

Ask A Genius 83 – Chaos and Order (2)
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This session has been edited for clarity and readability.

Scott: What else would “flavors” of order and chaos imply (Pippard, 2015)?

Rick: There’s the idea that if you step all of the way back that our world is an epiphenomenon of information processing within a vast information processor and that the information processing tends to be an order producing process (Robinson, 2015).

That we are the consequence of the increase in order within a vast information processor. That we are more ordered with all of our agents and feedback systems than hot lava on the surface of primitive Earth or bunch of flying hydrogen and helium 300,000 years after the purported Big Bang (Mastin, 2009; Shu, 2016).¹

We were the product of billions of years of evolution and are highly ordered. Not in an order that is the universe as an information processor that particularly cares about things the way an omniscient God would care about his or her creatures.

But that we’re an epiphenomenon of the universe with its perhaps consciousness, which isn’t even aware of us because the universe is aware of the universe we’re made out of as its own model of its own world.

We and our Super Bowl, and our human bodies, are not a model of anything in the mental world of the information processor that is the universe. Everybody is going to have to straighten out all of this stuff philosophically before we have a complete picture of how the world, meaning everything, works, but it seems doable.

Until 100 years ago, we didn’t have any idea of the structure of the universe. Everything was a wild guess. Now, we have a decent picture of the type of matter clumping and the spatial scale of that clumping of all the visible matter in the universe.

Not all of it, but most of it. From that, we have assumed a temporal structure, an explanation, for the distribution of that matter, which is the Big Bang. I happen to think that the Big Bang is not

¹ *Cosmic Microwave Background Radiation* (2009) states:

This radiation was emitted approximately 300,000 years after the Big Bang, before which time space was so hot that protons and electrons existed only as free ions, making the universe opaque to radiation. It should be visible today because, after this time, when temperatures fell to below about 3,000°K, ionized hydrogen and helium atoms were able to capture electrons, thus neutralizing their electric charge (known as “recombination”), and the universe finally became transparent to light.

Mastin, L. (2009). Cosmic microwave Background Radiation. Retrieved from http://www.physicsoftheuniverse.com/topics_bigbang_background.html.

right and that the spatial distribution of matter is due to the nature of information with the necessary appearance of something that is Big Bangy.

But 100 years ago, we didn't have any of that. We didn't have any idea of the spatial distribution of matter or of the possible dynamics of the matter characterized by the Hubble Constant, which makes it look like we live in an expanding universe.

Where the farther a galaxy is from our galaxy, the faster it seems to be moving from us, whether it actually is or it is an informational thing rather than a Big Bangy thing. We didn't have anything like that. Now, we do.

That can give us some optimism that we can eventually come up with a logically, metaphysically satisfying first stab at an overall understanding of existence and the universe, which would be a frickin' lucky thing.

That there's a logical, philosophical underpinning that it's even possible. It may not be. It may be that such an underpinning may have holes in it. That are so powerful as to render any overall understanding impossible. But maybe not!

If things exist because they can't not exist, because things that don't contradict the rules or the principles of non-contradiction must unavoidably exist, then maybe that whole structure of things existing via not violating principles of contradiction, maybe, there's a thing there.

An overall understanding, or maybe that's hopelessly naïve, or maybe it is something in the middle. Where we get something pretty satisfying logically, that once you dig down into the foundation of it, then there are giant disturbing holes.

The only people well-versed in the giant disturbing holes are PhDs in the meta-meta-metness of everything. There might be some satisfaction in understanding why things are. It is a little bit more satisfying than the current scientific paradigm of everything from randomness and randomness in charge.

I think information is in charge, rather than randomness, and there might be solace in that, and understanding. One more thing, there's the Feynman talk about 55 years ago in the early 60s. He talked about the 3 paths of possible science (The Nobel Prize Foundation, 2017).

Science could explain everything within a reasonable amount of time. We reach a fairly thorough understanding of how everything works. Science hits an impregnable wall. It turns out you can only understand so much of the universe. There are no answers or no easy answers beyond a reasonable point.

Science chugs along finding out more and more about the universe bit-by-bit without acquisition of any thorough understanding. Those are the 3 paths of science according to Feynman: hitting a wall, understanding close to everything, and chugging along understanding more and more without coming to complete understanding.

That's equivalent to what we might find once we bring philosophy and metaphysics back into science. You may end up with some philosophically and logically very satisfying understandings of the universe or we may hit a wall.

We may go chugging along and come to something that feels incomplete, but still gathers and accumulates more and more understanding like a snowball. That's a lot.

References

- 1) Shu, F. H. (2016, April 29). Cosmic microwave background radiation (CMB). Retrieved from <https://www.britannica.com/topic/cosmic-microwave-background>.
- 2) Mastin, L. (2009). Cosmic microwave Background Radiation. Retrieved from http://www.physicsoftheuniverse.com/topics_bigbang_background.html.
- 3) Pippard, A.B. (2015, December 3). Principles of Physical Science: Chaos. Retrieved from <https://www.britannica.com/science/principles-of-physical-science/Conservation-laws-and-extremal-principles#toc14875>.
- 4) Robinson, W. (2015). Epiphenomenalism. Retrieved from <https://plato.stanford.edu/archives/fall2015/entries/epiphenomenalism/>.
- 5) The Nobel Prize Foundation. (2017). Richard P. Feynman: Biographical. Retrieved from http://www.nobelprize.org/nobel_prizes/physics/laureates/1965/feynman-bio.html.

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