

CHAPTER FIVE TELEOSEMANTIC THEORIES

Theories of the sort that I propose for intentional signs are often called "teleological theories of content." Accordingly, naturalist theories of the content of mental representation are often divided into, say, picture theories, causal or covariation theories, information theories, functionalist or causal role theories, and teleological theories, as though these divisions all fell on the same plane. That is a fairly serious mistake, for what teleological theories have in common is not any view about the nature of representational content. "Teleosemantics," as it is sometimes called, is a theory only of how representations can be false or mistaken, which is a different thing entirely. Intentionality, if understood as the property of "ofness" or "aboutness," is not explained by a teleological theory. Natural signs are signs of things and represent facts about things, but they cannot be false. To explain the possibility of falseness, then, cannot be the same as to explain ofness or aboutness.

The confusion began with, or at least passed through, a common interpretation of Franz Brentano's writings. According to this interpretation (Chisholm 1967¹), Brentano held that what distinguishes mental phenomena from physical phenomena is that the latter possess a property that he called "intentionality." He characterized intentionality in two different ways. He spoke of "object intentionality" or "direction on an object" or "reference to a content." This was the capacity of mental phenomena to be of things or about things, as when a thought is of Johnny or about the fact that winter will soon arrive. But he also spoke of "intentional inexistence," which referred to the apparent peculiarity of objects of thought that these objects can be thought about, can be in or before the mind, even when they don't exist. One can think of Saint Christopher even though he never existed and one can think it is already snowing when it is not. Clearly, he argued, the relation between a thought that does exist and an object or situation that doesn't exist is not a physical relation. It is a peculiar "psychical" relation. Inside Brentano's term "intentionality," then, was trapped the theory that to explain how a representation could be of or about something is just the other side of the coin of explaining how it could be empty or false. Also trapped inside this theory, of course, was the idea that when one thinks emptily or falsely there IS an object that is being represented in more or less the same sense that there IS an object represented when one thinks truly. There is something called an "intentional object" or an "intentional content" that is present regardless of whether the thought is true or false.²

Teleological theories of content are best understood if we insist on dividing Brentano's "intentionality" into its original two aspects, treating them separately. Teleological theories have in common that they deny that there IS any object at all that is being represented when one thinks emptily (say, when seeming to think about "phlogiston" or "the ether") or that there IS any state of affairs or occurrence being represented when one thinks falsely. Similarly, there IS no object, not even an inner one, being seen when one has an hallucination. Teleological theories all deny this for the same reason. They take it that mistaken representations, rather than representing peculiar objects, things called "contents," are merely representations that are failing to represent. False representations are representations, yet they fail to represent. How can that be? It can be in the same way that something can be a can opener but be too dull, hence fail to open cans, or something can be a coffee maker yet fail to make coffee because the right ingredients were not put in or it was not turned on. They are "representations" in the sense that the biological function

of the cognitive systems that made them was to make them represent things. Falsehood is thus explained by the fact that purposes often go unfulfilled. "What is represented" by a false representation is indeed "something that does not exist" because a false representation represents nothing at all. By turning intentionality in this way into just ordinary purpose, and by naturalizing the notion of purpose, teleosemantics yields a fully naturalistic resolution of Brentano's paradox about nonexistent objects of thought.

Here is another way to understand Brentano's problem and the point of the teleosemantic move. Compare the verb "to represent" with verbs such as "to see," "to hear," "to smell" and "to perceive." Gilbert Ryle called these latter verbs "achievement words" or "success words" (1949, p. 223). He contrasted them with "task" words or "search" words or "try" words. "Hunt," for example, is a try word while "find" is an achievement word. "Look" seems to be the try verb corresponding to "see," "listen" the try verb corresponding to "hear" and so forth. Now consider the achievement verb "to know." What try word goes with it? There seem to be two: "to wonder whether" and "to believe." As you can hunt without finding, you can wonder whether without knowing whether, and you can also believe that without knowing that. Believing is aiming to know or seeming to oneself to know but it is not necessarily succeeding in knowing. In exactly the same way, besides looking, one sometimes merely seems to see. Shouldn't there be a second try verb then to go with "see"? Where is the aiming verb that corresponds to "see" as "believe" corresponds to "know"? Or the aiming verb that corresponds to "hear" in this way? Where is the aiming verb that corresponds to "perceive"? The difficulty is that we have no such separate aiming verbs. Instead, the same verbs are used over again. When delirious, you say that you "see pink elephants" even though you are surely not succeeding in seeing pink elephants, because there are no elephants there to see. You say that you "hear voices" even though you are not succeeding in hearing any voices because there are no voices there to hear. The verbs of perception are all equivocal in this way, and equivocity in language leads immediately to fallacies of equivocation in thought. For example, because in its achievement sense you can't "see" what isn't there, it is thought that when you see pink elephants there must be something there to see --not pink elephants, of course, but certainly something! Seeming to see is confused with actually seeing --not seeing the same thing, of course, so seeing what? Something "merely mental," an "inexistent object," for example, a "visual image". Similarly, the verb "to represent" is equivocal. Used as an achievement verb, to represent something requires that there be something there to represent. Thus Brentano claims that representing something in thought requires that there exists something for the thought to represent. But "represent" is also used as a try word. You can represent a golden mountain even if there is no golden mountain to represent. This is what confused Brentano. The verb "to represent" collapses the distinction between succeeding and merely trying or seeming to succeed.

The teleosemanticist, in order to speak most clearly, should refuse to equivocate in this way. S/he should simply deny that you can see or think of or represent what doesn't exist, refusing to use the verbs "to see," "to think of," "to represent" and so forth except as success words. This avoids confusion and the resulting reification of special "intentional objects." Strictly speaking, you can't represent something that doesn't exist. In equivocating, what the philosophical tradition has previously done is to confuse actually representing with merely being in a mental state turned out by cognitive equipment designed to produce representations. Such a

mental state may, of course, cause the mind to churn as though it were representing, but that does not produce actual representing.

Teleosemantics neatly disposes of Brentano's reified intentional contents. But by itself it says nothing at all about Brentano's "object intentionality." What teleological theories do not have in common is an agreed on description of what representing --what "ofness" or "aboutness"-- is. They are not agreed on what an organism that is representing things correctly, actually representing things, is doing, hence on what it is that an organism that is misrepresenting is failing to do. To the shell that is "teleosemantics" one must add a description of what actual representing is like. When the bare teleosemantic theory has been spent, the central task for a theory of intentional representation has not yet begun. Teleosemantic theories are piggyback theories. They must ride on more basic theories of representation, perhaps causal theories, or picture theories, or informational theories, or some combination of these.

Failure to grasp this last point has lead many to take a dismissive attitude toward teleosemantic theories. How, they ask, could the question whether my current thought is the thought that cats meow, or instead the thought that elephants are big, be a matter that is settled only by evolutionary history, or even by my past learning history? But a teleological theory, just as such, makes no attempt to explain what makes your thought be a representation that cats meow or that elephants are big. Put it this way. You present your favorite theory of what a true representation is, for example, of what makes something be a true representation that cats meow. Then the teleologist subtracts nothing but adds one thing. The teleologist adds that for your true representation to be an intentional representation, it must be a function or purpose of the system that produced it to make true representations. Otherwise, though it may indeed be a true representation, it is not an intentional representation. Then the teleosemanticist proceeds to explain what a false representation is given your view. That is all teleosemantics amounts to.³

But there is a catch (of course). The following requirement will have to be placed on the theory of representation you present. Representing things will have to be something that it might sometimes benefit an organism to do. Otherwise it will be a mystery why any organism would contain systems designed to make representations, and the teleosemantic move will not be possible. Surely such a requirement is not unreasonable. But I will argue that in the end it turns out to be surprisingly restrictive. Indeed, in the end, it may not be possible to formulate a coherent teleological theory exactly in the way just described. But I will argue that we can come very close.

A common way of glossing teleosemantic theories of representation has been to say that they claim that "the function" of an intentional representation is "to represent" or "to indicate" something. But that way of expressing the teleosemantic idea invites serious confusion. For in the sense of function intended, the functions of things are effects that these things have, namely, effects they have been selected for causing, or that their producers have been selected for producing things that will cause, and so forth. Consider, for example, using an informational theory of content as the base on which to build a teleological theory of intentional representation. Natural information is carried by natural signs. To represent, in the base sense, will then be to be a natural sign. But It can't be the function of an intentional representation to BE a natural sign. It can't cause itself to be a natural sign or cause itself to indicate something. For example, it couldn't cause itself to have been caused by something. Taking the classic example of the firing

of a fly detector in a frog's eye, it couldn't be a function of that firing to have been caused by a fly. Functions don't work backwards. What then is the informational teleologist to say? Several different kinds of things might possibly be said, and to keep these kinds separate makes all the difference when thinking about teleological theories in general.

The teleologist might claim that the function of the apparatus that produces intentional representations is to produce basic representations, whatever one takes basic representations to be. For example, the teleologist who takes natural signs as basic representations might say that the function of the systems that produce intentional representations is to produce natural signs. Intentional representations are purposefully produced natural signs. That is one possibility.

A second possibility might be to claim that the function of an intentional representation is to have some sort of effect that retroactively makes it into a basic representation. A basic representation is then defined by its effects, as a terminal illness is defined by its effects. Perhaps it is designed to have the effect of correctly representing something to something else, an organism or an interpreting apparatus within an organism. The teleologist will then have the job of explaining, without going round in circles, what it is for something to have the effect on something else that will constitute its being interpreted. What kind of reaction is interpretation? Possibly a functionalist theory could be given here. What makes a basic representation be a representation is how it interacts with other representations and how these together produce the organism's behavior.⁴ Possibilities one and two might also be combined.

A third possibility is less obvious. Let me give some background first. When a trait has been selected for by natural selection, or by learning, it has been selected for some effect that it has. (If it was selected not owing to some effect it had, but merely because it correlated with the occurrence of some helpful happening that was not its effect, then it has been "selected" but it has not been "selected for" (Sober, 1984)). That is why a thing's functions (in the sense meant here), or its purposes, are effects that it has, not its causes. On the other hand, for any trait to have had an effect systematic enough to have caused its selection, there will generally be some explanation of how it caused that effect that is also systematic. That is, it will not be that every time it caused this effect, it did so by an entirely different mechanism. This need not be true in the extreme. Just as certain traits of an animal may have been selected for because sometimes they served one helpful function and sometimes another, as one's hair both protects one's head from abrasion and also keeps it warm, there could be a trait that always served the same function during its history but by the operation of several alternative mechanisms. But it would be impossibly unlikely that there would be more than a few mechanisms by which that function was effected. I call predominant mechanisms of this kind "normal mechanisms" for performance of their functions by these traits.⁵ A normal mechanism for performance of a trait's function will pretty invariably involve the presence of other things that act in cooperation with it, acting on it or being acted on by it, and it will involve the presence of various supporting conditions. In the absence of these supporting things or conditions, probably it will not be able to perform these functions. But it is always possible that a trait should cause some proper effect, an effect it was selected for, by accident in some cases. It is possible, for example, that my reflex eye blink, though caused only by a passing shadow, might none the less succeed accidentally in keeping a piece of sand out of my eye.

Here then is the third possibility for the teleologist. The teleologist might claim that when

the systems that produce and/or use intentional representations perform the tasks they were designed to perform and perform these tasks by means of their normal mechanisms --let us just say "in a normal way"-- then the intentional representations are basic representations --whatever "basic" representations are taken to be. Notice that it need not follow from such a theory that it was a function or purpose of the system that produces intentional representations to make things that are true representations in the basic sense. That would merely be how they normally manage to serve their functions.

The reader will be right in suspecting that I have introduced this third option so as to embrace it, and right in suspecting that I will use local natural signs for my base representations. But intentional signs will be defined independently by reference to the functions of their producers. It will follow from this that they are also designed to have certain effects on their consumers, the organisms or parts of organisms that use them.

FOOTNOTES

1. I am aware that Chisholm's interpretation is now considered questionable, but its influence has not abated.

2. Brentano was surely mistaken, however, in thinking that bearing a relation to something nonexistent marks only the mental. Any sort of purpose might fail to be fulfilled, hence might exhibit Brentano's relation, such as the purpose of one's stomach to digest food or the purpose of one's protective eye blink reflex to keep out the sand. Nor are stomachs and reflexes "of" or "about" anything. The traditional reply, scouted in Chapter One above, is that natural purposes are "purposes" only in an analogical sense hence "fail to be fulfilled" only in an analogical way. This response begs the question. It assumes that natural purposes are not purposes in the full sense exactly because they are not mental. It also fails to explain why analogical intentionality is not accompanied by analogical "aboutness."

3. For example, the teleologist. merely as teleologist, has no immediate problem with the idea that Davidson's Swampman is truly representing everything that Davidson would have been representing truly had Davidson lived on in Swampman's place. It is just that he is not intentionally representing these things. His true beliefs are representations, but not intentional representations. And where Davidson had false beliefs, Swampman is not representing anything at all, either in the achievement or in the trying sense. He is not failing to achieve his purposes on any level of purpose (Chapter One above). (There is a wrinkle, of course. Swampman's beliefs about his past and about who his relatives are seem problematic on any view of representation.)

4. This would be a good choice for the teleologist who thinks that Swampman has thoughts. But such a functionalist theory would have to ignore the causes of representations, merely looking at their effects.

5. In earlier writings I have I referred to them as "normal explanations" for performance of a trait's

functions. This caused some confusion, since many think of an explanation as being a set of propositions rather than what these propositions are about. For a thorough treatment of the notion of a normal explanation, see (Millikan 1984), Chapters 1 and 2.