Passives, Pronouns, and Themes and Rhemes.

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Passives, pronouns, and themes and rhemes

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Abstract

The 'direct discourse analysis' introduced by Susumu Kuno is examined and found to be inadequate. To account for the data Kuno discusses, as well as for related data, a new approach to transformations is suggested. By determining the function, rather than the form, of a transformation, certain predictions are possible. Primary is the prediction that two or more grammatical devices may not apply to achieve antagonistic purposes in terms of theme-rheme distinctions. That is, no grammatical device may be used to indicate that an element of a sentence is the theme (or rheme) if another device has already been used to indicate the opposite.
0. In this paper I intend to demonstrate that the "direct discourse analysis" introduced in Susumu Kuno's paper entitled "Pronominalization, reflexivization, and direct discourse" ([LI III:161-96] is invalid. In many respects this is a difficult chore, since I find myself in almost complete disagreement with Kuno's grammaticality judgments concerning his crucial examples. This makes a refutation of his analysis difficult, because a simple reanalysis of the data using my grammaticality judgments would devolve into the (sometimes) relatively sophisticated name-calling game referred to as "In my dialect, . . ." The problem is that linguistic facts, or raw data, are not objectively, but rather subjectively, determined. That is, in the simplest terms, the use of intuitions to determine grammatical-ungrammatical sequences constitutes a value judgment. In this regard, Kaplan (1964:370ff) points out that value judgments are in fact necessary for scientific investigation, but also that "there are real difficulties in the empirical validation of value judgments." (397) Unfortunately, he provides us with no answer to the question of how to validate value judgments, nor do I have a reasonable suggestion for this
perhaps most important of all questions facing linguistics today [See, in this regard, Bolinger (1968), Householder (1973), Labov (1971)]

What I will attempt to do is to show that K's analysis is internally inconsistent. Then I will reexamine K's data from my perspective. Finally, I will suggest some working hypotheses and principles which will account, at least in part, for the differences in the grammaticality judgments between K's analysis and mine.2

I.1. K states that (1a) has lower degree of acceptability than (2a):

(1) a. ?That John, had an appointment at two was forgotten by himi.

b. That John had an appointment at two was forgotten by Johni.

(2) a. *That John, was the best boxer in the world was claimed by himi.

b. That he was the best boxer in the world was claimed by Johni.

4 (These are K's (120) and (121) [192])

In order to account for this difference, K claims there are two classes of verbs: direct internal feeling verbs and non-direct internal feeling verbs. Direct internal feeling verbs, such as claim in (2), have a deep structure which "indicate explicitly that its complement sentence represents the direct internal feeling of the matrix sentence subject, as in (3):

(3) John claimed, "I am the best boxer in the world."

Since the subject of am the best boxer in the world is a pronoun
From the beginning, there is no way to realize it as a full-fledged noun phrase (namely as John)." [192]

On the other hand, K claims that (1) has the deep structure (4):

(4) John forgot [John had an appointment at two.]

Since the complement subject is a full-fledged noun phrase from the beginning, in K's term, (1a) is acceptable.

1.2. I will offer three specific reasons for why K's analysis is inadequate. All indicate that the direct discourse analysis is not supported and that a different approach is necessary to explain the data.

1.2.1. The first reason involves the use of some of the standard tools of the trade: *, ?, and other related markers. We are all aware of the difficulties involved in assigning these symbols to individual sentences with any consistency. Thus, for the kind of sentences that we as linguists continually examine, we must expect that fatigue, desire to make the facts fit the argument, lack of interest, or any of a number of other reasons will cause our own and our informants' grammaticality judgments to differ from time to time. This much, I am afraid, is to be expected. We must, however, insist at least on some semblance of consistency in the use of the symbols with which we evaluate sequences: for instance, * to indicate acceptable and/or grammatical sequences; ? to indicate questionable sequences; and so on. The minimum requirement is that these symbols be used consistently within a single analysis. If the linguist is free to interpret these symbols in any
way he pleases, they lose all meaning, and consequently any analysis based on such an interpretation must be considered invalid. Consider in this regard the following:

(5) a. John expects that he will be elected.
    b. That he will be elected is expected by John.
    c. *That John will be elected is expected by him.

(6) a. John claimed that he was the best boxer in the world.
    b. That he was the best boxer in the world was claimed by John.
    c. *That John was the best boxer in the world was claimed by him.

(7) a. John denied that he was sick.
    b. That he was sick was denied by John.
    c. *That John was sick was denied by him.

(8) a. John forgot that he had an appointment at two.
    b. That he had an appointment at two was forgotten by John.
    c. *That John had an appointment at two was forgotten by him.

[These are K's (6)-(9)]

K claims that (5c) and (6c) are ungrammatical because expect and claim are direct discourse verbs. He further says "Although [(7c)] and [(8c)] are very awkward, they are not ungrammatical." [163 (my underlining)] Contrast this statement with the following statement about (9) and (10):

(9) a. John asked Mary if she could do it.
    b. Whether she could do it or not was asked of Mary by John.
c. Whether Mary could do it or not was asked of her by John.

(10) a. John persuaded Mary that she was wrong.
b. That she was wrong was one of the things that John persuaded Mary of.
c. That Mary was wrong was one of the things that John persuaded her of.

According to [K's] hypothesis, [(9c)] and [(10c)] are derived from structures like:

b. John persuaded Mary, "You are wrong."

Since the subject of the complement clauses above is the personal pronoun you, there is no way to change it to Mary. Hence the ungrammaticality of (9c) and (10c)." [(170) my underlining]

Any analysis which can use an informant's (including his own) judgment of ? to indicate grammatical sequences at one time and ungrammatical sequences at another must be discounted.  

1.2.2. The second reason for rejecting the direct discourse analysis concerns the analysis itself. K distinguishes two syntactic classes of verbs. For "verbs such as expect, claim, know, think, request, on the one hand, and verbs such as deny, forget, be unaware (of), on the other, . . . the content of the complement clause of the former represents more or less the direct discourse of the matrix subject, while this is not the case for the latter."

[162] A complete list of verbs K deal with are presented for reference in (12):
What follows in a brief catalogue of types of counterexamples to K's claim that the direct discourse verbs have a deep structure representation like (3), while non-direct discourse verbs have a deep structure like (4). All of these involve the same general type of phenomenon in that they refute K's suggestion that a single controlling factor for the grammatical-ungrammatical distinction between (1a) and (2a) is due to the difference in type of matrix verb. 4

I.2.2.1. The relevant point of K's analysis is that, depending exclusively on the syntactic type of verb, elements in the complement sentence either can or cannot be a full-fledged noun phrase. Direct discourse verbs do not allow elements in the complement sentence to be full-fledged noun phrases, while non-direct discourse verbs do. Consider in this light (13):

(13) Kalmbach had the keys, he says, but the ultimate power to disburse the money remained with Haldeman.

[From Newsweek, July 16, 1973, p.32] 5
This structure, I presume, comes from an underlying structure like (13a):

(13) a. Kalmback says \([\text{Kalmback} \text{ had the keys, but the ultimate power to disburse the money remained with Haldeman.}]\)

Under K's analysis, this sentence would have to come from underlying structure (13b), offering no possibility for the complement subject to become the full-fledged noun phrase Kalmback.

(13) b. Kalmback says \([\text{I had the keys, but the ultimate power to disburse the money remained with Haldeman.}]\).

1.2.2.2. Consider also (14):

(14) John will be late tonight, he told me today.
The same argument holds for this example. K's deep structure must be (14a), again allowing no chance for the complement subject to become a full-fledged noun phrase.

(14) a. John told me today \([\text{I will be late tonight.}]\).

1.2.2.3. And (15):

(15) The claim that Chomsky believes in transformations was made for the first time in Syntactic Structures.

According to my analysis, this sentence is derived from an abstract structure like (15a):

(15) a. Chomsky made the claim for the first time in Syntactic Structures \([\text{that Chomsky believes in transformations.}]\).

And the agent phrase is deleted after passivization applies. K, of course, must derive this sentence from something like (15b):

(15) b. Chomsky made the claim for the first time in Syntactic Structures \([\text{I believe in transformations.}]\).
in which the complement sentence subject is a pronoun, denying the possibility of deriving sentence (15). This, too, gives evidence that a direct discourse verb may have a full-fledged noun phrase as the subject of its complement clause.

1.2.2.4. Finally, examine the sentences of (16).

(16) a. *That John was the best boxer in the world was claimed by him.

b. That John was the best boxer in the world was never claimed by him.

c. That John was the best boxer in the world was loudly and repeatedly claimed by him.

d. That John was the best boxer in the world was claimed by him, but it was never verified.

e. That John was the best boxer in the world was claimed by him, but he would never prove it.

The acceptability of (16b)–(16e) appears to be based on the fact that they each achieve the purpose of calling special attention to the end part of the sentence by creating a type of focus. More will be said about this in section 2.

For some speakers, examples (13)–(16) all show that H's generalization concerning the direct discourse analysis is incapable of accounting for a series of straightforward data. Actually, it is not necessary for someone to accept all of the examples in (13)–(16). If someone accepts only one example it shows that, for that speaker, the direct discourse analysis is not the single reason for the acceptability/unacceptability of, for instance, (1a) and (2a). Moreover, the fact that even some people accept some of these data shows that the direct discourse
analysis is not valid for all speakers of English. This being the case, we should look for some other principle or principles to account for the materials K has presented in his paper.

1.2.2.5. In addition, there are some data which are clearly outside the scope of K's direct discourse analysis, since they have nothing to do with direct or non-direct discourse. However, owing to the strong structural similarity between the (c) versions of the sentences following] and, for instance, (1a) and (2a), we might legitimately expect that the same principle or principles which cause the (c) versions of (17) through (21) to be less than good will account for the strangeness [K's ? and *] of (1a), (2a), and related examples.

(17) a. The dog indicated that it wanted to go out.
   b. That it wanted to go out was indicated by the dog.
   c. That the dog wanted to go out was indicated by it.

(18) a. The machine signaled that it was inoperative.
   b. That it was inoperative was signaled by the machine.
   c. That the machine was inoperative was signaled by it.

(19) a. Daimaru announced that it would close early.
   b. That it would close early was announced by Daimaru.
   c. That Daimaru would close early was announced by it.

(20) a. The meat gave off an odor that indicated that it was rotten.
   b. An odor that indicated that it was rotten was given off by the meat.
c. %An odor that indicated that the meat was rotten was given off by it.

(21) a. The symbol % indicates that the sentence following it is not completely natural in a neutral context.

b. That the sentence following it is not completely natural in a neutral context is indicated by the symbol %.

c. %That the sentence following the symbol % is not completely natural in a neutral context is indicated by it.

The symbol % indicates that the sentence following it is not completely natural in a neutral context. This symbol, as I am using it, has no connection with the traditional concepts of grammaticality or acceptability. The relevance of these examples is that they have the following deep structures to account for their strangeness, since, except in fairy tales and other extraordinary cases, the referent of the first person singular pronoun is restricted to human beings.

(17) d. The dog indicated, "I want to go out."

(18) d. The machine signaled, "I am inoperative."

(19) d. Daimaru announced, "I will close early."

(20) d. The meat gave off an odor which indicated, "I am rotten."

(21) d. The symbol % indicates, "The sentence following me is not completely natural in a neutral context."

The analysis which is presented in this paper does not rely on the direct discourse analysis, and is capable of accounting for the strangeness of (17c)-(21c).

2.0. In several recent studies, among them McCawley (1972), Ziv (1973), Kuno (1972c), Loetcher (1973), and Jacobs and Rosenberg...
(1971), linguists have asked what the purpose of applying a particular transformation is. This question may be rephrased in any number of ways, but always we are led to the same general consideration. Why should a language have more than one way of specifying essentially the same information? For instance, why should English allow both the (a) and the (b) versions of (22)–(25)?

(22) a. Ok-Hee won the speech contest.
     b. The speech contest was won by Ok-Hee.

(23) a. It was confirmed yesterday that Nixon is a crook.
     b. That Nixon is a crook was confirmed yesterday.

(24) a. Kazuko bought some English muffins yesterday morning. Later in the day Kazuko had to go shopping again.
     b. Kazuko bought some English muffins yesterday morning. Later in the day she had to go shopping again.

I will offer in this paper one reason for why this situation is allowed. It must be noted at this point, however, that there are other possible, not necessarily incompatible reasons. If we think of language somewhat along lines suggested by the Prague School, we arrive at a general working principle. The Prague School linguists claim that every utterance consists of elements which manifest varying degrees of communicative dynamism. That is, every element in an utterance contributes in varying degrees to the total amount of communication that the utterance achieves. Every utterance has both thematic material and rhematic material. Thematic material is also known as old information, or that which
is predictable from context; rhematic material is also known as new information, or that which is not predictable from context. Sentences with neutral, or unmarked, word order in English, and many other languages, progress from basically thematic material to basically rhematic material. This is termed by the Prague School linguists the "word order principle." Certain transformations, then, can be seen as devices for changing the normal, unmarked theme-rheme progression which, for instance, the (a) sentence of (22) exhibits, in order to conform to the word order principle while indicating that the active subject is not the theme.

As a beginning, let us examine the passive transformation to see what its purpose is, rather than what its formal nature is.

2.1. PASSIVE

Jespersen (1933:12ff) lists five reasons for the choice of the passive voice in English:

(25) I. The agent is unknown, or the speaker prefers not to name him.
   a. A window was opened.

II. The active subject is self-evident from the context.
   b. He was elected President.

III. There may be a special reason for not mentioning the active subject. Thus the use of the first person in avoided.
   c. This matter will be treated in detail in a later chapter.

IV. When the active subject is mentioned, there is generally a greater interest in the passive rather than the active subject.
   d. The house was struck by a train.
e. The man was run over by an electric car.

f. The house was demolished by a bomb.

V. The passive may facilitate the connection of one sentence to another.

g. He rose to speak, and was listened to with enthusiasm by the great crowd present.

Point IV is of special interest to us here. Despite Jespersen's claims, I will maintain that the use of the passive in sentences of this type is designed to place essentially rhematic material at the end of the sentence, and to place essentially thematic material at the beginning, thus allowing the sentence to conform to the word order principle which forces material to be arranged in a theme-rheme progression. This position is supported by various writings of the Prague School, Halliday (1967) and others. Examine (26d) through (26f) again. The derived subjects are in each case marked by the definite article, indicating that they refer to material already under discussion. The objects of the by-phrase in each case are marked by the indefinite article, indicating that these refer to material not yet under discussion. Of course, this distinction corresponds to the theme-rheme distinction introduced above. As evidence of this, consider (26a)-(26c), none of which are perfectly natural given neutral contexts and neutral intonation contours:

(26) a. %A house was struck by the train.

b. %A man was run over by the electric car.

c. %A house was demolished by the bomb.
I must reemphasize here that I am not claiming these sentences are either ungrammatical or unacceptable, only that they are not completely natural in a neutral context. Thus, in the normal case, material that occurs near the end of a sentence is more rhematic than that which occurs near the beginning of a sentence. It is important to point out here that the word order principle serves at least one more purpose. That purpose is to draw a distinction between focused and non-focused material, roughly equivalent to Hübner's (1934) distinction between figure and ground. That is, the focused element of a sentence is the most important element, while the non-focused part provides the background for the focused element. This fact can be seen in (28).

(27) Hubert loves God.

(28) God is loved by Hubert. [from McCawley (1970)]

is strange precisely because of the relative importance normally given to the two noun phrases. Notice that this strangeness has nothing to do with whether or not Hubert is the theme or the rheme of the sentence. In actual fact, most occurrences of rheme correspond to focus, but this is not necessarily the case. I will leave now the question of focus-non-focus distinctions and restrict my discussion to theme-rheme distinctions.8

The observations made above lead directly to the formulation of definition (29):

(29) A function of the passive transformation is to move
essentially rhematic material to the end of the sentence and thematic material to the beginning of the sentence.

2.2. PRONOMINALIZATION

Pronouns often refer to material already under discussion, or to material which is assumed known by the members of a conversation. (30) illustrates this:

(30) a. I know you.
    b. The other day I met Bill Adams. He's leaving for Bangkok tomorrow.
    c. The Smiths came over last night. They're quite a threesome.

There is the vexsome problem of backwards pronominalization, both intra- and extra-sententially, which appears to contradict this statement, at least in part. However, many instances of backwards pronominalization can be explained by assuming that backwards pronominalization has function of building suspense. This can most clearly be seen in the case of extra-sentential pronominalization. The following is the opening passage from a short story called "The other child" by Olivia Davis:

(31) I saw the whole thing. I didn't snoop. I didn't have to. They carried on, day after day, right there on the open beach, immediately under our noses. Or at least under mine, since a nose without a pair of eyes above it isn't much good, and Lansing is blind.
    We'd sit out most of the day on the porch of the little cottage I'd rented for the summer, Lansing slumped in his chair, hands folded across his stomach. You never know if he was asleep or not. I'd read, or sew, and there would be the three of them, the young woman and her little boy and the lifeguard, sitting practically under the porch railings, so we could hear every word they said.

[p. 74]
Notice the entirely different effect that is achieved if the first occurrence of both *they* and *our* is substituted for by the young woman and her little boy and the lifeguard and Lansing's and my, respectively. This phenomenon can also be observed inter-sententially. James (1972) has pointed out that the interjection *uh* is used to indicate that the speaker is either trying to remember the name of the NP which follows it, or that the speaker wants to hold back the name of the NP for various reasons. Consider then, the following pair of sentences:

\[(32)\]

\[a.\quad \text{That he shouldn't have done it was clear even to, uh, John}.\]

\[b.\quad \text{%That John shouldn't have done it was clear even to, uh, him}.\]

The (a) version uses backwards pronominalization. Since a function of backwards pronominalization is to build suspense, pausing before the name of the person by using *uh* is perfectly natural, since it contributes to the overall suspense-building atmosphere. On the other hand, the (b) version is decidedly unnatural, since forward pronominalization does not build suspense. Thus, there is no reason to hold back the name. For future reference, although this is not pointed out in James' paper, anything which follows *uh* must be relatively schematic material. Definition (33) follows directly from these observations:

\[(33)\quad \text{A function of pronominalization is to indicate that the referent of the pronom is marked as thematic material.}\]

What this definition suggests is that, for instance, (34) is not necessarily ungrammatical or unacceptable if it is the
opening sentence of a discourse, but that the referent of the pro-
noun he is presumed known, or pretended to be so, by the speaker:

(34) %He's decided to divorce Martha.

2.3. Returning to K's data, notice the types of sentences he
uses to support his direct discourse analysis. Sentence (1)
and (2) are reprinted here for convenience as (35) and (36):

(35) a. ?That John had an appointment at two was forgotten
by him.

    b. That he had an appointment at two was forgotten
by John.

(36) a. *That John was the best boxer in the world was
claimed by him.

    b. That he was the best boxer in the world was claimed
by John.

Notice in particular that K distinguishes between (35a), which
is marked with ?; and (36a), which is marked with *. Although
I have not emphasized this point, it is appropriate here to
mention that both (35a) and (36a) are odd to me, and to almost
everyone I have checked with, in the same way. [In the appendix
there is a representative grammaticality judgment disagreements
between K and me] If we ask why (35a) and (36a) are both less
than totally acceptable, an answer can be provided using the defi-
nitions which have so far been established. Consider the function
of the two relevant transformations involved in the generation
of both of these sentences: PASSIVIZATION and PRONOMINALIZATION. PASSIVIZATION applies to (37) to produce (38):

(37) a. John forgot [John had an appointment at two].

    b. John claimed [John was the best boxer in the world].
(38) a. [John had an appointment at two] was forgotten by John.
    b. [John was the best boxer in the world] was claimed by John.

In other words, the sentences of (38) indicate that John constitutes the rhematic material, as opposed to the sentential complement being the rhematic material in (37). When PRONOMINALIZATION applies to convert the phrase by John into by him, as in (39), we see the problem:

(39) a. [John had an appointment at two] was forgotten by him.
    b. [John was the best boxer in the world] was claimed by him.

PASSIVIZATION has been used to indicate that John is rhematic material; but PRONOMINALIZATION has also been used to indicate that John is thematic material.

These observations lead directly to the formulation of the following principle:

(40) All grammatical devices used in a single sentence must be compatible in terms of their functions, or the sentence will tend to become bad.

In particular, a violation of this principle will produce a sentence that is difficult to judge consistently as either grammatical/ungrammatical or acceptable/unacceptable.

2.4.1. A brief survey of related matters will illustrate this principle more clearly. Consider once again the interjection uh. Anything which follows uh is relatively rhematic. Therefore if we select something which is inherently thematic to place after uh, strangeness should result. The following examples show this to be true, since none are absolutely natural in neutral
environment:

(41) a. %That John, had an appointment at two was forgotten by, uh, him.

b. %That John was the best boxer in the world was claimed by, uh, him.

c. %A house was struck by, uh, the train.

d. %Give, uh, me the cake.

e. %That, uh, he, had an appointment at two was forgotten by John.

2.4.2. Consider next EXTRAPOSITION. There are two relevant observations that can be made. First, Charleston (1957) has observed that sentences with sentential subjects are much less common than the extraposed types. Second, she states:

If we compare, for example,

(42) a. It would be silly to refuse.

b. To refuse would be silly.

What difference in affective value can be discovered? ... each of [the sentences] endeavors to give prominence to one or the other part of the sentence, namely by means of tension when the most important part of the sentence (to the speaker) ... is kept until the end; the hearer is kept waiting, in suspense, and consequently his interest is roused ... i.e. the hearer is kept in suspense to find out what would be silly [in (a)] ... . On the other hand, in the [(b) example], the hearer is kept in suspense to know what the speaker intends to express concerning to refuse ... .

In both constructions it would seem to be the end position that gives the prominence ... .

Charleston's comments are of interest because she suggests that the extraposed version of a sentence is the most neutral. In this sense, observe what happens when there is an interaction between PRONOMINALIZATION and EXTRAPOSITION.
(43) a. It was obvious to John that he was in trouble.
   b. *It was obvious to him that John was in trouble.
   c. (Literary) That he was in trouble was obvious to John.
   d. %That John was in trouble was obvious to him.

Of these, (43a) is the most neutral. (43b) is out because it violates the general condition for backwards pronominalization. (43c) is acceptable, but is marked as being literary. (43d) should be acceptable, since it involves forward pronominalization, but it is not. The reason it is not acceptable is that EXTRAPOSITION has been suppressed to mark is clear to X as the rhematic material in this sentence. PRONOMINALIZATION, however, has indicated that the object of to in is clear to X is thematic material.

Hence, strangness results, since two different grammatical devices have been used to achieve cross-purposes.

3.0. In this section I will discuss two types of apparent counter-examples to principle (40). The first involves an interaction of PASSIVE and PRONOMINALIZATION which, despite the fact that it places a pronoun at the end of the sentence, results in a perfectly acceptable utterance. The second involves the interaction of CLEF and PRONOMINALIZATION.

3.1. Consider first of all the sentences of (44):

(44) a. The MG that chased the pilot who shot at it was hit by him.
   b. The man who kissed Nancy was poisoned by her.

Both of these seem to contradict principle (40), since in each case both PASSIVE and PRONOMINALIZATION have operated and a pronoun ends
the sentence. However, this phenomenon is easily explainable. In both cases the main verb must receive heavy stress placement or the sentence is odd. That is, the most important element in each of these sentences is not a noun phrase that ends the sentence, but the verb: hit and poisoned respectively. Compare the non-passivized versions of (44), presented in (45), to see that, with normal main noun phrase, the verb cannot be the most rhematic material because there is too much material following it:

(45) a. The pilot who chased it hit the MIG that chased him.  
    b. Nancy poisoned the man who kissed her.

One of the choices possible to indicate that the verb is the most rhematic material in a sentence is to move it as close as possible to the end of the sentence. Among other methods, passivization can achieve this purpose. In case the verb is the most rhematic material, the sentences of (46) are unacceptable, because the noun phrase at the end of the sentence is a full-fledged noun phrase and it therefore attracts attention away the verb.

(46) a. The MIG that chased the pilot who shot at it was hit by the pilot.  
    b. The man who kissed her was poisoned by Nancy.

The only possibility left which will convey the desired meaning is to have a pronoun follow the verb. Since a pronoun is used, along with reduced stress, it tends to de-focus the scant amount of material following the verb to ensure that the verb is interpreted as the most rhematic material.

This first apparent counterexample then supports principle
(40), since PASSIVE is used to place the verb near the end of the sentence to show that it is more rhematic than the normal, or unmarked, situation. PHONOMINALIZATION is used to de-focus the material following the verb. As proof, notice that the final pronoun cannot be stressed, or a strange sentence results:

(47) a. The MIG that chased the pilot who shot at it was hit by him.
    b. The man who kissed Nancy was poisoned by her.

3.2. The second apparent counterexample involves the interaction of PSEUDO-CLEFTING and PHONOMINALIZATION. The purpose of PSEUDO-CLEFTING is to indicate that the material which follows the verb BE is the most rhematic material in the sentence. Mini-dialogue (48) shows this, since the answer to a WH-question is always new, or rhematic, material.

(48) a. A: What did Dick do?
    B: What Dick did was to erase part of the tapes.
    b. A: Where did Dick erase the tapes?
    B: You won't believe this, but where Dick erased the tapes was in Spiro's old office.

If a pronoun occurs in the position following the verb BE in this construction, strangeness should result. That this is generally so may be seen in (49):

(49) a. What Dick did was it.
    b. Where Dick erased the tapes was in it.

However, the following example seems to contradict this statement and thereby refute principle (40):

(50) Where Dick put the package was near him.
An examination of the intonation again provides the clue to this phenomenon. HEAVY STRESS must be placed on near, and not on him. That is, PSEUDO-CLEFTING is used in this case to move the word near after BE to indicate that it is the most rhematic material in the sentence. Proof of this is seen by virtue of the fact that if PSEUDO-CLEFTING applies to put only one word after BE, that word cannot be an anaphoric pronoun with its referent in the same sentence.

(51) a. Who Dick put the package near was Tricia.
   b. Who Dick put the package near was him.

Thus, in this case as well, the transformations involved in the generation of the sentence have not operated to achieve cross-purposes; they have applied to put a particular item into the rhematic position after BE. What appeared to be a problem is explained by the fact that the transformation in question, PSEUDO-CLEFTING, has not operated to place the agent noun phrase into the rhematic position, but rather to place the preposition near into the rhematic position.

4.0. In this paper I have outlined the reasons for why I believe we must begin to look seriously at the purpose of transformations, as well as at the form of transformations. Only one aspect of a specific transformation's purpose was examined—the ability to alter the basic theme-rheme progression of a sentence. It was shown that an incompatible application of two or more transformational devices produces sentences which tend to be bad. Although principle (40) as formulated may eventually be altered, I believe it is correct in its essential form. There are two specific ways in which I can presently
envisage alterations in this principle. First, in this paper I have assumed that all transformational operations carry the same weight in terms of their effects. This is probably not true. For instance, both DEFINITIZATION and PHONOMINALIZATION have the purpose of indicating that a particular noun phrase is thematic material. They do this to the same degree.

Consider the following in this respect:

(52) a. There was an old lady, who lived in a shoe. She had so many children she didn’t know what to do.

b. There was an old lady, who lived in a shoe. The (old) lady had so many children she didn’t know what to do.

At some time I believe it will be necessary to indicate various transformations on a scale, showing the respective weight of each.

The second way this principle might be altered is that the functions of transformations cannot be defined exclusively in terms of theme-rheme distinctions. Other functions must be taken into account as well. Some of these include focus, emphasis, humorous intent, shock value, and so on. While none of these notions are very well understood at present, the necessity of exploring these areas is obvious. For instance, consider the following:

(53) a. Jesse registered his first win of the tournament against one loss by upsetting ozeki Kiyokuni for the second straight basho. The huge No. 1 maegashira, waiting patiently for slow-starting Kiyo, made a powerful charge and quickly bulldozed the husky ozeki to the rim. Kiyo got his left arm through Takanishima’s guard and tried to turn him aside, but the 275-pound behemoth resisted the maneuver and powered out the champion—"yorikiri." It was Jesse’s ninth win in 26 bouts with Kiyo, who is now 0-2 in the present meet.

[From The Japan Times: 13 November 1973]
The underlined noun phrases all refer to the same person. The extensive use of epithets apparently is used to avoid what the author must believe to be dull journalism; that is, the excessive use of personal pronouns and the repetition of the name Jesse.

In addition, examine (54):

(54) Bill and Sally showed up late for class. He's never on time.

Although he indicates that the referent is old information, HEAVY STRESS PLACEMENT indicates that the referent is in certain ways the most important element in the second sentence.

4.1.0. One aspect of principle (40) must be commented upon, even as it stands. Principle (40) is reprinted here for the reader's convenience.

(40) All grammatical devices used in a single sentence must be compatible in terms of their functions, or the sentence will tend to become bad.

The phrase "tend to become bad" should strike us as a major hedge; an attempt at vagueness which should vitiate any potential value of the principle. It is necessary, however, if we wish to report honestly what information our informants give us. There are so few examples of sentences which are either completely good or completely bad that this terminology must be kept to report accurately what the informant and linguist knows to be true about their language. However, I believe there are two specific ways in which linguists might better utilize an informant's reactions to raw data. Neither suggestion is new [see, again, Bolinger (1968) and Householder (1973)], but both are worth frequent repetition until
they are universally implemented.

4.1.1. First, informants can indicate that a particular sentence is either marked or unmarked. By marked I mean that the sentence is not the normal way a sentence would be said, given a specific context. This means that both grammatical/acceptable sentences and ungrammatical/unacceptable sentences may be either marked or unmarked. The linguist's explanation of how and why a sentence is marked in a specific context should do a lot to dispel disagreements over judgments on certain sentences. For instance, the sentences of (55) are all marked in some way, although only the first two would normally be considered unacceptable/ungrammatical:

(55) a. *Himself was shaved by John.
   b. *The apple are walking a house in seven day.
   c. *Beans I don't like.
   d. *The article was written by me.

4.1.2. The second way that we can improve the situation is to indicate the context in which a particular sentence is imagined. Doing this is difficult, time consuming, and paper wasting. It is also necessary. We all recognize situations in which a sentence first strikes us as terrible, only to have someone ask, "but how about in the following situation?"

4.2. The implementation of these two suggestions will not solve all of our problems concerning grammatically judgments, nor will it do away entirely with the game of "in my dialect, . . ." It will cut down on the number of areas that currently strike us as pure caprice on the part of the linguist.
FOOTNOTES

* This is a revised and expanded version of paper given at the 1973 LSA winter meeting in San Diego. I would like to thank Susumu Kuno, the members of my graduate seminar at Tokyo University of Education, and anonymous audience members at LSA, International Christian University (Tokyo), and University of Hawaii for comments on preliminary versions of this paper. None of people necessarily agree with everything presented here.

1. K also applies this analysis to Japanese, stating in particular that the reflexive pronoun zibun in a constituent clause (A) is coreferential with a noun phrase (B) of the matrix sentence (a) if A represents an action or state that the referent of B is aware of at the time it takes place (in the reportative style and the nonrecollective nonreportative style); or if A represents an action or state that the referent of B has later come to be aware of, and is now reflecting upon (in the recollective nonreportative style).

Kuroda (1973) disputes this analysis, primarily because he disagrees with K's crucial grammaticality judgments for Japanese. Hence, he does not feel K's data support such an analysis. Most Japanese informants I have checked with are equally suspicious of K's grammaticality judgments.

2. The way K's judgments were gathered must be taken into account. My guess is that if informants were presented with more complete contexts, different results would emerge. Cf. Section 4.

3. K has said [personal communication] that there is in fact no inconsistency in his use of ? to indicate both ungrammatical and grammatical sentences. He states that "(2a) has a lower degree of acceptability than (9c) and (10c) because it involves violation of two principles; one is the direct discourse principle, the other is coreference of the principles in this paper. (10c) does not involve violation of the second principle, that there, it is better than (2a). (9c) is better than (2a) probably because of 'per/hidy was not involved in what you might call 'theme-rheme switch'. (It is John that took part in the switch, and not Mary)." [10 December 1973]

If I understand this response correctly, K is asserting that (2a) is ungrammatical and less acceptable than (9c) or (10c). In addition, (9c) and (10c) are both better than (2a) in terms of grammaticality. However, the point at issue is why (7c), (9c), (10c), and (11c) all are marked with ??. The grammaticality/acceptability of (2a) at this point is absolutely irrelevant.
4. K has since informed me [personal communication] that the "direct discourse analysis is a more semantic constraint than a syntactic one." Thus, my criticism is apparently valid only for K's published work.

5. This sentence was brought to my attention by Nozuo Okada of Tokyo University of Education, Tokyo.

6. The accent mark here and elsewhere indicates heavy stress. I am operating under the common, though mistaken, assumption that heavy stress is an isolated (or isolatable) phenomenon. I am doing this because it is the accepted practice and because in the materials I present it does not cause any major distortion of the data. In fact, of course, heavy stress is inherent cannot work in isolation from other suprasegmental phenomena such as pitch and juncture. In a more refined analysis, this information must be taken into account.

7. This has been recognized by both traditional grammarians and modern linguists. For instance, Christofersen (1939) states:

> For the use of the the-form it is necessary that the thing meant should occupy a prominent place in the listener's mind that by the mention of the form the right idea is called up. There must be a basis of understanding and the purpose of the article the is to refer to this basis, to indicate "the thing you know." [69-70]

Hobbs (1968) recognizes this same fact:

> In an anaphor a noun is related by the to a previous occurrence of the same noun in the same or an earlier sentence. [11]

8. See Minds (in preparation) "The Prague School and transformational grammar." For a more complete discussion of the theme-rheme, focus-non-focus distinctions.

9. I am claiming that PASSIVATION and PHONOMINALIZATION are processes, although this point remains valid even the two transformations are considered some type of interpretive filters. Further, I am purposely indicating that PASSIVATION applies first, and then PHONOMINALIZATION later applies in a lower cycle to emphasize the fact that rule ordering and application are entirely irrelevant to the question at hand. Whether transformations apply cyclically or not, in order or not, or are in the form of rules of filters is immaterial. The important point is that both of these transformations apply at some stage in the derivation.

10. It is of course debatable whether the proper description of this type of sentence is [+Literary]. The term will
be used because such sentences often have a literary or argumentative flavor, and for no stronger reason.

11. This type of sentence, and its beneficial nature to my analysis, was pointed out to me by Ichiro Asano and Hasunori Suiko, both of Tokyo University of Education.

12. The possibility that this interaction might be of interest to my analysis was also pointed out by Ichiro Asano.

13. It has been pointed out to me by Nobuo Okuda that Schachter (1973) presents a principle which may easily be translated into the terms I have been using. Schachter states:

once a sequence has been transformed into a foreground-background sequence [roughly a rhyme-theme sequence: JVII],

this sequence is immune from further transformational division into foreground and background.

The similarities between this proposal and (40) are obvious. Schachter's concluding statement is also quite in line with the spirit of my analysis:

This account of the restrictions . . . is, admittedly, rather vague. The account does, however, represent an attempt to explain certain facts which could at best be described [previously].
This appendix is provided merely to indicate the extent to which grammaticality/acceptability judgments between linguists may vary. I use the same symbology as Kuno, although apparently not the same meaning is attached to each symbol. For me, * indicates a sentence that, in as neutral a context as can be imagined, is completely unacceptable; ? indicates a sentence that, in as neutral a context as can be imagined, is not quite right and not completely unacceptable. I have, on three different occasions spread out over seven months, examined each sentence and arrived at the same marking each time. My method for trials two and three was to copy each sentence onto a 3 x 5 card, shuffle the resulting pack, and then examine each sentence in isolation and in random order. The first trial was done by examining the sentences in the context of Kuno's paper. My reactions to the following sentences were identical on each trial.

<table>
<thead>
<tr>
<th>#</th>
<th>K's mark</th>
<th>K's my mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>6c</td>
<td>*</td>
<td>?</td>
</tr>
<tr>
<td>7c</td>
<td>*</td>
<td>?</td>
</tr>
<tr>
<td>11a</td>
<td>OK</td>
<td>John denied, &quot;I am sick.&quot;</td>
</tr>
<tr>
<td>11b</td>
<td>OK</td>
<td>John forgot, &quot;I have an appointment at two.&quot;</td>
</tr>
<tr>
<td>13a</td>
<td>*</td>
<td>?</td>
</tr>
<tr>
<td>K's #</td>
<td>K's mark</td>
<td>K's mark</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>13b *</td>
<td>?</td>
<td>That John was the best boxer in the world, he claimed.</td>
</tr>
<tr>
<td>13c *</td>
<td>OK</td>
<td>That John will be elected is one of the things that he expects.</td>
</tr>
<tr>
<td>13d *</td>
<td>OK</td>
<td>That John was the best boxer in the world was one of the things that he claimed.</td>
</tr>
<tr>
<td>14a ?</td>
<td>OK</td>
<td>That John is the best boxer in the world is one of the things that he denies.</td>
</tr>
<tr>
<td>14b ?</td>
<td>OK</td>
<td>That John had an appointment at two was one of the things that he forgot that day.</td>
</tr>
<tr>
<td>15b OK</td>
<td>?</td>
<td>That Mary would do it was expected of her by them.</td>
</tr>
<tr>
<td>15c OK</td>
<td>?</td>
<td>That Mary would do it they expected of her.</td>
</tr>
<tr>
<td>17a ?</td>
<td>OK</td>
<td>That John was secretly in love with Mary worried him.</td>
</tr>
<tr>
<td>18a ?</td>
<td>OK</td>
<td>That John was always unhappy worried him.</td>
</tr>
<tr>
<td>19a ?</td>
<td>OK</td>
<td>That John felt hungry all the time worried him.</td>
</tr>
<tr>
<td>20a OK</td>
<td>?</td>
<td>The rumor that John would become the president of the Corporation was denied by him.</td>
</tr>
<tr>
<td>21a *</td>
<td>?</td>
<td>The rumor that John would become the president of the Corporation was spread by him.</td>
</tr>
<tr>
<td>23a *</td>
<td>?</td>
<td>The claim that John was dying of cancer was denied by him.</td>
</tr>
<tr>
<td>24a OK</td>
<td>?</td>
<td>The claim that John was dying of cancer was made by him.</td>
</tr>
<tr>
<td>25a *</td>
<td>?</td>
<td>The idea that John was sick worried him.</td>
</tr>
<tr>
<td>26a OK</td>
<td>*</td>
<td>Realizing that John had cancer seemed to him to have bothered Mary.</td>
</tr>
<tr>
<td>26d *</td>
<td>OK</td>
<td>He seemed to those who knew John to be in trouble.</td>
</tr>
<tr>
<td>28c ?</td>
<td>OK</td>
<td>Whether Mary could do it or not was asked of her by John.</td>
</tr>
</tbody>
</table>
53a * OK    That Mary was wrong was one of the things that John persuaded her of.

53b *    If Betty would (please) come, Harry asked her.

53c *    Whether or not Betty would (please) come, was asked of her by Harry.

53d *    OK    As for yourself, you won't be invited.

54a *    OK    John told Mary that as for herself, she wouldn't be invited.

54b *    OK    John heard from Mary that as for himself, he wouldn't be invited.

55a *    John knew that as for myself, I wouldn't have to leave.

55b OK    John agreed with me that as for myself, I wouldn't have to leave.
Bibliography


Bolinger, Dwight (1952) "Linear modification." PMLA 67: 1117-44.


Bresnan, Joan (1972) "Theory of complementation in English Syntax." Unpublished Ph. Dissertation. MIT.


Firbas, Jan (1958) "Bemerkungen über einen deutschen Beitrag zum Problem der Satzperspektive." Philologica Pragensia 1:49-54.

--- (1959) "Thoughts on the communicative function of the verb in English, German and Czech." Brno Studies in English 1:39-63.


Ross, John (1967) "Constraints on variables in syntax." Unpublished Ph. D. Dissertation. MIT.


Schapiro, Ben (1972) "Some observations on indirect objects; perceptual or grammatical phenomena?" Paper presented at LSA Winter Meeting, Atlanta, Georgia.


Kuno, Susumu (unpublished a) "Pronouns, reflexives, and deleted subject in discourse." [October, 1973]

Kuno, Susumu (unpublished b) "On the direct discourse analysis of the Japanese reflexive "ubera". A reply to Kuno's comments." [no date]