

Psychological Aspects of Language

The epistemology, ontology, and paradigm of our language

by Carol Sanford

Take a formal or informal survey in any company of what is the most common problem and the number one priority is always “Communication”. It has become the rallying cry for most employee involvement programs, most work redesigns, and the base of union/management relations. Of course, with further research one frequently discovers that within many of these same companies there is an avalanche of memos, crew and staff meetings, even while people complain they are missing information and understanding. I believe that at least part of the problem is the *language* that is used. Language is just the medium we use to communicate, right? Well, yes, but language is not as passive as we have come to assume. In fact language is a paradigm generator—guiding us toward a particular world view, an epistemological framework—determining what and how we can learn and know our world, and ontological map—it proscribes what we see as meaningful and significant to pursue as humans. In short it is

constantly—completely out of our awareness—creating and perpetuating our reality.

Language is studied by a variety of disciplines from linguists to philosophers. But one of the most intriguing studies of language is done from the perspective of psychology. I am not so much speaking of the perspective from the field of psycholinguistics which is associated with Chomsky's rejection of behaviorism (Harré: 1983) and with language acquisition mechanisms, but rather the study of the relationship of language to mind and mental life and to our ability to see and represent reality more completely. The field of cognitive psychology has within and without it a debate on the effect of language on thought. The focus of this paper will jump into this debate particularly regarding the role that language plays in determining what realities we can see, understand, and make use of. Or as Derek Bickerton (1990) points out, language is more than a reflection, merely labeling our thoughts and their objects. It actually creates all that we can think about and communicate about. This paper will hypothesize that the development of different language forms or types can enable an increased intelligence—particularly in terms of understanding different

perspectives on reality and that this in fact probably constitutes an epistemologically technology for shifting how we know what we know and how we learn. Even though it will not be explore in this paper, there is a natural extension of this hypothesis, which is that insistence on one particular type of language—referred to here as objective functional language— used in the business, scholarly, and societal communication is actually limiting our ability to understand and come to terms with complex problems that require alternate views or interpretations.

What do we mean by “language determines” our reality?

Let us take several examples taken from different researchers in the field of language epistemology.

Deductive logic versus dialectical forms: Jacob Needham (1956) studied the difference in the way civilizations unfolded in Western cultures and those of the East, particularly China. One of his offerings relates to the nature of the alphabet used by Western civilizations compared to the ideographic language found in China. He postulates that the standardized repeatable elements (e.g. letters) linked together in a linear fashion to form words has enabled the paradigm for deductive logic in which ideas or statements are linked together to form arguments. He substantiates this by looking at the lack of such a deductive logic emerging in China, but rather dialectical forms of discourse emerged—analogue in much the same way as the Chinese characters are analogs of the words they represent.

Abstract versus concrete forms of thinking: Robert Logan (1986) has also studied what he calls the “Alphabet Effect”. He points out that the Chinese never developed the concept of scientific laws of nature. In fact Chinese

thought forms are considerable more concrete and less abstract than Western thought. He found Chinese logic to be based on analogy and induction rather than matching or classification and deduction. He equates this with the nature of characters which make up the two systems of language. Chinese ideographs directly depict the idea or thing to which the character refers. In Western language, the letters that are placed in relationship to one another have no direct correlation to the idea or thing and in fact a learned relationship must be created. This relationship introduces at least one additional plane of abstraction between the word and the thing. He also found this carried into the Chinese legal system which is not codified—abstracted across a set of situation—but is rather one of situational dialogue and consideration—concrete to each event.

Metaphor as transferable context: A third example comes from John Clancy (1989) in the study of metaphor as it has been used by business leaders over several centuries. He points out that as the use of metaphors became more machine like in the early industrial revolution, the metaphor spilled over into the way workers were perceived—as no more than parts in the machinery. As the metaphor of machine was transferred, most of what he calls the

entailments—the concepts and images that are conjured up with the metaphor—are also unconsciously transferred to the new setting. Salner (1988) describes the same thing in different words when she points out that metaphor is not just the substitution of a fanciful image for a literal meaning but the creation of new information resulting from the combination of heretofore unrelated elements of experience.

Clancy offers several examples of the combining of unrelated events and the resulting entailments and therefore a situation where new information is carried across to object of transference. When the metaphor of *teams* emerged as a result of the professionalization of sports, he found it being used very often within business and within a couple of decades the metaphors of “coach” and “game plan” became wide spread at the same time as changes in work systems emerged in business which formed workers into teams. He adds a caution. He now sees a blending of war and game metaphors where the game is not over until the opponent is eliminated. Clancy believes that leaders do not understand the “invisible power” of such metaphors. He associates this recent shift in metaphorical usage with the great increase, persuasiveness, and impact of TV, closeness to war zones and

the influence it has on our thinking. He also sees it beginning to manifest in the new business competitive approaches that try to price out of competition or undercut a competitor until they are bankrupt or forced to withdraw from the market. He feels in order to shift the thinking of business leaders away from the metaphors of massacres, and children's games, our current language needs to be replaced with new metaphors in order to bring about a more social responsible and rewarding approach to business.

Language as Structure for Reality: Several researchers (Clancy:1989, Logan:1986, Pearce:1992, Strauch:1989) have pointed out that words become *things* to us even when they are really events, activities, emotions, and ideas. They correlate this to the Western language structure which requires a subject and object which are separated from each other—one acting on the other. We even assign an artificial object-like character to aspects of reality which have no objects at all (e.g. day, thunder, hand wave) We also create fictitious subjects in order to retain our subject-verb structure as in “*It is raining*”. In language systems that do not have the same structure they project a very different picture of reality. The language of the Nootka Indians in the Pacific Northwest, has made use of a term for “eventing” and

other words that are primarily verbs with no subjects. The Nootka, perceive the world as a stream of transient events rather than a collection of more or less permanent objects.

All the researcher mentioned above believe that the subject-predicate form that leads to making all ideas into “things” has a very great restraint. It limits experience and it limits changing our view of an experience. Events or emotions as things become fixed in the same way a stone or tree is fixed. This “concretizing” experience tends to hide from us the nature of our interpretation that we imbedded into the experience. When we use the word for the event we pull back up all the experience with the word but only see the event as a thing that “is” and always “will be”. (Lakoff and Johnson:1980). In fact Ogden and Richards, late nineteenth century linguists, point out that once a word is in our vocabulary, we actually tend to argue our case from the “word” to the “thing” as though the existence of the word proves the truth of the thing. Examples where this occurs most frequently are in religion and nationalistic issues. As Bentham said, “error is never so difficult to be destroyed as when it has its root in Language.” or Poincaré “We have to make use of language, which is made up necessarily of

preconceived ideas. Such ideas unconsciously held are the most dangerous of all” (Ogden and Richards:1989)

The linearity of Western language seems to also be correlated to a very strong tendency to see history as a progression from times of worse and less developed cultures to times of better and more developed cultures. Cultures such as the Asian and Native Indian with primarily ideographic and/or oral languages with symbolic written forms frequently see more cycles in the history of humans and as ebbs and flows of developments which are discovered, lost, and then regained. (Eisler:1987)

How does Language alter or influence our Perceptual and Conceptual Processes

There are several arguments that can be considered here to understand if and how this is possible.

1. Language is a system of representation. It is not a system that passively mirrors what it represents but rather creates a new and parallel world with laws of its own nature but not of the same nature as the phenomena it represents. (Bickerson: (1990). Meaning is determined primarily by cultural significance, type consistency, and contiguity effects.

Bickerson provides some examples in the area of sentence structuring, the classification of word types, and the importance of space and time as a referent in our language. For sentence structure, it again brings us back to the subject predicate of Western language which is so fundamental that we forget it does not correspond to anything real in nature. We can not conceive of an animal without simultaneously perceiving that it is doing something—eating, grazing, sleeping. Nor can we do the reverse—see the activity without seeing the creature that performs it. If our language mirrored reality,

it would account for this, but it does not. Nature has no sharp division between *bush* and *tree* —only a continuum of vegetable forms, some larger or smaller, some more or less branching. Likewise, in nature there is not clear break in the geography of “here” and “there”, but we speak of these as separate places—divided by some invisible line. We create the classifications. There is no base in reality to account for the prototypes we create in language, but once they exist, they define how we see that reality and provide a basis for communication and even argument over what something is and is not.

The association we have come to automatically make with ‘subject-predicate’ has been transferred to a reality where “an actor taking an action and producing an effect” invites us to see that subjects are always the source of the effect. “She made me mad” is a typical psychological statement that assumes a separation between an action and an effect without consideration of the physical impossibility of one person entering the other and stimulating the triggers and chemistry that results in “mad” in the other person. Strauch (1989) believes that this language structuring contributed to the particular nature of “discoveries” that emerged in the seventeenth and eighteenth

centuries relating to the thermodynamics of scientists such as Newton and Bacon as well as what they did not “discover”. In these experiments scientists theorized that an object must be moved by something and to stay in motion requires continuous action on it. We now know through other scientific “discoveries” that was not the whole truth and in fact may be inaccurate for many phenomena to which these findings were applied. For example, the external force as a source of motion has been transferred to even non-physical phenomena like motivation. We most often describe motivation as needing or resulting from an external source. Language, even in science, is a paradigm former and provides a limit on which can be discovered.

Separation from nature’s reality was further fueled by the way Western language depicts all phenomena as having a concrete form through the process of giving it a name—making it a noun. When a child learns the names of things as well as when we grow older, we are learning to see events and ideas as *things* . The association of ideas with a concrete reality makes it hard for us to see that there is a non-physical reality. This definition of reality has led to a study of the physical world as the only accepted

reality. (Pearce:1992). Particularly in psychology this provided the basis for the rejection of the study on the inner, first person processes. (Searle:1992, Gardner:1985). The implication of this is of course, that if they do not exist, then they can not be developed. This again is a particular Western world, Western language view of the world.

2. Pearce points to another process that has allowed our language to influence our world view. When we acquire language as a child, the words do not only denote that particular sensory object, but also the process and the surround in which we learned the word for the object participates in structuring part our experience of that object. For example, when a child is given a name for an event or thing, not only is the name entered into the neural patterns of the child, but also the entire experience that gives rise to and shapes that event. The emotional context and the interpretation of the significance of the event or thing are also stored with the word. When the word is recalled, all the associated neural patterns that were taken in with it are also recalled. Pearce believes these contextual associations of learning are not an addendum to the perceptual text but are the principle motif that

directs the acting and coordinating of our acts and our interpretation of future similar events.

Bickerson also describes language as behavioral triggers, and not as literal representations. The concept that is imbedded in language serves to triggers a set of expectations and hence potential behaviors. It helps determine our response in the real world. The concept of *burglar* causes us when we hear a noise in the night to arm ourselves, or call the police, depending on our particular associations with *burglar*.

3. Bickerson also sees the grammatical elements of our language as constituting the coordinates of a linguistic map whereby the positions and objects and events can be plotted relative to the observer and to one another and where they can not. (Bickerton:1990) These form of grammar exist in what we will later refer to as “the language that provides an objective view of reality.” These *grammatical words* are the words in our language whose reference shifts continually. Examples are “you” when the “you” can mean anyone we are speaking to; or “that” when can refer to any item we chose. Half the terms we utter, hear, or read are of this nature rather than being

lexicon elements of our language which have a demonstrable referent. Bickerson points out that grammatical terms are not within our power to pick and chose and we can not invent or add new ones. It may look initially like these are merely structural pieces that hold the more meaningful parts of a sentence together. However their very relativity plays an important role in how we interpret meaning and then reality.

Examples that Bickerson explores include how our sense of space-time is influenced by these grammatical terms. For example, we have no tenses in our language that differentiate between past events that happened within our lifetime and past events that happened before we were born. We use the same tense for seconds ago or billions of years in the past. The options are very limited. In the Turkish and Hopi languages, verbal inflections allow them to indicate whether a statement is based on personal experience or on information obtained second hand. What is remarkable here that the number of possible qualities and relations in the world is immense and perhaps infinite. But our languages grammaticizes a few of these relations quite consistently, but never grammaticizes the vast majority of them. Language forces us to express automatically a very restricted subset of all the possible

qualities and relations in the world. We can not build other relationships or qualities of expression into the structure of our discourse without creating very long sentences and unusual sentence structures which require the listener or reader to move out of the automatic mode of interpreting. We can only communicate to each other easily what we already know and already understand.

It is easily possible to think of examples where the limits of the language limit what we can discuss and to therefore represent the world differently. In an open systems science or technology, it would be very highly advantageous to have a grammatical item that does not now exist, but if it did would express the relation between wholes and parts. For example when we say a “tree has leaves”, this seems perfectly reasonable. It also has branches, bark and a trunk. But if we take all of these away we do not have a tree. It can not exist independent of these things it *has*. But we ascribe the characteristics of separateness to them in the same way we say “Mary has a cold” because we have no language for doing otherwise—no systems language. We have to use a unsuitable item like *has*. We need a grammatical item like *inc*, which means “including as a part of itself” or *onc*, “forming a

part of”. However we cannot add to the store of grammatical items. We are stuck with the one we’ve got. As a result we stretch concepts that are purely grammatical , like “possessive” through the use of *ofs* and *haves*, in order to express something that does exist in nature—a part-whole relationship, but for which we have not grammar. The fact that our way of expressing the relationship between a thing and its parts are quite automatic and can not be altered, replaced, or even added to, leaves us with a world view that can only be expressed and—as a result of inexpression—only be conceived of in a limited number of ways.

The fact that we can endlessly create new lexicon words-names for things and ideas and not for grammatical items—those which allow us to bring relationships to ideas and concepts, can be seen in our proliferation of ideas and disciplines without a similar drive to bring relatedness to these separated ideas. (Berman:1988)

4. One way of describing the premise that underlies the previous three arguments is that the only way we can know the world is through levels of representations. Even if we seek to not interpret what comes into our mind

but try to analyze the sensory representations we are receiving, we are dependent on other representations—our systems of concepts. We can only represent what we believe to be out there, and what we believe to be out there shades imperceptibly what we want to be out there, or what would be convenient for us if it were out there. (Bickerson:1990).

Implications for psychology and business leadership

Several philosopher/scientists have developed and utilized technologies whose purpose is to expand the “realities” with which the world can be perceived. John Bennett(1956), a English mathematician and philosopher studied and wrote about language as an epistemology. Charles Krone (1980-1994) has worked with organizational trans-formation for over 30 years using different types and systems of language. And David Bohm (1980), the Nobel Prize winning physicist, points out how re-viewing our language is fundamental to any new discovery in science—particularly those that help us make sure we are even asking the “right questions”

Let us begin with Bohm’s inquiry into language and the implications he sees. He takes us back again to the syntax of language and particularly to the subject-verb-object structure of a sentence. He points to the implication of this structure that all action arises in a separate entity, the subject, and this action crosses space between them to another separate entity, the object—even it is sometimes us acting on ourselves. (e.g. “he moved”, *himself*, is implied as a separate entity).

Bohm points out that this tends to lead us in thought to divide up things into separate entities—even when with a little thought we could see that this is clearly inappropriate. For example, we say it is raining when there is no “it” to be ‘the rainer that is doing the raining’. It would be more accurate to say that “raining is going on”. One less obvious example of inappropriately separated entity, to those who are not familiar with the findings of quantum mechanics, is found in the implicit assumption in the statement “he looked at the object”. This statement according to modern scientific knowledge is not accurate and does not represent even a possible reality. Heisenberg’s discoveries have told us that a more accurate statement would be ‘Observation is going on, in an undivided movement involving the abstractions customarily called “the human being” and “the object he is looking at”.’ The critical element here is that everyday business and social language users look askance at any change in language form that tries to more accurately and completely represent the world as our sciences and own experience now tells us exists. There is no “grammatically” and “syntactically” correct way to represent these realities.

Bohm points that every language form carries a kind of dominant or prevailing world view, which tends to function in our thinking and in our perception whenever it is used, so that to give a clear expression of a world view contrary to the one implied in the primary structure of the language is usually very difficult. For business leaders to improve their reality viewing ability—to see the paradigm from which they form our world view—they must undertake a study of language. Particularly our business use of language. This is not easy since our ordinary mode of language tends very strongly to take its own function for granted and this leads us to concentrate almost exclusively on the content under discussion and with little or not attention left for understanding the function language is playing in how our thinking is actually working regarding the content, because of our language. We can not see, without effort, that our language itself is constantly introducing a tendency toward fragmentation.

We can overcome this tendency toward fragmentation and inaccurate representation of the world as divided object acting separately on one another, if we allow ourselves to begin to use language in a freer, more informal, and even what Bohm called ‘a poetic way’. But we can only do

this if we understand that this ‘artistic’ nature of perception and use has to developed further as a kind of skill. We must learn to lift up as part of the dialogue or interaction the affect of language on thought and perception.

Charles Krone has developed a technology for business usage that is very successfully in enabling people to expand the business realities can paradigms of which they can make use. In fact the users of this technology say that development of new ideas, new processes, systems, products, and the very development of people can not happen without building the expertise of language observation.

Krone describes two types of language with four levels contained within the two types. The two types are functional or objective language and semantic language. The syntax and grammatically construction of each is quite different. In fact using semantic language requires a different level or use of the mind.

Krone describes humans as naturally engaging in these two language systems each of which relates to different subject matter. The objective

language system relates to physical phenomenon and the goals and desires we have in regard to physical phenomenon. Krone also relates this physical world view to Bohm's divided world view. The semantic language system is related to thinking and the nature of behavior in regard to a field of activities or energy we are involved in. For example, a supervisor who is watching an individual who experiences a worker as taking an excessive break. The supervisor can engage with this situation from different levels. In such a situation if we have sufficient semantic language capability, we deal with what we think about the people involved and the nature of their and our behavior. Rather than pursuing goals as we do within our objective language system—get the other person to stop taking overtime on breaks—we pursue what it is we value frequently in relation to the situation. Semantic language results from thinking about a situation more systemically and seeing ourselves as part of the dynamics, not as an initiator taking action to move something. This way of seeing a situation leaves us with no option but to speak of it differently.

If our supervisor relates to the situation from the level of reality that is physical and divided, she would probably see the situation as something she

is responsible for resolving and would move according to provide a reprimand or instruction. If she sees herself as a *part of a system* — “supervision *inc* with the work system”—in which excessive breaks are being taken, then she has to ask how her own past and present behavior has or is about to effect the situation. She will try to observe herself as she engages in the interaction with the worker, and she will not presume herself to be a separate party with no impact in the forming of the situation. The language she uses can not be the same. The interaction will be formed from looking at the situation as though she is above it and the situation will be viewed as having started much further back in time, rather than just the events of the other person in the last few moments..

Krone specifies of course that this way of viewing the world and speaking about it comes about through development of different skills and understanding than we normally gain in our educational, family, or work life. It requires being able to observe ourselves, to adjust our behavior, and to see the world as more dynamic and systemic. He further believes that this can only occur if we have a desire to engage in our own development and if we make a conscious effort to learn this “more nature matching” way of

viewing the world. Bohm describes this as seeing the patterns in a field as they unfold and interweave.

Summary:

A semantic language represents connection to an internal frame of reference. It represents the world view of always a spectrum, not just either/or. Without a different language we can not describe this world view and therefore we have no way of representing this world view or concretizing this view. The semantic way of representing ideas is disconcerting to the hearer or reader when they are first introduced to it and is frequently experienced as “jargon”, with sentences that are too long, modifiers that can not be clearly connected to that which they modify. But if the hearer and reader is aware of Bickerson’s work that tells us we can not add grammar to specify relationships and Bohm’s caution that our current sentence structures cause us to illogically and unnaturally represent the world, then we gain some respect for the attempts made to work a more systemic view into the language systems we use to engage people. Also in scholarly writing, the semantic language forms are frowned on since they do not meet the standard of succinct form with no dangling participles and modifiers. However if scholarly research can not allow for semantic language within its formats, then it is destined to be an incomplete and

illogical representer of truth. We are Human Beings, not Human Doings, so we need a language to *be* all of that.

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