difference between *táa/d̥* and *-teki* is that only the former are morphologically clearly related to speech verbs.

(38)	<i>teki</i>	<i>táa</i>	<i>d̥</i>
‘similarity(/manner/exemplification)’	+	+	+
quote introducer	+	+	+
complementizer	+	+	+
morphologically related to <i>say</i>	-	+	+

Crucially, if the analysis proposed for *-teki* relatives in section 3 is on the right track, *-teki* relatives in fact involve the speech root, despite the lack of a clear morphological connection to speech verbs. The proposed analysis thus enables us to investigate the multifunctional items like *-teki* within a bigger picture that includes related items from other languages.

Note that English *like* shows the same type of multifunctionality as *-teki* in that it can be used as a word expressing similarity (*a student like John*), a quote introducer (*I was like, “that’s*

enough!”), and a complementizer (*This book seems like it is popular*, see Fujii 2005), though it does not show a morphological connection to speech verbs.

Similar multifunctionality is also found with *tipo* ‘type’ in Italian (Giulia Bellucci, p.c.). It is originally a noun ‘type’ expressing similarity and exemplification, but it can be used as a quote introducer in its innovative use.

- |   |   |
|---|---|
| (39) a. giornata-tipo<br>day-TIPO<br>‘prototypical day’ | b. Ho detto tipo “Scordatelo!”<br>I told TIPO forget.it<br>‘I told you: “Forget it!”’ |
|---|---|

I suggest that the idea of hidden *say* enables us to capture these cases of multifunctionality (and the relevant language change/grammaticalization) involving speech verbs, quote introducers, complementizers, and words expressing similarity. In the first stage, lexical items morphologically related to speech verbs become multifunctional due to the presence of the speech verb. Since typical speech verbs can take a direct or indirect quote as their complement, we observe the use as C and as a quote introducer. As for the use as a word expressing similarity, manner, or exemplification, I suggest that the relevant interpretation can be derived in the same way as *-teki*; people (the attitude holder) may say/think that a proposition is true, so the proposition is true-ish (informally: e.g., *(the) curry the attitude holder says/thinks that the mother cooks* ~ *(the) curry like the one the mother cooks*). In the next step, the hidden *say* becomes available (with other category determining heads in some languages, like the adjectivalizer in *-teki*). There is no overt connection to speech verbs here, as I have suggested for Japanese *-teki*. Still, since (hidden) *say* is actually present, the same multifunctionality as above is expected despite the lack of a clear morphological link to a speech verb.<sup>8</sup>

## 5 Conclusion

In this paper, I have first investigated the syntactic nature of the innovative use of *-teki* in Japanese. I have argued that there is a speech root with *-teki* which takes a clausal complement. I have then extended the analysis to *toiu* in Japanese. Finally, I have suggested that the idea of hidden *say* enables us to investigate multifunctional items (functioning as a speech verb, C, a quote introducer, and a word expressing similarity) by relating them to a speech verb, even when there is no clear morphological connection between such items and speech verbs.

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<sup>8</sup> It should be noted that Kidwai (2010) independently proposes that there is a covert performative predicate of saying in quotative *like* constructions in English, which is similar to hidden *say* in this paper.

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