

# Ellipsis and Discourse-Syntactic Structures in Japanese Interview Discourse: The Emergence of the Evidential Marker *to*\*

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This study addresses the elision of complement-taking predicates (CTPs) in Japanese interview discourse, and explores the discourse-syntactic contexts which facilitate the elision. A frequency-based approach is chosen to scrutinize the ellipsis and related issues concerning CTP. In Japanese, grammatical subjects are often unexpressed, and even CTPs are omitted in unplanned discourse; the clause contains only the complementizer *to*. In interview discourse, the overall frequency of CTP elision is relatively low (32.1%); however, when adverbial clauses precede *to*-marked clauses, the elision of CTP increases. Of the four types of adverbial clauses found in the database used in this study, i.e. cause/reason, concessive, conditional and temporal clauses, cause/reason and concessive clauses most frequently co-occur with *to*-marked clauses: the former provide the source of evidence for the following *to*-marked clauses, while the latter contain a fact or notion in spite of which the truth of the main clause is asserted. These two types of adverbial clauses account for 87.4% of all *to*-marked clauses, and 89.9% of the following *to*-marked clauses elide the CTP in this clause-linkage. Furthermore, when the preceding adverbial clause contains an embedded clause with *to* and an overt verb of thinking or saying, the following *to*-marked clause shows an even higher rate of CTP elision. In addition to these discourse-syntactic properties, *to*-marked clauses overwhelmingly mark the speaker's (i.e. 1<sup>st</sup> person's) reproduction of his/her own utterance or thought in the past (more than 90%), functioning as an evidential and indicating relatively firm sources of information.

Key words: ellipsis, evidential marker, frequency, complement-taking predicates (CTPs), grammaticalization

## 1. Introduction

Ellipsis is a syntactic process involving the deletion of a constituent from the basic syntactic structure of a sentence, and Japanese is well known to heavily utilize nominal,

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verbal, or postpositional ellipsis (e.g. Hinds 1982, Foley & Van Valin 1984:324). As shown below, the subject of a complement-taking predicate (CTP) is often unexpressed in Japanese, and the CTP itself is also unexpressed in certain discourse contexts. This study addresses the elision of CTP in Japanese interview discourse (see §3 for the data source), and explores the discourse-syntactic contexts which facilitate the elision of CTP. In addition, textual frequency reveals how pervasive this linguistic phenomenon is in this type of Japanese discourse.

Japanese is regarded as an ideal SOV (Subject-Object-Verb) language in the sense that the language maintains dependent-head order consistently with respect to all types of constituents (Shibatani 1990:257). In colloquial speech, one often encounters flexible constituent order; however, these orders can be characterized as responsive to certain discourse factors or as grammaticalized constructions (e.g. Ono & Suzuki 1992).

In the case of complement clauses, the subject in both complement and main clause is often unexpressed; however, since the verb-final order is strongly preferred (e.g. Matsumoto 2003:3-4), the OV constituent order is still maintained.<sup>1</sup> Consider the following example from an interview with a Japanese musician.<sup>2</sup> *To* and its variants are glossed as TO henceforth unless otherwise specified, and the elements at issue are in boldface.

- (1) 1 → Kore wa ireru beki daroo **to** omoi-mashi-ta.<sup>3</sup>  
           this TOP include should maybe TO think-POL-PST  
           ‘(I) thought that (we) should probably include this (song in our new album).’  
           (*Burrn!* 2002 Oct., Shinji Wajima)

In (1), the object complement clause *kore wa ireru beki daroo* ‘(we) should probably

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<sup>1</sup> According to Hinds (1983:53), only 8 out of 567 clauses (1.4%) shows a scrambled word order (i.e. OSV); however, the OV word order still remains.

<sup>2</sup> The absence of graphological marks “ ” (「 」 in the original Japanese) does not designate (1) as an indirect quotation. For a set of criteria to differentiate between indirect and direct quotations see Coulmas (1985), Fujita (2000) and Kamada (2000) among others.

<sup>3</sup> Abbreviations:

ACC=accusative; COP=copula; CTP=complement-taking predicate; DM=discourse marker; FP=final particle; GEN=genitive; NEG=negative particle; NOM=nominative; NOML=nominalizer; PASS=passive; PERF=perfective; POL=polite form; PST=past tense; PT=particle; QP=question particle; QT=quotative particle; TO=complementizer *to*; TOP=topic; unexpressed elements (e.g. subjects) are put in parentheses.

include this (song)’ is followed by the complementizer *to* and the verb of thinking *omou*; whether the subject is expressed or unexpressed, the OV order is maintained.

On the other hand, verbs of saying and thinking, which are CTPs in many languages, are also not always overtly expressed in Japanese; the clause may contain only the complementizer. Observe the following example:

- (2) 1      zentaitekina   kousei      wa   deki-te-ita      node  
          whole           structure   TOP   finish-and-be   because  
      2 → ato   wa   mukou   de   yarou   to.  
          rest   TOP   over.there   in   will.do   TO  
          ‘Since the whole structure (of the song) was finished, (I said) that (we) would  
          finish the rest (of it) there (in our recording place in San Francisco).’  
          (Burrn! 2001 Aug., Naoto Shibata)

In line 2, the object complement clause *ato wa mukou de yarou* ‘(we) would finish the rest there’ is accompanied by the complementizer *to* but not followed by any verb. In my database, discourse from interviews with Japanese musicians, use of a CTP appears to be optional.

Recent studies of Japanese complementizers show that some complementizers, including *to*, are grammaticalizing into sentence-final particles (Okamoto 1995) or evidential markers (Hayashi 1997); Makino (1984) characterizes clause-final *to* as indicative of speaker-oriented speech. My database gives support for their views. However, while these studies give insight into CTP elision, this line of reasoning can be taken one step further: there are certain discourse-syntactic sequences which promote the frequency of CTP elision; in other words, the use of ellipsis is closely related to and triggered by discourse patterns. Furthermore, as I shall show in later sections, textual frequency sheds light on the pervasiveness of CTP elision in Japanese discourse. I shall thus argue that findings from frequencies reveal a cognitive preference for certain discourse structures over others (e.g. Martinet 1960, Bybee & Thompson 2000, Bybee & Hopper 2001).

This paper is organized as follows. Section 2 gives a brief review of prior work on Japanese complementation, while §3 describes the source of the data used in this study. Section 4 demonstrates to what extent ellipsis permeates the data. In §5, I shall consider a certain discourse-sequential pattern that further promotes the elision of CTP in Japanese interview discourse. In §6, I shall provide a possible account of why CTPs are often elided in specific discourse-syntactic contexts. Section 7 summarizes findings from this study, addressing the significance of frequency in understanding grammar in use.

## 2. Overview of research on complementation

There are numerous studies of Japanese complementation, beginning with Kuno's (1973) characterization of the complementizers *no*, *koto*, and *to*: according to him, the first two are used to encode a presupposition of factuality or truth, while *to* is not. The categorization of Japanese complementizers has been reinterpreted in a variety of frameworks since then (e.g. McCawley 1978, Horie 1990). Recently, Suzuki (2000) has proposed that there are certain systematic correlations between types of complementizers, types of verbs, and degrees of speaker conviction. Martin (1975:997) points out that verbs of thinking and saying following *to* are often unexpressed. In the same vein, Okamoto (1995) examines the functions of *no*, *koto*, *to*, and *tte* (*tte* is an informal form of *to*) in clause-final position and characterizes them as sentence-final particles, while Hayashi (1997) suggests that the discourse function of clause-final *to* and *tte* is to mark evidentiality.<sup>4</sup> Fujiwara (1993) presents a more general and in-depth analysis of the process by which various grammatical categories are grammaticalized as sentence-final particles.

In addition to studies of the distributional patterns of *to*, there are also many works on certain fixed forms consisting of *to* and other particles or verbs. For example, Maynard examines the case of self-quotation with *to-yuu* (*to* + 'say') and proposes that "[s]elf-quotation also serves to qualify speech acts as it mitigates, parodies, and/or emphasizes the act of 'saying' itself" (1996:208-209). Kitano (2000) and Tanaka (2001) consider several types of quotative expressions, such as *te-yuu ka* (QT-say + question particle) 'that is to say' and *nante iu ka* (QT + say + question particle) 'how can I say' in conversational discourse and characterize the interactive nature of those expressions as involving repair.

In spite of the numerous studies on Japanese complementation, none seems to have addressed to what extent and why the elision of CTPs occurs in discourse. Textual frequency is a valuable tool in providing empirical evidence to gain a better understanding of the preference for a certain grammatical configuration over its alternatives. This study presents such an analysis of the deployment of *to*-marked clauses in a specific discourse genre.

## 3. Data

The data for this study are taken from one type of interview discourse in Japanese:

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<sup>4</sup> Similar phenomena are reported from Taiwan Mandarin (Wang et al. 2003). Campbell (1991) examines Estonian in which complementizers are grammaticalized as evidential markers.

interviews of Japanese musicians. In these interviews, one male interviewer from a music magazine named *Burnn!* meets with various Japanese musicians to ask them about their new albums, their new songs, where they recorded them, the messages of their lyrics, etc. All the musicians interviewed are male; therefore, this interview discourse reflects interactions between male speakers.

The reasons I chose to use interview discourse are as follows. First, in comparison to other discourse genres, interview discourse entails certain expository aspects which derive from the process of remembering the past. As I explained above, since *to* acts as a quotation marker as well as a complementizer, this kind of discourse has the potential to involve a variety of quotations with *to*. Second, the speaker often reports or reproduces another person's words in the process of remembering. Consequently, interview discourse typically includes 'constructed dialogue' (e.g. Tannen 1986) in which the complementizer or quotation marker *to* frequently occurs. Of course, it needs to be conceded that we cannot know how much these interviews have been edited before publication; however, the point is that native speakers of Japanese appear to be thoroughly familiar with such styles of writing. Otherwise, the music magazine *Burnn!* would have been criticized as having no reflection of adequate use of Japanese. The third reason is to avoid mixing genres in conducting an in-depth analysis of language in use. The use of particular linguistic forms is often genre-specific. The last two decades have witnessed several intensive studies on the similarities and differences between oral and written discourse (and their sub-genres), showing that linguistic forms can be specific to particular genres (e.g. Tannen 1982, Chafe 1991, Biber 1999).

In the next section, I shall examine *to*-marked complement clauses in interviews with Japanese musicians. Note that the findings and conclusions discussed in later sections are limited to the data examined.

#### 4. Overall frequency of CTP elision

In this section, I shall demonstrate the extent to which the elision of CTPs occurs in the interviews with Japanese musicians, focusing simply on whether CTPs are expressed or not. How often, then, are CTPs unexpressed in this discourse? Table 1 shows the number of *to*-marked quotations. '+CTP' means that a quotation clause is *to*-marked and followed by a verb of quoting, as in (1), while '-CTP' means that a CTP is unexpressed after *to*, as in (2). Table 2 shows the type and token frequencies for subjects of CTPs. Although subjects of CTPs or the whole phrase 'subject + CTP' are unexpressed, a stretch of discourse provides us with indicators that signal who the subject of a CTP is. However, the distinction between 1<sup>st</sup> person singular and 1<sup>st</sup> person plural, for example, is hard to determine, because interviewees often express their

opinion as a representative of their band, rather than as their own view; therefore, I simply subcategorize subjects of CTPs as 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> person. Out of the total tokens (N=829), 266 examples (i.e. 32.1%) occur without CTPs, as shown in Table 1; the omission of CTP in clause-final position is relatively less frequent than the retention of CTP.

**Table 1:** CTP elision with *to*-clauses

+CTP		–CTP		Total	
N	%	N	%	N	%
563	67.9%	266	32.1%	829	100%

**Table 2:** Person of subjects with +CTP and –CTP

	+CTP		–CTP	
	N	%	N	%
1 <sup>st</sup> person	555/563	98.6%	244/266	91.7%
2 <sup>nd</sup> person	0/563	0%	1/266	0.3%
3 <sup>rd</sup> person	8/563	1.4%	21/266	7.9%
Total	563/563	100%	266/266	100%

Table 2 shows a substantial skewing in the types of subjects of CTPs: 1<sup>st</sup> person overwhelmingly dominates 2<sup>nd</sup> and 3<sup>rd</sup> person in both +CTP and –CTP cases.<sup>5</sup> It follows that the subjectivity involved in the dominant use of 1<sup>st</sup> person subjects has an effect on the elision of CTPs. In addition, the types of verbs used as CTPs are almost uniquely predictable; of CTPs that are expressed after *to*, two verbs, *omou* ‘think’ and *iu* ‘say’, dominate others in the database; out of 494 total tokens, *omou* and *iu* reach 335 (67.8%) and 110 (22.3%), respectively. The frequencies of other verbs are less than 0.1% in my database (see §6 for details). Thus, the syntactic change from *to*-CTP to *to*-Ø appears to make sense, especially in unplanned speech such as interview discourse, because it is predictable what the elided CTP is supposed to be.

Yet in terms of frequency, examples of –CTP show a somewhat higher rate of non-first person—i.e. 3<sup>rd</sup> person—subjects than cases of +CTP (7.9% vs. 1.4%). As I pointed out in §3, interview discourse often involves constructed dialogue in which the speaker reports the words of another. In this case, the speaker tends to utilize –CTP after

<sup>5</sup> My database involves only one clear example of 2<sup>nd</sup> person speech (see (15) in §6). My speculation is that this interviewee chose to reproduce the words of another as third rather than second person, even though they were interviewed at the same time. Yet, since the subject of a CTP is often elided, it is not actually possible to differentiate between 2<sup>nd</sup> and 3<sup>rd</sup> person subjects.

reported speech, as in the following example.

- (3) 1 “Ore wa mou ikkyoku hayai kyoku ga hoshii  
       I TOP more on.song speedy song NOM want  
       2 to omou n da kedo” to it-tara,  
       TO think NOML COP but TO say-when  
       3 → “Mou hayai kyoku wa iranai desu yo, Shima-san” **to**.  
           any.more speedy song TOP be.unnecessary COP FP name TO  
           ‘When (I) said, “I think (we) need one more fast song (for this album)”’, (he said)  
           ‘(We) don’t need any more fast songs, Mr. Shima’.’ (*Burrn!* 2003 Feb., Norifumi  
           Shima)

In (3), the interviewee, Norifumi Shima, is remembering a discussion about the selection of songs for his band’s album. In lines 1 through 2, Norifumi reproduces his own opinion, *ore wa mou ikkyoku hayai kyoku ga hoshii to omou n da kedo* “I think (we) need one more fast song (for this album)”; however, at the time of the discussion, another band member argued against Norifumi’s opinion, which is reproduced in line 3 using –CTP: *mou hayai kyoku wa iranai desu yo, Shima-san* “(we) don’t need any more fast songs, Mr. Shima”.

Although the number of constructed dialogues is not extremely large, there are some discourse-syntactic cues in reported speech as to the identity of the subject referent. Take a closer look at (3). Here, the interviewee reproduces his words in the *tara* ‘if/when’ adverbial clause in lines 1 through 2, while he reports the words of another band member in the *to*-marked clause in line 3. The conjunctive particle *tara* is often considered to be a marker of switch-reference (e.g. Iwasaki 1993:61-77); when an interviewee reproduces his own words in a *tara* clause, the next reproduction of words should be another speaker’s.

Another syntactic cue is illustrated in the example to follow in which an interviewee directly expresses the source of the other’s words.

- (4) 1 → nandomo komakai bubun o naosi-te... sutajio no hito **kara**  
       many.times minute parts ACC rearrange-and studio GEN people from  
       2 “konnani komakaku suru no wa kimi kurai da” **to**  
       a.lot.of in.detail do NOML TOP you only COP TO  
       ‘(I) rearranged details many times and...the studio staff (said to me) “Maybe it’s  
       only you that stick to details so much.”’ (*Burrn!* 2001 Sept., Yukio Morikawa)

In line 1, the source of the words is expressed by the postposition *kara* ‘from’ in line 1: *sutajio no hito kara* ‘(lit.) from the studio director’. In addition, the pronoun *kimi* ‘you’ in the reproduced utterance refers to the present interviewee, Yukio Morikawa. Note

that a literal translation would be ‘I was told by the studio director...’ because of *kara*, although I have used the active voice in the English translation. It follows from these examples that, when words of another are reported, certain syntactic factors, whether intra-clausal or inter-clausal, help to clarify the source of the utterance (see Nariyama 2003 for a more detailed analysis).

In sum, whether a CTP is expressed or not, the unexpressed subject of the predicate has a strong tendency to be 1<sup>st</sup> person, as shown in Table 2; this predictable pattern may trigger the elision of the CTP. Furthermore, the remaining *to* in clause-final position serves as a sign of the speaker’s subjective stance to the utterance; when the speaker reports words of another, he can utilize certain syntactic indicators by which to specify the source of the utterance, i.e. non-first person. That is, *to* represents the speaker’s retelling, whether it is his own speech (i.e. 1<sup>st</sup> person) or not (i.e. non-first person).

In this section, I have shown how frequently CTPs are elided in interview discourse with Japanese musicians. As pointed out by Okamoto (1995) and Hayashi (1997), the complementizer or quotation marker *to* is used as a sentence-final particle or evidential marker. However, while these studies emphasize the high frequency of *to* in Japanese discourse, the actual textual frequency of this usage in my database is not as high as implied in them (which do not specify frequency). Judging from my quantitative evidence, the elision of CTP is perhaps at an incipient stage of language change.

In the next section, I shall examine a particular discourse-syntactic sequence which apparently facilitates the elision of CTP elision.

## 5. Frequency of CTP elision with preceding adverbial clauses

In the previous section, we have scrutinized the frequency of CTP elision in interview discourse, and interpreted the results as representing an early stage of language change, i.e. grammaticalization. The focus of the previous section was simply whether a CTP is unexpressed in clause-final position or not. Roughly speaking, the main clause verb is elided and the complementizer *to* remains, while the remaining complement clause is reanalyzed as a main clause.

On the other hand, if we enlarge the scope of analysis beyond the clause containing the CTP and its complement, we may discover further information about the discourse contexts in which the elision of CTP occurs. Limited though it is, my database provides us with one such context, namely, that in which an adverbial clause precedes a *to*-marked complement clause. In other words, the likelihood of ellipsis is related to discourse-syntactic structure.

To begin with, let us reconsider (2), which is repeated below as (5). In this example, a *node* reason clause precedes the *to*-marked clause and the CTP after *to* is unexpressed,



as in line 2.

- (5) 1 → zentaitekina kousei wa deki-te-ita **node**  
 whole structure TOP finish-and-be because  
 2 ato wa mukou de yarou **to**.  
 rest TOP over.there in will.do TO  
 ‘Since the whole structure (of the song) was finished, (I said) that (we) would finish the rest (of it) there (in our recording place in San Francisco).’ (*Burrn!* 2001 Aug., Naoto Shibata)

This kind of sequential pattern is quite pervasive in my database. In the examples to follow, (6) illustrates a *kedo* concessive clause, (7) a *kara* reason clause, and (8) a *te*-marked clause, all of which are linked with the following *to*-marked clause and, as we shall see, are followed by a very high frequency of CTP elision.<sup>6</sup>

- (6) 1 → Tsukuri-nagara “saigen wa mutsukashii naa” to omotta **kedo**,  
 compose-while reproduction TOP be.difficult FP TO thought but  
 2 “yatte-mi-tai na” **to**  
 do-try-want FP TO  
 ‘While composing, (I) thought, “It may be difficult to reproduce (this song),” but (I thought) “(I) want to try (it).”’ (*Burrn!* 2002 Apr., Akihito Kinoshita)
- (7) 1 → Chigau shigeki o uke-ta **kara**  
 different stimulus ACC receive-PST because  
 2 chigau kanji no gitaa ga hik-e-ta ka na, **to**  
 different feeling GEN guitar NOM play-can-PST QP FP TO  
 ‘Because (I) received a different stimulus (from other band members), (I thought) that (I) could play a different tune on the guitar.’ (*Burrn!* 2003 Feb., Norifumi Shima)
- (8) 1 → “Kore de ii no?” tte iw-are-**te**  
 this by be.good QP TO say-PASS-and  
 boku wa “nani ga?” **to**  
 I TOP what NOM TO  
 ‘Because/although (I) was asked, “Are you OK with this (version of the song)?” I (was like/said) “Why not?”’ (*Burrn!* 2003 Feb., Matatabi)

In addition to these examples, we have already seen another clause-combining pattern in (3): a *tara* temporal clause preceding the *to*-marked clause. However, the question is:

<sup>6</sup> *Te* is a semantically open adverbial marker that is dependent on clausal relations for its pragmatic interpretation (Hasegawa 1996).

To what extent do these sequential patterns influence the elision of CTPs after *to*? In my database, when preceded by an adverbial clause, more than 63% of *to*-marked clauses occur without any CTP. Apparently, the preceding adverbial clause promotes the elision of CTPs. This sequential pattern is formed in combinations of *to*-marked clauses with cause/reason, concessive, conditional, and temporal clauses. Table 3 shows the frequency of +CTP and –CTP in sequences of adverbial clauses followed by *to*-marked clauses.

**Table 3:** CTP elision in *to*-marked clauses following adverbial clauses<sup>7</sup>

+CTP		–CTP		Total	
N	%	N	%	N	%
62/56	11.0%	169/266	63.6%	231/829	27.9%

In the previous section, we found that the overall frequency of CTP elision tops out at 32.1%. However, once we zoom in a stretch of discourse, as in this section, we can realize that adverbial clauses are associated with an increase in the elision of CTP: CTP elision vaults from 32.1% to 63.6%. That is, ellipsis is closely linked to discourse-syntactic structures.

However, what kind of adverbial clauses are deployed in this discourse-syntactic sequence? Are there any encoding preferences or skewing in this complex construction? Table 4 gives a synopsis of the types of adverbial clauses co-occurring with *to*-marked clauses in my database.

<sup>7</sup> A –CTP clause can occur as a single clause without any adverbial clause; there are 50 such examples in my database. In addition, a –CTP clause can serve as an adverbial or medial clause ‘while saying or thinking that...’ modifying the main clause. My database includes 47 instances of this usage out of 266 clauses. However, these two functions are beyond the scope of this study.

**Table 4:** Synopsis of adverbial clauses with *to*-marked complement clauses

Cause/reason clauses	+CTP		-CTP		Total	
	N	%	N	%	N	%/153
<i>node, nde</i>	31	33.3%	62	66.7%	93	60.8%
<i>te</i>	5	15.6%	27	84.4%	32	20.9%
<i>kara</i>	4	33.3%	8	66.7%	12	7.8%
<i>si</i> <sup>3</sup>	25.0%	9	75.0%	12	7.8%	
DM	0	0%	4	100%	4	2.6%
Subtotal	43	28.1%	110	71.9%	153/231	66.2%
Concessive clauses	N	%	N	%	N	%/49
<i>kedo</i>	7	20.0%	35	80.0%	42	85.7%
<i>tutu</i>	0	0%	2	100%	2	4.1%
<i>temo</i>	0	0%	2	100%	2	4.1%
<i>nagara</i>	0	0%	1	100%	1	2.0%
<i>noni</i>	0	0%	1	100%	1	2.0%
<i>ga</i>	0	0%	1	100%	1	2.0%
Subtotal	7	14.3%	42	85.7%	49/231	21.2%
Conditional clauses	N	%	N	%	N	%/20
<i>tara</i> <sup>8</sup>	3	25.0%	9	75.0%	12	60.0%
<i>nara</i>	1	25.0%	3	75.0%	4	20.0%
<i>reba</i>	3	100%	0	0%	3	15.0%
<i>to</i>	1	100%	0	0%	1	5.0%
Subtotal	8	40.0%	12	60.0%	20/231	8.7%
Temporal clauses	N	%	N	%	N	%/9
<i>toki</i>	3	37.5%	5	62.5%	8	88.9%
<i>ato</i>	1	100%	0	0%	1	11.1%
Subtotal	4	44.4%	5	55.5%	9/231	3.9%
Total	62	26.8%	169	73.2%	231	100%

There is strong skewing in the linkage of clauses. As Table 4 shows, semantically informative *node* ‘because’ and *kedo* ‘although’ clauses are most frequently utilized to introduce *to*-marked clauses; *tara* conditional clauses, as well as *te*, *kara*, and *si* reason clauses, are also frequently used. DM indicates discourse markers which can encode a reason interpretation, such as *sore-de* (that + PT) ‘because of that’.

Before explaining this strong skewing in clause-linkage, I shall provide brief

<sup>8</sup> *Tara* has both conditional ‘if’ and sequential/temporal ‘when’ functions, but I classify *tara*-clauses as conditional clauses, following the traditional categorization. Yet in my database, all *tara*-clauses have a sequential/temporal function, and the content of *tara*-clauses appears to encode cause/evidence for the following *to*-marked clauses, as in (3). Noda et al. (2002:78-83) suggest that *tara*-clauses encode factual events more frequently than other conditional clauses, and my database supports this opinion.

accounts of clause types. Both *te* and *si* clauses are semantically unspecified by themselves; the semantic interpretation of these clauses depends on the context in which they occur. For example, Hasegawa (1996:4-7) offers the following interpretations of *te*-linked clauses: circumstance, additive, temporal sequence, cause/reason, means, contrastive, concessive and conditional. On the other hand, *si*-clauses have contrast, enumeration and reason interpretations. However, when they combine with *to*-marked clauses, the *te* and *si* clauses in my database always have a cause/reason interpretation.<sup>9</sup> Considering the preferred linkage with cause/reason and concessive clauses, semantically informative clauses seems to be requisite for the elision of CTP, which I shall intensively discuss below, particularly with respect to evidentiality.

In addition to such semantic factors, I assume that syntactic-pragmatic properties of adverbial clauses have much to do with this skewed linkage with *to*-marked clauses. That is, frequently used adverbial clauses have greater morpho-syntactic and pragmatic freedom than others. For example, verbs in *kedo* clauses can be marked by past tense, volitional, inferential morphemes, and the politeness auxiliary, while verbs in *tutu* and *nagara* cannot be marked by any of these; other types of combined clauses fall in-between (Minami 1973). *Node* clauses are considered to have stronger politeness implications than *kara* (e.g. Kunihiro 1992). Semantically open-ended *te* clauses are also preferred over others. *Te*-clauses may be useful for combining clauses because of the semantic unspecificity of *te*, which can imply certain discourse-dependent meanings by linkage, as I explained above (cf. Minami 1973, Hasegawa 1996). These syntactic constraints on adverbial clauses reflect more or less preferable linkage with *to*-marked clauses, as clearly shown in their frequency. However, the point is that, regardless of such differences—syntactic, semantic, or pragmatic—adverbial clauses influence the presence or absence of CTP; in almost all combinations of clauses in Table 4, the elision of CTP is more frequent than the retention of CTP. Ellipsis is discourse-based.

Table 5 summarizes the four types of adverbial clauses by their token frequencies. Whether the particle *to* is followed by a CTP or not, cause/reason clauses frequently precede *to*-marked clauses (66.2%=153/231).

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<sup>9</sup> Ohori (1995) considers a different discourse-syntactic sequence which specifies reason interpretations of *si*-clauses: when *si*-clauses are suspended, i.e. when their main clauses are unsaid in discourse, only a reason interpretation is possible.

**Table 5:** Types and frequencies of adverbial clauses with *to*-clauses

	Frequency		–CTP	
	N/231	%	N/169	%
Cause/reason clauses	153	66.2%	110	65.1%
Concessive clauses	49	21.2%	42	24.8%
Conditional clauses	20	8.7%	12	7.1%
Temporal clauses	9	3.9%	5	3.0%
Total	231	100%	169/231	73.2%

Table 6 shows the grammatical person of the subjects of +CTP and –CTP in combination with adverbial clauses. There is no conspicuous difference between these clauses and those clauses in Table 2. However, considering the overwhelmingly high frequency of 1<sup>st</sup> person referents in both cases, the primary function of sentence-final *to* is apparently to encode the speaker’s subjective relationship to the information that the *to*-marked clauses express. In addition to the speaker’s attitudes towards the proposition, *to*-marked clauses indicate types of sources for the information, as shown in (4). These two functions correspond to the definition of evidentiality in Chafe (1986:262): “... I am using the term ‘evidentiality’ in its broadest sense, not restricting it to the expression of ‘evidence’ per se... everything dealt with under this broad interpretation of evidentiality involves attitudes towards knowledge.”

**Table 6:** Person of subjects of +CTP and –CTP with adverbial clauses

	Frequency		–CTP	
	N/231	%	N/169	%
1 <sup>st</sup> person	217	93.9%	159	94.1%
2 <sup>nd</sup> person	0	0%	1	0.6%
3 <sup>rd</sup> person	14	6.1%	9	5.3%
Total	231	100%	169	100%

Chafe correlates sources of knowledge (sensory evidence, language, hypothesis) with types of knowledge (belief, induction, hearsay, deduction) on a continuum from the most reliable to the least reliable, as shown in Figure 1. He goes on to say that the position of the four modes of knowing in Figure 1 is not fixed but flexible, going up and down the scale of reliability (1986:263).<sup>10</sup>

<sup>10</sup> Aikhenvald (2003) puts emphasis on the difficulty of classifying evidential markers due to their crossover nature of meaning.

source of knowledge		mode of knowing			knowledge matched against
			reliable		
			k		
			n		
???	→	belief	o		
evidence	→	induction	w	→	verbal resources
language	→	hearsay	l	→	expectations
hypothesis	→	deduction	e		
			d		
			g		
			e		
			unreliable		

**Figure 1:** Chafe’s classification of knowledge (Chafe 1986:263)

From the perspective of Figure 1, the frequency of adverbial clauses co-occurring with *to*-marked clauses gives insight into the reason why the 1<sup>st</sup> person usage dominates over the 2<sup>nd</sup> and 3<sup>rd</sup> person. Cause/reason clauses, which are the most frequent in my database, provide the source of evidence for the following *to*-marked clauses; the speaker can express his/her own evaluation or attitude in the *to*-marked clause. Concessive clauses, the second most frequent type, contain a fact or notion in spite of which the truth of the main clause is asserted (e.g. Haiman 1974:357, Couper-Kuhlen & Thompson 2000). These two types of adverbial clauses comprise 87.4% of all combinations with *to*-marked clauses, as shown in Table 5, and correspond to ‘induction’ and ‘belief’ respectively in Chafe’s classification of knowledge: both are placed relatively higher on the scale of reliability. In my view, the reason why these adverbial clauses frequently precede *to*-marked clauses is that they serve to project the speaker’s attitude (e.g. assertion, evaluation, thought, etc.) in the *to*-marked clauses. In fact, the overwhelming frequency of 1<sup>st</sup> person subjects is clearly associated with the functions of these adverbial clauses. Based on these quantitative and qualitative observations, I shall argue that the primary function of sentence-final *to* is to mark the subjective attitude of the 1<sup>st</sup> person speaker towards the content of the *to*-marked clause.<sup>11</sup>

In this section, we have scrutinized how adverbial clauses influence the following *to*-marked clauses. In interview discourse, when *to*-marked clauses are combined with adverbial clauses, the elision of CTP increases, and this change is found consistently in

<sup>11</sup> Mushin examines the sentence-final *tte*, which is often considered a variant of *to*, and argues that “it indexes information to some previous speech act (by a different speaker) without explicitly referring to the original speaker or the speech act” (2001:123). *Tte* and *to* may not be classified in the same way.

almost all combinations of clauses, as shown in Table 4. Furthermore, I have demonstrated that the content of *to*-marked clauses is a reproduction of the speaker's own utterance or thought in the past, and that the degree of reliability of *to*-marked clauses is quite high because the source of knowledge is the speaker's own direct past experience. The preferred types of adverbial clauses, i.e. cause/reason and concessive clauses, by which the speaker expresses his/her attitude in the following *to*-marked clauses, give further support for this argument.<sup>12</sup>

In the next section, I shall provide a more syntactic and constructional-oriented account of why CTP is often elided in this discourse-syntactic context.

## 6. Why is CTP elided?

The finding of the above analyses can be recapitulated in the following way. In contexts in which a CTP may occur, both the main clause verb and the subject may be elided, while the remaining complementizer *to* changes its status to that of an evidential marker or sentence-final particle, which primarily indicates the speaker's attitude towards the content of the *to*-marked clause. In other words, the complement clause is reanalyzed as a main clause. Furthermore, when an adverbial clause precedes a *to*-marked clause, the elision of CTP is even more frequent.

Yet, one question emerges from the above observation: why do adverbial clauses promote the elision of CTPs? Do adverbial clauses entail any property which motivates the speaker to elide the CTP after *to*? Let us return to (6), which is repeated as (9).

- (9) 1 → Tsukuri-nagara “saigen wa mutsukashii naa” **to omotta** kedo,  
       compose-while reproduction TOP be.difficult FP TO thought but  
       2 “yatte-mi-tai na” **to**  
       do-try-want FP TO  
       ‘While composing (it), (I) thought, “It may be difficult to reproduce (this song),”  
       but (I thought), “(I) want to try (it)”’. (*Burn!* 2002 Apr., Akihito Kinoshita)

In the *kedo* concessive clause prior to the clause with CTP elision, there is an embedded clause with an overt complementizer *to* and the CTP *omotta* ‘thought’ (or *iu* ‘say’ in other cases). In my database, 121 examples of the –CTP cases share this syntactic-semantic pattern, which is schematized in (10) (comp=complement clause; adv=adverbial; LK=linking particle).

<sup>12</sup> One might say that these clauses do not show such strong reliability as expected, but rather they are just thought to be reliable. I am grateful to Mary Bucholtz for this sharp indication. Yet the actual frequency tells us that *to*-marked clauses have close links with the semantics of these clauses in discourse.

- (10) [ [..... ] comp + TO-CTP-LK ] adv. clause  
       [ [..... ] + *to*-Ø ] main clause

In the diagram, the capital TO indicates the complementizer function of ‘*to*’, while the italicized small letter *to* indicates the sentence-final particle or evidential function of ‘*to*’; the clause accompanied by *to* is considered a main clause. For convenience, Example (9) is reformatted in (11) according to the schema in (10).

- (11) [ [...“*saigen wa mtsukashii naa*” ] comp+ *to omotta kedo* (TO-CTP-LK)] adv. clause  
       [ [...“*yatte-mi-tai na*” ] + *to* (*to*-Ø) ] main clause

Both adverbial and *to*-marked clauses involve reported speech, which is followed by the complementizer + CTP in the adverbial clause on the one hand, and by the evidential in the main clause on the other. Despite the functional difference of ‘*to*’, they are structurally parallel, and as in the English translation of (9) above, the non-elided and elided CTPs are considered to be the same verb *omotta* ‘thought’. Remember that, as shown in Table 5, 169 out of 231 examples (73.2%) elide CTPs after *to* in combination with an adverbial clause; 121 out of 169 examples (71.6%) have the syntactic structure shown in (9) and (10) in common. The embedded complement clause syntactically necessitates the presence of a complementizer and a CTP, which I propose may trigger the elision of CTP in the following *to*-marked clause. In what follows, I shall give a brief account of this view of the elision of CTP.

Table 7 summarizes the type and token frequencies of verbs that occur after *to* in my database. Two verbs, i.e. *omou* ‘think’ and *iu* ‘say’, are the most frequent verbs, with a combined frequency of 90.1% (445 out of 494 total tokens). Importantly, these two verbs are elided in most of the –CTP cases, as the English translation for the above examples indicates. Martin (1975:997) also makes the observation that in Japanese, verbs of thinking and saying after *to* are often unexpressed. It seems likely, for example, that when a verb of saying is used in a *node* reason clause, if the speaker were to use the same verb after a *to*-marked clause, s/he would feel that it is redundant, because the types of verbs that follow *to* are quite predictable, as Table 7 shows. The types of non-elided verbs in Table 7 and the types of elided verbs seem to be cognitively related. Therefore, I shall suggest that when the speaker uses a CTP in an adverbial clause (which necessitates the presence of a complementizer), the CTP after *to* in the following *to*-marked clause can be elided. As illustrated in (10), the similar syntactic structure in the preceding clause facilitates the elision of CTP in the following clause, and the remaining *to* serves an evidential function in this sequential discourse pattern. I shall characterize the linguistic change in this highly specific morphosyntactic context as ‘constructional grammaticalization’ (see §7 for related discussions).



**Table 7:** Frequencies of quoting verbs

	Types of verbs	Frequency
	N	%
<i>omou</i> ‘think’ <sup>13</sup>	335	67.8%
<i>iu</i> ‘say’	110	22.3%
<i>kiku</i> ‘ask’	10	2.0%
<i>kangaeru</i> ‘think’	5	1.0%
<i>kanjiru</i> ‘feel’	4	0.8%
others <sup>14</sup>	30	6.1%
Total	494	100%

In some cases, a CTP is passivized and a different complementizer is used (*tte* is an informal form of *to*) as in (8). However, this constructional grammaticalization does not lose effect of eliding CTP. Example (8) is repeated as (12) below for convenience.

- (12) → “Kore de ii no?” **tte** iw-are-te  
           this by be.good QP TO say-PASS-and  
           boku wa “nani ga?” **to**  
           I TOP what NOM TO  
           ‘Because/although (I) was asked, “Are you OK with this (version of the song)?”,  
           I (was like/said), “Why not?”’ (Burrn! 2003 Feb., Matatabi)

Building on this frequency-based analysis, I propose that the elision of CTP is discourse-structurally motivated; such discourse-syntactic structures enable the speaker to elide the CTP and provide the hearer with a syntactic-semantic cue (i.e. the overt CTP in the adverbial clause) to keep track of what is elided, as noted above.

Japanese, like other Southeast and East Asian languages, utilizes ellipsis heavily (e.g. Hinds 1982), and this study has analyzed the elision of CTP, i.e. a kind of verbal ellipsis in clause-final position (or clausal ellipsis if we regard CTP elision as ellipsis of a subject and a verb). A general view of this phenomenon leads us to conclude that the co-occurrence of one structure (i.e. +CTP) and another (i.e. –CTP) has emerged due to the linkage of an adverbial clause with a *to*-marked clause, as illustrated in Table 4. On

<sup>13</sup> Shinzato (2004) demonstrates certain cognitive correlations between *omou* ‘think’ and *iu* ‘say’ from a different perspective (cf. Wang et al. 2003 on Taiwan Mandarin).

<sup>14</sup> Other quoting verbs in the database are: *shinjiru* ‘believe’, *happyoo-suru* ‘announce’, *kizuku* ‘realize’, *kan’yuui-suru* ‘invite’, *kitai-suru* ‘expect’, *yookyuui-suru* ‘require’, *soozoo-suru* ‘imagine’, *ishiki-suru* ‘be aware’, *sootee-suru* ‘assume’, *jikkan-suru* ‘realize’, *siru* ‘know’, *kaku* ‘write’, *toraeru* ‘comprehend’, *tanomu* ‘ask’, *setsumei-suru* ‘explain’, *wakaru* ‘understand’, *kiku* ‘hear’, *ketsui-suru* ‘make a decision’, *kimeru* ‘decide’, *ketsudan-suru* ‘make a decision’, *naru* ‘become’, *tsutaeru* ‘inform’, *nattoku-suru* ‘be assured’, *shoodaku-suru* ‘accept’. The frequency of each of these verbs is fewer than four tokens or 0.1% in my database.

the other hand, a closer look at this phenomenon leads us to recognize that a certain structural sequence facilitates or is closely related to the elision of CTP. These findings are represented in Table 8, which summarizes the findings presented in this section.

**Table 8:** Frequency of the elision of a CTP with respect to adverbial clauses

Syntactic specification of adverbial clauses	elision of CTP	Frequency
(a) $\emptyset$	$[[\dots \dots] + to-\emptyset]_{\text{main clause}}$	32.1% (266/829)
(b) [ $\dots \dots$ no comp $\dots \dots$ ] adv. clause,	$[[\dots \dots] + to-\emptyset]_{\text{main clause}}$	73.2% (169/231)
(c) [ [ $\dots \dots$ ] comp + TO-CTP-LK ] adv. clause,	$[[\dots \dots] + to-\emptyset]_{\text{main clause}}$	71.6% (121/169)

In (a),  $\emptyset$  means that no adverbial clause precedes the *to*-marked complement clause; in this combination, 32.1% of CTPs are elided in the *to*-marked clause (Table 1 in §4). In (b), ‘no comp’ means that the adverbial clause has no embedded complement clause; in this combination, 73.2% of CTPs are elided in the following *to*-marked clause (Table 5 in §5). In (c), the adverbial clause involves a complement clause, which is followed by the complementizer and CTP; in this combination, 71.6% of CTPs are elided in the following *to*-marked clause. In different texts, the predictability of CTP elision might be weaker. However, the structural sequence represented in Diagram (10) appears to be pervasive and powerful, at least in my database.

The discourse-syntactic structures in Table 8 provide us with clear syntactic-semantic cues for processing the following CTP elision. However, in terms of the frequency of CTP elision, there is no conspicuous difference between prior adverbial clauses with overtly expressed CTPs (73.2%) and prior adverbial clauses that do not involve CTPs (71.6%). The structural sequence we have examined thus far involves strict adjacency of the adverbial and *to*-marked clauses. In order to ascertain how strict this adjacency requirement is, I shall scrutinize two marginal cases to further strengthen the predictability of the structural sequence in (10) and differentiate between the structures (b) and (c) in Table 8.

In the discourse prior to (13), interviewee Ken’ichi Suzuki is asked to tell the interviewer how he and his band chose songs from their six recent albums for the release of their “best of” album. In line 2, Ken’ichi’s first impression of a particular song, *zuibun poppuna kyoku da na* “(it) was very much a pop song”, is embedded in the verb phrase *to omot-ta* ‘(I) thought that’, which is followed by the concessive particle *kedo* ‘but’. In lines 3 and 4, he uses one *si* reason clause and one *nde* reason clause, respectively, and the *to*-marked clause follows these three adverbial clauses. If we count the temporal clause in line 1, four adverbial clauses precede the *to*-marked clause in this example. The structural sequence of (13) is represented in (14). Remember that in our diagram, TO and *to* indicate the complementizer function and evidential function of ‘*to*’, respectively.

- (13) 1 “Kurai nichiyooobi” wa saishoni Wajima-kun ga mot-te-kita toki,  
 the name of a song TOP first name-POL NOM bring-and-come when  
 2 → zuibun poppuna kyoku da na **to omotta** kedo,  
 very pop song COP FP TO thought but  
 3 raibu o yat-tara okyakusan no uke wa yokat-ta si,  
 live ACC do-when audience GEN reaction TOP be.good-PST because/and  
 4 sugoku nomerikomi-nagara ensoo-dekiru nde,  
 very.much be.absorbed.in-while play-can because  
 5 → kore wa meikyoku datta n da naa **to**  
 this TOP masterpiece was NOML COP FP TO  
 ‘When (I) received the song *Kurainichiyooobi* from Mr. Wajima, (I) thought that  
 (it) was very much a pop song. However, when (we) played (the song) at (our)  
 live concert, our fans were excited (with the song) and (I) could lose myself in  
 playing (it). Because of that, (I thought) that this (song) was a masterpiece.’  
 (*Burrn!* 2002 Oct., Ken’ichi Suzuki)

- (14) [... ..] *toki*,  
 [...] comp + TO + CTP *kedo*,  
 [... ..] *si*,  
 [... ..] *nde*,  
 [... ..] *to-Ø*

It is obvious that an embedded clause is not involved in the immediately previous clause, i.e. the *nde* reason clause, but rather in the *kedo* concessive clause which is three clauses prior to the *to*-marked clause. Despite this distance, the presence of this embedded clause apparently has an effect on the elision of the CTP after *to* in line 5. At first glance, this case may seem exceptional. However, whenever an embedded clause occurs within three clauses from a *to*-marked clause, the CTP is always elided in my database (14 examples), regardless of whether those clauses are sequentially combined as in (13) or separated by punctuation marks such as periods.

The other example is illustrated in (15). In this example, the interviewee Shinji Wajima is explaining to the interviewer that he changed his way of composing songs for the release of his band’s new album. It is important to note that this example consists of two interactions between the interviewee and the interviewer, but the effect of the CTP *kangaeta* ‘thought’ in line 1 continues over the following four clauses to elide all CTPs after the *to* in lines 3 through 8.

- (15) 1 → W: Mouikkai nanno tameni bando yatteru no ka  
 once.again what for band do NOML QP  
**to kangaeta** toki ni  
 TO thought when PT

- 2        jibunjishin ga        seishintekini mitasa-reru mono o  
          self        NOM        spiritually        satisfy-PASS        thing        ACC
- 3 →    tsukura        nakute        wa        ikenai,        to.  
          make        NEG        TOP        must.not        TO  
          ‘When (I) reconsidered why I am running the band, (I thought) that (I)  
          have to make songs which spiritually satisfy myself.’
- 4 → I:    De, konkai wa kokoro no kase o        hazushi-te-mi-ta,        to?  
          then this.time TOP mind        GEN        fetters        ACC        take.off-and-try-PST TO  
          ‘So, (you were) free to compose your songs this time without any pressure,  
          (would you say)?’
- 5        W:    Sou desu. Ningen’isu tte        kou-iu        bando to-iu        imeeji ga  
          so        COP        band.name TOP        like.this band        TO-say image        NOM
- 6 →    nani-mo-nai joutai o        souteishi-te        yat-te-miyou to.  
          be.not        state        ACC        imagine-and        do-and-try        TO
- 7        De,        kashi no        kakikata        mo, shousetsu no        ue o  
          and.then lyrics GEN        composition too        fiction        GEN        on ACC
- 8 →    nazoru youna koto        wa        yame-you to.  
          imitate like        COMP TOP        stop-will        TO  
          ‘Yes. (I thought) that (I) would try (to make songs), getting rid of the  
          stereotypical image that we are such and such a band. And then, (I thought)  
          that (I) would stop imitating lines from (famous) novels.’ (*Burn!* 2001  
          Nov., Shinji Wajima)

The embedded clause in the *toki* temporal clause in line 1 triggers the elision of CTP in the following *to*-marked clause, which stretches over lines 2 through 3. This –CTP clause triggers the following –CTP clause, which is uttered by the interviewer in line 4. In the interviewee’s turn in line 5, he uses another –CTP clause as his answer in lines 5 through 6, which subsequently triggers another –CTP clause in lines 7 through 8. Thus, the embedded clause triggers the following chain of four clauses, all of which elide the CTP. In other words, a –CTP clause implies the existence of CTP; when another complement clause follows a –CTP clause, the CTP can be elided on the basis of the preceding –CTP clause. This structural sequence is represented in (16).

- (16) [[...] comp + TO + CTP] *toki*,  
       [...] *to*-Ø,  
       [...] *to*-Ø,  
       [...] *to*-Ø,  
       [...] *to*-Ø

This example is the most extreme case in my database, but the chaining of two or three –CTP clauses is found sporadically throughout my data (12 examples). The above two

examples demonstrate that strict adjacency is not necessarily required for the elision of CTP. Note that if we count the above two cases as examples of (c) in Table 8, i.e. as having a prior TO + CTP, the predictability of –CTP becomes 87.0% (147 out of 169 examples).

Considering the frequency of structural sequences with –CTP, the adjacent pair in (10) is the most frequent pattern (121 examples), while the non-adjacent pair in (13) and the chaining of –CTP clauses in (15) can be regarded as marginal cases (14 and 12 examples, respectively). This concomitance of different discourse-syntactic patterns is a clear case of “layering”, which Hopper (1991:22) defines as follows: “Within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but may remain to coexist with and interact with the newer layers.” In our case, the retention of CTP is one layer, while the elision of CTP is the other layer; the relatively low frequency of the latter indicates that the elision of CTP is in an incipient stage of layering.

Now let us reconsider the sequence in (10) in order to rethink why a number of discourse-syntactic structures co-occur. The three discourse-syntactic structures found in my database are schematized in (17). (17b) corresponds to (14); (17c) corresponds to (16).

(17) Layered structures of –CTP with respect to adverbial clauses

- |    |                               |                       |
|----|-------------------------------|-----------------------|
| a. | [[... ...] comp + TO + CTP-LK | ] adv. clause         |
|    | [[... ...] + to-Ø             | ] main clause         |
| b. | [[... ...] comp + TO + CTP-LK | ] adv. clause         |
|    | [ ... no comp ... ...         | ] adv. clause n,      |
|    | [ ... no comp ... ...         | ] adv. clause n+1..., |
|    | [[... ...] + to-Ø             | ] main clause         |
| c. | [[... ...] comp + TO + CTP-LK | ] adv. clause,        |
|    | [[... ...] + to-Ø             | ] main clause,        |
|    | [[... ...] + to-Ø             | ] main clause,        |
|    | [[... ...] + to-Ø             | ] main clause...      |

The presence of CTP after *to*-marked clauses in (17a) is expected; however, the recurrent discourse-sequence schematized in (17a) elides the CTP in the second clause, because this CTP is predictable, as illustrated in Table 7. Furthermore, the structural sequence in (17a) starts to lose its strict adjacency through frequent use and comes to be associated with a wider variety of communicative behaviors, freed from the stringent discourse-structural context. That is, strict adjacency is no longer necessary, and the different layers (17b) and (17c) emerge from (17a). The elision or retention of CTP in this discourse gives empirical evidence for layering, and the quantitative results further strengthen the phenomenon.

In this section, I have provided quantitative evidence for certain discourse-syntactic contexts that trigger layering. This finding suggests that grammar changes gradually but consistently in a systematic fashion, and that speakers of a given language, Japanese in this case, change the language to the extent that the speaker and hearer can maintain mutual understanding in ongoing unplanned speech.

## 7. Summary and conclusion

In this section, I shall summarize what we have examined thus far and go on to reaffirm the two important issues in the grammaticalization of complementizer to evidential marker, i.e. construction and frequency.

In this study, I treated frequency patterns as linguistic data, examining the elision of CTP after *to*. When we considered only the presence or absence of CTP, as in §4, the elision of CTP was relatively infrequent. On the other hand, once we broadened the scope to a stretch of discourse, we were able to discover a more crucial discourse-syntactic pattern which facilitates the elision of CTP: clause-combining with adverbial clauses. Furthermore, the existence of a complement clause in the preceding adverbial clause, which necessitates the presence of CTP, provides the speaker with a structural motivation for eliding CTP in the following *to*-marked clause, while the hearer can grasp what is implied by the clause-final *to* on the basis of this structural sequence. In other words, the specific discourse sequence of a similar construction motivates language change, which I characterized as constructional grammaticalization.

In the previous section, I investigated two marginal cases in which complementation appears three clauses prior to the *to*-marked clause, and in which the chaining of –CTP clauses occurs over a stretch of discourse even across speaker turns. Even in these cases, the structural sequence represented in (10) has an effect on the elision of CTP in the following *to*-marked clause. My database provides firm evidence for the reason why the structure in (10) is unmarked in terms of textual frequency. Most CTP ellipsis in the data is discourse-syntactically motivated; even marginal or exceptional cases can be regarded as demonstrating the recurrent patterns, whether speakers use them consciously or unconsciously. While the above discussion emphasizes the highly context-dependent nature of ellipsis, the original discourse-syntactic context loses its structural strictness through repeated use, leading to a wider range of discourse-syntactic structure that shows CTP elision. In addition to these discourse-structural patterns, we can also measure the degree of evidential meanings via frequency by examining the correlation between the original speaker and re-teller of *to*-marked clauses, as illustrated in Tables 2 and 6.

Now, let us make certain of ‘construction’ which in this case study is considered to motivate the grammaticalization of the complementizer *to* into the evidential marker *to*.

As summarized above, a highly specific syntactic structure of the preceding adverbial clause triggers the elision of CTP in the following clause, grammaticalizing the remaining *to* as an evidential marker. We have regarded this discourse-syntactic structure as being a construction, more precisely, at clause-combining level. Concerning the relation between construction and grammaticalization, Traugott (2003:624) specifies that "...early in grammaticalization, lexemes grammaticalize only in certain highly specifiable morphosyntactic contexts, and under specifiable pragmatic conditions" (cf. Bybee 2003). Whether she indicates such linguistic changes within or beyond clause, our findings obviously can provide a piece of evidence for her claim. Taking a quick survey of grammaticalization works on Japanese, we realize that the majority of works are limited to the morpho-syntactic or semantic-pragmatic expansion of a given form (e.g. papers in Ohori 1998) or the emergence of discourse markers (e.g. Onodera 2004). I am hoping that the constructional grammaticalization of *to* at clause-combining level, as presented in this paper, can create an opportunity to expand the realm of grammaticalization and construction works, synchronically or diachronically, from lexical or clausal level to discourse level.

Finally, I shall reconfirm the force and effect of frequency on language change. The discourse-syntactic structures exemplified above exhibit different rates of language change; one discourse sequence promotes the elision of CTP at a faster rate than the other, but each discourse sequence manifests the elision of CTP at its own rate with respect to frequency. It thus follows that such different motivating factors enable a synchronic picture of the layering of  $\pm$  CTP. In the first edition of their book *Grammaticalization*, Hopper & Traugott (1993:112) argue that "There is an urgent need for additional reliable statistical studies of a variety of phenomena in which early grammaticalization appears to be involved." Whether researchers have paid attention to the indication of frequency or not, a wide range of works based on discourse tokens or frequency have been produced since then, which Hopper & Traugott (2003:126-130) summarize in the second edition of their book. Degrees of language change can only be measured by means of frequency. A synchronic view of language change by frequency can reveal gradual shifts in language use and may give insight into the diachronic evolution or the future development of a given form. And this study casts light on the possibility by the analysis of a synchronic picture of CTP in Japanese.

## Data

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## 日語晤談中的省略與言談句法結構： 親知標記 *to* 的出現

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本文以頻率統計為基礎，探討日語晤談中帶補謂語的省略與言談句法結構情境。日語語法主詞一般不出現；帶補謂語亦然。在晤談之中，帶補謂語的省略率相對較低 (32.1%)；但是有帶 *to* 的副詞子句時，省略率即升高。本文發現，表因果、讓步的副詞子句，與 *to* 同時出現的情形最多；表條件、時間的副詞子句則否。這是因為前者提供了親知的訊息，而後者沒有。此外，當副詞子句含有一個帶 *to* 和言說或思想動詞的包孕句時，其後帶 *to* 子句的省略頻率更高。帶 *to* 子句還大量地與重複語句一起出現，明顯帶有訊息親知和肯定的作用。

關鍵詞：省略，親知標記，頻率，帶補謂語，語法化