

Spontaneity

Personal Freedom versus Universal Order

I don't think about Freedom a lot. Like most people, I just take it for granted. Until, that is, someone tries to take it away from me. Several years ago, I was reading a magazine article entitled "Prospects for Existence", which explored the basis for morality in an age of science. I agreed with most of the author's assertions, until he emphatically denied that Free Will is possible in an orderly deterministic universe. That didn't seem right to me, so I tried to think of some alternative to a one way trip through history, where everything is caused by something that came before.

The inexorable chain of cause and effect didn't leave much room for spontaneity or free choice, though. The article implied that my behavior today was determined at the instant of the Big Bang. From the time of creation onward, every action was the inevitable result of all prior events. Yet, I thought I saw a way to avoid the curse of the zombie. So I wrote a letter to the magazine pointing out that, in principle, the behavior of unruly crowds is statistically predictable, while individual behavior is completely unpredictable, therefore free.

Unfortunately, the author of the article was not impressed with my mechanical analogy to human freedom. He rejected my picturesque metaphors, because, while they are suggestive, they don't prove anything. Metaphors, to him, are akin to metaphysics. They may give emotional hope to those who want to believe, but they don't provide rational evidence to those who want to know.

However, I am also one of those knowledge seekers. I too am not content with comforting imagery. I too want beliefs supported by facts, not fantasies. Yet, I am painfully aware that scientific proof for pet theories is hard to come by. Those coveted nuggets of scientific knowledge are often discovered only after years of speculative prospecting. So, patience is a virtue for truth seekers.

Even though I must admit that I can't explain precisely how freewill can emerge from absolute determinism, I don't give up so easily. I may be stumped, but the author himself is in the same boat. As a physicist, he would have great difficulty explaining his belief that a pinpoint particle of light can simultaneously exist in the form of a fluid wave of luminosity; or how an electron can exist in a hybrid state of up/down spin. Both of us must find a way to reconcile two conflicting facts.

Modern physics has its share of paradoxes. But, unlike theologians, scientists can't shrug them off as a sign of God's inscrutability. Nature is assumed to be transparent to human reason, at least in principle. But sometimes, what we observe defies rational explanation within our current philosophical and scientific belief system. It often takes lifetimes, maybe even a paradigm shift, before paradoxical puzzles are put to rest.

Most scientists and philosophers, though, act *as if* they are not programmed, but free to choose by reason, not coercion. At the same time, however, most of them would admit that they see no loopholes in the iron chain of cause-and-effect determinism. Indeed, they rely on determinism as the basis of Nature's order. But that doesn't make carved-in-stone predestination and foreordination any easier to accept than wispy, statistical freedom.

When faced with evidence of "spooky action-at-a-distance" Einstein refused to believe it. Astronomers, for many years, operated as if they believed in things not seen—such as black holes—without physical evidence, only their mathematical models. Eventually, though, their longsuffering "faith" was rewarded with tantalizing glimpses of indirect evidence for the object of their hope. And quantum physicists have produced practical applications based on concepts they still don't understand.

In a similar manner, I continue to assume that I have the power of Free Will, in the face of strong evidence to the contrary. Because it helps me to make sense of the world. I certainly don't claim to know how we manage to break the shackles of destiny. But, I do know that Nature permits other paradoxical relationships to exist, suggesting that there are gaps in our knowledge. Consequently, my analogies and metaphors give me hope that my belief in Free Will is not without good reason.

However, my hope must be tempered with skeptical doubt, in order to guard against false beliefs. My little analogies of *Freewill within Determinism* are no different in principle than Deepak Chopra's use of Quantum Theory to support his belief in mind/body duality. Both are speculative extrapolations from accepted facts toward desired conclusions. Only time will tell which of our hypotheses are true. In the meantime, we will continue to believe what we want to be true. Is that a matter of choice, or destiny?☹