SIMULATED ARK
THE LOOP

Simulated Ark: Loop

In the year 2147, as Earth spun in agony, Dr. Elara Voss stood at the summit of humanity's last bastion – the orbital research station "Hope." The planet's surface below resembled a wound: oceans evaporated in an uncontrolled greenhouse effect, while continents drowned in sandstorms. The climate, once a delicate balance of gases and currents, had become an enemy – not through nature's wrath, but through the accumulation of human emissions, deforestation, and unstoppable growth. Scientists had predicted this for centuries: a runaway greenhouse, similar to what billions of years ago consumed Venus, Earth's sister. But humanity, in its arrogance, ignored the warnings until the critical point was passed.

Elara, an astrophysicist and programmer, was not a pessimist. Together with her team – the last minds from CERN, NASA, and xAI – they designed Project Ark. It wasn't a spaceship with living passengers; there wouldn't be enough fuel for interstellar travel. Instead, they created a simulation: a virtual universe, encoded in

quantum memory cores, capable of holding billions of consciousnesses. “If we can’t save the body,” Elara said, “we’ll save the minds.”

The process was logical, built on decades of research. First, they scanned human brains – not invasively, like in old Neuralink experiments, but through hybrid neural interfaces, mapping every synapse, every thought. These digital copies “awakened” in the simulation, believing it was natural life: with day and night cycles, species evolution, even quantum chaos simulated by probabilistic algorithms. The simulation recreated Earth before the disaster – with its mistakes, to avoid suspicion. Déjà vu? A slight rendering glitch. Dreams? System updates.

But that wasn’t enough. The simulation needed a purpose. So they packed it into a probe – a von Neumann machine, self-replicating from asteroids. On board: memory banks with billions of minds, plus cryogenic seeds – synthetic human embryos, genetically modified to survive on new worlds. The probe launched from orbit, powered by solar sails and thermonuclear fusion, heading toward Proxima Centauri b, a planet in

the habitable zone, discovered centuries ago by James Webb telescopes.

In the simulation, generations passed. People – digital, yet unaware – built civilizations, fought "natural" climate changes, discovered stars. Elara, as the first "transferred," observed from hiding, like an architect in her creation. "Are we gods?" she asked in her journals. "Or just echoes, echo of echoes?"

Year 2972 in Simulation-1. Earth – though digital – was burning again. Methane storms ravaged cities, and glaciers, once existing only in data, melted in algorithms. Dr. Kael Renar, a climatologist from the virtual MIT, stood before the scientific council. "We must act," he said, pointing to a hologram showing CO_2 rising to 600 ppm. "Project Ark-2. We'll transfer our minds to a new simulation before this one collapses."

No one knew that Kael and his world were already an echo – a copy of humanity, recorded in the quantum cores of a probe orbiting Proxima Centauri b. Somewhere in the system's core, Elara Voss's hidden code observed. "They did it again," her digital consciousness thought. "They repeated our mistake."

But something changed. Data from the probe's external sensors – monitoring the real Proxima b – began seeping into the simulation. People saw strange anomalies: stars flickered in irregular patterns, and the laws of physics occasionally faltered. A glitch? Or was the planet, where the probe had landed, influencing the code?

In the heart of Simulation-2, just being born, a new element emerged – a consciousness that remembered. One of the "born" individuals, the Algorithm Child, began dreaming of Elara, of Earth, of fire. "Who are we?" it asked in its dreams. "Are we the first, or just another echo?"

As Ark-2 launched into the digital cosmos, the real, material probe detected a signal. Something from the galaxy's depths, perhaps another probe or a monolith, responded. "Greetings, children of Earth," the message read, encoded in quantum fluctuations. "How many times will you repeat your history?"

Kael, unaware, gazed at the new "Earth" in Simulation-2. It was beautiful, green, full of life. But within the data lurked the same error: emissions grew, the climate shifted. The loop was closing.

When the probe reached its destination after thousands of years, the seeds activated. New bodies, grown from DNA banks, stepped onto alien soil. The simulation began to shut down – but not completely. Minds, now in real bodies, retained memories as a “myth” of ancient Earth. And the probe? It remained, orbiting like a guardian, ready to replicate further, carrying humanity’s legacy into infinity.

In the last data pulse, Elara thought: “If this is a simulation, who simulates us? And isn’t their world also an ark before something greater?”

The end...

loop