

DISCUSSION PAPER
COMMENTS ON GLEASON'S "GRAMMATICAL
PREREQUISITES"

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In a number of matters, Gleason and I are in agreement.

ON EXPECTANCIES AND REDUNDANCIES

Gleason discusses expectancies of the hearer-reader, emphasizing the relation of nonlinguistic content to the interpretation of the meaning of a statement. Similarly, from my viewpoint, language can only be understood in relation to a theory of the structure of human behavior as a whole.¹ In some sense, a sentence "means" expected impact—not the mere summation of bits of verbal features. Similarly, expectancies arise from memory of prior language experience. Thus, in coming into New York last night, I saw a sign reading, "The army wants to join you" (by paying you for training). It derives impact by contrast with the already known "Join the navy and see the world." Expectancies from universe of discourse, in my view, are important also. Thus a context recognized as one of science fiction can markedly change permitted collocations—hence meanings—of words.

When expectancies overlap or interlock, an expectancy set up by one feature may trigger a response which either does not need the redundant features for intelligibility—or one feature may drastically override contrasting clashing features. I remember my sharp surprise—and pained annoyance—when a student in Michigan, reading isolated sentences to me, led me to "hear" statements wrongly, i.e., to "hear" the wrong phoneme of a minimal pair, when lexical, grammatical, or cultural probabilities (*not* impossibilities) teased me to false expectancies.

And, finally, I am in agreement with Gleason that psycholinguistic reality must be treated along with—and controlling—the evaluation² and the choice of any formalism, if we wish to achieve practical results tying grammar more closely to lexicography.

ON OPTIMISM AND HEURISTICS

Thus far my experience parallels that of Gleason. But on some matters I am more optimistic than he, and on others less so. He feels, if I hear him correctly, that the gathering of massive detail is sufficient to lead to solutions when the outlook is dark. Yet in my experience the gathering of extensive detail does not provide our successors with results useful or interesting unless those details have been collected against the background of a partial theory (a "hunch") or an extensive one. Here, then, I am pessimistic about his view.

On the other hand, I am more optimistic than his view, which is that "Currently, linguistics and linguists have little to contribute in the way of specific techniques." I think that several kinds of work being done in recent tagmemic analysis might conceivably be of some interest to lexicographers in the near or distant future. Some of these I list, along with the warning (not to Gleason, who does not need it) that by the term "procedure" I do not mean a mechanical discovery procedure, but a normal heuristic involving nonprogrammable insights and guesses. (Fortunately for me, such hunches, when wrong, do not cost me, as Gleason tells us they might cost the lexicographer, \$200 per slip, for a million slips; so I can afford more risk, and a greater investment in trial and error devices.) On the other hand, I would be more conservative than he, retaining more features of an immediate constituent approach, and placing less hope on defining language purely in relation to a poetic norm. (I shall return to this problem in a moment.)

ON "ALPHABETS" FOR GRAMMAR

When Gleason discusses certain requirements which must be met for a grammar "to be useful in a way parallel to the usefulness of the dictionary to the lexicographer's customers," however, a major practical value of an English dictionary for native speakers is omitted. Many people, of whom I am certainly one, consult an English dictionary ten times (perhaps) to see how to *spell* a word for once in which they consult it in order to learn the *meaning* of that word. Presumably the lexicographer spends less money on providing spelling service than on providing semantic information, and hence can easily overlook the extraordinary *theoretical* relevance of the former to any study of "the requirements that must be met for a grammar to be useful to the lexicographer."

Let us explore this a bit: The reader may consult the dictionary (1) when the spelling is known but the meaning is wholly or partially unknown; or (2) when correct spelling is unknown-although-vaguely-guessed-at, but the meaning is adequately known. The direction of search in the one case is the opposite from the other. In order to find the unknown, whether for (1) or for (2), however, something must be known. Search in the dictionary for the meaning of a word presupposes the possibility of data and technique for alphabet usage. Search for the correct spelling of a word requires a somewhat accurate knowledge of the meaning of that word so that meaning allows the word to be recognized once it is found—but the finding of a correct but unknown spelling by recognizing a meaning which must be found by spelling requires the knowledge, experience, and capacity for making preliminary guesses at alternative spellings which can be checked, respectively, until one occurs with the appropriate meaning.

And the alphabet requirement is in part based, ultimately, on general principles of alphabet formation with *universal* etic-emic validity.

Now we check for a possible grammatical analogue:

(3) If the grammatical *structure* of an utterance were known in advance, and *listed* by means of an appropriate symbolism—a "grammar alphabet"—which ties ultimately into universal principles of structure, then certain unknown grammatical meanings could be looked up in the "grammar dictionary." It is this "alphabet" which we so sadly lack.

(4) If, on the other hand, the grammatical meaning is well known but the

grammatical formal structure is unknown (but can be vaguely guessed at within some universal *range* of structural types in which it would occur, represented by the grammatical "alphabet"), the grammatical form could be looked up in the index.

Here, as with the words, exhaustive listing could not feasibly be given. Just as regular plurals and some regular derivatives may not have full separate lexical entries in a dictionary, so sentences regular in grammatical pattern would not need to be listed, each one, in the analogous grammar list.

But this leads to two questions: (1) How close are we to being able to work in this way; and (2) How would it affect classical dictionary definitions?

In my view, some of the work of the Summer Institute of Linguistics in Nepal this past year (report to appear in Hale³ and Trail⁴) is very promising in this respect. Earlier work by Pike,⁵ Pike and Gordon,⁶ Becker,⁷ Wise,⁸ Klammer,⁹ and Ballard and coworkers¹⁰ set a pattern of analysis of clause (and sentence, paragraph, and discourse) in relation to interrelated packages of tagmemic units including simultaneous notations for grammar, semantics, and phonology, for function, category, and instance—in ways too intricate to be represented here. To this, now, Hale has added for the clause an etic which can specify by a limited number of contrastive features some of the range of possibilities for languages in general. If one calls this specification a "grammar alphabet," then its use allows a systematic listing (a "dictionary") of clause forms for which contrastive grammatical meanings (e.g. "case") can then be defined. In reverse, one can ask how a certain known kind of situational-role meaning is expressed grammatically with a tentative range of guesses, subject to margin of error, but necessary for look-up in a reference list. Application of the analysis to English, with preliminary formulas and samples, has been begun by E. G. Pike and K. L. Pike.

The probable validity of the alphabet analogue is heightened by the presence of a second analogue. Hale uses the same kind of role-plus-form material as a basis for systemic typological cross-language comparisons across language families. This serves as a kind of "bilingual grammar dictionary," with "translation" of grammatical form-meaning composites.

The study of these role-plus-form studies has a practical impact on lexicography. The shift of a verb from its "normal" position in one clause type to use in another clause type may carry with it a special meaning—and certain of these changes can now be studied in a way more systematically than was easy previously. Here, then, we finally return to the problem of definition: Once the grammatical alphabet is given, look-up of a word can list it not only as, say, a verb (as part of speech, mentioned by Gleason) but as a refinement on the use of terms like transitive, and intransitive, to include other types of relations which may condition the semantics in some way relevant to the lexicographer.

A practical pedagogy for beginners in such matters is essential. It should be remembered that even the ability to read an ordinary alphabet, and to use a dictionary, are skills which have to be learned. So, too, the use of the analogous grammatical tools will require an apprenticeship.

POETRY IN RELATION TO TYPES OF EFFICIENCY IN LANGUAGE

Gleason emphasizes the naturalness, in principle, of poetic language. With this I am in accord. But he has swung—in my view—from an overly simplistic

but clear "immediate constituent" pattern of analysis to an equally simplistic but obscure affirmation of some kind of "poetic" base for language.

As I see the structure of language, *no one* perspective is sufficient. Three interlocking perspectives must be given. As I have suggested, briefly, elsewhere,¹¹ scientific discourse seeks an efficiency type obtained by a relatively nonredundant, segmentable approach, (analyzable in immediate constituent terms, in relation to Gleason's discussion), characterized by morpheme isolatableness and clear-cut meanings, with (ideally) one meaning per morpheme, and one morpheme per meaning. Some phases of pedagogical writing, on the contrary, achieve a different kind of efficiency by a deliberate use of redundancy, with multiple representations of the same meaning. Poetic writing, on the contrary, achieves part of its impact and compactness—its *efficiency*—by an "anti-redundancy," that is, by the deliberate use of elements signaling two or more meanings at the same time. Any natural language uses all three, in an oscillation, historically, about some undefined norm such that feed-back from one efficiency type counter-balances excessive change induced by the others which would otherwise ultimately destroy the possibility of normal language communication.

METHODOLOGY FOR FUNCTION WORDS IN CONTEXT

Gleason points out that the line between content words and function words is fluid. Here, again, some tagmemic heuristic now seems hopeful as a start towards tying these to discourse context. Taking English narratives, for example, Pike and Pike have tried reversing successive pairs of sentences, accompanied by those adjustments in the grammar and lexicon which are necessary to retain the original meaning of the narrative. The use of words like "before" and "after" can be thus defined. Often such an approach adds no information unknown to the lexicographer, but it might conceivably be of occasional interest in explaining the use of such elements—as it certainly has been instructive to me as a linguist.

GRAMMAR AS WAVE

This approach observes some degree of discreteness of elements. A static approach to meaning, as Gleason implies, leads to problems of gradation of meaning. In order to handle such a spectrum in relation to its conditioning by grammatical placement, my own heuristic utilizes a supplementary dynamic approach, in which restrictions on the occurrence of words, or the weakenings of the meaning of words takes place, but within the matrix of changing grammatical restrictions—e.g., two clauses fusing to one clause, with the first becoming an auxiliary to the second. (See Pike.¹²) This perspective on grammar made up not of discrete parts, but as overlapping, fusing, merging elements, might in due season suggest to the lexicographer further options, or more explicit systematization of some of the problems of gradual change over time, and indeterminacy in category, which plague him so constantly if discrete definitions are expected by his audience.

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