

#### The Biblical Claim

"Since the creation of the world God's invisible qualities – his eternal power and divine nature – have been clearly seen, being understood from what has been made, so that men are without excuse." – Romans 1:20

# **Evidence from Inanimate Nature**

- The universe provides strong evidence for the existence of a God like the One pictured in the Bible.
- We examine two lines of evidence here:
  - Evidence the universe had a beginning
  - Evidence the universe is designed

# A Beginning

- Atheists must either claim that the universe has always existed or that it popped into existence without a cause.
- The history of cosmology in the past century argues strongly that the universe had a beginning.

# Cosmology in the 20<sup>th</sup> Century

- Static, eternal universe model
  - But discovery of expanding universe
- Steady-state universe model
  - But discovery of early high temperature
- Oscillating big-bang model
  - Discovery of acceleration, insufficient density
- Big-bang bubble models
  - No evidence for more than one universe

# A Beginning?

- As Hugh Ross has pointed out, the history of cosmology in the 20<sup>th</sup> century has been an ever more frantic attempt to escape a universe with a beginning in the face of mounting evidence.
- As far as we can tell from the inside, the universe has not always existed, but began at a finite time in the past.

# A Beginning!

- Claims that our universe is a bubble in a larger universe are more of a leap in the dark than claims the universe was created by God.
- Claims that our universe just popped into existence without a cause are truly desperate. Science itself (& personal experience) is based on the belief in causation.

# A Designed Universe

- Atheists have no mind in the universe to produce design until the universe has evolved minds.
- They must therefore argue that all apparent design is not really design but a clever (& accidental!) fake.
- But the universe looks designed in ways that are far from trivial.

### The Basic Forces

- There are four known basic forces that constitute the physics of our universe.
  - Strong nuclear force
  - Electromagnetism
  - Weak nuclear force
  - Gravity
- These forces differ drastically in strength, yet they are very closely adjusted to allow life to exist.

## Strong Force

- The strong force holds both neutrons & protons together to form the nucleus.
- It this force were 5% weaker
  - Deuterium would be unstable
  - Stars would not burn
- If this force were 5% stronger
  - The diproton would be stable
  - Stars would burn explosively

#### Weak Force

- The weak force holds the neutron together.
- If it were a few % weaker
  - Neutron would be unstable
  - No heavy elements
- If it were a few % stronger
  - Neutron would be too stable
  - No hydrogen

### Electromagnetic Force

- The e-m force holds electrons to atoms, and atoms to one another, allowing neutral atoms, molecules & solids.
- This force depends on the balance of + and charges to both attract & repel.
- If this balance were off by 1 part in 10<sup>40</sup>, this force would swamp gravity and there would be no galaxies, stars, planets or people.

#### Gravity

- Gravity is the weakest of the four forces, but it dominates at astronomical distances.
- Gravity & the expansion of the universe are neatly balanced to produce a life-friendly universe.
- If the balance were off by 1 part in 10<sup>60</sup>, the universe would expand too quickly or collapse too quickly to form stars, planets or people.

## Designed Universe!

- The universe is "fine-tuned" to allow life at the level of less than 1 part in 10<sup>100</sup>.
- In an atheistic scheme, this means we need at least 10<sup>100</sup> universes to expect this by chance.
- If you wish to bet there is no God at these odds, you will have no one to blame but yourself if you are wrong.

# Evidence from Animate Nature & Humanity

- High level of order in living things
- "Initiative" in humans & higher animals
- Level of intellect in humans
- Structure of rationality in nature
- Human moral standards
- Human pleasure
- Human futility

# High Level of Order

"The information content of a simple cell is about  $10^{12}$  bits, equivalent to about 100 million pages of the *Encyclopaedia Britannica*." – Carl Sagan, article "Life" in the *EB*.

# High Level of Order

- Sagan's statement is just for the simple bacterium E. coli.
- Multi-celled animals, especially humans, are far more complex than this.
- All the evidence we have suggests that the universe is incapable of producing this level of order by natural processes.

#### Initiative

- Humans & (at least) the higher animals apparently have the ability to initiate actions that are not caused by any external necessity.
- One of the goals of Al (artificial intelligence) research is to show that this can be produced by purely natural causes in a mindless universe.
- We should not mistake research goals for research results.

## Level of Intellect

- The level of intellect in humans appears to be far beyond what is "needed" in primitive conditions or even in most situations today.
- This does not fit what one would expect from evolution:
  - Too much energy put into unneeded brain power takes away from what is needed to be a better competitor.
- This suggests mankind was designed for some purpose that requires considerably greater intellect than we now use.

# Structure of Rationality

"The most incomprehensible thing about the universe is its comprehensibility."

- Albert Einstein

# Structure of Rationality

- Human logic appears well-designed to explain the universe.
- It can deal with all sorts of things we can never imagine it having contact with during its supposed evolution:
  - Mathematics
  - Atomic structure
  - Poetry

## Structure of Rationality

- Einstein was amazed that man's mind (developed by mutation) should have categories to handle all this.
- But a God might very well have designed the human mind to function well in the universe he made.
- Atheists have only mutation and natural selection to explain all this.

- Philosophically, we cannot derive an "ought" from an "is." Where does this realm of human activity come from?
- The world's cultures contain strangely parallel moral standards.
- This argues against independent development of morality and for a common source.



IN ORDER TO
DETERMINE IF
THERE IS ANY
UNIVERSAL MORAL
LAW BEYOND HUMAN
CONVENTION, I
HAVE DEVISED
THE FOLLOWING TEST.



I WILL THROW THIS WATER BALLOON AT SUSIE DERKINS UNLESS I RECEIVE SOME SIGN WITHIN THE NEXT 30 SECONDS THAT THIS IS WRONG.



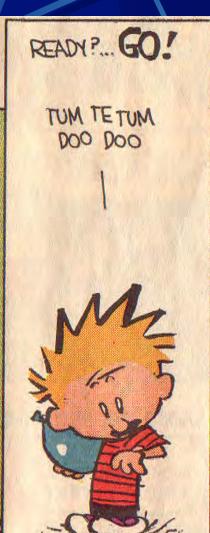
IT IS IN THE UNIVERSE'S POWER TO STOP ME. I'LL ACCEPT ANY REMARKABLE PHYSICAL HAPPENSTANCE AS A SIGN THAT I SHOULDN'T DO THIS.



READY?... GO!

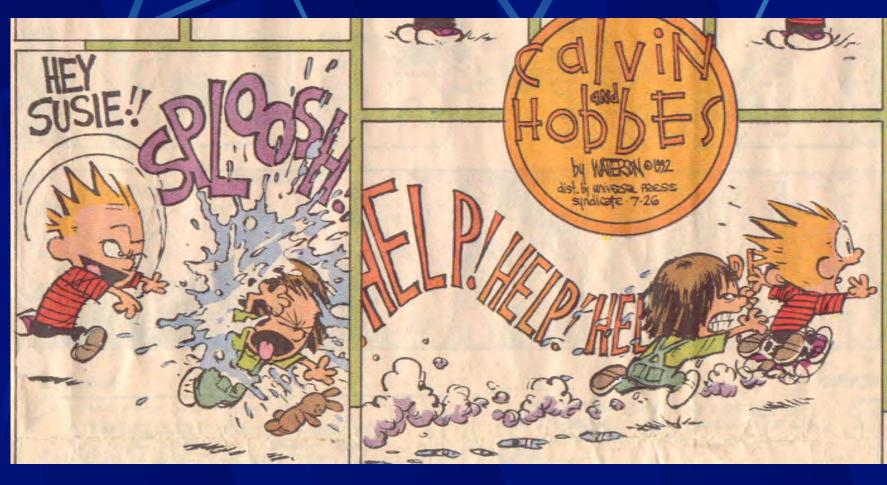
TUM TETUM

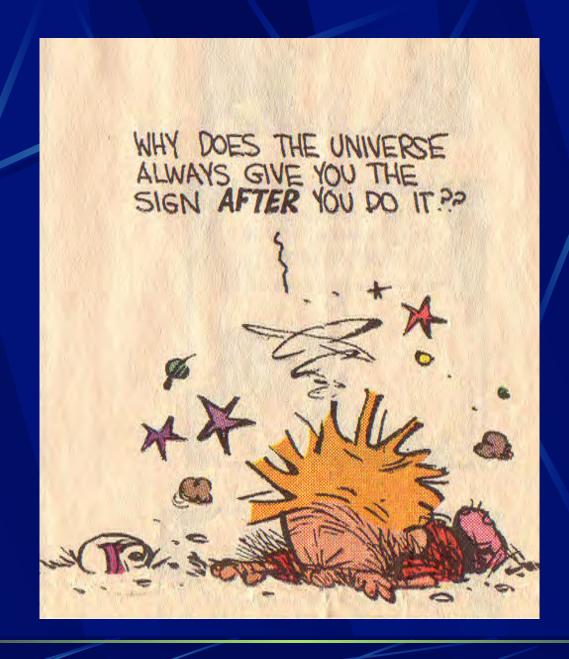












#### **Pleasure**

- Is all pleasure really biologically useful?
- Loren Wilkinson suggests that the strength and variety of human pleasures is far beyond what can be explained by biological utility.
- See Wilkinson, "The Problem of Pleasure" in Montgomery, Christianity for the Tough-Minded.

### **Futility**

- Humans have a sense of longing and a joy that does not seem to have any object in this world.
- Man appears to be a sort of ruin:
  - Not just junk, like unshaped stones
  - Not functioning as he appears to be designed to
- This "frustrated design" is hard to explain by evolution, since there is no apparent reason for desires which transcend the present order.

# Evidence of God in Conscience

- These items fit well with a God behind it all, especially the God of the Bible.
  - High level of order in living things
  - "Initiative" in humans & higher animals
  - Level of intellect in humans
  - Structure of rationality in nature
  - Human moral standards
  - Human pleasure
  - Human futility

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