

The Unifulverse versus the Multiverse

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Abstract—The unifulverse hypothesis says that there are transformant universes, such that any universe could transform into another universe from among all of the infinite parallel and different universes. From the perspective of this cosmological hypothesis, all of the infinite parallel universes potentially exist in our actual universe, which enables our universe to transform into any different parallel universe. This distinguishes the unifulverse hypothesis from the multiverse approach, according to which, the infinite parallel universes actually exist in different dimensions from our actual universe. The unifulverse hypothesis holds that our universe is potentially full of other universes. And this is why it is called the unifulverse. According to the unifulverse hypothesis, there is a unique law of nature, called the transformantalist law, in light of which, a universe, such as ours, could transform into another universe.

Keywords: *Unifulverse; Multiverse; Transformantalist Law; Uncertainty; Probability; Energy; Transformant Universes; Parallel Universes*

Two Competing Scientific Visions

There are two competing scientific visions of reality. According to the first vision, there is only one universe, and that is the universe which we live in. The concept of universe in English implies the content of this scientific view because the term “uni” means one. But, according to the second scientific vision, there are many different universes, which we call the possible and parallel universes, possessing different facts and laws of nature. We use the concept of multiverse to describe this scientific view [1]. The concept of multiverse in English entails this vision because multi means many.

A Third Option

Yet there is a third option different from the one universe vision and the multiverse vision. This third option is called the unifulverse, according to which, there is one universe, namely our actual universe, but our universe could become any possible universe from among all the possible and parallel universes in the multiverse. Hence, the unifulverse vision entails

the first one universe vision and the second multiverse vision because it says that there is one universe capable of becoming a multiverse, and hence, the multiverse potentially exists in our actual universe. Thus, the unifulverse vision successfully reconciles between the first one universe view and the second multiverse view. And therefore, it successfully solves the conflict between these two competing scientific views. And in light of this success, we could rightly infer that the unifulverse vision is a plausible scientific hypothesis.

Defining the Transformantalist Law

There is a unique law of nature enabling a universe to transform into another universe, leading to the existence of transformant universes. This law is the following: $u = \infty P_s \div E$, such that u is uncertainty, ∞P_s is all of the infinite probabilities, and E is energy. We call this law the transformantalist law because it explains how a universe could transform into a different universe.

If there are different and opposing probabilities, then and only then there is uncertainty. This is why we are justified in analyzing uncertainty in terms of probabilities. In light of this consideration, the maximum uncertainty is equivalent to the maximum number of probabilities which amounts to infinite probabilities. This leads to the conclusion that uncertainty must be analyzed in terms of infinite probabilities, exactly as the previous law says.

The law $u = \infty P_s \div E$ is a special case of the general law $u = \Sigma P_s \div E$ (such that ΣP_s is the sum of all the probabilities) when ΣP_s is infinite. And we need energy in this law in order to enable the probabilities to be manifested because without energy nothing could be done. The law $u = \Sigma P_s \div E$ accounts for this fact in the following way: since $u = \Sigma P_s \div E$, it follows that $E \times u = \Sigma P_s$, leading to the conclusion that more energy is needed to obtain more probabilities. The success of this law in accounting for the fact that more energy is needed in order to obtain more probabilities speaks for its acceptance.

The Transformant Universes

Our universe is governed by uncertainty, such as the uncertainty principle of Heisenberg, according to which, the position of a particle and its momentum are uncertain at the same time [2]. But if $u = \infty P_s \div E$, i.e., if uncertainty is equal to the infinite probabilities divided by energy, it follows that our uncertain universe entails all of the infinite probabilities. Our uncertain universe is an actual existent universe. Hence, all of the infinite probabilities could be actualized and manifested in our uncertain universe (given that uncertainty is equal to the infinite probabilities divided by energy), leading to the formation of all the infinite parallel universes within our actual universe (such that different probabilities are actualized in different universes which our actual universe transforms into). This shows that our universe could become any possible universe from among the infinite parallel universes because our universe is uncertain while uncertainty equals all the infinite probabilities, which are equivalent to the infinite and diverse parallel universes, divided by energy. Therefore, $u = \infty P_s \div E$ is the law of nature which enables a universe, such as ours, to transform into any other different universe from among all of the infinite parallel universes.

The Universe is Full of Other Universes

The unifulverse hypothesis says that any universe, such as our actual universe, could change into another universe from among all of the different and parallel universes. And hence, all of the different and parallel universes potentially exist in our actual universe, otherwise our universe could not transform into another universe. The concept of unifulverse means one full universe, implying that the universe is potentially full of other universes, while the concept of multifulverse means all the infinite parallel universes which potentially exist, and which become actually in existence, when our actual universe transforms into each one of these infinite parallel universes. Our actual universe is a unifulverse. And the unifulverse transforms into a multifulverse when the different parallel universes are actualized and manifested in our unifulverse.

References

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- [2] David Lindley: Uncertainty: Einstein, Heisenberg, Bohr, and the Struggle for the Soul of Science. 2008. Anchor.