ON WORD MEANING

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In this paper two broad schools of linguistics are referred to: transformational-generative grammar (TGG), philosophically rationalistic and psychologically cognitive, and the more empirical and behavioristic linguistic thought: the empirical theory of language (ETL), stemming from "structural" linguistics. Their views on word meaning are considered in Sections 1 and 2, and the third Section suggests a basis for defining word meaning which is thought to be more intuitively viable.

1. Word meaning in ETL

1.1 For and against the ideational theory

Much of the discussion on word meaning prior to transformational grammar can be viewed as the *ideational theory* vs. various attempts to avoid it. This theory, basically, goes back to the ancient Greeks, though it is currently common to quote John Locke as a more recent representative: "The use, then, of words is to be sensible marks of ideas; and the ideas they

stand for are their proper and immediate signification." What might be called "word meaning" is in this way equated with "ideas." Criticisms of this view and alternative suggestions have resulted, and a brief review of some of these will interest us in this section.

The reason for dividing pre-TGG explanations of word meaning into for-and-against the ideational theory is that ETL definitions appear to originate in some objection to this theory.² Robins³ objects to equating word meaning with ideas, on the basis that such a position tries "to explain and define public phenomena (speech, writing) primarily by reference to necessarily private phenomena" (ideas). He goes on to imply that an empirical science cannot deal with phenomena which are not publicly observable (apparently ruling out the data provided by introspection).4 Robins feels that "it is not easy to say what an idea is"5 and simply concludes that meaning is not an idea and that it "is best to regard knowledge of meaning" of a word "as an ability to use the word in ways other people will understand " The ideational theory, apparently, is abandoned in principle. Likewise. Alston objects that "we do not settle questions about meaning by looking for ideas in the minds of speakers and listeners."6 He confuses, apparently, what meaning might be and how we come to know what it is.

Carroll, a "moderate" behaviorist, speaks of the "danger that one may lapse into philosophical dualism." On the one hand positing internal or mental entities appears so tempting or obvious

that there exists the great danger of reverting to it, while, on the other, such a move must be avoided at all costs. We are therefore expected to "think of subjective behavior as a series of responses," so that we can succeed in avoiding any disussion of consciousness. Carroll maintains that "there are publicly observable indices of subjective events," but does not explain why he is sure there are subjective events at all; "subjective events may be assumed to follow much the same laws" as observable events; but the reasons behind this assumption are not explained, and we must not think that the internal "guides or directs overt behavior."

For some empiricists, *idea* or *concept* must be read *image. Hörmann points out that "In Saussure the object, which he calls *signifié*, is not the object itself, but the concept, something rather like an idea or an ideal image of the object. This view has led psycholinguistics again and again to the conception of the object as an *image*. The meaning of a word such as 'Eiffel Tower,' then, consists in the image of the edifice that the word evokes in the hearer. But what image corresponds to the word 'animal'? Has it fur, feathers or scales; and has it fins, feet or wings? And what does the image of 'justice' look like?" The point is well taken. It is only an extreme enpiricism which would try to explain ideas in terms of images.

Although ideas may be difficult to define, there have been attempts among non-philosophers. Chafe¹⁰ assumes that ideas "have some kind of electro-chemical existence in the nervous sys-

tems of individuals." Although his remark is made in passing, he is apparently describing "meaning" with this sentence. It is difficult to understand how an electro-chemical state will account for knowledge (ideas): Is "beauty," for example, the *same* thing as a nervous state? If not, what is the relationship between the two? If there is a relationship, what is it that relates to the nervous state?

These being a few of the criticisms of the ideational theory, let us turn to some of the suggested alternatives. All have in common the definition of meaning in terms of *something observable*, and differ, basically, only with respect to what observable entity is chosen be equated with meaning.

1.2 Meaning as situation

Bloomfield, who subscribed to Watson's extreme form of behaviorism, defined the meaning of a linguistic form as "the situation in which the speaker utters it and the response which it calls forth in the hearer." Similar views can be seen in Fries' "sociocultural meaning" and Harris' associating morpheme meaning with social situation. And Robins, after outlining Firth's concept of the context of situation, goes on to say that "meaning is therefore not a single relation or a single sort of relation, but involves a set of multiple and various relations holding between the utterance and its parts and the relevant features and components of the environment, both cultural and physical, and forming part of the more extensive system of in-

terpersonal relations involved in the existence of human societies." ¹⁵

But how realistic is it to include under meaning all factors which determine sentences spoken? The sentence meaning would the be said to include all manner of information which is already obvious and which, therefore, need not be communicated at all. By extension, the speaker would be able to produce *only* the sentence whose meaning is reflected by that situation. It would seem reasonable, in fact, to consider more or less the contrary: that the determining influence of context and situation of sentences is one of *eliminating* meanings which need to be expressed.

A more sophisticated approach (in least in terminology) to associating meaning (in this case, sentence meaning) with situation is Alston's "illocutionary act potential," ¹⁶ which "enjoins members of a speech community from uttering [a] sentence, in certain contexts, unless certain specified conditions hold." ¹⁷ By way of example, Alston takes the sentence *Please pass the salt*, which would be covered by a rule that no one must utter this sentence outside a situation in which the following conditions hold:

- (a) Someone, H, is being addressed.
- (b) It is possible for H to pass the speaker some salt.
- (c) The speaker has some interest in getting H to pass him some salt.

But, in fact, the possible conditions could be gleefully extended without any conceivable limit. Consider, for example:

- (d) H is not deaf; or, rather, the speaker assumes he is not—unless the speaker assumes (or hopes) that H can read lips (in which case, add the condition that H is looking at the speaker).
- (e) H is not asleep; or, rather, the speaker assumes he is not—unless the speaker intends by the sentence to rouse H to consciousness as well as to have him pass the salt.

etc.

Nor is it clear that Alston's three conditions are at all essential. Cannot one mutter the sentence to himself, or his dog? Can the speaker always know if H is able to pass the salt? Must the speaker be interested in getting the salt, instead of, for example, just striking up a conversation? In a word, trying to formalize meaning in terms of situation takes one nowhere but precisely to the situation (or, to any number of possible situations)—with no clue as to what the meaning of Please pass the salt is.

1.3 Meaning as response

Meaning as equated with response raises a number of obvious problems, some of which have been criticized by TGG authors. 18 It could imply, for one thing, that the speaker is not aware of the meaning of what he says until after taking note of his hearer's reaction, or that his meaning is two-fold if two hearers react differently to his sentence.

C. Osgood and others hoped to show that meaning could be

represented by responses made in a controlled laboratory setting. One approach he mentions is to ask directly for the meaning. Of course, the typical reaction to this is anything but eloquent; there will be fumbling about for words, corrections, and, no matter how much time is provided, seldom a complete satisfaction with one's own definition. (The response would come much faster and with much more conviction, if the subject had access to a dictionary.) If, then, even in this situation, the response does not equal meaning in the subject's own estimation, how can response in general be equated with meaning?¹⁹

Another approach suggested by Osgood to formalize meaning through response is to elicit associations. But there is no reason in principle to assume that concepts associated with a given word will lead to its meaning at all. Given certain practical difficulties of an administrative nature in eliciting associations, Osgood suggests playing "Twenty Questions," forcing a choice between, for example, opposite adjectives: "Is it hard or soft," etc.²⁰ But, in this case, there is no end to responses which might be elicited. And if some arbitrary limit is imposed, it is due to prior knowledge of the meaning. (In any case, there is something absurd about asking whether the word *sophisticated* is *hard* or *soft*, *fast* or *slow*, as most non-psychologists might agree.)

Elicitation experiments designed to determine word meaning seem to glory in the experimenter's blissful ignorance of just what that word might mean. But just as we know that the word has a meaning, so we know the meaning. And we know which questions will best elicit that meaning and which responses best reflect it. And thus is it possible to judge the relative success of an experiment and revise the ground rules to assure better success the following try—where all the while the ultimate success is not finding out what the word means, but merely discovering what series of questions will enable some other person to tell us that meaning.

1.4 On word usage and referents

Wittgenstein's definition of the meaning of a word as "its use in the language" ²¹ is another attempt to bring this evasive concept out into the open. He likens words to tools, which are defined by their diverse functions. ²² Usage, certainly, is an interesting reference when discussing meaning, since it provides harder data than intuition and because there is evident correlation between meaning and replaceability: If there were X and Y replaceable in all contexts, they would be unanimously accepted as synonymous. Though there is no such pair, ²³ there are grades of proximity to it. Boy/lad come closer to this replaceability than do boy/girl, boy/man, boy/puppy, etc., and boy/lad obviously come closer to synonymy than the other pairs. Usage is also an important criterion for determining traditional dictionary definitions. ²⁴

It is clear, though, that meaning and usage cannot be equated. Note that (1) erroneous usage is recognized (and, in the case of the dictionary writer, weeded out) on the basis of a priori knowledge of word meaning; ²⁵ (2) equating meaning with use would rule out potential novel uses of a word that do not change its meaning; (3) usage is determined partly by form rather than meaning. ²⁶ In Ullmann's words, "The use of a word, its distribution, the collocations into which it enters, are not identical with its meaning; they are mere consequences and manifestations of the meaning, even if, for metholodological reasons, one may feel that it is through these consequences and manifestations that meaning can be most profitably explored." ²⁷

Replaceability could reasonably be taken to indicate meaning "overlap." This would leave us with no real synonyms, it is true, but this too is reasonable in the following: (1) The proponents of rather extensive synonymy provide no clear criterion for determining synonyms. There seems to be no real way of verifying supposed intuitions on identity of meaning, when individuals (including linguists and lexicographers themselves) differ on whether X and Y mean the same thing or not.²⁸ (2) Difference in usage indicates some difference between any two forms-which in almost all cases cannot be attributed to the sound. (3) There is no need of grouping various forms under the same meaning—as there might be if given general intuitive agreement in a language community. (4) Equating the meaning of pairs like boy/lad of violin/fiddle is simply an extension of the referential theory of meaning: both words of a pair appear to cover the same class of referents. The full application of this criterion, however, leads to problems like equating morning star

and evening star (both Venus), as Frege pointed out.

TGG, to digress a bit, has created some intricate confusion regarding the roles of intuition and usage in distinguishing and in identifying word meanings. Different "senses" of a single words are distinguished on the basis of usage,²⁹ while different words are equated in meaning by invoking intuition. But if either one of these criteria were followed to its final consequences, it would bear out the other in that different forms reflect different meanings, though ever so subtly—just as differences in usage will be just as subtle.

2. Word meaning in TGG

Attempts to explain word meaning in some observable way were seen to identify meaning with one or other observable aspect surrounding language *use* which does not happen to be the sound itself. The approach in TGG is radically different. This school is less taken up by a craze for observability, and, in this sense, can be likened to the natural sciences, where constructs, concepts, symbols, etc., are posited and theorized upon without scruple. It must be noted at the start though, that TGG theory will not provide a definition of meaning, since TGG linguists consider it too early to do so.³⁰ This must await development of the over-all theory.³¹

Another point to be borne in mind is that analysis of word meaning in generative formulation does not, strictly speaking, have as its goal to express meaning at all,³² but to provide a criterion for predicting certain sentence types: ambiguous, analytic, etc. On this point Katz, for example, does not seem entirely consistent. He states that "the job of the dictionary is to represent the conceptual structure in the meaning of words," which seems to mean to represent word meanings. But he goes on to say, and more typically, that the dictionary must represent "every piece of information about the meaning of a word required by the projection rules in order for them to operate properly." ³³

There is no guarantee providing the information required by projection rules will result in "full analyses of word meanings." ³⁴ It may only result in distinguishing words *somehow*, and it will leave untouched any differences between words which are classified *a priori* as synonymous. In fact, it is suggested by Katz and Fodor that the semantic component as a whole should be defined as a description minus the grammar, ³⁵ i. e. whatever *else* is required for sentence generation. This highly idiosyncratic view of meaning will be useful only to those who accept TGG as a whole.

2.1 Semantic markers and words

Analysis of a word meaning should be expected to provide the make-up or whatever meaning structure a word might have. According to semantic-marker analysis, 36 a word like bachelor. for example, is defined with the markers (PHYSICAL OBJECT), (LIVING), (HUMAN), (MALE), (ADULT), and (NEVER

MARRIED).³⁷ The aim is to arrive at the "complex conceptual structure" ³⁸ of a morpheme (though examples in various works give only an unordered list of such markers). ³⁹ Semantic markers are intended as a set of formal features which will describe word meanings in a non-circular way. ⁴⁰ Such constructs, like (HU-MAN), are therefore not to be considered words themselves, a point which Katz tries to illustrate by referring to theoretical constructs, like *force*, in the sciences. ⁴¹ This approach is intended to provide semantics with a metalanguage in which to define meanings, thereby avoiding the circularity of defining words with other words. ⁴² It must be noted, however, that the meanings of semantic markers currently used to illustrate this theory appear to differ in no way from the meanings of the words with which they are represented. (HUMAN), in capitals, seens to represent *precisely* the meaning of the word *human*.

The parallel with other sciences is fortunate. The concept force attempts to represent a reality in a way which is true of many words. The fact that its definition is more rigorously stated in the science, or that scientists may have a clearer idea of the meaning of force, does not imply that it is not a word. It is an error of semantic-marker analysis to suppose that concepts entirely independent of existing words can actually be set up. New theoretical constructs are understandable only insofar as they modify concepts which are already understood and insofar as the modifications themselves are understandable. This means that ultimately some relationship (even if remote) must hold between

a newly defined concept, word, or construct and the knowledge or belief it previously represented. It is only natural that both force and (HUMAN) be based on the very words force and human. A theory will be valuable only if it is understood; and it can be understood only if its original concepts (the starting point of its elaboration) are understandable to the theorists. The science clarifies and modifies these concepts, but it is precisely these concepts which the science modifies.

Normally there is no clear demarcation between a word and a scientific construct expressed by that word, both of which are publically accepted notions. There are merely numberless possible interpretations (degrees of understanding) according to the familiarity any individual has with the science in question.43 Note, in fact, a sort of "feedback" process, in which a word chosen by a science and given a clearer definition tends to evolve in that direction in the language at large. As knowledge acquired by scientists becomes, to some extent, general knowledge, the word meaning (of force, for example) is affected (judging from revisions thereby the made in our traditional dictionaries); i. e. the meaning, hopefully, reflects a bit more accurately the external realities. This feedback essentially amounts to a private meaning or concept (of individual scientists) influencing public (linguistic) meaning—an obvious phenomenon which is explainable if the word meaning is somehow linked to knowledge of the world. Thus, a common-sense (conventional) concept or word meaning is given a scientific definition which, in the long run, influences the conventional definition. Were this not the case, science would not raise the knowledge of the general public, and there would not be expressions like nuclear energy in common coinage. The fact that scientists presumably understand these concepts in a more accurate way does not mean that these concepts are not words when used in the science. A farmer may understand heifer better than a nuclear scientist, but this does not necessitate classifying heifer as a construct rather than a word.

This "feedback" phenomenon and the view of word meaning as evolving according to the demands of newly acquired knowledge seems implicit in remarks by J. L. Austin, who felt that the stock of words we presently use "embodies all the distinctions men have found worth drawing, and the connections they have found worth making, in the lifetimes of many generations." 44

It follows that likening semantic markers to scientific constructs is not equivalent to showing they are not words. It seems to show precisely the opposite.

Defining words in terms of "constructs" specially set up, then, will tell us nothing about those words until such constructs are themselves defined in terms of what we already know. In the case of semantic markers, we could consider three conceivable sources for definitions of symbols like (HUMAN), (MALE), (MATERIAL), etc. (1) They might be defined to some extent in terms of other markers: (MALE) means (PHYSICAL OBJECT), (ANIMATE), etc. However, this is circular. (2)

(MALE) may be said to mean whatever is common to the words man, bull, bachelor, rooster, etc. But this is also circular, since the raison d'être of the markers is precisely the contrary: to set forth just what is the meaning of man, bull, etc. (3) Finally, we may make (MALE), (HUMAN), etc. comprehensible to us by equating them to the meanings of the words male, human, etc., but this would remove any need of semantic markers in the first plase.

The circularity of defining words with other words may be inescapable. But this would be only natural, in a way, since, to the individual, a word expresses his knowledge of some reality—what he understands about it. Therefore a definition, if it is supposed to be understood, ought to be presented in words. In this way, too, the language can parallel more directly the realities it signifies: just as word W^1 is defined in terms of words W^2 and W^3 , so is reality R^1 constituted by realities R^2 and R^3 .

2.2 Markers and traditional definitions

Katz informally considers semantic markers in three ways. The first is a "decomposition of the sense" being represented,⁴⁵ on the supposition that they present "atomic elements" of meaning,⁴⁶ but is is clear from the remarks above that they are no more atomic than the words used to symbolize them. The markers themselves decompose into other markers, as is evident in Katz's redundancy rules.

A second way of considering markers, according to Katz, is

"as the elements in terms of which semantic generalizations about senses can be made." ⁴⁷ Thus the marker (OBJECT) represents an element present in the words *chair*, *hat*, *planet*, etc. as opposed to *breath*, *truth*, *ripple*, etc. This is true, of course, for the very word *object*. And this fact is capitalized on in the traditional genus-difference definitions, which delimit a word meaning by assigning it first to a general class and then indicating what characterizes the word within that class.

The third way Katz views semantic markers is as a means of explaining inferences evident in certain sentences.⁴⁸ Thus, the sentence *There is a chair in the room* implies any of the following sentences:

There is a physical object / something / an artifact / a piece of furniture / something portable / something having legs / / in the room.

It is evident, though, that a word implies its definition (in the traditional sense), i. e. that implicit in the word chair are the meanings of its defining words: physical object, artifact, furniture, etc., and that this traditional analysis of word meaning is at least equally capable of explaining such inference.

Weinreich suggests that there should be as few markers in a semantic description as possible.⁴⁹ But the fewer the markers, of course, the greater will their number be in each "reading." Birnbaum feels that they would "amount to a considerable number." ⁵⁰ The most economically worded readings, of course, leads back to the traditional genus-difference definitions, the result of which

is as many markers as there are words in the language under question (assuming that any two words in a language have different meanings). In that case, it is easy to see Bolinger's point that this approach amounts to doing "what dictionary-makers have been doing all along." And it is difficult to see, on the other hand, what advantage there might be to reducing the number of markers (by eliminating the more inclusive or abstract markers) at the expense of longer definitions or "readings."

2.3 Semantic markers and anomaly

Another motivation for semantic-marker analysis of word meaning is to provide objective constructs which will predict, linguistically, the anomaly or nonanomaly of any sequence of words. 52 Thus, the sentence Students complete the woman is predicted to be anomalous since restrictions on objective-of complete rule out the occurrence of woman here. This, however, leaves unaccounted for the nonanomalous interpretation of this sentence in the case that woman actually refers to some artificial representation (like a statue) of a woman. If senses of woman are distinguished (person vs. artificial representation of a person) so as to allow for nonanomalous interpretation of the sentence. is it also necessary to distinguish between senses of house, as in John completed the house (where John may be either a carpenter or an artist)? If we do not distinguish, the ambiguity remains unresolved; if we do distinguish between house and representation of house, must we also distinguish between painting of a house (which cannot be completed by a sculptor) and sculpture of a house (which cannot be completed by a painter) or any other representation of house which cannot be completed by some conceivable subject of the sentence?

If, as Katz suggests, sequences like *honest baby*⁵³ should be blocked by semantic markers, should we also block:

10-year-old doctor

honest child bad baby? (age unspecified)

Where do we draw the line in the following sequence:

honest (1 2 . . . n)-year-old?

At what age will semantic markers allow a child to be honest? Should we block reference to *an honest man* who has not matured beyond a 2-year-old mentality?

Harrison observes that competence, according to generative grammar, includes the ability to recognize the correctness or incorrectness of any concatenation of linguistic signs, but that, if correctness depends on extralinguistic fact, the generative-linguistics program is incompletable, since this would call in the "indefinitely variable content of (one's) experience." ⁵⁴ In the examples cited above it is clear that both context and situation can be determining factors in classifying sentences as "correct," "anomalous," "unlikely," "well formed," etc.

It is inappropriate to assign exclusively to *linguistic* competence the ability to discriminate correct and incorrect sentences (concatenations of signs). The sign stands for something which

can be evaluated against knowledge, not only of language, but also of extralinguistic fact or belief. If we find furiously sleep ideas green colorless odd, we have linguistic (syntactic) reasons for it. But the sequence colorless green ideas sleep furiously is unacceptable due to the fact that ideas do not sleep; they are not green; and, if they were, they would not be colorless—not due to the "non-Englishness" of the combinations. I revolt against the latter example for its unreality, not because I speak English. Calling it linguistically anomalous on top of that is redundant.

TGG severs word meaning from knowledge of the word. It is assumed that sentences are produced and interpreted entirely on the basis of a closed set of linguistic rules, that knowledge of the world (or any other nonlinguistic factor) does not enter into this interpretation. This naturally leads to classifying as linguistic any factors which influence interpretation. It is clear, though, that sentences are understood or interpreted differently by different individuals and differently according to context. What is necessary is to isolate the linguistic factors from the rest, not to assign them all to linguistics.

Determining possible or permissible combinations of meanings implies ruling on possible realities.⁵⁵ And, in any case, to say that "square circle" is incorrect because of semantic-marker makeup is to give no explanation at all. The explanation of its anomaly lies in the real world, the real reason for the incompatible definitions of these two words—and this is not a linguistic

question.

2.4 A contribution to philosophy?

The TGG view on anomaly is better understood in the context of its avowed philosophy. The endeavor to assign syntactic markers to meanings so as to avoid accepting sentences like the tree thanked him comes directly from the tendency to consider truth to be that which is known, rather than that which is. Just as cartesian rationalism considered as real that which existed in mind, rationalistic linguistics attempts to impose cogno-linguistic restrictions on what exists outside the mind, restricting, for example, the verb thank to human subjects—a position which is redundant, to repeat, if it is clear that, in fact, only humans thank.56 The insufficiency of this approach is evident in the examples above. Whether or not sentences about an honest 6year-old are acceptable or not is not a linguistic question nor one concerned with mental structures. Acceptability has to be judged against specific situations in reality. Honest worms is anomolous simply because worms, in reality, are not honest. Semantically, in fact, such a concept is quite interpretable, and we are therefore able to say it is mistaken.

One of the attractions of semantic-marker analysis is the propect of arriving at a set of universal features of meaning.⁵⁷ Katz already discusses a rather ambitious application of universal markers to a philosophical problem: the formulation of "semantic categories," which he sees as formalizing Aristotle's categories.

He claims that a language basis provides empirical justification for categories (presumably metaphysical categories). But it would be more accurate to say that they merely provide justification for universally used (i. e. not language-specific) concepts or meanings. And, in spite of the fact that he refers to his own effort as "correct and exhaustive," he is actually doing something essentially different from Aristotle, whose categories are realitybased. Katz is talking about language, assuming that whatever happens to be universal in linguistics carries philosophical implications. It is to be recalled too that the very foundation of this effort—the semantic marker—is extremely hypothetical and depends on the viability of TGG syntactic rules (which TGG semantics merely complements), and that the whole TGG system is ultimately conditioned by rather unsure criteria like the simplicity metric. If it is true, besides, that features or markers do not differ in meaning from the words used to symbolize them. then we will find universal meaning features only insofar as there are universal word meanings. And there must be very few of these, leaving them with very little value in a semantic theory or in philosophy.

It was suggested above that semantic theory seems less concerned with conceptual structure as it is with providing a description of those aspects of meaning which allow word senses to function in the grammar—and this according to the rules of generative transformational grammars. This is seen both in the way that markers are arrived at and in their actual application.

For this purpose it is merely required that words assumed to have different meanings be distinguished *somehow*, not necessarily on the basis of a formalization of intuitive notions of meaning itself, but rather in terms of the environments in which they correctly occur (which, as mentioned above, comes close to equating meaning with distribution or usage, to which TGG authors object).⁵⁸

The rationalism of transformational grammar is evident here, whereby (1) influenced by the thesis of innate ideas, it is supposed that all speakers of a given language (of all languages, in fact) are in possession of an identicle set of semantic features, and (2) as a result, it is felt that a language need only distinguish combinations of features (in words) in order to succeed as a medium of communication (speaking now of the word level). Also as a result, (3) the nature of these features (their origin, their relationship with the external world, their make-up or structure, and, certainly, their "meaning") need not be explained, because they are common knowledge or self-evident.

This is one aspect of an *over*-idealization in TGG, which ignores *individual* competence and, consequently, variations in knowledge and meaning interpretation from one individual to another. Some idealization and simplification is natural in theory construction, but, in this case, it has given no explanation of just what word meaning *is* and has provided us, instead, with simply a description of word usage designed to make syntactic rules work. An approach to word meaning based on constructs independent of the individual's knowledge of the world, severs

language meaning from external reality, reducing it to a closed (rationalistic) system of mental entities (a set of innate ideas or "structures").

And this is the basis for supposing that all anomaly can be predicted. For just as Cartesian philosophy held that the mind determines (imposes order on) reality, TGG linguists now hold that anomaly (impossible realities) can be determined a priori and predicted by a study innate language in the mind.

Perhaps weaknesses of rationalist linguistics will make their contribution to philosophy by bringing out into the open weaknesses of rationalism itself.

3. Word meaning and knowledge of the world

3.1 Word meaning

There is a general tendency among people to equate, more or less, their knowledge of the meaning of a word, as they understand it, with the knowledge they have of its referents. And this point is a datum of common sense (intuition) which requires explanation. This equation is reasonable in that (1) there appears to be no essential difference, in the *individual*, between these two kinds of knowledge—either in their acquisition or in their use in thinking; and that (2) knowledge of word meaning grows together with knowledge of referents (consulting a dictionary will enhance both).

Three aspects of human knowledge might be considered in this connection: perception, images, and concepts. They relate, in that order, in an ascending abstractness, and of the three, concepts appear to be most closely linked with word meaning. It is fairly evident that (1) the concept is more public, being somewhat removed from perceptions, which are individual-specific; 60 (2) the concept is formed to some extent under the guidance of the word-sound, whereas perceptions and images are not; (3) both the concept and the word prescind of individual objects and images and cannot be fully illustrated with a finite number of pictures or images; (4) there is a closer numerical relationship between concepts and word-sounds than between images and word-sounds; (5) classification of various images (of one or various referents) under a single word already implies a concept.

However, it is clear that these two notions are not equivalent: (1) Knowledge is individual-specific, whereas linguistic meaning is taken to be public; ⁶¹ (2) in typical language use, the meaning of a word is assumed known to the hearer even when ignorance of some aspect of the referent is assumed; (3) attempts by an individual to define a word involve sifting out those aspects of his knowledge which he does not consider common or public knowledge.

Related to these common-sense notions, let us turn to a distinction between *empirical* and *rational* ideas made by Jolivet. Empirical ideas express, and depend on, experience, and they signify not so much what a thing is in itself, as what it is in

relation to the knower. (Milk for a child is a drink, while for a milkman it is a source of income.) These ideas are rich and confused and prone to change with new experiences. Rational ideas represent things as they are, independent of experience. Thus, for example, are scientific ideas, which represent essential features and are free of subjective elements like visual recollections. In the individual, however, a rational idea, though very abstract, is generally tied up with imagery; and a science can be considered to express ideal ideas—those which would be completely rational in an individual if they existed precisely as defined by the science.

What a word "means" to an individual, likewise, does not generally equal its definition in a traditional dictionary, but takes in his own experiences and relative understanding, different from other users of the language. The *linguistic* meaning of many content words can be taken to be common or public knowledge relating a sound to a class of referents, in a form which is purged of any individual's perceptions or image-memories of specific referents. This public "knowledge" is restricted to essential features, by which referents qualify for membership in the class of objects governed by the word.

3.2 Word meaning in communication

Let us note now a tendency in communication to express through language what is not already assumed known to the hearer by virtue of, for example, past education and experience or present situation or context, including gestures, facial expressions, cries, sounds made by the hands, whistling, patting, hitting, etc. To the extent that this is so, what a person says is a direct indication of assumptions he makes about the hearer's ignorance. Typically, assumed ignorance of a fact is expressed in the explicit predication of a VP to an NP, whereas implicit predication found in the internal make-up of an NP in many cases indicates that the hearer is assumed aware of the predication as such.⁶² The distinction is important because, generally, the motivation behind explicit predication is to inform the hearer; and this is often the reason for producing a sentence in the first place.

The make-up of an NP, then, is greatly influenced by suppositions about the listener's knowledge. Though a great many ideas can be represented by single words, reference to specific objects often requires modification of nouns. And reference to a specific reality requires modification of the abstract phrase-head noun precisely to the extent that the hearer would otherwise be left ignorant of which reality is referred to. (Here, again, we see an essential difference between explicit and implicit predication in that the former is not a modification and not required for the hearer to identify the referent of the subject noun.)

The general tendency to express explicitly in language only what the hearer is presumed ignorant of can be referred to as the principle of simplification of form. It is a cover rule which also takes in pronominalization and deletion, 63 including a rule sug-

gested by Chafe: "If we disregard other complicating factors, in general an item can be pronominalized after it has appeared once in the linearized postsemantic sequence. Thus we can say Walter promised that he would come but not He promised that Walter could come if it is the same Walter that is referred to in both cases." A syntactic criterion will not explain all pronominalization, however. Consider these examples:

- (a) No, it's imitation. (a woman's reply to another woman's inquisitive glances at her large diamond-like ring)
- (b) It's a bird! It's a plane!...

In (a) discourse analysis will not explain it, because the word ring does not occur. And in (b) the pronoun does not replace any noun, but only a referent in the external world. Any such examples, as well as Chafe's, fall under the cover rule which simplifies forms as far as possible considering the needs of the hearer for identifying a referent.

The hearer's knowledge can be assumed for any number of reasons which go beyond sentence or discourse-level meaning. The principle of simplication explains a very wide range of data in performance which will be valuable to investigate.

In this context, then, the use of word meaning in communication will also be an interesting study. A word is often used presupposing more of the hearer than merely knowledge of the word's meaning, taking in familiarity with specific *referents* as well. Depending on the extent to which the speaker is acquainted

with the hearer, assumptions vary greatly, due to a common education or experience, or any number of factors. On the other hand, communication succeeds even given faulty command of word meaning and more on the basis of perceptual knowledge of referents. In every case of linguistic communication, however, there seems to exist in the minds of the speakers, first, a distinction between word meaning and knowledge of referents beyond that, and, second, an implicit intention to be using words in accordance with their publicly accepted meanings.⁶⁵

NOTES

- 1. John Locke, Essay Concerning Human Understanding, Bk. III, Ch. 2, Sec. 1; noted in Alston (1967, p. 235).
- 2. Lyons (1971, p. 401—2) notes that today even some philosophers find themselves dubious of mental realities.
- 3. Robins (1964, p. 22).
- 4. In explaining that linguistics is an empirical science, Robins gives the reason that "its subject matter is observable with the senses, speech as heard, the movements of the vocal organs as seen directly or with the aid of instruments, the sensations of speaking as perceived by speakers, and writing as seen and read" (1964, 7). Observability, however, is not what makes a science empirical, so much as a "confirmability," by which the abstract statements of linguistics are substantiated or reputiated on the force of observable evidence or generally accepted intuition.
- 5. Robins (1964, p. 22).
- 6. Rf. Alston (1967, p. 235).
- 7. Carroll (1955, p. 72); emplasis added throughout this paragraph.
- 8. Hörmann (1971, p. 28). Harrison (1972, 44) too criticises the image theory of meaning, which claims that ostensively defined basic symbols

(and thoughts?) could be replaced by sets of pictures. He points out convincingly that such portrayals are as variously interpretable as real objects themselves. The point is well taken. Reality is interpretable in any member of ways. And there is no clear limit to the distinctions which might be made in interpreting it. There are indeed, at least as many ways as there are languages insofar as they differ in their grouping of realities under words. Thus, equating word meaning with images or with the real objects themselves share the defect of not explaining differences in meaning (from language to language) in the face of a common real world.

- Gilson (1969) is amused by linguists who attempt to make philosophical statements without realizing they are stepping out of their own field.
- 10. Chafe is not a representative of ETL, but rf. Sell (1979) on the philosophical similarity of ETL and TGG.
- 11. Rf. Chafe (1970, p. 16). Rf. Alston (1967, p. 235).
- 12. Bloomfield (1933, p. 139); emphasis added.
- 13. Noted in Hörmann (1971, p. 44).
- 14. Cf. Harris (1952, p. 356), though Harris is not equating meaning with situation so much as suggesting situation as a possible approach to morpheme meaning.
- 15. Robins (1964, p. 27); emphasis added.
- 16. Rf. Alston (1971, pp. 35—6).
- 17. See also Vasiliu (1973) for a similar view.
- 18. See, for example, Katz (1971, p. 87 f).
- 19. See also Alston (1967, p. 235 f).
- 20. See Osgood (1963, p. 306 f) for a discussion of the problem of the semantic universality of such judgments.
- 21. See also Robins (1964, p. 20).
- 22. On this subject, see also Ullmann (1972, p. 347); and Katz (1966, p. 78).
- 23. Rf. Lyons (1971, p. 73) on this point.
- 24. Harris (1954, p. 43 f) discusses the correlation between difference of

- meaning and difference of distribution.
- 25. This point is also mentioned by Ullmann (1972, p. 348).
- Rf. Ullmann (1972, p. 348) and references there; and Katz (1972, p. 442).
- 27. Ullmann (1972, p. 350).
- 28. The French Academy, for example, insist that there are no synonyms in French.
- 29. This is ironic, since TGG disclaims basing meaning on usage. See, for example, Katz (1971, p. 93); Katz (1972, p. 442); and Caton (1971, p. 12).
- 30. But TGG authors speak of what meaning is not; see, for example Katz (1972, p. 441 f) and cf. Jackendoff (1974, p. 2).
- 31. Cf. Chomsky (1964, pp. 73-4, 94).
- 32. Cf. Katz and Fodor (1963, p. 480 f).
- 33. Cf. Katz (1966, p. 154).
- 34. Ibid.
- 35. Cf. Katz and Fodor (1963, p. 483 f).
- 36. Ibid.
- 37. For an application of this approach to English, see G. Leech, (1969).
- 38. Rf. Katz (1966, p. 155).
- 39. McCawley (1974, p. 29) points out that "there is no general agreement as to the nature of semantic structure."
- 40. Rf. Katz (1966, p. 173) and Chomsky (1958, p. 223).
- 41. Rf. Katz (1966, p. 156).
- 42. Cf. Katz and Fodor (1963, p. 517).
- 43. This is true also of chemical symbols used by Katz in illustration. H, C and O, though once removed from normal orthography, still represent words.
- 44. Noted in Katz (1966, p. 86).
- 45. Rf. Katz (1972, p. 40).
- 46. Cf. Postal (1964, p. 168).
- 47. Rf. Katz (1972, p. 41).
- 48. Ibid.
- 49. Cf. Katz's (1972, p. 78) criticism of Weinreich.

- 50. Rf. Birnbaum (1970).
- 51. Cf. Katz (1972, p. 86).
- 52. See, for example, Postal (1964, p. 161).
- 53. Rf. Katz (1966, p. 161).
- 54. Rf. Harrison (1972, p. 21-2).
- 55. In spite of Chomsky's comments more or less to the contrary (1961a, p. 384).
- 56. Cf. Hörmann's reference to Kant (1971, p. 300), who felt that the mind determines reality.
- 57. Cf. Katz (1966, p. 224 f).
- 58. Cf. Katz (1972, p. 442).
- 59. Carroll (1964, p. 219 f) takes issue with the separation of *meaning* from *concept* and suggests that "a framework can be made for considering their intimate interconnections." Bellert (1973, p. 68) also refers to knowledge of language as "intrinsically interconnected with knowledge of the world." See Vygotsky (1962, p. 60), who speaks of the futility of separating the mind from the world, leaving "thoughts thinking themselves."
- 60. Carroll (1964 a, p. 221) traces similarity of concepts among people to similar experiences, but also because of the public word which fosters this similarity by grouping experiences in similar ways for different individuals in a language community.
- 61. DeCecco (1967, p. 62) also makes clear reference to private vs. public meaning, and Carroll (1964 b, p. 82) states that concepts vary according to the individual, whereas meaning is more constant; in(1964, p. 393) he speaks of meaning (as vs. concept) as "socially-standardized."
- 62. Oim (1973, p. 361) says that "the aspect of the hearer....is most significant" in the problem of predication. (In connection with the general thesis of this section, Oim goes on, more generally, to say that "language as a whole exists for hearers and because of hearers.")
- 63. It is also a more natural explanation than the "drive" toward economy that Chafe speaks of (1970, p. 54).
- 64. Rf. Chafe (1970, p. 53).

65. The general feeling that word definitions in traditional dictionaries are accurate is due precisely to their public or conventional acceptance.

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