0. Introduction

Restructuring phenomena have been viewed as resulting from a rule that changes a bi-clausal structure to a mono-clausal structure. The rule is often triggered by a particular group of verbs such as motion verbs. Restructuring has been claimed to exist in various languages including Japanese. In Japanese, for instance, Miyagawa (1986) and Matsumoto (1991) show that purpose clauses and gerundive clauses as in (1-2) can create Restructuring environments.¹

¹Although both Miyagawa (1986) and Matsumoto (1991) discuss Restructuring phenomena in Japanese, Miyagawa adopts a transformational approach while Matsumoto supports a lexical analysis.
In both constructions the matrix verbs are typically motion verbs. In (1) -NI is a purpose morpheme suffixed to a verbal stem, and -TE in (2) is the gerundive suffix that takes a verbal root. Restructuring phenomena in purpose clauses and gerundive clauses are observed with negative polarity binding and the Nominative Case assignment on the object associated with the potential morpheme (rar)e. Negative polarity items like sika must be bound by negation within the same clause in order to be interpreted as 'only'. This is shown in (3-4).

When sika is not bound clause-internally as in (4), the sentence is ungrammatical. Given the condition that negative polarity items must be bound clause-internally, we would expect that the purpose clause and gerundive clause in (5-6) would be ill-formed if we analyze them as bi-clausal.

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2 Matrix verbs in gerundive clauses also include giving/receiving verbs such as ageru 'give' and morau 'receive', but in this paper I will restrict the discussion to the gerundive clauses with motion verbs as their matrix verbs.

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(1) Taroo-ga hon-o kai-NI itta.
   -Nom book-Ace buy-purpose went
   'Taro went to buy books.'

(2) Taroo-ga hon-o kat-TE kita.
   -Nom book-Ace buy-gerund came
   'Taro (came back, having) bought books.'

In both constructions the matrix verbs are typically motion verbs. In (1) -NI is a purpose morpheme suffixed to a verbal stem, and -TE in (2) is the gerundive suffix that takes a verbal root.

Restructuring phenomena in purpose clauses and gerundive clauses are observed with negative polarity binding and the Nominative Case assignment on the object associated with the potential morpheme (rar)e. Negative polarity items like sika must be bound by negation within the same clause in order to be interpreted as 'only'. This is shown in (3-4).

(3) Taroo-ga sakana-sika tabe-nai.
   -Nom fish-SIKA eat-NEG
   'Taro eats only fish.'

(4) *Hanako-ga [Taroo-ga sakana-sika tabe-ru]-
   -Nom fish-SIKA eat-nonpast-
   to iw-ana-katta.
   COMP say-NEG-past
   'Hanako said that Taro eats only fish.'

When sika is not bound clause-internally as in (4), the sentence is ungrammatical. Given the condition that negative polarity items must be bound clause-internally, we would expect that the purpose clause and gerundive clause in (5-6) would be ill-formed if we analyze them as bi-clausal.

Consequently, it can be concluded that the grammaticality of these sentences suggests the monoclusal status of the constructions.

Miyagawa and Matsumoto demonstrate the same point in regard to the Nominative Case assignment involved in the potential morpheme (rar)e. When the potential morpheme (rar)e is suffixed to a verb, the direct object of the verb can either be marked with Nominative Case -ga or Accusative Case -o. However, the Nominative Case is assigned to the direct object only when the complex of the verb and the potential morpheme is clausemate with the direct object. This is shown in (7-10).

(5) Taroo-ga Kanda-ni [hon-sika kai-NI] 1k-
   -Nom -to book-SIKA buy-purpose go-
   ana-katta.
   NEG-past
   'Taro went to Kanda to buy only books.'

(6) Taroo-ga [nihon-no eiga-sika mi-TE] ko-
   -Nom Japan-Gen movie-SIKA see-gerund come-
   na-katta.
   NEG-past
   'Taro (came back, having) seen only a Japanese
   movie.'

Consequently, it can be concluded that the grammaticality of these sentences suggests the monoclusal status of the constructions.

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(7) Taroo-ga tyuukaryoori-o umaku tukuru.
   -Nom Chinese food-Ace well make
   'Taro cooks Chinese food well.'

(8) Taroo-ga tyuukaryoori-o/ga umaku tukur-
   -Nom Chinese food-Ace/Nom well make-
   -ru.
   potential-nonpast
   'Taro can cook Chinese food well.'

(9) *Tanakasan-ni [PRO tyuukaryoori-o asita
   Mr. Tanaka-Oat Chinese food-Nom tomorrow
   tukuru ka] kik-~-masu
   make Q ask-potential-nonpast Q
   'Can you ask Mr. Tanaka if he will cook Chinese
   food tomorrow?'

(10) *Tanakasan-ni [PRO tyuukaryoori-ga asita
   Mr. Tanaka-Dat Chinese food-Nom tomorrow
'Can you ask Mr. Tanaka if he will cook Chinese food tomorrow?'

In (10) the Nominative Case and the potential morpheme are not within the same clause, which leads to the ungrammaticality. Given the clausemate condition on the Nominative Case assignment, it would be predicted that the purpose clause and gerundive clause in (11-12) are ill-formed since the condition is violated.

(11) Tanakasan-no musuko-wa hitoride [eiga-Mr. Tanaka-Gen son-Top alone movie o/ga mi-NI] ik-e-masu.
    Acc/Nom see-purpose go-potential-nonpast 'Mr. Tanaka’s son can go see a movie alone.'

(12) Tanakasan-no musuko-wa hitoride [eiga-Mr. Tanaka-Gen son-top alone movie-o/ga mi-TE] ko-re-ru no?
    Acc/Nom see-gerund come-potential-nonpast Q 'Can Mr. Tanaka’s son go see a movie alone (and come back)?'

Contrary to the prediction, the sentences in (11) and (12) are grammatical. This suggests that they are mono-clausal.

In this paper I shall show that despite the similarities we have observed above in Restructuring environments between purpose clauses and gerundive clauses, they demonstrate quite different behavior in selection of adjuncts. I will claim that the difference results from the distribution of event argument. I will further show that the they are different in their syntactic behavior, and claim that the difference can be attributed to argument/non-argument status of the two clause types.

1. Adjunct Selection

While we have observed that purpose clauses and gerundive clauses exhibit similar behavior with respect to Restructuring phenomena, there is a striking difference between these two clause types in their ways of selecting adjuncts. The generalization to be captured is that sentences with purpose clauses can select only the adjuncts that modify the matrix verb, while those with gerundive clauses allow only the adjuncts modifying the embedded verb. We shall look at the validity of this generalization with respect to (i) locative/directional adjuncts, (ii) comitative adjuncts, (iii) instrumental adjuncts, and (iv) depictive predicates.

First, in a sentence with a purpose clause, a locative/directional phrase can modify the matrix verb, but it cannot modify the embedded verb. Consider (13).

    purpose go-NEG-past 'Taro went to the library to borrow only comic books.'

b. *Taro-ga tosyokan-de manga-sika
   Nom library-at comic book-SIKA kari-ni ik-ana-katta.
   borrow-purpose go-NEG-past 'Taro went to borrow only comic books at the library.'

Both sentences in (13) are Restructured sentences, as indicated by the sika...nai construction, which was considered as triggering a Restructuring environment. The directional phrase in (13a) tosyokan-e 'to the library' modifies the matrix verb, while the locative phrase in (13b) tosyokan-de 'at the library' is intended to modify the embedded verb. As the ungrammatical status of (13b) suggests, locative/directional adjuncts are licensed only by
the matrix verb in a sentence with a purpose clause. The situation is opposite in sentences with gerundive clauses. With gerundive clauses, locative/directional phrases can modify the embedded verb but not the matrix verb. This is illustrated by (14).

(14) a. Taroo-ga tosyokan-de manga-sika kari-te ko-na-katta.
    Nom library-at comic book-SIKA borrow-gerund come-NEG-past
'Taro came back, having borrowed only comic books at the library.'

    Nom library-from comic book-SIKA borrow-gerund come-NEG-past
'Taro came back from the library, having borrowed only comic books.'

The polarity binding construction with sika...nai suggests that the sentences in (14) are in the Restructuring environment. In (14a) the locative phrase tosyokan-de 'at the library' modifies the embedded verb, and the sentence is grammatical. By contrast, the directional phrase in (14b), tosyokan-kara 'from the library' is intended to modify the matrix verb, rather than the embedded verb, but the sentence is ill-formed. Hence, with gerundive clauses, locative/directional adjuncts are licensed only by the embedded verb.

Second, the selection of comitative phrases points toward the same generalization. (15) and (16) contain a purpose clause and a gerundive clause, respectively, and each has a comitative phrase.

(15) Taroo-ga (Tokyo-to) hon-sika Hanako-to kai-ni ik-ana-katta.
    Nom (Tokyo-to) book-SIKA -with buy-purpose go-NEG-past
'Taro went (to Tokyo) to buy only books with Hanako.'

The comitative phrase in (15), Hanako-to 'with Hanako', is interpreted as "go and buy books with Hanako", but is never construed as "Taro went to Tokyo alone and bought books with Hanako (after meeting with her somewhere, for example)." The comitative phrase, then, must have its scope over the event of going. The comitative phrase in (16), on the other hand, is interpreted such that Taro ate sushi with Hanako, but crucially it cannot be construed as Taro came back with Hanako. That is, in (16) the comitative phrase modifies only the embedded VP. Hence, comitative adjuncts are licensed by the matrix verb in a sentence with a purpose clause while they are licensed by the embedded verb in a sentence with a gerundive clause.

Third, the same generalization holds for the interpretation of instrumental adjuncts as well. Consider the sentence with a purpose clause in (17) and the sentence with a gerundive clause in (18).

(17) Taroo-ga Hanako-no megane-sika zitensya-de kowasi-ni ik-ana-katta.
    Nom Hanako's glasses-SIKA bicycle-with break-purpose go-NEG-past
'Taro went to break only Hanako's glasses (??)with a bicycle/by bicycle.'

(18) Taroo-ga Hanako-no megane-sika zitensya-de kowasi-te ko-na-katta.
    Nom Hanako's glasses-SIKA bicycle-with break-gerund come-NEG-past
'Taro (came back, having) broken Hanako's glasses with a bicycle.'

'Taro (came back by bicycle, having) broken Hanako's glasses.'
The instrumental phrase *zitensya-de* 'by bicycle' in (17) is interpreted as modifying the matrix verb, whereby a bicycle is used as a transportational device. In (18), by contrast, the instrumental adjunct can only modify the embedded verb, so that the bicycle is interpreted as being an instrument used to break Hanako’s glasses rather than as a transportational device. Again, we can observe that with a purpose clause, an instrumental adjunct is licensed by the matrix verb, while with a gerundive clause, it is licensed by the embedded verb.

Finally, the selection of secondary depictive predicates in Restructuring environments is consistent with the generalization under discussion. Contrast (19) and (20).

   Neg-past 'Taro went naked to hit only Ziro.'

(20) Taroo-ga Ziroo-sika hadakade nagut-te ko-niga-katta.
   Neg-past 'Taro (came back, having) hit Ziro naked.'

In the sentences with a purpose clause in (19), the secondary depictive predicate *hadakade* 'naked' can relate only to the matrix verb: that is, the person who is naked in (19) is Taro, rather than Ziro. In the sentence with a gerundive clause in (20), on the other hand, the depictive phrase can only modify the embedded object, namely, Ziro. So, the person who was naked is Ziro rather than Taro in (20). This suggests that object-oriented depictives can cooccur with gerundive clauses but not with purpose clauses.

To summarize so far, we have observed an interesting contrast between the two Restructuring environments, purpose clauses and gerundive clauses. The data from locative/directional, comitative, and instrumental adjuncts all demonstrate that these adjuncts can relate only to the matrix verb with purpose clauses while they can relate only to the embedded verb with gerundive clauses. Furthermore, purpose clauses and gerundive clauses are different in that purpose clauses disallow object-oriented depictive predicates while gerundive clauses allow them.

2. Event Argument

Given these observations about adjunct selection, I will claim that the different behavior manifested between purpose clauses and gerundive clauses has to do with the temporal properties associated with the two clauses, which ultimately lead to the difference in the distribution of event argument.

Recall, first, that object-oriented depictive predicates can appear in gerundive clauses but not in purpose clauses. This was shown in (19-20). The secondary depictive predicate *hadakade* 'naked' can only take the subject, Taro, as its antecedent in (19), while the object is the antecedent of the depictive in (20). Upon closer examination, furthermore, this contrast shows up even when the sentences do not contain anything that forces Restructuring, such as the presence of the negative polarity item like the *sika...nai* sequence. This is shown in (21-22).

(21) Taroo-ga Ziroo-o hadakade naguri-ni itta.
   -Nom -Acc naked hit-purpose went
   'Taro went to hit Ziro naked.'

(22) Taroo-ga Ziroo-o hadakade nagut-te kita.
   -Nom -Acc naked hit-gerund came
   'Taro (came back, after having) hit Ziro naked.'

In (21) the depictive *hadakade* 'naked' is predicated of the subject, Taro, and can never be interpreted with the object, Ziro. The interpretation in which the object Ziro is the antecedent of the depictive is
available in (22). Hence, even in the absence of any factors that generate Restructuring as in (21-22), an object-oriented depictive is still not possible in purpose clauses while it is allowed in gerundive clauses. This indicates that a potential difference between the two structures to which this contrast can be attributed is an inherent difference between the purpose morpheme -ni and the gerundive suffix -te. A possible inherent property that separates the two appears to be the temporal properties that accompany them. The gerundive morpheme -te is presumably specified as [-Tense] for its infinitival property. By contrast, -ni is not specified for the feature [Tense]: it only bears aspectual property of irrealis, as Iida (1987) points out. Whatever the exact nature of the temporal/aspectual feature specification is, it seems reasonable to posit that such a feature specification is playing a crucial role in distinguishing the behavior of depictives in (21) and (22). That is, assuming that object-oriented depictives must be governed by the feature [Tense], the interpretation of the depictives in (21) and (22) has a straightforward explanation. In (21) the purpose morpheme does not bear the feature [Tense], and thus, it cannot govern the object-oriented depictive. In (22), by contrast, the gerundive suffix is specified for [-Tense], which governs the depictive phrase, and therefore, the depictive can be predicated of the object.

Turning to the different selectional properties for adjuncts observed in purpose clauses and gerundive clauses, I contend that feature specification of [Tense] is again relevant. Let us suppose that the feature [Tense] sanctions an event argument, and that the event argument in turn licenses adjuncts. Given this assumption, the distribution of adjuncts in purpose sentences and gerundive sentences is explained as follows. In the case of sentences with purpose clauses, the purpose morpheme is not specified for [Tense], and thus, it cannot sanction an event argument. This, in turn, means that adjuncts are not licensed internal to the purpose clause, which is consistent with the data given above. The matrix verb, on the other hand, does bear the [+Tense] feature, as evidenced by the inflection on it. In the presence of this feature, the matrix clause can have an event argument, which enables adjuncts to be licensed. This is why in purpose constructions adjuncts are allowed only when they modify the matrix predicate.

In the case of sentences with gerundive clauses, the situation is opposite. The gerundive suffix bears the feature of [-Tense], which sanctions an event argument internal to the gerundive clause. The event argument within the gerundive clause, then, licenses adjuncts that modify the embedded verb. This propery departs from the construction with purpose clauses, as we have just explained. Hence, gerundive clauses can have their own adjuncts internal to them. Notice, however, that the matrix clause is also specified as [+Tense], just as in the sentences with purpose clauses. Nevertheless, we have observed that the matrix clause that cooccurs with a gerundive clause cannot license adjuncts.

This situation with gerundive clauses is reminiscent of Italian Restructuring sentences, as analyzed by Napoli (1982). Napoli claims that after Restructuring, the matrix verbs, most of which are modals, aspectuals, and motion verbs, are "semantic auxiliaries", acting to modify the infinitival verb. She further demonstrates that if the matrix verb becomes too strong semantically by way of adding modifiers to it, for example, then, Restructuring is impossible. Interestingly enough, the adjunct selection in Italian Restructuring sentences patterns with sentences with gerundive clauses in Japanese. The contrast in (23) illustrates that a directional adjunct which is intended to modify the matrix verb disallows clitic climbing. In other words, in a Restructured sentence, a directional adjunct cannot modify a matrix verb.
(23) a. Piero verrà in biblioteca a parlarti di parapsicologia.

Piero will come to the library to speak to you about parapsychology.

b. *Piero ti verrà a parlare di parapsicologia in biblioteca.

The analysis of main verbs as "semantic auxiliaries" in Italian Restructuring sentences can be extended to the Restructuring sentences with gerundive clauses in Japanese. Since the main verb becomes a semantic auxiliary after Restructuring, it loses the function of denoting an event, which the same verb would otherwise have expressed. Therefore, as a semantic auxiliary, the matrix verb involved in a sentence with a gerundive clause fails to bear an event argument, and as a consequence, it cannot license adjuncts internal to that clause.

3. Syntactic Differences

We have so far looked at the different behavior in adjunct selection in purpose clauses and gerundive clauses, and have attributed the difference to the distribution of event argument. For the remainder of the paper I would like to point out that there are other syntactic differences between the two clause types. I will limit the discussion only to two instances of such syntactic behavior.3

First, purpose clauses can be scrambled whereas gerundive clauses cannot. This is shown in (24-25).

(24) [Hon-o kai-ni] Taroo-ga Kanda-e ti itta.

Taro went to Shinjuku to buy books, eat sushi, and see a movie.

3For fuller discussion, see Tsujimura (in preparation).

Second, the two types of clauses demonstrate different behavior with respect to iterativity, as (26-27) show.


Taro (came back after having) bought books at Kanda.

(26) *Taroo-ga Sinzyuku-e hon-o kai-ni, susi-o tabe-ni, eiga-o mi-ni kita.

Taro went to Shinjuku to buy books, eat sushi, and see a movie.

(27) Taroo-ga Sinzyuku-de hon-o kat-te, susi-o tabe-te, eiga-o mi-te kita.

Taro (came back after having) bought books, eaten sushi, and seen a movie in Shinjuku.

I propose that these two differences are consequences of their syntactic status: more specifically I contend that a purpose clause is an argument of a limited set of motion verbs while a gerundive clause is a mono-clausal structure with a motion verb as a syntactic as well as semantic auxiliary element. Under such a claim the difference in scramblability and iterativity as we have observed in (24-27) can be straightforwardly accounted for. The purpose clause in (24) is an argument of the motion verb itta 'went', and, hence, can be scrambled since the trace left behind is properly governed by
the verb. As for the impossibility of scrambling 
with a gerundive clause in (25), it should be 
attributed to a more general constraint that, unlike 
in English, no auxiliary element can be stranded in 

(28) a. Taroo-ga Hanako-ni hon-o kat-te
     -Nom -Dat book-Acc buy-gerund
     ageta.
     'Taro bought Hanako a book.'

b. *[Hanako-ni hon-o kat-te]i Taroo-ga ti ageta.

(29) a. Watasi-wa asita byooin-e iku
     I-Top tomorrow hospital-to go
     tumori-desu.
     intention-be
     'I intend to go to hospital tomorrow.'

b. *[Asita byooin-e iku]i watasi-wa ti tumori-
     desu.

     -Top already home-to return expected-be
     'Taro is expected to have already gone
     home.'

b. *[Moo uti-e kaetta]i Taroo-wa ti hazu-da.

Ageta 'gave' in (28), tumori-desu 'intend' in (29),
and hazu-da 'is expected to' in (30) are arguably 
considered as auxiliary elements. Whether the verbal 
form that precedes them is gerundive, as in (28), or 
morphologically inflected for tense, as in (29-30),
to scramble a VP, leaving the auxiliary elements 
behind, leads to ungrammaticality.

The iterativity facts follow from the argument 
status of purpose clauses. Recall that gerundive 
clauses can be iterative while purpose clauses 
cannot. This was observed in (26-27). Larson (1988) 
discusses the difference in iterativity between 
arguments and adjuncts: that is, adjuncts are 
iterative while arguments are not. (31-32), which 
are taken from Larson (p.171), illustrate such a 
difference.

(31) Fred deftly [MANNER] handed the toy to the 
     baby by reaching behind his back [MANNER] over 
     lunch [TEMP] at noon [TEMP] in a restaurant 
     [LOC] last Sunday [TEMP] in Back Bay [LOC] 
     without interrupting the discussion.

(32) a. *John ate that meat that beef.
     b. *The job paid steadily well.

Adjuncts can be repeated an indefinite number of 
times while arguments that exceed the number (and 
type) that a predicate subcategorizes for are 
rejected. The ungrammaticality of (26), then, 
follows from the argument status of purpose clauses 
while the same restriction does not apply to 
gerundive clauses in (27).

4. Summary

In this paper I have examined two Restructuring 
environments in Japanese, purpose clauses and 
gerundive clauses. These two sentence types behave 
differently with respect to adjunct selection. That 
is, in the sentence with a purpose clause, adjuncts 
are only associated with the matrix clause. In the 
sentence with a gerundive clause, adjuncts are 
licensed only internal to the gerundive clause. I 
have argued that the difference should be attributed 
to the presence of the feature specification for 
[Tense]. A purpose clause lacks such feature, and as 
a result, it also lacks an event argument which would 
otherwise license an adjunct internal to it. The 
matrix clause that accompanies a purpose clause, on 
the other hand, bears the feature [Tense], and thus, 
can license an adjunct. As for the sentences with 
gerundive clauses, the gerundive clause bears the 
feature [-Tense], which allows for an adjunct 
internal to the gerundive clause. The matrix verb in 
this construction, however, functions as a "semantic 
auxiliary" in the sense of Napoli (1982). As a 
semantic auxiliary, the matrix verb lacks an event 
argument, and hence cannot license any adjunct 
internal to that clause.
It has also been shown that purpose clauses and gerundive clauses are different in their scramblability and iterativity. An account has been posited in which a purpose clause is an argument of a motion verb, and thus it can scramble though it cannot iterate.

References


1. Introduction

The purpose of this paper is to clarify the syntactic nature of the passive morpheme in Japanese and to explore its implications.

Consider first the following pair:

(1) a. Mary-ga John-o nagut-ta
   -Nom -Acc hit-Pat
   'Mary hit John'

b. John-ga Mary-ni nagur-are-ta
   -Nom -by hit-Pass-Pat
   'John was affected by Mary's hitting him'

(1a) is an active sentence; (1b) is a ni direct passive. The logical object in (1a), John, is in the subject position in (1b). Although (1b) seems like a regular passive involving NP movement, Kuroda (1965) argues that the passive morpheme (r)are of the ni direct passive assigns an external θ-role to the subject and that NP movement does not take place in this type of construction. The structure he proposes for (1b) is (2).