Scientific Problems for Scientism

Robert C. Newman
Biblical Theological Seminary
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 $\approx 5\%$

- **Weak Interaction**
  - Tuned to $\approx \text{few }\%$

- **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