

Logical Analysis of Psychology

by Carl G. Hempel



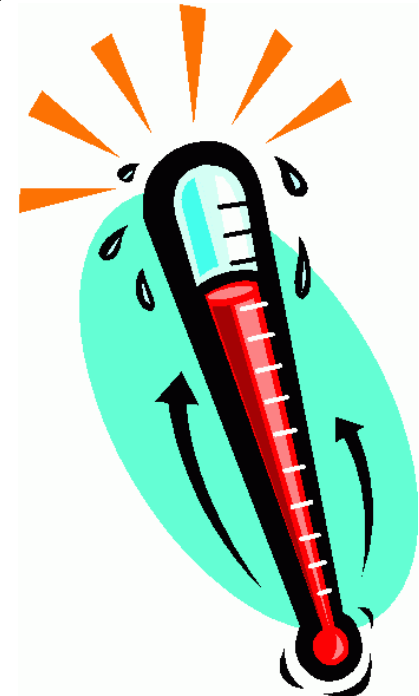
What is Psychology?

- Natural science, or science of mind and culture?
- Current view: “impassable gulf” between the two.
- Hempel, a supporter of Behaviorism, disagrees:
“We find in behaviorism, consequently, an attempt to construct a scientific psychology which would show by its success that even in psychology we have to do with purely physical processes...”
(Hempel 166.III)
- Behaviorism reduces mental states to pure bodily behaviors.



Psych vs. Physics

- Are psychology and physics the same in nature? Hempel has us look at what he calls “test statements”.
- Physics statement:
“Today at one o’clock, the temperature of such and such a place in the physics lab was 23.4° C.”
- This can be verified by mercury in a thermometer or some other form of temperature measurement test.



Psych vs. Physics

- Psychology statement: “Paul has a toothache”
 - a) Paul cries
 - b) Paul says he has a toothache
 - c) Examination reveals a decayed tooth
 - d) Paul’s blood pressure, digestive processes, etc. show such and such changes
 - e) Such and such changes occur in Paul’s central nervous system.
- All these circumstances that verify the statement are physical.
- Hempel disproves the “impassable gulf”:
 - “All psychological statements which are meaningful, that is to say, which are in principle verifiable, are translatable into statements which do not involve psychological concepts, but only the concepts of physics.”
(168.IV)



So...?

- Hempel is attempting to theorize the mind in a way that eliminates Descartes dualism (mind vs. body).
- Purely physical view of the mind. The mind is not a soul, nor is it separate from the body.
- No metaphysical speculation (introspection), only concrete scientific evidence: behavioral analysis.



The Watch Example

- Hempel uses Neurath's analogy of a watch to show why introspection can be eliminated from psychology.
- Saying a watch is "running" well is shorthand, just like psychological terms are just shorthand for behavior.
- We don't look for the "running" of the watch.
- We shouldn't look for some ineffable "running" inside ourselves
- Mental states are just their physical manifestations



Skinner vs. Hempel

- Logical behaviorism vs. psychological behaviorism
- Logical behaviorism (Hempel) concentrates on scientific test statements and psychology as a physicalistic science. (Remember the whole toothache thing?)
- Psychological behaviorism (Skinner) limits its research strictly to behavior; stimulus and response. Interested in predictions.
- Both similar in that they discard introspection as useless. Unverifiable, thus has no meaning. Unscientific.

Discussions

- Does Hempel and Behaviorism make a convincing argument against introspection and Cartesian Dualism?
- Do you see any weaknesses to Behaviorism? Do all mental states have to have a physical manifestation?
- Who do you see as the more radical behaviorist, Skinner or Hempel?