PROPERTIES OF SYNTACTIC SUBJECTS

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The focus of this discussion[1] is the notion of subject (of a clause or sentence) and the different properties characteristic of subjects in Japanese and English. Subjects have been paid much attention in the grammatical literature of both languages, with several noteworthy attempts to explain the differences; we will explore and evaluate one recent such attempt along strictly syntactic lines. An important caveat which needs to be made clear from the outset is that 'subject' is taken to be a syntactic entity, properly defined in syntactic terms. Thus what we regard as subjects do not necessarily coincide with such notions as 'agent', 'argument' and so on, which are basically semantic; or with such notions as 'reflexive controller', 'honorific trigger', and so on, which have both syntactic and semantic aspects. This is not to claim that such alternatives are necessarily useless or uninteresting, but only to clarify what we are primarily concerned with here. After a review of the properties of syntactic subjects in Japanese and English which do concern us, we will proceed to the relevant explanatory framework.

1   In a Japanese clause like (1), the subject is 太郎; in the corresponding English clause (2), it is *Taroo*.

(1)   太郎が英語を話す（こと）

(2)   *(that) Taroo speaks English*

Our examples will typically appear in the form shown in (1) and (2), which is intended to be ambiguous between a complete sentence and a complement clause.[2] When desired, an unambiguous complete sentence will be indicated as in (3) or (4), and a complement clause as in (5) or (6).

(3)   ?太郎が英語を話す。

(4)   *Taroo speaks English.*

(5)　　　太郎が英語を話すこと

(6)　　　*that Taroo speaks English*

The ambiguous form is used here because in Japanese complete sentences often have other compo-nents such as topics, emotive or evidential particles, or honorifics which are irrelevant for our purposes. Many people judge Japanese sentences like (3), where these components are lacking, as unnatural and of dubious status, while finding clauses like (5) easier to accept.

1.1　　The first property of interest is dispensability: as is notorious, Japanese clauses or sentences do not have to have a subject at all, whereas those in English do.

(7)　　　英語を話す（こと）

(7) lacks a syntactic subject, although that by no means implies that when it used it is necessarily unclear who is being said to speak English. In many cases it will be appropriate to render (7) into English as (8), using a pronoun subject; in other cases, as (9), which lacks a subject but is not a clause or sentence. But sentences like (10) are not possible in English and clauses are limited to relative structures as in (11) or to questioned complements as in (12).

(8)　　　*(that) he speaks English*

(9)　　　*speaking English*

(10)　　　**Speaks English.*

(11)　　　*the student that speaks English*

(12)　　　*Who did you say speaks English?*

Syntactic subjects are dispensable in Japanese, but generally indispensable in English.

1.2　　The second property of interest is salience: subjects in Japanese clauses or sentences behave in the same way as other noun phrases or postpositional phrases, whereas in English, subjects have their own position and unique effects.

(13)　　　日本語を太郎が話す（こと）

In Japanese, both subject and object precede the verb in (1); while the neutral order between the two may be as in (1), (13) is also possible. Other elements, such as adverbs, also participate in

more or less free order before a clause or sentence final verb.

(14)　　　太郎が日本語を毎日話す（こと）

(15)　　　太郎が毎日日本語を話す（こと）

(16)　　　毎日太郎が日本語を話す（こと）

(17)　　　日本語を太郎が毎日話す（こと）

(18)　　　日本語を毎日太郎が話す（こと）

(19)　　　毎日日本語を太郎が話す（こと）

The order in examples like (14) to (19) reflects subtle differences in meaning, but all variations

seem to be permitted.

　　　In English, the subject normally comes in initial position before the verb and other elements

such as the object or adverbs, after the verb as in (20).

(20)　　　*Taroo speaks English every day.*

The object in English cannot occur in subject position directly before the verb as in (21); in passives

like (22), what is the object of the corresponding active has become the syntactic subject.

(21)　　　**(that) Taroo English speaks*

(22)　　　*(that) English is spoken by Taroo*

It is possible to put the object or an adverb at the beginning of a sentence as in (23) or (24), but

such freedom is restricted in clauses as in (25) or (26).

(23)　　　*English, Taroo Speaks.*

(24)　　　*Every day, Taroo speaks English.*

(25)　　　**that English Taroo speaks*

(26)　　　*?that every day Taroo speaks English*

　　　In Japanese, there is no morphological person or number agreement between the subject and

verb; in (27) 話す takes exactly the same form as in (1).

(27)　　　私が英語を話す（こと）

Although subject verb agreement is not as prominent in English as in some other Western langua-

ges, it is found in regularly in the third person singular present. The verb form *speaks* in (2) becomes *speak* in (28).

(28)   *(that) I speak English*

In standard English examples like (29) and (30) are impossible; the so-called English subjunctive as in (31) is found in formal styles.

(29)   **(that) I speaks English*

(30)   **Taroo speak English.*

(31)   *I would rather (that) Taroo speak English.*

Syntactic subjects in Japanese are not salient in either having a unique position, or in participating in agreement as those in English are.

1.3   The third property of interest is uniqueness: while Japanese sentences or clauses may have more than one syntactic subject, those in English have only one. This property differs from the previous two in that it is not the case that any Japanese sentence or clause may have more that one subject. How many subjects a sentence or clause may have depends on the meaning of the predicate; most predicates which allow multiple subject constructions are adjectival as in (32) or (33).

(32)   男性が平均寿命が短い（こと）

(33)   私が水が欲しい（こと）

In (32), we take both 男性 and 平均寿命 to be subjects; in corresponding English examples like (34) and (35), either *men* or *average life span*, but not both at the same time, may be the subject. The element not the subject appears as the object in (35), and as a genitive modifier of the subject in (34)

(34)   *(that) the average life span of men is short*

(35)   *(that) men have a short average life span*

In (33), the same situation is found with both 私 and 水 as subjects, but in here there is a clearly preferable English alternative; while (36) is similar in meaning to (33), (37) is an unnatural construction which would not be used as a simple equivalent of (36).

(36)   *(that) I want water*

(37)   *?(that) water is desirable to me*

Although we take (32) and (33) to be syntactically parallel, semantically they are not. One reflection of this is (38) and (39).[3]

(38)   男性の平均寿命が短い（こと）

(39)   私の水が欲しい（こと）

(38) describes the same situation as (32), and is syntactically parallel to English (34) (39) on the other hand is distinct in meaning from (33) in the way that (40) is from (36).

(40)   *(that) I want my water*

This reflects the fact that 男性 in (32) is not a semantic subject, but 私 in (33) is. The meaning of (41) is not contained in (32), and it is quite odd since 短い is not equivalent *short* in reference to stature. The meaning of (43) on the other hand is contained in (33); it differs only in that what is wanted must be understood in context.

(41)   ?男性が短い（こと）

(42)   *(that) men are short*

(43)   私が欲しい（こと）

(44)   *(that) I want it*

(32) and (33) also differ in that further subjects may be added to the former, but not to the latter. (45) is like (32) in that it may be rendered in English using any one of its subjects, as in (46) to (48).

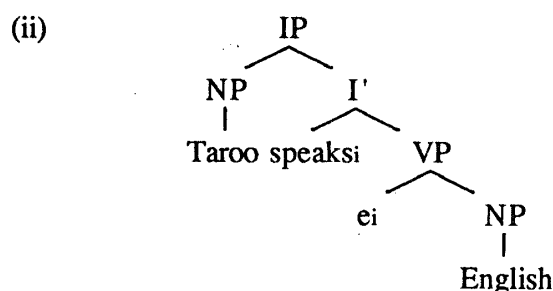(45)   文明国が男性が平均寿命が短い（こと）

(46)   The average life span of men in civilized countries is short.

(47)   Men in civilized countries have a short average life span.

(48)   Civilized countries have a short male average life span.

Clauses or sentences in Japanese may have any number of subjects; those in English may have but one.

2.1 The properties of subjects in Japanese and English just surveyed are by no means new discoveries, or particularly mysterious; the examples given are mostly taken from previous literature. As mentioned at the outset, we are interested in how the differences observed can be understood and explained in syntactic terms. As part of the approach we are discussing, three ideas which may be unfamiliar need to be mentioned.[4] First of all, we take the syntactic structure of a simple English clause like (2) to be something like (ii).

(ii)
```
              IP
            /    \
         NP        I'
          |       /  \
       Taroo speaksi   VP
                      /  \
                    ei    NP
                           |
                        English
```
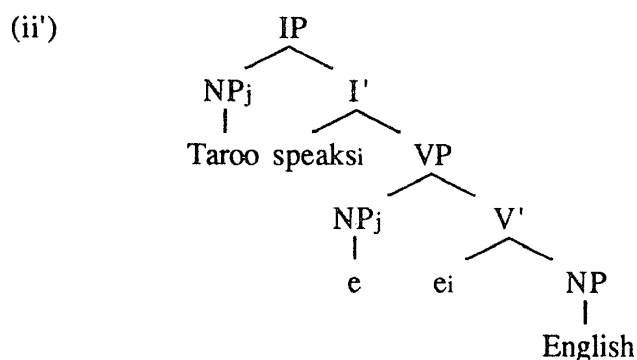
What is of most direct concern in (ii) is the subject (*Taroo*). This is a noun phrase (labelled NP) which belongs to a larger phrase labelled IP ('inflection phrase'). IP is really nothing more than what formerly would have been labelled S (sentence). The reason for the new terminology is the idea that an abstract 'inflection' is the syntactic head of a sentence. According to so-called X' Theory, syntactic heads establish successive 'projections', which are labelled in a consistent way. If X is such a head, its first projection is X' (to be read 'x bar'), its second is X" ('x double bar'), and so on. However, the most inclusive ('maximal') projection is labelled XP. Phrases which combine with a head X to form X' are termed 'complements'; those which combine with an X' to form X" are termed 'specifiers'. Thus in (i), the object (*English*) is a complement of the V (verb: *speak*), and the predicate (*speak English*) is a complement of the I (-*s*). The subject, on the other hand, is a specifier of the I' (*speaks English*). Head positions like V or I do not need to be explicitly labelled.

The above discussion assumes that the verb (*speak*) in (i) is really V (head of VP), though it in fact appears as (part of) I. This is shown by the empty element e which is co-indexed with

speaks. Such 'finite' verbs are thus taken to be syntactic as well morphological combinations of a verb stem (*speak*) and the tense/agreement element (-*s*). I is in fact a development of what was formerly termed AUX (auxiliary), which in turn originated in the traditional category of auxiliary verb. One way of thinking about structures like (i) is to have the verb originate as V, but move up into I; then e is the 'trace' left by the movement operation, and (i) is the S-structure corresponding to a D-structure in which V contains *speak* and I contains only -*s*. It is sometimes assumed that the movement goes in the opposite direction: that is, that inflection moves down into V. If so, *speaks* should appear as V in (i) rather than as I. The analysis of finite verbs[5] is of some interest, but peripheral to the questions which concern us here.

2.2 The second idea is at once less familiar and less orthodox, and is illustrated in (ii'), an elaboration of (ii).

(ii')
```
                    IP
                   /  \
                NPj     I'
                 |     /  \
              Taroo speaksi  VP
                          /   \
                       NPj      V'
                        |      /  \
                        e     ei    NP
                                    |
                                 English
```

The difference between (ii) and (ii') is that the latter contains two subject positions: the specifier of I' and also the specifier of V'. Much as we noted in the case of the finite verb *speaks*, the subject *Taroo* is taken to be really the specifier of V', though it appears as the specifier of I'. As before, we can imagine that the subject originates in the lower position, and moves up to the higher position. The status of the two cases is not really parallel, however. The analysis of finite verbs seems to be reasonable in part because there are many English sentences in which the inflection and the verb are separated, and the latter remains as V; questions and negations are relevant examples, as in (49) and (50).

(49)   *Does John speak English?*

(50)   *John doesn't speak English.*

But there don't seem to be any English sentences in which the subject is the specifier of V'^6; it must always be the specifier of I'. Thus the existence of VP as in (i') and a specifier of V' position has not been recognized in English syntax.

For the same-reason, it is difficult to give any argument, based only on facts of English syntax, that (ii') is the correct structure for (2). But if it is correct, it is not difficult to account for why the subject *Taroo* must appear as the specifier of I', and may not appear as the specifier of V'. Overt English noun phrases are limited to positions which are assigned case in one of a restricted number of ways. In (ii) or (ii'), the object *English* is assigned (accusative) case by the verb *speak*, and the subject *Taroo* is assigned (nominative) case by the inflection -*s*. A case assigner assigns case to exactly one NP. Since the specifier of V' position has no case assigner associated with it, no subject can remain there. In the approach developed independently, and in slightly differing variants, by S.-Y. Kuroda and Naoki Fukui, the three properties of subjects in English are to be derived as follows.[7] They are indispensable because there must be an overt NP for the inflection to assign case to; even if there is no semantic subject, an overt NP (usually *it*) is required, as in (51) or (52).

(51)   *(that) it is raining*

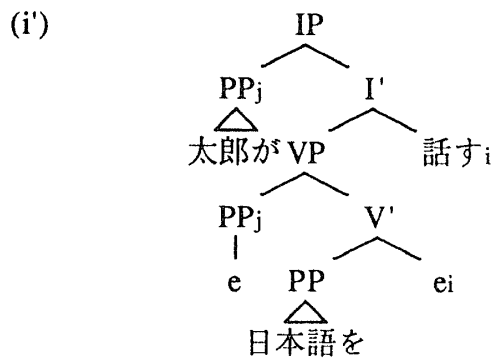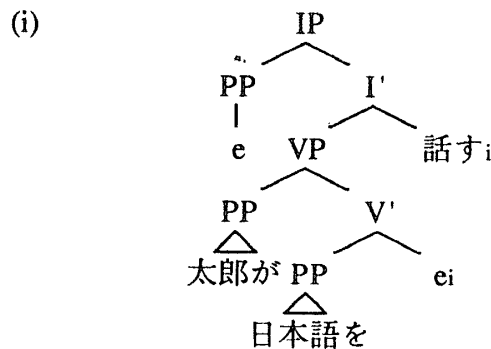(52)   *(that) it is possible for Taroo to speak English*

In such examples it makes no sense to ask what *it* is. English subjects are unique because inflection can only assign case to a single NP. And they are salient because, unlike verbs (and prepositions), inflection assigns case to its left. It should be noted that these derivations are independent of the difference between structures (ii) and (ii').

2.3   How then does Japanese differ from English in the subject properties discussed previously? Kuroda and Fukui both use the third idea referred to above, that of syntactic parameters, to answer this question. They take it that inflection in Japanese differs from inflection in English in not being

required to assign nominative case to the specifier of I' position. If so, then the subject of a Japanese clause need not appear there, but may appear in the specifier of V' position. The structure of (1), repeated for convenience, might then be either (i) or (i').

(1)   太郎が英語を話す（こと）

(i)

```
            IP
          /    \
       PP        I'
        |       /  \
        e     VP    話す_i
             /  \
           PP    V'
          /\    /  \
       太郎が PP    e_i
            /\
         日本語を
```

(i')

```
            IP
          /    \
       PP_j      I'
       /\       /  \
    太郎が VP    話す_i
          /  \
        PP_j  V'
         |   /  \
         e  PP   e_i
           /\
        日本語を
```
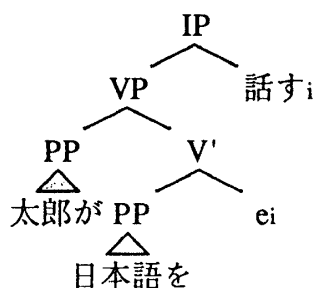
As in English, there is no Japanese case assigner associated with the specifier of V' position; but Japanese subjects need not be assigned case by either the verb or inflection. Both Kuroda and Fukui assume that the postposition が is what assigns case to 太郎 in (2). They differ somewhat in their accounts of the status of が: Kuroda takes it to be attached to an NP on the basis of linear order (clause initial), and Fukui takes it to be attached on the basis of hierarchical structure (sister to V'). Both agree that it has no relation to I, and that it can be attached to more than one NP per clause, if the requisite condition is met.

The dual structures (i) and (i') are consistent with the analysis of Japanese subjects given by Kuroda. However, Fukui takes a more radical view, which eliminates the indeterminacy of the
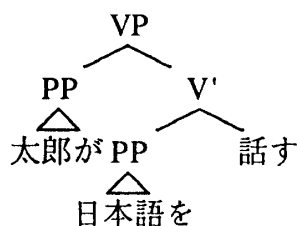
syntactic subject position, but in a different way from what happens in English. He takes it that Japanese inflection not only need not assign case to the specifier of I', but cannot. Further, he assumes that if a head is incapable of assigning case to a specifier position, then there is no such position available. That is, the structure of (1) must be (i").

(i")

```
                    IP
                  /    \
              VP          話す i
            /    \
        PP          V'
       / \        /    \
   太郎が PP      ei
          / \
       日本語を
```

Fukui considers an even more radical view of Japanese: that in fact it lacks inflection and its projections altogether. In that case the structure of (1) would become (i"').

(i"')

```
                VP
              /    \
          PP          V'
         / \        /    \
     太郎が PP        話す
            / \
         日本語を
```
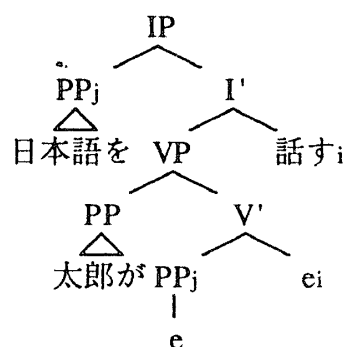
He feels himself unable to accept this analysis in part because of difficulties it would create for the analysis of verb morphology in Japanese, but it would provide the most direct account of the differential behavior of subjects in English and Japanese.[8] Either of his accounts provides strong evidence for the reality of the specifier of V' position, at least in Japanese: most Japanese subjects occupy just this position, and they cannot occupy the specifier of I' position (since there is none).

Japanese clauses need not have subjects because inflection in Japanese is not required (or according to Fukui, able) to assign nominative case to the specifier of I' position. Japanese clauses may have more than one subject because it is possible to attach the postposition が to more than one noun phrase. Japanese clauses lack a salient subject position because it is possible to move (case-
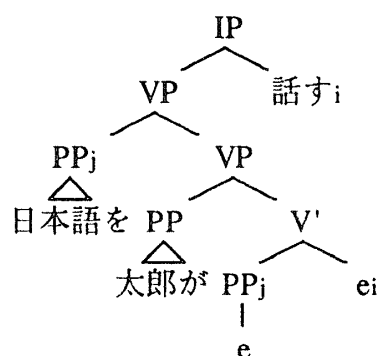
marked) phrases around, either into the specifier of I' position (according to Kuroda) or within the projection of V (according to Fukui)[9]. The structure of (13), repeated for convenience, might be (xiii) under the former proposal, or (xiii') under the latter.

(13)   日本語を太郎が話す（こと）

(xiii)

```
                        IP
                      /    \
                   PPj      I'
                   /\      /  \
             日本語を  VP      話すi
                     /   \
                   PP      V'
                   /\     /  \
              太郎が PPj     ei
                     |
                     e
```

(xiii')

```
                        IP
                      /    \
                    VP      話すi
                   /   \
                 PPj    VP
                 /\    /  \
            日本語を PP     V'
                   /\    /  \
              太郎が PPj    ei
                     |
                     e
```

According to Kuroda, the difference between English and Japanese which ultimately explains the variant behavior of subjects is that in English, inflection must assign nominative case, whereas in Japanese, it may but need not. He includes nominative case assignment under the general category of 'agreement'; thus in his terminology, agreement is forced in English, but not forced in Japanese. For Fukui, the basic difference is rather that English inflection assigns nominative case, but Japanese inflection does not. He regards nominative case as an instance of a 'function feature' (inflection belonging to a 'functional' as opposed to a lexical category); in his terminology, English functional categories have function features, but Japanese functional categories lack them.

	Kuroda	Fukui
English	nominative case must be assigned (forced 'agreement')	nominative case must be assigned ('function feature' present)
Japanese	nominative case need not-be assigned (non-forced 'agreement')	nominative case may not be assigned ('function feature' absent) or: (no 'functional' categories)

3 Both regard Japanese が as depending on the parametric difference in nominative case assignment. That is, the existence of が in Japanese should be deducible, as well as its non-existence in English. But such deductions are problematic. In Kuroda's system, if Japanese did not have が, then the only way to case mark subjects would be nominative case assignment by I, and it would then resemble English. In Fukui's system, if Japanese did not have が, then there would be no way to case mark subjects. This might appear to supply the necessary basis for deduction; but assuming that overt subjects must be provided for, all that can be deduced is that Japanese should have some way to case mark them, not that it must have a device with the specific properties of が on which the behavior of Japanese subjects depends. In English on the other hand, if there were a device like が, it would necessarily have a more restricted application than in Japanese; a subject would appear with it only if nominative case were simultaneously assigned to some other NP, either an additional subject or a non-subject. The indispensabilty of English subjects would still hold, but their uniqueness and salience would not.

This suggests an alternative view, in which the basic parameter is taken to be the presence or absence of が, and nominative case marking differences deduced from this.

English	no device like が
Japanese	が available

On the further assumption that I in both languages (and presumably universally) is able but not required to assign nominative case to a subject position, the properties of subjects in the two languages generally follow. In particular, English subjects must be unique and salient while Japanese subjects need not.

Taking $\hbar^s$ as the parameter responsible for the differences between subjects in English and Japanese results in an empirical advance over the proposals of either Kuroda or Fukui. However, it is not difficult to see why they implicitly reject such an analysis. First, $\hbar^s$ is less satisfactory as a parameter than either 'forced/non-forced' or 'present/absent' nominative case assignment. This is because, while either way of looking at nominative case assignment presents an atomic binary choice, $\hbar^s$ is a rather complex entity whose motivating function might be fulfilled by a large number of possible alternatives. The apparent inability to deduce the specific details of how Japanese subjects behave has been remedied by attributing those details to the parameter itself. But the spirit if not the letter of the parametric program is thereby abandoned.

Second, there is one respect in which the revised view with $\hbar^s$ as the parameter is empirically weaker than either alternative with nominative case assignment as the parameter. As noted with respect to examples like (51) and (52), repeated here for convenience, the English subject is syntactically indispensable regardless of whether it is semantically present or not.

(51)   *(that) it is raining*

(52)   *(that) it is possible for Taroo to speak English*

Kuroda and Fukui account for the presence of *it* in such examples by requiring I to assign nominative case; whether a subject is semantically present or not is a function rather of the verb. This phenomenon is sometimes referred to as the 'extended projection principle'. If nominative case assignment by I is not required, then it cannot be appealed to as the basis of the indispensability of English subjects. If the verb has a semantic subject, then it must be assigned nominative case, but examples like (51) or (52) are expected to be grammatical without syntactic subjects.

Thus if the parameter is $\hbar^s$ rather than nominative case assignment, the 'extended projection

principle' must constitute (or follow from) an independent parameter. Though this appears as a disadvantage in the present context, it can be argued that it is in fact incorrect to regard this effect as a mere implication of the more general system. Looking at the range of languages, it is clear that it is a peculiarity of English which is not found in many other languages whose subjects otherwise resemble English rather than Japanese. And looking at the range of constructions within English, which share the properties of subjects according to Kuroda or Fukui, it is clear that no parallel to it can be found. That is, English appears to lack verbs which are semantically intransitive but syntactically transitive[10], or nouns which are syntactically but not semantically possessed.

[1] The original version of this paper, under the title 'Subjects in English and Japanese', was prepared for presentation to the Linguistic Society of Hong Kong, February 25, 1989, and was presented at Dokkyo University in the Summer of the same year. I am grateful to those who attended both presentations, and also to Masayoshi Shibatani, for comments. This version was presented as a 研究例会 of the ICU 日本語教育研究センター on June 6, 1992, and I am grateful for comments received on that occasion as well.

[2] This device is not totally innocuous. Some of the sentences in question seem to be worse than others; e. g. those corresponding to examples (32) and (33) below. See also footnote 3, and English examples (24) and (26).

[3] In fact, (38) and (39) are ambiguous, each having a sense in which の is a variant of が, and therefore equivalent to (32) and (33) respectively. This sense is restricted to clauses, however, and does not appear in corresponding sentences.

[4] Chomsky (1986) provides general background and references.

[5] See Bedell (1989) for some analysis.

[6] Fukui (1986) argues that the agent phrase in a passive sentence occupies just this position.

[7] See Kuroda (1988) and Fukui (1986). The former paper was in informal circulation in 1986.

[8] This is the position taken in Fukui (1986); in later work such as Fukui (1988, 1989), the more radical view is adopted without further justification.

[9] Since more than one movement may be needed, as in cases like (9) to (14) above, each assumes that adjunction is also possible to I' or V'.

[10] It might be suggested that verbs like *blow it* or *stonewall it* are parallel to *rain* in (36), and that (38) is parallel to (37) in the relevant respect.
(38)   *?Mary expected it of John to speak English.*

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