On the Status of the VP Node in Japanese*

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This paper will be concerned with determining the existence or non-existence of a VP node in Japanese. Following Schwartz (1972):220, "the notion VP means, in the transitive case, a constituent whose head is a predicate and whose complement is a nominal in the patient relation to it." This concern may, of course, be explored on two different levels; a level of surface structure and a level of semantic representation.[1] Both of these levels will be examined, and it will be shown that a VP node is an unnecessary feature of either level.

As far as I can determine, there are five possible—and I must here emphasize the word possible—arguments for establishing a constituent VP[2] in any language. In section I, each of these arguments will be discussed, and it will be shown that each argument is either not a valid argument, or if it is a valid argument, that it does not hold for Japanese. In section II, the implications of this fact will be discussed.

1. The Arguments for a VP Node

The first argument for a VP node might be termed the "historical precedent" argument. Robins (1967 : 24-25) points out that:

> The theories, categories, and terminology evolved by ancient [Greek and Latin] scholars in relation to the grammar of their own languages have become part of the general grammatical equipment of descriptive linguists of our own day.

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[1] I am assuming the level of semantic representation is the "deepest" possible level.

[2] With Chomsky (1965:68ff) I am distinguishing between grammatical functions and grammatical categories. This paper is aimed primarily at the investigation of the grammatical category VP.

He further points out (p. 26) that at least as early as Plato

> we encounter a fundamental division of the Greek sentence into a nominal and verbal com-
> ponent, *ónoma* and *rhema*, which remained the primary grammatical distinction underlying
> syntatic analysis and word classification in all future linguistic description.

There is then obviously a long tradition for the existence of a predicate phrase, or VP, as one of the two major constituents of a sentence, and this tradition was incorporated into all of the initial studies within the transformational framework. This framework was quite naturally extended to initial studies of 'exotic' languages, such as Japanese. Thus it is not at all surprising to find early studies in Japanese, for example Kuroda (1965), making the fundamental division in a sentence between subject and predicate, or NP and VP.

This argument for historical precedence, if it can even be termed an argument, can be attacked on two separate grounds. First, and more generally, Postal has pointed out the danger of this type of reasoning in his forthcoming work *On Raising*. He discusses Chomsky's rejection of McCawley's VSO analysis of English (footnote 29):

> [Chomsky] asserts there is no argument for the VSO analysis and adopts without explicit
> justification a version of the NP+VP analysis of English clauses which he has maintained since
> his initial transformational studies in the early fifties.···Neither of these analyses has any known
> empirical or logical priority.···But one must clearly beware of mistaking the historical priority
> of the NP+VP analysis, which is linguistically irrelevant, with some other kind.

Of course, this criticism is valid in the Japanese case as well. The fact that initial studies assumed the NP+VP analysis is not a justification of that analysis.

The second reason that this argument fails is that even if we assume the ancients had some perceptive powers lacking in contemporary scholars, the traditional grammarians of interest are the Japanese grammarians, not the Greeks. Miller (1967) reports the work of Fujitani Nariakira (1738-79), a Japanese grammarian who worked on Japanese before any Western influence reached Japan. Fujitani (pp. 309-10) classified the forms of Japanese into four major categories: 1) *na* 'name;' 2) *yosoi* 'decoration;' 3) *kazashi* 'hairpin;' and 4) *ayui* 'binding cord.' *na* refers

> to what we now call nouns, a large category encompassing all uninflected free forms. His
> second category, *yosoi*, contained all the inflected forms of the language, those which today
> would be considered verbs, adjectives, and the copula. His third category, *kazashi*, consisted
> of bound forms used in syntax preceding other forms of either his first or his second category.
> In the same way his last category embraced all those bound forms which follow the forms to
> which they have reference.

Note that, without the influence of Western notions, Japanese grammarians developed a

classification without the presence of a predicate phrase; that is, without a constituent consisting of a verb plus an object.

The second possible argument for establishing a VP node is discussed in Schwartz(1972). He states (p. 216) that "a feeling of interruptability (more accurately, a resistance toward interruptability) can be used as evidence for constituency relations." He further points out (p. 216) that "such evidence has been used in the past…in support of major constituency breaks." In order to use this criterion, it is necessary to show that an element which is otherwise freely positioned cannot be placed in a specific context. His example involves Indonesian, in which time adverbials can usually be placed anywhere in a sentence. However, they cannot occur in between an object and a verb. Schwartz(p.217) claims that "the intuitive sense of a bond or valence between these predicates and complements is substantiated by a probing of constituency breaks; the stronger the bond, the worse the violation."

Although Schwartz claims that this test is weak, let us examine the consequences in Japanese. Time adverbs in Japanese, as well as Indonesian, are freely placed, with the exception of the position following the verb.[3]

(1a) kinoo taroo ga sinda.

'yesterday Taro died.'

(1b) taroo ga kinoo sinda.

'taro yesterday died.'

What makes Japanese different from the Indonesian example cited by Schwartz is that time adverbials can intervene between a verb and a direct object.

(2a) kinoo taroo wa tegami o kaita.

'Yesterday Taro wrote a letter.'

(2b) taroo wa kinoo tegami o kaita.

'Taro yesterday wrote a letter.'

(2c) taroo wa tegami o kinoo kaita.

'Taro wrote yesterday a letter.'

Schwartz claims that this test is relatively weak because there are times that even a freely-positioned element cannot be placed between two elements which do not in fact form a

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[3] Actually, in colloquial speech, many elements, not just adverbs, may be placed behind the verb.

    a. taroo ga sinda, kinoo. 'Taro died, yesterday.'

    b. kinoo sinda, taroo ga. 'Yesterday (he) died, Taro.'

Notice that falling intonation, or sentence final intonation, usually accompanies the verb.

single constituent. That is, this test does not fail to isolate constituents, but rather it isolates all constituents and in addition some non-constituents. In the Japanese case, then, since the test does isolate all constituents, and further since *tegami o* and *kaita* can be separated by a time adverbial, it is relatively safe to assume that they do not form a single constituent.

Kuno(1973a) claims at one point[4] that a VP node is necessary in the deep structure of Japanese because imperative sentences must have entire predicate phrases that have the feature[±self-controllable], rather than just verbs with the feature [±self-controllable]. Examples are drawn from English, although he states that the same argument holds for the Japanese case.[5] Relevant parts of his data are presented in (3):

(3a) Be good.

[+self-controllable]

(3b) *Be tall.

[−self-controllable]

(3c) *Be a girl.

[−self-controllable]

(3d) *Be a tall girl.

[−self-controllable]

(3e) Be a good girl.

[+self-controllable]

His claim (p. 332 fn.3) is that

in order to handle this phenomenon systematically, it is necessary to have semantic rules that assign semantic features to the predicate node on the basis of the lexical features of its constituent nodes,

This argument is not at all valid. All of Kuno's crucial examples deal with copular expressions, none with transitive verb plus object. In fact, I believe it is impossible to find a situation in which a verb is marked [+self-controllable] while the addition of an object noun phrase renders the whole expression[−self-controllable]. In the absence of such

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[4] Actually Kuno's argumentation appears to be very confused in this matter. At the beginning of the discussion in question he states [331:fn 3] "It is not clear whether Japanese has a constituent that can be called a VP." He concludes [332:fn 3] the discussion by claiming "This necessitates the presence of the VP node in the deep structure." The remainder of his paper then employs the VP node for diagrams and usually no VP node for statements of structural descriptions.

[5] It seems that the case is actually much stronger in English than in Japanese. Incidentally, it may be of interest to note that in Kuno(1973b), which is essentially a translation of Kuno(1973a) into Japanese, the article under consideration, "Case making in Japanese," does not appear, so we are not able to see how Kuno would apply the [±self-controllable] argument directly to Japanese.

examples, it seems that Kuno's discussion offers no compelling reason for establishing a VP node.

Schwartz(1972) provides another criterion for determining constituency relations, which he states(p. 218)

> is based on the unit-movement constraint: if two or more constituents can be shown to move simultaneously, then we must assume that they themselves form a constituent.

While there is some doubt as to the legitimacy of the unit movement constraint[6] this point will not be pursued since, in fact, there are no transformations in Japanese which move what might be considered a VP. Thus, in this instance, the test is simply inapplicable to Japanese and can offer no evidence for or against a VP node.

The fifth argument for establishing a VP node is presented originally in Lakoff and Ross(1966), and is applied to Japanese without modification in Nakau(1973). Lakoff and Ross(p. II—4) propose that "[the] phrase 'do-so' is a pro-form which may substitute for a verb phrase." In fact, they claim(p. II—5) "that 'do-so' replaces all the constituents of the verb phrase and only these." Given this strong, and essentially justified claim, it is no wonder that the argument was transferred to Japanese with the translation *soo su-*. Thus, in an attempt to justify the existence of a VP(Nakau's Predp), the following data are adduced in Nakau (1973):

(4a) taroo wa, terebi o mita; ziroo mo terebi o mita.

'Taro watched television; Jiro also watched television.'

(4b) taroo wa, terebi o mita; ziroo mo soo sita.

'Taro watched television; Jiro did so too.'

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[6] For instance, there is a pluralizer in Korean, *-til*, which is normally attached directly to the noun it modifies, as in (a):

(a) sənsaeng til in hankukmal lo malhase yo. 'Gentlemen, please speak in Korean.'

However, under certain conditions which I do not pretend to understand completely, *-til* may be attached to some other element in the sentence, usually when the subject has been deleted. Thus, examine (b):

(b) hankukmal lo til malhase yo. 'Please speak in Korean(all of you).'

It is obvious that *hankukmal, lo* and *til* do not in fact form a single constituent, because *-til* is still indicating that the deleted subject is plural, not that *hankukmal lo* is. If we combine this with the fact that *hankukmal lo til* may be moved as a unit, we see that the unit-movement constraint is not absolutely valid, and that any argument for constituency which relies on this constraint is weakened. In Korean, as in Japanese, elements may be post-posed to the position following the verb, indicating that this information is tacked on to the main predication as an afterthought(see footnote 3 for some Japanese examples). Once again, although it is not clear to me exactly what may be postposed in either Japaness or Korean, (c) is certainly acceptable:

(c) malhase yo, hankukmal lo til. 'Speak please, in Korean(you plural).'

In which case *hankukmal lo til* has moved as a unit, although it is not a constituent.

(4c) *taroo wa, terebi o mita; ziroo mo terebi o soo sita.

'Taro watched television; Jiro did so too television.'

Nakau (p. 45) claims as a result of these data that

the pro-form *soo su-*···substitutes for a Predicate Phrase consisting of an object Noun Phrase
and the immediately following Predicate, in particular [sic], *terebi o mi-* 'watch television.'

Once again, although this seems to present a strong case for the claim that a VP node
exists, further investigation shows that *soo su-* is not at all parallel to *do so* in English
because *soo su-* may substitue for elements which constitute more than what is traditionally
termed a VP; for elements which constitute less than a VP; and for elements that cannot
be considered a single constituent.[7]

As evidence for the first claim, that *soo su-* substitutes for elements which constitute more
than a VP, consider (7):

(7) taroo wa tomodati to nigeta; ziroo mo soo sita.

'Taro escaped with his friend; Jiro did so too.'

Nakau (pp. 65-6) claims, and most investigators would agree, that comitative noun phrases
are not part of the predicate phrase. Since *soo su-* substitutes for *tomodati to nige-* in (7), we
must conclude that *soo su-* can substitute for more than simply a VP. Incidentally, it is not
the case that *tomodati to* 'with his friend' has been deleted by some kind of independent
deletion rule, as evidenced by the fact that (8) is acceptable:

(8) *taroo wa tomodati to nigeta; ziroo mo tomodati to soo sita.

'Taro escaped with his friend; Jiro did so too with his friend.'

Next, *soo su-* may substitute for elements that are not restricated to a single constituent:

(9) taroo wa hawai ni tomodati ni ai ni itte, kankoku ni yotte, sore kara nihon ni
kaette kita; ziroo mo soo sita.

'Taro went to Hawaii to meet his friend, stopped in Korea, and then returned to
Japan; Jiro did so too.'

In (9), *soo su-* substitutes for everything except the subject and tense marker. The most
that can be maintained in the light of this example is that *soo su-* may substitute for a
series of concatenated VP. This claim too must be abandoned because of examples like(10):

(10) taroo wa hawai ni tomodati ni ai ni itte, nihon ni kaette kita ga, sono mae ni
kankoku ni mo yotte kita; ziroo mo soo sita.

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[7] See Hinds(1973) for a fuller discussion of this point, including an indication of the difficulty in
determining the actual conditions for the substitution of elements by *soo su-*.

'Taro went to Hawaii to meet a friend and returned to Japan, but before return-

ing he also stopped in Korea; Jiro did so too.'

Whatever the underlying structure of (10) might be, it clearly involves more than a simple

concatenation of VP.

Finally, *soo su-* substitution offers no evidence for considering any noun phrase and the

verb to be a single constituent. For instance, in sentence (11) the indirect object is outside

the scope of *soo su-*:[8]

(11) taroo wa akiko ni bakudan o utta; ziroɔ ni mo soo sita.

'Taro sold a bomb to Akiko; (he) did so too to Jiro.'

The subject, *taroo*, may be assumed to be deleted by an independent deletion rule. However,

the indirect object, correctly considered part of a VP, is outside the scope of *soo su-*, since

it is the indirect object which is being contrasted.

The direct object may also be outside the scope of the *soo su-* construction, whether the

direct object is marked by *ni* (for certain verbs) or by the usual object marker *o*. These

are illustrated in (12) and (13) respectively.

(12) taroo wa hanako ni kisu sita; akiko ni mo soo sita.

'Taro kissed Hanako; (he) did so too (to) Akiko.'

(13) taroo wa teinei ni hon o kaita; ronbun mo soo sita.

'Taro wrote the book carefully; (he) did so too the dissertation.'

In these examples as well, the subject is assumed deleted by an independent deletion rule.

Here, of course, the respective direct objects are contrasted, and so do not fall within the

scope of *soo su-*.

Thus, the 'do so' argument also fails to isolate a VP constituent in Japanese because the

Japanese counterpart, *soo su-*, replaces more than a VP, less than a VP, and even non-

constituents.

2. Discussion and Implications of the Arguments

It must be emphasized at this point that the objective of the discussion presented above

is to demonstrate that *none of the procedures or tests which might be used to isolate a*

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[8] In the discussion following the presentation of this paper, J. McCawley pointed out that the use of
an example like (a), the original example, is misleading, since the noun phrase followed by *ni* in

(a) could be taken as either a "for-dative" (outside the VP) or a "to-dative" (inside the VP). This
problem is avoided with the revised example now presented in (11).

(a) taroo wa ziroo ni okurimono o ageta; akiko ni mo soo sita.

'Taro gave a present to Jiro; (he) did so too (to) Akiko.'

VP node in Japanese is successful, either because the procedure itself is faulty, or because the procedure does not apply to Japanese. The argument for historical precedence, and the argument involving [±self-controllable] features of verbs and verb phrases, both have inherent flaws which make them invalid. The interruptability argument, and the argument with *do so* are valid arguments, but they do not apply to Japanese. The argument based on the unit-movement constraint might or might not be valid, but in either case it does not apply to Japanese. At any rate, the next question we must ask is, what is each of these arguments designed to prove? We find that the arguments are designed to uncover VP nodes on separate levels. The arguments dealing with *do so* and the placement of time adverbs are actually arguments which apply only to surface structure. This point has been missed in the past, since the arguments advanced by both Lakoff and Ross(1966) and Nakau (1973) have been used to justify abstract structures. This line of reasoning is excusable by the desire to have underlying and surface structures bear a certain degree of resemblance. Kuno's argument about the use of [±self-controllable] verbs and verb phrases, and the argument for simultaneous movement transformations are arguments about underlying structures. Neither type of argument offers any justification for establishing a VP node in Japanese. But in the absence of any compelling reasons to the contrary, I have not demonstrated that a VP may not be set up. There are some sound methodological reasons why this VP node should not be established, however.

The first reason concerns simplicity. Kaplan (1964:318) states:

> The justification might be given for the norm of simplicity that the norm does not condemn complexity but only imposes on it the burden of proof. We are to introduce a complicating factor only if have reason to expect error from its omission, and not if we just lack a reason for expecting error from the simpler treatment. On this interpretation, the norm of simplicity presents itself as another form of Occam's razor: variables are not to be multiplied beyond necessity.

The creation of an extra node, a VP node, is a complication that is simply not justified, given the evidence presented so far in this paper.

The second reason is that there is no transformation which requires the VP node in its structural description. This fact is reflected in Smith (1970:7) who states

> Arguments for VP and Aux as major categories have generally related to their behavior as constituents in movement and deletion transformations, and in this light···one might wish to question their status in Japanese where such transformations do not appear to exist except as very low level scrambling rules.

As well, a quick survey of relevant grammars of Japanese, including Kuno (1973a, b) Kuroda(1965), Inoue(1969a), and Prideaux(1970), shows that any transformation which uses the VP node in a structural description can be stated with equal ease without that node.

The third reason concerns a plea for universality. If we claim that no VP node exists in Japanese, what does this say about other languages, assuming anything resembling a "universal base hypothesis"? Can this fact square with the fact that English, for example, appears to have at least a surface structure VP node? [see, for instance, Lakoff and Ross (1966)] There are two courses open to us, it seems to me. We can claim that there are at least two different types of semantic representations[9] as examplified in (14a) and (14b) [I will always represent the verb as occurring in sentence final position for ease of exposition since my discussion has to do with the existence or non-existence of the VP node rather than with constituent order problems.]

(14a)

```
        S                              S
        |                              |
    ┌───┴───┐                      ┌───┴───┐
    NP      VP        ⟹           NP      VP
            |                              |
        ┌───┴───┐                      ┌───┴───┐
        NP      V                      NP      V
```

(14b)

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        S                              S
        |                              |
    ┌───┼───┐                      ┌───┼───┐
    NP  NP  V      ⟹              NP  NP  V
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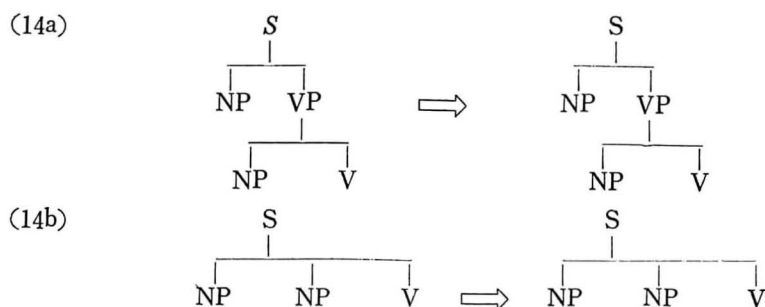
These diagrams illustrate that the semantic representation on the left of the arrow must somehow end up with the derived structure on the right of the arrow. In this case, there is no problem since the structures we begin with and the the structures we end up with are identical. Of course, (14a) represents a language like English, while (14b) represents a language like Japanese. Alternatively, we can claim that there is a universal base, or semantic representation, which maps into (at least) two different kinds of derived structures. Once again there is a choice:

If one of the alternatives in (15) can be justified, it is to be preferred over the choices of (14) because it is a more general treatment of the facts. Hankamer (1971:7) states the principle involved quite clearly:

A hypothesis which accounts for similar phenomena in two different languages at once is better than two language-particular hypotheses which account for the same phenomena. When

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[9] I am purposely restricting discussion to only two languages, English and Japanese. Undoubtedly looking at more languages will considerably complicate matters. In this regard, see Schwartz(1972).

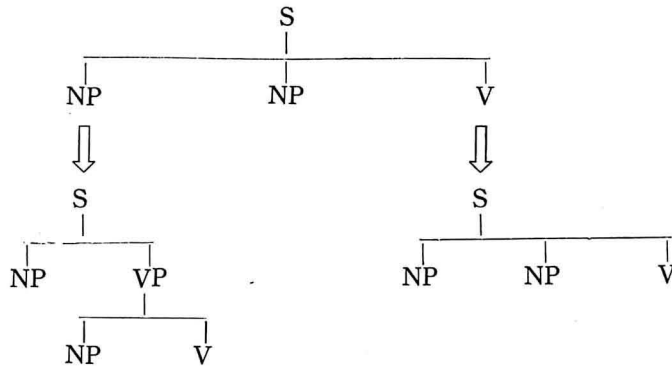faced with a choice between one general hypothesis and two language-particular hypotheses consistent with the same empirical facts, we can reject the latter and accept the former.

(15a)

```
            S
          /   \
        NP     VP
              /  \
            NP    V

      ⇓               ⇓

      S               S
    /   \          /  |  \
  NP     VP      NP  NP   V
        /  \
      NP    V
```

(15b)

```
              S
          /   |   \
        NP    NP    V

      ⇓               ⇓

      S               S
    /   \          /  |  \
  NP     VP      NP  NP   V
        /  \
      NP    V
```
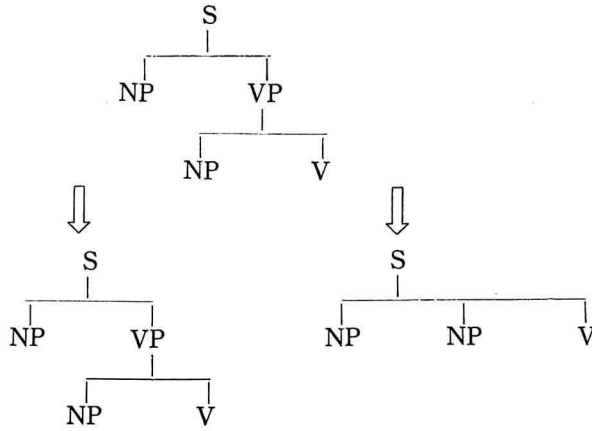
What is necessary to show is that one of the alternatives in (15) is in fact consistent with the phenomenon under discussion.

(15a) is not a possible solution to the problem because of the evidence presented so far in this paper. That is, it has been shown that it is preferable to represent Japanese without a VP constituent in its semantic representation, so that (15b) is a better representation. English, which would presumably give support to (15a), also in fact supports (15b) [once again, the question of constituent order is irrelevant here]. Ample evidence for this is presented in McCawley (1970) and Postal (1971). McCawley demonstrates that English is an underlying VSO language, and this analysis obviously rules out the possibility of an underlying NP+VP analysis.[10] The only difficulty with this proposal for English is that it
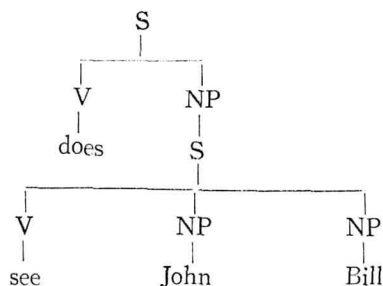
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[10] I am not sure what the status of a surface structure node VP in McCawley's analysis is. He states (p. 298) the following which seems to bear on the issue: "The few existing arguments that purport to provide evidence for a syntactic category of VP in English actually only provide evidence that

appears we must have a "node-creating transformation" to give us the surface VP node shown to be necessary in Lakoff and Ross (1966). However, it turns out that this is not a problem at all. Postal (1971) emphasizes the role of RAISING in the verb-initial hypothesis for English. Consider (16) in this regard:
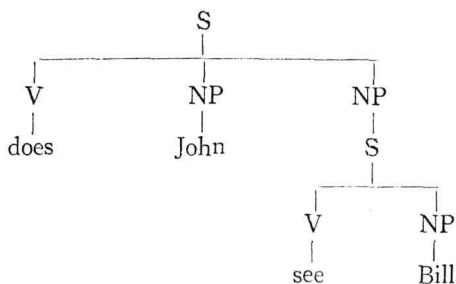
(16) John sees Bill.

Postal offers the following underlying structure for (16).

(16a)

```
                              S
                              |
                 _____/ _____
                |                            |
                V                           NP
                |                            |
              does                          S
                                            |
                  _____|_____
                 |                          |                  |
                 V                         NP                 NP
                 |                          |                  |
               see                        John               Bill
```

After RAISING applies, we have:

(16b)

```
                              S
                              |
              _____|_____
             |                |                |
             V               NP               NP
             |                |                |
           does             John              S
                                              |
                                    _____|_____
                                   |                     |
                                   V                    NP
                                   |                     |
                                 see                    Bill
```

This pre-final structure ultimately produces either sentence (16), if DO-DELETION applies, or sentence (17) if it does not:

(17) John dóes see Bill.

Notice further that what has traditionally been termed VP in surface structure (i.e. *see Bill*) results from RAISING, and that the node, strictly speaking, is an S node. Thus, there is no necessity for creating a new node in the case of English, if we begin with a VP-less semantic representation.

By way of summary, let me simply reiterate the points made in the body of this paper. There is no evidence to motivate a VP node in Japanese. Further, it is claimed that it is in fact incorrect to postulate a VP node in Japanese, because doing so violates the general

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surface structure has a constituent consisting of the verb and its object but not the subject." I believe this statement is meant to conform with Postal's analysis presented in the body of this paper, that the derived S node is equivalent to what had previously been termed VP.

condition of scientific methodology enunciated in Kaplan(1964) that variables are not to be multiplied beyond necessity. The implications of these arguments are that, on the basis of English and Japanese, two considerably different languages in terms of surface struature, a universal base seems possible, and this base cannot contain a VP node. Both Japanese and English support this position.

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