

Information ---> Semiotics

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It dawns to me that, rather than leading endless discussions on the legitimacy of the semiotics concept, or lack of it, I might have to describe what originally made me replace the concept of information with the term semiotics

In the beginning, it was probably just a diffuse irritation over and over to see the biological concept of a gene used to support a conservative view of man. I began to wonder why the Darwinian view always led to this particular result.

The beginning of an explanation I got when I read about chemotaxis. Chemotaxis is the term for the phenomenon that a cell is drawn against a particular substance. For example, a bacterium will typically look for the place where there is the most nutrition. It is said - popularly - that the bacterium has received information from the environment about where there is most nutrition. However, if one asks what is meant by this phrase "has received information" then one gets a purely chemical explanation - the substrate molecules have been absorbed by the cell, which has linked them to particular receptor proteins that have led them to the aggregate of proteins which regulates the direction of rotation of the flagella and thus

the movement of the cell, etc. - pure chemistry thus. The assumption is that a similar chemical explanation will be found for all genes. So far this is only an assumption, speculation in other words. But why are people talking about information if it's all pure chemistry? The gods must know, but I have a suggestion:

The thing is, you need the information metaphor not for chemical reasons, but for the sake of the evolutionary argument. For, although the chemotaxis mechanism has been purely biochemically explained, it leaves the question of why this mechanism is present in today's bacteria. Well, so is the answer, because it is stored as information in the genes. So, as you can see, the information talk does not serve to solve anything, but only to mystify. By saying that the chemotaxis is due to the fact that "the bacterium has received information" from the environment, one invents a concept, information that can subsequently be claimed was in the DNA, the genes - inherited from the past. Without information, no past.

It was when I discovered this probably unconscious deception built into the very use of the information metaphor that I began to consider how to speak more correctly. I realized it was the information concept that brought mud into the explanations. In fact, the bacteria have not received anything from the

environment. What happens is just that the bacteria actively interpret the environmental properties as a sign of moving where the nutrient concentration is highest. So it is the bacteria that are the active party, not the environment.

I realized that everything you needed to do was throw the information metaphor overboard and replace the explanations of information with sign-theoretical, ie semiotic, explanations.