

SCIENCE, REASON AND CONSCIENCE: A PHILOSOPHICAL JOURNEY FROM THE CHAIR TO THE CREATOR – 24

"Beyond Entropy: The Endless Secret of the Cosmos"

(TÜRKÇE VE İNGİLİZCE)

Silence... The discussion paused momentarily, reverberating with the echo of the Deist's last question. This silence was not merely external but carried with it a profound inner reckoning. As a storm of thoughts swirled in the listeners' minds, the intensity of the debate became even more palpable. *The perfect order of the universe at its inception and its supposed self-sufficiency through natural laws formed one of the pivotal points of this philosophical journey. Yet, this was merely the surface; the true matter lay in the force behind this order and its influence on existence.*

Every mind grappled with the meaning of the universe's harmony and the inescapable effects of entropy. Was the cosmos operating like a self-sustaining clockwork mechanism, or were there traces of a constant creative force behind this order?

The silence provided a space for reflection, a crucible where the direction of the discussion would be forged. The storms of this profound reckoning stirred different waves in each person's mind. **The desire for "truth" was not merely about defending an idea but was also an earnest pursuit of answers to the most fundamental questions of human "reason" and "conscience".**

Believer: Claiming that the universe was created with perfect order at its inception and that this order could then sustain itself solely through "*Natural Laws*" is in clear contradiction with the "*Law of Entropy*." The law of entropy states that in a closed system, energy becomes progressively less usable over time, and the system moves toward disorder. ***If the universe had been left solely to its initial order, its energy would have been "depleted long ago," and the system would inevitably have ceased to function.***² However, **the reality** we observe shows that the universe continues to operate in an orderly manner. This fact necessitates the existence of an intervention that continuously preserves the universe's order and energy.

The Deist noticed that the audience was deep in thought, and the Believer's words had made an impression on those in the room. He felt a growing discomfort; after all, his goal in this debate was to maintain the upper hand and keep his own perspective at the forefront. Resolving to stick to his **plan**, he prepared to ask his next question. Yet, despite his effort to conceal his intent, his movements and demeanor betrayed him to the observant. Narrowing his eyes, he glanced briefly at the table, as if trying to gather his thoughts. Then, he spoke in a calm voice:

Deist: Let me put it this way for better clarity: The universe was "*created with a finite amount of energy*" at the beginning, and the fact that the universe is a "*closed system*" reveals that this energy is limited. All entities sustain their existence using this finite energy. For instance, stars form by consuming this energy in the process. However, according to the law of entropy, energy in a closed system inevitably moves toward depletion over time, a process known as "*heat death*." The initial energy was sufficient only for a specific duration, and **that duration should have already passed. Yet, the fact that the universe still exists-does this point to the necessity of an external intervention?**

As he spoke, his voice remained calm and measured, but the sharp look in his eyes hinted at his intention to steer the discussion in a different direction. The audience, realizing the depth of his question, continued to listen attentively. The Deist's deliberate approach gave the impression of a subtle challenge to the Believer.

The Believer, as if sensing the Deist's intent, smiled faintly and nodded patiently. Aware that it was now his turn to speak, he began in a calm yet compelling tone:

Believer: Yes, you've described it quite accurately. Now, let me explain this situation with a more concrete example. Imagine the universe as a massive factory. Let's say this factory was initially established with a large capital investment. This capital represents the energy resources and infrastructure necessary for the factory to operate. The factory begins producing goods, running its machines, and maintaining its systems using this initial capital.

The energy at the beginning of the universe is akin to this factory's foundational capital. Stars, galaxies, and other celestial bodies are the products that emerge as a result of utilizing this capital. However, like any factory, the operation of this universal factory depends on the gradual depletion of the capital it uses. As the capital is consumed in the production processes, it diminishes and, at some point, runs out. This parallels the workings of the law of entropy; energy transitions into less usable forms, and disorder increases.

But here lies a critical point we must emphasize: **Calculations indicate that this universal capital-energy-should have been depleted over the billions of years of cosmic operation. If we were limited to the initial capital alone, it would be impossible for stars to continue generating energy or for the universe to maintain its orderly functioning today.** Yet, the reality we observe tells a completely different story. The universe has continued to operate in an orderly fashion for billions of years; stars produce energy, galaxies move, and life persists.

This fact suggests that the factory's capital is being continuously replenished through an external intervention. **The factory owner actively renews the capital, ensuring the factory's operation and the continuation of its production.** This is precisely what we observe in the workings of the universe. The Creator renews the universe's capital-its energy-ensuring the persistence of its order and operation. Without this intervention, the capital would be exhausted, production in the factory would cease, and chaos would engulf the universe.

In other words, the continuation of the universe's order and operation resembles the intervention of a factory owner who continuously increases the capital to keep the factory running. This demonstrates that the universe does not persist solely on the initial order but requires ongoing creative intervention. This creative force not only brought the universe into existence but also continuously oversees, supports, and organizes it at every moment.

Deist: Perhaps there are "*natural mechanisms*" behind these processes that we have yet to fully understand...

The Deist's words rippled through the silence in the room once again. This statement, shifting the course of the discussion, seemed to open a new door in the minds of those present. The faint smile on the Deist's face revealed a clear determination to advance his thoughts to the next stage.

The Believer watched him patiently. Yet, the expression on his face betrayed a deep astonishment that such an evident truth was still being questioned. After a deep breath that broke the silence, he spoke in a calm yet resolute tone:

Believer: The pursuit of "*truth*" requires not settling for surface-level assumptions. But remember, what you call "*natural mechanisms*" are merely components of an outwardly orderly system. **Those who refuse to see the force behind them can only grasp a fragment of the truth.** Therefore, if you truly wish to uncover the full truth, continue to question sincerely and with an open mind.

The Deist nodded slightly as he gathered his notes, seemingly forming new questions to take the discussion to the next level. However, his plan was not yet fully shaped, and this left the room filled with a tense silence. The Believer, as if sensing the Deist's preparation, added with a calm demeanor:

Believer: This discussion will not end here; there is a journey ahead where we will delve deeper into the mysteries of the universe's workings and the true force behind the order you call "*natural mechanisms*." **If you are willing to see**, we will explore the deeper truths of the universe's operation together in the next step.

The determination in the Deist's gaze made it clear that his journey was far from over, and he would continue with new questions. **The pursuit of truth was not yet complete, but the next destination on this journey would involve the most challenging questions-and perhaps the greatest answers.**

See you in the next chapter, God willing...

¹ The term "energy depletion" is intentionally used to simplify the concept for broader audiences. Scientifically, energy is never destroyed; it merely changes form or transitions from usable to unusable states, in line with the second law of thermodynamics (entropy). According to entropy, as energy is utilized, order decreases, chaos increases, and energy becomes less accessible. Eventually, when all energy is in an unusable state, universal processes cease, and life ends. The first law of thermodynamics also states, "*Energy cannot be created or destroyed in isolation.*" Therefore, the term "energy depletion" should be understood as a practical interpretation of energy transformations.

This usage is akin to describing temperature as "hot" or "cold" in everyday language. Technically, these terms are relative perceptions of heat increase or decrease. Similarly, when we say energy is "depleting," we mean it is undergoing transformations that reduce its usability due to increasing entropy.

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