

Creation Sunday School Class #7

Definitions and Discussion Part 5

2/28/10

Definitions and Discussion

7 Types of Evolution

1. Microevolution
2. Macroevolution
- 3. Cosmic evolution**
4. Stellar or planetary evolution
5. Organic evolution
6. Chemical evolution
7. Molecular evolution

Cosmology

the study of the Universe in its totality, and by extension, humanity's place in it.

Wikipedia

Physical Cosmology

Some researchers (notably astrophysicists) restrict their view of cosmic evolution to change within stars and galaxies, confining the adjective “cosmic” to only astronomical objects during mostly the first several billion years of the universe.

Others (astrobiologists) also limit their study of this subject, working among more specialized venues such as planets and moons suitable for life during the most recent few billion years.

But those who study the entire subject of cosmic evolution in its most general scope over 14 billion years from a presumed creation event (including both astrophysics and astrobiology) address all changes ubiquitously and indefinitely.

Wikipedia

Cosmic Evolution

The origin of time, space and matter

Evolutionary belief requires that matter must be eternal. Naturalism allows no Creator so matter must have always existed.

The currently accepted evolutionary theory is the Big Bang Theory

Law of Cause and Effect

is commonly known throughout science. For every action there is a reaction or similarly, for every cause there is an effect and from every effect there must have been a cause.

Everything that had a cause, has an effect

“Out of nothing, nothing comes.”

Causality

is the relationship between an event (the *cause*) and a second event (the effect) where the second event is a consequence of the first.

Wikipedia

There are 3 main evidences that creationists can use to confound evolutionists:

- 1. 2nd Law of Thermodynamics**
(Genesis 3:14-19)
2. Origin of life
(Genesis 1:11-27)
- 3. Origin of the universe**
(Genesis 1:1)

Origin Theories

Steady State Universe Theory

Big Bang Theory

Oscillating Universe Theory

Inflationary Universe Theory

Steady State theory

also known as the Infinite Universe theory or continuous creation

a model as an alternative to the Big Bang theory (known, usually, as the standard cosmological model).

in steady state views, new matter is continuously created as the universe expands, so that the perfect cosmological principle is adhered to.

Although the model had a large number of supporters among cosmologists in the 1950s and 1960s, the number of supporters decreased markedly in the late 1960s with the discovery of the cosmic microwave background radiation, and today only a very small number of supporters remain.

Wikipedia

This theory says that, in the space between galaxies, new matter is quietly but continually appearing out of nothing.

According to this theory, galaxies are continually disappearing while new ones are appearing, and matter is continually inventing itself out of nothing.

It teaches that matter never had a beginning

"We are told that matter is being continually created, but in such a way that the process is imperceptible—that is, the statement cannot be disproved.

When we ask why we should believe this, the answer is that the "*perfect cosmological principle*" requires it.

And when we ask why we should accept this principle, the answer is that the fundamental axiom of science requires it.

This we have seen to be false, and the only other answer that one can gather is that the principle must be true because it seems fitting to the people who assert it. With all respect, I find this inadequate."

Herbert Dingle, "*Science and Modern Cosmology*," *Science*, October 1, 1954, p. 515.

In traditional logic, an **axiom** or **postulate** is a proposition that is not proved or demonstrated but considered to be either self-evident, or subject to necessary decision.

Therefore, its truth is taken for granted, and serves as a starting point for deducing and inferring other (theory dependent) truths.

Wikipedia

"Contrary to popular belief, not a single star, planet, or galaxy has ever been seen forming spontaneously out of cosmic debris. Such imaginary evolutionary processes do not even work on paper!"

George Mulfinger, "*Degeneration Processes in the Cosmos*," Bible-Science Newsletter, September 15, 1968.

"The static (steady] state, universe concept is now out of favor for several good reasons, one being that no matter how evolutionist cosmologists may twist and turn, there is no getting past the second law of thermodynamics—if the universe were of infinite age then it would have run down infinitely long ago.

"Its main proponent, Fred Hoyle long ago abandoned the idea and he expresses much cynicism about the barren state of cosmology today."

W. Mehlert, book review, in Creation Research Society Quarterly, June 1987, p. 24.

Big Bang Theory

The **Big Bang** is the cosmological model of the initial conditions and subsequent development of the Universe that is supported by the most comprehensive and accurate explanations from current scientific evidence and observation.

As used by cosmologists, the term *Big Bang* generally refers to the idea that the Universe has expanded from a primordial hot and dense initial condition at some finite time in the past and continues to expand to this day.

Wikipedia

Asimov, Isaac, *In the Beginning* (New York: Crown Publishers, Inc., 1981), p. 24

“The existence of the cosmic egg is, however, itself something of an anomaly. If the general movement of the Universe is from order to disorder, how did the order (which presumably existed in the cosmic egg) originate? Where did it come from?”

Big Bang Theory

has been accepted by a majority of scientists today.

in the beginning, there was no matter, just nothingness.

then this nothingness condensed by gravity into a single, tiny point (“cosmic egg”)

then it exploded outward into hydrogen and helium through frictionless space

this would eventually form stars, galaxies, planets, and moons.

Narlikar, Jayant, "Challenge for the Big Bang," *New Scientist*, vol. 138 (June 19, 1993), p. 27.

"Questions of origin have always been the most difficult ones to answer. But perhaps the most fundamental of all questions concerns the origin of the Universe.

Many astronomers and physicists today feel they have found the answer. They believe that the Universe was created at one instant in a hot explosion, called the big bang, and that the basic structure of matter was decided in the first billion-billion-billion-billionth part of a second (10^{-36} seconds). But this hypothesis has serious deficiencies ..."

Darling, David, “On Creating Something from Nothing,” *New Scientist*, vol. 151 (September 14, 1996).

p. 49 “What is a big deal—the biggest deal of all—is how you get something out of nothing.”

“Don’t let the cosmologists try to kid you on this one. They have not got a clue either—despite the fact that they are doing a pretty good job of convincing themselves and others that this is really not a problem.

‘In the beginning,’ they will say, ‘there was nothing—no time, space, matter or energy. Then there was a quantum fluctuation from which ...’ Whoa! Stop right there. You see what I mean?”

First there is nothing, then there is something.

And the cosmologists try to bridge the two with a quantum flutter, a tremor of uncertainty that sparks it all off.

Then they are away and before you know it, they have pulled a hundred billion galaxies out of their quantum hats.”

p. 49 “You cannot fudge this by appealing to quantum mechanics.

Either there is nothing to begin with, in which case there is no quantum vacuum, no pre-geometric dust, no time in which anything can happen, no physical laws that can effect a change from nothingness into somethingness; or there is something, in which case that needs explaining.”

Questions

How can nothingness pack together?

How can a vacuum become dense?

What ignited the nothingness?

Where did the gravity come from that brought this point together?

Where did the heat come from?

Where is the antimatter?

Isaac Asimov, *Asimov's New Guide to Science*, p. 343.

"Since matter and antimatter are equivalent in all respects but that of electromagnetic charge oppositeness, any force [the Big Bang] that would create one should have to create the other, and the universe should be made of equal quantities of each.

This is a dilemma. Theory tells us there should be antimatter out there, and observation refuses to back it up."

Victor Weisskopf, "*The Origin of the Universe*," *American Scientist*, 71, p. 479.

"We are pretty sure from our observations that the universe today contains matter, but very little if any antimatter."

Peter Coles, “The End of the Old Model Universe,” *Nature*, Vol. 393, 25 June 1998, p. 741.”

Observations only recently made possible by improvements in astronomical instrumentation have put theoretical models of the Universe [the big bang] under intense pressure.

The standard ideas of the 1980s about the shape and history of the Universe have now been abandoned—and cosmologists are now taking seriously the possibility that the Universe is pervaded by some sort of vacuum energy, whose origin is not at all understood.”

P. Ehrlich and L.C. Birch, "*Evolutionary History and Population Biology*" *Nature*, Vol. 214, April 22, 1967, p. 352.

"Our theory of evolution has become . . . one which cannot be refuted by any possible observations.

Every conceivable observation can be fitted into it. It is thus 'outside of empirical science' but not necessarily false."

The Oscillating Universe Theory.

says that when the universe finally runs down, another Big Bang will start it going again

also called "**eternal oscillations**"

teaches that after each Big Bang outward explosion and formation of stars and planets, at a later time all matter contracts into a single tiny point, which then explodes again in another Big Bang.

main difference is that the initial explosion (Big Bang) is supposed to have been of nothing exploding into matter; the later ones are theorized to be produced by matter packed into a point, and then exploding back into matter again.

George Abell, *Exploration of the Universe*
(1982), p. 648.

"Such speculation is sometimes referred to as the oscillating theory of the universe, but it is not really a theory, for we know of no mechanism that can produce another big bang. "

The Inflationary Universe Theory

The universe (including all space and time) began as a single infinitesimal particle.

No one has figured out where that particle came from and how everything got jammed into it.

First, it was in its *"cold big whoosh"* stage.

When it reached five inches, it suddenly got hot (the *"hot big bang"* stage)—and blew up.

Don N. Page, "Inflation Does Not Explain Time Asymmetry," *Nature*, Vol. 304, 7 July 1983, p. 39-40.

"The time asymmetry of the Universe is expressed by the second law of thermodynamics, that entropy increases with time as order is transformed into disorder. The mystery is not that an ordered state should become disordered but that the early Universe apparently was in a highly ordered state."

"There is no mechanism known as yet that would allow the Universe to begin in an arbitrary state and then evolve to its present highly-ordered state."

Lincoln Barnett, *The Universe and Dr. Einstein*
(1957), pp. 102-103

"Everything indeed, everything visible in nature or established in theory, suggests that the universe is implacably progressing toward final darkness and decay.

"There is an important philosophical corollary to this view.

For if the universe is running down and nature's processes are proceeding in just one direction, the inescapable inference is that everything has a beginning: somehow and sometime the cosmic processes were started; the stellar fires ignited, and the whole vast pageant of the universe brought into being...

So all the evidence that points to the ultimate annihilation of the universe points just as definitely to an inception fixed in time."

Morris, Richard, *Time's Arrow: Scientific Attitudes Toward Time* (New York: Simon and Schuster, 1984), pp. 212-3

“There are other problems associated with attempts to apply the second law of thermodynamics to the universe as a whole. Presumably the universe began in a very chaotic state.

A chaotic state is, by definition, a state of high entropy (when we speak of ‘chaos,’ we mean that there is a great deal of disorder).

On the other hand, numerous kinds of structure have appeared since the universe began.

For example, stars and galaxies have formed. The creation of this structure, and the fact that stars gain entropy as they burn their nuclear fuel, would seem to imply that the universe is far from a state of maximum entropy now.

But how can this be, if entropy was so high at the beginning? Doesn't the second law of thermodynamics tell us that entropy always increases with time?"

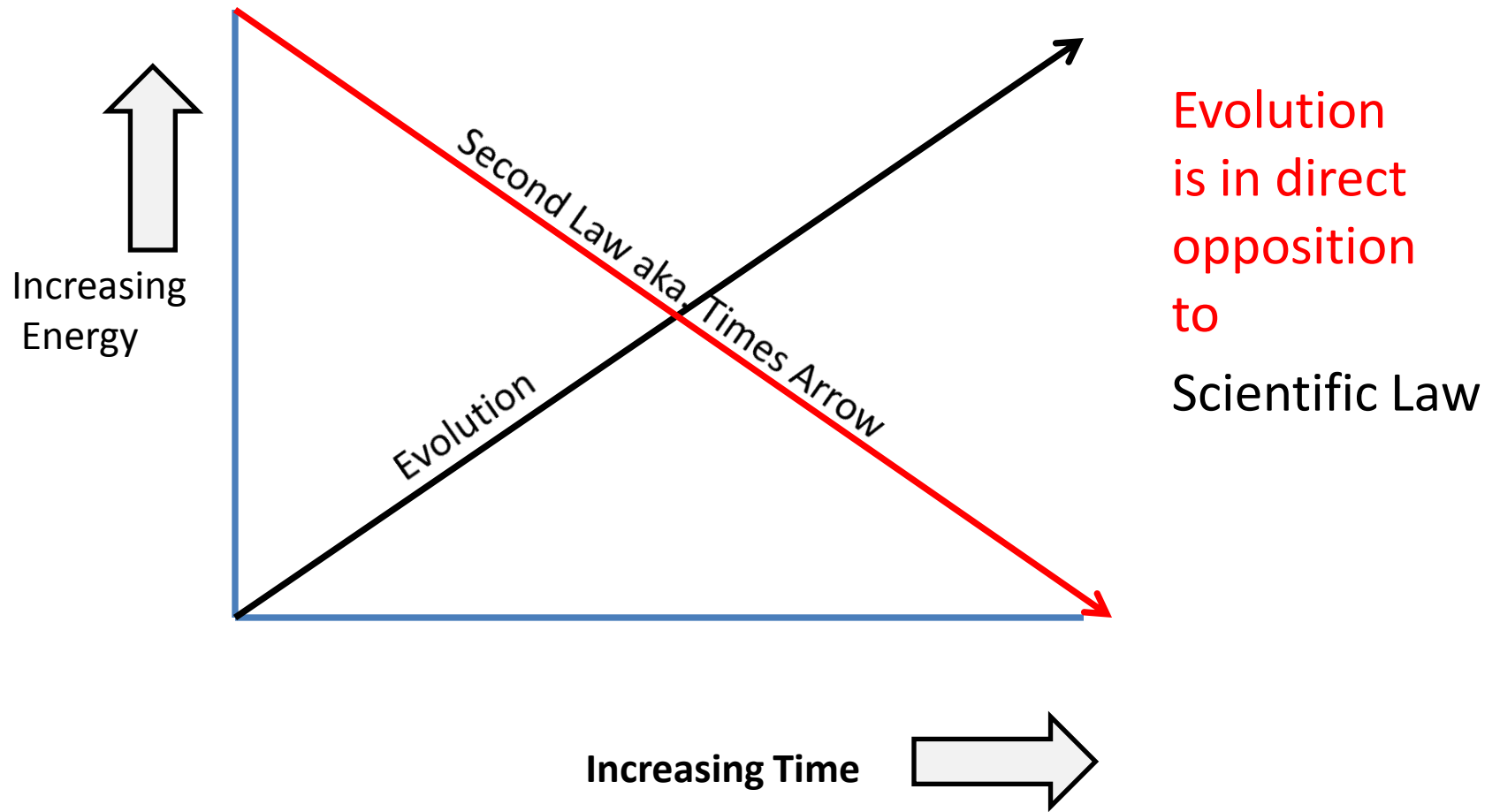
Gordon J. Van Wylen, Thermodynamics (New York: John Wiley & Sons, 1959), p. 169.

“A final point to be made is that the second law of thermodynamics and the principle of increase in entropy have great philosophical implications.

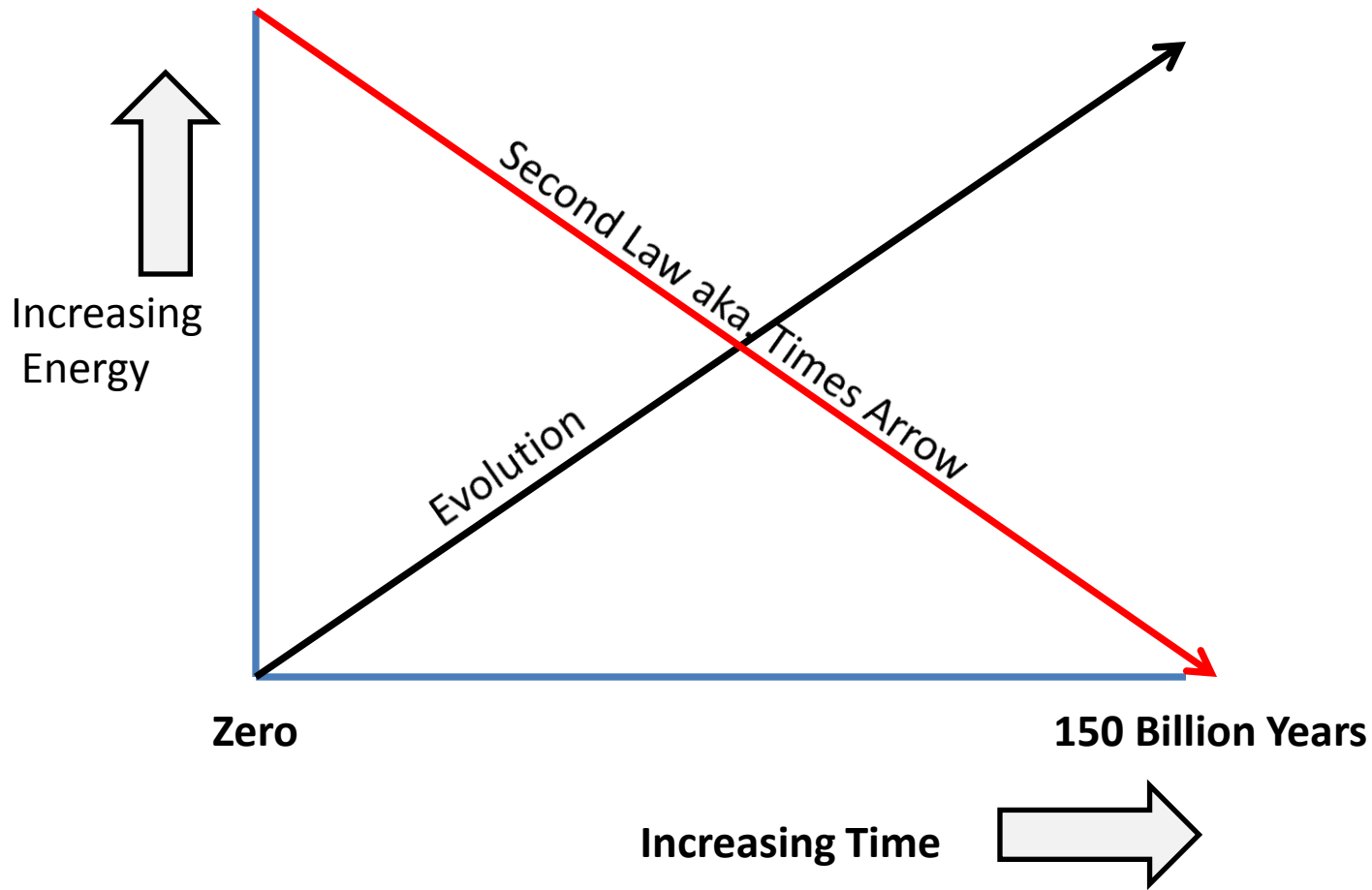
The question that arises is how did the universe get into the state of reduced entropy in the first place, since all natural processes known to us tend to increase entropy?

The author has found that the second law tends to increase his conviction that there is a Creator who has the answer for the future destiny of man and the universe.”

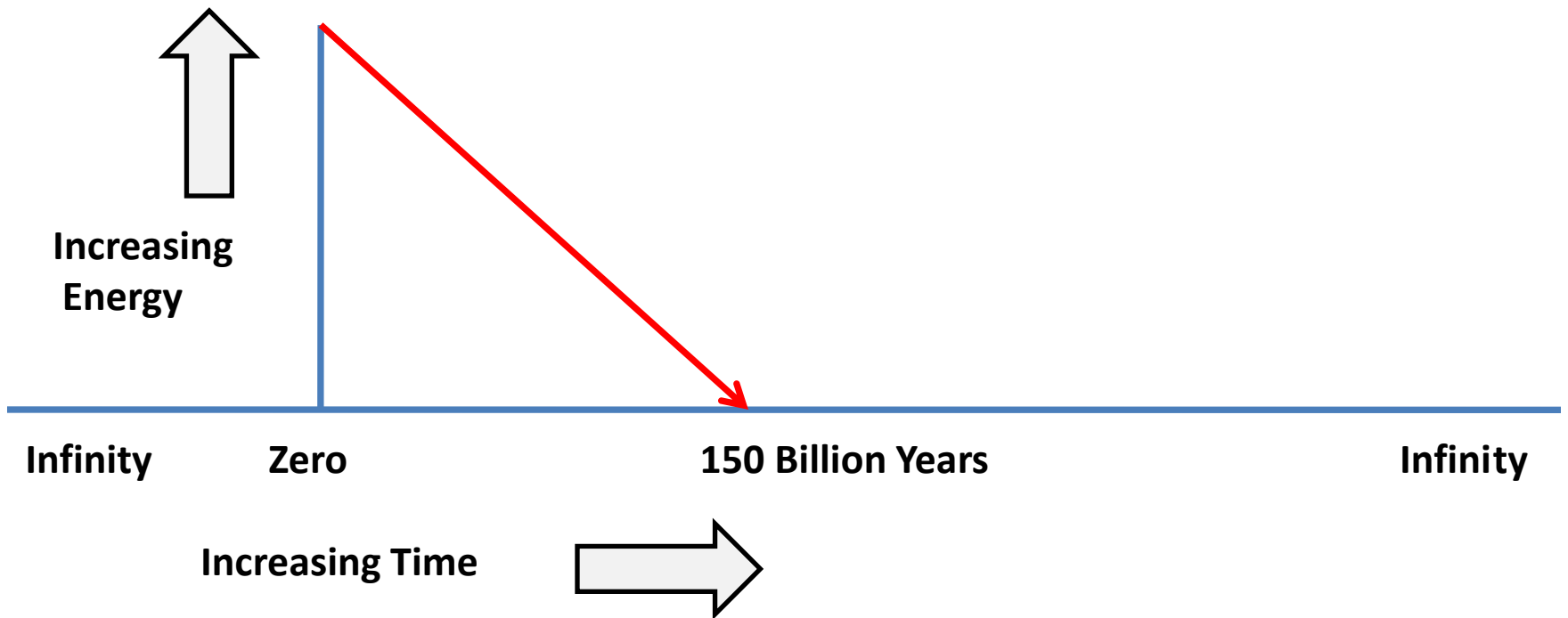
Second Law of Thermodynamics



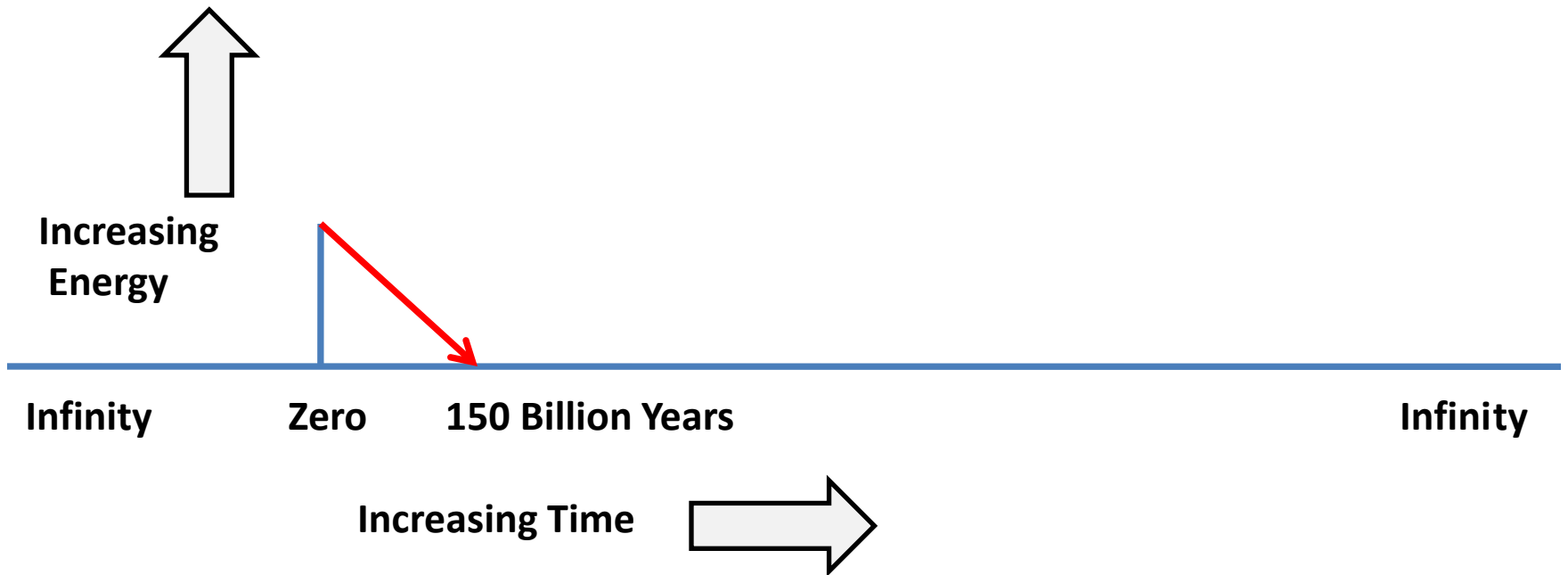
If a fixed amount of time...



Is placed on an infinite time scale...



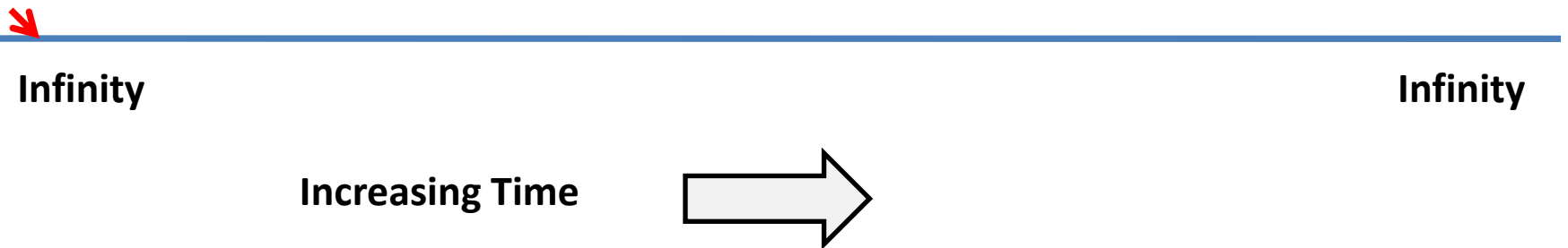
The fixed amount of time...



Gets Infinitely Small!



And since the universe would have been 100% organized at the beginning, the “150 billion year” dot would have to be at the far left of the time scale.



If infinity could be approximated as a trillion, trillion, trillion, trillion of those 150 billion year dots, then the 150 billion years....

Would have happened in infinity past

And therefore:

**WOULD HAVE
ALREADY OCCURRED!!!**

If the universe is supposed to be infinite,
and the Second Law of Thermodynamics
is valid,

then the universe would have
ALREADY RUN DOWN!!

Therefore:

The universe had to have had a beginning.

And everything that has a beginning had a cause (according to the Law of Cause & Effect)

Roy C. Martin Jr., *Astronomy on Trial: A Devastating and Complete Repudiation of the Big Bang Fiasco* (New York: University Press of America, 1999), p. xv.

“Astronomy, rather cosmology, is in trouble. It is, for the most part, beside itself.

It has departed from the scientific method and its principles, and drifted into the bizarre; it has raised imaginative invention to an art form; and has shown a ready willingness to surrender or ignore fundamental laws, such as the second law of thermodynamics and the maximum speed of light, all for the apparent rationale of saving the status quo.

Perhaps no ‘science’ is receiving more self-criticism, chest-beating, and self-doubt; none other seems so lost and misdirected; trapped in debilitating dogma.”

First Law of Thermodynamics

the total energy in the universe remains constant

energy is not now being created or destroyed; it simply changes form

a corollary of the first law is that natural processes cannot create energy.

therefore, energy must have been created in the past by some agency or power outside and independent of the natural universe.

Gingerich, Owen, “Dare a Scientist Believe in Design?” in John Templeton, editor, *Evidence of Purpose* (New York: Continuum, 1994), p. 25.

“Fred Hoyle and I differ on lots of questions, but on this we agree: a common sense and satisfying interpretation of our world suggests the designing hand of a superintelligence.”

Bryson, Bill, *A Short History of Nearly Everything* (New York: W.W. Norton, second edition, 1992) p. 13

“It seems impossible that you could get something from nothing, but the fact that once there was nothing and now there is something is evident proof that you can.”

Narlikar, Jayant, “Challenge for the Big Bang,” *New Scientist*, vol. 138 (June 19, 1993), p. 28

“There are three major problems with the big bang model. First, as a theory of physics, it breaks a cardinal rule by violating the law of conservation of matter and energy.”

Fred Hoyle, *The Intelligent Universe*
(1983), p. 181.

“The big bang theory includes a microwave background . . . but this success is tempered by the fact that it was expected to be between ten and a thousand times more powerful than is actually the case.”

Fred Hoyle, "*The Big Bang in Astronomy*," in *New Scientist*, 92 (1981), p. 522.

"The latest data [on background radiation] differ by so much from what theory would suggest as to kill the big bang cosmologies. But now, because the scientific world is emotionally attracted to the big-bang cosmologies, the data *is* ignored."

Alfvén, Hannes and Asoka Mendis,
“Interpretation of Observed Cosmic Microwave
Background Radiation,” *Nature*, vol. 266 (April 21,
1977), pp. 698-699.

- p. 698 “The observed cosmic microwave background radiation, ... is generally claimed to be the strongest piece of evidence in support of hot big bang cosmologies by its proponents.”
- p. 698 “The claim that this radiation lends strong support to hot big bang cosmologies is without foundation.”

Arp, H. C., G. Burbidge, F. Hoyle, J. V. Narlikar, and N. C. Wickramasinghe, “The Extragalactic Universe: An Alternative View,” *Nature*, vol. 346 (August 30, 1990), pp. 807-812.

p. 809 “The Big Bang model offers a Universe created in a smooth featureless condition, out of which a highly structured Universe is nevertheless supposed to have evolved. Numerous attempts have been made to explain how this miracle is supposed to have happened.

They have two features in common, one a retreat into the highest flights of physics and the other an unsatisfactory absence of the immense detail that would be required to support them in a proper manner, from which we suspect the attempts to be little more than ingenious handwaving. Perhaps this is why they are called 'scenarios.'

p. 810 “The above discussion clearly indicates that the present evidence does not warrant an implicit belief in the standard hot Big Bang picture.”

p. 812 “Cosmology is unique in science in that it is a very large intellectual edifice based on a very few facts.”

Burbidge, Geoffrey, “Why Only One Big Bang?”
Scientific American (February 1992), p. 120.

- p. 120 “Big Bang cosmology is probably as widely believed as has been any theory of the universe in the history of Western civilization. It rests, however, on many untested, and in some cases untestable, assumptions. Indeed, big bang cosmology has become a bandwagon of thought that reflects faith as much as objective truth.”
- p. 120 “This situation is particularly worrisome because there are good reasons to think the big bang model is seriously flawed.”

Hoyle, Sir Fred, “The Big Bang under Attack,”
Science Digest, vol. 92 (May 1984), p. 84.

“Was there ever really a big bang? Even as greater and greater numbers of people have come to believe that the universe began with one great eruption, others have seen a persistent weakness in the theory—a weakness that is becoming ever harder to overlook.”

“As a result of all this, the main efforts of investigators have been in papering over holes in the big bang theory, to build up an idea that has become ever more complex and cumbersome....

“I have little hesitation in saying that a sickly pall now hangs over the big-bang theory. When a pattern of facts becomes set against a theory, experience shows that the theory rarely recovers.”

Linde, André, “The Self-Reproducing Inflationary Universe,” *Scientific American*, vol. 271 (November 1994), pp. 48.

“The first, and main, problem is the very existence of the big bang. One may wonder, What came before? If space-time did not exist then, how could everything appear from nothing? What arose first: the universe or the laws determining its evolution? Explaining this initial singularity—where and when it all began—still remains the most intractable problem of modern cosmology.”

Maddox, John, “Down with the Big Bang,”
Nature, vol. 340 (August 10, 1989), p.
425.

“In all respects save that of convenience,
this view of the origin of the Universe is
thoroughly unsatisfactory.”

Paul Davies, *Superforce* (1984).

"There is a deep compulsion to believe that the entire universe, including all the apparently concrete matter that assails our senses, is in reality only a frolic of convoluted nothingness, that in the end of the world will turn out to be a sculpture of pure emptiness, a self-organized void."

Oldershaw, Robert L., “What’s Wrong with the New Physics?” *New Scientist*, vol. 128 (December 22/29, 1990), p. 56-59

“During the past decade or so, two worrying trends have emerged in the two areas of physics that claim to explain the nature of everything—particle physics and cosmology.

The first trend is that physicists are increasingly devising mathematically elegant hypotheses, which they say are ‘compelling’ but which nevertheless cannot be verified by experiments or observations.

The second trend is that theorists are becoming reluctant to give up their elegant notions, preferring to modify the theory rather than discard it even when observations do not support it.”

p. 59 In light of all these problems, it is astounding that the big bang hypothesis is the only cosmological model that physicists have taken seriously.

Smith, Quentin, “Did the Big Bang Have a Cause?” *British Journal for the Philosophy of Science*, vol. 45 (June 1994), p. 666

“Thus we reach a general conclusion: there is no *philosophy of big bang cosmology* that makes it reasonable to reject the fundamental thesis of *big bang cosmology*: that the universe began to exist without a cause.”

Stenger, Victor L., “Was the Universe Created?” *Free Inquiry* (Summer 1987), pp. 26-30.

p. 26 “In other words, physicists are now claiming that the hundreds of billions of stars and galaxies, including the earth and humanity, are not conscious creations but an accident. There is no Creator, because *there was no creation*.

“... But it is fair to say that there is not a single shred of evidence that demands that we hypothesize that the universe was created, and we can now at least provisionally understand how all we are and all we know could have come about by chance.”

- p. 29 “So what had to happen to start the universe was the formation of an empty bubble of highly curved space-time. How did this bubble form? What *caused* it? Not everything requires a cause.”
- p. 30 “Our universe is a very unlikely one, but it is the only one we have. And this unlikeliness of our universe is no argument for its having been planned.”

Stephen W. Hawking, *A Brief History of Time* (New York: Bantam Books, 1988), pp. 140–141.

“So long as the universe had a beginning, we could suppose it had a creator.”

SO:

the universe had to have been created

AND:

it had to have been created by a
Creator that exists outside of our
Time/Space/Matter Continuum.

Space, Time, and Matter

Where did, space, time, and matter
come from?

The evidence points to
Our Eternal, Omnipotent God.

Genesis 1:1

In the beginning God created the heavens and
the earth.

In the beginning (**TIME**)
God created the heavens (**SPACE**)
and the earth. (**MATTER**)

Evolutionary Science has no explanation for the beginning of TIME, SPACE and MATTER.

They spend billions upon billions to try to discover the answer, but for the price of a Bible, they would discover the answer in the first sentence of Genesis.