

Vol. 3, No. 4: John D. Norton, "Causation as Folk Science"

Abstract:

I deny that the world is fundamentally causal, deriving the skepticism on non-Humean grounds from our enduring failures to find a contingent, universal principle of causality that holds true of our science. I explain the prevalence and fertility of causal notions in science by arguing that a causal character for many sciences can be recovered, when they are restricted to appropriately hospitable domains. There they conform to loose and varying collections of causal notions that form folk sciences of causation. This recovery of causation exploits the same generative power of reduction relations that allows us to recover gravity as a force from Einstein's general relativity and heat as a conserved fluid, the caloric, from modern thermal physics, when each theory is restricted to appropriate domains. Causes are real in science to the same degree as caloric and gravitational forces.

Keywords:

causation, philosophy of science, physics, Newtonian mechanics