Causal Theories of Knowledge:
Why They Leave Gettier Problems Unresolved

Chris Dierich & Kristin Schaupp ❖ Philosophy ❖ University of Wisconsin-Eau Claire

What is Knowledge?

o   Philosophers have been interested in what constitutes Knowledge for centuries.

o   The claim Knowledge=Justified True Belief can be traced back as far as Plato.

Knowledge=Justified True Belief?

o   With the use of a few examples Edmund Gettier showed that JTB is necessary but not sufficient for Knowledge (Gettier, 122-23).

o   Gettier examples involve cases were someone has the right belief for the wrong reason.

o   Alvin Goldman tries to address this by requiring that there be a causal connection between the fact that makes something true and the person knowing it. He thought this would resolve the Gettier problem.

The Causal Theory

o   Goldman argued that what was missing in Gettier's examples was an unbroken causal chain (Goldman, 358).

   e.g. The eruption of a volcano causes lava to cover the surrounding countryside. The sight of which causes an observer to infer (without seeing the eruption) that that the volcano once erupted (Goldman, 362).

Volcanic eruption	Lava present	Belief lava is present supplemented by background beliefs	Belief volcano erupted

o   This figure represents a continuous causal chain between the event, beliefs, and resulting knowledge.

o   Gettier examples involve an element of luck. The causal chain between the event and resulting belief is faulty or incomplete. Thus, the resulting beliefs are more akin to lucky guesses than to knowledge.

A Difficulty for the Causal Theory

o   While Goldman's proposal seems to solve Gettier problems, the difficulty with a causal theory of knowledge is that reconstructing causal chains requires a necessary element of inductive reasoning.

o   This opens us up to a specific type of uncertainty; that which is inherent in inductive reasoning as shown by Nelson Goodman's "New Riddle of Induction."

Goodman and the Riddle of Induction

o   Goodman shows that we are unable to provide a satisfactory account of what makes one inductive statement good and another bad.

o   Imagine that in addition to the words 'green' and 'blue' we have another word 'grue.' 'Grue' is used to refer to things which are green if we look at them before the year 2045, and blue if we look at them after year 2045.

   (In other words, grue is used to designate things which suddenly change color - from green to blue - in year 2045.)

Consider the following inductive arguments:

Each observed emerald is green
All emeralds are green

The first inductive conclusion is acceptable while the second conclusion is not.

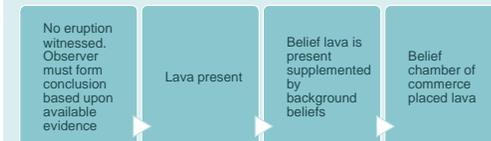| Each observed emerald is grue. |
|---|
| All emeralds are grue. |

o   The riddle is: What makes the first conclusion acceptable and not the second? (Goodman, 71-80)

Goodman Continued…

o   We have clear intuitions about which is correct but since we have the exact same evidence for each statement, our intuitions do not seem to be based on the evidence.

o   This riddle shows that we lack a foolproof way of determining in advance why one inductive statement is considered good and the other bad.

What Goodman's Riddle Means for Knowledge Claims

o   The causal theory seems to resolve the initial problem raised by Gettier because it eliminates the presence of luck in knowledge claims.

o   However, its appeal to inductive reasoning leaves us with another problem to address.

o   This can be seen by returning to our original example:

No eruption witnessed. Observer must form conclusion based upon available evidence	Lava present	Belief lava is present supplemented by background beliefs	Belief chamber of commerce placed lava

o   The above reasoning seems bizarre. But if it turns out that the chamber of commerce really did distribute the lava in order to attract additional tourists and this is a known fact, then it would be acceptable. Determining this involves inductive reasoning.

Conclusion

o   Our best responses to the problem of knowledge involve some form of inductive reasoning.

o   If we are unable to provide, in advance, a satisfactory account of what makes inductions good or bad, then there will always be a weakness in our theory of knowledge.

o   There is good reason to think that the problem of induction is here to stay. If so, theories of knowledge will remain essentially inadequate.

References
Gettier, Edmund. "Is Justified True Belief Knowledge?" *Analysis*, vol. 23, pp. 121-123, June 1963.
Goldman, Alvin. "A Causal Theory of Knowing" *Journal of Philosophy*, vol. 64, pp. 357-372, June 1967.
Goodman, Nelson. *Fact Fiction and Forecast*. Harvard University Press, Cambridge, MA. 1963.