The problem of meaning in cross-cultural situations, resulting from differing patterns of thought, requires comprehension of the basic rules or patterns of these thought systems. This comprehension can be sought through Vygotsky's unit of analysis, a unit being a product of analysis which, unlike elements, retains all the basic properties of the whole and which cannot be further divided without losing them. Syntactical rules found in patterns of expression can furnish only partial clues to the thought of the encoder. Interfunctional relations between thought and language cannot be established through an analysis of the components of verbal thought. A mechanical approach, uncovering only thought and word, destroys the whole to describe its elements whose characteristics are in no way similar to those of the whole. (Author/VM)
MEANING IN CROSS-CULTURAL SITUATIONS: AN APPLICATION OF VYGOTSKY'S UNIT OF ANALYSIS TO ETHNOLINGUISTICS

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Fundamental to the establishment of effective communication between cross-cultural groups whose native tongues are different is, according to Glenn, "the determination of the relationship between the patterns of thought of the cultural or national group whose ideas are to be communicated, to the patterns of thought of the cultural or national group which is to receive the communication." He further points out that current assumptions in the field of ethnolinguistics, namely that the problem of international communication is "principally a problem of language" and that it "can always be solved by the use of appropriate linguistic techniques--translation and interpretation"--are indeed a fallacy. Patterns of thought, he claims, represent a method of organizing thoughts: they influence language and are also influenced by it.

Since thoughts must be put into words in order to be expressed and transmitted, correlations exist between patterns of thoughts and patterns of expression. These correlations may be used in the analysis of the patterns of thought. Thus in the field of international communication, the determination of the correlations between patterns of thought and patterns of expression of group A and of the correlations between these two sets of patterns for group B is extremely important, but insufficient unless followed by a careful analysis of cultural factors which color meaning.

Glenn introduces at this point the semantic complexities generated by the concepts "denotation" and "connotation." According to Webster, denotation refers to "meaning or signification," all that strictly belongs to the definition of the word, while connotation refers to "the suggestive significance of a word apart from its explicit and recognized meaning," all of the ideas that are suggested by the term. Complexities and impasses arise from the fact that most semantic situations in cross-cultural communication fall in either one of two types, defined by Glenn as follows:

1. Cases where a given language is capable of expressing various shades of meaning and where the given pattern
of expression selected by given individuals provides a clue for the determination of their pattern of thought.

2. Cases where a certain combination of denotation and connotation cannot be obtained in a simple manner in a given language. 

An example of case 1 would be found in a round-table discussion between two nations with the intent of solving a common problem, in the following propositions: (a) "Shall we arrive at a compromise?" and (b) "Shall we find a mutually acceptable solution?" Both propositions have the broad denotation of working out a solution which will require some meeting on a middle road, with concessions by both sides if both are to accept it. However, the connotations of (a) and (b) can lead to difficulties in attaining the set goal if the two countries are not culturally atuned. If both countries are of Anglo-Saxon culture, as Great Britain and the U.S.A. are, the problem would be most unlikely to arise. However, if one country is Anglo-Saxon and the other is French, for example, an immediate pejorative connotation will be given to proposition (a) "Devrons-nous arriver à un compromis?" by the French side. Compromis (compromise) has two different meanings both in French and in English, an action to reach a middle ground, by mutual concessions ("accommodement" say the French) and a prejudicial concession, a surrender of principles, of character, etc. The second meaning is more common in French, thus giving its unpleasant flavor to proposition (a). Proposition (b), "Devrons-nous trouver une solution acceptable à toutes les parties?" still implies a settlement reached by mutual concessions but does not carry the stigma of a morally reprehensible concession or surrender. The above case shows that certain word connotations can be represented in different linguistic systems. However, Glenn states in case number two that such is not the fact in all situations in all languages. Citing from his vast répertoire of genuine occurrences which he has collected during his career as chief of the Interpreting Branch of the Division of Language Services in the United States Department of State, he gives a striking example of a semantic impasse resulting from the absence of parallelism in denotation-connotation, reflecting divergent patterns of thought. The U.S. and the Soviet Union participated in an international conference in the drafting of an agreement dealing with economic matters. A particular clause submitted by the U.S. delegate brought a violent reaction from the Soviet delegate because it contained the terms "expanding economy." The Russians refused to sign the document. According to Glenn, an "expanding economy" in the Western world may be expanding because of accident (various outside influences) or essence (characteristics inherent to its nature), but to a Russian speaker, "rashshirayushchhiyasya ekonomiya" has a connotation of "expanding for reasons inherent to its nature" (due to its essence). This pattern of expression is in direct contradiction with the Marxist-Hegelian patterns of thought which assert that a capitalist economy is
is doomed to failure and cannot expand. Therefore, the patterns of thought and patterns of expression of the opposing camps were in conflict and nothing could be done to remedy the situation.  

The point made by Glenn centers on the false assumption commonly made by some semanticists and other experts in cross-cultural communication, to wit: that problems of language can be solved linguistically through clues provided by the patterns of expression. Katz and Fodor have thoroughly researched the semantic structure of language, with the intent to determine the correlations between semantic and grammatical structures. They remarked that "in comparison to semantics, the nature of grammar has been clearly articulated."  

A fluent speaker's mastery of his language exhibits itself in his ability to produce and understand the sentences of his language, INCLUDING INDEFINITELY MANY THAT ARE WHOLLY NOVEL TO HIM. ... what qualifies one as a fluent speaker is not the ability to imitate previously heard sentences but rather the ability to produce and understand sentences never before encountered.  

Therefore, it is "what a fluent speaker knows about the structure of his language that enables him to use and understand its sentences." There are rules which allow the speaker to project the finite set of sentences in his language. Furthermore, when considering the question "what is a novel sentence?" an interesting fact comes to light: a novel sentence is not made up of novel elements; it is made up of familiar elements arranged in a novel combination.  

Katz and Fodor then asked the crucial question: "To what point is the grammar of a language a solution to the projection problem for that language?" A grammar specifies the elements of which a sentence can be constructed and the syntactical relations between these elements, also the relations between this sentence and the other sentences. Some sentences can be set to illustrate the point:

(a) The lion eats Paul.
(b) Paul eats the lion.
(c) Paul is eaten by the lion.

Here we are raising semantic intricacies not accountable for by syntactical structure. Sentences (a) and (b) are semantically different but have exactly the same syntactical structure and description. Sentences (a) and (c) have exactly the same meaning -- (c) being a paraphrase of (a) -- but are syntactically different in their structure and cannot be described the same way: (a) is a construction in the active voice; (c) is constructed in the passive voice and the agent is expressed in an ablative construction introduced by the preposition "by."
Grammar, however, can only partially monitor a construct in the sense that it tells when and why the sentence is syntactically ambiguous or anomalous, but it cannot monitor for semantic ambiguities or anomalies. Thus, a sentence of the type "The dog is barking loudly" can have similar constructs which are:

(a) either syntactically correct but semantically impossible ("The leaf is barking loudly.") or

(b) syntactically anomalous ("The open is barking loudly.").

Grammar tells us that sentence (a) is correct and acceptable. We reject it because meaning renders the stated fact impossible—a leaf does not bark. Grammar tells us that sentence (b) is incorrect and must be rejected, since "open" (verb or adjective) is not used substantively and cannot be accepted as subject of the verb. Similar syntactic structures do not mean similar reading of a word. "My watch runs fast" and "my daughter runs fast" are identical sentences from the point of syntactical structure; "runs" must be interpreted differently by the reader. A native anglophone encounters no difficulty here; but a representative from another culture, with a good knowledge of only the English grammar but none of the Anglo-Saxon patterns of thought—say a Bakongo from Equatorial Africa, will reach a semantic impasse when confronted by these two simple sentences: the first sentence is hilarious, that is all.

Katz and Fodor illustrate semantic ambiguity by showing that the sentence, "The bill is large," has at least two readings: (1) the bill of sale (for goods or services rendered) exceeds the usual costs or fee, and (2) the beak of a bird is of a large size. The ambiguity here cannot be attributed to syntactic structure.10 Katz and Fodor have thus proved that grammar alone is unable to account for all the morphemes used in speech. Meaning cannot be arrived at without considering setting, that is without establishing the grammatical and semantic relations between (1) the elements of a sentence and (2) the sequence of sentences which form the setting of the sentence and all others in a discourse. The authors showed that the sentence, "The shooting of the hunters was terrible," cannot be decoded properly if in isolation; but given an extra sentence which provides a setting, e.g. "How good was the marksmanship of the hunters?" the decoding can proceed satisfactorily. The authors have thus arrived at a formula representing a function F whose arguments are S = sentence, GS = grammatical description of S, IS = semantic interpretation of S, and C = abstract characterization of a setting. Thus, the notation
F(S, GS, IS, C) is to be interpreted as

1. the particular reading in IS that speakers of the language give to S in settings of the type C, or

2. an n-tuple \((n \geq 2)\) of the readings from IS that speakers of the language give to S if S is ambiguous \(n\)-ways in settings of type C, or

3. the null element if speakers of the language give to S none of the readings in IS when S occurs in settings of type C. \(^{11}\)

Some examples will illustrate the three possible cases. For case one, a sentence of the type "The shooting of the hunters was terrible," used by Katz and Fodor, has two readings, depending upon the setting C; in setting \(C_1\), where the context indicates that a terrible accident occurred, the decoder understands that some hunters were shot; in setting \(C_2\), where the context provides a question related to "How good was the marksmanship of the hunters?" the decoder understands that some hunters were poor marksmen.

For case two, a sentence of the type "Adams beat Washington" is ambiguous. If the setting clearly shows that it is a question of two men, then the reading "The basketball team of Adams High stomped the Washington High team" must be rejected. There are, however, at least two possible readings in the selected setting, viz. "Adams beat (physically, perhaps with his fists) Washington," and "Adams defeated Washington." This last reading offers several possibilities: a defeat in a sports event, in a game, at the polls, in a contest.

For case three, a sentence such as "I really like this great soup," uttered by someone eating a sandwich, makes no sense in that particular setting, since its actual setting does not fit the selected setting C, and it must therefore be given a null value.

Considering Katz and Fodor's remarks in terms of Glenn's initial statement that correlations exist between patterns of thought and patterns of expression, we are now able to state that the syntactical rules found in patterns of expression can furnish only partial clues to the patterns of thought of the encoder. This is exactly what Vygotsky meant when he stated in his book on Thought and Language that the interfunctional relations between thought and language could not be established through an analysis of the components of verbal thought. A mechanical approach would only uncover thought and word, and in turn, in a word, would uncover sound and meaning. This atomistic method "produces generalities pertaining to all speech and all thought." \(^{12}\) It destroys the whole to
describe its elements whose characteristics are in no way similar to those of the whole. Vygotsky suggested that we use another type of analysis which he called analysis into units:

By unit we mean a product of analysis which, unlike elements, retains all the basic properties of the whole and which cannot be further divided without losing them.  

The answer then is found in word meaning, that which constitutes the internal aspect of the word. Each word is a "generalized reflection of reality" and "consequently . . . meaning is an act of thought in the full sense of the term."  

This, again, links meaning to patterns of thought, and particularly to generalization:

To become communicable an individual's experiencing must be included in a certain category which, by tacit convention, human society regards as a unit.

Generalization is the act of expressing reality in concepts and principles. However, as Vygotsky pointed out, it is foolish and unrealistic to dissociate intellect from affect: the thought process is not an autonomous flow of "thoughts thinking themselves," segregated from the . . . personal needs and interests, the inclinations and impulses, of the thinker. . . . [It is]

a dynamic system of meaning in which the affective and the intellectual unite.

Thus, meaning has a logical aspect which meshes with its psychological aspect. This dual nature accounts for the difference between "concept" and "conception": according to Brooks, a concept is a common denominator of identity found in two people's personal conceptions of the meaning of a symbol—and between literal meaning and figurative meaning. Thus, the same word may reflect different conceptions of the object designed by the symbol. We are all familiar with Hayakawa's cows: cow₁ viewed by observer₁ is not cow₂ viewed by observer₂; even though, when both observers discuss the cows, they have an understanding of the concept "cow" because there is a common denominator of identity in the term cow of which both are aware. The situation becomes more complex when viewing literal and figurative meanings of a verbal sign. Given the two sentences (1) "The bomb burst into smoke," and (2) "The children burst into laughter," we realize that burst₁ is not the same as burst₂; translation into another language may require a word for burst₁ and a different one for burst₂. This is where communication between different ethnic groups, different cultures, becomes both complex and ticklish. According to Lee, members of each separate group have the tendency
1. to re-structure the other group's language according to the rules governing his own (problem of interference),

2. to reject new patterns (of thought and of expression) found in the other group's linguistic system, simply because they are different (mental blocking),

3. to assume that they know how the terms used by the other group are being used (projection misevaluation),

4. to consider statements containing many-valued variables as if they were single-valued (simplicity-clarity principle). 18

Lee cites as an example the diplomatic impasse reached at the San Francisco Conference on World Security in 1945 by a Russo-American team discussing the Polish question. One word, only, brought about the split: "democratic." Both sides had agreed on the necessity of "democracy" for Poland. This meant, for the Americans, the protection of minority opinions; for the Russians, racial equality in the Communistic ideology. Both delegations accused the other of behaving badly. 19

The difficulty increases considerably when dealing with idioms. Twaddell warns: "An idiom is by definition an expression whose meaning is not readily derived from the combination of the ordinary meanings of its parts,"20 a point known to all semanticists as Korzybski's non-additive factor. A word-by-word translation is fallacious or even meaningless. For instance, an anglophone with little knowledge of French idioms would be baffled by a simple sentence such as "Donne-moi un coup de fil ce soir," where a literal translation produces the absurd "Give me a blow of the wire tonight," instead of "Give me a jingle tonight." Worse yet, in translation, many idioms lose their flavor. How could anyone put in French "to paint the town red," since the French express the same idea by saying "faire la bombe," which shows a complete lack of parallelism in the patterns of expression? We thus encounter the "irreducibles," words or expressions which remain untranslatable, such as puns, plays on words, jokes, etc. Some time ago, Paris-Match, a French weekly similar to Life, had a cartoon representing a bum walking along a busy street, while a man driving an expensive car was cruising along looking for a parking place where there was obviously none to be found. The caption read -- as if quoting the poor fellow -- "Tiens, on cherche tous les deux une place!" (Say, we're both looking for a place.) The translation into English destroys the punch line. Place means a spot, a place (such as a parking place), also a position, a job! This won't bring a laugh in English, but it certainly does in French.

How then are we going to bridge the gap between differing patterns of thought in cross-cultural situations? Obviously, by making people
fully aware of the variety and differences in cultural factors, and consequently, in semantic patterns in their native tongues. This is where Vygotsky's unit of analysis becomes an important tool: awareness of dynamic systems of meaning can be achieved only through comprehension of the basic rules or patterns of these systems, and comprehension requires analysis. It is not possible to deal with all possible situations; one must be able to transfer acquired knowledge to solve novel situations.

Using Vygotsky's approach, it is already possible to state a number of general rules or principles governing ethnolinguistics. First, it is clear, says Glenn, that "association of ideas plays a great part in thought; thus . . . each man's thought is to a large extent a function of this man's past." It could be expanded to include an ethnic group or a nation's patterns of thoughts, being a function of this group's past. Don't we call our forefathers' thoughts, ideas, systems, institutions, "our cultural heritage"? Glenn has shown that Marxist theories have so shaped all patterns of thought of the Communist world that the word nepravilnoe is commonly used by Soviet diplomats to characterize the Western position. Nepravilnoe means incorrect, not viable. It is not viable because it is not in accordance with the Marxist theory which claims that "historical situations evolve in a unique and predetermined manner, [and] an attitude not in accordance with theory is not in accordance with truth either." In Anglo-Arab negotiations, only the emphasized "no" and "yes" carry their actual value; if non-emphasized, then they mean the opposite. And we could go on with a multitude of examples.

Secondly, as Glenn has pointed out, we must take heed of the importance and the influence of the verbs "to do" and "to be," where one of the two dominates a particular culture. The logic of "to be" is two-valued; it is an Aristotelian "either . . . or" situation, as reflected in our constructs of "good or bad," "black or white," "young or old," "right or wrong," "true or false," etc. The logic of "to do" is multivalued: a person can do a thing in a great variety of ways ranging from very poorly to very well. Thus, a person, or a group, or a nation, showing a prevalence of reasoning in terms of the verb "to be" shows universalistic patterns of thinking, that is to say, a belief that universals—general concepts—do exist independently. A person, or a group, or a nation, showing a prevalence of reasoning in terms of the verb "to do" shows nominalistic patterns of thought, that is to say, a belief that universals are only convenient name-tags or categories, arbitrarily devised and subject to verification through experience. This differentiation leads Glenn to the most challenging interpretation of the "Metro" (the Paris subway) and the "El" (the New York subway) I have ever encountered—and I believe he is right. The "Metro," he says, is based on a universalistic concept: to be a means of transit for a whole city, a collective entity; therefore, it serves all parts of that city equally. The "El" is
based on a nominalistic concept: to do the greatest good to the greatest number of people where the greatest need shows; therefore, it lacks comprehensive coverage of all areas of New York. 25 In the same line of unit of analysis, one could point out the great emphasis put on idiomatic use of the verb "avoir" ("to have") in French, when English stresses "to be." "To have" reflects the French obsession with ownership, property; "to be" reflects the Anglo-Saxon obsession with status.

Thirdly, even though patterns of thought can be seemingly infinite, it is possible to classify them into broad categories, as Pribram has done for the patterns of reasoning. In Conflicting Patterns of Thought, he identified four main patterns:

1. Universalistic reasoning: leads to the knowledge of truth, proceeding from the general concepts (universals) to the particular; universals have a reality per se. This is mostly the French pattern of reasoning.

2. Nominalistic reasoning: general concepts have no reality per se, they are labels; reasoning proceeds from the particular to the general. This is mostly the Anglo-Saxon pattern of reasoning.

3. Intuitional (organismic) reasoning: stresses intuition rather than systematic reasoning; the relationship between general and particular is similar to that of biological organism and the component cells. This is mostly the German and the Slavic pattern of reasoning.

4. Dialectic (Hegelian) reasoning: the premise is the same as that of universalism, but comprehension of the nature of the phenomena is to be achieved with the aid of concepts adjusted to the contradictions of the antagonistic forces at work in the universe. This is mostly the Marxist-Hegelian pattern of reasoning found in Communist countries. 26

Fourthly, unit of analysis forces concern for connotation. Earlier in this paper, the importance of connotation was stressed. Glenn called attention to the fact that, in the formation of names of sets or classes, two orientations can be found: one, extensional, close to actual experience, reality; and the other, intensional, close to abstraction, idea, expectation. Extensional formation, he claimed, indicates nominalistic patterns of thought and multivalued logic. Of course, both types of formation exist in most languages, but some exhibit some areas with a prevalence of one type over the other. 27

Hayakawa has magistrally illustrated this thesis in his study of words of popular songs and jazz songs. By studying the theme of
love and its treatment in popular songs and in blues songs, he discovered that (1) the lyrics of popular songs always idealized people and situations; that this led to frustration, disappointment, and self-pity; and (2) the lyrics of blues songs always had a down-to-earth approach, a realistic look at the facts of life; that this led to tough-mindedness and folk wisdom. He concluded that "The blues tend to be extensionally oriented, while popular songs tend to exhibit grave, even pathological intensional orientations." 28

We have yet to go a long way in understanding the full nature of meaning. At least, linguists now agree on the importance of meaning in the field of ethnolinquistics. Effective communication between culturally different groups can best be achieved, as Glenn suggested, by becoming aware of the correlations between the patterns of thought and the patterns of expression by these groups. Awareness, Vygotsky has taught us, is best arrived at through analysis, provided this analysis does not destroy the unit or the semantic whole. Analysis of units of meaning deals with words, or groups of words, or idioms, relating concept and conception, differentiating between denotation and connotation, keeping as points of reference an individual's or a group's cultural heritage, their use of verb clues ("to be" and "to do"), and the prevalence of a particular type of reasoning pattern. Katz and Fodor have demonstrated fully that strict reliance on patterns of expression, that is, on clues provided by syntax alone, is not possible; nor is "setting" a sufficient indicator of meaning.

I do not wish to say that the establishment of better international communications is an easy task, but I wish to show that these communications can be made more effective and that some techniques, such as Vygotsky's unit of analysis, do exist and can be used without much difficulty. One element, however, cannot be supplied by any semantic theory: the willingness to make use of what already exists and to persist in our efforts.

NOTES


2. Ibid., p. 47.


5. Ibid., pp. 50-51.


7. Loc. cit.

8. Loc. cit.

9. Ibid., p. 166.

10. Ibid., p. 167.


13. Ibid., p. 58.


15. Ibid., p. 59.

16. Ibid., p. 60.


19. Ibid., p. 33.


24. Ibid., pp. 55-56.
25. Ibid., pp. 53-55.

