

There are three theories of causation:

Upward: Scientific Causation - energy-matter makes us what we are.

In this theory, everything that exists in the physical universe is dependent on fundamental entities (bosons with mass and massless fermions) and their interactions (found by splitting matter apart down to the smallest currently possible scales). Living creatures can be divided into cells; cells themselves are composed of organelles; organelles can be broken down into molecules; molecules are made up of atoms; atoms are fermions and bosons. These fundamental particles obey certain fundamentally inherent laws.

In this theory, we have little or no contribution to the process, the fundamental laws of science control things.

Downward: Spiritual Causation - God makes us what we are.

In this theory, the fundamental laws of science are God's preferred way of doing things and we have little or no contribution to the process.

Comparing these two theories from my logical perspective, if the universe was created based on a downward causation scenario of structural formation, we'd see large collections of matter fragmenting into smaller structures. If it were purely upward creation, mutual gravitation would gradually bring matter together. Instead, our universe appears to be an amalgam of both. The universe is not described well by either scenario. So, a more plausible scenario is:

Up/Down: Combined Scientific/Spiritual Causation - Energy-matter makes sentient beings possible. Sentient beings continue the organizational, perfection process.

Transcendent Naturalism and has a circular cause/causality paradigm that can be broken down like this:

1. Matter/Energy

There is a continuum between the quantum realm and the realm of classical physics when more complex forms of matter abruptly lose their quantum properties in a phenomenon called "decoherence." Quantum properties like entanglement suddenly disappear, waveform collapses, and matter becomes measurable. Classical matter has emerged from the quantum realm via this constantly occurring decoherence. This implies that energy/matter has an emergent foundation and a coherent destiny.

2. Life. Sentient Autopoiesis

The circular pattern when something maintains and renews itself by regulating its own composition and conserves its own boundaries in a system of feedback loops.

3. Mind.

Microtubules and other connection relationships form the base of a 4E (“embodied, embedded, enacted, and extended) cognitive feedback loop. As we enhance the positive aspects of these feedback loops, we improve our spiritual receptivity.

4. Culture.

As the cultures evolve, more sophisticated models emerge, culminating in “wisdom” which grows out of the wisdom of the individual as it is guided by top-down insight. There is not necessarily a direct connection between how things seem and how they really are. We are often mistaken in our self-reporting of how things seem unless we use a top-down perspective.