

An Essay on the Morphosyntactic Characteristics of *V-te I-* Complex in Japanese*

Katsuo Ichinohe

1. Introduction

Japanese has some verbal sequences that can be schematized as $V_1-te V_2$, including *V-te i-*. *V-te i-* is an aspectual expression that denotes the progressive or perfective aspect. It is obvious that *V-te i-* sequences such as *kowasi-te i-ru* consist of two independent verbs, *kowas-u* 'break' and *i-ru* 'be'.

(1) *kowas-u + i-ru* → *kowasi-te i-ru*

In (1) *-te* is attached to a conjugational form (that is, conjunctive form 'Renyoukei') of the preceding verb *kowas-*, and the complex is followed by *i-*, which is regarded as a copula verb like *be* in English.¹

Although this sequence has been an object of study for a long time, there is little agreement as to its exact syntactic nature. Some researchers (e.g., Miyagawa (1989), Sugioka (1984), Jacobson (1991)) consider the $V_1-te V_2$ sequence to be a lexical unit. On the other hand, as is shown in the following section, there is evidence for the non-lexical status of the sequence *V-te i-*. In addition, some properties signal its subordinate-status: *V-te* cannot occur independently and it is obvious that the verb combined with *-te* carries no tense information. Intuitively, *V-te* does not modify the meaning of *i-*, so it seems to be a complement of *i-* from a semantic point of view. However, a close examination of morphosyntactic characteristics of *V-te i-* complex will reveal that there exist some puzzling situations under the ordinary complement clause analysis.

The organization of this paper is as follows: In section 2, we review the discussion by Lee (1995), which argues for the phrasal status of the sequence *V-te i-*. Section 3 and 4 are devoted to morphosyntactic description of the sequence, and we will observe some puzzling situations. In section 5, I propose a solution to the puzzles. Section 6 includes some concluding remarks.

2. Evidence for the Non-lexical Status of the *V-te I-* Sequence

There is ample evidence to show that the *V-te i-* sequence is not a lexical item. Let us review observations made in Lee (1995) in support of the non-lexical status of the *V-te i-* sequence. She presents six pieces of evidence to show that the *V-te i-* sequence is not a lexical item. The first and second arguments that Lee presents have to do with the Lexical Integrity Hypothesis, which states that no syntactic rule can operate into a lexical item (Bresnan (1982), Di Sciullo and Williams (1987), among others). Thus the *V-te i-* sequence can be interrupted by contrastive and focusing

particles (*toritate-si*), such as *wa*, a topic/contrastive particle, *mo* ‘also’, and *sae* ‘even’. In (2), for example, the contrastive particle *wa* intervenes in the sequence.²

- (2) Ken-ga sono hon-o yom-de wa i-ru.
 Ken-NOM that book-ACC read PART be-PRES
 ‘Ken is reading the book.’

To compare *V-te i-* with lexical compounds makes clear a contrast between them: Contrastive/focusing particles cannot interrupt no lexical compounds. For example, *kaki-tome-* ‘write down’ excludes such interruption, as shown in the following:

- (3) *Ken-ga koogi-o kaki wa tome-ta.
 Ken-NOM lecture-ACC write PART down-PAST
 ‘Ken made notes of a lecture.’

Generally, V-V compounds such as those in (3) are considered to be lexical words (see Kageyama (1993)). Given the Lexical Integrity Hypothesis, if particle insertion is a syntactic operation, the ungrammaticality of (3) follows.

The following example serves as another evidence, which also has to do this hypothesis. Lee claims that deletion applies to *i-* in conjunctions as the following:

- (4) Ken-ga uttat-te, odot-te i-ru.
 Ken-NOM sing dance be-PRES
 ‘Ken is singing and dancing.’ (Intended)

Comparing (4) to its English counterpart, Lee claims that as a result of deletion of *i-* from one of the conjuncts, (4) is derived in the same way as (5), and concludes that each component of *V-te i-* has a status of an independent word.

- (5) Ken is singing and (is) dancing.

Third, Japanese has an honorification form *o-V-ni nar-*. The particle *-ni* is attached to a verb in conjunctive form and turns it into a nominal-like expression to which the politeness prefix *o-* is attached. If *V-te i-* were a single word, *o-ni nar-* honorification would be applicable to the sequence as a whole. As shown in (6), however, this is not the case.

- (6) *Tanaka sensei-ga hon-o o-[yom-de i] ni na-ru.
 Tanaka teacher-NOM book-ACC [read be]-HON-PRES
 ‘Mr. Tanaka is reading.’
 (cf. Sensei-ga hon-o o-yomi ni nat-te iru.)

Compare (6) with lexical compounds like *uke-tor-* ‘receive’.³

- (7) Tanaka sensei-ga tegami-o o-uke-tori ni nat-ta.
 Tanaka teacher-NOM letter-ACC receive-take-HON-PAST
 ‘Mr. Tanaka received a letter.’

Forth, the *V-te i-* sequence as a whole does not participate in any morphological

processes that apply to lexical verbs. For example, the sequence does not undergo so-called Renyookee Nominalization, a process that derives nouns from verbs in conjunctive form (e.g. *nemur-u* > *nemuri*, *uke-to-ru* > *uke-tori*). Thus, it is not possible to form nouns as such *tabete-i*.

Fifth, the *V-te i-* sequence exhibits semantic compositionality or semantic transparency: The entire meaning of the sequence is composed of the meaning of a verb followed by *-te* with the aspectuality of stativity or duration, which *i-* expresses. As has frequently been pointed out, on the other hand, lexical words tend to undergo “semantic drift” to get semantically opaque to various extents. For example, *kai-tatak-* ‘beat down the price of’, which is composed of *kaw-* ‘buy’ and *tatak-* ‘hit’ does not mean the sense expected, that is, ‘to buy and hit something’ or ‘to buy something by hitting’.

The last evidence she gave for the non-lexical status of the sequence in question has to do with a phonetic property of lexical words in Japanese. Shibatani and Kageyama (1988) claim that Japanese lexical words including compounds are necessarily pronounced with one accentual peak. On the other hand, as Lee points out, each of the components of the *V-te i-* sequence (that is, *V(-te)* and *i-*), retains its accentual peak, and the sequence as a whole shows the pitch pattern of a phrase.

- (8) a. $\overline{yomu} + \overline{hazime-ru} \rightarrow \overline{yomi-hazime-ru}$
 b. $\overline{yom-ase-ru}$
 c. $\overline{yomu} + \overline{i-ru} \rightarrow \overline{yom-de\ i-ru}$

From the observations above, Lee concludes that *i-* selects *V-te* as a complement clause and analyzes the structure of the sequence as (9):

- (9) [_S Ken-ga [_S hon-o yom-de] i-ru].

I agree with her that the complex *V-te i-* is not a lexical word in an ordinary sense. It should be noted, however, that Lee’s arguments only show that the sequence as a whole is not a lexical item, but has a phrasal structure, and it is not made explicit what structure the sequence has. I will address this issue in the rest of the paper.

3. Further Scrutiny of *V-te*

3.1. Morphosyntactic Characteristics of *-te*

Let us start by discussing the morpheme *-te*. In the tradition of Japanese grammar, *-te* is named the conjunction particle (*setuzoku-zyosi*), which derived from the perfective auxiliary verb *tu*; it is attached to verbs and adjectives in conjunctive form, thereby casting those elements and their dependents (i.e. arguments and/or adverbials) as part of a complex expression. The resultant combination *V* (or *A*) + *te* has been variously referred to: for example, gerund (Martin (1975)), gerundive (Kuno

(1973)), past participle (Teramura (1984)), or, simply, *te* form. In the following discussion, I sometimes use *te* form to avoid irrelevant connotations that the other names carry and for the sake of convenience.

Of the names given above, the first two is motivated by the fact that the *V-te* constructions can be translated into English with gerundive constructions. With this respect, it should be noted that to call the sequence in question gerund is misleading since in almost all contexts it is not used as a nominal, contrary to the gerund of English. In addition, although *V + -te* exhibits some similarities to the gerund of Indo-European languages, *-te* functions like the English conjunction *and* in some uses, as demonstrated by Hasegawa (1995).

McCawley and Momoi (1986) treat *V-te* as one of the conjugational forms of verbs verb and regard *V-te* as dominated by a single *V*. It does not seem adequate to treat *V-te* as a whole as a conjugational form of verbs, however. A conjugational form is basically a combination of a root, which carries semantic content, and a conjugational ending, which serves as the function to determine the distribution of the conjugational form. As mentioned above, the verbal form with which *-te* is combined is not the root, but the conjunctive form, which in itself is also a conjugational form. In addition, it is hard to specify the function of *-te*: It does not contain particular information about tense or mood. Moreover, *-te* is attached to adjectives as well (e.g., *utukusiku-te* 'beautiful' plus *-te*). Adjectives and verbs belong to a different conjugational system from each other, and there seems to be little motivation to assume a conjugational ending common to verbs and adjectives.

Hasegawa (1995) regards *-te* as a kind of conjunction. The categorial status of conjunction is left unclear, however. Conjunctions are words and morphemes that are used to connect words, phrases, or clauses. Two general classes of conjunctions, coordinating and subordinating, have traditionally been distinguished. The coordinating conjunctions are those that assign equal rank to the conjoined elements (e.g., *and*, *or*, *but* in English). The subordinating conjunctions are those that assign unequal rank to the conjoined elements, marking one of them as subordinate to the other (e.g., *that*, *if*, *because* in English).

It has also been pointed out in the literature, however, that the distinction between coordination and subordination is by no means clear-cut, and that the coordination-subordination dichotomy is inadequate from cross-linguistic points of view (see Haiman and Thompson (1988), Van Valin (1984), and Hasegawa (1995), among others). As demonstrated in Kuno (1973) and Hasegawa (1995), *-te* functions as a subordinating conjunction in some cases, and as a coordinating conjunction in others. Hasegawa (1995:13) examines the following example, arguing that semantically,

sentence (10) appears to be a prototypical example of coordination, though syntactically, it does not seem to be an instance of coordination, because the predicate of the first conjunct is nonfinite and thus cannot occur by itself.

- (10) Maki-wa kinoo Oosaka-e it-te, Hiro-wa asita Oosaka-kara
 Maki-TOP yesterday Osaka-to go Hiro-TOP tomorrow Osaka-from
 kaet-te ku-ru.
 return come-NPST
 ‘Maki went to Osaka yesterday, and Hiro will return from Osaka
 tomorrow.’

On the other hand, (11) seems to be an example of subordination.

- (11) Nomisugi-te atama-ga ita-i.
 drink-too-much head-NOM have-ache-PRES

I agree with Hasegawa that *-te* is a clitic-conjunction (see note 1), and functions as both a coordinating and a subordinating conjunction. However, I want to go further: I assume that in *V-te i-* complex (and other *V-te V* complexes as well), *-te* functions as a kind of complementizer. Following Fukui (1986), I regard (at least some of the) complementizers in Japanese as categorially P (for a similar analysis for English, see Emonds (1985)). Thus I assume the syntactic structure in (12) for *V-te i-* complex, where *i-* takes as a complement PP headed by *-te*, which in turn takes (nonfinite) VP as its own complement.

- (12) [_{VP} [_{PP} [_{VP} V]-te] i-]

The naming of complementizer is on the basis of its function. Complementizers mark a clause as the complement of a verb, noun, or adjective. Conceptually, it will be clear that *V-te* in *V-te i-* complex does complement the meaning of *i-* and makes the sequence as a whole a predicate to subject. Because of this conception, I call *-te* a complementizer, cliticizing to the preceding verb.⁴

Since *-te* originates from an auxiliary verb, a verb must be in conjunctive form when it precedes *-te*. Conjunctive form is a conjugational form, in which a verbal is connected to another verbal element including auxiliaries. The conjugational form of a verb combined with *-te* is a reflection of the categorial status of the original category of *-te*. This is true of the English complementizers *for*, which has to do with the preposition *for* and thus case-marks its object NP in the same way the preposition does.

3.2. Temporal Interpretation of *V-te*

It has been generally assumed that verbs in *te* form depend on the (sentence-final) finite verb (called *ru/ta* form) with respect to time-reference. Consider the following:

- (13) a. Asa oki-te, kigae-te, tyoosyoku-o tot-te, gakkoo-ni ik-u.
 morning wake-up change breakfast-ACC have school-to go-NPST

'I wake up in the morning, change, have breakfast, and go to school.'

- b. Asa oki-te, kigae-te, tyoosyoku-o tot-te, gakkoo-ni it-ta.
 morning wake-up change breakfast-ACC have school-to go-PAST

'I woke up in the morning, changed, had breakfast, and went to school.'

Note that temporal interpretations of the events denoted by the verbs in *te* form are determined in reference to the sentence-final finite verbs (*ik-u* 'go' and *it-ta* 'went'). In (13a), the finite verb is the non-past and the sentence as a whole is given a habitual or future interpretation, and the temporal interpretation of the verbs in *te* form is equated with that of the finite verb. In (13b), the sentence-final verb is the past and the verbs in *te* form are interpreted as denoting a past event as well.

It should be noted that sentence (10) in the preceding section demonstrates that the first conjunct with *-te* can be independent of the sentence-final finite verb with respect to its time-reference.

- (10) Maki-wa kinoo Oosaka-e *it-te*, Hiro-wa asita Oosaka-kara kaet-te ku-ru.

It is obvious that in this case, the temporal adverb *kinoo* 'yesterday' plays a crucial role in determining the temporal interpretation of the *te* form. This observation indicates that time-reference of a verb in *te* form is underspecified and determined either in reference to the sentence-final finite verb or by some elements such as temporal adverbs.

I assume that this temporal underspecification of *V-te* is due to the nature of the conjunctive form. Conjunctive form can sometimes be temporally independent of the sentence-final verb.

- (14) Maki-wa kinoo Oosaka-e *iki*, Hiro-wa asita Oosaka-kara kaet-te ku-ru.

In (14), as opposed to (10), the verb in the first conjunct is in the conjunctive form *iki*, but they have an identical interpretation. Conjunctive form in certain contexts is used as nonfinite whose time-reference is underspecified and thus allows relatively free interpretations.

With these observations in mind, let us turn to the *V-te i-* sequence.

- (15) a. Ken-wa ima amerika-o ryokoo si-te i-ru.
 Ken-TOP now America-ACC travel do be-PRES
 'Ken is traveling through America.'
- b. Ken-wa kyonen amerika-o ryokoo si-te i-ru.
 Ken-TOP last year America-ACC travel do be-PRES
 lit. 'Ken has traveled through America last year.'

The examples in (15) are superficially identical to each other except for the temporal adverbs, but make a clear contrast with respect to their aspectual interpretations: (15a) has a present progressive interpretation, while (15b) presents a perfective

interpretation. This contrast is ascribed to the choice of temporal adverbs. In (15a) *ima* 'now', which refers to a time interval including the speech-time, locates in that interval the event denoted by the *V-te* and its dependents, so the sentence as a whole comes to denote (imperfective) progressive aspect. In (15b) *kyonen* 'last year', linking the event which it modifies to a (definite) past interval, makes the event described by the verb in *te* form perfective and the sentence as a whole perfective aspect. These observations suggest that the patterns of temporal interpretations of the nonfinite verbs in Japanese exemplified in (10) and (14) are of importance to those of *V-te i-* sequences.

4. Reexamination of Syntactic Characteristics of *V-te I-*

In section 2, we reviewed Lee's arguments that the *V-te i-* complex involves complementation. A further consideration, however, reveals that the complex differs both from its counterparts in English and from a prototypical complement clause in Japanese in some respects.

4.1. Problems with Lee's Analysis

Lee analyzes (4) as a result of deletion of *i-*. Her analysis encounters some difficulties. First of all, the expression before deletion is deviant, as shown in (16).

(4) Ken-ga uttat-te, odotte iru.

(16) ??Ken-ga uta-te i-te, odot-te i-ta.

Ken-NOM sing be dance be-PAST

'Ken is singing and dancing.' (Intended)

It is somewhat surprising that non-application of deletion degrades the acceptability to a considerable degree. Hiroaki Konno (p.c.) points out that sentence (16) may be acceptable on the reading in which the events denoted by the first and the second conjunct are discrete in time: Ken was singing at the time when the speaker saw him, and when he/she saw him later, he was dancing. It should be noticed that if his intuition is reliable, the sentence is a counterexample to her analysis because the meaning changes before and after the deletion, contrary to what her analysis predicts.

In addition, Lee assumes that her observations based on *V-te i-* can be generalized to cover all $V_1-te V_2$ complexes. This generalization will predict that similar interpretations of temporal relation between the first and the second conjunct to that observed in (4) is always found in other $V_1-te V_2$ complexes. This prediction is not correct, however. Consider the following:

(17) a. Kaze-o hii-ta node, Ken-wa [kusuri-o nom-de] [ne-te] i-ru.
cold-ACC pull-PAST since Ken-TOP medicine-ACC drink sleep be-PRES
'Catching a cold, Ken took medicine and lies in bed.'

- b. Eri-wa [sono hon-o yom-de] [nai-te] simat-ta.
 Eri-TOP that book-ACC read cry finish-PAST
 'Reading the book, Eri (unexpectedly) had a cry.'

In (17a), the conjuncts in brackets do not denote simultaneous situations, as those in (4). In (17b), the first conjunct *sono hon-o yom-de* 'read the book' does not have the modal connotation of regret/surprise, which the second conjunct *nai-te* and *simat-ta* obviously has (see, Hasegawa (1995) and Martin (1975), among others). Lee's analysis in terms of deletion of V_2 cannot explain these facts.

Example (17b) also casts doubt on the alleged semantic transparency of $V_1-te V_2$ complexes (cf. the discussion in section 2). Under the assumption that phrasal elements are semantically transparent, which seems to be implicit in Lee's argument, it is not obvious how the sequence of *nai-te simaw-* gets such a modal connotation. Similarly, the sequence of *V-te ok-* exemplified in (18) can express the meaning 'doing something in advance so that it will be ready' (cf. Martin (1975)), which cannot be expected from literal meanings of the parts.

- (18) Eri-wa sono hon-o yom-de oi-ta.
 Eri-TOP that book-ACC read put-PAST
 'Eri had read the book (in advance).'

Contrary to Lee's assumption, the fact that $V_1-te V_2$ complexes are phrasal, not lexical, does not entail their meanings are totally transparent.

Only from these observations, should we feel dubious about the plausibility of such a simple analysis as Lee's. As I will show in the following sections, *V-te i-* complex poses more puzzles to us.

4.2. Quasi Integrity

4.2.1. Intervention of Adverbs between *V-te* and *I-*

It is worth emphasizing that emphatic/contrastive particles are the only elements that can intervene *V-te* and *i-*. Consider the following:

- (19) a. Ken-wa *yukkuri* hasit-te i-ru.
 Ken-TOP slowly run be-PRES
 'Ken is running slowly.'
 b. *Ken-wa hasit-te *yukkuri* i-ru.
 Ken-TOP run slowly be-PRES
 lit. 'Ken is slowly running.'

In section 3.1., I assumed that *-te* functions as a complementizer, which selects a nonfinite complement. This assumption entails that *-te* marks a kind of clause boundary. If this is the case, it will not be surprising that adverbials like *yukkuri* in (19b), which is a constituent of the complement, cannot be placed between *-te* and *i-*.

As is well known, in Japanese, it is banned to place elements of a complement clause after the complementizer that introduces it.

- (20) a. Ken-wa [Eri-ni sono koto-o asita osie-ru] to it-ta.
 Ken-TOP Eri-to that fact-ACC tomorrow tell-NPST COMP say-PAST
 'Ken said that he would tell the fact to Eri the next day.'
- b. *Ken-wa [Eri-ni sono koto-o osie-ru] to asita it-ta.
 Ken-TOP Eri-to that fact-ACC tell-NPST COMP tomorrow say-PAST
 lit. 'Ken said the next day that he would tell the fact to Eri.'

The analysis of *-te* as a complementizer immediately gives rise to another problem, however. Since sentential adverbs like *tabun* 'maybe' can be placed between a *to*-complement and the verb selecting it, there seems to be no reason why the adverbs of same kinds do not intervene between *V-te* and *i-*. In fact, with this respect, *V-te* differs from *to*-complements: Intervention of such adverbs between *V-te* and *i-* is also disallowed.

- (21) a. *Tabun* Ken-wa sono koto-o sira-nai to i-u (daroo).
 maybe Ken-TOP the fact-ACC know-NEG COMP say will
 'Maybe, he will say that he does not know the fact.'
- b. Ken-wa sono koto-o sira-nai to *tabun* i-u (daroo).
 Ken-TOP the fact-ACC know-NEG COMP maybe say will
- (22) a. *Tabun* Ken-wa hon-o yom-de i-ru (daroo).
 maybe Ken-TOP book-ACC read be-PRES
 'Maybe Ken will be reading.'
- b. *Ken-wa hon-o yom-de *tabun* i-ru (daroo).
 Ken-TOP book-ACC read maybe be-PRES

In addition, adverbs like *zutto* 'since', which is closely related with the durative/continuous aspect that the *V-te i-* sequence conveys, are also excluded.

- (23) a. Ken-wa *zutto* hon-o yom-de i-ru.
 Ken-TOP since book-ACC read be-PRES
 'Ken has been reading since.'
- b. *Ken-wa hon-o yom-de *zutto* i-ru.
 Ken-TOP book-ACC read since be-PRES
 lit. 'Ken has since been reading.'

These observations lead us to the conclusion that adverbials are not permitted to intervene between *V-te* and *i-*, contrary to emphatic particles.

As is well known, nonfinite complement clauses in English allow adverbials to intervene between them and the higher verbs selecting them.

- (24) a. Ken had really delighted his audience.

- b. Ken is constantly practicing tennis.
- c. Ken began slowly to take his boot off.

This fact suggests that *V-te i-* complex does not bear rough comparison to nonfinite complement clauses in English as well.

4.2.2. *VP Preposing and VP Deletion*

English has operations that apply to constituents composed of a verb and its dependent(s): so-called VP preposing and VP deletion. As is well known, progressive and perfective sentences in English can undergo these operations. In the following examples, the present and past participles and their dependents can be preposed and deleted.

- (25) a. Ken said that he would read that book, and [_{VP} reading it] he was.
- b. Ken said that he would read that book, and [_{VP} read it] he has.
- (26) a. Ken was [_{VP} reading the book], and Eri was [_{VP} e], too.
- b. Ken had [_{VP} read the book], and Eri had [_{VP} e], too.

Each of the bracketed sequences in these examples is considered to be forming a constituent, that is VP. If the *V-te i-* complex had the same structure as that of its English counterparts, VP preposing and VP deletion should be applicable to the complex. In fact, however, the sequence in question cannot be preposed nor deleted, leaving *i-*.

- (27) a. *[Sono hon-o yom-de] Ken-wa i-ru.
that book-ACC read Ken-TOP be-PRES
lit. 'Reading the book, Ken is.'
- b. *Ken-wa [sono hon-o yom-de] i-ta. Eri-mo i-ta.
Ken-TOP that book-ACC read be-PAST Eri-also be-PAST
lit. 'Ken is reading the book, and Eri is too.'

Taking into consideration the observations made in the previous section, we will notice that *V-te* and *i-* must be adjacent to each other. This fact makes a sharp contrast with a prototypical complement as introduced by complementizer *to*: They can be preposed and separated from the verb.

- (28) a. Ken-ga [Eri-ga sono hon-o nusum-da] to it-ta.
Ken-NOM Eri-NOM that book-ACC steal- PAST COMP say- PAST
'Ken said that Eri stole the book.'
- b. [Eri-ga sono hon-o nusum-da] to Ken-wa it-ta.
Eri-NOM that book-ACC steal- PAST COMP Ken-TOP say- PAST
'That Eri stole the book, Ken said.'

These observations lead us to the conclusion that *V-te i-* complex should be given rather different syntactic descriptions both from its English counterparts and *to*

complements in Japanese.

4.2.3. *Monoclausality*

The negative polarity item *sika* ‘only’ requires a negative element such as *na-* within a certain local domain. Generally, the relevant domain is assumed to be a clause.⁵

- (29) a. Ken-wa sono hon sika yoma-nakat-ta.
Ken-TOP that book only read-NEG-PAST
‘Ken read only the book.’
- b. Eri-wa [Ken-ga sono hon sika yoma-nakat-ta] to it-ta.
Eri-TOP Ken-NOM that book only read-NEG-PAST COMP say- PAST
‘Eri said that Ken read only the book.’
- c. *Eri-wa [Ken-ga sono hon sika yom-da] to iwa-nakat-ta.
Eri-TOP Ken-NOM that book only read-PAST COMP say-NEG-PAST
lit. ‘Eri did not say that Ken read only the book.’

In (29a,b), *sika* and *nai* are clause-mates; in (29c) *sika* is in the embedded clause but *nai* occurs in the main clause; thus unacceptability.

Comparison of this fact with the acceptability of the following examples shows us that the *V-te i-* sequence contains no clause boundary in an ordinary sense.

- (30) a. Ken-wa sono hon sika yom-de i-na-i.
Ken-TOP that book only read-te be-NEG-PRES
‘Ken has read only the book.’
- b. Ken-wa sono koto-o Eri-ni sika osie-te i-na-i.
Ken-TOP that fact-ACC Eri-to only tell be-NEG-PRES
‘Ken has told the fact only to Eri.’

Intuitively, it is obvious that even though the *V-te i-* complex contains two lexical verbs, they do not denote separate situations; rather, *V-te i-* sequences describe only one event or situation. This suggests that *V-te* and *i-* form a single complex predicate to describe one situation. In this connection, consider the following:

- (31) *Ken-wa ki-te i-nai ga, kare-wa ki-ta.
Ken-TOP come be-NEG-PRES but he-TOP come-PAST
lit. ‘Ken has not come, but he came.’

Note that when *i-* is negated, the event to be described by the complement *V-te* is also negated.

Supporting evidence for this idea comes from the discussion of *have*-causative and *make*-causative sentences by Ritter and Rosen (1993). They observed that even when *make* is negated and thus the causing event has not taken place, as in (32a), the caused event *writing* may still occur without coercion. The same is not true for *have*. This

is indicated by the (im)possibility to add the *but*-clause, indicating whether the *writing* took place or not. Consider the contrast in (32).

- (32) a. The teacher didn't make Bill write the article, but he didn't it anyway.
 b. *The teacher didn't have Bill write the article, but he didn't it anyway.

(Ritter and Rosen (1993: 529))

They ascribe this contrast to the difference in the number of the event described between the two kinds of causative: *Make*-causative sentences denote two events, that is, the causing event denoted by *make* and the event by its complement, while *have*-causative sentences denote only one event. That is, they argue that *have* and its complement verb form a complex predicate. If their approach is on the right track, the contrast shown in (32) will lend a support to my argument.

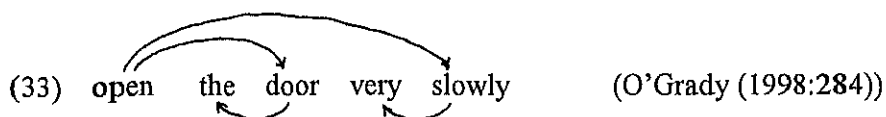
To summarize, we obtain the descriptive generalizations as follows: *V-te i-* excludes intervention by almost all elements except emphatic particles; *V-te* cannot be separated from *i-*; the sequence in question forms a single predicate. These observations suggest that the sequence of *V-te i-* has a considerable degree of integrity, which seems to be somewhat puzzling under a complex clause analysis in an ordinary sense.

5. A Proposal

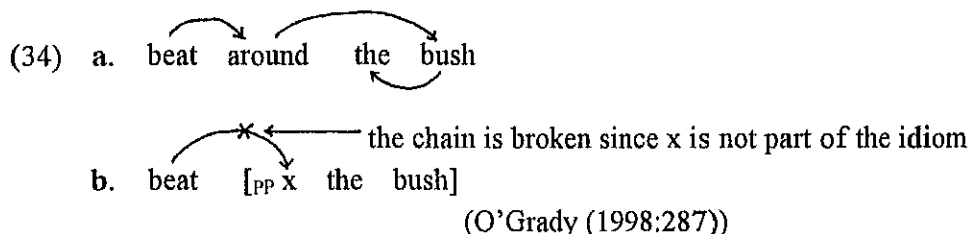
In the following, I will put forward a tentative proposal to figure out some puzzles which we observed in the previous section. My proposal is basically based on the work on the syntactic nature of idioms by O'Grady (1998), but adopts some ideas about metaphors. I assume that $V_1\text{-}te\ V_2$ complexes including *V-te i-* are highly transparent idioms, and that skeletons of those complexes are specified and listed in the lexicon. Although the proposal presented here is somewhat speculative and requires further scrutiny, I will show below that the approach offer a solution of the puzzles.

5.1. *V-te I- Complex as an Idiom*

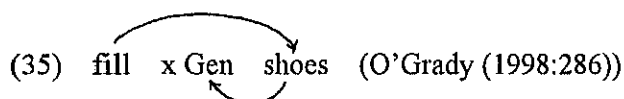
Let us start by reviewing O'Grady (1998). O'Grady claims that idioms are subject to the grammatical constraint that defines syntactic structures in general. The idea here is that idioms are dependency/licensing relations between the components of them, which are stored in the lexicon. Extending the idea of Baltin (1989), he defines licensing as a head-to-head relation: A head licenses its dependents via head-to-head relation. Thus, in the verb phrase *open the door very slowly*, the verb *open* licenses the head of the object NP *door* and the head of the modifier phrase, the manner adverb *slowly*. These elements in turn license dependents of their own, that is, the determiner and the degree word.



Furthermore, O'Grady argues that the nature of idioms is determined by the chain of head-to-head dependency relations between their components, which is listed in their lexical entries with particular words specified. To take an example, *beat around the bush* has the dependency relations of heads as shown in (34a).



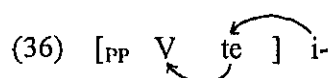
Note that in (34a) the dependency relation forms a chain. O'Grady argues that this dependency chain of heads must not be broken. On the other hand, in (34b) the chain is broken and thus the form is illicit: The head of the idiom *beat* does not license the head of its dependent. Let us take one more example.



In (35), Gen stands for an abstract genitive marker which heads possessor dependents, and x is an open position and thus the substitution of lexical items is possible.⁶ Note, however, that the relevant portion of the dependency chain is completed, thus this idiom is grammatical.

It should be noted here that O'Grady's treatment of idioms as lexical entries does not entail that idioms are lexical words in an ordinary sense. Accepting the thesis of Nunberg et al. (1994), he considers that components of idioms are syntactically independent words, they can undergo syntactic operations like movement, and the meanings of many idioms can be compositional by nature.⁷

Now, we turn to the analysis of the *V-te i-* complex. I assume that *V₁-te V₂* complexes including *V-te i-* are highly transparent idioms and that a chain of head-to-head dependency relations shown in (36) is listed in the lexical entries for them.



In the section 3.1, I assumed that *i-* selects the complex *V-te* as a complement phrase, and *-te*, which is categorially a postposition P, functions as the complementizer. This means that it is a head of the dependent; thus a dependency relation holds between *i-*

and *-te*.

So far, so good. At this point, however, some extension is in order. The position of V is open and various kinds of verbs (except state verbs) can fill the position. Therefore, under the definition of O'Grady, there is no dependency relation established between *-te* and V (cf. (35)). I assume that dependency relation does exist. As pointed out in section 3.1, *-te* is considered to be a clitic.⁸ In virtue of this morphological status, the lexical entry for *-te* contains the information as to the morphosyntactic context in which it occurs, that is, it selects and must be attached to the preceding verb in conjunctive form. The point is that this specification with respect to the conjugational form of verbs can be regarded as the dependency relation in a broader sense. Because of this specification, I postulate some weak dependency relation between *-te* and V.

Furthermore, I assume that in addition to the dependency relations between the components, the lexical entries for V_1 -*te* V_2 complexes contain specifications about some event unification process like argument structure merger proposed by Rosen (1989). Roughly speaking, the argument structure of *i-* and that of the V are unified into a complex argument structure. I assume this process is responsible for the monoclausality of the complex as seen in 4.2.3.

It should be emphasized here that the present analysis does not entail particular V_1 -*te* V_2 sequences are lexical words fixed in the lexicon; rather I assume that the pieces of information stored in the lexical entries for the complexes serve as templates for particular V_1 -*te* V_2 sequences.

At this point, one might have deep doubts about the plausibility of the present approach: As mentioned in section 2, the meaning of the *V-te i-* complex is believed to be transparent, whereas one of the characteristics of idioms is their semantic opaqueness or non-compositionality. Considering other V_1 -*te* V_2 complexes, however, will show that the approach is on the right track. Recall that with respect to some examples of V_1 -*te* V_2 complexes such as (17b) and (18), it is hard to compose the exact meanings of the literal meanings of their components. Thus, *ok-* 'put' as a main verb denotes the action of the placement of something, but *V-te ok-* complex conveys the meaning of "preparation" in many cases. In addition, *V-te ik-* 'go' or *V-te k-* 'come' are also used to express various ranges of metaphorical meanings, which cannot be calculated from the literal meanings of their parts. (For a detailed discussion, see Hasegawa (1995).) These observations lead us to the assumption that V_1 -*te* V_2 complexes involve "metaphorical extension" in the sense of Cognitive Semantics.

The *V-te i-* complex is also metaphorical. Note that the verb in this complex lacks the original sense of the existence of some animate entity; instead, it denotes the

existence of “some situation or event”. The situation or event described by *V-te* is located at some place of the temporal domain in the same way that some animate entity is located at some place in the spatial domain.

The view of $V_1-te V_2$ complexes as a kind of idiom (or “construction” in the sense of Construction Grammar) has some merits. First, we can encode unexpected meanings/uses in their lexical entries in addition to their morphosyntactic specifications.

In addition, the integrity of *V-te i-* complexes seems to be ascribed to the idiomaticity (or a constructional nature) of them. I assume that *V-te i-* complex (and also $V_1-te V_2$) is well-formed only under the contexts specified in their lexical entries. What is the cause of this inflexibility? I claim that the answer to the question lies in semantic dependencies between *V-te* and *i-*. First, the metaphorical meaning of *i-* seems to be responsible for the inapplicability of deletion to *V-te*. Let us introduce the discussion by Fillmore (1986) about the omissibility of complements of polysemous verbs. Fillmore points out the following contrast.

- (37) a. She arrived (at the summit).
 b. She arrived *(at the answer).

The complement phrase of *arrive* in (37a) can be omitted under appropriate contexts, whereas the complement in (37b) cannot. As discussed in Nogawa (1994), there is a close relation between metaphor and the omissibility of the complements. Note that the meaning of *arrive* in *arrive at the summit* is literal meaning of the verb, while its meaning in *arrive at the answer* is metaphorical. In the latter the complement *the answer* is a clue to the metaphorical extension of *arrive*, and thus the metaphorical meaning of *arrive* is not gained without it. The same is true of the relation between *V-te* and *i-*. The presence of the former is the clue to the metaphorical extension of the latter.

In addition, *V-te* is also a dependent element. *V-te* lacks specific tense/aspectual information and thus cannot express progressive or perfective aspectual meanings by itself. The lack of specific temporal information seems to be the other side of the coin of its flexibility to occur in various contexts including $V_1-te V_2$ complexes. Furthermore, the choice of V_2 can affect the valency of V_1 . Consider the following:

- (38) a. Ken-ga tukue-no ue-ni hon-o oi-ta.
 Ken-NOM desk-on up-at book-ACC put-PAST
 ‘Ken put on a book on the desk.’
 b. Tukue-no ue-ni (*Ken-niyotte) hon-ga oi-te ar-u.
 desk-on up-at Ken-by book-NOM put-te be-PAST
 ‘A book has been put on the desk.’

Note that *Ken*, the agent of *ok-* 'put', cannot occur in the *V-te ar-* sentence in (38b). Among other V_2 candidates, *k-* 'come', *ik-* 'go', *age-ikure-* 'give', *ok-* 'put', *mora-* 'receive, get' affect the valence of the V_1 . This fact seems to indicate the lack of independently identifiable meanings in *V-te* of the $V_1-te V_2$ complexes. It will not make sense to emphasize parts of the *V-te i-* complex through VP preposing if these parts have no identifiable meaning.

The contrary seems to be true of present and past participles in English: They are assigned particular meanings, though somewhat abstracted. Cowper (1995) argues that the present participle expresses simultaneity and the past participle expresses anteriority because of the lexical properties of the morphemes *-ing* and *-en* (cf. also Kageyama (1996), Parsons (1990)). The contrast in the preposability and deletability between *V-te* and present and past participles in English, as shown in (25) and (27b), will be explained in terms of the differences in their semantic dependency.

Finally, I stipulate that emphatic particles are permitted to intervene between *V-te* and *i-* because they do not break the dependency relation syntactically. I assume that by virtue of their suffixal nature, they are not projected onto the syntax, in spite of their morphophonological presence.

5.2. Comparison to Another Alternative

Before closing this paper, I would like to attempt a comparison of my approach with some purely syntactic approach. It seems that we can ascribe the integrity of the *V-te i-* complex to some syntactic clause unification process such as 'restructuring'. Restructuring, in general, is considered to be a process to unify a verb and its (auxiliary-like) governing verb. An idea that has often been proposed is that restructuring involves incorporation of the lower verb into the higher verb (cf. Manzini (1983), Baker (1988) among others). This mechanism has the effect to create a complex predicate denoting a single event linked with a single tense (or INFL in the generative syntax term). The formation of a single complex verb entails the effect of clause unification.

Choe (1988) discusses Korean counterpart to the *V-te i-* complex and argues that restructuring is involved in the complex. According to his claim, restructuring requires adjacency and the fact that *V-te* and *i-* cannot be separated would seem to be accounted for. However, we cannot maintain a simple V-to-V incorporation analysis. Restructuring cannot be extended to the *V-te i-* complex: If *-te* functions as a complementizer and projects onto the syntax as an independent category, then raising the embedded verb (that is, V in conjunctive form) directly to *i-* is prohibited by Head Movement Constraint (Travis (1984)), and restructuring through incorporation fails. Incorporation of *V-te* as a whole is also banned, because head movement applies only

to lexical categories.⁹ If *-te* functions as a complementizer, and has a syntactic projection of its own, then *V-te* cannot be qualified as a lexical category. Furthermore, it is generally assumed that application of restructuring is optional. In face of the facts we saw in section 4, however, we have to assume that its application is obligatory in the case of $V_1-te V_2$.

There remains a doubt as to the motivation of restructuring. If the process is to unify two verbs into a complex verb, which is to be linked with a single tense, the process might well apply to progressive and perfective sentences in English. It is unlikely that *be* and a present participle refer to independent events. The observations in 4.2.1 and 4.2.2, however, show us that present and past participles in English do not undergo restructuring with *be* or *have*, respectively.

6. Concluding Remarks

In this paper, we discussed the morphosyntactic characteristics of the *V-te i-* and observed certain confusing properties: On the one hand, the sequence as a whole is not a lexical word but a phrasal category, and on the other, it has the syntactic tightness to resist the syntactic processes that broke apart *V-te* from *i-*.

In order to solve the puzzles, I proposed, adopting the idea of O'Grady (1998), a new approach to the $V_1-te V_2$ complexes including *V-te i-*. In particular, I assumed that the skeleton of *V-te i-* complex (that is, a chain of dependency relations,) is listed in the lexical entry, and that it serves as a template for particular sequences. This conception, combined with the semantic dependency between *V-te* and *i-*, provided the answer to many questions.

In setting out my proposal, I borrow some ideas, implicitly and explicitly, from different linguistic frameworks: lexicalism (that is, to attach greater importance to the information listed in the lexicon,) from Lexical Functional Grammar and Head-Driven Phrase Structure Grammar; the importance of metaphor in explaining semantics in natural languages from Cognitive Semantics; the conception of constructions as the basic units of a language from Construction Grammar. I hope that the argument presented in this paper is more than a medley of various thoughts.

NOTES

* I am very grateful to Keigo Yamada, Koichi Nishida, Hiromitsu Akashi, Shoichi Yamada, Hiroaki Konno, and Joe Morita for reading earlier versions of this paper and making a number of helpful suggestions. Without their help and patience, this paper would not be completed. All remaining errors and inadequacies are of course my own.

¹ Notice that *-te* participates in assimilatory morphophonemic processes that respond to the final

consonant of a consonant-final verb stem. For example, *omow-* ‘think’ + *-te* > *omotte*, *kaer-* ‘go home’ + *-te* > *kaette*, *tat-* ‘stand up’ + *-te* > *tatte*, and *ok-* ‘put’ + *-te* > *oite*. When the verb stem ends in a voiced obstruent, *-te* is voiced, e.g. *tob-* ‘fly’ + *-te* > *tomde*, and *oyog-* ‘swim’ + *-te* > *oyoide*. These forms are, in their classical forms, *omoite*, *kaerite*, *tatite*, *okite*, *tobite*, *oyogite*, respectively. This property suggests the clitic-like status of *-te*. It should be noteworthy that the same assimilation happens with the past-tense/perfective suffix *-ta*. As expected from this morphophonemic parallelism, *-te* is morphologically related to *-ta*: *-ta* is derived from a complex form of *-te ar-i* (the classical form of *ar-u* ‘be’), via the intermediate stage *tari*.

² In providing glosses for Japanese data, the following abbreviatory symbols will be used. ACC = accusative particles COMP = complementizer, HON = honorific marker, NEG = negative morpheme, NOM = nominative particle, NPST = non-past tense, PART = emphatic particle, PAST = past tense, PRES = present tense, TOP = topic marker.

³ Kageyama (1993) makes a close examination of complex predicates in Japanese, and draws the same conclusion as Lee's. The tests he uses in the examination also include honorification test and emphatic particles test. Sometimes, these tests show incompatible results with each other. In particular, some aspectual compounds like *yomi-hajime-* ‘begin to read’ excludes intervention of emphatic particles (**yomi-wa-hajime-* ‘begin PART to read’), but two honorification patterns (*o yomi-ni nari hjime-* and *o yomi-hajime-ni nar-*) are acceptable. See also the discussion about Renyookee Nominalization. These facts seem to cast doubt on a clear distinction between words and phrases, or morphological component and syntactic component, which many researchers including Kageyama have pointed out.

⁴ Noonan (1985:47), citing data from Lukas (1977), points out the case of Kanuai, an East Saharan language. In Kauai, clitics otherwise functioning as accusative and dative case markers may be affixed onto finite verbs and function as complementizers.

⁵ Some informants judge as acceptable example (ia), where *sika* has no licenser in the embedded clause marked by *yooni* (cf. Nakau 1973).

- (i) a. Ken-wa [sono hon *sika* yomu] yooni iwa-*nakat*-ta.
 Ken-TOP that book only read COMP tell-NEG-PAST
 lit. ‘Ken did not tell to read only the book.’
- b. Ken-wa [sono hon *sika* yoma-*nai*] yooni it-ta.
 Ken-TOP that book only read-NEG COMP tell-PAST
 lit. ‘Ken did not tell to read only the book.’

If their intuitions are reliable, the assumption that *sika* requires a negative morpheme within the clause where it occurs will be undermined.

⁶ Following Fukui (1986) and others, O’Grady takes possessor dependents to be headed by an abstract genitive marker that may be realized in different ways.

⁷ Some of the examples of syntactic processes that break apart idioms are shown in the following:

- (i) a. Raising
 All hell seemed to break loose. (O’Grady 1998:288)

b. Passivisation

That bridge will be crossed when we come it. (Williams 1994:131)

c. Topicalization

Those strings, he wouldn't pull for you. (Nunberg et al. 1994:501)

Idioms resist these processes to varying degrees, and as far as I know, no grammatical account has been given to these phenomena.

⁸ My analysis of *-te* as a postposition cliticizing to the preceding verb is along the line of Marantz (1989). He argues that in explaining the distribution and behavior of clitics, it is necessary to appreciate their dual nature. That is, as syntactic constituents, clitics are mapped by projection to bear certain surface relations: they are positioned as if they were phonologically independent constituents. However, as suffixes, clitics have left- or right-morphological subcategorization frames, demanding to be attached to the left or right of a stem.

⁹ Some researchers in the framework of early generative syntax take this approach. For example, Nakau (1973) argues for the existence of a rule of Complement Predicate Raising, and with respect to some V_1 -*te* V_2 complexes, he does propose that V_1 -*te* raises into V_2 to derive the surface order.

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Doctoral Program in Literature and Linguistics
University of Tsukuba