

Are Some Things Unknowable?

A Philosophical Inquiry on the Limits of Human Understanding.

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"Words are but symbols for the relations of things to one another and to us; nowhere do they touch upon the absolute truth."

— **Friedrich Nietzsche**

§1 Introduction

The question of whether some things are fundamentally unknowable is a philosophical conundrum that has puzzled thinkers across various fields for centuries. I will argue that there are indeed limits to human knowledge, and that some things are, by their very nature, beyond our comprehension. I will explore the question through the lens of three objects that hold special meaning to me:

- My Chess Board
- My Copy of “The Republic” by Plato
- My Dad’s Telescope

By examining these objects, I hope to offer insight on the limits of human knowledge, and our relationship with the unknown.

§2 My Chess Board



Figure 1

The game of chess surpasses what the human mind can fully comprehend, with over 10^{120} possible positions (Shannon p. 4). Even the most skilled players cannot calculate all possible moves and positions in a game (Kasparov p. 1), revealing the limits of the human brain's capacity to process information. More formally, this is called the "Cognitive skill" of the human mind. The brain can only process a limited amount of information at any given moment, and it relies on various shortcuts and heuristics to make sense of the world (Douglas et al. p. 1).

In the context of chess, these limitations become particularly apparent (Burgoyne et al. p. 3). While computers can analyze billions of possible moves per second and calculate outcomes with near-perfect accuracy, humans are limited to processing only a fraction of this information. As a result, even the best human players are prone to making mistakes and overlooking key moves. This idea of limited understanding extends beyond chess, of course. We are constantly faced with the challenge of understanding complex systems in fields ranging from science and technology to politics and economics (Sterman p. 4). The human brain has a finite capacity for processing information, and therefore cannot fully understand all the intricacies of complex systems above our cognitive capacity.

§3 My Copy of “The Republic” by Plato

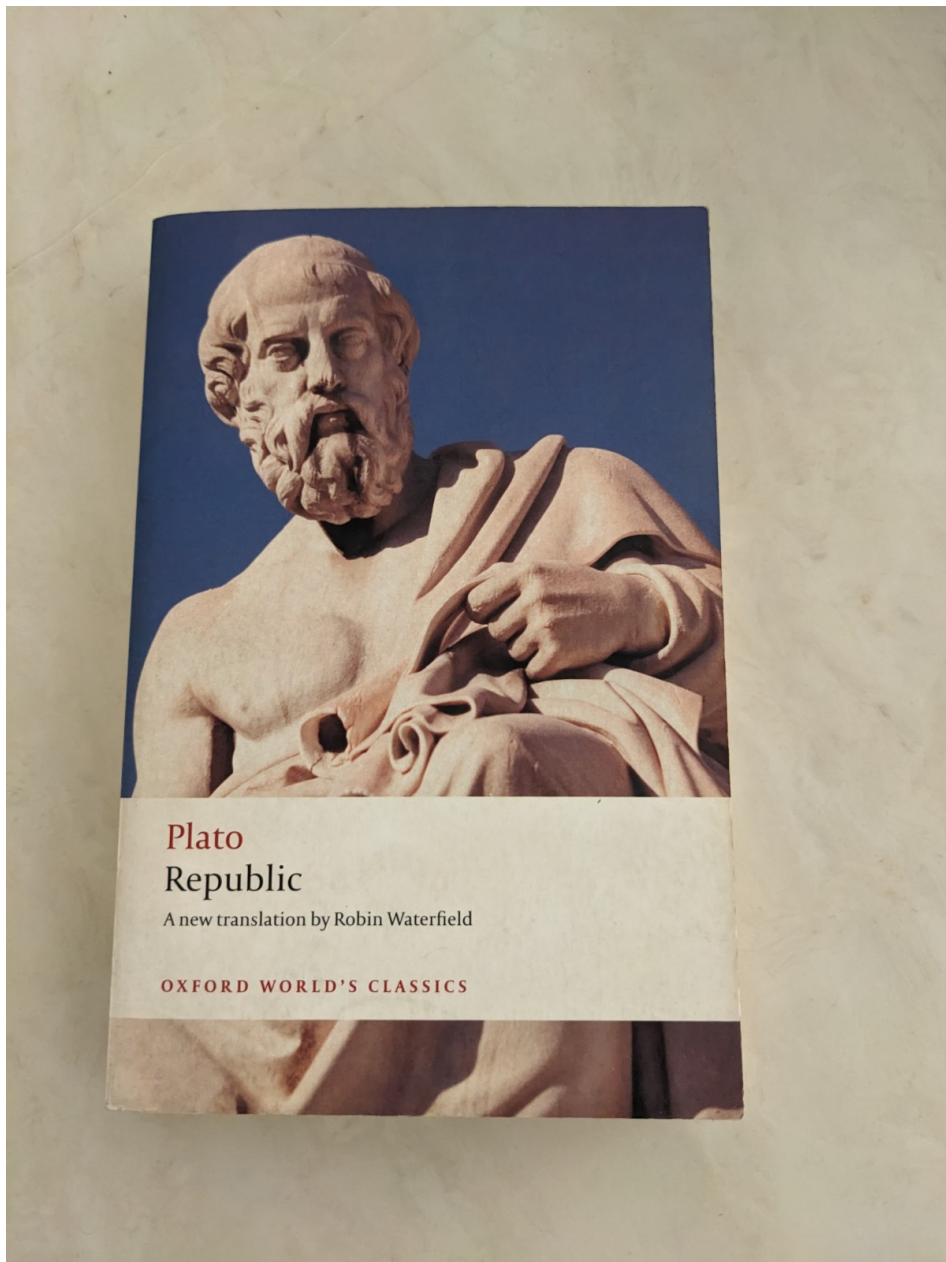


Figure 2

In this section, I focus on Books VI-VII of "The Republic", Plato (sec. 6 ~ 7), where he delves into the concept of justice and its application to a just city-state. Of particular interest is Plato's use of the Allegory of the cave to distinguish between the world of appearances and the 'real' world of Platonic Forms (Silverman sec. 9).

Plato's Theory of forms asserts that there exists an objective reality beyond the physical world we experience. The physical world, for Plato, is a mere imitation of the real world of Forms. The Forms are eternal, unchanging, and perfect, while the physical world is constantly changing, imperfect, and temporary (Kraut sec. 10).

The allegory depicts a group of people who have been chained their entire lives inside a dark cave, facing a wall on which shadows are projected. They believe that these shadows are the only reality and have no knowledge of the outside world. However, if one of the prisoners were to be released and leave the cave, they would discover the real world, illuminated by the sun.

According to Plato, the shadows are fragments of reality perceivable by our senses, while outside the cave are the true forms (sec. 3) which can only be seen through reason (natural sciences, mathematics, deductive logic, etc.).

Plato's Theory of Forms (sec. 3) and the Allegory of the Cave (sec. 3) illustrates that our perception of reality is limited by our senses and our experiences. The prisoners in the cave only know the reality they have experienced, and they cannot conceive of any other reality until they are shown it. Similarly, our perception of reality is limited by our senses and experiences, and we can only gain knowledge of the Forms through reason and philosophy, which is never complete or absolute (Raatikainen). This implies, given our current understanding, there may exist things we can never fully comprehend the true nature of.

§4 My Dad's Telescope



Figure 3

To me, my dad's telescope is more than just a tool for observing the cosmos. It is a testament to the power of human curiosity and our unrelenting desire to understand the world around us.

Throughout history, both the humble beginnings of Galileo's first telescope in the 1600s ([Galileo and the Telescope — Modeling the Cosmos — Articles and Essays — Finding Our Place in the Cosmos](#)) and the cutting-edge advancements embodied by the James Webb Telescope of the 21st century ([Gardner et al.](#)) have exemplified the remarkable capability of a seemingly simple tool to propel us towards the boundaries of human knowledge.

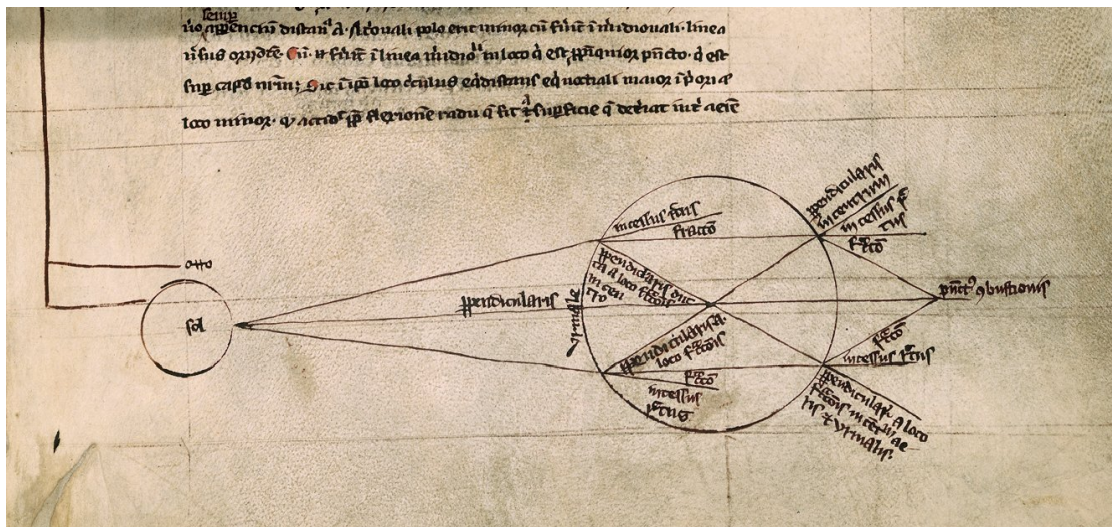


Figure 4: Roger Bacon's initial diagram describing the principles of the telescope lens (Image Source: [History of the telescope](#))

A telescope is a simple apparatus, made out of just a few lenses and mirrors. Nonetheless, it has a large impact on the limits of our understanding. It allows us to peer into the depths of space thus uncovering celestial marvels once invisible to the naked eye.

§5 Conclusion

Acknowledging these limits, I celebrate the human spirit of curiosity and exploration. The quest for knowledge may be endless, but to me it is the most fundamental and fulfilling aspects of the human experience.

Regardless, I will continue exploring, continue seeking answers, even when they seem impossible to find. I believe the pursuit of knowledge is a journey worth taking, regardless of the limits we may encounter along the way.

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