THE SEARCH
ALLEN WALKER READ* # FOR SEMANTIC UNITS

S TATEMENTS ABOUT LANGUAGE come in all degrees of technicality. At one end of the scale is the sentence that the journalist Max Lerner set down as the opening of one of his columns, when he said: *"A word is the skin of a thought."*[1] This could be the basis of a theory of linguistics; and then linguistics, to continue the figure of speech, would be a form of dermatology. Actually, the most popular view of language may well be just that: it is merely the skin of our thoughts. I do not agree with this view, but some well-considered treatments seem to me to share its shortcomings.

The jumping-off point of this paper was a phrase that I found in Wallace Chafe's book of 1970, *Meaning and the Structure of Language.* At several points he speaks of a "semantic inventory," which apparently refers to a listing of units in the world outside language that may correspond to units of form inside language. This is an untenable position if one makes the assumption, as I do, that the world outside language is a flowing process, without discrete units.

The assumption that the world is a continuous flow is an old one, going back to the view attributed to Heraclitus that one cannot step into the same river twice. In a practical way, most of us simply don't believe it, because, as I shall argue here, we are prisoners of our linguistic systems. We will also have to look into what the physicists may be able to tell us.

Chafe's position is carefully argued, and deserves respectful treatment, but I am puzzled to find out how he arrives at his "semantic inventory." The underpinning statement may well be this (p. 20): "the conceptual universe, and then necessarily also the universe of symbols, may be discretely structured." He finds it easy to develop the notion of "semantic units" because of the vocabulary that he allows himself. He assumes something countable when he speaks of "ideas" and "concepts." Typical sentences are these:

> The simplest conceivable communication system is one in which only a single idea can be transmitted. (p. 19)

> Language enables a speaker to transform configurations of ideas into configurations of sounds. (p. 15)

> [Language operates] by converting ideas into a medium which does have the capacity to pass between one nervous system and another. (p. 16)

> The sound . . . is normally reconverted within their nervous systems into some facsimile of the original concepts. The facsimile is usually imperfect . . . between the conceptual repertoires of different individuals. (p.17)

> The more recent growth of the human conceptual inventory in large part has been a matter of adding concepts that are more abstract to a basic inventory of concrete concepts. (p. 48)

The closest that Chafe comes to an explanation of these entities is as follows (p. 16): "Ideas, I assume, have some kind of electro-chemical existence in the nervous systems of individuals." This terminology begs so many questions that I believe he has not established any foundation for an inventory. [2]

I agree with Charles F. Hockett, who stated in one of his early papers (if 1948 is early) as follows: "Other social scientists use terms such as *idea, mind, concept* as common-vocabulary words; the linguist must not, for part of his task is to investigate the operational definition of these terms and attempt their translation into more fundamental behavioristic language." [3] I do not hold the view that dropping mentalistic terms like *idea, mind,* or *concept* would transform a linguist's writing into sound scientific discourse, for that would be word magic at its worst; but such terms do have an inevitable tendency to deflect or veer the discourse in certain directions.

Hockett's mention of "behavioristic language" raises the spectre of behaviorism, which means different things to different people. Nowadays most people think of B. F. Skinner, with his behavior modification, as representing behaviorism; but there was an older, more humane type, such as that promulgated in the 1920s by A. P. Weiss and embraced by Leonard Bloomfield. [4] It did not involve im-

posed behavioral modification; but modification might come from within by increased awareness of possible options.

Linguists in the Bloomfieldian tradition have been severely criticized for leaving meaning out of account; but this is a faulty accusation. They only refused to use meaning in certain traditional, circular ways. A meaning was too often reified, as in the phrase, "A word *has* a meaning," as if it were an entity. In the famous dispute in 1944 between Leo Spitzer and Bloomfield, Spitzer stated exactly that. As he wrote: "We mentalists . . . have no scruples in positing an entity 'anger' in observing its activity. But we could not expect a scholar with the scruples of Mr. Bloomfield to study the influence of 'anger' on speech—which is a reality: just consider the style, even the phonetic style, of Hitler.[5]

The Bloomfieldian point of view was that "meaning" was a suffusing element of all language by definition, to differentiate it from squeaks, thumps, creakings, etc. To use a figure of speech, the semantic continuum is a seamless fabric (although the threads of the fabric can be discerned and isolated). The often-quoted definition of language as given by Bloch and Trager in 1942 was as follows: "A language is a system of arbitrary vocal symbols by means of which a social group cooperates."[6] Although the word *meaning* does not occur there, the paraphrase "symbols by means of which a social group cooperates" takes its place. Leonard Bloomfield himself in 1943 wrote an essay entitled "Meaning," in which he asserted the need for a general term to cover the phenomena of cooperation achieved by language, and he concluded by saying (1943, p.102): "The actual student of language, . . . if he does not want to coin a new term, . . . will naturally choose the traditional term meaning." In a study of my own in 1948, I cautioned that the ignoring of contexts would result in a "bloodless, nerveless, and meatless point of view" (Read 1948, p.82).

What Bloomfield tried to avoid, as I said before, was the reification of meaning, which so usually has been couched in terms of *idea, thought,* and *concept.* Traditionally these represent a mentalistic domain, separate from the physical domain and hence a dualism has been forced on us. To avoid this dualism, a theory of abstraction has been developed, and it is crucial to understand that in the Bloomfieldian outlook an abstraction is not a mental manifestation. Features are selected from the environment not to make an entity, but to make a grouping that can be spoken of by the representation of a verbal symbol. Whether one can agree with or adopt the Bloomfieldian outlook depends altogether on whether one accepts the validity of a theory of abstraction.[7] Bloomfield introduced an abstract term when he wrote (1926, p. 155): "A minimum form is a *morpheme;* its meaning a *sememe.*" He was there naming his basic semantic unit, and it is

closely tied to the form (the morpheme) and does not represent some outside entity. Could such sememes be inventoried? He answered (1933, p. 162) that "the sememes of a language — could be analyzed or systematically listed only by a well-nigh omniscient observer."

In contrast to this, Wallace Chafe's semantic units seem to make their appearance outside language and then find their symbolization when they are taken into the language system. Such a view requires that the universe itself have natural segmentations, and this would contradict the Heraclitean assumptions. When I say that this is an assumption, I recognize that I am taking it as an act of faith. We might hope that reliable information might be found in the field of physics, but we are at the mercy of the particular physicists that we might consult. Historically many of them have attempted to find elementary segments that could be used as building blocks. Yet the soundest of them question the notion of fundamental particles. The discussion by David Bohm, Professor of Theoretical Physics at Birkbeck College, University of London, brings this out. In a paper of 1971 he said (pp. 13-14):

> One of the extreme forms of the fragmentary approach in physics is to be seen in the commonly accepted notion that at bottom, the world is constituted of a set of separately existent fundamental entities of a fixed nature (e.g. elementary particles) which serve as 'basic building blocks' for the whole of reality . . . To help indicate how our world view has to change, we first note that the atoms originally thought to be the basic 'building blocks' have since been split into electrons, protons and neutrons. But these so-called elementary particles have in turn been shown to have an as yet very poorly known deeper structure, and to be capable of transformation, allowing for the creation and annihilation of an apparently unlimited number of further new unstable particles of a similar nature. It is clear that these particles are very unlikely to be ultimate and basic building blocks either. Thus far, the search for such basic constituents has failed; and indeed, the goal seems to retreat to the horizon each time that we think we are approaching it.

Later on he says (pp. 14-15):

> Even if we consider what is now known about the present so-called elementary particles, we can see that there are a number of important new developments, indicating that we have already to explore what is outside the 'plane' of the particle concept as a whole. Thus, the theory of relativity shows that these 'particles' cannot consistently be taken as the starting point of our reasoning. Rather, they have to be understood as abstractions from a stream of events or a flow of process, in which *every* object is regarded as in essence a relatively invariant form of such abstraction.

Thus Professor Bohm concludes (pp. 16-17):

> In this (new) view, there is no ultimate set of separately existent entities, out of which all is supposed to be constituted. Rather, unbroken and undivided movement is taken as a primary notion. Or, equivalently we can say: *What is* is a whole movement, in which each aspect flows into and merges with all other aspects. Atoms, electrons, protons, tables, chairs, human beings, planets, galaxies, etc. are then to be regarded as abstractions from the whole movement and are to be described in terms of order, structure, and form in the movement. The notion of a separate substance or entity is dropped, or at most, retained as part of the earlier world view, which is now seen to fit the totality of our experience only in certain limited ways.

Since Bohm's survey of 1971 further atomic fragments have been postulated, especially two hypothetical subunits called quarks, one of them being the antimatter counterpart of the other, an anti-quark. In recent weeks the newspapers have carried stories about newly observed particles with a lifetime of a fraction of a second, and their unifying characteristic seems to be what is called "charm."[8] So far charm does not seem to be divisible into countable units. The most advanced physics still seems to harmonize with the insight of Heraclitus.

How can we account for our feeling that we do perceive discrete units that appear to be semantic units? This feeling springs, I submit, from the workings of language. This view is often called the Whorfian hypothesis. I might hesitate to call this to your attention on the ground that it is "old hat," and yet in a recent issue of the magazine *Encounter* I find the statement by Hugh Lloyd-Jones, the Regius Professor of Greek at Oxford University, as follows: "Few linguists at present sympathise with Whorf; most accept the universalising theory associated with the generative grammar of Noam Chomsky."[9] Perhaps, after all, Whorf needs reviving. The segmenting of the world, that is, the creation of objects, is accomplished by the imposition on it of language forms. This can be taken in a strong or weak form and readers of Whorf differ in their interpretation of his position. George Steiner says, for instance, in his *After Babel* (1975, p. 89): "Whorf is not altogether clear as to whether language determines that conceptualization or only conditions it." If we take only the weak form we may as well admit, as Max Black has said, that it "is too obvious to require mention."[10] But the strong form furnishes an underpinning for the search for semantic units. In view of the remarkable diversity of languages, it is a strong challenge to linguists to organize and methodize the varying linguistic systems. I was surprised to find that George Steiner says that scientific linguists resent the "mobile, perhaps anarchic prodigality of natural forms." I would say that linguists glory

in the richness of their material. Certainly lexicographers do, and I would imagine that other workers do too.

Cross-cultural studies thus loom as especially important, and we can get further bearings on the degree to which we are prisoners of a particular culture. Our freedom is very much a matter of degree. Uriel Weinreich claimed much when he said (1963, p. 119): "We must carefully avoid the unjust claim that man cannot in his thinking transcend the 'logical mold' given by his languages; there is ample evidence to the contrary." This may be so; but still considerable *hubris* is involved in saying so. Just when a linguist says to himself, "Ah, how emancipated I am!" he may be missing some of the nuances and subtleties that are in the plenum of experience.

In the analysis of cognition that I am here proposing, the linguistic mechanisms have supreme importance. How do the formal units of a language operate? Technically speaking, the PHONEMES must be identified and then the next step is to isolate the MORPHEMES; but western cultures have given primacy to the units known as WORDS. Eugene Nida says in this connection in his recent book *Exploring Semantic Structures* (1975, p. 20): "A language needs a basic inventory of symbols which are relatively fixed in meaning and largely arbitrary. If they were too closely tied in form to their referents, they would be too rigid for the dynamic growth and movement essential to a living semiotic system."

There are many problems in identifying "the word" as a unit, and many linguists have pointed out that it does not have cross-cultural validity. Nevertheless, there is no doubt that the word carries great, even exaggerated, importance in our culture. The larger forms, though they are not basic semantic units in the sense used in this paper, must be investigated—the phrase, the clause, the sentence, the utterance.

While these units, especially the morphemes and words, operate as building blocks in their syntactic relations, they are quite different in their semantic relations. In those connections it is recognized that the units can be broken down by componential analysis. In this outlook, the semantic range of a form is made up of covert features that bundle together. The early investigations were made in the 1950s mostly by anthropologists, beginning with the area of kinship terms, as it was a productive way of comparing cultural outlooks. As John Lyons has said (1968, p. 472): " . . . the semantic components might be combined in various ways in different languages (and thus yield 'senses' or 'concepts' unique to particular languages)." Componential analysis reduces the notion of "thingness" in word-meaning, showing that "a meaning" is a summing up of features.

A recent development that is clearly allied to componential analysis appears in a brilliant study by William Labov, published in 1973 as "The Boundaries of Words and their Meanings." He tackled the problem of what features are criterial in establishing the definition of an object. He begins his analysis by saying (p. 342): "If linguistics can be said to be any one thing it is the study of categories: that is, the study of how language translates meaning into sound through the categorization of reality into discrete units and sets of units." He is not content to assume the nature of the classifications, but he attempts to find out by empirical tests what are the regularities that determine the selection of features leading to denotation. As he describes it, he says (p. 347): "We will be dealing with the conditions which govern denotation, that is, the act of naming or reference which associates a linguistic sign with an element of the extra-linguistic world." He devised a number of experiments around a series of cup-like objects, using many sets of speakers, in order to find out what features caused them to classify an object as a "cup," or a "bowl," or a "mug," etc. He found that certain features formed an invariant core, while other features had a variable range. On this basis the lexicographer could frame a definition recognizing the criterial features and the degree of relevance of the other variable features.

Labov's study itself is remarkably cogent, making explicit what lexicographers have long been trying to do. However, at the end, in a codicil, he adds a section that I disagree with profoundly. He expresses a point of view, which he calls his "conviction," that (p.368) "there is no significant difference between the distinctive/redundant opposition and the Aristotelian notion of essence and accident. A search for distinctive features is fundamentally a search for the Aristotelian essence, through which the thing itself is to be known. . . . Essence is opposed to accident, and reflects the way things really are, intrinsically, and cannot help being." This is a mixing of philosophical systems that I regard as utterly insupportable. It is incompatible to take an absolutist and a relativist position at the same time. In scientific pursuits, ecumenicism can be carried only so far. It may appear on the surface to be a humane stance, but it is stultifying to sound scientific procedure.

We have been plagued in linguistics with misleading terminologies, such as concepts rather than formulations, universals rather than generalizations, categories rather than classifications, deep structure rather than levels of analysis, reality rather than observed features of the environment, rule-governed behavior rather than habit patterns, intuition rather than generalized experience, the infinite rather than a very large number, and so on. Another important discrimination was

firmly established in Hockett's monograph, *The State of the Art,* namely that the well-defined domains must be kept strictly separate from the ill-defined domains (1968, pp. 44-55). I am in agreement with Robert A Hall's clarion call to us when he said (1969, p. 227): "Aprioristic rationalism and all its consequences, such as the 'innateness-hypothesis' and the establishment of 'rule-governed behavior' as a goal — must be returned as quickly as possible to the limbo of out-worn dogmas, and linguistics must return to its basis in observation of humans' activities in relation to their culture, if it is to continue developing as a science."

I believe that a responsible linguist cannot hold himself apart from making a commitment. I cannot agree with John Lyons when he states (1968, p.443): "Acceptance of the structural approach in semantics has the advantage that it enables the linguist to avoid commitment on the controversial question of the philosophical and psychological status of 'concepts' or 'ideas.' " Is it really an advantage to avoid such a commitment? Our traditional language leads automatically to the old mentalistic view, and there will be no change in outlook without a definite decision to change terminology. If a linguist is to be a responsible scientist, he is under obligation to achieve as much rigor as he can. Rigor is possible only by leaving the traditional terminology behind us. I do not anticipate agreement among scholars on these matters, for the differences run deep in cultural history; but we can exhibit the candor of agreed-on disagreement and comport ourselves with gentlemanly civility.

Let us move forward now to examine some of the attempts to find basic semantic units. Earlier in this paper I have maintained, with Whorf, that the segmentation of the flow of the event level of existence takes place by means of linguistic mechanisms. The chief of these is the word, although that term needs refining and supplementation as linguistics moves forward. When words are taken out of context for study, they are no longer the same as they were in the human situation. They become set up as specimens and thus are said to be "hypostatized." A dictionary entry, or an example in a semantic treatise, is a hypostatized form. Kenneth Pike made much of this term (1967, pp. 156-68 and elsewhere). A Finnish scholar, Arne Runeberg, has gone so far as to say that in the language of scientific logic, words have to be "killed" (1953, pp. 27-32). This rightly designates the move from an ill-defined system to a well-defined system, as logic purports to be; but still the figure of speech of 'killing" words seems rather gruesome.

To counteract the shortcoming of hypostasis, an English school of philosophers has developed the notion of the "speech act" as a unit. As J. L. Austin, in *How to Do Things With Words* in 1955 declared

(p. 138): " . . . what we have to study is *not* the sentence but the issuing of an utterance in a speech situation." This is not exactly new, as we all remember that Bloomfield led into his treatment of the use of language with the illustration of Jack and Jill, not getting a pail of water, but with Jack vaulting over a fence to get Jill an apple (1933, pp. 22–27). Austin's approach has been taken up by John R. Searle in his book *Speech Acts* of 1969. Searle presents it as follows (p. 16): "The unit of linguistic communication is not, as has generally been supposed, the symbol, word or sentence, or even the token of the symbol, word or sentence, but rather the production or issuance of the symbol or word or sentence in the performance of the speech act. . . . Speech acts (of certain kinds to be explained later) are the basic or minimal units of linguistic communication."

The speech act has a shortcoming as a semantic unit, in that it is not a discrete entity with clear boundaries. It is impossible to say where one act leaves off and another begins. But Searle links the speech act closely to concrete linguistic material, when he says (1969, p. 19): "for every possible speech act there is a possible sentence or set of sentences the literal utterance of which in a particular context would constitute a performance of that speech act." He emphasizes that these would be, in Saussurian terms, part of "parole" rather than "langue."

Even more fundamental than the speech act is a unit that has been called the "semantic reaction." This was set forth in 1933 by Alfred Korzybski as a basic term in his general semantics. He chose *semantic* to refer to the reaction of the organism-as-a-whole, without any split between emotions, feelings, intellect; in fact, a close synonym was "evaluative." The semantic reaction was fundamental, he felt, because it was neurologically based, and he declared (1933, p. 20): " . . . the neurological attitude toward 'meaning' is the only structurally correct and most useful one." To emphasize this, he frequently used the hyphenated word *neuro-linguistic*.

Both the speech act and the semantic reaction do not occur in a vacuum, and it seems to me that they could well be enlarged to the "speech situation," which would include enough context to be worthy of extended explication. A favorite example of mine, that I have often used in my classes at Columbia University, was found in a newspaper dispatch from Chicago to the New York *Times*, when Chicago's subway was being installed. It has the headline, "Climbs a Down Escalator: Stalls in Chicago Subway," and this is the account:

> The plight of elderly persons who are puzzled by the escalators in stations of Chicago's new subway was demonstrated last night by a woman about 65.
> She tried repeatedly to walk up a descending escalator at the Madison and Monroe station. Finally she managed to get up about six steps and,

holding to the guard rails, kept pace with the escalator in treadmill fashion.

A guard shouted to her to turn around. As the woman reached the bottom again, she collapsed. Revived after first-aid treatment, she said: "The old-fashioned stairways will suit me here hereafter."[11]

Here is a case, it seems to me, where a misevaluation was the result of the words whirling about in her head. She did not examine the event in front of her but followed the words given to her by her culture. On seeing an escalator for the first time, she classified it as "stairs." She saw only what her language allowed her to see. She had known stairs all her life and stairs are meant to be walked up. If she could have looked at the situation without the mediation of language, she could have seen that a channel of material coming downwards in her direction was not the proper means for going upwards. However, her language classifying supervened over observation of the facts.

Another revealing speech situation is found in a "Dear Abby" column, widely circulated in the newpapers over the country. A contributor wrote in as follows:

Dear Abby: . . . My husband and I have owned and operated a small florist shop for the last 15 years, and I have encountered some unusual situations. But the one I had yesterday beats them all.

Two middle-aged women came into the shop together and asked what I had to offer in the way of a "Bon Voyage" wreath, so I showed them what I had in my catalog. I asked if a man or a woman was going abroad, and one of the women replied, angrily: "It is for my sister's FUNERAL!"

I must have shown my amazement because she then added: "If you were a true Christian you would consider death as the beginning of a long, happy trip."

Abby, I do consider myself a Christian, and I refused to sell that woman a "Bon Voyage" wreath for her sister's funeral.

When my husband came in, I told him what had happened and he laughed and said: "You should have sold it to her."

I was very much upset by my husband's response as I have always considered death to be a very solemn occasion. Maybe you or some of your readers could tell me what they would have done.

[SIGNED]—SHOCKED[12]

This situation has a very high linguistic content, with much cultural conditioning behind the terms *bon voyage, funeral, true Christian, happy trip, death,* etc.; and full significance can be understood only in the large social context.

A linguistic situation, even though it is basic for semantic analysis, is not a minimal semantic unit, but a complex structure of interrelated units. The search for a basic unit might well zero in on a simple

fundamental unit of a syntactic nature. This has been done by Kenneth Pike in his TAGMEME. Another attempt was made by Bert Decker of the State University of New York at Buffalo. He presents us with a "VF," which stands for *verifiable function*, explained as follows (1969, p. 2):

> The *"verifiable function"* is an extremely handy part and the smallest meaningful part of verbal structure that I have been able to find. Realize that a word by itself cannot be a meaningful, scientific dimension or unit of language. A word by itself has no meaning. The *"verifiable function"* is a meaningful unit of verbal structure.
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> The *"verifiable function"* consists of a verb and a noun. However, it is a unique verb and a unique noun and their uniqueness hinges upon their being together to form the meaningful structural unit. We can define the *verifiable function* as a demonstrable verb and a measurable or count-able noun whose *combined* meaning can be demonstrated on the non-verbal level without using words except the verb and noun. Examples of verifiable functions are *"lift pail," "lower pipe," "reverse pencil," "underline noun,"* and *"add weight."*
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> To me, a "verifiable function" is the lowest common denominator of meaningful verb structure. Most important, it is a *verifiable* unit of meaningful language. We can either demonstrate the meaning of a verb-noun function or we cannot. If we can demonstrate its meaning, if others can "see" its meaning, it is a verifiable function. It has the same scientific validity as the arbitrary inch whose meaning must also be demonstrated on the non-verbal level. The inch is an invented, arbitrary dimension of human measuring behavior. The *verifiable function* is an invented, arbitrary dimension of human verbal behavior.
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> Because it is the first invented scientific verbalized dimension which has been intuitively used for centuries, the *"verifiable function"* allows us to define precisely many words important to creative behavior, science and education which have been plagued with vagueness and lack of precision for centuries. This advantage springs from the fact that the in-vention of the *"verifiable function"* allows us for the first time in history to count *meaningful* verbal units. Counting words was little help since a word by itself has no meaning. Being able to count *"verifiable functions"* can lead to surprising advantages. Most important, being able to use a meaningful verbal unit to define concepts is the only hope for clarifying many of them.

Despite Decker's sanguine tone, I have grave reservations about the soundness of his analysis. Whether or not he has something valuable depends completely on his making his "VF" stick. When he admits that it is "an invented, arbitrary dimension," I do not see how he can expect different investigators to make the same arbitrary segmenta-tions. Such agreement is at the heart of "verification" and the method of science itself. In the contrast between the "hocus pocus" approach

vs. the "God's truth" approach, it seems to me that he has some hocus pocus masquerading as if it were God's truth. He attempts to establish language in Hockett's "well-defined system," not recognizing that language involves the approximations of diverse human beings experimenting with sentences. His VF can never be fully V. I called some of these points to his attention and in a personal letter he replied:

> To me, as I define a "verifiable function" it is extremely handy because there is a precise line of demarcation between "verified" and "unverified." It is possible for you and me to agree what we mean (by demonstration) by *"lift pencil," "underline word," "lower hand,"* etc. However, we have yet to learn how to demonstrate on the non-verbal level without using words other than verb and noun, such functions as *"glorify God," "detect thoughts," "display reason."*

In my opinion, Decker's VF is a valiant attempt to find a unit, but it involves insurmountable difficulties.

Of great and fundamental importance is Pike's use of the TAGMEME. He has elaborated his "tagmemics" into a broad system that covers all of human behavior. His discrimination between *-etic* units and *-emic* units has had profound implications both within and outside linguistics. For the widest context he has developed the notion of the BEHAVIOREME (1967, pp. 120–49), and in some senses that is a basic semantic unit. Altogether Pike's three-part volume, *Language in Relation to a Unified Theory of the Structure of Human Behavior,* is a monumental achievement that deserves continued careful attention.

Hockett has developed an expanded framework for the description of communicative systems, in which the "plereme" is the basic formal unit. In his *Course in Modern Linguistics* he made use of the term *plereme* to describe a unit that is comparable to a morpheme in a limited language, and its meaning would be a semantic unit (1958, p. 575). He developed this system further in 1961 in his study "Linguistic Elements and their Relations." In describing the property of SEMANTICITY, he said (p. 45):

> In a semantic communicative system, messages bridge antecedents and consequences by virtue of associative ties between the messages in the repertory, or some elements in the messages, and things or situations or kinds of things or situations in the environments of the users of the system. The messages or message-elements that have such ties are PLEREMES; the environmental things or situations or kinds of things or situations are the DENOTATIONS of the pleremes.

He goes further to point out that some linguists, notably Zellig Harris, have attempted to isolate or discover morphemes by dealing with phonemes alone. If this were true, we would have no difficulty in deciphering Etruscan. An additonal criterion must be added to

phonological information, and as Hockett says (1961, p. 46), this "is always at bottom semantic, no matter how disguised."

I feel that in the long run it will be most fruitful to return to the analysis of Bloomfield and put the sememe in a central position for semantic analysis. In doing so, two papers are especially helpful: one is Eugene Nida's "A System for the Description of Semantic Elements" in 1951 and the other, Sydney Lamb's "The Sememic Approach to Structural Semantics" in 1964, declaring the necessity of a "sememic stratum" that mediates between semantic data and a lexemic stratum.

As a basis for his systematic coverage, Nida stated (1951, p. 105):

> The meaning of a form is describable in terms of the situations in which it is used, i.e. in terms of its ethnolinguistic environment. We may prefer to talk about cultural contexts or to describe stimulus-response behavior, but fundamentally we are describing the meaning of a form in terms of its ethnolinguistic distribution. The ethnolinguistic environment comprises two types of contexts: (1) linguistic and (2) nonlinguistic (i.e. the biosocial environment, or "practical world").

Later he provided names for these, when he said (p. 106): " . . . we may identify a minimal feature of meaning based on the linguistic context as a *linguiseme*. This contrasts with an *ethnoseme*, which, as the name implies, identifies a minimal feature of meaning based on the ethnological context." He went on to give a full panoply of terminology, including *alloseme, episeme, alloepiseme, episememe, macroseme, allomacroseme*, and *macrosememe*, together with combinations of them, such as *linguimacroseme*. I cannot see that these are needed in our usual discourse; but they provide an elegant classification of the data.

In a later paper in 1964, "Linguistic and Semantic Structure," Nida advocated cutting semantic units loose from any referents, and considering only their relation within the linguistic system, that is, their "distributional meaning." He described this as follows (p. 15):

> In order to discover the semantic structure of a language we must be concerned with the semantic units and their distribution within the linguistic discourse, not with the referents and their classification in the non-linguistic world. The distribution which concerns us is not describable in terms of the practical-world context (i.e., the when, where, and how of the use of the referents) but in terms of the linguistic context (i.e., the when, where and how of the use of the semantic units).

It is of interest that when Nida re-published this essay in his book of 1975 he back-tracked somewhat by adding this footnote (p. 194): "While distributional approach to the problems of differences of meaning of a single word is valid, it no longer seems necessary. In many instances one can approach the same problems more directly

and efficiently by making use of the reference of terms to describe the componential features of the meaning." Thus he comes to incorporate the newer technique of componential analysis, about which he has written a detailed monograph (Nida 1975).

I regard it as very heartening that semantic analysis has taken tremendous strides in recent decades. It should be of some concern to us that the findings of a sound linguistics should have an influence in "popular semantics." I trust you will grant that popular semantics is worthy of our attention. It is to be hoped that people in general may come to recognize the shallowness of Max Lerner's dictum that "a word is the skin of a thought."

A revised linguistic outlook will tend to undermine the absolutism and certitude of word meaning. It must be pointed out that no two contexts are ever identical, and a different set of experiences are brought into play whenever a word is introduced into discourse. Lexicographical evidence supports the doctrine, stated in extreme form, that *no word ever has the same meaning twice.* Bloomfield's classical statement on this point was as follows (1933, p. 407): "Every utterance of a speech-form involves a minute semantic innovation." A similar conclusion can be quoted from Hockett, Pike, Nida, and others.[13] It is astonishing that a first-rate logician like Ernest Nagel is unwilling to admit this. As he has declared: "If this were really the case, no valid inference could ever be drawn and no inconsistency ever exhibited."[14] He is dead wrong about what is "really the case," although there is also enough stability in word meaning to allow the communication process to go forward. A valid inference can be drawn only in a well-defined system, when words have been killed and sentences hypostatized as propositions.

Another revision in popular semantics would have to do with the matter of precision in word usage. A careful precision can arise only when there is arbitrary agreement among speakers. Meteorologists will discriminate between *weather* and *climate;* as one of them has said: "weather may change from day to day but climate goes on all the time; it is the summing up of all the day-to-day changes of weather."[15] Similar discriminations may be made even in low-class speech. A social worker found in a poor district of Liverpool that a distinction is made between stealing from public property and from individuals. Two terms are used: "It is 'thieving' to steal from the 'stores or the like' but it is 'robbing' to steal 'from you or me.' "[16] In a commercial context, the discriminations may be self-serving. A mother bought a non-breakable record but found that her four-year old after one playing broke it in half. She wrote to Columbia Records and received the following reply:

> Please be advised that our records are not *un*breakable, which means they will not break under any condition, but *non*breakable, which means they will not break under normal conditions and usage. We do not feel that we should be held responsible for your record's breaking. However, as a courtesy, we will replace it for you this time. [17]

There are uncertainties even in the "King's English," if we may believe a story told of King George the Fifth. When Margot Oxford was lunching with him and Queen Mary, he started to tell one of his naval stories and mentioned a cask of rum. Mary interrupted: " 'Keg,' George." And he replied: "No, Mary, 'cask.' " " 'Keg!' " said Mary firmly. " 'Cask,' " said George more irritably. They then appealed to Margot, who replied diplomatically: "Both seem to me correct, Your Majesties." [18]

What is needed most of all in "popular semantics" is an awareness of how deep language goes in determining our perceptions. If we accept the Heraclitean assumption, it follows that there are no objects in nature, but that they are created by the interaction of the flow of events with the human nervous system, operating by means of linguistic mechanism. The symbol creates the object. I would criticize a statement by a philosopher at Yale, Professor Frederic B. Fitch, when he said: "no amount of linguistic analysis can in itself provide a theory that will give an account of the structure and nature of non-linguistic entities (e.g., living organisms, crystals, airplanes, etc.)." [19] What he does not realize is that by the time he perceives an entity, the linguistic mechanism has already been at work. The expression *non-linguistic entity* is a contradiction in terms. The world of process, the event level, is not differentiated into "entities" until human experience, partly individual and partly social, by means of abstracting, establishes these entities.

To be sure, the student of language as such cannot make investigations into the empirical fields mentioned by Professor Fitch, for each field falls within the purview of some specialized scientist. Each investigator must be his own semanticist; and his success and originality will result from his degree of semantic awareness and sophistication. The linguist can tell him how language works.

The sound linguist, in his awareness of ever-changing process, will be opposed to "thingness." There is good reason why, as Kenneth Pike has noted (1967, pp. 271–72), "the idea of unit itself has come under subtle attack." The outlook in glossematics has been strongly stated by Uldall (1957, p. 8): "To the scientific view the world does not consist of things, or even of 'matter,' but only of functions between things, the things themselves being regarded merely as points where the functions meet." The same view is held in the more general system of Alfred

Korzybski, when he said (1933, p. 20): "In fact, even objects, as such, *could* be considered as relations between sub-microscopic events and the human nervous system." In stratificational grammar, the notion of "cognitive networks" presents a refinement of the search for units. Sydney Lamb has gone so far as to hold (1970, p. 205) that linguistic structure "does not have items at all, nor does it have rules." A cautionary note was sounded by Archibald Hill (1962), who holds that within linguistics discrete units are a necessity. As he says (p. 345): "Any utterance is separable *into* discrete units, since only chunks and pieces can be arranged and manipulated. Continua can be blended and stirred, perhaps, but not manipulated."

The most promising direction for semantic analysis is to look to relationships and to study the configurations of forces that come together at particular points. In this way our outlook will be in harmony with the recognition of the unsegmented flow that holds sway in the universe.

FOOTNOTES

[1] New York *Post*, May 15, 1972, p. 33, col. 1.

[2] Chafe unfortunately retreated from his position set forth several years before in "Phonetics, Semantics, and Language," in *Language*, 38.335-44 (1962), in which he stated (p. 336): "An important characteristic of the universe is the fact that it is continuous, containing within itself no discrete properties."

[3] See Hockett 1948, p. 572. This follows the reasoning of Bloomfield 1933, pp. 142-44, and 1936, an article as trenchant and needed now as when it was written.

[4] Weiss's outlook is summed up in his book, *A Theoretical Basis of Human Behavior* (2nd ed.; Columbus, Ohio: R. G. Adams & Co., 1929), xvii, 479 pp. He and Bloomfield worked together closely at Ohio State University.

[5] *Language*, 20.246 (1944).

[6] Bernard Bloch and George L. Trager, *Outline of Linguistic Analysis* (Baltimore, Md.: Waverly Press, 1942), p. 5.

[7] Some theorists have in this connection made good use of the term *fiction*. See especially W. Freeman Twaddell, *On Defining the Phoneme, Lang. Monograph* No. 16 (1935). I have myself thought that Jeremy Bentham had this insight in his "Theory of Fictions" (see Dineen 1973); but Ogden and Richards forced Bentham into their own mentalistic mold.

[8] New York *Times*, July 14, 1975, pp. 1 and 15. See also Sheldon Lee Glashow, "Quarks With Color and Flavor," in *Scientific American*, 233, No. 4 (October, 1974), 38-50, much marred by whimsical word play. I am sympathetic to word play, but not in such a profound area.

[9] *Encounter*, 44, No. 6 (June, 1975), 65.

[10] Max Black, "Linguistic Relativity; the Views of Benjamin Lee Whorf," in *Models and Metaphors* (Ithaca: Cornell University Press, 1962), p. 253.

[11] New York *Times*, October 30, 1943, p. 30, col. 5. See also my discussion of the incident in Read 1962, pp. 329-30.

[12] New York *Post*, January 14, 1972, p. 42, col.6.

[13] I have gathered such statements together in my study, Read 1973, p. 167.

[14] *Journal of Philosophy*, 38.721 (1941).

[15] *Countryman*, Spring, 1955, p. 153.

[16] Madeline Kerr, *The People of Ship Street* (London, 1958), p. 126.

[17] *New Yorker*, November 17, 1956, p. 45, col. 3.

[18] *New Statesman and Nation*, March 28, 1953, p. 361, col. 3.

[19] *Journal of Philosophy*, 35.360-61 (1938).

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