

## SCIENCE, REASON AND CONSCIENCE: A PHILOSOPHICAL JOURNEY FROM THE CHAIR TO THE CREATOR – 31

### "The Secret at the Heart of the Universe: Traces of Order in the Subatomic World"

The universe's silent breath flows toward the smoldering embers of cells, while the spark of curiosity continues to blaze. As we take one step closer to the mysterious dance of quantum mechanics, we stand on the threshold of a moment where we might touch the very heart of the cosmos. In the previous chapter, we delved into the paradox of energy in living beings, tracing the uninterrupted patterns of creation under the shadow of entropy. Now, we embark on a journey into the intricate labyrinths of the subatomic world—into that enigmatic realm where probabilities dance in perpetual motion.

Could the mysteries of this domain conceal deeper insights into the infinite will of the Creator? The echo of this question calls us toward a new adventure.

**The Believer:** Quantum mechanics indeed appears to be a realm governed by probabilities. Subatomic particles do not possess fixed positions or momentum but instead move according to probabilities.<sup>1</sup> Yet, we observe that these probabilities form an inherent order, maintaining stability.<sup>2</sup> For instance, electrons exist at specific energy levels around the atomic nucleus. If there were even the slightest deviation in these energy levels for a mere fraction of a second, the atom would become unstable, leading to the disintegration of matter itself.<sup>3</sup>

**Deist:** But can't we explain this stability in the quantum world as a mere coincidence or as an inherent mechanism of nature itself?

**Believer:** Theoretically, that might seem possible. However, quantum mechanics suggests that this order is not the result of random coincidences but rather a form of regulation. Electrons move within an energy level according to their wave functions. Yet, at a certain moment, this wave function must collapse into a definite state, establishing a stable order.<sup>4</sup> This transition does not occur randomly when left to itself—it requires a regulating mechanism.<sup>5</sup>

**Agnostic:** Then how do you define this mechanism? How is this order in electron energy levels maintained?

**Believer:** When electrons transition from one energy level to another, a specific amount of energy is either emitted or absorbed.<sup>6</sup> If this process were not regulated **at every moment**, atoms would lose their stability, leading to the collapse of the fundamental

building blocks of matter.<sup>7</sup> This stability must be maintained **at all times**, and such precise regulation can only be explained by constant oversight and intervention.

**Deist:** So, are you suggesting that these delicate balances at the subatomic level also require the constant intervention of a creative force?

**Believer:** Absolutely! The stability at the quantum level is one of the fundamental pillars of the universe's order. If this balance were disrupted even for a moment, atoms would disintegrate, molecules could not form, and ultimately, the existence of the universe itself would cease. The intricate structure of the quantum world is not sustained merely by an initial setting but rather through **continuous regulation at every moment**.<sup>8</sup>

**Agnostic:** Is there a connection between this regulation in the quantum world and the constant energy demand in biological processes?

**Believer:** Definitely! The order in the quantum world ensures the stability of molecules, which are the foundation of biological processes.<sup>9</sup> The formation of atomic bonds, protein synthesis, and energy transformations all depend on this delicate equilibrium at the quantum level.<sup>10</sup> Therefore, **the continuous oversight within the quantum realm is a fundamental factor that sustains the order of the universe and makes life possible**.<sup>11</sup>

**Atheist:** So, according to your argument, there is a regulating force behind the uncertainty at the quantum level?

**Believer:** Yes, because it is impossible for this order to be maintained purely by chance. The balance in the quantum world is the foundation of order at every level of the universe, and it requires constant oversight. This serves as a powerful indication that a creative force is **continuously** controlling the universe.

**Deist:** I understand that the stability at the quantum level requires continuous supervision. However, when we look at the broader structure of the universe, how do we explain the fine-tuning of cosmic constants? Couldn't they have been set just once at the beginning?

**Believer:** While that might seem possible, the **law of entropy** disproves this idea. The entropy law clearly states that energy and order are constantly being lost, and no system can sustain itself indefinitely without external input. If the cosmic constants had been set only at the beginning, over time, deviations would have occurred, leading to the collapse of the universe's order. However, our observations show that these constants have remained

unchanged and precisely maintained for **billions of years**. This strongly suggests the necessity of **ongoing regulation**.<sup>12</sup>

**Agnostic:** So, you argue that there is a creative oversight at every level of the universe, from the quantum world to the cosmos?

**Believer:** Yes. From the subatomic balances in the quantum world to the preservation of cosmic constants and the continuous renewal of matter, everything is a result of this oversight. It is impossible for such order to sustain itself randomly. The precise workings of the universe serve as one of the strongest scientific confirmations that a creative force is **constantly active** and governing the cosmos.

As the dialogue came to an end, the table fell silent. Each person sank into deep thought, contemplating the discussion through the lens of their own perspective.

**Deist:** I must acknowledge that I remain open to the idea that the stability of the universe at the quantum level could be sustained by natural mechanisms. However, could the fact that these natural laws are so perfectly designed be sufficient to maintain cosmic order? Perhaps the creator designed the universe in such a way that even tendencies toward decay—like entropy—are counterbalanced by natural mechanisms without disrupting the overall system. In that case, could we explain this delicate balance **without** the need for continuous intervention?

The Deist's words once again cast a veil of uncertainty over the carefully woven arguments of the Believer. A hush fell over the room. The Atheist raised an eyebrow in astonishment at the Deist's statement, while the Agnostic shifted uneasily in their seat. Everyone was silently weighing this new dimension of the discussion in their minds.

For the first time, a flicker of strain appeared in the Believer's eyes, hinting that his patience was being tested. He took a deep breath, placed his hands on the table, and paused for a moment. Fixing his gaze on the floor, it seemed as if he was trying to suppress the disappointment rising within him. He let the silence linger a little longer.

Despite the quiet frustration building inside him, a thought surfaced in his mind—words from **Bediüzzaman Said Nursi**:

***"The path of the Risale-i Nur is one of dignity, gentleness, and soft-spoken wisdom."***<sup>13</sup>

These words reminded him that in defending the truth, one must never abandon **kindness and composure**. The realization renewed his patience and reshaped his approach.

His disappointment did not manifest as sharp rebuttal or heated reaction. Instead, it transformed into a firm, unwavering stance—one filled with a deep sense of responsibility to uphold knowledge and truth. It was a stance that not only reflected his dedication to defending what he believed but also his commitment to doing so with the **right tone and manner**.

As the Believer listened to the Deist's carefully chosen words, the tense silence that settled over the room reflected not only the weight of the discussion but also the complexity of the questions at hand. He took a deep breath, slowly turned his gaze toward the Deist, and spoke with calm determination:

**Believer:** This discussion is not merely a clash of scientific theories; it is a test on the path to truth. If we are truly in search, we will find wisdom behind every question and a new doorway beyond every answer. But I see that our discourse is not leading toward resolution—it is instead caught in an endless cycle of uncertainty.

He paused for a moment, his words carrying the weight of deep contemplation.

**Believer:** Now, I have one final question for you: What is it that you truly seek? Is it the truth—or the **comfort of uncertainty**?

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

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