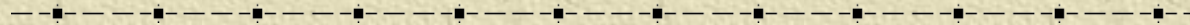
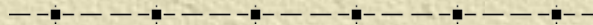


Scientific Problems for Scientism



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Scientific Problems for Scientism

- ✦ Power Point version of a paper by the same title published in *Presbyterion* in the Fall issue 1995.
- ✦ See the paper for references and further details.

Various Terms for Scientism

✧ Scientism

- ◆ Science is the only valid way of knowing.

✧ Materialism

- ◆ All is matter, or matter-energy.

✧ Naturalism

- ◆ All is nature; there is no supernatural.

✧ Evolutionism

- ◆ All things have developed by unguided natural processes.
- ◆ No God has intervened miraculously to make things the way they are.

Influence of Scientism

✦ Liberal Biblical Criticism

- ◆ Explain the Bible without miracles.

✦ Darwinian Evolution

- ◆ Explain nature without divine intervention.

✦ Marxism

- ◆ Explain history and society by economics.

✦ Freudianism

- ◆ Explain mankind without soul or spirit.

The Problems Scientism Faces

- ✦ Prediction
- ✦ Continuity
- ✦ Mindlessness
- ✦ Eternality
- ✦ Locality

Prediction

"I have no need of that [the God] hypothesis"

Laplace

The Laplacean Program: Calculate the entire future of the universe by knowing the position and velocity of all its particles at one time.

How Much Computing Power?

- ✦ There are 10^{80} particles in the universe.
- ✦ Each particle exerts one or more forces on (nearly) all other particles.
- ✦ It is more economical to build a parallel universe as a model!
- ✦ Must give each particle its proper position and velocity.
- ✦ Problem of quantum uncertainty.
- ✦ Problem of the "butterfly effect."

Conclusion re/ Prediction

- ✦ The Laplacean Program is dead!
- ✦ Contrast the Christian worldview:
 - ◆ God alone knows the future.
 - ◆ He can intervene, and He surely has.
 - ◆ He can answer prayer.
 - ◆ He can fulfill prophecy.

Continuity

- ✦ Scientism has an antagonism for, and fear of, gaps or singularities in nature.
- ✦ Darwin – no discontinuities in biology if the history of life is taken into account.
- ✦ Reaction of biologists to Goldschmidt in the 1940s for his "hopeful monster" model.
- ✦ Proposal of punctuated equilibria model of Gould & Eldridge.

Problems with Continuity

- ✦ The "trade secret of paleontology" – gaps in the fossil record
- ✦ Over 200 million fossils catalogued in museums
- ✦ A "random walk" between major kinds?
- ✦ The "shape" of the fossil record

Conclusions on Continuity


- ✦ A "god of the gaps" or a "natural law of the gaps"?
- ✦ Lack of evidence or evidence of lack?
- ✦ Discontinuities point beyond mere natural law.

Mindlessness

- ✦ Minds only arise by evolution in a mindless universe (according to scientism).
- ✦ Darwin's work is hailed as destroying Paley's arguments from design to a Designer.
- ✦ Design is only apparent, being produced by natural selection.
- ✦ But design appears in inanimate nature also!

Fine-Tuning in the Basic Forces

✦ Strong Interaction

- ◆ Tuned to  5%

✦ Weak Interaction

- ◆ Tuned to  few %

✦ Gravity & Cosmic Expansion

- ◆ Tuned to 1 part in 10^{60}

✦ Electromagnetism

- ◆ Charges balance to better than 1 part in 10^{40}

Designed Earth?

- ✦ Rotation period
- ✦ Distance from sun
- ✦ Thickness of crust
- ✦ Atmosphere
- ✦ Size of moon
- ✦ Size of Jupiter
- ✦ About 60 more such items

Conclusions on Mindlessness

- ✦ Design in inanimate nature
- ✦ Design in animate nature
- ✦ Insufficient probability in 1000s of universes
- ✦ Minds can construct order that would never happen by chance

Eternality

- ✦ According to scientism, the universe must somehow be eternal.
- ✦ Sagan – "The cosmos is all that ... ever was..."
- ✦ But the history of cosmology in the past century has been that of increasingly frantic attempts to avoid a beginning in the face of mounting evidence for one.

Cosmology

- ✦ Eternal static universe
- ✦ Expanding universe
- ✦ Steady-state universe
- ✦ One-bounce big-bang
- ✦ Oscillating big-bang
- ✦ No-bounce big-bang
- ✦ Pop-into-existence-w/o-a-cause big-bang

Conclusions on Eternality

- ✦ What is eternal is not confined to this universe.
- ✦ What is eternal has the characteristics of mind.
- ✦ What is eternal is an adequate cause for the universe.
- ✦ This sounds like the God of the Bible!

Locality

- ✦ Materialism naturally favors local interaction of particles (bumping).
- ✦ Even Newton's gravitational field was initially viewed with great suspicion, but came to be seen as local interaction of the particle with the field.
- ✦ Quantum phenomena have put pressure on this, suggesting instantaneous interaction at great distances.

Quantum Phenomena & Locality

✦ The Two-Slit Experiment

- ◆ Which slit does the particle pass through?

✦ Bell's Theorem

- ◆ If quantum phenomena are real, then the universe is not local.

✦ Aspect's Experiment

- ◆ Particle spin shows instantaneous knowledge at large distances.

Conclusions

✧ Prediction

- ◆ Laplace's program has collapsed.

✧ Continuity

- ◆ Darwinism is inadequate.

✧ Mindlessness

- ◆ Does not explain known design.

✧ Eternality

- ◆ Universe looks like it had a beginning.

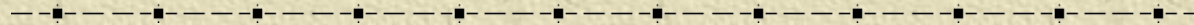
✧ Locality

- ◆ Quantum phenomena are non-local.

A Designed Universe

- ✦ Looks structured to point beyond itself.
- ✦ Unpredictable to show human limitation?
- ✦ Discontinuous to show divine intervention?
- ✦ Planned to show a mind behind it?
- ✦ Finite to point to the infinite beyond it?
- ✦ Non-local to point to the omnipresent God?

The End of Scientism?



Universe Looks Theistic

