



## *Mathematical Philosophy of Probability, Uncertainty and the Future: A Combination of Statistics, Quantum Theory and Islamic Perception*

**Md Ziaur Rahman**

MSCSE, Department of Computer Science and Engineering, United International University, United City, Madani Ave, Dhaka-1212, Bangladesh

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**\*Corresponding author:** Md Ziaur Rahman, MSCSE, Department of Computer Science and Engineering, United International University, United City, Madani Ave, Dhaka-1212, Bangladesh.

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The "future" is a mysterious and profound exploration in the history of human thought. Humans with their intellect, experience, and knowledge wanted to understand the future, wanted to predict, and even dreamed of control. But as science and mathematics have advanced, it has become clear that the future is an uncertain field, where probability takes precedence over certainty. At the heart of this realization is the probability theory of mathematics, which teaches us that the outcome of an event is determined not on the basis of probability, but rather on the basis of probability.

Mathematically, a fundamental law of probability is: if the total probability of an experiment is a number and each result is equal probability, then the probability of a certain outcome. This simple formula leads us to a deeper truth. When  $n = 1$ , the probability is 1, that is 100% certain. But when  $n = 2$ , then the probability  $\frac{1}{2}$  is, i.e. 50%. When  $n = 3$ , it is  $33.33\frac{1}{3}\%$ . Thus  $n$  decreases as it increases.  $\frac{1}{n}$  When  $n = 100$ , the probability is 0.01, when  $n = 1000$ , then 0.001. And when  $n \rightarrow \infty$ , then 0. That is, in the case

of an infinite number of possibilities, the probability of a certain outcome leads to virtually zero.  $\frac{1}{n} \rightarrow$

This mathematical analysis brings us to an important conclusion: the more the number of probabilities increases, the less certain the certainty of a particular outcome. Infinite possibilities mean virtually infinite uncertainty. "Zero" here means impossible or probability is almost zero, but rather so small a probability that is not predictable in reality. These concepts profoundly influence our perception of the future. If the future is the sum total of many possibilities, then it is not possible to predict any one future with certainty. The future is then a field of possibility, with countless possibilities simultaneously.

This concept has been reflected more powerfully in modern physics, especially in quantum mechanics. According to quantum theory, nothing is definitively determined at the fundamental level of nature; Rather, everything depends on possibility. A particle can be in more than one state at the same time—this is known as superposition. But when we observe it, one of those possible states becomes a reality. This phenomenon is

called a wave function collapse.

Another important principle of quantum theory is the Heisenberg Uncertainty Principle, which states that the position and speed of a particle cannot be determined precisely at the same time. This uncertainty is not a limitation of any measurement, but a feature of nature itself. That is, reality itself is based on uncertainty. From this point of view, the future does not follow a definite path; Rather, it is a broad realm of possibilities, where every possibility is waiting to become a reality.

Now, if we analyze these mathematical and physical concepts together, a strong argument can be formed. Mathematically, we have seen that in cases of infinite possibilities, the probability of a certain result leads to zero. Quantum theory says that reality itself is based on uncertainty and is dependent on probability, and that an outcome is determined by observation. Together, these two concepts tell us that the future is an uncertain field of possibility, where there is no certainty, but a reality is formed out of possibility.

At this stage, a deep connection of this concept with Islamic philosophy can be seen. According to Islamic beliefs, only Allah has full knowledge of the future or "the unseen". Man can predict the future with his limited knowledge, but he does not have the ability to know anything for sure. This concept makes a great compatibility with mathematical and quantum analysis. Because, while mathematics and physics identify the future as uncertain, Islamic philosophy assigns the ultimate knowledge of that uncertainty to God.

However, an important philosophical explanation is needed here. What we mean by "mathematically proven" is to establish a truth by means of a particular argument and formula. The argument we get here is: if there is a probability of an event and  $n \frac{1}{n} \rightarrow \alpha$ , then the probability. This means  $\rightarrow 0$  that the  $n$  specific results are not predetermined. Again, according to quantum theory, the results are not determined before

observation. Together, these two arguments provide a mathematical-philosophical proof that the future is not predetermined and is uncertain.

Therefore, the statement about the future of the Almighty Allah is mathematically proven. Islamic philosophy says that only Allah has a definite knowledge of the future. Mathematics and physics say that the future is uncertain and it is not possible for humans to know it completely. These two statements express or prove the same truth and support each other.

This integrated analysis leads us to a deeper philosophical understanding. Uncertainty is not a weakness; This is a fundamental feature of reality. If everything was confirmed, there would be no freedom, no creativity, no change. Uncertainty gives rise to possibilities, and possibilities pave the way for the future.

People live in this uncertainty. He plans, decides, takes risks, and hopes for the future. But he doesn't know what possibility will become a reality. It is this unknown that drives him, teaches him to think, teaches him to trust. From this point of view, uncertainty is an essential part of human life.

Therefore, we see that the three different fields of knowledge—probability theory, quantum mechanics, and Islamic philosophy—together point to a common truth. The future is a field of probabilistic uncertainty, where there is no certainty, but reality is formed from the possibility. The ultimate knowledge of this uncertainty is reserved not with man, but with God. It is this realization that brings us to a deeper truth—human knowledge is limited, but truth is infinite.

Thus combining mathematical analysis, physical theory and religious philosophy gives us a new perspective, where the future is seen as an uncertain but meaningful reality. This perspective makes us humble, thoughtful, instills deep faith in God or the Creator, and helps us understand the deeper meaning of our existence.

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