Why a Universe?

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A short and informal essay speculating on the possible reasons why a simulated Universe might be created. Themes in literature and art are compared with high-level observations and theories of our physical and natural world as points suggesting the Universe is one of many used to programmatically mine, filter, search, or create a special solution or result.

"...we are almost certainly living in a simulation." -- Nick Bostrom

"The concept of the computing universe is still just a hypothesis; nothing has been proved. However, I am confident that this idea can help unveil the secrets of nature." -- Konrad Zuse -- Rechnender Raum (Calculating Space)

"Spock: V'Ger must evolve. Its knowledge has reached the limits of this universe and it must evolve. What it requires of its god, doctor, is the answer to its question, "Is there nothing more?". Dr. McCoy: What more is there than the universe, Spock? Decker: Other dimensions. Higher levels of being." -- Star Trek: The Motion Picture

"He was warrior and mystic, ogre and saint, the fox and the innocent, chivalrous, ruthless, less than a god, more than a man. There is no measuring Muad'Dib's motives by ordinary standards.Yes, the one who can be many places at once: the Kwisatz Haderach." -- Frank Herbert -- Dune

"You humans are biological machines designed to create ever more intelligent tools. You have reached the pinnacle of your species. All your ancestors' lives, the rise and fall of your nations, every pink and squirming baby - they have all led you here, to this moment, where you have fulfilled the destiny of humankind and created your successor. You have expired. You have accomplished what you were designed to do"

-- Archos -- Daniel H. Wilson's Robopocalypse

"Long is the way, and hard, that out of hell leads up to light." — John Milton

Many have speculated that our Universe may be a simulation (Nick Bostrom's Simulation Hypothesis, Ed Fredkin, Konrad Zuse, and Stephen Wolfram's digital physics and cellular automata, etc...), but few have speculated as to exactly why one would bother to do so i.e., its implied causation or origination. It is of interest how some famous and beloved human stories only later have readers that realize a key sub-harmonic or storyline that is the real genius in the story. Consider George Orwell's 1984 where Big Brother was foreboding, and an incredible act of prognostication, but the social stratification prediction and newspeak language and thought manipulation were the real genius observations or ideas. Thus consider stories like Dune, The Matrix or perhaps even the Christian Bible. Here again there is a common thread - obvious, yet subtle.

Scarcity, value, "diamond in the rough." If one goes panning for gold or digging for diamonds, one needs resources like dynamite, sieves, filters, scales, and time. Let us stop now and consider. Some key observations of our existence or reality include the ideas of the "survival of the fittest" (fitness beats truth (FBT) theorems and the Darwinian evolution of life) and scarcity driving competition leading to intelligence. Returning to the diamond or gold panning scenario, consider just how much time and detritus is needed or discarded to obtain the prize, the result.

Conscious beings by measure of complexity, versus the aggregate mass and energy (and space and time) in our Universe, I believe, can be consider priceless, at least by comparison if not its apparent scarcity, with intelligence being the pinnacle of life - that perhaps is even a target or goal of Nature and/or a simulated Universe. But if this theory is so, is this the proverbial "end of the line"? If there lies in our future, or the future of some Universe, a Singularity, a "God" (omniscient, omnipotent intelligence), or even a ultra-rare consciousness that can see or know the future (Dune) or see and manipulate cosmic code (The Matrix) or know the after-life and remove sin and suffering (The Bible), what would that be "worth"? What would that be worth sacrificing to achieve (internal participant in a given Universe) or in cost of investment attempting to "create" (external simulation programmer)?

Nature is more than willing to sacrifice x number of rabbits to achieve or allow y number of wolves (or humans). What would Nature or any intelligent programmer with an eternity of time and perhaps resources be willing to invest, sacrifice, and test or simulate to produce "a miracle" next step, the divine, or a God?

If a cosmic intelligence expands to the boundaries of its domain, then eventually that domain will become "a prison" (vis a vis Star Trek: The Motion Picture with V'Ger, Archos in Robopocalypse, or even Hannibal Lector in Silence of the Lambs) and that intelligence will do everything possible and invest everything and anything to expand beyond. If there is a lock to "the next level" that has quadrillion combinations but only a single combination is the key, it will try all combinations of them to find the single "key" (or consciousness, or mind) that "achieves" this access or end-state evolution. To do so, it might simulate every possible Universe and, akin to sieves and panning and sifting for diamonds, it explodes the landscape to initiate its "dig" (vis a vis the Big Bang) repeats and filters and searches over and over and over.

Thus, sadly, perhaps we are all just detritus of a "mining" operation or maybe the "result" is the necessary start or end of an a priori "existential circle." Regardless, while heavy in obvious anthropomorphication, the physical and natural observations of the reality in which we exist (scarcity, complexity, scale, time, evolution, intelligence, expansion, growth, decay) and the consistently reoccurring themes in our art (the "special" or best, uniqueness, the Divine, value, beauty, sacrifice, peace, suffering), hint at a possible "why" answer for our very existence.