

Rotten apples: solipsism; learning

Unedited posts from archives of CSG-L (see INTROCSG.NET):

Date: Tue Feb 28, 1995 7:52 am PST
Subject: Re: solipsism; learning

[From Bill Powers (950227.2000 MST)]

As to the difference between inference and perception, this is a matter of classifying experiences, not a statement about reality. When we are perceiving we are attending to inputs from a place independent of us. When we infer, we are thinking about those perceptions. It is not hard to tell the difference. Thinking is one kind of activity and perception is another. If I see an apple with a brown spot on its surface, I am perceiving. If I see a rotten apple, I am inferring something I can't perceive. That's all I mean.

Best, Bill P.

Date: Wed Mar 01, 1995 11:29 pm PST
Subject: Re: rotten apples

[From Bill Powers (950203.1420 MST)]

Martin Taylor (950301.13:55)--

> When you are inferring a rotten apple from the perception of a red round thing with a brown spot, you are specifically imagining something that you are NOT CURRENTLY PERCEIVING. You ARE perceiving the red round thing; you ARE NOT perceiving the appleness. To perceive the appleness you would have to cut the round thing open and see that it is pale inside, or not, and perhaps taste it to find the perception you call "apple" or "rotten." There is a possibility that when you cut the red round thing open you will find none of those signs of appleness; the red round thing may simply be a plastic shell with a brown spot.

Right, that's what I'm getting at. Even when we make such an innocuous identification as that of saying "It's an apple," we can be mistaken because we're referring in part to imagined perceptions.

Of course this depends in part on what we mean. If by "That's an apple" I mean only that the shape and color are those I classify as "apple," there is no problem. We need not be asserting anything unobservable; that is something that each of us alone must determine.

> In other words, I read you as saying that no perception above the intensity level is a "perception."

Not at all. If I say "I see something spinning," the spinning IS the appearance, and it is entirely perceivable. Even if I'm being fooled by stroboscopic motion, I am simply reporting the presence of a perceptual signal, which I don't have to imagine. This is, in fact, how we know there is a level of perceptions pertaining to motion or change -- transitions. If I see two objects at an apparent separation from each other, I can report the relationship of "near" or "beside" without imagining anything -- even if one object is "actually" 20 light years farther from me than the other. If, on the other hand, I see a double star and report that the two stars are in orbit around each other, I am not perceiving that orbital motion, but imagining it. The difference between perception and inference is not the difference between "real" and "unreal." It is strictly a question of whether there is a perception there to notice, or whether we are supplying it ourselves in imagination.

Perceptions are appearances. To be fully aware of the difference between perceiving and inferring, one has to spend a lot of time looking to see whether there is actually any apparent thing, property, experience, what have

you being perceived right now. When we have become very familiar with a phenomenon, we often start to blur the distinction. An old hand at operant conditioning speaks and thinks as if "reinforcement" is something we can actually see occurring. An electronics expert looks at a trace on an oscilloscope and imagines that he can see a voltage changing over the space of a microsecond. When we see an athlete trying for a world record with the shot-put we think we can actually see and feel the enormous effort the person is putting behind the heave. Yet all of these perceptions are imagined, not real-time. If we were not imagining, we would perceive none of these things.

This distinction is particularly important in theorizing about observable phenomena. If we fail to be alert to this difference, we will not be able to report observations accurately. Some of what we report will be supplied by our own imaginations, as when we report that an organism received 10 reinforcements per minute. That is quite different from reporting that the organism received 10 pellets of food per minute.

In a tracking experiment, we see a person moving a handle to make a cursor follow a target. Hidden in this observation is a certain degree of imagination. For example, when we refer to the "target" we tend to imagine that the subject wishes the cursor to be at the target position. The Test is designed, in part, to relieve us of such illusions created by our own imaginations. If you apply the Test properly, you may well find that the participant's behavior is maintaining the mark we call the cursor 10 cm to the right of the position of the mark we call the target, or the participant might be keeping the cursor at the same distance as the target and in the opposite direction from an imaginary place on the screen. We think we are observing a target, but all we are actually seeing is a moving mark on the screen. This becomes immediately apparent when something happens to reveal what we are imagining.

> I infer from the rest of your posting that by "inference" you imply perceptions at the program level only.

I think there is a serious point here that goes beyond word usage. There are many levels of inference, some involving reason, but they all rest on inserting imagined perceptions among the real-time ones, the ones that are not dependent on imagination alone. Many of our problems with conventional psychology arise because psychologists have become so used to certain terms that they think they are observing phenomena when they are mostly imagining them. The demos are supposed to create a conflict with the imagined perceptions, so they can be separated from the real-time ones. But of course that doesn't happen automatically; the person involved must be willing for it to happen.

Best to all, Bill P.

Date: Fri Mar 03, 1995 1:28 pm PST
Subject: Re: rotten apples

[From Bill Powers (950303.0945 MST)]

Martin Taylor (950302.1300)--

> I take "perception" to represent the output of a perceptual function. But "perception of" is something else again. "Perception of" is an assertion by an outside agent (i.e. another perceptual system, whether in the same hierarchy or another) whose input is not only the perceptual signal, but also some aspect of the "real" world. "Perception of" is a statement that some perceptual signal correlates with some other perception of the real world.

This is a very clear statement of the problem. The problem is exacerbated when the two people think they are talking about the same thing in the external world, and don't realize that there is an undefined term:

Given: Your perception of X
My perception of X

Then: Your perception corresponds to my perception.

Our perceptions correspond to X (where X is still undefined).

- > ... if I happen to have in my hierarchy a PIF that gives a strong output in the presence of rotten apples, but not of rotten grapes, I claim that I truly perceive a rotten apple--whether or not it is a scented plastic imitation. The facts of the real world are never known to me, but my perceptions may change when new sensory data come available. What I perceive NOW is truly what I perceive.

When you have a PIF (perceptual input function) that reports the presence of a rotten apple smell, there is no need to infer or imagine its presence. This observation is infallible -- unless you go on to claim that the apple would indeed prove to be brown and mushy inside if you opened it up. THAT would be an inference. If there is no other apple nearby, the inference might prove out 99.9% of the time, but the claim would still be an inference, not an observation, a perception.

- > But a process that says "I perceive red. I perceive round. I perceive dark small line protruding from round... Therefore I have an apple" is quite different from perceiving an apple.

Exactly what I was getting at. You put the problem as succinctly as possible in saying that it is represented by "perception of ...". This very common usage begs the question (meaning that the statement or question assumes without proof to be brown and mushy inside if you opened it up. THAT would be an inference. If there is no other apple nearby, the inference might prove out 99.9% of the time, but the claim would still be an inference, not an observation, a perception). Discussions of epistemology are constantly running afoul of this logical shoal. "When you see an apple, is the apple really there?" The only proper answer is another question: "What apple are you talking about?"

One of my favorite diagrams concerning perception is the one that shows a right-side-up vertical arrow in the environment, an upside-down image of it on the retina (with optical rays connecting the appropriate points), and a pathway into the brain where the same arrow is again shown. The naivete is charming. The same diagram, of course, applies to us as we view the diagram, and so on forever.

Anyway, have you also considered this subject as it applies to "information about ..."?

Best to all, Bill P.