

PSYCHOSEMANTICS

Dretske bases his nascent psychosemantics on the notion of “information” that figures in the Shannon-Weaver “Mathematical Theory of Communication.” A state of a device carries the “information” that P iff by law of nature, the device could not be in that state unless P. Of course, this sort of relationship is ubiquitous in the universe, because there are lots of laws of nature and scads of nomic relationships. So Dretske’s task is to say what must be added to “information” to get a genuine *cognitive* intentional content.

He focuses on the *most specific* “information” carried by a state. His second organism (p. 360) can know that it is touching acid without knowing that it is touching HCl because it has a repertoire of two different states, one of which carries the information that it is touching HCl (but nothing more specific) while the other carries only the information that it is touching acid. He calls this a difference in two ways in which the creature can “code” the information that it is touching acid.

That suggestion does not help much. Two thermostats or galvanometers could have such pairs of states. It follows from what Dretske says here that they would be genuine cognizers.

But this is only the beginning of a long tale of woe. The next problem is that which Dretske confesses on p. 361: How is he to accommodate *false* intentional contents, such as those of false beliefs? (If we were to say that a belief that P is even in part a state that carries the information that P, then the subject by definition could not be in the state unless it were true that P.) Dretske gestures toward the organism’s learning history, but that idea never panned out.

In later work, Dretske (wisely!) injected an element of teleology: A state carries the content that P iff it *has the function of* carrying the information that P. That explains how a belief can be false; the belief is supposed to carry the information that P, but fails to. (Examples: A malfunctioning gas gauge, a watch that’s fast.) That’s helpful, but again is only a baby step. Objection: The new teleologized theory entails that every time I have a false belief, I’m broken or at least *malfunctioning*. But some of my false beliefs are not the result of malfunction. Sometimes I am in perfect working order and hold a belief that is perfectly well justified (indeed, I’d be malfunctioning if I *didn’t* hold it), yet the belief is false owing to a fluke.

A worse objection: How does the gas-gauge, galvanometer model apply to the human brain? Are we to think that various individual brain states have as their

biofunctions to carry information about the speed of light, about the Australian bushranger Ned Kelly, about God and my sister? That is a weird suggestion. Compare: The biofunction of teeth is to pulverize food so that it can be swallowed. If you like, the biofunction of eyes is to extract information from the immediate environment and to output a representation of what sorts of physical objects lie before one. But how could it be a biofunction of a state deep inside cerebral cortex to indicate something about the speed of light or Ned Kelly?

A further and much more serious obstacle to psychosemantics is that the objects of thought need not be in the environment at all. They may be abstract; one can think about a number, or about an abstruse theological property. And as always they may be entirely unreal. (N.b., the same things are true of representations posited by cognitive psychology.) An adequate psychosemantics must deal just as thoroughly with arithmetical beliefs, and beliefs in quantum field theory, and Arthur's illiterate belief that the number of the Fates was six, and Hegel's belief that the Absolute is in a constant process of self-realization. I have no idea how present-day psychosemantics could be extended to deliver contents like those.

Finally: Dretske and other psychosemanticists focus almost entirely on *belief*. (I say "almost" because in his 1988 book Dretske does also address desire.) Of course belief is information-carrying in some sense; it represents the world as being a certain way, even if we don't agree with Fodor that it is a kind of internal, computational representation, and it aims at correctness. But what about other propositional attitudes whose function is not to be *correct* representations? S wishes that P; S wonders whether P; S hopes that P; S fears that P. It is not the function of any such state to carry the information that P. So here is another dimension along which Dretske's account will have to be extrapolated, and I don't see bright prospects for that project.