

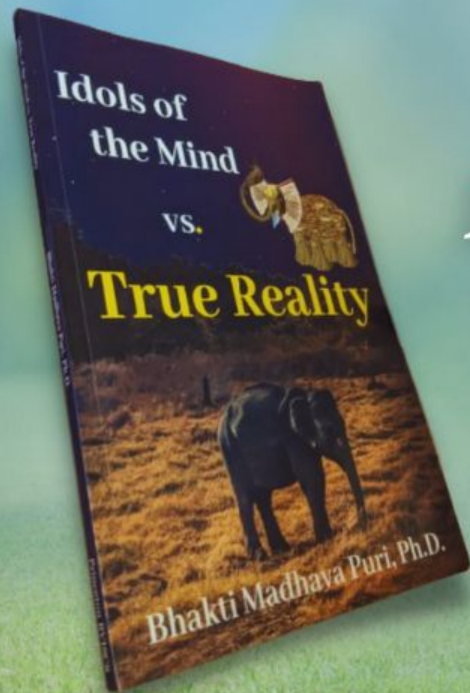


BHAKTI VEDANTA INSTITUTE
of Spiritual Culture and Science

PRINCETON, NEW JERSEY, USA



OSPREYHUB
STOCKTON UNIVERSITY

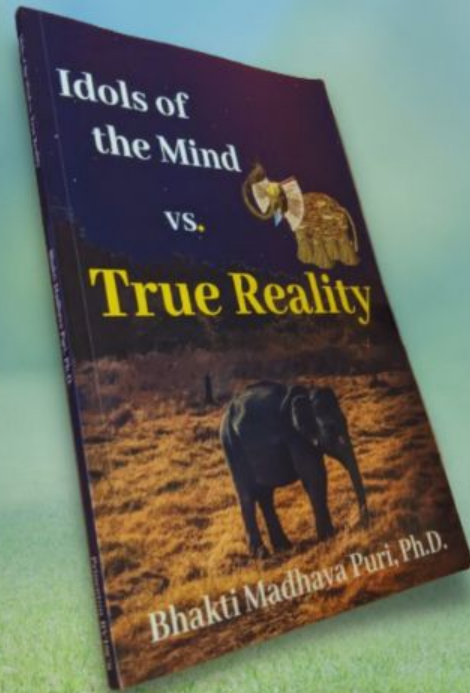


Idols of the Mind vs. True Reality

(by Dr. B Madhava Puri, Princeton Bhakti Vedanta Institute)

An Introduction to the Complementarity of
Science, Philosophy, & Religion

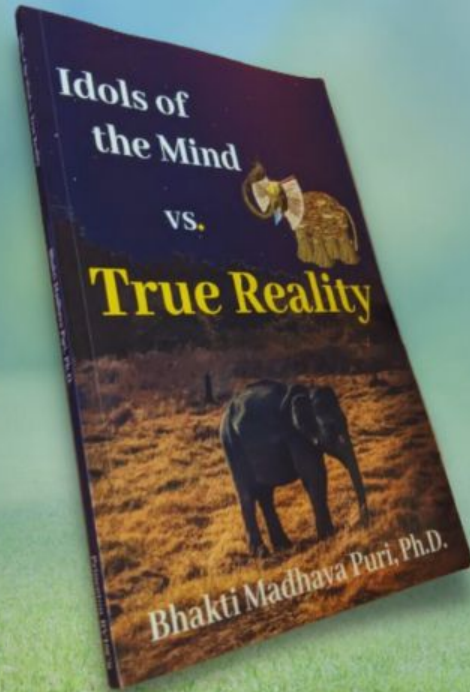
Chapter 2: Idols of the Mind
vs. True Reality



“The title of this book comes from Sir Francis Bacon (where human concepts are thought to be objectively true) and it synthesises a Vedantic approach with that of Hegel grounded in the primacy of the idea, Spirit and Consciousness. On the basis that there is no equivalence between organisms and machines, the author criticises the attribution of metaphysical qualities to inanimate robots as a serious category error: life and consciousness do not derive ultimately from matter. Interestingly, Nobel laureate and emeritus Honorary Member George Wald was persuaded by this approach on encountering Vedantic philosophy and switched his views accordingly to assert that mind had always been present in evolution. [...] This book makes a sophisticated and significant contribution to an emerging science of consciousness.”

::David Lorimer

Programme Director of the Scientific and Medical Network
(Full book review published in Paradigm Explorer - 137 p 65)



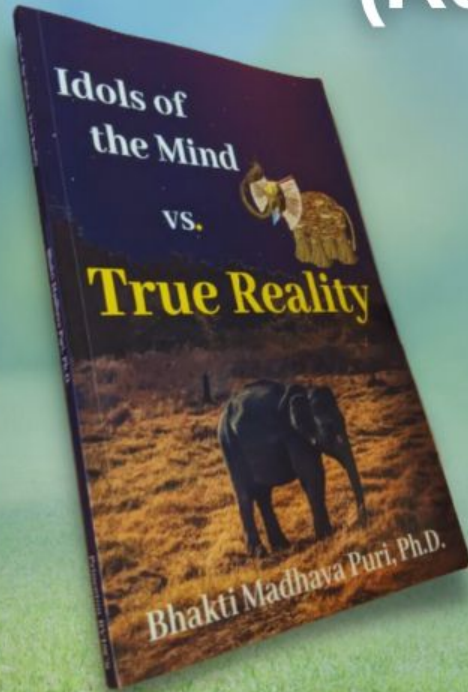
“Readers looking for a bridge between ancient Hindu philosophy and its Western counterpart will appreciate the general nature of this text. [...] This book serves as a useful synopsis of the main arguments for looking beyond materialist science toward a more holistic worldview. Although some readers will find the pace and breadth of Dr. Puri’s arguments disorienting, others will appreciate its comprehensiveness and straightforward presentation. In any case, the message is an important one, as materialist philosophy continues to wreak havoc on social relationships and the environment around the world.”

::Jennifer Lyke, PhD

Professor of Psychology at Stockton University
Science of Life Club Faculty Advisor

(Review) Chapter 1: Logic of Life

Emphasizes the teleological view of nature and life through the philosophies of Aristotle, Immanuel Kant, and G.W.F. Hegel



Aristotle
384–322 BC

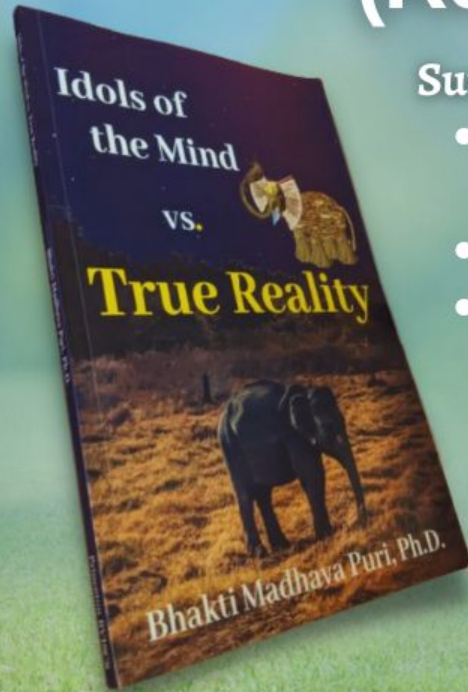


Kant
1724–1804



Hegel
1770–1831

(Review) Chapter 1: Logic of Life



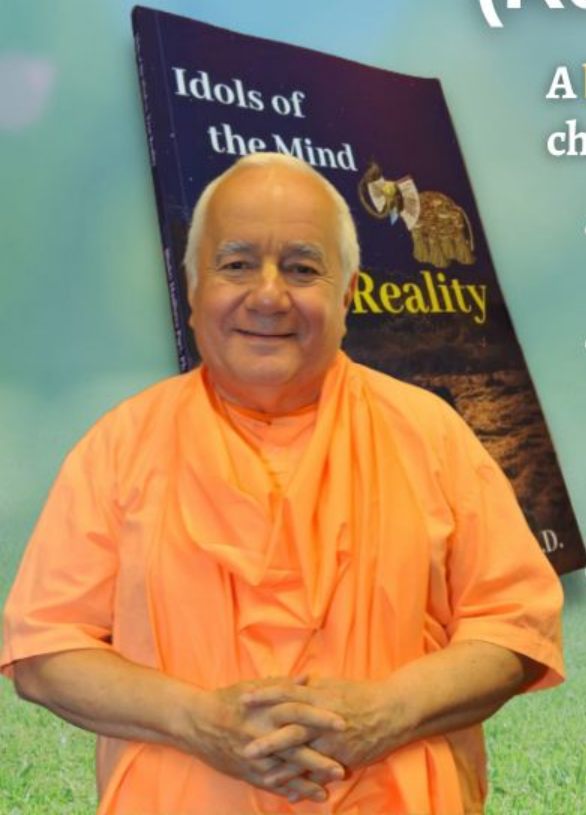
Summary of main topics:

- Aristotelian perspective of ontology and causality and their relevance to contemporary studies in embryonic development
- Emphasis on the (inner and outer) teleological view of nature
- Hegelian perspective on the ontological distinctions between mechanical, chemical, and biological objects
 - Kantian perspective of an organism
 - Hegel's Conceptual comprehension of life as a dialectic process
 - Threefold aspects of the concept of life
 - Universal (reproduction), Particular (metabolism), Singular (digestion/assimilation)

(Review) Chapter 1: Logic of Life

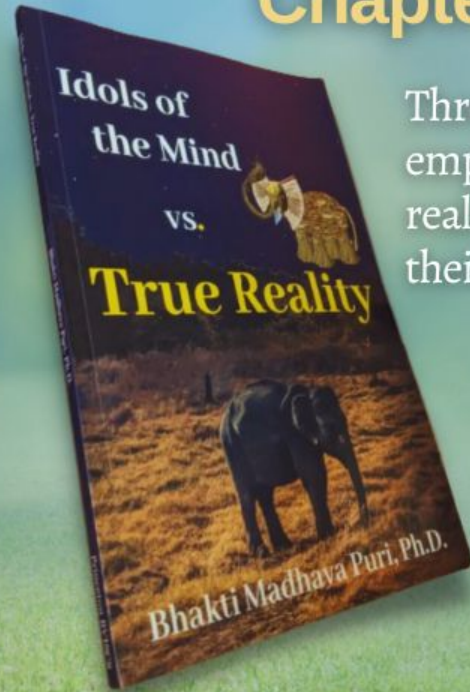
A **book** as a metaphor for the completeness of the mechanical, chemical, and biological aspects of a **living entity**:

- (**Mechanical**) an externally unified aggregate of paper, ink, and glue where there's no inner relation among parts
- (**Chemical**) an aggregate of alphabetical patterns, frequency of combined letters and words where parts have some inner affinity to connect based on sentence structure and the language spoken
- (**Biological**) the intention, purpose, or message of the author that is expressed through the written words on the page
 - only this level is the complete Concept of the book, which includes yet is beyond the lower levels of understanding



While **Chapter 1** addressed the complementarity of *science and philosophy*, **Chapter 2** establishes the relevance of *religion* to science and philosophy

Chapter 2: Idols of the Mind vs. True Reality



Through historical and conceptual perspectives, this chapter emphasizes the significance of not mistaking models of reality for reality itself, the fallacy of isolating a part from its whole, and the theistic development of universal reason as the goal of modern science.



Francis Bacon
1561-1626



René Descartes
1596-1650



Isaac Newton
1642-1727



G.W.F. Hegel
1770-1831

CHAPTER 2 : IDOLS OF THE MIND VS. TRUE REALITY

Theistic inspiration underpinning modern science

Theistic inspiration underpinning modern science

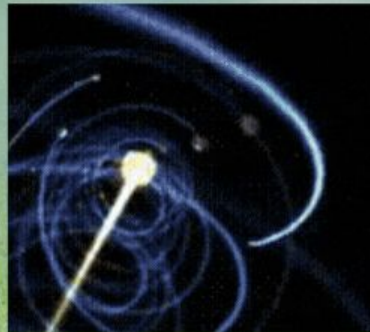
- Historically, religious faith was the basis for the natural philosophy of modern science's founding fathers, and there's an argument to be made that without the theistic presumption that nature is rational due to being a product of an intelligent God (where atheists may not have had a reason to assume that nature could be rationally known), then science would have never developed

“Modern science, as we know it today, had its beginnings in the Christian West because of a faith that Reason or rational principles could be found in God's creation. Reason is a personal feature, found in Man. A world that is created by a rational being must also possess this personal feature, which we call God [infinite Spirit]. It is possible that an atheistic culture would have never conceived Reason in the world and therefore failed to develop science.”

(Dr. B. M. Puri, IMvTR, p 30)

Theistic inspiration underpinning modern science

- Sir Isaac Newton, “the father of modern physics,” and other pioneering scientists like “father of modern chemistry” Robert Boyle, saw their scientific investigation as a form of worshipping God
- Given his awareness of the n-body problem and the unlikelihood of the stability of the solar system by mere “blind fate,” Newton called for the necessity of the “counsel and dominion of an intelligent Being” which he called “‘Lord God’ [Pantokrator], or ‘Universal Ruler’”



Isaac Newton
“Father of Modern Physics”
1642-1727

Theistic inspiration underpinning modern science || Humility

- Newton's theistic worldview was accompanied by a disposition of **intellectual humility**. He said:

"I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."

Other scientists have also expressed intellectual humility in their astonishment at the **intelligibility of nature**



Isaac Newton
"Father of Modern Physics"
1642-1727

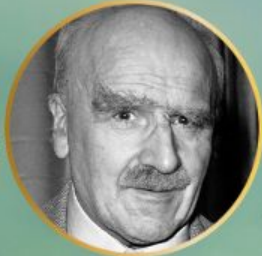
Theistic inspiration underpinning modern science || Humility

"There is a coherent plan to the universe, though I don't know what it's a plan for."



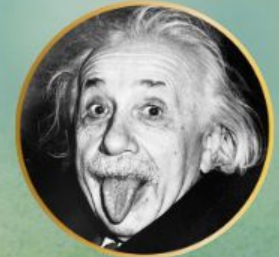
Fred Hoyle
English astronomer
1915-2001

J.B.S. Haldane
English evolutionist
1892-1964



"Now my own suspicion is that the Universe is not only queerer than we suppose, but queerer than we can suppose."

"The human mind is not capable of grasping the Universe. We are like a little child entering a huge library. The walls are covered to the ceilings with books in many different tongues. The child knows that someone must have written these books. It does not know who or how. It does not understand the languages in which they are written. But the child notes a definite plan in the arrangement of the books — a mysterious order which it does not comprehend, but only dimly suspects."

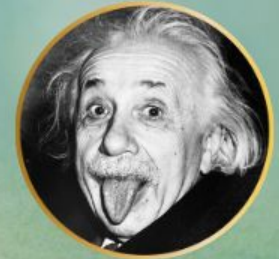


Albert Einstein
Theoretical Physicist
1879-1955

Theistic inspiration underpinning modern science

“But science can only be created by those who are thoroughly imbued with the aspiration toward truth and understanding. This source of feeling, however, springs from the sphere of religion. To this there also belongs **the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that profound faith.** The situation may be expressed by an image: **science without religion is lame, religion without science is blind.**”

:: [Reference] *Science, Philosophy and Religion, A Symposium*, published by the Conference on Science, Philosophy and Religion in Their Relation to the Democratic Way of Life, Inc., New York (1941); later published in *Out of My Later Years* (1950)

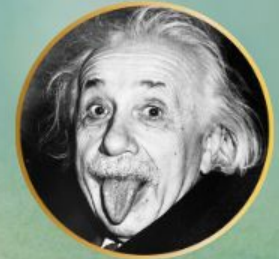


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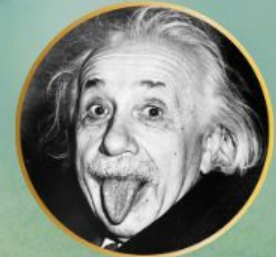


Albert Einstein
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Theistic inspiration underpinning modern science

“[S]cience without religion is lame, religion without science is blind.”

- Religion without science is blind
 - Blind = the mind's eye cannot see or comprehend that which (blind) faith simply believes in
 - Religion without science lacks a systematic account of Divinity
 - There is blind faith and rational faith (faith that sees)
- Science without religion is lame
 - Lame = unintelligent or unreasonable due to (1) not acknowledging the role of consciousness in science, such as axioms, and (2) misleadingly reducing the Organic Whole of reality to mechanical parts (*will be discussed in the next section*)

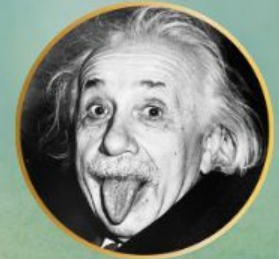


Albert Einstein
Theoretical Physicist
1879-1955

Theistic inspiration underpinning modern science || Axioms

“But science can only be created by those who are thoroughly imbued with the aspiration toward truth and understanding. This source of feeling, however, springs from the sphere of religion. To this there also belongs **the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that profound faith.** The situation may be expressed by an image: **science without religion is lame, religion without science is blind.**”

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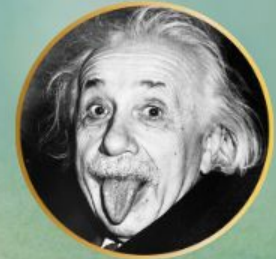
Albert Einstein
Theoretical Physicist
1879-1955

Theistic inspiration underpinning modern science || Axioms

“But science can only be created by those who are thoroughly imbued with the aspiration toward truth and understanding. This source of feeling, however, springs from the sphere of religion. To this there also belongs **the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that profound faith.** The situation may be expressed by an image: **science without religion is lame, religion without science is blind.**”

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- An **axiom** is an unproven belief (faith) that is fundamental to a system of knowledge
- The **intelligibility of nature** is an axiom of modern science



Albert Einstein
Theoretical Physicist
1879-1955

Theistic inspiration underpinning modern science || Axioms

Intelligibility of nature:

- “[T]he faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason.” (Einstein’s definition)
- Nature’s inherent laws and principles are discernible to human rationality

Theists have reason to believe that nature is intelligible due to their faith that:

1. God is omniscient / Supremely Intelligent
2. God purposefully created the world and its inhabitants
3. Humanity was “made in the image of God” and possessed similar intelligence (same in quality, not quantity)
4. Human rationality could perceive God’s reason and creative principles through studying nature

Atheists do not have reason to believe that nature is intelligible due to their belief that blind chance (like the Big Bang) gave rise to the universe

- Laws are explanations of consistently observed patterns of behavior under particular conditions, so a worldview that embraces blind chance as the agent behind the existence of the universe doesn’t give scope for consistently ordered phenomena, let alone the intelligibility of such phenomena
 - How does disorder give rise to order without an organizing principle (like intelligence)?

Theistic inspiration underpinning modern science

- Historically, it's simply a fact that the founding fathers of modern science (which was originally called natural philosophy) were theists, thus the intelligibility of nature was a sensible presumption for them
- In IMvTR (p 30), Dr. B. M. Puri suggests that atheists could not have pioneered science due to having no sense of the intelligibility of nature or reason in the world
- Today, using science to popularize atheism produces self-destructive cultural norms like thinking free will is illusory and that there's no universal purpose that all humanity can harmoniously rally around

Primary Figure	Lifetime	Subject(s)	Belief in God
Aristotle	384-322 B.C.	Biology	Theist
Francis Bacon	1561-1626 A.D.	Early Physics	Theist
Galileo Galilei	1564-1642	Physics, Modern Science	Theist
Rene Descartes	1596-1650	Analytic Geometry, Modern Philosophy	Theist
Isaac Newton	1642-1727	Physics, Classical Mechanics, Mod. Sci.	Theist

“It is the task of this chapter to understand how and why modern science today has turned away from and failed to comprehend this Reason in the world...”

(Dr. B. M. Puri, IMvTR, p 30)

CHAPTER 2 : IDOLS OF THE MIND VS. TRUE REALITY

Distinguishing between models and truth

Distinguishing between models and truth

“We cannot disregard the fact that natural science is formed by men. Natural science does not simply describe and explain nature; it is a part of the interplay between nature and ourselves; it describes nature as exposed to our method of questioning. This was a possibility of which Descartes could not have thought, but it makes the sharp separation between the world and the I impossible.

If one follows the great difficulty which even eminent scientists like Einstein had in understanding and accepting the Copenhagen interpretation of quantum theory, one can trace the roots of this difficulty to the Cartesian partition. This partition has penetrated deeply into the human mind during the three centuries following Descartes and it will take a long time for it to be replaced by a really different attitude toward the problem of reality.”



Werner Heisenberg
Theoretical Physicist
1901-1976

Distinguishing between models and truth

Solar eclipses have been observed for as long as humans have been on this planet... but how do they happen?

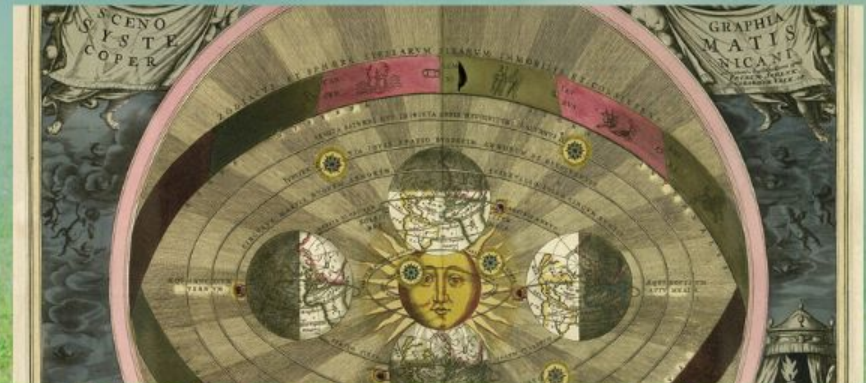
- In the East, the ancient Chinese believed that the moon dog Tiangou was eating the sun, and they would beat a gong to scare him away. Every time they did it, it worked i.e. the eclipse would end, so they felt justified in their belief and thought that it correlated with the truth



Distinguishing between models and truth

Solar eclipses have been observed for as long as humans have been on this planet... but how do they happen?

- In the West, eclipses were described by the geocentric epicycles of Ptolemy. Astronomers were able to accurately predict eclipses and the positions of other planets using this model plus it seemed to stand the test of time since it was the dominant astronomical paradigm for 1,500 years, so they also seemed justified in their belief. Now, for the last 480 years, eclipses are described by the heliocentric orbits of Copernicus.



Distinguishing between models and truth

“Natural science does not simply describe and explain nature; it is a part of the interplay between nature and ourselves; it describes nature as exposed to our method of questioning.”



Werner Heisenberg
Theoretical Physicist
1901-1976

Nature as exposed to our method of questioning = **a model of nature:**

- The ancient Chinese belief represents a **mythological model** of the solar system
 - explanations of observed phenomena that very loosely correlate to observation
- The Ptolemy's geocentrism and Copernicus' heliocentrism represent **empirical models**
 - an explanation of an observed phenomenon
- Atomic theory and quantum theory are **theoretical models**
 - proposing the existence of something unobserved to explain an observed phenomenon

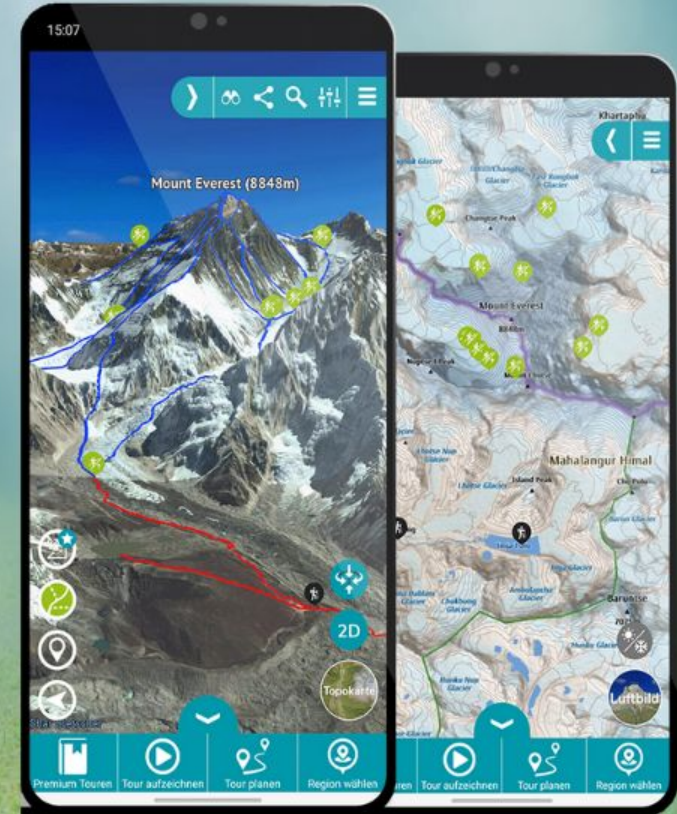
A model is to truth what a map is to its terrain

Distinguishing between models and truth

“A map corresponds to an actual terrain and can help one navigate one’s way through the real terrain, depending on its accuracy. Yet, the map may never be considered a substitute for the actual terrain since a two-dimensional visual map can never represent the sensed actuality that is experienced in real terrain. [...] different theories may have some correspondence with objective observations and yet still refer to different imagined realities.

The real problem arises when these different Idols of the Mind (man-made images/ideas/conceptions that are for us in our subjectivity) are presumed to be outwardly objective and venerated as the True Reality (reality *as it is* or *by itself* and for itself)."

Dr. B. M. Puri, IMvTR, pp 32-33



Distinguishing between models and truth

The notion of Idols of the Mind is derived from Francis Bacon's *Novum Organum* (1620) where he acknowledged types of cognitive biases:

Bacon's Four Idols:

1. Idols of the Tribe

- a. taking our imperfect immediate sensory experience as the truth

2. Idols of the Cave

- a. interpreting reality solely through the lens of our personal experience

3. Idols of the Marketplace

- a. becoming misled by deceitful language and wordplay

4. Idols of the Theater

- a. arguing in terms of popular familiarities that may be false or not adequately understood



Francis Bacon
1561-1626

Distinguishing between models and truth

While considering the **theistic inspiration underpinning modern science**, we concluded with:

“It is the task of this chapter to understand how and why modern science today has turned away from and failed to comprehend this Reason in the world...”

(Dr. B. M. Puri, IMvTR, p 30)

Making progress in this endeavor requires acknowledging that:

“The real problem arises when these different Idols of the Mind [...] are presumed to be outwardly objective and venerated as the True Reality.” (p 33)

Modern science has failed to understand the truth of nature, the reason in the world, due to mistaking the map for the terrain, i.e., confusing models with the truth. Thus, scientists wrongly reduce life and consciousness to matter, to models of neuronal correlates of consciousness and of living entities as mechanical aggregates of material building blocks. Correlation doesn't imply causation.

CHAPTER 2 : IDOLS OF THE MIND VS. TRUE REALITY
TO BE CONTINUED