

ON ASSIGNING CONSTITUENT STRUCTURE: THE PASSIVE

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INTRODUCTION

Matters dealing with attempts to derive an efficient and satisfactory means of assigning constituent structure have proven troublesome to a number of transformational analyses. Verification of the above claim is readily available. All one need do is review the literature involving the notions voice and deep-structure marker. Here it is important to note that only after we adopt a mode of assigning constituent structure that does not necessitate the inclusion of ad hoc devices can we expect a theory of deep structure to efficiently capture the generalizations required to uniquely characterize the possible set of semantic readings.

It is the intention of this brief study to suggest possible avenues of improvement, improvement that, among other things, provides for the description of passives as passives, independent of so-called underlying actives.¹

Before discussing the evident weaknesses and inconsistencies that characterize a few particular attempts to satisfactorily handle constituent-structure assignment, the notion deep structure as viewed by this study must be clearly defined. Otherwise, it would prove rather difficult to economically approach motivation of the arguments that will be presented momentarily. Additional reasons can be cited. Among these, one in particular stands out, namely the desire to avoid, in Hockett's terms, a multitude of pseudo-questions. A case in point involves the assumed and long-overworked relationship concerning the active and passive voices, a relationship that has yet to be adequately established. This problematic relationship has far-reaching effects as is illustrated by the following comments found in Robin Lakoff's Studies in the Transformational Grammar of Latin.

That the active sentences and the passive sentences are somehow related is well known. What is less well known is precisely what the relationship between them is. The passive transformation is one of the most mysterious rules of the transformational component. We know, to be sure, that it exists. We know apparently what it does to structures on which it operates, and what superficial structures it produces. But we do not know, and can barely begin to guess, the actual form of this transformational rule, and the kind of deep structures on which it operates (p. 69).

Regarding the various notions as to what constitutes a grammar, something is terribly deficient if a condition is allowed to exist whereby on the one hand, we know apparently what the passive transformation does to deep structures and what outputs it produces, and, on the other

hand, we do not know the basic form of the rule and the type of deep structures that serve as inputs to the passive transformation.

DEEP STRUCTURE

According to George Lakoff's "Instrumental Adverbs and the Concept of Deep Structure," the theory of deep structure that emerges from Chomsky's Aspects of the Theory of Syntax and Katz and Postal's An Integrated Theory of Linguistic Description dictates that deep structure is that level of analysis defined by the following conditions.

First, the basic grammatical relations (subject-of, object-of) are represented at this level in terms of the grammatical categories (S, NP, VP, N, V, etc.).

Second, the correct generalizations about selectional restrictions and co-occurrences are to be stated at this level.

Third, lexical items are assigned to their appropriate categories at this level.

Fourth, the structures defined at this level are inputs to the transformational rules (G. Lakoff 1968.4).

In regard to these defining conditions (recently reamplified as the Standard Theory in Chomsky's "Deep Structure, Surface Structure, and Semantic Interpretation"), it is important to note that the assignment of proper lexical items to their appropriate categories presupposes that the semantic representation of an utterance is characterized in deep structure. Further, in Lakoff's terms, "the semantic interpretation rules are defined in terms of lexical-semantic context (condition three) and grammatical relations (condition one), and since selectional restrictions involve lexical items, the second and third conditions are interdependent" (p. 4). Finally, because it is stipulated that the first three conditions allow a theory to state the correct generalizations about sentences at the deep structure level, the structures defined here provide the corpus of inputs utilized at the transformational level, consisting of rules that cannot alter the semantic content of their inputs.²

In connection with the above, it cannot be overemphasized that one of the most fundamental properties of the possible set of inputs utilized at the transformational level is that they are generated by the base component, which, in turn, yields deep structures that have as their purpose the nonredundant specification of the pertinent generalizations that can be made concerning the semantic composition of outputs. Therefore, we can conclude that in order to avoid meaningless complication and what some might term subsequent degrees of unnaturalness, specific generalizations are to be stated no more than once within the framework of the base component and the resultant deep structures. For example, assuming as Fodor did in "Projection and Paraphrase in Semantics" that passives are dependent on corresponding-underlying actives, one can conceivably argue that the

selection of the passive must be relegated to portions of the grammar other than the base. However, if the base is for some reason allowed to permit the selection of the passive under such circumstances, a generalization is redundantly specified. As a result, the base becomes needlessly complicated, a situation that Chomsky insisted upon avoiding in Syntactic Structures.

IMPLICATIONS

Having established how this study conceives of deep structure, the overall negative effects of ad hoc devices may be given specific attentions.

Upon closely reviewing the concepts and accompanying analyses of voice and/or negation as formulated by Chomsky, Lees, Klima, Katz and Postal, it becomes increasingly evident that the conditions underlying deep structure have often been manipulated in order to provide the means to some desired end. For instance, Katz and Postal (1964) have made the claim that the choice upon which depends the difference in meaning is made available only by the base and projected into deep structure. In spite of this view, they insist that the passive (made available by the optional selection of what is in reality an ad hoc passive marker inserted in the base and a corresponding obligatory transformation [p. 72]) does not necessitate independent semantic interpretation. That is, in terms of its semantic reading, the passive is a function of what Chomsky and Lees have called the underlying active. If they were to add a bit of consistency to their argument, the selection of the passive would be limited to the transformational level as was done in Syntactic Structures.

In approaching a defense of their position, Katz and Postal mention that the use of what they term an underlying P-marker containing an ADV_{manner} constituent dominating agentive by plus a passive morpheme dummy commits them to two assumptions:

First, if actives and their corresponding passives are the same in meaning, the difference between their underlying P-markers is semantically insignificant.

Second, if actives and their corresponding actives are different in meaning, the difference between their underlying P-markers is semantically significant in relevant respects (p. 72).

Amazingly enough, these two assumptions seem to move dangerously close to advocating the incorporation of what might be called arbitrary dummy markers. That is, upon recalling the interpretation(s) of the often cited utterance pair Everyone in this room speaks two languages and Two languages are spoken by everyone in this room, one might be left with the bothersome impression that the dummy marker in question

functions as a multi-faceted marker, a safety valve of sorts. In other words, such a marker is allowed to become semantically charged when a difference in meaning arises. Otherwise, it assumes the nature of a semantically vacuous marker, one which according to Katz and Postal has no semantic content but does not block the operation of the appropriate transformational rule(s) (p. 72).

Judging from what has just been mentioned, it is not beyond reason to surmise that dummy markers are introduced primarily to facilitate the assignment of constituent structure--hence the claim that such markers are necessarily ad hoc. Here it is curious to note that the scope of Katz and Postal's passive morpheme dummy includes at least the power to (1) indicate a difference in constituent structure with no corresponding semantic difference, (2) indicate a difference in constituent structure along with a corresponding difference in meaning, and (3) indicate a change in meaning with no corresponding difference in constituent structure (the so-called medio-passive as The book does not translate well). In addition, because the passive morpheme dummy, if selected, forces the application of the obligatory transformation, we have a case where, in (1) above, a stylistic rule becomes obligatory--hardly a suitable state of affairs if we hope to approach descriptive adequacy.³

Beyond a doubt, Katz and Postal's views, along with those expressed in Lees' "On Passives and Imperatives in English," influenced the revision of Chomsky's earlier proposal as presented in Syntactic Structure, one which, according to Lees, failed to provide for the correct constituent structure of the "resulting" passive, even though it correctly served to derive the passive from an underlying active (p. 10). As a result, Chomsky's revised analysis of the passive as presented in Aspects, in agreement that transformations cannot introduce meaning-bearing elements, also appears inconsistent in regard to the underlying conditions governing deep structure and proper assignment of constituent structure. Attesting to this is the fact that Chomsky's revised analysis fails to generate and, hence, provide for the correct constituent structure of passives characterized by the presence of double manner adverbials. For example, the base rules proposed by Chomsky do not have the power to generate such well formed utterances as The clock was watched steadily by Bill.⁴

In all probability, a more precise evaluation of the concept of deep structure would indicate that the legitimacy of introducing such a marker as Psv in deep structure, whether it be through the use of a high or low level base rule, presupposes that a difference in meaning, no matter how slight or abstract, be involved. It is rather apparent that Chomsky and others thus far mentioned have overlooked this condition. That such is the case becomes quite evident upon considering the possible implications of Chomsky's comment that the inclusion of the presentence markers Neg, Q, Imp is completely motivated as the result of their being characterized, unlike the passive marker, by independent semantic interpretations (Chomsky 1965.223). Hence, it seems conceivable that the following question may be asked: is the inclusion of their passive morpheme dummy sufficiently motivated?

At this point, it goes without saying that if you somehow acknowledge the legitimacy of semantically vacuous ad hoc markers (in the tradition of Chomsky, Katz and Postal) you, in turn, recognize as somewhat suitable the proposals of the above individuals. However, if you do not accept the legitimacy of such markers, you will be willing to admit to their negative impact on a theory of deep structure.

Moving on, it will prove quite beneficial to comment on the fact that Bolinger's "Entailment and the Meaning of Structures" provides motivation to an argument opposing the inclusion of ad hoc devices, which Bolinger interprets as forcing markers. According to Bolinger, within the framework of the base component, there are apparently three processes by which we can account for a syntactic difference at the surface, given a base that for all intent purposes remains the same. The two processes which are of significance to the present study may be described as follows: (1) incorporation of so-called semantically vacuous morpheme dummies (which in the case of passives are used solely to trigger the desired transformations), and (2) incorporation of semantically charged deep structure markers (which in the case of presentence constituents trigger the application of the appropriate transformations) (p. 124). As one might be led to conclude, Bolinger emphasizes that we must either motivate an argument asserting that the so-called semantically vacuous markers are in fact semantically charged--classifiable as semantically charged along with presentence markers--or admit to their semantic vacuity and, as a result, adjust our analyses accordingly.

Favoring the former, Bolinger attempts to demonstrate that the passive marker is, like presentence markers, semantically charged. For one specific reason, the case of a morpheme dummy without semantic content is of the utmost concern to Bolinger. This reason directly involves the explicit assumption of a structural difference without a semantic one and the subsequent view that the distinction between active and passive is a matter of stylistics, a view that must be regarded as untenable (p. 125).

While attempting to appreciate the above position, let us consider the implications of the utterances John has been misinformed by the cabinet and The cabinet has misinformed John. In the former, the focus is on the effect(s) such action as performed by the cabinet might possibly have on John. However, countering this, the latter appears to emphasize the action of the cabinet, not the effect(s) of such action. Consequently it can be tentatively assumed that the former is semantically independent of the latter. Furthermore, in Bolinger's terms, we can at least momentarily conclude that semantically vacuous dummy markers must be ruled out of linguistic analysis, the reason being that they trigger the obligatory application of stylistic rules at the transformational level (p. 126).

Pursuing this matter further, reference to the utterances The picture was painted by a new technique and The artist painted the picture by a new technique (Katz and Postal 1964.35) and their simplified (and conventionally accepted) underlying structure

by+Agent (someone=the artist) +Aux+VP+Adv manner

provides us with a number of curious observations. First of all, upon accepting the derived nature of the passive, the deletion of the agentive expression becomes obligatory, necessitating the insertion of an additional rule at the transformational level. Otherwise, the passive version would read The picture was painted by the artist by a new technique, a very questionable surface form. Second, the so-called corresponding active The artist painted the picture by a new technique appears quite odd. One might suggest that utterances such as The artist painted the picture using a new technique and Using a new technique, the artist painted the picture represent legitimate paraphrases of the active. Reconsideration, however, proves that this is not the case. That is, phrases such as using a new technique are realizations of embedded elements, not agentive expressions or strict manner adverbials in the underlying form. Finally, as already mentioned, Chomsky's revised analysis of the passive cannot account for such passives, characterized by double manner adverbials in the underlying form. Obviously, descriptive adequacy is hardly approachable if one clings to the idea that passives are mere stylistic variants of corresponding actives.

Bloomfield's 1917 study of Tagalog provides additional data which can be interpreted as supporting a description of the passive in terms of itself. According to Bloomfield, the Tagalog active is strictly confined to instances where the subject (an object expression in Tagalog), other than the agent, is either vague or omitted (p. 154). The examples below are indicative of this peculiarity.

(Active) Kumain sya nan kanin.
'He ate some boiled rice.'

(Passive) Kinain nya an kanin.
'Was eaten by him the boiled rice.'

Complementing this tendency, the active is not selected whenever a definite object expression, other than the agent, is available as subject. Especially avoided are actives with anaphoric subjects when the passive is at hand (p. 154). Therefore, constructions that one would expect to translate into such English forms as He ate the boiled rice and He took the book are not found in Tagalog. Rather, He took the book would read, in translation, as Was taken by him the book (Kinuha nya an isa n aklat). From these data, based on a review of Bloomfield's syntactical description of Tagalog and interviews with representative native speakers, it can be claimed that Tagalog, probably more than any Inod-European language, possesses a significantly large number of passives having no underlying actives.⁵

If favorably received, what has been discussed thus far appears capable of lending support to a description of passives as passives.⁶

In addition to incorporating the claims discussed up to this point, motivation of describing the passive in terms of itself can be approached by relying on the implications of Klima's work on negation and McCawley's "On the Base Component of a Transformational Grammar" and "The Role of Semantics in a Grammar." However, prior to closing with a few remarks on motivation and the results of describing passives as passives, it must be shown that a Psv marker (which will facilitate the operation of a high level base rule to be introduced in the conclusion of this study) can and does share the significant properties of presentence markers.⁷

PSV AS A PRESENTENCE MARKER

Concerning the somewhat widely accepted view that a morpheme dummy element is, among other things, a morpheme which cannot function as a formative, one can argue that it is not necessary for a morpheme to be realized in a concrete sense. By calling attention to the assertion, not a revolutionary one by any measure, that a morpheme is never unitarily realized, the apparent fact that a proposed passive marker (assuming that it can be mapped onto a syntactic or semantic representation that adequately incorporates it) shares significant properties of presentence markers can be demonstrated. Note the following overt similarities which are found to exist in the base.

1. Negation is represented by the marker Neg which is later realized as not, n't, etc.
2. Passive may be represented by the marker Psv which is later realized as be+En, get+En, etc.⁸

Implicit here is McCawley's assumption that a difference in underlying structure be viewed as a function of a given semantic reading as opposed to other semantic readings. The sample utterances given attention in the previous section lend at least partial support to this observation.

That the character of the proposed Psv marker is similar to that of presentence markers can be illustrated further. As Jackendoff is careful to point out in "Speculations on Presentences and Determiners," presentence markers such as Neg and Q are "affective" elements, that is, they somehow condition the use of any rather than some and the use of such elements as at all and anymore (p. 1). By extending this line of thought, the Psv marker can also be classified as an "affective element as it evidently conditions the use of by + agent (subject to recoverability if deleted). Also, it conditions the use of be + en, get + en, etc. as passive morphemes. Additional similarities can be seen upon referring to the power of such markers to trigger some sort of inversion. Whereas Neg and Q may trigger subject - aux inversion, Psv may trigger noun phrase inversion.

Having discussed what may be considered basic similarities involving the properties of presentence markers, namely Neg and Q, and

the Psv marker, a discussion of the above observations and their possible results appears appropriate as a concluding note.

PROPOSALS AND CONCLUSIONS

Upon tentative acceptance of the similarities involving presentence markers and Psv, it becomes feasible to classify Psv along with presentence markers. By virtue of such a classification, the following abbreviated set of rules may be proposed.

S ----> (PreS) + Agent + Aux + VP + Adv

PreS ----> ({ Imp }) (Emph) (Neg) (Psv)
 Q

Agent ----> by + NP

Because we have implicitly adopted a view of the base component that is primarily semantic rather than syntactic, a number of advantages come about. For instance, the proposed set of base rules allows a description to (1) explicitly claim, from the outset of the base, that passives are not mere stylistic variants of so-called underlying actives, (2) assert the semantic and, hence, syntactic independence of the passive, (3) capture more explicitly the notion basic sentence types in conjunction with their respective sets of intrinsic meanings. To clarify this point, consider the effects of selecting a particular presentence marker. For example, ideally the selection of Neg would necessarily claim that the sum of the component meanings characterized by the underlying and, as a result, superficial constituent structure of a given utterance yields the general idea of negation. It should then be evident that the proper implementation of semantically charged deep structure markers facilitates the assignment of constituent structure in a non ad hoc fashion.

Though it may appear to some that the proposed base rules are radical in nature, such is not the case. The major alteration has to do with the recognition that selectional restrictions are, in essence, semantic, which is an automatic result of assigning underlying constituent structure while relying on semantic factors. As already mentioned, semantic factors did not originally play a role in motivating the insertion of the marker Neg. However, recognition of the obvious fact that underlying structures marked Neg or Q as opposed to minus Neg or (positive) or minus Q (indicative) necessitate independent semantic interpretation, completely motivated the insertion of such markers in the base component. By positing the semantic independence of utterances marked passive we have, in a sense, paralleled the argument concerning markers such as Neg; we have only chosen to place primary emphasis on semantic factors, which, according to McCawley, must be considered as primary. In the final analysis then, we have actually adhered to the general outline of Chomsky's Standard Theory, one containing a base component, a semantic component,

and a transformational component. What we have questioned and continued to question is the erratic and confusing use of deep structure.

After carefully examining the use of Chomskian deep structure in relation to the implementation of deep structure markers, one is apt to question (as has been implicitly done here) the functional value and, as a result, the existence of such a level of analysis. As is somewhat widely known, McCawley's "On the Base Component of a Transformational Grammar," and "The Role of Semantics in a Grammar" along with Ross and Lakoff's "Is Deep Structure Necessary" seriously doubt the necessity of deep structure. The fact that the exponents of deep structure have, in the past, so manipulated it to reach a desired end only adds to the doubt.

As McCawley is careful to point out, rejection of deep structure does not imply total rejection of Chomsky's Standard Theory. If we tend to favor McCawley's formative-rule component (which specifies well-formed semantic representations) rather than deep structure, as is the case here, we are not as far removed from the Standard Theory as one might expect (McCawley 1968b.165). As previously implied, the primary difference is that the emphasis has been shifted to semantic representations. The result is that we seriously question the notion that syntax is generative, and, as a consequence, we approach the realm of generative semantics. In other words, rather than mapping syntactic structure onto semantic representations (syntactically-based theory) we have chosen to favor the process whereby semantic representations are mapped onto syntactic structures (semantically-based theory). Interestingly enough, in defense of the Standard Theory, Chomsky considers the difference as one involving the "direction of mapping," which he, at present, interprets as being of little import.⁹

NOTES

¹As will be discussed later, previous descriptions of the passive have implicitly or explicitly assumed the derived nature of the passive. The most recent analyses, the majority of which depend on some form of sentential embedding, are no exception.

²This study implicitly adopts, as will be seen in the latter portions, a view whereby semantic representations are mapped onto syntactic structures (semantically-based theory) as opposed to the mapping of syntactic structure onto semantic representations (syntactically-based theory). However, we are presently concerned with the manipulation of syntactically-based theory in terms of constituent-structure assignment.

³For the sake of clarity, it should be mentioned that Katz and Postal, in spite of their supposed semantic bias, chose to substantiate their argument on purely syntactic grounds, which resulted in what they felt to be "a simpler and explanatorily more powerful over-all linguistic description" (Katz and Postal 1964.71). Supporting Katz and

Postal, J. F. Stall insisted that "to establish a claim on purely semantic grounds would beg the question since the doctrine of the invariance of meaning would be involved at every step of the argument" (Stall 1965). As a result, the insertion of a passive dummy marker assigned a null reading became a necessity and, in turn, descriptive adequacy was not approached.

⁴As pointed out by Silas Griggs in "Aspects of the Theory of English Passives as Manner Adverbials" (paper presented at the 24th meeting of the South Central Modern Language Association, Louisiana State University, October 25, 1967), the following rule

$$\text{Manner} \text{ ----} \rightarrow \left. \begin{array}{l} \text{by Psv} \\ \text{Man} \end{array} \right\}$$

as found in Chomsky's revised analysis rules out utterances characterized by the presence of double manner adverbials.

⁵The observation that the Tagalog passive is characterized by the expression of definiteness (in reference to object expressions) lends support to the claim that such passives be marked by the feature [+definite].

⁶At this point, it might prove profitable to again recall that originally the arguments pertaining to the inclusion of presentence markers were, at base, presented from the point of view of syntax. However, motivation of their inclusion was actually provided, as Chomsky pointed out, by the recognition that the presentence markers in question (Neg, Q, Imph) necessitate independent semantic interpretations. The passive, in the framework of Chomsky, Lees, Katz and Postal, was inserted in the base without concern for the possibility that it might necessitate independent semantic interpretation. For this reason, their passive marker remained semantically vacuous.

⁷The primary reason for attempting to treat the Psv marker in a like manner has to do with the facilitation of mapping it onto a syntactic representation (or favoring Chomsky's approach, a semantic representation) that adequately incorporates it.

⁸Carrying this further, we may describe what may be called the Active Positive as being [-Psv] and [-Neg]. As a result, the Active Positive does not realize the presence of not, n't, be+En, get+En, etc.

⁹Judging from recent comments made by Chomsky (1969), a description of passives as passives would be considered to involve only a question of mapping what is essentially a semantic representation onto syntactic structures rather than mapping syntactic structures onto semantic representations. According to Chomsky, thus far no empirical evidence has been presented which indicates the superiority of mapping semantic representations onto syntactic structures.

Consequently, his Standard Theory continues to map syntax onto semantics. Upon accepting Chomsky's position and ignoring the possibility of demonstrating that passives do in fact necessitate independent semantic interpretation, the assumption that passives represent stylistic variants of corresponding actives enters the picture again.

REFERENCES

- Bach, Emmon. 1967. "Have and be in English Syntax." Language 43.462-486.
- Bloomfield, Leonard. 1917. Tagalog Texts with Grammatical Analysis. Urbana, Illinois: University of Illinois Press.
- Bolinger, Dwight. 1968. "Entailment and the Meaning of Structures." Glossa 2.119-128.
- Chomsky, Noam. 1957. Syntactic Structures. The Hague: Mouton.
- _____. 1964. Current Issues in Linguistic Theory. The Hague: Mouton.
- _____. 1965. Aspects of the Theory of Syntax. Cambridge, Mass.: M.I.T.Press.
- _____. 1966. Topics in the Theory of Generative Grammar. The Hague: Mouton.
- _____. 1969. "Deep Structure, Surface Structure, and Semantic Interpretation." Paper reproduced by the Indiana University Linguistic Club.
- Fillmore, Charles. 1968. "The Case for Case." Universals in Linguistic Theory, edited by Emmon Bach and Robert Harms. New York: Holt Rinehart and Winston.
- Fodor, Jerry. 1960-1961. "Projection and Paraphrase in Semantics." Analysis 21.73-77.
- _____, and Jerrold Katz. 1963. "The Structure of Semantic Theory." Language 39.140-210.
- Foster, James. Personal letter.
- Fraser, B. L. 1964. "Passive Constructions in English." Paper presented at the Annual Meeting of the Linguistic Society of America.
- Hasegawa, Kinsuka. 1968. "The Passive Construction in English." Language 44.230-243.
- Howard, Irwin. 1969. "A Semantic-Syntactic Analysis of the Japanese Passive." The Journal-Newsletter of the Association of Teachers

of Japanese 6.40-47.

- Inoue, Kazuko. 1969. A Study of Japanese Syntax. The Hague: Mouton.
- Jackendoff, Ray S. 1968. "Speculations on Presentences and Determiners." Paper reproduced by the Indiana University Linguistic Club.
- Katz, Jerrold. 1964. "Mentalism in Linguistics." *Language* 40.124-139.
- _____, and Paul Postal. 1964. An Integrated Theory of Linguistic Description. Cambridge, Mass.: M.I.T. Press.
- Klima, Edward. 1964. "Negation in English." The Structure of Language: Readings in the Philosophy of Language, edited by Jerry Fodor and Jerrold Katz. Englewood Cliffs, N.J.: Prentice-Hall.
- _____. 1964b. "Relatedness between Grammatical Systems." *Language* 40.1-20.
- Kuroda, Sige-Yuki. 1965. "Generative Grammatical Studies in the Japanese Language." Unpublished Ph.D. dissertation, M.I.T.
- Lakoff, George. 1965. "The Nature of Syntactic Irregularity." Unpublished Ph.D. dissertation, Indiana University.
- _____. 1968. "Instrumental Adverbs and the Concept of Deep Structure." Foundations of Language 4.2-28.
- _____, and John R. Ross. 1968. "Is Deep Structure Necessary?" Paper reproduced by the Indiana University Linguistic Club.
- Lakoff, Robin. 1967. "Studies in the Transformational Grammar of Latin: The Complement System." Unpublished Ph.D. dissertation, Harvard University.
- _____. 1969. "Some Reasons Why there can't be any some-any Rule." *Language* 45.608-616.
- Lees, Robert B. 1963. The Grammar of English Nominalizations. The Hague: Mouton.
- _____. 1963b. "On Passives and Imperatives in English." Paper presented at the Summer Institute of the Linguistic Society of America, University of Washington.
- Lyons, John. 1966. "Review of An Integrated Theory of Linguistic Description." Journal of Linguistics 2.119-125.
- McCawley, James. 1968a. "Concerning the Base Component of a Transformational Grammar." Foundations of Language 4.243-269.

- McCawley, James. 1968b. "The Role of Semantics in a Grammar." *Universals in Linguistic Theory*, edited by Emmon Bach and Robert Harms. New York: Holt, Rinehart and Winston.
- Niyekawa-Howard, Agnes. 1968. "A Psycholinguistic Study of the Whorfian Hypothesis Based on the Japanese Passive." Unpublished ms.
- Rosenbaum, Peter. 1967. The Grammar of English Predicate Complement Constructions. Cambridge, Mass." M.I.T. Press.
- Smith, Michael D. 1968. "The Unmotivated Passive Transformation." Unpublished M.A. thesis, Texas Technological University.
- _____. 1969. "Why Selectional Restrictions?" Paper presented at the 26th Meeting of the South Central Modern Language Association.
- Stall, J. F. 1965. "Generative Syntax and Semantics." Foundations of Language 1.133-154.