

(12) *It had John's look at the insect with a magnifying glass.

Do nouns treat and assign external arguments the same way verbs do, or is something else really going on here? Are there other instances in which arguments can appear outside the noun phrase? More generally, what exactly is the relation between the verb in a sentence such as (2) and the θ -assigning noun?

These are the questions this thesis will attempt to answer for a similar set of data from Japanese, which due to its overt case marking will allow us to take a closer look at these θ -assigning nouns, from here on referred to as verbal nouns or VNs, and a specific construction we see them occurring in, the light verb construction. Section 2 will present the Japanese data. Section 3 will give an overview and critique of one of the most influential analyses of this phenomenon, that of Grimshaw and Mester (1983). Section 4 will be devoted to considering the problems with this analysis and reviewing an alternative analysis by Uchida and Nakamura (1992). Section 5 will consider other VN data not usually linked to the light verb construction and explore its potential as a starting point for a new analysis. In Section 6 I will present my conclusions.

2.0 The Japanese data¹

Consider the following Japanese NPs with VN heads.

(13) Tanaka-no eigo-no BENKYO
 Tanaka-GEN English-GEN study
 'Tanaka's study of English'

(14) Tanaka-no [ōkami-ga kuru-to]-no KEIKOKU
 Tanaka-GEN [wolf-NOM come-COMP]-GEN warning
 'Tanaka's warning that the wolf is coming'

That these are more useful for our purposes than their English counterparts is due to the fact that Japanese is a language that overtly marks all case. Specifically of use to us is what the literature assumes about the meaning of this case-marking. Genitive in Japanese is thought to be assigned by a noun to the XPs it governs, and this, combined with the generally accepted assumption that case-marking is local, leads us to the conclusion that genitive case-marking implies NP-internality and thus is a useful test for it. In both (13) and (14), for example, all the relevant phrases are marked with *-no* and so we know that they occur within the NP.

¹ Most of the examples in this section are modified from those given in Grimshaw and Mester 1988 to suit my own presentation needs. Examples throughout the paper have been slightly modified from their original forms in an attempt to regularize the romanization. Within examples, all VNs are written in caps for ease of identification, and the following abbreviations are used: NOM=nominative, ACC = accusative, GEN=genitive, TOP=topicalizer, COMP=complementizer.

Such overt case-marking will allow us to thoroughly examine the nature of arguments in the construction in question. English data seems to suggest that the arguments of the noun occur within its maximal projection, a desired result if we want to maintain that internal arguments are assigned to sisters. Japanese data will allow us to test for phrasal location more directly via case-marking

The overt nature of Japanese case-marking also affords an opportunity to examine the relationship between the VN and accompanying verb. In a normal Japanese sentence, the verb assigns both a θ -role and the accusative case (manifested as *-o*) to its object. An example of this can be found in (15).

- (15) Tanaka-ga sushi-o taberu.
 Tanaka-NOM sushi-ACC eat
 ‘Tanaka eats sushi.’

In the construction we want to examine, however, the verb-noun relationship is different—it is the noun, not the verb, that provides the θ -roles. We know from rules like Burzio’s Generalization that θ -roles and case-assignment can be interconnected, so the natural question to ask is: is accusative case assigned in this kind of construction? The Japanese data will allow us to see.

Let us, then, examine the construction in question in Japanese. While English pairs a variety of verbs (we have seen *have* and *take*) with VNs, Japanese seems to use one main one: the verb *suru* ‘do.’ Consider the following example:

- (16) Tanaka-ga [ōkami-ga kuru-to]-no KEIKOKU-o shita.
 Tanaka-NOM [wolf-NOM come-COMP]-GEN warning-ACC did
 ‘Tanaka warned that the wolf is coming.’

This example seems to mirror what we saw in the English data—while the external argument is marked by the nominative *-ga* and is thus given the aforementioned test clearly outside the NP, the other argument, *ōkami ga kuru to* ‘that the wolf is coming,’ is just as clearly shown to be inside the NP by its genitive case-marking. The VN receives accusative case from *suru* just like any other object might.

The sentence in (17) also seems to support our English observations, showing that the external argument in this construction must be realized outside of the noun phrase; if it is marked with genitive case the sentence is ungrammatical.

- (17) *Tanaka-no [ōkami-ga kuru-to]-no KEIKOKU-o shita.
 Tanaka-GEN [wolf-NOM come-COMP]-GEN warning-ACC did

So far, nothing out of the ordinary. Consider, however, the following data:

- (18) Tanaka-ga [ōkami-ga kuru-to] KEIKOKU-o shita.
 Tanaka-NOM [wolf-NOM come-COMP] warning-ACC did

‘Tanaka warned that the wolf is coming.’

The sentence in (18) poses a serious problem to the current theory. If case-marking works as I have described it, then the Theme *ōkami ga kuru to*, bereft of genitive case, is outside of the VN’s maximal projection and is thus unable according to θ -theory (in which argument assignment, like case assignment, is assumed to be local) to receive a role from the VN. Yet we know from (14) that the *ōkami ga kuru to* must be an argument of *keikoku*. Is there a way to explain this without doing away with locality restrictions in either case- or θ -theory?

Things only become more confusing upon the addition of another argument.

- (19) a. Tanaka-ga murabito-ni [ōkami-ga kuru-to] KEIKOKU-o shita.
 Tanaka-NOM villagers-to [wolf-NOM come-COMP] warning-ACC did
 ‘Tanaka warned the villagers that the wolf was coming.’
- b. Tanaka-ga murabito-ni [ōkami-ga kuru-to]-no KEIKOKU-o
 Tanaka-NOM villagers-to [wolf-NOM come-COMP]-GEN warning-ACC
 shita.
 did
- c. *Tanaka-ga murabito-e-no² [ōkami-ga kuru-to]-no
 Tanaka-NOM villagers-to-GEN [wolf-NOM come-COMP]-GEN
 KEIKOKU-o shita.
 warning-ACC did
- d. Tanaka-no murabito-e-no [ōkami-ga kuru-to]-no KEIKOKU
 Tanaka-GEN villagers-to-GEN [wolf-NOM come-COMP]-GEN warning
 ‘Tanaka’s warning to the villagers that the wolf is coming.’

The addition of a PP Goal begins to show the full complexity of the situation. Not only can the Goal, independent of the position of the Theme, appear outside of the maximal projection of the VN ((a) and (b)), but as (19c) demonstrates, it *must*. Note that this restriction is entirely dependent upon the context of the light verb construction—as (19d) demonstrates, in an isolated NP or one not paired with a light verb, an NP-internal Goal is perfectly acceptable. Why should an argument of *keikoku* have to appear outside of its maximal projection in this construction? Perhaps more confusingly, why should one argument be forced to appear outside and another allowed to be either NP-internal or external? How are we to explain *this* given the assumed case- and θ -theory?

The case-marking of the VN’s arguments is bad enough, but it is not the only source of complication. We also see variation in the accusative marking of the VN itself. Consider the following:

² The substitution here of the particle *e* for *ni* is due to the fact that *ni* cannot be marked with genitive case (some say that this is because *ni* is actually a dative case-marker itself). These particles have approximately the same meaning and can be used interchangeably without any effect upon the data in question. While for the sake of simplicity I could have used *e* throughout, I decided to use *ni* in non-genitive cases to reflect native speaker usage.

- (20) Tanaka-ga murabito-ni [ōkami-ga kuru-to] KEIKOKU shita.
 Tanaka-NOM villagers-to [wolf-NOM come-COMP] warning did
 ‘Tanaka warned the villagers that the wolf was coming.’

The sentence in (20) is an example of what has been called the incorporation construction. In this construction, all of the VN’s arguments appear outside of its maximal projection and the VN is “incorporated” into *suru* and bears no case. If we assume the VN is still lexically independent of *suru*, shouldn’t this be a violation of the Case Filter? More troubling is the following example:

- (21) Densha-ga Ōsaka-ni TŌCHAKU(*-o) shita
 Train-NOM Osaka-to arrival(*-ACC) did

With the sentence in (20), an unincorporated construction in which the VN is accusative-marked is also possible. (21), however, shows that in the case of certain VNs, omission of the accusative marker is not optional but obligatory. Why should this be?

These are the major problems presented by the Japanese light verb construction, based for the most part in the appearance of different θ - and case-assigners, something which seems to problematize the assumption that case- and θ -marking are both local. An analysis of this construction must account for them all; that is, it must reconcile the data with θ and case theory and explain the following:

- (22) (i) what a light verb is and how it relates/reacts with the VN
 (ii) the variation in case-marking and thus phrasal position of the VN’s arguments in the light verb construction, and how these arguments receive their θ -roles
 (iii) the variation in accusative case-marking on the VN

3.0 Grimshaw and Mester

3.1 *Argument Transfer*

To date, nearly all discussion of this data has been informed by and thus a reaction to the seminal 1988 analysis by Grimshaw and Mester (G&M). In their paper, G&M argue for a process they call Argument Transfer, in which the VN cedes some or all of its arguments to the light verb. It is worth noting that such an analysis is in GB theory per force lexical; that is, that Argument Transfer must take place in the lexicon, as in (23), and not in the syntax.

- (23) (= Grimshaw and Mester 1988: [13])
 a. *keikoku* (Agent, Goal, Theme)
 b. *suru* () <acc>
 c. *keikoku* (Theme) + *suru* (Agent, Goal) <acc>

In this example, the VN *keikoku* ‘warning’ in (a) combines with the light verb *suru* in (b) to make the lexical entry in (c), in which *keikoku* has transferred its Agent and Goal arguments but has retained its Theme argument. Presumably there would be other lexical entries derived for other permutations of transfer and retention (i.e., transfer of all three arguments to *suru*, transfer of only one, etc.).

G&M claim Argument Transfer can only take place with a light verb like *suru*. By their definition, such a light verb need not necessarily be entirely devoid of arguments (G&M point to *suru*’s causative form, *saseru*, as evidence for this) but must simply be “thematically incomplete” (Grimshaw and Mester 1988: 210) and thus capable of taking on arguments from the VN. Light *suru*, in fact, assigns no θ -roles of its own, merely subcategorizing and case-marking a VN, and this provides a way of distinguishing it from its heavy counterpart: while heavy *suru* requires, for example, that its subject be agentive (note the bizarreness of (24)), light *suru* has no such requirement as the θ -roles it assigns are originally the VN’s (see the contrast of light *suru* in (25)).

(24) #Densha-ga tennis-o suru
 Train-NOM tennis-ACC do
 ‘The train plays tennis.’

(25) (=Grimshaw and Mester 1988: [11c])
 America-ga 200-nen-mae-ni Iギリス-kara DOKURITSU-o shita
 America-NOM 200-year-ago-at England-from independence-ACC did
 ‘America became independent of England 200 years ago.’

In contrast with light verbs, heavy verbs, with their own complete argument structures, cannot participate in Argument Transfer and therefore never appear with a VN whose arguments are not marked in genitive case, as we can see from the contrast between (26a) and (b).

(26) (=Grimshaw and Mester 1988: [5])
 a. John-wa Mary-e-no HANASHI-o wasureta.
 John-TOP Mary-to-GEN talk-ACC forgot
 ‘John forgot the talk to Mary.’
 b. *John-wa Mary-ni HANASHI-o wasureta.
 John-TOP Mary-to talk-ACC forgot

G&M express this by making a distinction between normal, θ -opaque NPs, which cannot assign θ -roles outside their maximal projections, and θ -transparent NPs, which can via Argument Transfer. Light verbs can take θ -transparent NPs while heavy verbs cannot and this difference can be used as another way to distinguish between heavy *suru* and light *suru*.³

³ By my way of thinking, the distinction between θ -opaque and θ -transparent always seemed a bit superfluous—why assume two different versions of a VN when we can simply assume that the two different versions of *suru* we are already postulating behave differently with respect to the same VN? For example, why propose two different *keikokus* when we can just assume that our one *keikoku* can undergo

3.2 Other restrictions

So according to G&M, the variation in location and case of the VN's arguments we've seen in the data is explained by Argument Transfer, which allows light verbs to combine with VNs in the lexicon and receive various combinations of their arguments. But as we've also seen in the data, the situation is more complicated than this, and G&M don't pretend otherwise. In addition to argument transfer, they propose the three restrictions below.

- (27) (i) At least one argument apart from the subject must be outside the NP.
 (ii) The subject argument must always be outside the NP.
 (iii) For Nouns that take a Theme and a Goal, if the Theme argument is realized outside NP, the Goal must also be realized outside NP.
 (Grimshaw and Mester 1988: 215)

These, they claim, “follow from the hierarchical organization of argument structure plus the assumption that Transfer must transmit at least one unsuppressed argument position to the *suru* predicate” (215) and in combination with Argument Transfer explain all the data.

Let us first, then, examine the requirement that at least one unsuppressed argument position be transferred to the light verb. Leaving aside the qualifier “unsuppressed” for a moment, the reasoning behind this rule is quite simple: without it, the sentence is claimed to result in a θ -Criterion violation. G&M have already stated that light verbs do not assign a θ -role to their VNs, and the idea is that only by their combination in the lexicon are they exempt from this requirement under the θ -Criterion. Such a combination is a result of Argument Transfer, and this process can only be said to have applied if, as its name suggests, an argument is transferred.

Why, though, an “unsuppressed” argument? G&M point out that while an NP-internal subject results in ungrammaticality, an NP-external subject does not ensure grammaticality: based on their data, they conclude that another argument must also be transferred. The question then becomes, what is the motivation for this? If the subject has already been transferred, then the θ -Criterion should already be met. This is where the idea of an “unsuppressed” argument comes in. G&M claim that all subject arguments of nouns, unlike those of verbs, are lexically suppressed, and that this suppression disqualifies them from satisfying Argument Transfer.⁴ Therefore, another argument must be transferred to do so.

Argument Transfer with light *suru* and cannot with heavy *suru* and other heavy verbs like *wasureru* ‘to forget’? G&M offer as evidence for the existence of different NPs that θ -opaque NPs can be topicalized while θ -transparent ones cannot, but as others had pointed out and we will see later on, this turns out to be untrue. Ultimately, I think that the opaque/transparent distinction is unnecessary; luckily, it is not central to G&M's analysis.

⁴ This, frankly, is the weakest part of G&M's paper. They provide almost no explanation of, let alone evidence for, the concept of argument suppression and yet base a key part of their analysis on it. One has

We can now explain restriction (i), but we are back to square one as concerns restriction (ii). If transferring an internal argument satisfies the θ -Criterion, then there should be no need to transfer the external argument as well, and yet (9) shows us that its transfer is obligatory.

- (31) *John-no murabito-ni KEIKOKU-o shita.
John-GEN villagers-to warning-ACC did

Similarly, we are no closer to explaining restriction (iii). This is where the “hierarchical organization of argument structure” comes in. G&M propose a thematic hierarchy⁵ in

to go to Grimshaw’s other work in order to get a better idea of the concept. In her 1990 book *Argument Structure* she explains it as follows: nominals and passives have “suppressed” a-structure positions corresponding to subject phrases. These positions cannot be satisfied by arguments or θ -mark them, but they can license something Grimshaw calls “argument adjuncts (a-adjuncts).” These are adjuncts that, while licensed by the argument structure, do not satisfy argument structure positions. What this means practically for us is that for a phrase like that in (28), what we assume is the subject argument, θ -marked as the agent, is in fact an adjunct licensed by argument structure but assigned no θ -role by it.

- (28) John-no nihongo-no BENKYOU
John-GEN Japanese-GEN study
‘John’s study of Japanese’

The most compelling evidence Grimshaw provides for this theory is that subject arguments are infallibly optional in noun phrases. Note that while one cannot say **studies Japanese*, leaving out the subject, it is perfectly acceptable to say *the study of Japanese* and leave out the very same subject. While *John* is clearly thematically related to the noun *benkyou* in (28), identifying him as a θ -marked argument forces us to discard the principle that argument structure must always be satisfied because this argument can be omitted grammatically. Identifying *John* as an a-adjunct allows us to maintain this principle.

Grimshaw’s further support for her concept of argument suppression comes in the form of more evidence that the subject of an NP is an adjunct. She points out that, as seen in (29), expletives, which cannot occur in adjunct position, are ungrammatical in NPs. Likewise, raising, which cannot happen in non-argument positions, is also unacceptable in NPs, as shown in (30).

- (29) a. There arrived a man at the door.
b. *There’s arrival of a man at the door. (Grimshaw 111)
- (30) a. John appears to have left.
b. *John’s appearance to have left. (Grimshaw 111)

Grimshaw’s idea of argument suppression is by no means universally accepted, and its doubtful nature is a weak point of the G&M analysis. Fortunately (or unfortunately, depending on how you look at it), the part of the analysis that requires it, as other have pointed out and we will see later, is in fact a misinterpretation of the data. The only reason I explain argument suppression here is because it will become interesting in light of our forthcoming discussion of the subject in light verb constructions.

⁵ A thematic hierarchy, unlike argument suppression, is a concept not without precedent. Jackendoff (1972) proposes a nearly identical thematic hierarchy to regulate what kinds of verbs can take “by” phrases in the passive. To my thinking, all this similarity with passives (note that argument suppression is claimed to happen in passives too, and has similar evidence) works nicely for G&M’s analysis of the light verb construction, as the parallels seem to strengthen their claim for another parallel with the passive—its lexically-derived nature.

which arguments are not only described as external and internal, but internal arguments too are ordered from most external to most internal (or most prominent to least, or furthest from the noun to closest, etc.). They claim that Argument Transfer must respect this hierarchy; thus, it “can peel off outside layers but can never remove an inside layer without also removing the layers outside it” (225). The basic hierarchy they give is as follows: Agent/Source is most external, followed by Goal, then Theme as the most internal argument. They represent it as in (32).

(32) (= Grimshaw and Mester 1988: [50])
(Agent/Source (Goal (Theme)))

Now we can make sense of restrictions (i) and (iii). Because an internal argument must always be transferred, we have to transfer the external argument first to get to it in the hierarchy, thus (i). If we want to transfer the Theme, we must transfer the Goal to get to it in the hierarchy, and thus (iii).

3.3 *Strengths of the analysis*

Now that we understand the nature of the analysis, let us examine why it has been so influential. First and most importantly, it has the very appealing quality of allowing us to keep our case theory and θ -theory entirely intact. Locality is preserved in both; nouns continue to assign genitive and verbs accusative within their maximal projections and arguments continue to be assigned within the assigner’s maximal projection. This accomplishment is a result of G&M’s innovative approach of positing not one but two θ -markers (i.e. both the light verb and the VN)—with only one, locality of θ -marking would have to be sacrificed, wreaking havoc upon the theory.

Second, it accounts for a good chunk of the data. The questions in (22i) and (ii) now have answers—G&M have given us a definition of light verb as an incomplete predicate and an account of its interaction with VNs that explains the variety of case-markings its arguments receive in (16) through (19).

Lastly, there is something to be said for simple, graceful analysis. Despite the few weaknesses I have noted, G&M’s work is based on tried-and-true syntactic principles and straightforward reasoning, and it is understandable why such an analysis would be difficult to jettison.

All in all, G&M have devised a unique, functional, well-constructed theory. Sadly, it leaves some aspects of the light verb construction unexplained.

4.0 **Problems with G&M’s analysis**

4.1 *Miyagawa and unaccusatives*

First, let us consider a point that G&M barely address in their paper; namely, that while all VNs can appear without case (in the so-called incorporation construction), there are

some that cannot appear with it, as in (21) above. G&M mention this only in passing, saying in their conclusion that it is the result of “morphological compounding, applied to the case of complex predicate formation where the Noun yields all its θ -assigning capacities to *suru*” (229). When they run into a problematic instance of this amongst their data (there are in fact many more instances of this than they recognize), they shrug it off as a “lexical gap for some speakers” (213). Presumably, then, we are to interpret this to mean that failing to take accusative case—that is, obligatorily “morphological[ly] compounding”—is a lexical property that varies from VN to VN and from person to person.

This might seem a satisfactory explanation, were it not for the fact that, as many were quick to point out, it seems to be whole, identifiable groups of VNs that have this property. Though the exact characteristic that defines these groups is a matter of contention, not to try and identify them and offer a principled account for their behavior is not to take the analysis through to its end.

One of the first to pinpoint this problem with G&M’s analysis and propose a solution to it was Miyagawa (1989). Luckily enough for G&M, his analysis complements theirs quite nicely and even provides additional evidence for their concept of argument transfer. Miyagawa begins by pointing out that some of the examples of the *VN-o suru* construction that G&M claim to be grammatical are in fact marginal at best. They become perfectly acceptable, however, when the accusative marking is removed and they appear in the *VN suru* construction. The problem here, Miyagawa claims, is that all of the VNs in the offending examples are unaccusative, and given this property and the nature of Argument Transfer *suru* simply has no accusative case to assign them.

The explanation is as follows: unaccusatives by nature have no external argument. Since in G&M’s Argument Transfer model *suru* gets any arguments it might have from the VN, it too will have no external argument when paired with an unaccusative VN. Consider, then, Burzio’s Generalization (1986), reproduced below as (33):

(33) *Burzio’s generalization:*

A verb assigns an external thematic role iff it can assign case.

If we assume this to be true (and there is plenty of evidence to suggest we should), then it is easy to see why unaccusative VNs fail to take accusative case—their external argument-deprived *suru* partners can assign no case at all. This analysis is admirably neat and simple, and because it relies on Argument Transfer to work it not only avoids stepping on the toes of G&M, it makes their analysis all the more compelling.

There is, however, the matter of the Case Filter. Although Miyagawa explains why unaccusative VNs cannot be assigned case, he does not reveal why they don’t need to be. One explanation is to follow the school of thought that links the Case Filter to θ -theory and says that case is only necessary to make NPs visible for argument assignment. Since VNs receive no θ -roles under G&M’s analysis, the Case Filter would not apply to them. Without making this assumption about the Case Filter, it could equally validly be argued

that because of the lexical combination of the VN and *suru* via Argument Transfer, the VN does not constitute a separate overt NP and thus does not need case. Such an analysis, though, begs the question of why some VNs can and do take accusative case. This is not a major problem to the analysis; sadly, however, there remains other data that Miyagawa fails to consider.

4.2 Uchida and Nakayama's approach to VN case

For this we turn to Uchida and Nakayama (U&N) (1992). They, in contrast to Miyagawa, do nothing to shore up their analysis of G&M; rather, they aim to knock it down. U&N claim that the *VN-o suru* construction identified by G&M as the light verb construction is in fact nothing of the sort: *suru*, in this case, is a regular heavy verb and thus assigns arguments and places semantic restraints upon them. Critical to this analysis is the assumption that *VN suru*, the so-called incorporation construction in which accusative case fails to be assigned, is different from *VN-o suru* and is a case of the light verb construction, just not in the sense of G&M. Argument Transfer is denied outright—*suru* is only light in that *VN suru* is treated as a compound verb with a single lexical entry and this compound's argument structure is determined by the VN.

Given this characterization of the analysis, the obvious question to ask is: why would one want to claim that it is heavy *suru* in the *VN-o suru* constructions when the manifold problems of such a claim are presented in the initial data? The answer lies in U&N's account of why certain VNs cannot take accusative marking while others can. If the data were truly as clear-cut as that presented in Miyagawa 1989, then this strength would not seem nearly so compelling, but as U&N display, the full range of data is such that it simply cannot be accounted for under the G&M system.

U&N account for it as follows. It is true, they claim, that unaccusatives normally seem unable to take accusative case, but there are exceptions. Consider the following:

- (34) (= Uchida and Nakayama 1992: [19])
Tokkyū-ga Uenoeki-ni 10-pun okure-no TŌCHAKU-o
Limited express-NOM Ueno Station-at 10-minutes late-GEN arrival-ACC
shita.
did
'The limited express arrived at Ueno Station 10 minutes late.'

In (34), the unaccusative VN is modified by a time expression, and the rule is turned on its head; while we have seen in examples like (21) that accusative case assignment for these VNs is generally forbidden, in this context it is obligatory. If unaccusatives fail to take accusative case because of the reasons laid out by Miyagawa, there should be no such exception—Burzio's Generalization should keep *suru* from assigning case no matter the context.

Moreover, U&N point out that unaccusatives are not the only VNs to prohibit accusative marking—some transitive VNs do as well. Consider (35):

(35) (= Uchida and Nakamura 1992: [21])

- a. Keikan-ga suri-o TAIHO shita.
 policeman-NOM pickpocket-ACC arrest did
 ‘The policeman arrested the pickpocket.’
- b. *Keikan-ga suri-no TAIHO-o shita.⁶
 policeman-NOM pickpocket-GEN arrest-ACC did
 (lit.) ‘The policeman did an arrest of the pickpocket.’

The transitive VN *taiho* ‘arrest’ clearly has both an external and an internal argument, so Burzio’s Generalization is irrelevant and we would expect accusative case-marking to be possible, but the sentences in (35) clearly show such case-marking to be ungrammatical. Miyagawa provides no way of handling examples like this.

U&N, however, do. They begin by noting that while VNs that bar accusative marking may not be bound together by their lack of external arguments, they do have something in common: aspectual class. Following Vendler (1967), they demonstrate systematically that VNs that allow accusative marking are all activities or accomplishments, while those that do not are either states or achievements; in other words, accusative marking seems to require a +*durative* VN. Such a revelation is rather unenlightening, however, if we assume that *suru* in the *VN-o suru* construction is a light verb in the sense of G&M—there seems to be nothing to motivate VNs of certain aspectual classes refusing to accept accusative case from light *suru*.

It is only when we assume, as U&N do, that *suru* in these constructions is in fact a heavy verb that things begin to fall into place. *Suru* as a heavy verb places semantic restrictions on its arguments, and the one of interest to us is demonstrated by the sentences in (36).

- (36) a. Tanaka-wa tenisu-o suru.
 Tanaka-TOP Nakayama-with tennis-ACC do
 ‘Tanaka plays tennis.’
- b. *Tanaka-wa hokori-o suru.
 Tanaka-TOP pride-ACC does
 (lit.) ‘Tanaka does pride.’

The contrast in grammaticality between (36a) and (b) is a result of heavy *suru*’s restriction of its direct objects to those “[nominals that denote] a lasting activity or event” (Uchida and Nakayama 1992: 650). This constraint explains why –*durative* state and achievement VNs cannot take accusative case—as U&N explain, “the achievement class verbal nouns... denote activities or events, but they occur just at a moment in nature. The state class verbal nouns ...do not denote any activities or events. Therefore, the heavy *suru* rejects them as its direct object because of the semantic restrictions” (650).

⁶ The genitive marking on *suri* here is due to the double-o constraint, a restriction in Japanese that allows only one accusative-marked phrase per clause. This has no effect on the grammaticality of (b). The double-o constraint will be dealt with more fully in section 5.

We should note that U&N argue that this analysis also explains the behavior of sentences like those in (34), in which an achievement (*tōchaku*) can and must take accusative case. Their claim is that “when a VN is modified and the VN has the characteristic of ‘event’ (accomplishment) because of the modifier, *VN-o suru* becomes acceptable” (642). This is apparently irrespective of any actual change in aspectual class; as we can see in (37), *tōchaku* still fails to allow a progressive reading (as in (a)) or a construction that denotes the beginning of an activity (as in (b)) and thus clearly remains an achievement. Therefore, the claim must be that heavy *suru*’s semantic restrictions are not based on aspectual class itself but on the property of being “a lasting activity or event” (650), which happens to closely follow the aspectual divide U&N define.

- (37) a. Tokkyū-ga Uenoeki-ni 10-pun okure-no
 Limited express-NOM Ueno Station-at 10-minutes late-GEN
 TŌCHAKU-o shite-iru.
 arrival-ACC is-doing
 *‘The train is arriving at the station ten minutes late.’
 ‘The train arrived at the station ten minutes late.’
- b. *Tokkyū-ga Uenoeki-ni 10-pun okure-no
 Limited express-NOM Ueno Station-at 10-minutes late-GEN
 TŌCHAKU-o shi-hajimeta.
 arrival-ACC do-began

Clearly, having to make such a claim is less than ideal, as it is a bit of a stretch to assert that (34) is somehow more durative because it is delayed. Still, this analysis seems to provide a principled way to determine which VNs can take accusative case and which cannot, and does so for a wider range of data than Miyagawa’s. For this reason alone, it is worth considering despite the obvious problems that arise from claiming heavy *suru* in the *VN-o suru* construction.

Speaking of these problems: how do U&N resolve them? In order to make this analysis work, they must account for the variety of case marking shown on the arguments of the VN. Unfortunately, this is where their analysis begins to fall apart.

4.3 Uchida and Nakayama’s approach to arguments in the light verb construction

Let us first examine the case of the Goal and Source arguments. U&N seem to assume what is explicitly stated by Isoda (1991): that G&M’s characterization of the behavior of these arguments is incorrect. The real restriction at work here is less complicated than G&M make it out to be. It is simply, as we observed in our initial look at the data, that the Goal and Source arguments may never appear inside the NP in the *VN-o suru* construction. Though the complex rules in (27) generate the same result, they also erroneously predict certain grammatical sentences to be unacceptable. Isoda provides the following as an example:

- (38) (= Isoda 1991: [9b])
 John-wa sūgaku-no BENKYŌ-o shita.

John-TOP math-GEN study-ACC did
 ‘John studied math.’

Though this sentence is perfectly acceptable, G&M’s analysis would mistakenly declare it ungrammatical because its one unsuppressed argument, *sūgaku* ‘math,’ is marked with genitive *–no* and thus inside the NP and untransferred.

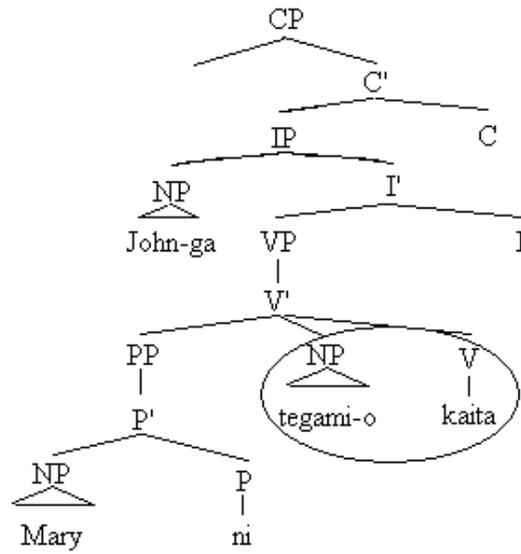
Assuming Isoda’s restriction instead of G&M’s, U&N find a way within their framework to deal with the case of the Goal and Source. They posit that these arguments are not chosen by the VN but rather by a predicate consisting of both the VN and the verb. They give the following as evidence:

- (39) (= Uchida and Nakayama 1993: [81a] and [82])
- a. John-wa Mary-ni tegami-o kaita.
 John-TOP Mary-to letter-ACC wrote
 ‘John wrote a letter to Mary.’
 - b. *Tarō-ga Hanako-ni gengogaku-no ronbun-o kaita.
 Taro-NOM Hanako-to linguistics-GEN article-ACC wrote
 ‘Taro wrote an article on linguistics to Hanako.’

The nominals in these sentences, *tegami* ‘letter’ and *gengokaku-no ronbun* ‘linguistics article,’ are not VNs, and yet they seem to determine whether or not the heavy verb *kaita* ‘wrote’ can take a Goal argument. In (a), John can write a letter to Mary, but when Taro writes a linguistics article to Hanako in (b) the sentence is, just like its English counterpart, unacceptable. Neither the nouns alone nor the verb alone selects the goal argument, so U&N reason that a predicate containing both must serve this function; that is, that in (a) *tegami-o kaita* selects a Goal and in (b) *gengogaku-no ronbun-o kaita* does not.

While the evidence certainly seems to support a role in this process for both noun and verb, U&N fail to specify exactly how their idea of a complex predicate works with contemporary θ -theory. If we examine the structure of a sentence like (39a) (see (40) below), we see that this predicate does not constitute its own phrase—how, then, do we syntactically define what is selecting the Goal, and how do we describe its relationship to the Goal phrase? Presumably, we would have to assume that it is in fact the verb that selects the arguments and that the noun somehow modifies what it selects, but U&N make no mention of this complication in their analysis.

(40)



Moreover, while *tegami* and *gengogaku-no ronbun* are claimed to have no argument structures, this is not necessarily the case. The sentence in (41), for example, seems to suggest that *tegami* has both a Goal and a Source argument of its own.

- (41) *Watashi-wa John-kara-no Mary-e-no tegami-o moyashita.*
 I-TOP John-from-GEN Mary-to-GEN letter-ACC burned
 'I burned the letter from John to Mary.'

If anything, then, U&N's example seems to show that the connection between noun and verb in (39) that determines the acceptability of a Goal is exactly what G&M describe for VNs: Argument Transfer.

Let us move on to the other arguments. For U&N, the Agent or other subject role is always assumed to be that of the verb. According to them, this is one of the properties that make a sentence like G&M's in (25) (reproduced here as (42)) ungrammatical unless in the non-heavy incorporation construction. (G&M incorrectly cite this as a grammatical example, while most judge it to be marginal at very best.)

- (42) (=25)
 **America-ga 200-nen-mae-ni Igrisu-kara DOKURITSU-o shita*
 America-NOM 200-year-ago-at England-from independence-ACC did
 'America became independent of England 200 years ago.'

Because *suru* specifies that its subject be agentive, it will not allow an inanimate object like *America* as its subject. This characterization seems strange, however, when we consider the same sentence in the form of an isolated noun phrase, as in (43) below, and see that *America* is clearly an argument of the VN and not of a verb. In light of the curious data Grimshaw (1990) presents concerning the optionality and what she calls

“suppression” of the subjects of noun phrases, U&N’s does not seem altogether unreasonable, but it is still highly problematic.

- (43) America-no 200-nen-mae-no Igrisu-kara-no DOKURITSU
 America-GEN 200-year-ago-GEN England-from-GEN independence
 ‘America’s independence from England 200 years ago’

Finally, let us consider the Theme argument. U&N could simply assume that this argument is always the VN’s, as the double-o constraint (see footnote 5) ensures that the Theme cannot appear with accusative case in a *VN-o suru* sentence and so in all regular sentences it appears with genitive case. Isoda, however, complicates the situation with the following example:

- (44) (= Isoda 1991: [3b])
 John-wa sūgaku-shika BENKYŌ-o shi-nai.
 John-TOP math-only study-ACC does-not
 ‘John studies only math.’

Shika is a particle that, in combination with the negative form of the verb, expresses the concept of ‘only.’ It generally takes the place of the accusative marker *-o* and does not accept the genitive marker *-no*. What (44) seems to be telling us, then, is that the Theme *sūgaku* ‘math’ is not within the noun phrase, and this poses a problem to the characterization of the Theme as the VN’s argument within U&N’s framework.

Luckily, U&N recognize this problem, though the evidence they use to present it deals with CPs. Because CPs don’t take verbal case marking, there is no violation of the double-o constraint and we do regularly see Theme CPs outside of the NP, as in some of our original examples like (18) and (19). If *suru* is a heavy verb and the Theme is the VN’s argument, how is this to be accounted for? U&N claim that while the Theme is the VN’s argument, it can optionally move out of the NP and thereby escape being assigned genitive case. For example, in (44) U&N would claim that *sūgaku-shika* ‘only math’ originates in *benkyō*’s NP as its argument but then moves out before receiving genitive case.

They present the following evidence for their movement analysis, which they argue has the added benefit of invalidating another of GM’s arguments for *suru* as a light verb in *VN-o suru* constructions. Consider the data in (45).

- (45) *KEIKOKU-wa John-ga murabito-ni ōkami-ga kuru-to shita.
 warning-TOP John-NOM villagers-to wolf-NOM come-COMP did

G&M claim that the ungrammaticality of this sentence is due to the nature of Argument Transfer—because *keikoku* and *suru* have combined through this process into one lexical item, they cannot be separated and thus the VN cannot be topicalized. U&N point out, however, that there are plenty of cases where topicalization is perfectly acceptable, such as in (46) and (47) below:

(46) (= Uchida and Nakayama 1992: [79b])

Ōkami-ga kuru-to-no KEIKOKU-wa John-ga murabito-ni
 wolf-NOM come-COMP-GEN warning-TOP John-NOM villagers-to
 shita.
 did

‘As for the warning that the wolf was coming, John (gave it) to the villagers.’

(47) (= Uchida and Nakayama 1992: [84b])

KEIKOKU-wa John-ga murabito-ni shita.
 Warning-TOP John-NOM villagers-to did

‘As for the villagers, John warned (them).’

In (46) we see that if the CP Theme is within the NP and moves with it, the topicalization is acceptable. Furthermore, in (47) we see that topicalization in a sentence without the CP is also grammatical. U&N explain these data by saying that the Theme argument is the VN’s, and when it moves out of the NP it leaves a trace that must be governed. If we look at (45) again with the trace inserted (shown here as (48)), we can see that this analysis accounts for the sentences’ grammaticality where G&M’s does not.

(48) *_{t_i} KEIKOKU-wa John-ga murabito-ni [ōkami-ga kuru-to]_i shita.

When the NP containing *keikoku* is topicalized, the trace within it is moved along with the rest of the phrase to the matrix [Spec, CP] where *ōkami-ga kuru-to* cannot govern it, and therefore the sentence is ungrammatical. In contrast, there is no trace present in either (46) or (47), either because the CP does not move or because it is not there in the first place, so there is no problem with the movement involved in topicalization.

U&N also use this analysis also to explain another obvious question posed by their framework: if *suru* is a heavy verb, what is to distinguish it from other heavy verbs that don’t allow verbal case on the arguments of their VN complements? In U&N’s system, this question boils down to the variability of the Theme. The subject argument is assumed to be chosen by the verb, and so poses no problem, and the Goal is selected by a *VN-o verb* predicate, so we could say that with other verbs this predicate does not select a Goal (though the VN can independently)⁷. Thus, the only puzzle they see the need to solve is why the Theme is allowed to move outside of the NP with *suru* but forbidden with other verbs.

U&N point out that *suru* is actually not the only verb with which the Theme of the VN shows verbal case marking, and provide the sentence in (49) as an example.

(49) (= Uchida and Nakayama 1992: [86b])

John-ga murabito-ni ōkami-ga kuru-to KEIKOKU-o ataeta.
 John-NOM villagers-to wolf-NOM come-COMP warning-ACC gave

⁷ Note that this is a problem: why can’t a VN independently select a Goal argument with *suru* when it can in any other context?

‘John gave the villagers a warning that the wolf was coming.’

Isoda supports this claim, offering up a long list of other verbs he says can serve as light verbs (in the sense that they allow arguments of a VN to somehow appear outside its maximal projection) (265). What must be found, then, is not the reason why *suru* allows this verbal case marking, but why certain other verbs do not. U&N claim it is because these verbs are all factives. Factives, they point out, are well-known and well-documented islands for extraction, and since they prevent external movement in other cases we could assume that they are at fault here as well.

This assumption, of course, is based on the correctness of U&N’s characterization of all verbs that allow verbal case-marking on the Themes of their VNs as *-factive* and all those that do not as *+factive*. Although I cannot think of a verb that contradicts this characterization, U&N’s analysis of θ -roles within the light verb construction is flawed enough as is. We have seen that their characterizations of the Agent and Goal roles have their own problems, and even if they were perfect, the movement proposed for the Theme has an additional problematic aspect—they give absolutely no theory-internal motivation for it.

All in all, then, while U&N’s analysis explains the case-marking on the VN and some aspects of topicalization within the light verb construction more thoroughly than G&M’s, their characterization of the arguments and their phrasal positions within this construction is highly problematic and inferior to their predecessors’. Both analyses, it seems, have their problems.

5.0 A new approach

At this point, however, I do not intend to try and perfect G&M’s framework or overhaul U&N’s—fully accounting for these complicated constructions would be beyond the scope of a one-semester thesis. Rather, I would like to present some data that, while relevant in determining the nature of VNs and thus potentially useful for solving the problems we’ve been considering, has not been closely considered in the literature on light verb constructions. Examination of this data will give us a new way of approaching these constructions and a new criterion for evaluating the effectiveness of the analyses we’ve been considering.

Let us first examine a few more curious properties of *VN-o suru*. As we have mentioned, there is a restriction in Japanese grammar called the double-o constraint, which disallows the appearance of two accusative marked phrases within a VP. Consider the following data on the causative:

- (50) (= Dubinsky 1997: [24a])
 Tarō-ga Hanako-ni/*o meshi-o takaseta.
 Taro-NOM Hanako-to/ACC rice-ACC cook-made
 ‘Taro let/made Hanako cook the rice.’

Dubinsky (1997) notes that generally, the causee in Japanese can be marked either by *-o* or *-ni*, but as (50) demonstrates, the presence of another accusative-bearing phrase forces it to take the *-ni* marking. Interestingly enough, the causee cannot be marked accusative even in constructions where the other phrase is clefted and thus is not itself marked with *-o*, as in (51).

- (51) (= Dubinsky 1997: [24b])
 Tarō-ga Hanako-ni/*o takaseta-no-wa meshi da.
 Taro-NOM Hanako-to/ACC cook-made-thing-TOP rice is
 ‘The thing Taro let/made Hanako cook is rice.’

As Dubinsky points out, (51) seems to show that the double-o constraint is not merely a superficial restriction on having two accusative markers in a phrase⁸, but rather a structural prohibition that he defines as follows:

- (52) (= Dubinsky 1997: [28])
Double-object condition:
 No clause may contain two distinct VP-internal arguments...that occupy A-positions in which they are checked for structural accusative case.

This seems to explain the double-o constraint in most cases. Consider, now, the data on the light verb construction.

- (53) (= Dubinsky 1997: [25])
 a. *Kare-ga kankyaku-no mae-de piano-o ENSŌ-o shita.
 He-NOM audience-GEN before-LOC piano-ACC perform.-ACC did
 ‘He performed the piano before an audience.’
 b. Kare-ga kankyaku-no mae-de ENSŌ-o shita-no-wa
 He-NOM audience-GEN before-LOC perform.-ACC did-thing-TOP
 piano da.
 piano is
 ‘The thing that he performed before an audience is the piano.’

(53a) shows, as expected, that the explicit appearance of two accusative *-o* markers results in ungrammaticality. The judgment on (53b), however, is crucially different from its causative counterpart. Though both *ensō* ‘performance’ and *piano* ‘piano’ should be checked for structural accusative case and thus violate the Double-object condition, the sentence is perfectly acceptable. If we would like to maintain Dubinsky’s rule, which seems to work for all other situations in which the double-o constraint comes into play, we need to explain this somehow.

⁸ Dubinsky seems to assume that the cleft construction has an underlying structure identical to (49) and that it is this structure, where both *Hanako* and *meshi* are in one phrase, that is checked for structural accusative case by the Double-object condition below. This may or may not be a valid assumption; what is important here is to notice that the Double-object condition, however it is formulated, works differently in clefted versions of light verb constructions than in clefted versions of causatives and other constructions.

Dubinsky uses the data in (53) to claim that while in other cases the double-o constraint is structural, in the light verb construction it is merely superficial—in other words, it is only a (perhaps stylistic) aversion to having two *-os* in a clause that makes (53a) unacceptable, and neither sentence in (53) actually violates the Double-object condition.

There are many possible explanations for why (53) might not violate Dubinsky's condition; the one we are interested in is not the one Dubinsky proposes but a rather simpler idea. *Piano* is an argument of *ensō*, so what if we were to assume it appears inside the NP and receives its case from *ensō*? This would allow us to explain why the Double-object condition is not violated: because there is a VP-internal argument and an NP-internal argument instead of two distinct VP-internal ones, the condition never even comes into play.

Following through with this idea, we see that it could explain the topicalization data in (46) and (47) equally as well as U&N's movement account. If we were to assume the CP were already inside *keikoku*'s NP, then there would be no way to generate a sentence such as (45) in which only part of the NP moves, leaving one of its arguments behind.

This idea seems to have merit, but it has one fatal flaw—why would we ever assume that a noun could assign anything but genitive case? Such an assumption would require changing our theory of case-assignment—a theory the other analyses have been trying to maintain—and there would have to be some compelling evidence to go that far.

This is where the new data on VNs comes into play. Consider the following:

(54) (= Tsujimura 1992: [3])

John-no eigo-no BENKYŌ-chū, Mary-ga tazunete-kita.
 John-GEN English-GEN study-while Mary-NOM visit-came
 'While John was studying English, Mary came to visit.'

In this sentence, we see the VN *benkyō* suffixed with the morpheme *-chū*, which denotes 'during' or 'while.' As we would expect of a VN outside a light verb construction, its arguments are marked with genitive *-no*. But this is not the only grammatical option; the following is equally acceptable.

(55) (= Tsujimura 1992: [1])

John-ga eigo-o BENKYŌ-chū, Mary-ga tazunete-kita.
 John-NOM English-ACC study-while Mary-NOM visit-came
 'While John was studying English, Mary came to visit.'

In the sentence in (55), the VN's arguments are marked in verbal case. Unlike in the light verb construction, it is clear here that the only potential case assigner, at least for the Theme, is the VN itself, so it seems we must allow for the possibility of VNs assigning verbal case under certain circumstances. The question is, what are these circumstances?

In a paper published around the same time as Grimshaw and Mester's Argument Transfer analysis, Iida (1987) attempts to answer this question. He contends that "verbal-case assignment behavior with a nominal is realized when the following two conditions are satisfied: (i) the nominal has an argument structure, and (ii) it is combined with a lexical item which bears an aspectual feature" (94). In other words, because *-chū* "adds a meaning such that the action denoted by the nominal is in progress" (104) and thereby provides the VN with aspect, the VN is able to assign verbal case to its arguments. This is shown to hold true with other suffixes that provide temporal information as well, such as *-go* 'after' and *-izen* 'before.'

Iida assumes that the feature [+aspect] must be added via morphological affixation to the noun, but this is not necessarily the case. Shibatani and Kageyama (1988) point out that phrases like *no sai* 'on the occasion of,' *no setsu* 'at the time when' and *no ue* 'upon ...ing, after' (in which the *no* is a genitive marker attached to the preceding noun and *sai*, *setsu* and *ue* are themselves nouns) can perform the exact same function as suffixes like *-chuu*, *-go* and *-izen*, as seen below. (456)

(56) (= Shibatani and Kageyama 1988: [10a])

Kibōsha-wa henshin-yō-kitte-o dōfū-no ue, omōshi-komi
 Applicants-TOP return.postage-ACC enclosure-GEN upon, apply
 kudasai.

are.requested

'Applicants are requested to enclose the return postage in their applications.'

If it is true that in certain situations VNs assign verbal case to their arguments, then this is something that really must be considered in the literature on light verb constructions. It would be remarkably easy to fit these into the template already provided by Iida—VNs should be able to assign verbal case to their arguments in light verb constructions because they are combined with verbs like *suru* which bear aspectual features. Assuming this analysis also has the added benefit of immediately giving us a reason to rule out some verbs for the light verb construction. While verbs like *suru* 'do' and *ataeru* 'give' provide temporal aspect to their VN, a verb like *wasureru* 'forget' does not⁹—in fact, it implies that the activity described in the VN never occurred, and so given Iida's criteria VNs paired with *wasureru* should not be able to assign verbal case. As we have seen, this holds true.

When we examine further, however, the analysis becomes more complicated. Though it is now easy to account for why the nominal arguments can take verbal case, it becomes difficult to explain why certain arguments must. Why should the subject and Goal argument always have to be marked in verbal case? For the Goal, perhaps, we can fudge an analysis—Isoda reports that with other light verbs a genitive-marked goal is much more acceptable (264), so we could claim that some particular property of *suru* is the only thing blocking this in the cases we've seen—but the subject is more difficult. We could say it is in fact the verb's, but there then still remains the unanswered questions

⁹ The reading in question when paired with the VN would be the one meaning 'So-and-so forgot to VN,' not 'So-and-so forgot that VN occurred.'

about the nature of a nominal subject we had from assuming this with U&N. Our best option is probably to say that pairing a VN with a lexical item that gives it aspect allows it to assign an external θ -role, but this too might require some additional explanation.

There is also the problem of topicalization. Though it works the same as in U&N for the Theme, if we are assuming the Goal is inside the NP then the topicalization of the VN in (46) and (47) should not be possible because part of the NP is left behind. Assuming the Goal moves out of the NP simply leaves us with another ungoverned trace. There is no obvious way to amend this to correctly predict grammaticality.

6.0 Conclusion

In this thesis I have presented data from the Japanese light verb construction and critiqued two different analyses of it. I have also presented separate data on VNs that while examined on its own has not been seriously dealt with along with light verbs in the literature. Using this data, I have briefly outlined an alternative third analysis for the light verb construction, in which instead of questioning the argument assigner like the others, I question the case assigner. Obviously, this analysis is far from perfect—as we see above, there are questions of θ -roles and topicalization that need yet to be answered—but it seems promising nonetheless, and the data in the previous section presents some compelling evidence for it. Future study of the light verb construction would do well to consider this data; perhaps in combination with G&M's or U&N's analysis it could lead to progress in accounting for the various, often times confusing possibilities the construction has to offer.

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