

What is Rationalism?

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Plato's Question

Plato to Eudoxus:

"By the assumption of what uniform and orderly motions can the apparent motions of the planets be accounted for?"

The rationality principle is already implied by the question.

Solutions of

Plato-Eudoxus-Aristotle-Callipus-Ptolemy,

as well as

Philolaus–Aristarchus–Copernicus–Kepler–Newton–Einstein were different attempts to find this central principle.



Πλάτων, 428-348



What is Implied

Sufficiency of human abilities to potentially unlimited growth of global cognition.

How could that be possible?

1. The universe has to be globally comprehensible, progressing with effort.

2. The human mind has to be able to increase its global understanding of the world. Value of global cognition has to be high.

3. This global cognitive conformity of the universe and man is something very special; it may take place only if it is specially provided by the upper level, their origin or Creator. This fixes both possibilities and high value of global cognition.

This cognitive unity Nature-Man-God constitutes the core of rationalistic ontology and ethics, the Rationalistic Triangle.

Music of Reason

How and by what means and ways can the universe be understood?

In Plato's question we see the belief in mathematics; in his dialogues, trust to reason and to beauty.

Combining the two, we may say that we see the belief in the beautiful music of reason (*Jean Dieudonne*) as a guide to the global cognition.

"Beauty is Moira and Eileithyia for every Genesis" (Symposium)

Mathematics, from its birth, is about beautiful patterns of perfect ideas, it is indeed a music of reason.

Hard, critical and detailed thinking about thinking, the development of logic and dialectic, was a big part of ancient Rationalism:

terminology, definitions, axiomatization, classifications, including a classification of mistakes,

methods of reductio ad absurdum and mathematical induction,

Later: principle of sufficient reason, laws of nature and experimental verification, critical attitude to selfevidences.

Moira and Eileithyia for Genesis on the laws

First, the laws are endowed with a peculiar mathematical beauty, uniting in themselves formal simplicity, richness of solutions and one or another kind of symmetry, often as if suggesting itself as a hypothesis to a mind gifted with intuition. This special beauty is sometimes called elegance of the laws of nature. Thus, elegance has a decisive significance to a birth of a hypothesis, the most mysterious part of discovery.

Secondly, the same elegant mathematical law captures a tremendous range of parameters (distances, time intervals, energies, etc.), at that with a fantastic precision, up to twelve digits. This quality of the laws can be called universality.

Finally, the laws happen to be friendly to life's appearing and developing up to intellect; following the established terminology, this quality can be called anthropic.

The combined presence of these three qualities allowed for their discovery by great minds, and for that reason, it seems that the most appropriate term, uniting all three, is **discoverability**. A universe whose laws satisfy the **Discoverability Principle** (DP) of being *elegant, universal and anthropic* we suggested to call **Pythagorean**.

It could be even that the laws of our universe constitute the simplest possible set, compatible with the DP. The only explanation of this amazing quality of the laws is that they come from the highest mind that created our universe able to not only be inhabited by intelligent beings but cosmically cognized by them.

A.&L. Burov, https://pythagoreanuniverse.com/

Irrationalists

Who was against the Rationalist agenda?

All teachers of the narrow horizon: empiricists, skeptics, cynics, epicureans...

Among many schools of ancient thought we may find

- atheistic or irreligious, who also were indifferent or skeptical about global cognition;
- theistic irrationalists, aloof from global cognition of universe too;
- theistic rationalists;

Whom we cannot find there: atheistic proponents of global cognition.

This strange teaching appeared only recently, when — paradoxically enough — the rationalist agenda proved to be unbelievably fruitful.

To be continued...