COMMUNICATION AND LANGUAGE

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But Socrates, I have no way of telling you what I have in mind, for whatever proposition we put forward goes around and refuses to stay put where we establish it.

Plato

This essay is an argument for the establishment of a semiotically based study of communication as the central activity for all those having a theoretical interest in language.* Essentially the assertion is that the contemporary approach to the theoretical study of language, which places the search for a linguistic "calculus" above the more usage oriented "pragmatics" of language, has created a view of linguistics that has for most of this century misdirected many of the best minds in the field.

Three areas of scholarly concern are central to this line of argument. The first is semiotics, whose aim it is to associate signs with meanings, not with material objects nor with mental ideas, but with meanings as they shape our dialogues and permit the effective interpretation of our experience. The second is hermeneutics, the open-ended approach to questions of meaning that guides our understanding of dialogues to their most compelling, their most meaningful conclusions. The last is pragmatism, not in the work-a-day sense of practical behavior, but as a philosophical position that gives to human interaction that spirit of democratic interchange which must be present if thought is to acquire meaning in the broadest possible context.

It will be noticed that three terms—system, method, and truth—are

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not concerns of this dialogue. Their exclusion is purposeful. It may well be that truth is knowable, that it is systematic, and that there is a method by which truth and its system can be extracted from nature. Nature, however, has not as yet given up her secret, and until she does there will continue to be a need for dialogue. The position taken here is that pattern is a term less confining than system, approach more flexible than method, and agreement is more useful that truth.

The alternative to this kind of semiotic, pragmatic interpretation (and an alarming trend in contemporary academia) is a progressively narrow specialization within the scholarly community, with the result that scholars are less and less capable of making meaningful contributions to public debate. What better way to silence intellectuals than to require them to spend their careers with their eyes pressed to a microscope or perusing a medieval text for *hapax legomena*, speaking only to themselves in the jargon of their specialization?

While there will always be a need for specialists, and a significant segment of the academic community will always be drawn toward specialization, there ought also to be available in academia a mode of broader intellectual concern that gives shape and voice to the whole. A major goal of this essay is to argue that the study of communication is one such activity. How does the nuclear physicist tell the neuroscientist what he knows so that the latter can in turn offer to the psychiatrist explanations of those mechanisms, which when explained to a patient, can make him or her aware of the causes, and perhaps the cure, of some deep-seated fear, a fear that once understood can permit the return of that nuclear physicist to the laboratory with a renewed capacity to contribute to the whole of the dialogue? The participants in this cycle of communication will make themselves understood to the degree that what they are trying to express can be made meaningful within the context of the dialogue.

Within the framework of this terminology it will be argued that any effective study of the human capacity to communicate is necessarily going to begin pragmatically and proceed by means of the interpreta-

tion of signs and their use to a fuller understanding of our existence in the world. It will be argued that since there is no empirical reality to signs nor any tenable description of them that can be extracted from our knowledge of the mind, our better understanding of this key aspect of thought will not be advanced by yet further application of the principles of the natural sciences to their study. The idea of a cat on a mat is not a cat on the mat nor a cat in the mind, and if the sign that is used to talk about it is going to be understood it will be so by virtue of a dialogue whose understanding is derived through interpretation.

In taking this view of semiosis and the communicative processes that bring it into existence, the study of language can be seen as passing through three broadly conceived periods—periods that can be defined by the questions they ask of the object of their investigations. The modern development of the study of communication has moved from asking "What?", to asking "How?", to asking "Why?"

In its beginnings, the scientific study of language disassociated itself from the prevailing religious explanations of linguistic activity by focusing its attention on *what* constituents comprised language and by means of *what* observable laws they were arranged. After a generation of descriptivist analyses, it was not surprising that the attention of the scholarly community should shift in mid twentieth century from simple behaviorist accounts of items and their arrangements to a methodology that asked *how* meaningful sentences came to be generated.

Given this interpretation of the process by which the study of communication has unfolded thus far, I will attempt to argue for the necessity of pushing beyond the self-imposed limits of structural and generative linguistics to ask a further question of the communicative process: *Why* does language happen?

The historical context in which this process unfolded began with the opening up of new worlds in the sixteenth century. As the description of innumerable new languages became necessary, they were initially shoe-horned into the grammatical categories that had been established for Latin. Soon, however, as seen in Rodriques' *Arte de Lingoa de* *Iapam*, written at the beginning of the seventeenth century and von Humboldt's studies of Indonesian in the nineteenth, languages began to shape their own descriptions. It was here that the traditional quest for accurate linguistic description joined the desire for definitive scientific explanation.

In the natural sciences, empirically based discoveries brought as their reward a clearer knowledge of the material universe and gave to technology better and better means for the control of things. In the study of language, once it was established as a behavioral science, the matter was otherwise. The clearly articulated general descriptions of language made during the first half of the twentieth century by Ferdinand de Saussure and Leonard Bloomfield gave precise structural descriptions, but never overcame the drawbacks inherent in their empiricism. Their static, descriptivist methodology was unable to answer the question of *how* languages function.

Grammar, as the explanation of how a language creates meaning, had attracted the attention of a host of highly capable scholars even before the end of the structuralist period. Jakobson, Martinet, and Pike are just three whose scholarship gave broader scope to the study of language than the strict descriptivism of their day. It was the Cartesian insights of Chomsky, however, that breathed new life into the study of language. His generative-transformational approach to language, with its search for the mechanism by which language carries out its innate functions and the universals of grammar that permitted linguistic competence, moved our comprehension of language far beyond that provided by the structuralists. It is, itself, however, not without flaws.

In the open paragraph of this revolutionary *Syntactic Structures* (1957), Chomsky writes:

Syntax is the study of the principles and processes by which sentences are constructed in particular languages. Syntactic investigation of a given language has as its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language under analysis. (p. 11)

Summing up his discussion of the productive aspects of language, Chomsky describes language as being free from the control of external stimuli or internal states, as are the pseudo-languages of animals. Rather it is "free to serve as an instrument of free thought and self-expression." It is a finite set of rules for creating infinite expressions, "constrained only by rules of concept formation and sentence formation." (Chomsky, 1966, p. 29)

In establishing the concept of competence in generative grammar, Cowper quotes S. Jay Keyser's description in the late 60s of the grammarian's task as that of "trying to figure out what it is that people act as if they know." The job, she goes on to say, is not just to describe what people say (which was what the structuralists did), but to determine "what might be the knowledge that permits them to perform their linguistic behavior." (Cowper, p. 2) While rarely attempting to present the apparatus by which speakers behave, there seems to be an implicit assumption that, given an idea to express, the speaker applies the rules supplied by his or her linguistic competence to the performance of the task at hand. But clearly this is not a task that can be carried out in the manner of a machine—even a machine more efficient than today's fastest computer. Such a machine could quite reasonably look up words in a semantically sensitive lexicon and apply rules of the sort found in the most sophisticated transformational grammar books. But look words up for whom? Apply rules for whom? At some level of consciousness, this machine must also make contact with whomever, or whatever, resides on the far side of the machine, presumably in the brain, with its synaptic activity, and relate that activity to the lexical items and syntactic structures that serve as the vehicle for communication.

If we take Chomsky's position that linguistics is a biological science (Chomsky, 1976. *Reflections on Language*. Temple Smith, p. 123), this device can be assumed to have the capacity to convert biological brain functions into linguistic behavior. It does something very much like "translate" the synaptic activity for such ideas as "student" and

"boredom" and the passive voice and past tense and transforms them into *The student was bored*, and then, by means of an identical device, or an analogous one, someone else performs the function in reverse to allow whomever it is that hears sentences, to analyze the sentence and store the information in the brain in its proper place.

That the example is structurally ambiguous, and might well be reported as a passive going out and be received as a copula plus a participle coming in, is purposeful. It suggests that what might be heard as a comment about the existential state of the student could have been a comment on the effectiveness of her instructor. The point is not simply to affirm the complexity of language, but to suggest that the device, as a translating device, has the same flaw as a translating machine—it doesn't know what it's talking about.

Can devices even begin to perform the tasks required of communication? Imagine yourself (actually, your brain) interacting with an immensely powerful computer. Conceptualize how you feel. Will the computer monitor display a well-formed sentence specifying your emotional state? I think not. Devices don't do that sort of work. They don't convert mental states into linguistic output, nor do they generate wellformed formula, such as $S \Rightarrow NP + VP$, from the shape of your thoughts. They might reasonably translate neural activity into observable behavior, the way the brains of animals do. But the assumption of generative grammar seems to be either that the brain conceptualizes and the device translates the concepts into sentences, or that the device reads synaptic activity and translates what it reads into sentences. The first alternative is the reverse of the perennial Cartesian question; it asks how to translate physical into mental activity, and then it asks you the more conventional question of how to translate concepts into the physical activity of speech. Neither of these questions is answerable in Cartesian terms.

The second alternative leads to an even larger problem. If something conceptualizes, can it be taken to be a tool? It seems to be something very much more like a human being of some sort. And a human being, if endowed with the capacity to communicate, operates

within contexts on the basis of beliefs and desires, and is certainly not a tool that functions according to well-formed rules.

It is the position of this essay that what Chomsky is looking for in the allusive instrument that he places somewhere between the brain and the voice box of the competent native speaker is in fact located outside, and to a large degree independent of the speaker, in the communicative processes of the community.

Chomsky's device might better be thought of as an aspect of shared human experience that enables "understanding." Which is to say it is not totally innate, because it could not come into existence with such things as an awareness of contextual ambiguity; nor is it totally mechanical, since machines don't know how either to conceptualize brain messages or to verbalize concepts. What it seems to be able to do, and what it somehow must do, is to understand in some kind of Wittgensteinian, *verstehen*, way, which is to say, "it can go on." It can take synaptic activity and go on to form participles or passive voices. It can hear utterances and go on to assign them, perhaps, to locations in the brain. It must do something like this because nothing else does. And if it does do these tasks, it is misleading to talk about it as if it were a pre-programmed instrument.

Perhaps Locke was on the right track after all when he spoke of "the Understanding." Certainly something analogous to the understanding—that part of us we share with our language community—is influencing the vocal organs to say what we want them to say and the brain to store the data we hear.

Ultimately the weakness of the tool analogy is that it obscures the possibility of this second interpretation. I would not want to argue, as do certain of the postmodernists, that "languages speak people," but at the same time I find it difficult to accept the Chomskyan idea that the biological brain, with no awareness of context, can with the help of a device of some sort generate meaningful utterances.

For similar reasons, the idea of universal grammar creates an uneasiness. The question that arises in this context is, how would one go about

verifying the assertion that something posited as universally present in human language is, or is not, functioning in a specific language?

Let us posit the universal grammatical rule that languages coordinate and then investigate something that looks quite like modern Japanese. It has constructions such as *inu to neko* "dog and cat," and *Gohan o tabete, terebi o miru*, "[Someone] eats dinner and watches television." Now suppose that you are told that the particle *to* is a post-positional meaning "with," in the sense of accompanying, in a not totally equal status, and that the verbal ending *te* has a vaguely adjunctive function similar to the present particle, so that the first construction might reasonably be interpreted as "a cat with a dog" and the second as "While eating dinner, [someone] watches television," or "After eating dinner, [someone] watches television." Given these translations, it would seem that we are obliged to admit that either our universal grammatical rule is incorrect, or the Japanese-like encoding method under examination lacks an aspect that is universal to human language.

If conjunction were universal and if there were an example that presented prima facie evidence of the sort suggested by the Japanese-like example, what empirical data could be evinced to resolve this matter?

Clearly the only empirical model that will validate a rule of universal grammar is one that describes the mechanisms in the brain that generate linguistic behavior, e.g., when neuron X is activated, a sound (as opposed to a gesture) is produced in the language being spoken.

The problem seems to be that the system is hard put to find a way to map neurological functions into grammatical terms, even given, an ingenious device as the instrument of translation. It is conceivable from the example above that human synaptic activity may lack the means to conjoin units. Perhaps it can produce "X after which Y" and "X concurrent with Y," but cannot "conceive" of something so mundane as "X and Y." The performance of conjunction may well be a degenerate aspect of Indo-European. If so, how would we ever discover, through our theoretical hypotheses, that the brain has no need for anything as simple as "X

and Y"?

The generative grammarian seems here to be starting the process of mapping having only a sketchy view of the real estate of the brain onto which the model will be mapped. This putting of the cart before the horse could be avoided if, rather than constructing abstract models to explain the relation between syntax and an unknown mechanism, scholars of language attended to the task of relating the use of language to the contexts in which it occurs. Then, any future discoveries relating to the functioning of the brain, rather than having the potential consequence of proving our hypotheses invalid, would serve to give firmer support to our semiotic understanding.

Science in a social setting creates several fundamental problems. Popper's well-taken point in The Poverty of Historicism that while in chemistry analyses can yield laws upon which predictions can be made and technological innovations established, the social sciences possess no such power. The most careful analysis of the French Revolution teaches us nothing about the Russian Revolution, nor does the study of both offer us any hope of preventing, or effecting, the next revolution. The generative grammarian's assertion that his or her science will throw light of the cognitive processes or the biology of the brain is flawed by his or her incapacity to map immaterial concepts such as the NP onto the physical reality of the human brain. If you accept the theoretical advantages of Descartes over Locke, you have to live with its drawback, your "device of some sort" must perform the impossible alchemist's trick of turning neural impulses into governance and binding. And as one gets further and further into the complexity of the task, one gets further and further away from the question, "Why?"

If, given these problematic aspects of the generative grammatical view of language, we take grammar as an aspect of *why* language is able to communicate, a significant refocusing of attention takes place. To begin with, it may not be with language that we what to start our inquiry. John Deely's reading of the central authors of the modern logico-linguistic developments in contemporary philosophy brings

some important ideas to the fore. He looks at Frege, the early Wittgenstein, Russell, Carnap, Ayer, and Chomsky and finds that they were mainly intent on discovering "a way to assert a one-to-one correspondence between language and mind-independent reality and to say that the only time that language is really working is when is conveys that correspondence."

Against this view he finds that much of what we talk about and think about in everyday experience is unable to be reduced to any such physical reality. He continues:

There is no atomic structure to the world such that words can be made to correspond to it point-by-point. Nor is there any structure at all to which words correspond point-by-point except the structure of discourse itself, which is hardly fixed, and which needs no such preestablished structure in order "to be what it is and to signify as it does." (Deely, 1990, p. 18)

He goes on to ask: What does it mean to talk about physically nonexistent things as if they were existent? And from there we can go on to ask: Why should non-physical things obey physical laws? While Chomsky wants to take language as a function of our biology, his effort to avoid the mind-body problem leaves him with a set of grammatical terms (noun phrases and verb phrases) that cannot in any convincing way be shown to be mappable onto the brain. What would a biological noun phrase look like?

Broadly speaking, contemporary linguists take one of two positions with respect to language: the materialistic or the mentalistic (cf. Bolinger, 1975, Introduction). Both present shortcomings that are all but insurmountable. Materialism requires you to give up the possibility of there being a clear distinction between human and artificial intelligence, with the consequence that to know cannot be translated into knowing how; while mentalism gets you all tied up in the mind-body problem—how does one get from thought to action?

There is, however, a third possibility; pragmatism. While it does not, nor does it claim to, offer the final answer to all philosophical questions, it does give breathing room to get one's bearings. Through

dialogue one can begin to look at the problems that the idea of language presents without committing oneself to a preconceived system. By broadening the scope of the dialogue to include the observations of other points of view, one can discuss the over-arching question, "Why does language communicate?"

Pragmatists find neither sounds nor concepts basic. They instead build their understanding of language upon the idea of a triadic sign, a sign whose meaning is formed not by the material objects or conceptual elements somehow related to biology, but by the needs and intentions conferred upon them by experience.

To Peirce's triadic view of semiosis can be added Wittgenstein's insights into language as a game, and Gadamer's vision of hermeneutic horizons. These modes of thought are not hypothetical constructs to explain behavior, but ways by which we can effectively interpret communication. Gadamer, here, tells us that language is a medium of communication through which we live our lives more effectively. It is a game played with intentions, in contexts, and according to rules established by the community.

In discussing games, both Saussure and Wittgenstein use the analogy of chess, and certainly much of value philosophically can be gained by following this line of thought. However, I would like to suggest that a more appropriate type of game in this linguistic context is the type that children play—leap frog or jump rope, for example. These activities have more in common with human communication than do more complex, goal-oriented contests. In childish games we follow rules, we take turns, and we become accomplished at them as our talents permit. In sum, we find out who we are.

Gadamer makes this point in his argument against the usefulness of the generative device analogy:

Language is by no means simply an instrument, a tool. For it is in the nature of the tool that we master its use, which is to say we take it in hand and lay it aside when it has done its service. That is not the same as when we take the words of language, lying ready in the mouth, and with their use let

them sink back into the general store of words over which we dispose. Such an analogy is false because we never find ourselves as consciousness over against the world and, as it were, grasp after a tool of understanding in a wordless condition. Rather, in all our knowledge of ourselves and in all knowledge of the world, we are always already encompassed by the language that is our own. We grow up, and we become acquainted with men and in the last analysis with ourselves when we learn to speak. Learning to speak does not mean learning to use a preexistent tool for designating a world already somehow familiar to us; it means acquiring a familiarity and acquaintance with the world itself and how it confronts us (Gadamer, 1976 pp. 62–3).

Language for him is an aspect of our very being, not an innate capacity, but something we grow up into.

There are, of course, drawbacks to this view of language: it is nonmethodological and untried. But then, if the materialists and the mentalists are even close to correct, the universe (or the human mind) is already systematic, and therefore not in need of another system with which to understand it. If they are wrong, however, we had better get used to the idea of living in a world like the one that Deely finds, a world where the only thing that makes sense is what we are able to create by playing out our roles in our dialogues.

Granted, it would be more convenient to assign correct representations of things without being asked distracting questions, but the demand for neatness and the avoidance of inconvenience may not be the central aims of philosophical inquiry. Is it possible that an old joke has some relevance here?

This guy's walking down the street late at night and sees another guy on his hands and knees under a lamppost searching for something.

"What are you doing"

"I'm looking for my keys."

"Let me help. How did it happen?"

"Well, I was walking through the park over there and I took my handkerchief out to blow my nose, and when I put it back in my back pocket they were gone." "But if that's what happened, why aren't you looking for you keys over there?"

"Don't be stupid," says the other guy, "It's a hundred times easier seeing things over here where it's light."

Of course no scientist is half so silly as the guy who lost his keys, but there still remains the possibility that another joke could be told about a philosopher, where the punch line is, "Don't be stupid, I'd never find the answers to the questions I'm interested in if I look for them in that can of worms called life. I'm going to keep looking over here in the clear light of logic."

A pragmatic semiotic brings into its search through our can of worms a handful of terms that have over the last three or four hundred years been considered by most philosophers of science to be strange bedfellows.

intention	intuition	abduction
context	science	induction
knowledge	history	deduction

And having opened up the dialogue to all these aspects of investigation, it begins to try to make sense out of experience without imposing a predetermined form on the answer.

To put our discussion immediately into the context of communication, let's begin with the structurally parallel sentences:

- (a) That was all the baloney I could eat.
- (b) That was all the baloney I could swallow.
- (c) That was all the baloney I could stomach

Where among the atomic units or within the deep strucure of the second sentence can the idea of disgruntlement be assigned? And more importantly, if the grammar cannot specify where the semantic component is to be assigned, how can the grammarian ever expect to verify the validity of his description? In *That was all the baloney I could stomach*, the verb can be unambiguously related to some sort of dissatisfaction, but with "swallow" there must be a context. In *That was all the pâté de*

native speaker's competence would reject or one he would accept, on analogy with sentence (b), as a metaphorical use of pâté de foie gras for a certain social set that the speaker was unable to endure any longer? The generative grammarian, by rejecting the concept of analogy, has no way to assign meaning to *That was all the pâté de foie gras I could stomach*, and therefore no grounds to say that it is a sentence in English—this in spite of the requirement that a grammar must produce all the grammatical sentences of the language and no ungrammatical ones.

Let's take another simple example: an exchange between a rather goofy looking young man and one of Salinger's most delightful creations, Ginny, in "Just Before the War with the Eskimos." He begins:

"Friend of the jerk's?"

"We're in the same class."

Ginny hasn't said "no." She also hasn't limited her activity to the construction of a well-formed sentence. She has said exactly what she wanted to say, and in doing so has "generated" her piece of the dialogue by applying rules that are in no way limited to the rules of well-formedness.

It is not enough to say with Cowper that circumstance intrudes upon system in the sentence:

Please don't shut the window on my [loud scream]. (Cowper, p. 2)

One is obliged to go on and ask why we say what we say. A linguistic description that fails to supply something like an answer to that question is like a sports commentator who, when asked to comment of a football game, offers you the rule book and the roster of players. Sure enough, the rule book and roster account for all the plays—except of course those that end with a loud whistle that announces some infraction and its penalty—but it ignores the playing of the game. It doesn't tell us *why* the Cowboys decided to pass on third and two.

Both materialist and mentalist linguists have, like their logicalpositivistic forebears, set aside all the "connotative" aspects of their task to focus on what is important. Having done so, they find themselves creating more and more complex sets of rules to account for the simplified thing you've isolated in order to analyze. Yes, the use of language is complex, but it does not follow, as these linguists would argue, that a systematic disregard of that which is fuzzy will necessarily yield clarity. It is doubtful that a better understanding of a forest can be gained by beginning one's investigation with the application of a defoliant.

When Chomsky argues for the isolated study of syntactic structures on the basis of an anatomical analogy (cf. Geoffrey Horrocks, 1987. Generative Grammar. Longman, p. 9), he misstates the issue. The study of the separate parts of the body by distinctive methods, rather than the study of the whole organism, has validity in medicine. Neurologists study the nervous system, and cardiologists, the heart, each with their several methodologies, and in the end they both come to fit into the larger picture of the human organism. This does not, however, support the claim that a scrupulous study of, let us say, the brain is a way to discover how the body works. Yet, in all of the work done by the generative grammarians, there has been the assumption that the study of their selected "organ", syntax, will allow them to explain "the principles and processes by which sentences are constructed in particular languages." (Chomsky, 1957, first sentence) For the analogy to work, a fastidious study of the human brain would have to reveal the principles and processes by which Charles Hockett (or some other hypothetical, native pipe smoker) lights his (or her) pipe, or at least hold out some hope of being able to do so. There is serious doubt that the study of the brain—or perhaps here we might better refer to the mind—will yield the principles by which a smoker selects the means by which he (or she) lights his (or her) pipe or the processes by which the match is struck or the lighter operated or a straw thrust into the fire to be ignited and then held at just the right distance over the bowl or, for that matter, why such behavior should be found pleasurable.

When Ginny says, "We're in the same class," she is playing a language game that includes the history of her experience with her classmate, the anticipated reaction of a young man who is her classmate's older brother, and her own desire to be understood by him to be who she is. And the principles and processes by which she constructs her reply are in no small way influenced by these facts. That a subject, stative verb, and adverbial phrase can in principle be processed through the brain and out of the voice box in answer to questions is certainly an important linguistic fact. That knowledge would, to follow Saussure's insight, in all likelihood be a natural consequence of a clearly articulated semiology, or in even more fruitful terms, the result of a semiotic interpretation along the lines laid out by Peirce. But is this all?

And so we return to the over-arching question of how one begins, under such circumstances, to say anything useful about communication. Obviously, we need to say something about signs, something about their relationship to what is being signified, and how what is being signified is perceived. The last element is purposely stated in such a way that one can't be quite sure who it is that is doing the perceiving.

To this end, I would like to suggest a schema by which language, and perhaps the broader aspects of our experience, may be put into clearer focus. I conceive of this schema as a means to unify human intuition, empirical fact, and the historical reality of memory—not the memory of computer banks but a memory organized more casually, one able to retain all the richness and ambiguity of a culture's corpora, and yet capable of generating that sense of association that is the source of metaphor and its less attractive sibling analogy.

The aspects of communication contribute to comprehension in a variety of ways. The schema below adapts Peirce's categories to a display of the three major forms of dialogical input:

		time	aspect	function
(1)	Icons	Future	Possibility	Select Topics
(2)	Indices	Present	Actuality	Relate Events
(3)	Symbols	Past	Destiny	Assign Rules

The iconic aspect of communication is imbedded in our perceptions

and enters into the dialogue as no more than ideas. It presents, but does not necessarily give direction to, the topic:

I'm hungry.

There's a dark cloud.

Dogs have fur.

The indexical aspect of communication points to an event whose occurrence in the world has consequence. It relates events both in the sense that it brings elements of the world together and in the sense that it relates them to another:

I ate a sandwich.

The storm is moving across the countryside.

The dog chased the cat.

The symbolic aspect of communication associates the utterance to more than the immediate context of the event, it places it within its regulated, social, and historical setting:

I love ham and cheese sandwiches.

He thinks it's going to rain cats and dogs.

Dogs shouldn't be allowed to chase cats.

Peirce's use of the word "destiny" here for the symbolic is perhaps a bit melodramatic, but it carries with it the idea of that which propels us through the world. The Buddhist term *karma* is perhaps closer to the idea, but certainly further from Peirce's intention.

It will be noticed that these categories are not in any significant way related to grammatical structure. They require the user and interpreter of language to focus his or her attention on the function, not the form of the dialogue. Understanding happens triadically when intentionally selected topics, about contextually related events, are articulated by means of conventionally assigned rules.

There is no beginning or end to this dialogic process in human experience. We enter and depart, Gadamer tells us, *in medius res*. And while there is no hard-and-fast, step-by-step progression through the process, it is convenient to describe a dialogue by beginning with what is heard, or more precisely what is listened to—where the idea of

listening focuses on the active, participatory nature of all human involvement in the process.

As a consequence of having listened, we begin to organize, to make sense out of the input. To the extent that we organize effectively we can say that we grasp what we have listened to. The word "grasp" is selected with some care. It is an act that this schema wishes to distinguish from the concept of understanding, a term having a more overarching use.

With what is perceived, digested, and comprehended, the dialogic function is at mid-point. There remains the integrative aspect of the dialogue, the contribution of the listener to the flow of the dialogue. This begins with the organization of what is grasped into something that can be understood—an aspect of the process significantly different from the first act of organization in so far as it looks forward rather than backward and taxes our capacity "to go on." Then on the basis of what has been grasped and given new shape, the dialogic process arrives at the end of one step with the act of saying. A second round of dialogue begins when what is said is itself listened to.

What is noteworthy about this kind of description of our being in a dialogic community is that it consists of two willfully interactive kinds of organizational activity. The first is the act of organization that gives us a sound grasp of what is perceived and is fundamentally analytical. It is the reasoning by which we create our explanations of things. Were the process to stop here, however, dialogue would end. Ideally, we would have the correct explanation of all that had been perceived—perhaps with one final, metaphorical "Ah, yes, I see." But such seeing, such grasping, it not yet understanding.

The most significant thing about the dialogical process is its openness to interpretation. While dialogue is an endless process that generates ever new and, with luck, richer understandings, there is always the need to take the product of one's dialogues and reenter it again into the process, to look again at what has been said—not only to interpret experience, but also to interpret its interpretation, and act upon it.

This is the hermeneutic circle. It is predicated upon the fact that no statement, no observation, can be taken as verified until it has been accepted into the dialogue, just as no argument, no matter how eloquent, can be considered true until it has been held up to experience. And that all verification and all truth are, when all is said and done, best taken as links in the chain of our ever evolving understanding.

When discussing the kind of holistic, non-disciplinary, hermeneutic interpretation of experience outlined above, as it covers the whole of our being in the world or focuses in on the linguistic face of it, the circularity is often misunderstood. Some scientists see it as a circle that diminishes to some single, predetermined point that is the center of attention, while others, perhaps most often the more orthodox, see the circle as spreading out to the horizon. The hermeneutist, however, prefers to see the circle as going around and around from experience to its interpretation and then from the interpretation back to the experience, in a quest for a richer understanding. The circle need not possess an exact center nor a delimiting horizon, since its aim is not the solving of puzzles or the specification of limits so much as a useful interpretation and thus, ultimately, an understanding of experience.

And so we're back to the epigraph. As with Socrates, everything should be looked at and talked about from every angle, so that whatever proposition we put forward goes around and refuses to stay put where we would, through our prejudices, attempt to position it. We should do this lest we narrow our horizons and settle for the parochial pleasure of saying "Ah!" when we might better be looking towards the furthest horizon of our experience and then towards its uncertain center, shifting our attention from what we listen to to what we say, and then back again in a never-ending game of trying to discover who we are.

Unquestionably the search for a systematic examination of language should be continued. Who would legislate the appropriate limits of scholarly inquiry? But to stipulate that to be accurately understand language must be examined exclusively with the aim of determining its units and its system, or to say that a single rigorous technique must be followed in the study of utterances for the sake of control over the data, is to slip into a sort of authoritarianism that may well narrow the study of language to the disadvantage of scholarship.

For a hermeneutic pragmatist, the experience of, say, Donatello's "Young David" is not so much a matter of a type within systematizable art forms as of a variety of experience. The scientific philosopher will argue that, of course, "Young David" has disconcerting implications, but that fact not withstanding, our understanding, and therefore out appreciation, of it must be grounded on a knowledge of the facts derived from its analysis. And here I find fault with the scientific use of "understanding." From one prospective, I understood Donatello's masterpiece the moment I saw it. It was the complexity of the understanding that required examination. What I had failed to understand fully may well have been not the element of the object viewed, but the prejudices with which I viewed it. My Puritan upbringing required that I find inappropriate the union of the erotic and the genuinely aesthetic. What was Donatello saying? How is what he was communicating to be understood today? And how does a scientist approach these questions? Can he or she explain the artist's ability to express the David he saw in his mind's eye, and our capacity to look at it with an understanding that fits it into the community of our experience?

Like works of art, utterances, as they find their place in dialogue, have their complexities. They have histories, ambiguities, implications, purposes, and expectations in the world. And just as with a work of art, the understanding of them is not the result of a more and more detailed analysis—no matter how accurate and profound—of those elements of the phenomenon that possess a pattern. The structural similarity of *That's a shame* and *That's a bitch* is trivial compared to how the latter carries meanings that touch not only upon our ethical prejudices, but also our culturally influenced, sexist, modes of metaphorical expression.

At this point the materialist and the mentalist may well be saying, "You see! The hermeneutic approach is filled with complex, subjective factors running every which way, going around, and refusing to stay

put where we want to establish them, and end up being far more confusing than the commonsensical premise that language is systematic." But let's look again. The last forty years of generative grammatical scholarship has demonstrated, if it has demonstrated anything, that the scientific analysis of natural languages has resulted in a bafflingly complex and as yet incomplete explanation of the phenomenon under examination. Which is to say, it has shown us that language is what a hermeneutist takes it to be, a puzzlement. If this is so, is it altogether irrational to begin where scientific inquiry has placed us, with a view of language that specifies it to be a complex historical, aesthetic, phenomenon whose more integrated understanding will be acquired not necessarily by analysis but by a holistic broadening of our understanding of the world? Is it not possible that we speak for much the same reason that we are able to commute to work everyday, because we have learned to understand the world and know its whys and wherefores?

We cannot state with absolute assurance that language is not fed into our minds by some methodical software, or that it is not part of the systematic hardware of our mentality. Nor do we know if it functions unsystematically in the hardware (like a nest of ants wandering around pretty much hit or miss in search of food) or in the software (like the Tokyo subway "system" that is a unique, learnable, easily alterable set of ground rules for the transportation of people, relying only on memory and the ability to improvise when things gang agley, as they do so aft), or, indeed, if it is a complex combination of all these arrangements.

The pragmatist does not find it intellectually necessary to assume that human behavior must be systematic, or reducible to a precise system through methodological analysis, in order for it to be grasped. There are thousands of learned Chinese who understand quite adequately their written language. It is essentially arbitrary, with each ideograph learned as a result of individual attention. While there are hints as to a character's sound and semantic class, there is no formula for its comprehension. But this does not require one to assume that character comprehension cannot be acquired, which it obviously is, or that

when it is achieved the comprehension is the consequence of the application of some unconsciously known, innate system that will be discovered once we've analyzed the data carefully enough. It may mean nothing more than that a human being can recall past experience and articulate it in new ways through analogy, influenced more by practical, aesthetic, and spiritual concerns than methodological ones.

A perennial problem for both Bloomfieldian and Chomskyan linguistics has been metaphor. The dualism of the empiricist's subject-object, or the rationalist's mind-body, leave the ambiguity of metaphor off to one side as something best discussed by non-serious thinkers. The hermeneutic pragmatism presented here, with its triadic semiotics, holds out the possibility of locating metaphor more centrally in the process of communication.

While Peirce rarely touches upon the topic, his categorization of signs into icons, indices, and symbols allows for a clearer understanding of this everpresent aspect of language. Metaphors arise often in the shift from an indexical to a symbolic order and leave traces when the conventional usage assimilates itself only partially into the symbolic paradigm. Some frequently observed examples: enter, in its metaphoric sense with computers has no counterpart entrance; one does not hear, *His hard disk crashed following the entrance of the command; high, as a metaphor for being affected by marijuana lacks height, as in *I was really surprised at his height after just one joint. And similar phenomena can be seen in more traditional vocabulary. The word labor as it has come to be applied to the pain of child birth, take on certain of the syntactic associations of pain; so that one is in labor, while there is in that context no adjectival form laborious.

This returns us to the issue of language as a tool and its weakness as an analogy. Since the brain cannot innately know how to structure an utterance in the way appropriate to a new context, the processing must be carried out at the level of the device. This is quite reasonable, but for this to happen we are obliged also to accept the fact that the device is not really a device—since even the most complex computer is

unable to understand whether the utterance it is transmitting is saying something relevant or not. Metaphors, even many of the deadest (such as this one, which happily takes a superlative), require either the unlikely possibility that the brain be innately familiar with the culture it is born into, or that the ambiguity be comprehended by some device, mysteriously more complex than a tool, that understands what the metaphor is driving at.

A semiotic view of the issue finds, as the with example *high*, that a triadic categorization of semiosis places "That bookshelf is high," comfortably in the indexical category, when the bookshelf is situated above that which is easily reached. On the other hand, "That cat's high," can be situated both in the indexical and symbolic categories by virtue not only of its making a statement about things in the world, but also making a statement about things that can be high and applying it to the object.

Contemporary linguistists, while having clearly demonstrated the complexity of language, have only rarely given us insights that have not already been observed by numerous philologists, literary critics, and hermeneutists by means of sensitive examination and interpretation. It can be argued that scientific linguists have presented their insights more succinctly than their humanistic colleagues, but succinctness is not of value if it limits the capacity to understand.

The aim of materialist linguistics was the discovery or invention of explanatory systems. This project essentially collapsed when Zellig Harris unexpectedly demonstrated that a rigorously structural approach to a corpus yielded essentially the presuppositions with which the analysis began. The mentalist program, which wants more from the study of language than a rigorous taxonomy and the inventory of arrangements, has invented a powerful system. Unfortunately, to date, of the toilers in this vineyard—perhaps the most successful being Harris' student, Noam Chomsky—none have come forth with a scientific analysis of a natural language that has not been incomplete, frustratingly complex, or both.

In the absence of any convincing demonstration by methodological linguists that their programs are capable, even potentially, of specifying how communication is to be explained, there seems reasonable justification for assuming that human utterances are most usefully seen as works of art, grounded in our physical presence in the world, uniquely produced out of the remembered social conventions, and understandable within the historical totality of our culture.

It has been the goal of this brief essay to suggest some of the reasons why materialist and mentalist linguists alike have been unsuccessful, and why even the generative grammarians—those thought most likely to succeed—are still unsuccessful in their quest for a method with which to speak informatively about communication.

It would be intellectually convenient if the world were understandable on the basis of a verifiable knowledge of its discrete elements and their systematic arrangements. Unfortunately, no scientific methodology or philosophical analysis offers universally accepted proof that such an understanding is possible or even that such a world exists. There seems nothing in the primal nature of the universe that informs us that we ought to take a step back when we observe a bus bearing down upon us at an intersection and the light is against us. This is why Alaskan seals in the nineteenth century stood around and let hunters bash their brains in with clubs.

Without a prior understanding of the nature of such circumstances, which does not become part of a species' or an individual's adaptive behavior until it has experienced such grievous impacts; and without the intention to avoid their consequences—unlike Anna Karenina, who took yet another counter-intuitive course of action—we would have no criteria upon which to base our actions. Since we do behave in ways that presuppose an awareness of the past and the future, any scientific or philosophical method that ignores these factors, or sets them aside in order to maintain its rigor, places itself in danger of not being able to deal effectively with the existence of human beings in the world. It may account usefully for the movement of molecules and, on the basis of that

information, guide technicians in the construction of suspension bridges and computers, but it will not be able to explain *why* Anna threw herself beneath the wheels of a locomotive.

For logical positivists, the radical defenders of objective scientism, to say that Anna's aesthetic choice to end her life is a matter of no philosophical significance is just one side of the coin that on the obverse might reasonably state that nothing philosophers or linguists say has any relevance to the human condition. This silly controversy can be avoided if we take human beings—along with their complex needs to communicate their motivations and intentions—to be of philosophical concern, and philosophy to be a practice that has human motivations and responsibilities.

Richard L. Spear Mure, Mitaka 10 October 1996

Some Basic Sources

Austin, J. L. 1962. How to Do Things with Words. Oxford

Baker, G. P. and P. M. S. Hacker. 1984. Language, Sense & Nonsense. Blackwell

Bakhtin, M. M. 1986. Speech Genres & Other Late Essays. Texas

Barthes, R. 1967. Elements of Semiology. Cape

Beaugrande, R. de and W. Dressler, 1981. Introduction to Text Linguistics. Longman

Bloomfield, L. 1933. Language. Holt, Rinehart and Winston

Bolinger, D. 1975. Aspects of Language. Harcourt Brace Jovanovich

Chomsky, N. 1957. Syntactic Structures. Mouton

Chomsky, N. 1965. Aspects of the Theory of Syntax. M. I. T.

Davis, S. 1991. Pragmatics: A Reader. Oxford

Deely, J. 1990. Basics of Semiotics. Indiana

Eco, U. 1984. Semiotics and the Philosophy of Language. Macmillan

Gadamer, H-G. 1975. Truth and Method. Sheed and Ward

Gadamer, H-G. 1976. Philosophical Hermeneutics. California

Givón, T. 1989. Mind, Code and Context. Lawrence Erlbaum Associates

Goodman, N. 1984. Of Mind and Other Matters. Harvard

Grice, P. 1989. Studies in the Ways of Words. Harvard

Halliday, M. A. K. 1985. An Introduction to Functional Grammar. Edward Arnold

Harris, Z. S. 1951. Structural Linguistics. Chicago

Heidegger, M. 1962. Being and Time. Harper Collins

Hjemslev, L. 1967. Prolegomena to a Theory of Language. Wisconsin

Hoopes, J. 1991. Peirce on Signs. North Carolina

Hunter, J. F. M. 1990. Wittgenstein on Words as Instruments. Edinburgh

Johansen, J. D. 1993. Dialogical Semiotics. Indiana

Jokobson, R. 1990. On Language. Harvard

Kripke, S. A. 1982. Wittgenstein: On Rules and Private Language. Harvard

Longacer, R. E. 1983. A Grammar of Discourse. Plenum

Macdonell, D. 1986. Theories of Discourse. Blackwell

Martinet, A. 1961. A Functional View of Language. Oxford

Merleau-Ponty, M. 1964. Signs. Northwestern

Mey, J. L. 1993. Pragmatics. Blackwell

Nöth, W. 1995. Handbook of Semiotics. Indiana

Palmer, R. E. 1969. Hermeneutics. Northwestern

Peirce, C S. 1958. Charles S. Peirce: Selected Writings. Dover

Pike, K. 1967. Language in Relation to a Unified Theory of Human Behavior.

Mouton

Polanyi, M. & Harry Prosch. 1975. Meaning. Chicago

Putman, H. 1991. Renewing Philosophy. Harvard

Quine, W. 1960. Word and Object. M. I. T.

Rorty, R. 1979. Philosophy and the Mirror of Nature. Princeton

Saussure, F. de. 1983. Course in General Linguistics. Duckworth

Searle, J. R. 1993. Intentionality. Cambridge

Sebeok T. A. 1994. Signs: An Introdution to Semiotics. Toronto

Segerdahl, P. 1996. Language Use. St. Martins

Shapiro, M. 1983. A Sense of Grammar. Indiana

Shaumyan, S. 1987. A Semiotic Theory of Language. Indiana

Stern, D. G.1995. Wittgenstein on Mind and Language. Oxford

Taylor, J. R. 1989. Linguistic Categorization. Oxford

Tobin, Y. 1990. Semiotics and Linguistics. Longman

Wittgenstein, L. 1967. Philosophical Investigations. Oxford