ABSTRACT
        This paper asserts the "unquestionable" relevance of
linguistic insights in the training of and subsequent use by teachers
of English as a foreign language. Although the author agrees with
Chomsky's view that linguistics has nothing to offer the teacher in
the form of specific proposals for language teaching methodology, he
argues that linguistics can give the teacher the understanding of the
phonetic, morphological, syntactic, semantic and usage aspects of the
language necessary for classroom effectiveness. Because of the
dominance of transformational grammar in recent linguistic research,
it is considered imperative that the TEFL teacher be aware of the
terminology, tenets and results of this particular approach to
language. The paper is, therefore, intended to provide the teacher
with such an overview of transformational grammar and te direction
which it is taking. In addition one specific approach designed to
make the results of linguistic research directly relevant to the TEFL
teacher is outlined: the development of a book intended to make the
teacher aware of the sorts of errors most likely to occur among
learners of English, the linguistic facts which underly these errors,
and the way or ways in which the errors might be remedied. Work on
such a book is presently being carried out at the Language Research
Foundation in Cambridge, Massachusetts. (FWB)

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Linguistics and the TEFL Teacher

Bruce Fraser

(This paper was not presented at the workshop, but
should be of interest to the participants.)

In the ordinary class routine, the teacher of English to foreign students is
seldom called upon to give a lesson in linguistics -- that is, to teach the organization
of the language from a formal viewpoint.[1] Ordinarily, instruction in linguistic
theory would be scrupulously avoided in EFL classes, especially at the beginning and
intermediate levels. And yet, to be effective, everything the teacher does in the
classroom, from the use and preparation of materials, the dialogue with students,
explanation of points being taught, to the evaluation of the students' progress,
must be based on a sound knowledge of the subject of linguistic study. It is not
enough for the teacher merely to "know" the language in the sense of being a native
speaker or very fluent speaker of it; he must also possess an understanding of the
organization of the language; the phonetic, morphological, syntactic, semantic,
and usage aspects of the language. In short, the effective teacher must know the
results of linguistic investigation of the language.

The teacher who is aware of the language does not have to evade questions by
referring the student to the teaching materials--which may be less than lucid on
the point--or utter a resigned "That's just the way it is." He is able to call upon
this knowledge in specific cases, whether it is in teaching a particular structure,
clarifying the difference between the use of two very similar words, or suggesting
exercises to improve on less-than-native pronunciation. For example, he is able to
communicate effectively to the interested student that the present tense third
person singular is the only real anomaly in English verb conjugation, that one
does not say "He is knowing the answer" because no verb denoting a state of the
subject (e.g., know, want, hear, have) can be used in the progressive (gerund)
form, and that the question "When did Max stop smoking?" presupposes that at some
previous time Max did smoke.

From the outset I think it is important to make clear that to my knowledge no

one knows how the results of linguistic investigation ought to be conveyed to the

student; that is, whether they ought to to take the form of drills, lectures, dialogues,

movies, etc. Such a distillation of linguistic insights, to whatever extent it is

relevant to a successful teaching program, is certainly dependent on many factors

such as the theory of second language acquisition underlying the teaching program--

usually not made explicit to either the teacher or student--the goals of the

instruction (e.g., conversation versus compositional versus reading ability), the quality

of the students and teachers, time limitations, and so on. Chomsky expressed this

point in the following way:[3]

> I am frankly, rather skeptical about the significance, for the
> teaching of language of such insights and understanding as have
> been attained in linguistics and psychology. It is possible--even
> likely--that principles of psychology and linguistics, and research
> in these disciplines, may supply insights useful to the language
> teacher. But this must be demonstrated, and cannot be presumed.
> It is the language teacher himself who must validate or refute any
> specific proposal.

But the direct relevance of linguistic insights in the training of and subsequent

use by teachers of a foreign language, in particular of English as a foreign language,

is, in my view, unquestionable. Moreover, within the last ten years or so, the field

of linguistics has nearly universally adopted a new model of approach to the study

of language: transformational grammar. It is a matter of considerable import,

therefore, that the teacher of English as a foreign language be aware of this

approach to linguistics: its main tenets, its terminology, and its results. In what

follows I will attempt to sketch out some basic tenets of transformational grammar,

where linguistic inquiry now stands, where it seems to be heading in its efforts

to penetrate deeper into the organization of language. I will then suggest one type

of effort which I believe to be useful to the TEFL teacher.

BACKGROUND

A linguistic theory incorporating a transformational grammar was first developed

by Noam Chomsky in <u>Syntactic Structures</u>(1957)and then later elaborated by Jerrold Katz

and Paul Postal in <u>An Integrated Theory of Linguistic Description</u> (1964) and by Chomsky

in <u>Aspects of the Theory of Syntax</u> (1965). According to this theory, the grammar of a language

consists of a system of rules which expresses explicitly the correspondence between the

sounds and meaning of the acceptable sentences of the language.[2] Chomsky views linguistic

theory as

> concerned primarily with an ideal speaker-listener, in a
> completely homogeneous speech-community, who knows his
> language perfectly and is unaffected by such grammatically
> irrelevant conditions as memory limitations, distractions,
> shifts or attention and interest, and errors (random or
> characteristic) in applying his knowledge of the language in
> actual performance. (<u>Aspects</u>, p.3)

This view of linguistic theory leads to a fundamental distinction:that between

<u>competence</u> (the knowledge the ideal speaker-hearer has about his language) and <u>performance</u>

(the way in which he actually uses this language). However, only in the ideal situation

is it appropriate to talk about the performance of the speaker directly reflecting his

competence. Since these conditions are never met, the task of the linguist is to abstract

away from the performance of language to determine the actual underlying competence. Just

as the physicist must determine the law of gravity using data obtained under conditions

involving irrelevant factors such as air resistance, so the linguist must find the basic

generalizations of the language (rules of the grammar) by using data often affected by

irrelevant factors such as distraction, change of mind, etc.

A well-used example may further clarify this distinction. Every adult who has

attended school is able to add two relatively short numbers together to arrive at the

sum . The sum of 42 and 13 is easily done in one's head. Thus, it is safe to conclude

that the basic rules of addition, as judged from adult performance, have been achieved,

and that these basic rules will permit the extension to other numbers. The fact that even

the most intelligent of adults will occasionally err in such addition does not invalidate

the conclusion that the basic additive-competence has been attained. However, when presented

with the task of adding 43576 and 13445 together,the normal adult will hesitate and

usually decline. We know he has the competence to do this; there are simply factors of

memory in this case which preclude him from satisfactorily carrying out the task.

Analogously, the sentence "The mouse the cat chased died" is readily understandable,
and surely acceptable English. On the other hand, the sentence "The mouse the cat
the dog barked at chased died" is usually considered bizarre and ununderstandable,
although it is formed on exactly the same syntactic principles as the earlier,
acceptable one. There is simply something about the complexity of the second sentence
which prohibits its being used or understood outside of graduate psycholinguistic
experiments. The grammar of a language must capture the fact that such bizarre sentences,
though seldom used, are indeed grammatically well-formed.

Moreover, many important aspects of a language are known to a speaker but are,
in the main, unavailable to him without considerable introspection. For example,
many two-word verbs in English are formed by the addition of a short adverb to the
end of an existing verb (e.g., cut up, chop down, throw out). Such verbs pervade
English today and all speakers are aware of them and use them extensively. They will,
moreover, reject such combinations as reject up, communicate out and connive up, as
being somehow strange and unacceptable. The reason for this lies in the phonetic shape
of the verb; in general, only verbs which are initially stressed (this class of course
includes one-syllable verbs) can combine with such adverbials. This generalization is
part of the English speaker's competence and must be captured by the grammar of English.

To consider a third example, few speakers of English are aware at first glance
that the sentence "I had a book stolen" is at least three ways ambiguous. That is,
there are three different interpretations to the sentence which may be paraphrased as:
1) Because I was so careless in watching my desk, I had a book stolen; ii) In order to
cause confusion in the library, I contacted some professional shoplifters and I had a
book stolen; and iii) I had a book stolen until the clerk squealed and called the police.
But these facts are also part of the native speaker's knowledge about the language(that
is, his linguistic competence)and as such, must be reflected in the grammar which
characterizes this competence.

An important question to consider here is this: just how does the linguist go
about finding out these generalizations about the language he is describing? Unfortunately,

such facts are not usually obvious, nor usually present to direct observation nor
are they easily extractable from language data--corpora of sentences uttered by this
or that group of speakers under some set of conditions--by an inductive process of
any known sort. In short, there are no known formalizable techniques for obtaining
accurate information about a language. To be sure, there are particular tests which
may be applied in specific cases. But these simply don't generalize over additional
cases for which the test was not originally constructed. There are, however,
heuristics which a linguist uses (e.g., in the above case, the constraint on the
phonetic verb form could be suggested by substituting verbs of the same meaning but
different phonetic shape and seeing whether the results were acceptable--send out
for communicate out, think up for connive up).

Such procedures--the introspection and reliance on intuitions of native
speakers--have been the source of considerable controversy and debate, particularly
from those who either oppose transformational theory because they have a theory of
their own or because they do not understand the significance of such data. Data
cannot be excluded from any serious attempt at formulation of a theory simply
because it was not obtained by rigorous experimental conditions. All data, however
obtained, must be evaluated within the theory to determine its relevance and
appropriateness. The linguist, working within the framework of transformational
grammar, begins formulating the rules of the grammar from all data about the
language, whatever its origin.

As the rules of the grammar become more precise, the grammar begins making more
precise claims about sentences of the language which were considered in the initial
formulation of the grammar. To the extent to which the grammar correctly predicts
the native speaker's intuitions about this range of sentences, the linguist can take
confidence that he is proceeding in the right direction. When the claims of the
grammar and those of the native speaker diverge, the linguist must then go back and
determine if this divergence is due to his generalization (the rules of the grammar)
being too strong or too weak or if, as is often the case, the language is exhibiting
exceptional behavior at this point.

Again, an example will clarify this point. Suppose that in working on the grammar

of English we found that sentences like "John loves Mary" and "He loves to go home

on Sundays" are acceptable while sentences like "The dog loves the canary" and "The

proof of that theorem loved Maxwell" are relatively unacceptable. On this basis we

would conclude that the verb love can take any type of object but must have a subject

referring to a human noun. We could have made a generalization about the verb love,

which, upon further investigation, we would find extends to a large class of emotive

verbs. But then, suppose we came across the sentence "Misery loves company." Must we

then conclude that the original generalization was false? On the contrary, because

our native intuition tells us that this last example sentence is metaphorical and

that similar sentences like "Hate loves petunias" or "Courage loves garbage cans" are

practically impossible to interpret, we can conclude that the original generalization

is, at least for the moment, valid and that this apparent exception is to be explained

through another means.

This give-and-take must, of necessity, continue until the linguist is satisfied

that the grammar has adequately described the language. And although it is not usually

advertised, no grammar to date even remotely comes close to adequate language description.

Thus, most linguistic research involves this continual formulation of generalizations

about parts of the language, examination of additional data suggested by the hypothesis,

restatement of the generalization and noting of exception, and so on.

The results of such linguistic inquiry--the rules of the grammar of the language--

cannot be claimed to have any psychological reality. For example, the existence of

a syntactic rule of English which lets us order the indirect object before the direct

object (e.g., converting "John gave the candy to Mary" into "John gave Mary the candy")

does not entail the existence of some related psychological process. To be sure, since

the goal of linguistic study is the understanding of language--its acquisition,

organization, and use--and since language is one of the cognitive abilities of man,

and hence part of the domain of psychology, it would be most desirable that the result of

linguistic inquiry be closely related to work in psychology. We may eventually find

out that this is so. But for the present, there is little or no evidence to support
that claim.

Finally, a grammar must not be constructed--as it has been frequently by those
lacking a full understanding of its aims and organization--as a psychological model
for the speaker or hearer of t¹ anguage. There is, again, no reason to conclude
that the linguistic organization of a grammar is represented internally and used by
the native speaker. As we will see below, a transformational grammar has a definite
organization, but one based cn rather arbitrary criteria, psychologically speaking,
and therefore of a questionable nature. Moreover, the grammar is constructed to
reflect what is known about the language, not how this knowledge is used. It would be
a great achievement to find that the work of linguistics has struck upon a
psychologically real solution to the problem of language knowledge and use. But this
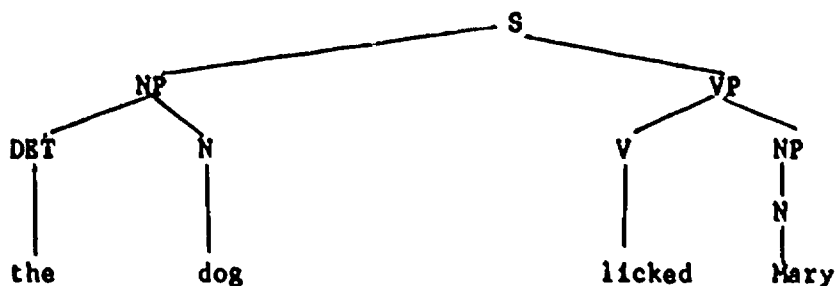also remains to be seen.

The Organization of a Transformational Grammar

In the sense of Aspects of the Theory of Syntax--our point of departure here--
a transformational grammar has the following schematic organization:
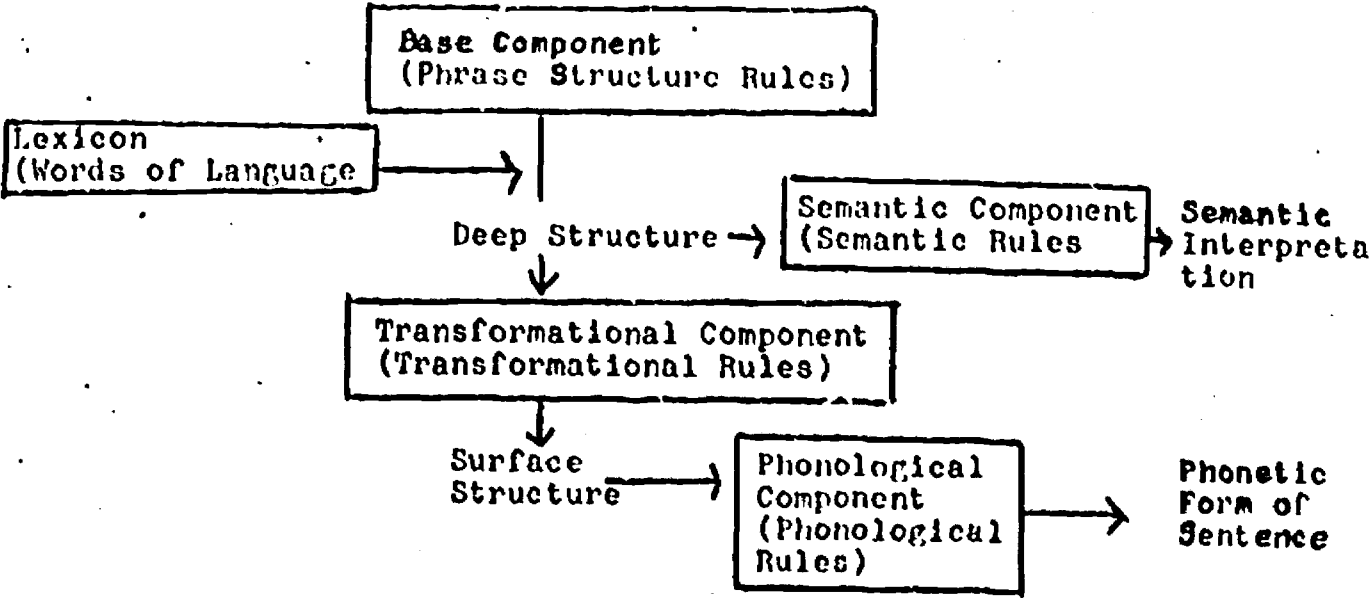
The division of the grammar--the device characterizing the corespondence between the
acceptable sentences and their meanings--into major components(e.g., base, lexical,
transformational, semantic, and phonological) reflects those areas in which linguists,
to date, have found the major generalizations about language. It is certainly possible
that additional components might have to be added in future characterizations (e.g.,
a morphological component) or that the content of these components will change
(almost a certainty).

The base component consists of a set of phrase structure rewriting rules which
generate a small set of phrase markers (P-markers): a tree having a single topmost
root (node) labeled as the grammatical category S (sentence) and a number of lowest
nodes. How the rules operate and the types of constraints on them is not of interest
here. Appropriate words for the grammatical categories of the sentence are selected
from the lexicon and are attached to these lowest nodes. The following P-marker is
a simplified deep structure representation of the sentence "The dog licked Mary."

```
                              S
              NP                          VP
        DET        N                 V          NP
                                                 N

        the        dog               licked     Mary
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The P-marker resulting from the application of the base component rules and the
subsequent lexical insertion(attachment of lexical items to the lowest nodes) is
referred to as the deep structure of the sentence. It is on this construct, the deep
structure, that the semantic component operates to determine the semantic interpretation
(meaning) of the sentence. The deep structure reflects the basic grammatical relationships
between the phrases of the sentence, e.g., the logical subject, the logical object,
modifier of a noun phrase, subordinate clause to the main clause, etc. Transformations,
which apply to this deep structure, often alter the original order of these phrases
but their initial grammatical relationship to each other remains the same. It is this
deep structure which (in the Aspects version of the thoery) contains all the information

necessary for the determination of the semantic interpretation of the sentence. In short, the deep structure carries the essence of the sentence. The transformational component consists of a set of transformations which convert P-markers into P-markers, changing the structure of the associated trees, beginning with the deep structure and ending with a final P-marker which is referred to as the surface structure of the sentence. It is on this construct, the surface structure, that the phonological rules operate to derive the phonetic form of the sentence--that is, the representation of how the sentence is uttered. A sentence is said to be derived by a sequence of steps beginning with the initial, given category S through the application of the phrase structure rules to form a P-marker, through the attachment of the lexical items, and the conversion of the deep structure to a second P-marker, this P-marked to a third, etc. through the application of transformations until the surface structure(the final P-marker) is reached.

Transformations have the power to permute phrases, delete phrases, substitute one phrase for another, and conjoin phrases--but all subject to very detailed general and transformation-specific restrictions.Here again, the detailed nature of transformations is not of immediate concern. What is important to realize is that a transformation does not alter the meaning of a sentence. Rather, it simply provides alternative ways of ordering the constituents of the original deep structure while keeping their logical(i.e., meaning) relationships constant. Thus, to the extent that the linguist argues that there is a question transformation which relates the basic P-marked underlying the sentence "John can see Mary" to the surface P-marker underlying the sentence "Can John see Mary," he must argue, that the deep structure contains some independently motivated marker which i) provides the information that the ultimate surface structure form will be a question form; and ii) that forces the application of the question transformation. To claim i) that deep structure contains all semantic information and ii) that transformations do not change meaning, while maintaining that there must be markers in a deep structure to account for what would otherwise appear to be meaning-changing transformations, (after all, the meaning of the statement "John can see Mary" and the question "Can John see Mary" are different) suggests that

such underlying markers are a hedge. Indeed, this may often be true. What is necessary

to counter this accusation is independently motivated evidence which requires the

presence of such markers. To present such evidence for even one case would take us

beyond the scope of the present discussion. Such arguments can be found, however, in

An Integrated Theory and Aspects.

Recent Suggestions for Revision

Since the publication of Aspects, there have been two main suggestions for revising

the form and organization of the grammar as presented therein. The first involves the

role that transformations ought to play in the grammar. A look at the literature

beginning with Robert B. Lees, The Grammar of English Nominalizations in 1960[4], reveals

that grammatical transformations have been utilized in syntactic analyses of language

to capture not just the most obvious generalizations such as the relationship between

the passive and active sentence, or the relationship between the question and declarative

sentence, but has been utilized as well to derive constructions for which very little

generality could be claimed. Basically the complaint raised against the linguistic

analyses which had arisen during the years following Lees' book was that transformations

were used in many places where they could not be justified. Some examples will clarify

this point.[5]

Consider first the claim often made that the following sentence pairs should be

analyzed as syntactically related:

(1) i. John and Mary got married.
     ii. John got married to Mary.

(2) i. Nixon and Wilson met in Madrid.
     ii. Nixon met(with) Wilson in Madrid.

(3) i. The Germans and the Poles fought in Central Europe.
     ii. The Germans fought against the Poles in Central Europe.

It has been argued (and I think quite convincingly[6]) that the first sentence in each

pair results from introducing a conjoined subject noun phrase in the deep structure

representation of the sentence rather than from conjoining two sentences. The latter approach

would require that "John and Mary got married" be derived from "John got married
and Mary got married" analogous to deriving "Nixon and Johnson have been elected
President of the U.S. during the last five years" from "Nixon has been elected President
and Johnson has been elected President." Clearly the intepretation of the first sentence
noun phrase--the conjoined subject--is that the two conjuncts (e.g., John, Mary) should
be taken as a unit rather than as two people, of each of which some action is being
predicated.

What was further argued was that the second sentence of each pair was derived from
the first by a transformational rule which moves the second of the conjoined noun phrases
to the end of the verb phrase, preceded by the appropriate preposition. However, looking
at this proposal more carefully reveals some rather serious defects. First, the
preposition associated with the moved conjunct (e.g., Mary, Wilson, the Poles) is
dependent on the verb, and thus, either some part of the transformation must be
sensitive to the form of the preposition or an additional mechanism will be required
to introduce the correct form. Second, in the speech of many native speakers, the
interpretation of the first sentence in each pair is not the same as any interpretation
of the second (if, indeed, there is more than one). In (2i) the interpretation is that
both country leaders came together in order to have a meeting, while in (2ii) there is
the interpretation that Nixon made the effort while Wilson was in Madrid. Third, the
symmetrical subject of the first sentence may be modified by the adverb even as in
"Even John and Mary got married" which presupposes that other couples got married and,
unexpectedly, John and Mary did so. However, the second form of the sentence, "Even
John got married to Mary," is not possible with anything close to the first interpretation.
Fourth, the gerund nominalization, derived from a sentence form, has a different inter-
pretation for the first and second sentences; for example, "Nixon and Wilson's meeting
in Madrid was fortunate" is not identical in meaning to "Nixon's meeting with Wilson
in Madrid was fortunate." Other similar objections can be raised. The point here is
this: the conjunct movement rule was heralded as a well-formulated, carefully motivated
transformation in the description of English. When, however, the question was asked
ju   general this transformation was, it because clear that it applied to a very

small class of verbs, and even then not in a very general way.

Another example concerns the derivation of adjectives with the prefix self, as in self-starting, self-condemned, and self-correcting.[7] Some linguists assumed that within the transformational framework most if not all of these forms should be analyzed as derived from underlying sentence forms. Thus, the following pairs were held as syntactically related:

(4)   i.   The engine starts itself.
        ii. The self-starting engine

(5)   i.   The man condemned himself.
        ii. The self-condemned man

(6)   i.   The machine corrects itself.
        ii. The self-correcting machine

But a careful look at the self forms in Webster's 7th Collegiate Dictionary will convince one that the amount of generalization to be realized here is relatively small. The relationship between the agent and the verb in each of the above sentences is perhaps the same. However, this relationship is certainly different from that which would underlie self-addressed which in turn is different from that underlying self-sufficient which is different from self-made, different from self-enforcing, and so forth. The number of such agent-verb relationships is certainly greater than two or three and may, depending on careful analysis, be different for each self form, although this position seems rather extreme. Suffice it to say that for one to claim seriously that such self forms should be derived by the application of transformations to underlying sentence forms requires—at least within the Aspects model of grammar—as many distinct transformations as there are distinct relationships. Moreover, since it appears that the semantic relationship between the underlying sentence and the derived adjectival does not remain the same, the transformations would appear, in some instances, to affect meaning. This result would run counter to the claim that the entire semantic interpretation of a sentence can be based on the information contained in the deep structure underlying it.

To summarize, there has been a serious attempt, at least in some quarters, to show that the role of transformations in the description of a language is restricted to processes of a very general nature, reflecting major structural changes in the composition of a sentence. There has been a concomitant effort to develop a theory of the lexicon capable of accounting for many of the particular properties of individual words that have heretofore been describable only by the use of transformations. Not suprisingly, these issues are often obscure and far from clear cut since the resolution of such conflicts is an empirical issue (as, indeed, is all of linguistic description).

A second thrust of linguistic theory since <u>Aspects</u> involves weakening the claim that all parts of the semantic interpretation of a sentence can be based exclusively on the deep structure syntactic representation of a sentence. In particular, it has been claimed that the entire derivation of P-markers, not just the one referred to as the deep structure, may be relevant in deriving the interpretation. Again some examples will clarify the point.[8]

Consider what might constitute a well-formed answer to the question

(7) Did John give the book to Mary?

when this is spoken with normal question intonation and stress (which includes a rising pitch at the sentence final position and the primary stress on <u>Mary</u>.) Certainly the following three statements are acceptable answers.

(8)   i. No, he gave the book to Jane.
      ii. No, he played baseball instead.
     iii. No, something else happened.

The first answer is appropriate if it is presupposed that <u>John gave the book to someone</u> and the question focuses on whether that someone was <u>Mary</u>. The second answer is appropriate if the presupposition is <u>John did something</u> and the focus is <u>give the book to Mary</u>. And the third answer is appropriate if the presupposition is <u>Something happened</u> and the focus is <u>John gave the book to Mary</u>. It has been pointed out (Chomsky, 1968) that the focus in each of these three cases contains the intonation center of the sentence, the syllable which contains the highest degree of non-contrastive stress relative to the other stresses in the sentence. In particular, it is claimed that a

possible focus for such a sentence(again with normal intonation and stress) can be

determined by examining the phonetic form of the sentence: only if a constituent

contained the element containing the intonation center can it be the focus. It

follows from this that since the noun phrase, the book,precedes, but does not contain

the intonation center of sentence (7), the statement

(9) No, he gave a pencil to Mary

is not an appropriate answer to the question (7). Additional support is given to the claim

that surface structure may play a role in determining the possible focus of a sentence

by the fact that the appropriate answers to the question:

(10) Did John give Mary a book?

where the direct and indirect object of (7) have been permuted, are

(11)   i. No, he gave Mary a pencil.
      ii. No, he played baseball.
     iii. No, something else happened.

The point here is that no longer can the noun phrase Mary be a possible focus because

it no longer contains but only precedes the intonation center which in (10) (normally)

falls on book. However, the focus can still be the verb phrase give Mary a book or the

entire sentence John gave Mary a book.

The question of what part of a sentence functions as its focus is clearly part

of the interpretation of the sentence. The range of possible foci for a given sentence

can be systematically determined in terms of other (independent) properties of its

structure (i.e., the location of the stress center) and hence should be part of the

linguistic description of the meaning of the sentence. But since the relevant properties

are not present in the deep structure, but only in surface structures, this implies that

at least part of the meaning of a sentence is only determinable on the basis of informa-

tion not present in deep structures.

A second example supporting this assumption concerns the order and scope of logical

elements such as negation and quantifiers. Consider the sentences:

(12)   i. Not many arrows hit the target
      ii. Many arrows didn't hit the target

It was pointed out by Jackendoff that the sentences (12i) and (12ii) are quite different

in meaning.[8a] In particular, the two sentences partition the set of arrows shot.
In (12i) the speaker refers to that subset of arrows which did indeed land on the
target and asserts that they were few in number; in (12ii) the speaker is talking
about the subset of arrows that missed the target and asserting that there were a
lot of them. If the suggestion in Katz and Postal's Integrated Theory is to be followed,
and a single negation attachment transformation, there is no motivated way of
indicating the difference in meaning of (12i) and (12ii). The suggesting made by
Jackendoff is that such negation should be attached after all relevant transformations
have applied and then, and only then, should the interpretation of the scope of the
negative element within the sentence be determined.

In support of his analysis Jackendoff shows that the passive form of (121)
shown in (131) does not exist while the presumably passive form of (12ii) shown in
(13ii) actually has the interpretation of (12i).

(13)   i.   *The target was hit by not many arrows.

        ii.   The target wasn't hit by many arrows.

In short, the order of quantifiers and negation is the same in the surface structure
of the semantically identical sentences.(12i) and (13ii). This is taken to support
further the basic argument that surface structure is relevant in determining meaning;
here the order of quantifiers and negation in the surface structure is crucial to
determining the meaning of the sentence.

The range of linguistic phenomena which have been claimed to be partially determined
by the form of the surface structure of the sentence--including not just order of constit-
uents but also phonetic form--includes the concepts of focus, topic and comment, scope
of logical elementa such as negation and quantifiers, and the scope of adverbials such
as even, also, only. Again, as with the question raised concerning the role of transforma-
tions in a grammar, there is considerable disagreement among the linguists working in
the area. It is almost fair to say at this point that, given an issue and five linguists,
there are at least eight solutions, and all "correct," since at least some evidence can
be adduced for all positions.

New Directions in Research

Frankly, I find such controversy far more healthy than the relatively placid and meek subscription to established theory which pretty much characterized linguistic activity during the early and middle 60's. To be sure, there is less agreement and more heated debate but there are substantive insights being squeezed out of this debate which probably would be less likely in a more placid period. It is these insights which are potentially useful to the TEFL teacher. I would now like to discuss a few of the areas in which work is currently being carried out.

The relationship between the stress of a sentence and the beliefs the speaker holds about certain referents or actions expressed is receiving considerable scrutiny. Consider the sentences[9]

(14)   i.   John praised Mary and then she commended hím

        ii.   John praised Mary and then she insúlted him

        iii. John praised Mary and then she went on about hím

In (14i) the interpretation of the two verbs praise and commend is nearly identical; at least they both express an action of approval. The primary stress in the second half of the conjoined sentence falls on the final noun phrase, the pronoun him. However, in (14ii), the interpretations of the two verbs are approximately opposite and here the primary stress must be on the verb insult rather than on the noun phrase him. And, for the third sentence, (14iii), where the verb is go on about, the stress will fall on either on or him, depending on whether or not the interpretation of go on about is construed as being praise or condemnation, respectively.

The same sort of phenomenon is illustrated by the sentences in (15).

(15)   John called Mary i) a democrat and then she insulted him

                        ii) a linguist

                        iii) a friend

where the stress will fall on him if, in the view of the speaker, Mary regards being called a democrat, linguist or friend as insulting.

A second area under investigation concerns what presuppositions underlie a given sentence or class of sentences.[10] The term "presupposition" is often used in a rather poorly defined fashion in the linguistic literature, but it is usually intended to have the following interpretation: if some sentence S_2 is a presupposition of a sentence S_1, then S_2 must be true whether or not S_1 is true or false. For example, if someone says "My two dogs are barking" there is a presupposition underlying this sentence that the speaker has two dogs. Whether or not these two dogs are barking must be empirically determined, but their existence must be presupposed if the issue is to be raised. To use another well-known example, for someone to state in 1969 that the present king of France is bald will have no truth value since the presupposition, that there is a king of France, it false.

To look at but one example of work on presuppositions, consider the sentences like those in (16) which contain the adverbial even.

16) i. Even John will pass the exam.

ii. The man even awoke on time

iii. She entertains soldiers even on Sunday

Even usually precedes the constituent which functions as its scope (the underlined words in (16)). The scope in (16i) is John, in (16ii) it is the verb phrase awoke on time, and in (16iii) it is the adverbial phrase on Sunday. What is particularly interesting about even is the fact that its presence contributes two pieces of information to that already present in the sentence. For example, we can talk about the interpretation of (16i) as analyzable into the three parts indicated in (17).

(17) i. John will pass the exam

ii. Other people will pass the exam

iii. One would not expect that John would pass the exam
One would expect that John would not pass the exam

(17ii) indicates that even requires the constituent functioning as its scope to be compared, albeit implicitly, against other similar constituents which, if inserted into the sentence, would result in the same truth value. For example, we might be comparing various students and their scholastic ability, and discussing who will pass the forthcoming

examination. If all we wanted to convey were that John, among the others under
discussion, would pass, we would have stated "John, also, will pass the exam" or
"John will pass the exam as well." If, however, we simply wanted to convey the feeling
that it is relatively unlikely that <u>John</u> would pass, then we would have stated something
like "Suprisingly (enough), John will pass the exam" or "One wouldn't expect it, but
John will pass the exam" with probably an emphatic stress on <u>John</u>. But, if what is
to be communicated is both the fact that a number of people will pass the exam and
that one wouldn't expect John to be among them, <u>even</u> is used. It is simple to test the
accuracy of these observations about the use of <u>even</u> by constructing sentences which
violate one or both of the underlying presuppositions. For example, the sentence
"Even Richard Nixon is President of the U.S. today" is strange because, whether we
like it or not, there is only one U.S. President. This sentence violates the first
presupposition, namely, that the constituent be comparable to other tokens of the
same type with the truth conditions remaining unaltered. Uttering the sentence,"Even
Einstein solved that problem" is also strange since one would normally expect that if
a problem were solvable, Einstein could have solved it.

The investigation of the appropriate use of an adverb like <u>even</u> permits one to
understand why other presumably well-formed sentences of English are unacceptable.
For example, the statement (18) <u>It was even Max that chided Martha about her long</u>
<u>skirts</u> is simply not good English. The reason is clear if one considers cleft sentences
of which (18) is an example. The purpose of clefting a noun phrase (that is, moving it
to the sentence initial position following <u>it was</u>) is not only to bring it into
prominence--it is this noun phrase which is the topic of the sentence--but also to
indicate that this noun phrase is unique with respect to whatever the rest of the sentence
says about it. The clefting of <u>Max</u> is forcing a unique interpretation on <u>Max</u> while the
<u>even</u> forces a comparison of <u>Max</u> to other people. An unacceptable sentence results.
Similarly, note the unacceptability of a sentence like "It was John that arrived
late and Henry did too".

A third area receiving considerable investigation involves the notion of speech

acts. Austin[11] suggested that there are at least three types of forces associated
with an utterance (a speech act): an illocutionary force--characterizing the type of
speech act(e.g., a command, a promise, a threat); a locutionary force characterizing
the semantic interpretation of the sentence; and the perlocutionary force characterizing
the effect of the utterance on the hearer. Of considerable interest to many linguists
at the present is (1) the extent to which such facts of a speech act, particularly its
illocutionary force, can be formally characterized; and (2),the extent to which they
are determinable from the syntactic form of the sentence. For example, the sentences
in (19) are all interpretable as commands in English.

(19)   i. Pass the salt

    ii. Please pass the salt

   iii. Just pass the salt

    iv. Would you mind passing the salt

     v. Could you pass the salt

    vi. How about passing the salt

   vii. If you'd pass the salt, I'd appreciate it.

However, they certainly can not be used interchangeably. A brief and certainly informal
classification of (19) would be the following: (19i) is a more abrupt version of (19ii)
but both are direct requests, and, in certain contexts are perfectly polite, e.g. a
chief cook to his assistant. (19iii) expresses not only the command to pass the salt
but also impatience; it would be appropriate to use if the speaker were in authority.
(19iv) and (19v) are rather polite, indirect ways of asking for the salt and an even
more polite version would include a final please. Use of these forms (19iv-v) presupposes
that the speaker knows that the hearer is able to pass the salt, and, that the hearer
knows that the speaker know he, the hearer, is capable of carrying out the action
requested. (19vi) conveys some impatience though unlike (19iii), probably no authority,
but perhaps the right to expect compliance with the request. Finally (19vii) indicates
a definite request but an effort to be very polite. I fully expect that many readers

will disagree with my characterization of these versions of a request to pass the salt. This is to be expected since the interpretations of these syntactic constructions do vary. I would expect, however, that everyone would agree that each of the examples in (19) can be interpreted as a request in some context. The extent to which this characterization can be made general and precise is one of the important issues in linguistics today.

The second question is the extent to which the syntactic form of the utterance conveys this information. Notice that (19i&iii) have the normal imperative form while (19iv-vi) have a question form and (19vii) resembles a conditional statement. Moreover, (19iv) has the imperative verb, pass, embedded in a complement construction while (19v) has it as the main verb of the clause. (19vi) does not resemble a yes-no question as the two preceding it but rather appears to be a question requesting information. Finally, (19vii) resembles "If you could explain the major result of the paper, I (am sure that I) would appreciate it."

A related problem arises with sentences like those in (20).

(20) i. Pass the salt and I'll excuse you.

    ii. Fire!

    iii. Go home (if you want to)

These sentence forms resemble the normal imperative form, at least in part. But (20i) is presumably related to a conditional sentence such as "If you pass the salt then I'll excuse you" and is thus not a request, but rather the statement of the condition under which the addressee may be excused. (20ii) is a warning of the existence of a fire, presumably related to "I warn you that there is a fire," and (20iii) is a form used for giving permission where the "if you want to" may or may not be present.

A fourth area receiving attention involves the sort of semantic information associated with a particular lexical item. This is an area in which work has just begun but I would suggest that some of the most productive research will be carried out here in the next few years. Of concern are the differences between verbs such as accuse and criticize as in (21):

(21) i. He accused John of loafing.

ii. He criticized John for loafing.

In (21i), the assertion is made that John did indeed loaf while it is presupposed
that loafing is a bad thing. In (21ii), however, the assertion is made that loafing
is a bad thing while it is presupposed that John actually loafed. In short, there is
the notion of John loafing and the notion of loafing being a bad thing; their role
as assertion and presupposition are reversed in these two sentences.

A second sort of question involves verbs like raise and lift which mean
approximately the same thing. However, a close examination of their use shows that
raise emphasizes the fact that the object has been elevated to some higher point
while lift emphasizes the actual act of elevating. Thus, note the relative
acceptability of the following sentences.

(22) John hurt his back i) lifting the piano

ii) ?raising

(23) We saved the pictures from the flood by i) lifting them up 3 feet

ii) raising

An even more striking contrast arises when the two verbs are used in a less literal
sense as in (24):

(24) The government will i) raise   praise supports tomorrow
                        ii) lift

To summarize our discussion, it is clear that the problems now being attacked by
linguists are far from solved. In fact, it has only been in the last year or so that
the problems themselves have begun to become clearly stated. We have seen a great deal
of work performed on the analysis of English syntax, much of it extremely insightful
and potentially useful to the language teacher. But now, in addition to such work, there
is a great interest in extending the scope of linguistic inquiry from the rather narrow
domain of descriptive syntax to problems of meaning and use.

I would like to suggest one specific approach to making the results of linguistic investigation directly relevant to the TEFL teacher. In general, the student of a foreign language, in this case, English, has little or no interest in being taught formal linguistics or anything that smacks of it. However, in practicing English in the process of learning it, he makes numerous and often systematic errors--in fact, violations of the linguistic generalizations found by the linguist. Hence, one application might be expected to arise from making the teacher aware of the sorts of errors most likely to occur, the linguistic facts which lie behind them, and the way or ways in which these errors might be remedied.

More specifically, I suggest the development of a book, call it a Goofikon, which will consist of a compendium of possible errors in English, organized such that the worst kinds of mistakes, those which interfere with intelligibility, are presented first, and minor surface distortions (e.g., number agreement, gender inconsistency in pronouns, etc.), normally taken up at the beginning of previous books of this sort, taken up at the end. The Goofikon should not be organized according to topics in the structure of English, but according to classes of errors made in using English. An effort should be made to establish natural classes of possible mistakes (e.g., word-order) and examples should be adduced from corresponding constructions in other languages to show how a particular class of mistakes can arise. The book should contain an extensive index of constructions with page references to possible mistakes in each construction, an in-depth discussion of the points of English grammar which relate to a particular mistake, and suggestions of possible ways to correct these mistakes. Such an approach to bring the results of linguistics into a useable form for the TEFL teacher is, in fact, already under development at the Language Research Foundation, Cambridge Massachusetts, and will be tested out in TEFL classes during the Spring semester, 1971.

Finally, I would like to suggest that there may be some merit in considering the organization of the grammar of a language as indicative of the way in which the language should be taught. Particularly in a course oriented toward the development of conversational proficiency (which certainly applies to most TEFL courses taught in this country) there must be maximum emphasis on effectiveness of communication rather than correctness of style or grammar. (Recall that grammar includes phonetics, morphology, and syntax). Therefore, there is much to be said for emphasizing the speaking of sentences of the language and particularly, the creation of new sentences in appropriate contexts, without the obsessive emphasis on the correctness of gender, case marking or verb conjugation.

For example, I would view the uttering of a novel sentence "He own dat houses fore day" as far more important than the accurate repetition of memorized drill sentences. This suggestion does run counter to the majority of experts in the field of language learning, a field in which I claim no expertise, as indicated by a recent statement by Wilga Rivers:[15]

> There must be, then, a constant interplay in the classroom of learning
> by analogy, and by analysis of inductive and deductive processes,
> according to the nature of the operation the student is learning. It
> is evident that the higher level choices (those of word order, clauses
> arrangement, etc. B.F.) cannot be put into operation with ease if
> facility has not been developed in the production of the inter-
> dependent lower level elements, and so learning by induction, drill,
> and analogy will be the commonest features of the early stages. Genuine
> freedom in language use, will, however, develop only as the student
> gains control of the system as a whole, beyond the mastery of patterns
> in isolation. (p. 209)

I certainly agree with this last statement. However, I strongly suggest that genuine freedom in language use (which I interpret to mean confidence on the part of the student) can be attained from the start if, and I stress if, the teacher is willing to let such low-level items as gender and number agreement, which do not bear crucially on communication, be overlooked in the early stages. In such a language teaching program, first topics for the student would be the general organization of

the language , the possible word orders, the ways in which clauses modify others,
the possible reorderings of phrases without a meaning change, and the like. Then,
only after he begins to create his own utterances using these structures would the
lower-level facts of morphology and phonology be looked to in any detail. This
framework is, of course, exactly the way in which the linguist, without any
consideration of the problems of language teaching, has chosen to organize
the grammar of the language. To be sure, there may be little psychological reality
to this approach and it may be of limited use. It has not, to the best of my knowledge,
been tried out. But I suspect that the reason it has not been lies both in the
sanctity of tradition and the inherent, even endemic conservatism of most language
teachers.

FOOTNOTES

1. The work discussed here was supported in part by contracts

from the TEC Company, Tokyo, and the Peace Corps, PC 25-1517,

to the Language Research Foundation.   I am indebted to Donald

C. Freeman and Robert Lugton for many valuable suggestions on

an earlier version of this paper.

2. The term acceptable will be used throughout this paper to

indicate English sentences which are perfectly natural and immed-

iately comprehensible without additional analysis and in no

way bizarre or outlandish.   This term should not be confused

with the technical term grammatical which indicates a sentence

generated by the grammar of the language although the sentence might

never be uttered for a variety of reasons.

3. "Linguistic Theory" by Noam Chomsky, in Robert G. Mead Jr.

(editor), Language Teaching: Broader Contexts, Northeast Conference

Reports, 1966.

4. The Grammar of English Nominalizations (Lees, Robert B., Inter-

national Journal of American Linguistics, 26, 1960) was a revision

of Lees' doctoral dissertation at M.I.T. and was the first attempt

to treat in detail any large portion of English.

5. In the discussion of examples,I will only attempt to provide a

flavor of what the issues are.   In no case will I attempt to go into

detail or even present both sides of the picture.   The references

indicate where a more thorough presentation may be found.

6. See "Phrasal Conjunction and Symmetric Predictes" by George

off and Stanley Peters, NSF Report 17, Harvard University.

7.   See "Some Remarks on Nominalizations" bu Noam Chomsky, to appear in

Roderick Jacobs and Peter Rosenbaum, eds., <u>Studies in English Transformational</u>

<u>Grammar</u>, Ginn-Blaisdell, 1970, and <u>On the Syntax of Word Derivation in English</u> by

Paul Chapin, Unpublished M.I.T. Dissertation, 1967

8.   See "Deep Structure, Surface Structure, and Semantic Interpretation" by

Noam Chomsky, Mimeo, 1969 (to appear in some book of readings), and "An Interpretative

Theory of Negation" by Ray Jackendoff, in <u>Foundations of Language</u>, 1969.

9.   See "On Derivational Constraints" by George Lakoff, <u>Proceedings of the Chicago</u>

<u>Linguistic Society</u>, 1969

10.   See "An Account of <u>Even</u> in English" by Bruce Faser, to appear in the <u>Proceedings</u>

<u>of the Ohio State Semantics Festival</u>, 1969.

11.   See <u>On How to Do Things with Words</u> by J. Austin, Harvard University Press,

1962, and <u>Speech Acts</u> by J. Searle, Cambridge University Press, 1969

12.   See "Lexical Entries for Verbs" and "Types of Lexical Information" by C.

Fillmore, Working Papers in Linguistics, No. 2, The Ohio State University, Columbus,

Ohio, 1968, and <u>Studies in Lexical Relations</u> by J. Gruber, Unpublished M.I.T.

Dissertation, 1962.

13.   <u>We</u> here refers to the staff of the Language Research Foundation.

14. See <u>English Transformational Grammar</u> by R. Jacobs and P. Rosenbaum, Ginn-Blaisdell,

Boston, 1968, and <u>Transformational Grammar and the Teacher of English</u> by O. Thomas, Holt,

Rinehart & Winston, 1966, for two attempts at presenting linguistic information to the

non-linguist while retaining much of the formalism found in the linguistic literature.

15. See "Grammar in Foreign Language Teaching" by Wilga M. Rivers, <u>The Modern Language</u>

<u>Journal</u>, No. 52, 1968. pp.206-211.