One of the recent trends in syntactic theory, in fact, a very predominant one, is to shift the balance between syntax and the lexicon radically in favor of the lexicon. Let me refer to this trend generally and vaguely as lexicalism. Chomsky's nominalization paper (1970) seems generally to be taken as the origin of lexicalism. In this paper, he argued for the transformational hypothesis for the gerundive nominals and the lexical hypothesis for the derived nominals. Various linguists have contributed to the propagation of the lexicalist trend in the late 70's. We have now in Bresnan "The passive in Lexical Theory" (1980b) a quite persuasive argument for a lexical treatment of the passives in English, undoing a prototypical model of transformational grammar.

In the field of Japanese linguistics two dissertations appeared which argue for the lexical treatment of Japanese syntax: Ann Farmer's On the interaction of morphology and syntax, and Shigeru Miyagawa's Complex verbs and the lexicon. A basic claim of theirs is that complex verbs, or put more generally, complex predicates, are produced by the lexicon, and they do not involve syntactically defined sentence embedding. To be exact, we have to make finer distinctions. The influence of generative semantics had not been so noticeable on Japanese syntax as on English syntax, and the lexicalist antidote of Chomsky (1970) would not have been much needed in Japanese syntax. The lexicalists would not have so much to undo in this field as might be expected if generative semantics influence had been greater. But I do not have to be concerned with finer points of distinction here, because the lexicalists advocate the lexical formation of certain types of complex predicates that the past generative grammarians on Japanese of practically all persuasions have treated syntactically.

As a so-called agglutinative language, Japanese will provide us with testground of a sort not available within languages like English for the transformationalist-lexicalist controversy. Recently, Sadock (1980) has made an argument against a version of the lexicalist hypothesis on the basis of Greenlandic Eskimo, a polysynthetic language.

In this paper, I would like to take up one construction, the causative, which has been a central topic among Japanese generative syntacticians and which Farmer and Miyagawa wish to delegate to the lexicon. The point I would like to make is, of course, that they cannot do so. Farmer's and Miyagawa's dissertations are, I believe, complementary of each other. In my criticism that follows, however, I will be only concerned with the latter's work. In the course of my discussion of the causative construction, I will also throw in some general remarks on the nature of modularity, as I see it, that relates syntax and the lexicon as two component modules of grammar.
We have to distinguish two causative constructions in Japanese. I would like to call one the syntactic causative and the other the lexical causative, because my claim is that the former is generated by syntax while the latter is stored in the lexicon. But this claim is the point of contention. In order, then, to avoid the theoretically biased terminology, I should perhaps adopt neutral terms, type 1 and type 2. I call what I would like to call the syntactic causative the type 1 causative and what I would like to call the lexical causative the type 2 causative.

Let me illustrate the intended distinction by these terms with some examples:

(1) Taroo-ga Hanako-o oki-sase-ru/oki-sas-u.
   nom acc arise-cause-pres
   'Taro causes Hanako to get up.'

(2) Taroo-ga Hanako-o okos-u.
   nom acc arouse-pres
   'Taro woke up Hanako.'

(3) Hanako-ga oki-ru.
   nom arise-pres
   'Hanako gets up.'

(4) Syoogun-ga hei-o susum-ase-ru/susum-as-u.
    general-nom soldier-acc advance-cause-pres
    'The general causes the soldiers to go forward.'

(5) Syoogun-ga hei-o susume-ru.
    general-nom soldier-acc advance-pres
    'The general advanced the soldiers.'

(6) Hei-ga susum-u.
    soldier-nom advance
    'The soldiers advance.'

Examples (1) and (4) illustrate the type 1 (i.e. syntactic) causatives, and examples (2) and (5) the type 2 causatives. Both (1) and (2) represent causation of the event expressed by (3), and both (4) and (5) represent causation of the event expressed by (6). Whatever semantic difference that might exist between (1) and (2) ((4) and (5)) do not concern us for the moment. The type 1 causatives are those whose syntactic derivation has been extensively discussed among generative grammarians in the last 15 years. Abstracting away from the points of disputes among those grammarians, we might summarize their description of the type 1 causatives as follows: the sentences (1) and (4) are complex sentences with the matrix causative verb sase/sas, into which (3) and (6) are embedded, respectively. One can construct a type 1 causative sentence on the basis of a transitive sentence, too:

(7) Taroo-ga Hanako-ni tegami-o kak-ase-ru/kak-as-u.
    nom dat letter-acc write-cause-pres
    'Taro causes Hanako to write letters.'
Morphologically, the matrix causative verb sase/sas is agglutinated with the embedded verb (oki, susum, and kak in (1), (4), and (7), respectively).

At the preliminary observational level, the type 2 causatives can best be characterized in terms of morphological (or, lexical) correspondence or pairing. Certain intransitive/inchoative verbs and transitive/causeative verbs are morphologically paired; that is, they share a common stem, and a suffix is added to one of them, or different suffixes are added to both, to differentiate them. The involved suffixation is not uniform; we can count about a dozen classes of such pairs. To illustrate:

(9) intransitive/inchoative transitive/causeative
    susum-u susum-e-ru "advance"
    ok-i-ru ok-os-u "wake"
    sas-ar-u sas-u "stick"

In contrast with the type 1 causative, the type 2 causative has not been much discussed in the work of generative syntax of Japanese. But it was the type 2 causative that had drawn the pre-transformationalist linguists' attention. I here refer the reader especially to the works of Kanae Sakuma and Bernard Bloch for the classificatory study of type 2 causatives. The transformational grammarian of Japanese has felt that there is not much about the type 2 causatives to add to these classical taxonomic studies.

As I have already indicated, generative grammarians of Japanese treated the type 1 causative transformationally, that is, its surface form is assumed to be derived transformationally from a complex base sentence form. In opposition to this, the lexical analysis of causative is proposed, which assumes that the type 1 causative is a simplex sentence with a complex verb form. But I would like to characterize the essence of this controversy in terms of the contrast, not of transformational vs. lexical, but of syntactic vs. lexical. I would thus talk about the syntactic analysis of causative as opposed to the lexical analysis. The question as to whether a syntactic analysis of the type 1 causative should be called transformational or not is to some degree a matter of execution and definition.

I would like to go directly into the heart of the factual matter, and try to convince the audience that the type 1 causative is syntactic. Then I will examine certain facts that served as evidence in Miyagawa's arguments in favor of the lexical analysis, and consider what lessons we should learn from such facts in general linguistic theory.

Decisive evidence, I believe, is provided for the syntactic nature of the type 1 causative, if we can show that the surface causative verb form V-(s)ase /(s)as- can be broken up into two constituents (V- and sase/sas-) by some syntactic processes which results in some formative or formatives intervening between these constituents. I believe we can do this.
Consider, first, the following sentence:

(10) Watasi-wa Taroo-ni tabako-o suw-anaku sase-ru.
    I-top dat tobacco-acc smoke-not cause-pres

I take this sentence form as being the causative form of a negative sentence:

(11) Taroo-ga tabako-o suw-ana-i
    nom tobacco-acc smoke-not-pres
    'Taro does not smoke cigarettes.'

The meaning of (10) is roughly:

(12) I cause Taro not to smoke cigarettes.

In terms of the syntactic analysis of the type 1 causative, (10) has the base structure involving embedding, which, for the present discussion, we might assume as:

(13) Watasi-wa [Taroo-ga tabako-o suw-ana] sase-ru
    I-top nom tobacco-acc smoke-not cause-pres

Compare (10) with the causative sentence form with an affirmative embedded sentence:

(14) Watasi-wa Taroo-ni tabako-o suw-ase-ru.
    I-top dat tobacco-acc smoke-cause-pres
    'I cause Taro to smoke cigarettes.'

The "affirmative" form has the familiar surface structure of causatives: it is identical with the surface structure of a simplex sentence, which contains exactly one verb form, the surface main verb suw-ase-ru. But in the "negative" counterpart, this surface verb is broken up by the intervening negative morpheme (a)naː: suw-ana-ku sase-ru. The suffix ku is a marker for the renyoo form of an adjective, the form generally used when an adjective is followed by a yoogen (verb, adjective, or adjectival verb). Thus, in the surface sentence form (10), the causative form sase-ru appears as if it is in fact a surface verb, a yoogen, and that is the reason why the negativized verb (which is a surface adjective) suw-ana- assumes the renyoo form.

Before proceeding to other examples I should add some more comments on this example. First, a trivial point. The contrast I have been making between "affirmative" and "negative" forms concerns the predicate embedded under the causative morpheme sase/sas, not the causative sentence itself. The negative of (14) is:

(15) Watasi-wa Taroo-ni tabako-o suw-ase-na-i.
    I-top dat tobacco-acc smoke-case-not-pres

which, roughly means, of course:

(16) I do not cause Taroo to smoke cigarettes.
Secondly, I might comment on the evidential value of (10), to take a preventive step against possible objections on factual grounds. I declare as a linguist that (10) is, for me, grammatical, and must also be so to anyone who knows the same language as I do. But if (10) is given to a so-called naive informant for acceptability judgment, his/her response might well be negative. (10) is certainly not a form to be recommended in Japanese language instruction. A more natural way of expressing (roughly) the same idea as (10) would be:

(17) \text{Watasi-wa Taroo-ni tabako-o suw-ana-i yoo-ni sase-ru.}

\begin{tabular}{ll}
I-top & dat tobacco-acc smoke-not-pres Comp-dat cause-pres \\
\end{tabular}

For whatever reasons there might be, if (17) sounds more natural than (10) with the roughly same semantic function, the naive intuition can easily be overshadowed by (17) for acceptability judgment.

Since our purpose of investigation is neither heuristic, nor practical, nor even functional, but purely theoretical, the acceptability judgment of (10) is relevant to us only to determine whether Japanese grammar allows a formative or a sequence of formatives to intervene between a verb stem (in (10), suw-) and the causative sase/sas. Even if (10) is judged to exhibit a lower degree of grammaticality, it suffices for our purpose.

Let me further note here that one can insert between suwanaku and saseru a particle that can be attached to the ku-form of an adjective in other contexts. Thus, we have:

(18) \text{Watasi-wa Taroo-ni tabako-o suw-anaku-wa sase-ru.}

\begin{tabular}{ll}
I-top & dat tobacco-acc smoke-not-emp cause-pres \\
\end{tabular}

'I do cause Taro not to smoke cigarettes.'

(19) \text{Watasi-wa Taroo-ni tabako-o suw-anaku-sae sase-ru.}

\begin{tabular}{ll}
I-top & dat tobacco-acc smoke-not-even cause-pres \\
\end{tabular}

'I cause Taro even not to smoke cigarettes.'

These examples are just about as acceptable as (10) is.

But even after the factual question as to whether (10) is grammatical or not is settled, one might still object the validity of the analysis of (10) on which my contention (that there are formatives intervening between the verb stem suw- and the causative sase in (10)) is based. The \textit{prima facie} reason for this objection is this: the surface form saseru may be the causative form of the verb su-ru. Thus, consider, for example:

(20) \text{Taro-ga benkyoo-o su-ru.}

\begin{tabular}{ll}
nom & study-acc do-pres \\
\end{tabular}

'Taro studies.'

(21) \text{Watasi-wa Taroo-ni benkyoo-o s-ase-ru.}

\begin{tabular}{ll}
I-top & dat study-acc do-cause-pres \\
\end{tabular}

'I cause Taro to study.'
(21) is the type 1 causative based on the transitive sentence (20). It exhibits the regular pattern of the type 1 causative formation, except that the "embedded" verb su- is one of the very few irregular verbs in Japanese, and its stem is almost invisible in the causative form.

My claim about the analysis of (10) is that the form sase-ru is a surface manifestation of the causative verb itself. By using here the term verb, I am describing the fact with a theoretical bias for the syntactic analysis of the type 1 causative. But the referent of what I call here the causative verb is the same as what the proponent of the lexical analysis would call the causative suffix. The significance of (10), if my analysis of (10) is correct, should not be overlooked. No one has so far questioned the claim made in various forms through the vicissitude of theories and descriptive frameworks that the marker of the type 1 causative, like the marker of the so-called passive form, is a bound form; to call it a suffix is a manifestation of this claim. But my analysis of (10) implies that the causative marker manifests itself as an independent word in it. If that is the case, it cannot be called a bound morpheme, because a bound morpheme is by definition not a free word in every morphological realization of it, thus to call it a suffix would be a misnomer.

Thus, it is important to dispell doubt, if any, that sase-ru in (10) is the causative form of the verb su-ru: s-ase-ru. In this respect, the contrast between (10) and (17) is interesting and instructive. If saseru in (10) and (17) is the causative form of su-ru, the embedded sentence of (10) and (17) would be, respectively:

(22) *Taroo-ga tabako-o suw-anaku su-ru.
    nom tobacco-acc smoke-not do-present

(23) Taroo-ga tabako-o suw-ana-i yoo-ni su-ru.
    nom tobacco-acc smoke-not-pres Comp-dat do-pres

(23) is grammatical, but not (22), as indicated. I am not concerned primarily with semantic analysis now, and do not attempt to be very exact in describing the shades of meaning. The semantic contribution of yoo-ni suru in (23) with a preceding negative, might be rendered as "refrain from":

(24) Taroo refrains from smoking.

But the negative is not required by yoo ni suru. We may have:

(25) Taroo-wa tabako-o su-u yoo-ni su-ru.
    top tobacco-acc smoke-pres Comp-dat do-pres

which might be translated as "Taroo makes efforts to smoke." (25) as well as (23) can be causativized, following the usual pattern, and we get:

(26) Watasi-wa Taroo-ni tabako-o su-u yoo-ni s-ase-ru.
    I-top dat tobacco-acc smoke-pres Comp-dat do-cause-pres

and (17), repeated here:
The shade of meaning contributed by yoo-ni su-ru is sufficiently subtle to allow us to translate (26) and (17) as:

(27) I cause/make Taroo smoke.

(28) I cause/make Taroo not to smoke.

In contrast to (17), (10) does not have any source other than (13), apparently.

There is another causative related sentence form that might be confused with (17), so I might as well comment on it, too. The verb su-ru, aside from its intrinsic use as do, may also be used as the lexically defined causative counterpart of the verb nar-u (become). Thus, compare:

(29) Taroo-ga kasikoku nar-u.
    nom wise    become-pres
    'Taro becomes wise.'

(30) Watasi-ga Taroo-o kasikoku su-ru.
    I-top    acc wise    pres
    'I make Taro wise.'

The pairing of nar-u/su-ru here, like that of sin-u/koros-u, parallels English pairs such as become/make and die/kill. The predicate preceding (with this function) must be stative. It can be negative. We have:

(31) Taroo-ga kasikoku-naku nar-u.
    nom wise-not    become-pres
    'Taro becomes unwise.'

    I-top    acc wise-not    pres
    'I make Taro unwise.'

In particular, the negative of an action verb, being stative, can precede nar-u.

(33) Taroo-ga tabako-o suw-anaku nar-u.
    nom tobacco-acc smoke-not become-pres
    'Taro stops smoking (lit. Taro becomes not to smoke cigarettes).'

There is, in my mind, some uncertainty as to what the corresponding causative su-ru form for (33) is, however. I believe:

(34) Watasi-ga Taroo-o tabako-o suw-anaku su-ru.
    I-top    acc tobacco-acc smoke-not do-pres
    'I make Taro not smoke any more.'
is grammatical, though it sounds less than perfect, perhaps because, as is well known in other cases, the Japanese surface sentence abhors a sequence of two o-phrases. I do not believe, though, that:

(35) *Watasi-wa Taroo-ni tabako-o suw-anaku su-ru.

I-top dat tobacco-acc smoke-not do pres

is grammatical. If my judgment is correct, it casts doubt on the generality of the rule which converts a sequence of o-phrases to a sequence of a ni- and an o-phrase, which is widely assumed to be responsible for the derivation of the causative sentence with a transitive embedded sentence.

Putting aside these issues orthogonal to our present concern, the point is that (34) is in a sense a causative form, but we have here the surface verb form suru, not saseru as in (10). (10) is not the "causative" form of (33), structurally, even though its semantic function might be close enough for it to be confused as so being, if carelessly analyzed.

Having confirmed that saseru in (10) is a "free" realization of the causative marker (the causative verb, in the terminology of the syntactic analysis of the type I causative, and the causative suffix in the terminology of the lexical analysis of the causative), let me now proceed to give some more examples of where the causative marker appears as a free word.

Consider:

(36) Watasi-wa Hanako-ni nyuuseihin-sika tabe-naku sase-ru

I-top dat milk-product- except eat-not cause-pres

sika is a negative polarity word "nothing but"; its function is much like French que accompanied by ne. (36) means:

(37) I cause/make Hanako eat only milk-products.

The point of this example is that since the scope of sika, i.e., semantically, the scope of 'only', is contained in (is narrower than) the scope of the causative, the negative marker na can be put inside the causative marker, breaking up the surface word tabe-sase-ru into its two components. It must, however, be noted that the negative marker na may be attached after tabe-sase, yielding:

(38) Watasi-wa Hanako-ni nyuuseihin-sika tabe-sase-na-1.

I-top dat milk-product-except eat-cause-not-pres

This sentence may also be translated by (37), though there seems to be some functional difference between (36) and (38). When the context calls for the translation:

(39) I let Hanako eat only milk products.

(38), but not (36) may be used. But (38) has a more general sense of causation than (39) indicates that allows it to be used in various contexts that fits the English (37). The semantic functions of (36) and (38) overlap, but are not identical.
It may not be just the negative aux that can break up the agglutinated causative verb complex, and set free the causative aux as an independent word. Some other plausible candidates to serve this purpose would be the so-called huku-zyosi, such as wa, sae, dake, which can be attached to various surface constituents, in particular to the verb stem. Thus, compare:

(40) Taroo-wa LI-o yom-u.
    top acc read-pres
    'Taro reads LI.'

(41) Taroo-wa LI-o yomi-wa su-ru.
    top acc read-emp do-pres
    'Taro does read LI.'

(42) Taroo-wa LI-o yomi-sae su-ru.
    top acc read-even do-pres
    'Taro even reads LI.'

(43) Taroo-wa LI-o yomi-dake su-ru.
    top acc read-only do-pres
    'Taro reads LI (but does nothing further about it).'

In each of the examples (41) - (43), particle wa, sae, or dake attached to the verb stem yomi causes the insertion of the verb stem su, whose only function is to serve as a carrier of the tense marker ru. Now consider:

(44) Watasi-wa Taroo-ni LI-o yomi-wa sase-ru.
    I-top dat acc read-emp cause-pres
    'I let/make/cause Taro (to) read LI (but, perhaps, not let him adore it).'

(45) Watasi-wa Taroo-ni LI-o yomi-sae sase-ru.
    I-top dat acc read-even cause-pres
    'I let/make/cause Taro to even read LI.'

    I-top dat acc read-only cause-pres
    'I let/cause/make Taro (to) only read LI.'

In these examples, the attachment of wa, sae or dake to the verb stem yomi frees the causative marker sase from the agglutination with it; the causative marker sase-ru appears as a free word in these examples.

It must be noted that the particles wa, sae, and dake can also be attached to the agglutinated causative verb stem yomase with wider scope than in (44) - (46) in their semantic function. Thus, alongside (44) - (46) we also have:

(47) Watasi-wa Taroo-ni LI-o yom-ase-wa su-ru.
    I-top dat acc read-cause-emp do-pres
In general, forms with wider scope can substitute for forms with narrower scope in most pragmatic situations. It must be noted that these latter forms sound much smoother to the native ears than the former. But, to repeat, our purpose is not directly heuristic or practical.

However, unfortunately, the claim that sase in (44) - (46) is another instance of a free appearance of the causative marker sase cannot be argued for definitively for another reason. As Kuno (1980c) pointed out, sentences like (44) - (46) are perhaps derived from sentences like (41) or (43) which are augmented by the carrier verb su-ru; that is, the surface form sase-ru in (44) - (46) may be the causative form of su-ru: s-ase-ru. For now, I have no clear answer one way or another.

Even if the latter analysis is correct, however, forms like (44) - (46) are not particularly favorable for the lexicalist analysis, to put it mildly. The formal-semantic function of the carrier verb su-ru is very much like the tense carrier do. Although the base generation of the tense carrier do has sometimes been proposed, and although the most strict lexical theory would commit itself to choosing the option, it is not at all obvious to me that such a theoretical move is the right one. But otherwise the lexicalist analysis of Japanese causative would have to assume that forms like yomi-wa sase-ru, yomi-dake sase-ru, etc. are all formations of the lexicon, not a particularly happy consequence.

Another example that seems to indicate that the causative marker sase may appear as an independent verb is:

(50) Watasi-wa Taroo-ni tabako-o sui-taku sase-ru.
I top dat tobacco-acc smoke-want cause-pres
'I cause Taro to want to smoke cigarettes.'

A plausible source for this, in terms of the transformational analysis, with irrelevant details ignored, would be:

(51) Watasi [Taroo tabako suw-ta] sase-ru
 tobacco smoke-want cause-pres

In this case, there is no possibility to set up a base form of the structure:

(52) Watasi [Taroo tabako suw-ta-su] sase-ru
 tobacco smoke-want-do cause-pres

so that the surface sase-ru may be analyzed as the causative form of su: s-ase-ru. A possibility remains that (50) is the causative form of:
(53) Taroo-ga tabako-o sui-taku nar-u.
nom tobacco-acc smoke-want become-pres
'Taro comes to desire to smoke cigarettes.'

But the expected causative form of (53) would be:

(54) Watasi-ga Taroo-ni tabako-o sui-taku nar-ase-ru.
I-nom dat tobacco-acc smoke-want become-cause-pres
'I cause Taro to come to want to smoke cigarettes.'

which, though quite awkward, would have to be judged grammatical. The lexically paired causative of (53), on the other hand, would be:

(55) Watasi-ga Taroo-o tabako-o sui-taku su-ru.
I-nom acc tobacco-acc smoke-want pres
'I make Taro want to smoke cigarettes.'

(50) cannot be accounted for as a causative form of (55). Thus, we seem to be left with no analysis except for the suggested one, where sase is the causative marker appearing as a free word.

My final set of examples is taken from Susumu Kuno's ongoing research in honorification. Consider the following sentence (where Subject Honorification Markers are underlined).

(56) o-yasumi ni nari-ta-i-dake o-yasumi ni nar-ase-te
rest want-pres-only rest cause-and
o-oki si-ta hoo-ga i-i no de-wa na-i
leave do-past option-nom good-pres Comp be-emp not-pres
des-u ka?
be-pres or
'Is it not better to let PRO rest as much as PRO wants?'

Sentence (56) involves honorification with respect to the implicitly understood subject of the verb yasum-u ("rest"), i.e. PRO. Stripped of this honorification, the sentence becomes:

(57) Yasumi-ta-i-dake yasum-ase-te o-i-ta hoo-ga
rest-want-pres-only rest-cause-and leave-past option-nom
i-i no de-wa na-i des-u ka?
good-pres Comp be-emp not-pres be-pres or

The relevant honorification consists of the prefix o, which is affixed to the verb stem yasum, the honorific aux nar, and the suffix ni, which intervenes between these two verb stems: o-....ni nar. The part that concerns us here is yasum-ase-te in (57) and the corresponding o-yasumi ni nar-ase-te in (56). We see that the honorification separates the causative sase from the verb yasum in (56). In this example, the causative marker remains bound, but bound to the honorific aux nar in place of the verb, yasum, to which, semantically, causative marker is attached.
Let me recapitulate the significance of the examples discussed above as counterevidence against the lexicalist analysis of the causatives. The examples with the negative, (10), (18), (19), and (36) all demonstrate, as already indicated, that the causative marker may surface as a free word. The lexicalist talks about the causative "suffix." This terminology turns out to be quite misleading.

The lexicalist must choose either one of the following positions. The first option is to assume that sentence like (10), (18) etc., are basically the same structure as such innocuous type I causative sentences as (1) and (4); in particular, that they are syntactically simple sentences. Under this assumption, the derivation of word sequences like suw-ana-ku sase-ru, suw-ana-ku wa sase-ru, etc. would be delegated to the lexicon just as the derivation of okos-a-ru, oki-sase-ru, and susume-sase-ru, etc. is. Otherwise, the lexicalist would have to assume that sentences like (10), (18) are, in contradistinction with those like (1) and (4), generated "syntactically," that is, from an underlying complex sentence form. Both of these consequences seem hard to defend.

A criterion alluded to by Miyagawa himself would rule out the assumption that the word sequence suw-ana-ku su-ru is lexically formed, a plausible conclusion. In fact, Miyagawa, ironically, discusses an impossible form: *V-na-sase (e.g. tabe-na-sase-). Let me quote: "...one never finds a [+Aux] morpheme between two items that get attached by a W[ord]F[ormation] R[ule], e.g., *V-sase-na-(r)are, *V-na-sase. This would be predicated by the assumption that, while [+Aux] morphemes get directly inserted into a syntactic structure, a complex verb such as V-sase is first produced by the lexicon before taking part in the syntax of the language." (p.89) The principle implicit in this statement might be paraphrased thus: if a complex formative A-B is a product of the lexicon, then no formative X may be inserted by syntax between A and B to derive A-X-B. Put it conversely, we have a sufficient condition to draw a conclusion that A-B is not a product of the lexicon: if A-X-B and X is inserted by syntax, then A-B is not a product of the lexicon. The principle sounds quite plausible.

Miyagawa applies this principle, taking A as a verb stem V (e.g., suw), B as the causative "suffix" (s)ase, and X as the negative marker na and claims that V-sase (V-ase) is a product of the lexicon. In contrast, I apply the same principle to the same entities, and arrive at an opposite conclusion. Miyagawa proceeds as follows: the negative marker na is an aux; an aux is inserted by syntax; if V-sase is a product of the lexicon, as he claims, the above principle predicts that V-na-sase is illformed. I reason as follows: suw-ana-ku sase-ru is wellformed; anaku is the renyoo form of the negative marker; I follow Miyagawa's assumption that na is an aux; ergo, by our principle, suw-ase is not a lexical formation.

What went wrong with Miyagawa's prediction? As is well known, the negative marker na is morphologically adjectival. Miyagawa bases his prediction on the fact that the causative suffix follows a verb stem in all the wellformed causative forms. One cannot make any prediction, solely on the basis of our principle at hand as to what conjugated form an adjectival stem might take if it can ever be followed by the causative marker sase. One may not simply assume that it is the stem form that must be followed by the causative marker, if an adjectival morpheme can ever be
followed by it. What turns out to be wrong is this hidden presupposition of Miyagawa's. The negative marker assumes the renyou form before the causative marker, as is in fact quite natural.

In contrast with examples (10) and (18) etc., sentences like (56) do not reveal the potential "freedom" of the causative marker. Kuno, however, tries to demonstrate with examples like (56) and related ones, that the honorification process is cyclic. If this claim is established, it is plausible to assume that honorification is transformational even though it contradicts the strict lexicalist hypothesis which prohibits a transformation to insert any morpheme. An option would still be open for a cyclic interpretive analysis of honorification. But even with an interpretive analysis it is still plausible to assume that nar is an aux, or even if not, some syntactically inserted formative, and then one would have to conclude that the complex form V-sase is also syntactically, not lexically, generated, on the basis of the same principle as above.

So far I have been presenting my case for the syntactic analysis of the causatives, drawing on direct counterevidence that has escaped the lexicalist's attention. Thus, I have managed to argue against the lexicalist analysis of causatives without really confronting the arguments made for it. I would now like to discuss such arguments.

There are, so far as I can see, three major points provided by Miyagawa that allegedly argue for the lexicalist analysis of causatives.

The first concerns the general nature of words (lexical products) and word formation rules. According to Miyagawa, some causative complex verbs have undergone "semantic drifts," and that is, they acquire meanings not predictable compositionally. He takes this alleged fact as reminiscent of the evidence Chomsky brought forth in favor of the lexicalist theory in his Nominalization article. Miyagawa further observes that some word formation rules may take causative complex verbs as inputs and produce new words, which don't have a totally predictable meaning. This fact must be taken as evidence for the lexicalist analysis of causatives, if indeed it is only the lexicon that can feed word formation rules, apparently a plausible hypothesis.

The second point concerns Miyagawa's notion of Paradigmatic Structure (PDS). In a nutshell he claims that the verbal lexicon is provided with a structure of arrayed slots and the WF rules that form causative complex verbs can feed this structure with a causative verb if and only if it sees an appropriate slot vacant. Again, if the lexicon is autonomous and self-sufficient, the rule that feeds a slot machine in the lexicon must be in the lexicon.

These two points are interconnected by the following claim. A lexical item (a product of the lexicon) is blocked from entering the permanent lexicon when it is not allowed to enter a lexical paradigm slot due to the existence of another lexical item in that slot. More specifically, a lexical item may not exhibit semantic drift or noncompositionality of meaning unless it occupies a slot in the Paradigmatic Structure, or, to use Miyagawa's term, unless it acquires the Paradigmatic Status. Applied
to the causative verbs, this principle yields the following corollary: "Every \( V_{\text{intr}} \)-sase that has a noncompositional meaning shares the trait that it does not have a corresponding unique verb stem. On the other hand, a \( V \)-sase formed from, say, an intransitive verb that has a unique transitive counterpart is never associated with anything but the compositional meaning." (p.109). I will refer to this hypothesis by "Paradigmatic Status Hypothesis."

My response to these points is: the facts cited in favor of the lexicalist's analysis of causatives should not be taken as evidence for it. Rather, if they are put in a broader perspective, they would be recognized as special cases of a more general phenomenon that indicates that there is more interconnection between the syntax and the lexicon than assumed by the lexicalist; it is not just one way commerce, the lexicon supplying words to the syntax when sentences are generated.

It first appeared to me that the Paradigmatic Status Hypothesis was at least factually correct, that is, it would not be directly disconfirmed by contradicting counterexamples. If the Paradigmatic Status Hypothesis is correct, it might appear to be strong evidence for the lexicalist analysis.

I now believe that counterevidence against this Hypothesis exists. There are some reasons, which I am not going to elaborate here, that such counterevidence is hard to come by. For the moment, I have only one counterexample. Besides, there are some complications to be explained before it can be presented as a counterexample. But the gist of my argument against the lexicalist position does not really depend on the existence of counterexamples against the Paradigmatic Status Hypothesis. It is rather an argument of the kind that would predict the existence, if not actual, then the eventual existence of such counterexamples. Hence, I would like to put off the presentation of my counterexample against the Hypothesis and, in fact, put aside the Hypothesis, for the moment, and turn our attention to the general issue of the relationship between syntax and the lexicon.

The general assumption underlying the lexicalist analysis of causatives is that only those constructions that are outputs of word formation rules may exhibit semantic noncompositionality and semantic drift. Here, the intended relevance of these traits is that they are taken as characteristic marks of lexical items. The basic assumption of the lexicalist seems to be that only word formation rules add (complex) words to the lexicon.

This assumption, I believe, is easily disconfirmed by an array of examples that involve the negation marker \( \text{na} \). I assume, as Miyagawa does, that the negative \( \text{na} \) is an aux. Now, consider expressions such as follows:

\[
\begin{align*}
\text{sumanai} & \quad \text{"excuse me"} \\
\text{sosiranu} & \quad \text{"feigning ignorance"} \\
\text{moosiwakenai} & \quad \text{"apologize"} \\
\text{nanigenai} & \quad \text{"casual"} \\
\text{azikenai} & \quad \text{"dreary"}
\end{align*}
\]
Detailed comments may be made about different characteristics of composition exhibited by subgroups of these examples, but I refrain from engaging myself in details at this point. Suffice it to note that these are beyond any doubt compound words stored in the lexicon of the present day Japanese. The naive native speaker would not fail to recognize the negative marker in these words, and also to identify most of the other constituent "words," but their meaning is not compositional of the constituent words.

As another example take the aux sugi-ru "do things in excess," as in:

\[(59)\]  
Taroo-wa hon-o yomi-sugi-ru.  
\hspace{1cm} top book-acc read-excess-pres  
'Taro reads books too much.'

It qualifies as an aux by the criterion of Akmajian and Kitagawa, cited by Miyagawa, that it does not impose any case array of their own. Consider derived nouns tabesugi "overeating," nomisugi "excessive drinking"; one might be able to argue that their meanings are still predictable. But, then, how about yarisugi "hustle"? If, for example, I want to contradict your saying "Taro wa nomi-sugi-ru" ("Taro drinks too much"), I can say "iya, Taroo wa sonna ni nonde inai" ("No, Taro does not drink so much"); but when I want to contradict your saying "Taro wa yari-sugi-ru" ("Taro hustles too much"), I cannot say, I suppose, "iya, Taroo wa sonnani yatte inai" ("Taro does not do too much").

To be sure these examples, especially with the negative na, are mostly formations of the past and in fact even reflect some features of premodern syntax. But that does not affect my point, insomuch as the auxes have been auxes during the relevant period of the history of language.

Let me then present my general hypothesis. Let me distinguish two concepts, words as elements of the surface structure and words as elements of the lexicon. One might have chosen to call the latter lexical items, but that would have committed me to too hasty of a simplification; I might want to call some forms of subword levels also lexical items. So, let me use the terms SS-words and L-words, awkward though they may be. SS-words may be formed by syntactic processes of certain types, "raising" and adjustment rules, after lexical items are inserted by the lexical insertion rule. Thus, in:

\[(60)\]  
Taroo-wa tabako-o suw-ana-i.  
\hspace{1cm} top tobacco-acc smoke-not-pres  
'Taro does not smoke cigarettes.'

suwanai is an SS-word, even though it is not an L-word, not a lexical item, and hence, naturally, it is not inserted by the lexical insertion rule as a unit in this syntactic structure. Its component suw and na are each inserted by the lexical insertion rule.

A lexical item which, upon being inserted to some syntactic structure, produces an SS-word, possibly with inflectional adjustment, but without the help of any syntactic rule of raising or adjustment, is an L-word. Thus, suw is an L-word, since, even though it does not produce an SS-word in (60), it does produce an SS-word by itself in:
A word formation rule is, if we follow the definition of the contemporary theory of morphology, a rule that takes a word, or words, as an input, and gives out an L-word, a lexical item, as an output. This is a "rule" in an ambiguous sense. In one sense, it is a rule to account for structural characteristics of derived words. In another sense, it is a creative rule of new lexical items to be added to the lexicon.

Now, I maintain that word formation rules are not the only way new L-words are created. Instead, I propose the following principle:

(SS-W:LW) Any SS-word is a potential candidate of a new L-word, whatever its "generative" characteristics might be.

It might appear that the SS-W:LW principle is too general; word creation cannot be so unconstrained. There must be some constraints as to what SS-words can become L-words. Perhaps, I would like to respond to this objection by saying that this is a good way to start, or even the right way to start. Such constraints, if any exist, should be understood as such, that is as constraints to this general rule. But more crucially, I would maintain that the SS-W:LW principle is, in another respect, still too specialized. It must in fact be taken as only a special case of a more general principle:

(SS-C:ID) Any surface structure constituent above the level of words is a potential candidate of an idiom or a fixed expression.

Again, SS-C:ID may be too general, but we should start from here to uncover whatever meaningful constraints exist.

By saying that the SS-W:LW principle is a special case I don't mean that it is simply an arbitrarily chosen special case of the SS-C:ID principle and does not deserve any special attention. It does deserve, and any meaningful constraints to be imposed on it that might eventually be found, do deserve most careful attention. This is precisely because the SS-W:LW principle relates two major modules of grammar, the syntactic component and the lexicon.

I supplement the SS-W:LW principle with another:

(WFR:BL) A word added to the lexicon through the SS-W:LW principle may be operated on by word formation rules as any lexical item may.

In other words, word formation rules are blind to the lexical or syntactic origin of a new word. Origin blindness may appear to be implied by SS-W:LW. It is not. It embodies an aspect of the autonomy of the lexicon, as I see it. Once syntax hands new words to the lexicon, they are under the complete governance of the lexicon.
If one has this general view of the relationship between syntax and the lexicon, one would expect that the Paradigmatic Structure cannot prevent type 1 causative complex verbs (V-as-e) from drifting into the lexicon, exhibiting such lexical features as semantic unpredictability, whether or not the transitive slot is already occupied by a type 2 causative verb.

So far I am aware of only one example of such a case, and this example is not so transparent as might be wished. The example is tob-as-e, with the meaning something like "demote to a position at a remote place." Thus, an executive officer of a corporation may advise its president:

(62) Aitu-o Kyuusyuu-e tob-as-e mas-yoo.
he-acc to (fly-cause) Formal-presume
'Let us demote him to a post in Kyuusyuu.'

The intransitive counterpart is not possible, with the intended meaning:

(63) *Aitu-wa Kyuusyuu-e ton-da.
he-top to fly-past
'He got demoted to a post in Kyuusyuu.'

A possible objection to this example is, precisely, that they appear to confirm, rather than disconfirm, the Paradigmatic Structure Hypothesis. It is in fact a risky example for me to handle! I am claiming that tob has a type 2 causative, distinct from tob-as-e, which fills the transitive slot corresponding to tob, and yet, I am claiming, they drift into the lexicon with a meaning unpredictable from its component meanings.

But, then, what is the type 2 causative of tob? It is tob-as-u. But is it not just a variant form of tob-as-ru? Yes and no, and both answers are relevant to our present problem. However, in order to explain the significance of this ambiguous answer completely, I have to tell the whole story of the morphology of the causative suffixes, which is quite a complicated, or better put, quite a delicate matter, and a fair amount of care is required to deal with it. I have to leave a full treatment of this topic for another occasion. (If separated from his stand on the lexicalist analysis, Miyagawa's Dissertation provides us with a fair treatment of this topic.)

Miyagawa provides examples of the semantic drift by causative verbs, e.g., nio-as-ru 'hint,' from nio-u 'smell.' They are taken by Miyagawa as evidence for his Paradigmatic Status Hypothesis. In my perspective, these examples as well as any counterexamples to the Paradigmatic Status Hypothesis, like tobas-as-u, are evidence for the SS-W:W principle.

In order to illustrate the principle (WFR:BL), according to which word formation rules are blind to the origin of L-words, let us consider hiki-as-ru, an example discussed by Miyagawa (cf. p.30). This word consists of three verb stems, hik 'pull,' aw 'meet,' and the causative as-e. The morpheme hik, however, functions here as a prefix; it derives a compound verb from a transitive verb, as in hiki-age-ru 'withdraw' (from age-ru 'raise'), hiki-tuke-ru 'attract' (from tuke-ru 'attach'), hiki-uke-ru 'consent to' (from uke-ru 'receive') etc. The causative verb
aw-ase-ru is taken in the lexicon as a transitive verb, with the meaning, roughly, 'pull together.' The prefix hiki is added to this transitive verb and derives the verb hiki-aw-ase-ru 'introduce.' Note that hiki does not prefix to the intransitive aw; we do not have a compound verb hiki-aw-u derived from aw. (The verb form hiki-aw-u exists. However, it is formed from hiki by the suffix aw, which derives the reciprocal from a transitive verb; hiki-aw-u, 'pull together,' belongs to this productive paradigm and does not underlie hiki-aw-ase-ru.)

Miyagawa seems to take the fact that such causative verbs as niow-ase exhibit the semantic drift as evidence for "Chomsky's Lexicalist Hypothesis (1970)" (p.2). I do not. The type of syntactic and semantic argument made by Chomsky in his 1970 paper for the lexical hypothesis for the derived nominals applies to the analysis of the Japanese type 2 causatives. There are no formal and semantic uniformity or regularity in those causatives that would justify a syntactic analysis of them. Whatever regularities that we might observe there are subregularities among idiosyncracies. In contrast, with the type 1 causative, we have basic formal and semantic regularity, from which certain idiosyncratic items might be created in accordance with general principles controlling the relationship between the two modules of grammar, syntax and the lexicon. I would not argue for a lexical analysis of type 1 causatives for the reason that there are lexical items originating in this construction, just as I would not argue for the dissolution of syntax just because there are idioms and fixed expressions that originate in structures generated by syntactic rules and the lexical insertion rule.

As I understand it, I am not arguing against the spirit of Chomsky (1970). I do not believe that the Chomsky of 1970 used the term lexicalist hypothesis as a name for a theory of grammar. For example, he states: "... it seems that the transformationalist hypothesis is correct for the gerundive nominals and the lexicalist hypothesis for the derived nominals ..." (p.215) Here, the term "lexicalist hypothesis" refers to an analysis of (or, a theory about) the derived nominals, not to the grammatical theory which makes both the transformational hypothesis, say, for the gerundive nominals, and the lexicalist hypothesis, say, for derived nominals, possible within one theory of grammar. My position expounded in this paper, or for that matter, the position implicit in my dissertation (1965), is compatible with this general theory, whether one calls it the lexicalist hypothesis of Chomsky (1970) or not.

My position is not compatible with various stronger versions of the lexicalist hypothesis. It is not compatible with the lexicalist position characterized by the motto: "derivational morphology is never dealt with in the syntax, although inflection is ..." (Aronoff 1976). This is so, since the formation of type 1 causatives is traditionally considered as a matter of derivational morphology. However, I also note that such a characterization of a lexicalist position as quoted now may be called into question. For, if the type 1 causative sase/sas can appear, albeit very rarely, as a free word, may it still be called a suffix? And are surface complex verbs of the form V-(s)ase/(s)as suffixed forms derived from the verb stem V? And once this problem for Aronovian motto raises its head,
are we as certain as before that the passive verbs V-(r)are are "derived" from the stem V by a "suffix" rare? What is derivational morphology? The question seems more opaque than it appeared to be.

[Editors' note: throughout this paper, glosses and English translations directly under example sentences are given by the editorial staff except the translations for the following: (44), (45), (46), (56), (62), and (63).]