

August 20, 1987

THREE CONCEPTIONS OF CONVERSATION

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Following the meeting of the American Society for Cybernetics in St. Gallen, Switzerland, last March, I found myself reflecting on the different assumptions that cyberneticians make about how to conduct a conversation.

Conversations occur on several levels and are conducted for a variety of purposes. Depending on their purposes, people choose different styles of conversation. Within the American Society for Cybernetics at the present time there are at least three different conceptions of how to conduct a conversation. One way both to "continue the conversation" and to advance cybernetics is to share our different assumptions about the art of conversation.

Three Subjects of Conversation

Before I describe the different ideas regarding how to converse, I think it would be useful to review what people are conversing about. Although this summary is greatly oversimplified, suppose that we identify three philosophies or points of view.

1. Realism is associated with classical science. The idea is that scientific laws are discovered rather than invented, that a real world exists, and that the task of science is to create theoretical pictures or models of the real world. Observations are assumed to be independent of the characteristics of the observer.

2. Constructivism is a newer point of view which is critical of realism and is struggling to replace it. According to constructivists scientific laws are invented rather than discovered. Although the existence of a "real world" may be a useful assumption, constructivists would insist that it cannot be known without a knower and that the correctness of the theories created by the knower cannot be established without the presence of a second observer with direct knowledge of the "real world". However, this second observer would operate under the same constraints as the first.

In constructivism the focus of attention is an observer. Constructivists sometimes make the distinction between "trivial constructivism" -- the idea that different observers interpret their

experiences differently -- and "radical constructivism" -- an exercise in the philosophy of language.

3. An additional point of view might be called "an ecology of concepts," until a better term emerges. In addition to an observer and what is observed, this view adds attention to the society in which observers live, and occasionally struggle for status and influence. Whereas constructivism emphasizes the "one brain problem", the idea of an ecology of concepts focuses on the "n-brain problem". Rather than explaining the relationships within an observed system (realism) or the physiological nature of an observer (constructivism), this point of view identifies a number of conceptual systems operating within a social system and examines how they are employed to achieve the goals of the various actors. This approach recognizes that although theories are developed in part to explain some aspect of the world of experience, they also can be used to establish and maintain certain social relations.

The advocates of the third position are quite comfortable with the idea that "the society" and the actors and conceptual systems in it are in turn constructions in the mind of an observer.

Three Methods of Conversation

These three different points of view are associated with three different conceptions of how to design a conference.

1. Those who use a philosophy of realism tend to assume that an academic meeting should use the classical design of formal papers presented in panels devoted to specific topics with subsequent questions and comments from the audience.

2. Constructivists envision a conference as an opportunity for friends to get together to continue an on-going conversation. Formal lectures may be given but are less important than thoughtful but leisurely conversation which, it is felt, is most likely to facilitate the emergence of new distinctions. The idea behind this type of conference is not to report on results achieved in a laboratory far away but rather to use the conversation during the conference to generate new results.

3. Those who view a social system as a collection of groups using different points of view are inclined to design a third type of conference. This approach prefers to combine elements of the first two. People are invited to give formal presentations which reveal what they are able to establish using their assumptions and methods. However, by putting on the same panel people who use very different assumptions, the discussion tends to draw out what these different assumptions are. The idea behind this approach is that people frequently forget the questions they were asking and the assumptions they made long ago. The intention is to use conflict to reveal unstated beliefs and to discover the limits on any system of ideas. Each set of ideas is usually quite effective at dealing with some questions but not particularly effective at dealing with other questions. If a society is regarded as a collection of points of view, then understanding the usefulness and the limitations of each point of view becomes the key concern.

Conflicts Among the Three Approaches

With three such different approaches to the design of a conversation, there are numerous opportunities for conflict. In the early days of the American Society for Cybernetics the dominant point of view was no doubt that of realism. However, by at latest 1980 the strongest voices were those of the constructivists. By now the realists have been hounded out of the Society in the name of a newer, more informed point of view, but those who display insufficient devotion to constructivism can still be accused of "not understanding." This behavior maintains the boundary so that the conversation among those devoted to a particular set of ideas can continue.

In recent years the third point of view has been put forward more frequently. There have been efforts to bring into the Society people who have developed other conceptions of cybernetics. While granting the enormous contribution of the constructivists to cybernetics, the third group of people have felt that other contributions should be recognized as well and that the limitations of the constructivist position and as well as the limitations of other positions should be explored.

These efforts have been resisted by the constructivists by a variety of means. They suggest that other theorists do not understand constructivism and that conflict disrupts the conversation and thereby impedes progress. In addition to direct statements, more subtle strategies are also employed. When the topic of conversation shifts to something other than constructivism, a criticism is made of the language used, thereby redirecting the focus of attention to issues of language and hence constructivism. The struggle to control the agenda also emerges in debates over who should be invited to conferences, how sessions should be designed, and what topics should be covered. In terms of topics the advocates of the third position tend to want more sessions to be devoted to social systems, whereas the constructivists prefer to limit the range of topics to issues associated with language and neurophysiology.

Constructivists tend to assume that there are two points of view -- realism and constructivism -- and believe strongly that constructivism is the superior point of view. Perhaps by considering the third point of view described above we shall be able to see the suggestions for additional topics and alternative designs for some conference sessions in a new light -- not as suggestions put forward by people with an insufficient devotion to constructivism but rather as proposals to advance recent work in an additional direction.

Published in *Continuing the Conversation*, the newsletter of the American Society for Cybernetics, Fall 1987, Number 10, pp. 17-18.