

Ask A Genius 14 - The Future of the Ethos of Science

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What about the ethos of science? Principles, values, what about things like ‘simulatability’?

The ability to simulate natural processes to conduct experiments.

Science has always been a search for simplicity. Because we'll be able to handle complexity better in the future doesn't mean that it's not still a search for simple laws. Whether the universe turns out to be built on simple laws, or principles, or not, our number one goal in science is to figure how the universe works, or how whatever the universe is part of or part of a set of, what the general principles are.

Those principles may turn out to be simple with a bunch of emergent complexities. We're going to want to figure out the most efficient ways to characterize those principles. What you and I have been doing by talking about how the universe might be arranged is that what can or has to exist is what doesn't have self-contradiction.

Which means that you do get stronger emergent properties, things can exist in a nebulous way, in a half-assed misty, blurry, way for things that don't exist for long or don't have a lot of information, but systems as universes have more and more information, then the things in the universe become more and more highly defined.

So, that more hard-edged principles and laws emerge from higher sets that contain larger amounts of information.