THE ECLECTIC COMPANY:
OR, EXPLANATORY POWER TO THE PEOPLE*

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Probably the most conspicuous characteristic of current linguistics is conflict. Observers of the linguistic wars have frequently emerged with the disheartening feeling that nothing is certain, and that this situation bids fair to continue for some time. Certainly, for someone interested primarily in trying to apply the results of theoretical linguistics, watching the dogged combatants deny basic premises, construct yet more elaborate edifices of abstraction, and argue interminably over some formal point, it must seem that there is no linguistic theory with results that can be applied, since no one seems to be able to agree on anything long enough to allow it to be used. Far from ushering in the new era in applied linguistics, generative studies might appear to have made it all but impossible to use their methods intelligently.

And yet, . . . languages exist, they are used, they must be learned, they must be taught. And it has been an article of faith for some time that a knowledge of linguistics is extremely useful (if not, in fact, essential) to the language teacher and others involved in dealing with the applied aspects of language. It is not my purpose in this paper to try to debunk this belief; rather, I think it is true, and I would like to discuss it in the light of certain trends in recent generative studies, showing (hopefully) how the potentially tremendous power of the theory can be harnessed by the applied linguist without getting lost in the maze of formalization which characterizes generative grammar of all kinds. 1

To begin with, I would like to discuss a few points of theory deriving from the tenets of Generative Semantics (with which school I
am, in my theoretical avatar, associated; the most important of these is the belief that most of syntax is based on semantics, and that, in fact, the distinction between the two studies is a misleading one—a linguist must study both together. Another is that not only semantics, but also context and stylistics must be 'taken into account' in order to adequately construct a theory of syntax (broadly defined, this time), as well as many nonlinguistic facts (or pseudo-facts) which we all know (or believe) about the real world. While it is true that an adequate theory constructed along these lines will approach a complete theory of human thought, and that no such theory has yet been proposed, the orientation of the practitioners of Generative Semantics has produced a serious search for semantic generalizations which have an effect on grammar (and, occasionally, phonology). The reasoning behind this pursuit is generally enounced in theoretical papers, and goes like this: 'There is a regular correspondence between [semantic, syntactic, or pragmatic] phenomenon P and phenomenon P': this can be stated informally as G [normally given in English]; now this result can be handled (as is easily explainable, is predicted, falls out naturally, etc.) in my theory, while X's theory, which denies the existence of such-and-such a mechanism, must necessarily fail to capture this generalization; therefore, my theory is more correct than X's.\(^2\)

Important though such proofs and disproofs are in the development of the theory, we need not concern ourselves too much with their validity if we are interested in applied linguistics; what should be important is the generalizations presented and their potential use in explaining grammatical phenomena. Particularly in language teaching (and in textbook writing), it is becoming increasingly evident that explaining is as important as drilling (and possibly more so for some students; cf. Lawler and Selinker 1971).\(^3\) The most pressing problem facing an applied linguist presented with such a putative generalization is determining whether it is, in fact, only putative; this involves searching for counter-examples or confirming evidence. It does not require (as it would for the theoretical linguist) integrating the generalization into a consistent theory and, if necessary, determining what kinds of mechanisms must be added to the grammar to account for it. Applied linguists, unlike theoretical ones, are under no obligation to be consistent, since they are not required to account for the existence of any phenomenon, merely to describe how it works and how it affects other phenomena.\(^4\) The applied linguist, it would seem, can have his cake and eat it too, since he can deal with intrinsically interesting facts and increasingly deeper explanations of them without having to swear allegiance to any school of grammar or work out all the formal apparatus, which has little, if any use in the application of the data.

There is, then, some hope that the current outpouring of generative studies can provide results, in the form of generalizations (most especially semantic and contextual generalizations) which are useful to applied linguists. However, there is another trend, most notable in writings of generative semanticists, which is potentially even more useful, and it is this emerging tradition which I would like to discuss here in detail.

As noted above, generative semanticists have embarked upon a search for generalizations and explanations: what are they to do when they find one, but realize that it is unstable in any theory? Clearly, it has relevance, since it constitutes (if true) data that a theory must account for; but it requires, often enough, tinkering with the theory that is beyond the interests or the ability of the linguist, who may not be all that interested in proposing his own unique reworking of generative theory, with all that that entails. The solution,\(^5\) recently, has been to present a paper of a peculiar sort, giving rather large amounts of data, pinning down correlations among them, and proposing informal statements of explanations and generalizations; typically, the conclusion reached is that there is much to learn and understand about the phenomenon being discussed, and that current theories must be revised in unpredictable ways in order to encompass the generalizations presented.\(^6\) This type of study has been known to distress people interested in applying linguistic theory; but as we will see, this is a misapprehension.

In the time allotted to me today, I would like to take up two topics which have received a great deal of attention in current (and not-so-current) generative studies, discussing a number of interesting facts relating to each, as well as some generalizations which may be useful, and noting that, while the position, treatment, and ramifications of these topics are by no means clear in current theory, there is no earthy reason why the facts and relationships adduced by theoretical linguists should not be taken by applied linguists and used any way they see fit. The two topics are presuppositions and modals: a type of semantic relationship, or meaning, and a class of verb with certain peculiarities. Obviously, they have different statuses in anybody's theory; and it is probable that an applied linguist would want to treat them differently in whatever way he was using them; nevertheless, they are similar in at least one respect: they are both phenomena which are puzzling in the extreme, pervasive in their relationships with all areas of language, and productive of intriguing and sometimes startling observations and explanations of language phenomena.

Presuppositions. A rather large amount of recent work has been concerned with presuppositional phenomena, and their integration into various theories;\(^7\) in the course of this work, numerous
definitions of presupposition have been given, and a lot of logic has been spilled on their behalf. For our purposes, a common-sense definition of presupposition and a few of its more interesting properties will suffice: basically, ‘presupposition’ means pretty much what one might expect it to—namely, a firm belief on the part of the speaker that a given proposition is true, no matter what. This manifests itself in the fact that, when presupposed material is part of a sentence, say (1), we are entitled to conclude that the speaker of (1) believes that (2) is true, whether or not he uses an overt negative: this is obviously not the case with (3), where the object complement is not presupposed:

(1) Sam \[\text{doesn't realize}\] that Nixon is a Republican.
realizes

(2) Nixon is a Republican.

(3) Sam \[\text{doesn't think}\] that Nixon is a Republican.
thinks

Verbs like know, realize, regret, stop, discover, and surprise, as well as adjectives like happy, strange, surprising, surprised, frightening, etc. in the following types of constructions:

(4) It’s (not) \[\text{strange}\]
\[\text{frightening}\]
\[\text{surprising, etc.}\]
that Bill came.

(5) I’m (not) \[\text{happy}\]
\[\text{surprised}\]
that Bill came.

all of which presuppose the complement sentence, are called ‘factives’.9 This raises interesting possibilities for anyone working on the uses of language to convey, reinforce, or contradict deeply-held beliefs,9 as well as some practical material for language teachers and text writers: it is interesting to note that factives exist in all languages, so far as we know, although there is not always a factive cognate or literal equivalent of every factive in a given language when it comes to translating, and circumlocutions must be resorted to if the presupposition is to come across.

There are, however, other types of presuppositions; not all the propositions which are presupposed in a given sentence actually appear in that sentence, as the complements of factive verbs do. One of the many functions of the definite article in English is to presuppose the existence and contextual relevance of the noun it modifies; similarly, the English possessive adjectives presuppose existence and possession, i.e. the NP my brother presupposes the sentence ‘I have a brother’, etc. The principled distinction between presuppositions and assertions of a sentence, and some of the ways in which they are being used in recent linguistics, go a long way towards explaining many of the connotative references of words and various constructions. There are also some interesting ways of applying presuppositions to explain individual problems.

Horn (1969) has advanced an intriguing explanation of the meanings of only and even; while the presentation is rather formal, the core of the generalization is easily understood informally. Basically, in (6), the presence of the only causes (7) to be presupposed, while (8) is asserted:

(6) Hunt only bugged the Watergate.

(7) Hunt bugged the Watergate.

(8) Hunt did not bug any other place but the Watergate.

However, even has quite a different meaning; (9) presupposes (10), but asserts (11):

(9) Hunt even bugged the Watergate.

(10) There is some place other than the Watergate that Hunt bugged.

(11) Hunt bugged the Watergate.

An interesting fact here is that the assertion of a sentence with even is a presupposition of the same sentence with only.

Another interesting use of presuppositions is in the distinction between subordinate and coordinate clauses; there are a number of criteria for separating the two types of conjunctions on the basis of the kinds of clauses they delimit, but one of the most useful is that, on the whole, subordinate conjunctions presuppose the clauses they introduce, but coordinate conjunctions assert them.11 Thus, the difference in meaning between (12) and (13) is explainable in terms of presuppositions:

(12) Rehnquist was confirmed, but Carswell wasn’t.

(13) Rehnquist was confirmed, although Carswell wasn’t.12
(12) asserts two clauses; (13) asserts the main clause, but presupposes the subordinate. In addition, since one does not state in a sentence something assumed to be well known (hence presupposed) without a reason, there is an implication in (13) that the denial of Carswell’s confirmation is relevant to Rehnquist’s actual confirmation, in that one might assume from the presupposition that Rehnquist would not have been confirmed. These generalizations, and numerous others, are described in R. Lakoff (1971a), which is a fruitful source of significant explanations and generalizations of English conjunctions.

Many other phenomena can be explained with presuppositions: used to in a sentence asserts the sentence in the past tense, but presupposes the denial of the sentence in the present; any more in the negative asserts the present negative but presupposes the past affirmative—thus (14) and (15) will be true in the same circumstances, but different in what they assert and presuppose:

(14) Connally used to be a Democrat.

(15) Connally isn’t a Democrat any more.

The difference shows up when the sentences are denied, as, for instance, in what is meant by saying ‘You’re wrong’ to someone uttering one of them. If someone says (14) and I tell him he’s wrong, I mean that Connally was never a Democrat; if I tell someone that (15) is wrong, I mean that Connally is still a Democrat. This is true because presuppositions cannot be explicitly denied by a negative, while assertions can. Another place where presuppositions are useful is in discussing adverbs; there seem to be factive adverbs which presuppose the sentence they are contained in, and others which do not. Note, for example, (16) and (17):

(16) ITT contributed to Nixon’s campaign for purely altruistic reasons.

(17) ITT contributed to Nixon’s campaign in 1972.

(16) presumes that ITT contributed to Nixon’s campaign, and asserts a statement about the reason for the contribution—if I tell someone that (16) is wrong, I am disagreeing with the motive stated. (17) asserts both the statement that ITT contributed and the statement that the event took place in 1972—if I deny (17), I may be denying either or both of the assertions.

There are also types of significance relationships similar to, but different from presuppositions; for instance, some recent works speak of entailments, conversational principles, contextual meanings, etc. While we will not speak of them here, they are similarly understandable for our purposes in nonnormal terms, and have similar usefulness in explaining many linguistic usages and forms.

Modals. Anyone who has had the opportunity to teach (or learn) English as a foreign language has had to grapple with modals. While their morphology is nonexistent, and their surface syntax is trivial, their semantics is anything but simple. And since the notion of what a given form or construction means, or (even more difficult) when one should use it, is the crux of language teaching and learning—far more important to success than proficiency in drills, which typically deal with mechanical matters—modals are difficult to cope with. Luckily, modals have become more and more important (and mysterious) in recent generative work, and many generalizations have been formulated regarding them. They turn out to be present and involved in many more types of phenomena than previously thought; and the plethora of meanings which they demonstrate is beginning to yield to analysis, providing many useful insights which promise to be of considerable value in applied work.

To begin with, everyone who has worked with modals has had to deal with the fact that all modals (in English, at least) are embarrassingly polysemic; all English modals have at least two meanings, not all of which are easy to relate to one another. For example, may, should, and must in (18)–(23) each show two meanings—the ones in the even-numbered sentences are called epistemic, and the ones in the odd-numbered sentences are called root meanings:

(18) John says that Martha may be nominated for the next Supreme Court vacancy.

(19) John says that Martha may talk to whomever she wants to, provided she doesn’t say anything.

(20) The administration spokesman said that meat prices should be going down any day now.

(21) The administration spokesman said that we should be more patient with Phase XVII.

(22) The President said that someone must have made a mistake in arresting his aide.

(23) The President said that all criminals must be arrested.
It will be noted that the root modals all have meanings referring to permission or obligation, while the epistemics refer to possibility or probability, as inferred by the speaker of the sentence containing the modal; thus, the conclusions as to the probability of meat prices going down or of someone having made a mistake are attributable to the administration spokesman and the President, respectively, not the speaker of (29) or (32). The modal can, in addition to root and epistemic meanings similar to those of may, has another root meaning equivalent to able to; in addition, the epistemic meaning is restricted to 'negative-polarity' contexts, such as with negatives, in questions, in if- clauses, etc., and it interacts rather differently with them than does may.

(24) He may not have done it.

(25) He can't have done it. 14

Although the epistemic senses of both may and can are equivalent to possible, (24) means that it is possible that he didn't do it, while (25) means that it is not possible that he did it—obviously something is going on.

R. Lakoff (1972b) presents an analysis of (among many other intriguing matters) the differences between the epistemic senses of may and can, and between those of should and must. Noting that the epistemic sense of can is also permissible with a generic noun phrase as subject, she discusses the differences in meaning between (26) and (27):

(26) Football players can be sex maniacs.

(27) Football players may be sex maniacs.

While (27) is fairly straightforwardly paraphrasable as (28),

(28) It is possible for football players to be sex maniacs.

(26) is triply ambiguous, having at least the meanings given in (29)-(31):

(29) Any given football player sometimes is, and sometimes isn't, a sex maniac.

(30) Some football players are (always) sex maniacs, and some football players aren't.

(31) Some football players are (sometimes) sex maniacs (sometimes not); and some football players aren't (ever).

Lakoff's conclusions regarding the meanings of these modals are fascinating, and give promise of helping theorists in the right direction for further analysis; but her facts and explanations are equally useful to applied linguists who have anything to do with modals, whether or not they intend to work out all the theoretical implications.

Recent studies deriving from the discovery of 'possible-polarity items', such as afford, tell one from another, etc., which must normally be used with an overt modal of a certain type, have shown that modals are much more common in semantics than they had been thought to be. The goodness of (32), for example, shows that modals must be contained somehow in the meaning of too and enough, at least in some cases:

(32) He's wealthy enough to afford a Rolls.

(33) He's so wealthy that he affords a Rolls.

(33) is bad, of course, because it doesn't contain a modal like can which would allow afford to be used; presumably, enough and too do have a modal concealed somewhere in their meaning, and therefore allow afford and other similar items.

Modals of the type which take afford also have the disconcerting ability to have subjects containing any, which otherwise is restricted to negative contexts, and never appears before the negative element.15 If this were all there were to it, we could let it go as one more peculiarity of modals; but there is a great deal more to it. Note, for example, (34)-(37):

(34) Anybody can do that.

(35) Anybody knows how to do that.

(36) Anybody knows he did it.

(37) *Anybody thinks he did it.

(34) contains a modal, and therefore the any should be all right. (35) does not contain a modal, but there is precedent for considering know how to as semantically a modal; after all, in German, the sense of this phrase is normally translated as können. (36), however, shows
that there is something else happening; know in its factive sense is not normally thought of as a modal, nor are factives in general usually modal:

(38) *Anybody realizes (is sorry, surprised, happy) he did it.

Somehow, there is an additional sense to (36), derivable perhaps from analogy with (35), or from an equally plausible analogy with (39):

(39) Anybody will tell you he did it.

which contains the modal will, and hence conditions the any. While this is a puzzle to theoreticians, facts like these lend themselves to informal generalizations, and therefore can have applicability.

It would be easy to go on indefinitely on the topic of strange facts and interesting generalizations about modals, but I will content myself with one more. Generics of all kinds (see Lawler 1972, 1973a, 1973b) are related to modals. We have already noted that there is an interaction between generic noun phrases and epistemic can; the behavior of such NP's with the other modals is equally strange, but generalizations can be stated (although not yet in sufficiently formal terms to satisfy a theoretician). In addition, certain types of verbal generics do interesting things; (40) is paraphrasable by (41), but (42) is not in any way equivalent to (43), even though (40) and (42) are generic sentences, and (41) and (43) both contain the same modal:

(40) Max eats worms.

(41) Max will eat worms.

(42) Bill walks to school.

(43) Bill will walk to school.

Note also that the reading of will in (41) is the root one of be willing, while that in (43) is the epistemic one of the future. There are also relations between modals and quantifiers, adverbs, many different types of verbs, presuppositions, conversational postulates, and many other topics which I forbear to mention here; while practically none of this is explained in terms of an adequate theory, much enlightenment is available in the guise of intuitively correct generalizations separate from the formalization of the theory.

Since I have restricted myself to dealing with only two topics (and that in very little detail), I have perforce not mentioned many interesting and illuminating studies that bear (or can be made to bear) on applied linguistic topics; these include Fillmore's 1971 work on deixis, R. Lakoff's studies of the passive (1971b), women's language (1972c), questions and particles (1973b), tense (1970), and contextual principles (1972a); James's work on interjections (1972, 1973), Borkin's studies of verbs and complements (1972a, 1972b, 1973c, 1973), G. Lakoff's recent work on hedges and 'fuzzy' expressions (1972), Morgan's (1973) investigation of sentence fragments, and Horn's continuing studies of negation and modality (1970, 1971, 1972). Some of these are totally nonformal, some are not; but all of them present facts, observations, explanations, and generalizations that not only possess intrinsic interest, but also go far toward giving the reader an understanding of how the phenomena work; further, even the most formal of these works can be read with pleasure and profit by anyone familiar with English syntax, and allow the reader to extract the useful parts.

These studies, and many others like them, confirm the long-held belief that the study of linguistics is a useful activity for anyone interested in practical matters having anything to do with language, particularly language teaching. In fact, these documents do not come close to representing the wealth of well-known generalizations and relationships which form the 'oral tradition' of generative grammar; what better base can there be for the practical matters of teaching?

NOTES

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None of the foregoing (or following) comments should be interpreted to mean that I disapprove of formalism, or believe that linguists are wasting their time any more these days than usual; nothing could be further from the truth. It is rather the relevance of the formally specified theory as such to applied work that I wish to call into question. I have argued elsewhere (Lawler and Selinker 1971) that formal grammar in principle is inapplicable to real-world concerns, since it contains many counterfactual assumptions which vitiate its usefulness; this is not, however, necessarily the case with the real results of generative grammar--the generalizations.
The works of Postal and Ross, for the most part, are paradigm examples of this type of generative paper.

Although it is by no means clear just which things should be explained, nor by whom, nor to whom; happily, this is a problem for applied linguists to wrestle with, and I feel fully qualified to ignore it here.

An important distinction needs to be made here. There are (at least) two different types of generalization: those which are 'universal', in the sense that they seem to be true in all languages, and those that are language-particular. While universal statements about grammar are interesting in themselves, they seem to have a different relevance to language teaching than the ones which are peculiar to an individual language (or language family), in that it is highly unlikely that students will need to learn anything about, say, English that is also true of their native language. In my experience as an EFL teacher I have observed few, if any, violations of, for example, Ross constraints—probably, in fact, fewer than the violations made by native speakers of English; and all were made for the same reason—the speaker had backed himself into a syntactic corner from which he could extricate himself only by a violation without starting over.

An alternate solution has led to the invention of the linguistic squib as an art form. In particular, the 'mystery squib' presents, without much in the way of solution, a problem for the theory deriving from interesting data which cannot at present be accounted for.

Some good examples of this type of paper can be found in the works of R. Lakoff and Charles Fillmore. I have also contributed (Lakower 1972) to the literature.

See, for example, the contents of Fillmore and Langendoen (1971), which are almost entirely concerned with presuppositions from many diverse viewpoints.

The first serious discussion of this phenomenon was Kiparsky and Kiparsky (1970); more recently, Karttunen (1970, 1971) has made significant contributions.

David Gordon (personal communication) has recently been working with the acquisition of presuppositions and factives in child language; his preliminary findings suggest that factives, as normally recognized in adults, are acquired very late. As late as 9-10 years, I know seems to mean 'think or believe because someone told me'; hence, sentences like:

(44) *He knows my name is Bruce, but he's wrong.

are encountered and understood (the star is awarded on the adult interpretation).

There is, of course, an alternative reading, generalized from the one discussed, on which bugging the Watergate is merely the most heinous of a series of acts, not all of which necessarily involve bugging, in which Hunt engaged. This type of reading is discussed also in Horn (1969).

An exception to this generalization seems to be the subordinate conjunction while, which, in at least some sentences, appears to assert the clause it introduces. See R. Lakoff (1971a) for discussion.

With appropriate stress (typically what has been called 'contrastive'), the presupposition can be cancelled, leaving the last clause asserted. This is one of the functions of contrastive stress; see Schmerling (1971) for an excellent discussion of the phenomenon.

See G. Lakoff (1971) and Lakower (1971) for discussion of this phenomenon, as well as its relation to many other semantic mysteries.

Note, incidentally, the difference in contraction possibilities with may not and can't. There is no phonological reason why may not may not cancel in the epistemic reading, but in fact it does not: in those dialects where such contraction is possible, it occurs only on the root reading; this is discussed in some detail in Horn (1972), and is only one of many places where semantics of the deepest sort influence phonology.

It is not only applied linguists who need to use these generalizations; confusion of the two types of any (one conditioned by modal, the other by negatives) leads even good a linguist as Labov into a great deal more difficulty than necessary in Labov (1972). Much of the apparently intransitive data he discusses is not, in fact, the any of the negative, as he supposes, but that of the modal; and most of the ingenuity expended in proposing blocking conditions on them is wasted because of this.

There is, alas, no single place where one can find out just what this mass of tradition contains; the speed with which theories and formalisms become obsolete in generative linguistics militates against writing more than a fraction of the possible papers that one thinks of doing. I am happy to relate, however, that much of it, and a great deal of new material, all presented in a nonformal fashion, will soon be available in R. Lakoff (to appear).

REFERENCES


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