

# Scientific Implications About Origins

## Introduction

In recent years a bubbling cauldron over the origins of the universe and life erupts intermittently into scientific, educational, and political arenas, most noticeable in the United States. A virtual monopoly by atheistic naturalists in academia and the judiciary have resulted in a predominance of Godless origin doctrines in governmental institutions and the media. Modern world culture is incessantly indoctrinated with Darwinian evolution of life and various naturalistic cosmologies of the universe by schools and by mass media.

Huge annual government grants and appropriations are dedicated to advance research, teaching, and financial backing to academic institutions, based on these evolutionary, cosmological theories. These massive government monies are mostly controlled by small groups of academia such as the National Academy of Science, largely composed of atheists. This academic indoctrination of lawyers and judges during their educational years has resulted in scientifically flawed court decisions, based on this atheistic bias.

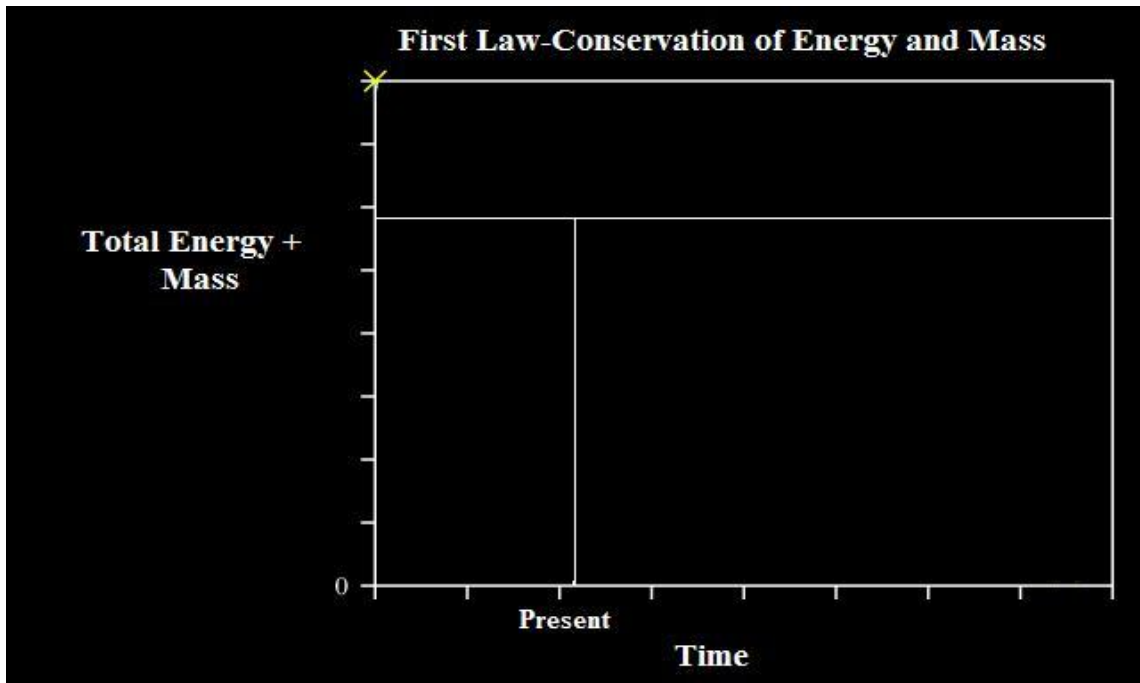
Increasingly, dissidents are objecting to this scientific masquerade by governmental institutions. However, even a whisper of doubt has cost more than one scholar his grant money and even his career. This has been particularly noticeable in the evolution-intelligent design controversies which are embroiled in legal and political actions. The threat of an increasing number of intellectuals who object to the atheistic/naturalist party line has led the scientific establishment to ridicule, to marginalize, to ignore, and to attack any dissidence.

## The Two Basic Laws of Science

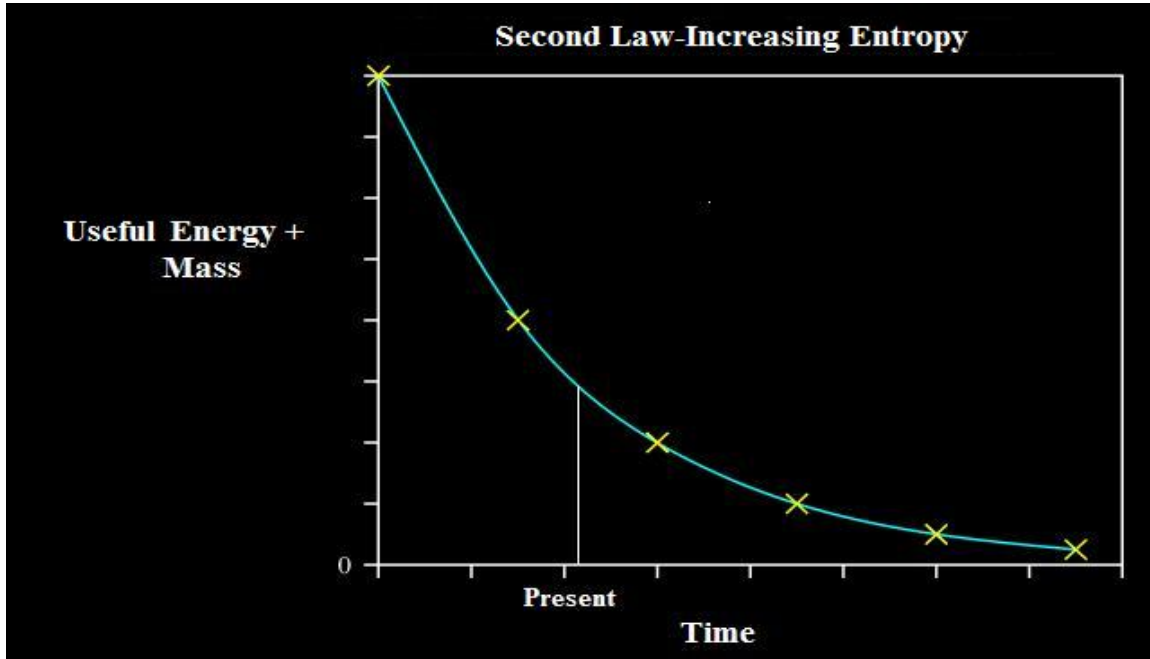
The Universe is composed of two elements: matter and energy. All physical phenomena are the interactions of matter or energy. The purpose of science is to discover the laws that define the principles that govern these interactions between matter and energy. Dr. Albert Einstein expressed it well, "In the whole history of science from Greek philosophy to modern physics there have been constant attempts to reduce the apparent complexity of natural phenomena to some simple fundamental ideas and relations." Like master detectives, scientists through the ages have looked for clues of these fundamental laws that define the interactions of matter and energy.

Modern physics assumes that the entire physical Universe has only these two components: matter and energy. In the last two hundred years, physics has developed two general laws which encompass all matter and energy interactions. These two laws of physics are: (1) the conservation of mass and energy and (2) increasing entropy. All of the laws of science (physics, chemistry, and biology) are derived from these two laws. In every matter and energy interaction both laws are always true.

The first law is the quantity law for matter and energy interactions. This law states that in all interactions the total quantity of matter and energy is conserved. In every matter-energy interaction there is the same quantity of matter and energy before and after the interaction. Matter-energy interactions are a zero sum game; there is no net gain or loss of matter and energy in any interaction. The ideal laws of classical physics, such as conservation of energy (kinetic and potential), conservation of mass, conservation of momentum, conservation of angular momentum, ideal gas laws, field theories (electric, magnetic, and gravity), etc., are all conservation laws, derived from this first law. This law has been verified without exception for nearly 150 years and is the most universally accepted law in both classical and modern physics. The Universe never creates or destroys matter and energy.



The second law is the quality law for matter and energy interactions. It states that in all matter-energy interactions, entropy or disorder always increases. Although the quantity of matter and energy is always constant in every interaction according to the first law, the disorder of matter and energy always increases in the same interaction according to the second law. Again, the veracity of the second law is bedrock for both classical and modern science. The non-ideal laws all involve increasing entropy or disorder such as friction, free expansion of gases, and free heat exchanges which are derived from this second law.



Entropy makes events irreversible and was given the name, time's arrow, by the physicist Eddington. Although this second law has been verified also for nearly 150 years, it is a statistical, mathematical law which for all practical purposes needs no experimental verification. Because the disorder states of any system of matter and energy are so much more numerous than ordered states above absolute zero degrees temperature, then every matter-energy interaction will always result in a more disordered state of matter and energy at a given temperature.

Both of these two laws were originally developed and known, respectively, as the first and second laws of thermodynamics. Since then, the first law has been expanded to develop all of our ideal laws, simply by applying energy, instead of forces. Likewise, the second law expanded beyond thermodynamics with the development of statistical mechanics, kinetic theory, and information theory. Historically, these two laws are so thoroughly accepted that any patent application submitted to the patent office will not even be examined if the patent claims violate either the first or second law. These laws have become recognized as the king and queen of science. By another analogy, the first law is the accountant, keeping the debits and credits of matter and energy accurate, and the second law is the manager, telling how the balanced credits and debits will be dispersed.

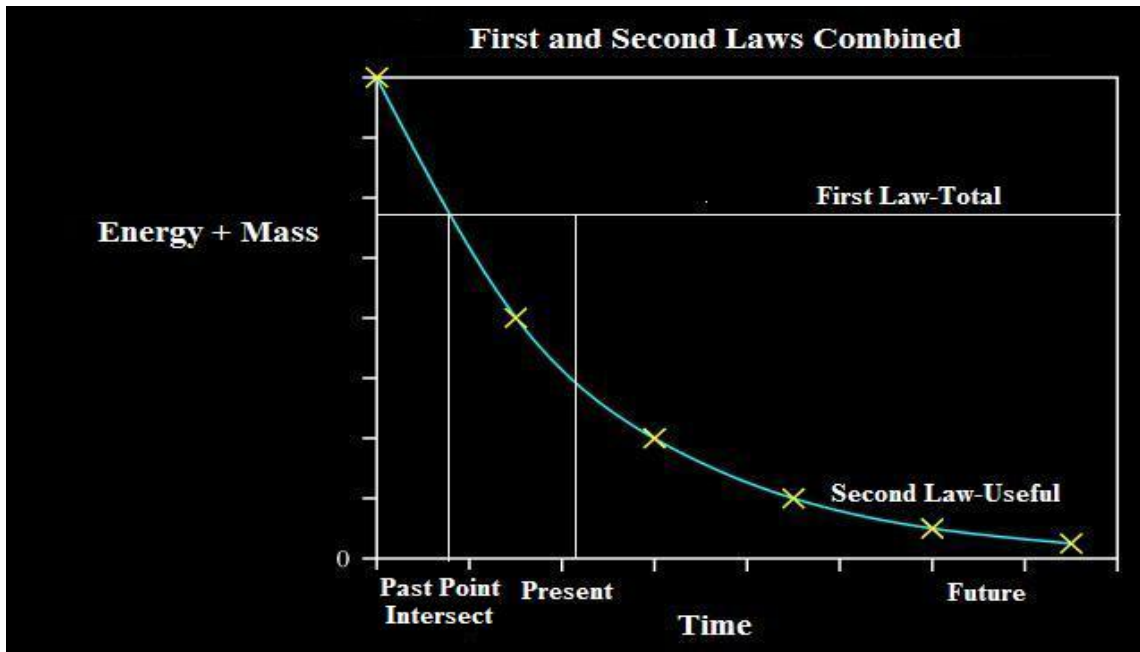
## Origin Implications of the Two Laws of Science

The implications of these two fundamental laws of science in the question of origins are rather astounding. The first law, the law of conservation of matter and energy, prohibits the Universe from creating or destroying any part of itself. Simply stated, the Universe can not procreate itself. The Universe is incapable of creating or destroying any of its matter and energy naturally. Since according to the first law the Universe can not create or destroy one particle of matter or one joule of energy, then there are only two possibilities for the origin of the matter and energy in the Universe. This first law limits science to two conclusions about the origin of Universe: (1) the Universe is eternal or (2) the Universe was created supernaturally. Either the Universe is eternal or it was supernaturally created.

The second law further constrains these two options on the origin of the Universe. The Universe is irreversibly dying in the death grip of entropy, the heartless mathematical destroyer of the order in matter and energy. The Universe has no means to prevent its own demise according to the second law. Each day, the stars, galaxies, and super clusters irreversibly lose matter and energy which they will never get back. A Nobel Prize was awarded for the discovery of the background microwave radiation at 2.7 degrees absolute temperature (Kelvin) as a proof of the lingering energy left from the Big Bang. In reality, this radiation is rather the effect of entropy as the stars irreversibly radiate their energy into the colder parts of the Universe. The quality of energy without any loss of the quantity of energy cascades downward until all of the energy and matter in the Universe will be uniformly four degrees above absolute zero.

Long before this happens, light will disappear from the Universe. Even before the disappearance of light, genetic entropy will mutate the vital genomes of all species to below vital functioning levels, driving all life into extinction. No intelligence will be alive to observe, much less prevent, this ultimate demise of the Universe. This scientific eschatology will be "a whimper and not a bang", as T. S. Eliot penned. Science's prognosis of the Universe is similar to the Shakespearean fool's view of life, "Life is a tale told by an idiot, full of sound and fury and signifying nothing." Or as the Mother Goose rhymes says, "Humpty Dumpty sat on a wall, Humpty Dumpty had a great fall, and all the King's horses and all the King's men couldn't put Humpty together again."

Each day, the Universe loses some of its former beauty and order. Yesterday, the Universe had more life and beauty than today. The records written in geological stone remind us that at one time we had one hundred times more species on the Earth than we have today. No new species are arriving to replace them. Contrary to the public perceptions derived from movies like Jurassic Park, the genomes of the past creatures are probably gone forever. Species can not be resurrected from mitochondrial DNA. Even if some wizardry of genetic engineering could resurrect species or stabilize DNA entropy, the fires of the Universe will ultimately extinguish and exterminate all life.



The second law eliminates the first option of the first law (an eternal Universe). According to the second law, at a finite time in the past all of the energy in the Universe was theoretically possessed by one particle, the highest possible state of order for the Universe. The Universe could not have existed before this finite time in the past. Before this point in time the Universe would have to have more ordered energy and matter than total energy and matter which is not possible. Neither can all the energy of the Universe reside in one particle before this point of time in the past without entropy disordering the particle's energy. Since this theoretical time in the past of perfectly ordered universal energy, the Universe can not reverse entropy from disorder to higher order on a cosmic level in order to maintain itself in a permanent, unchanging state of order without violating the second law. The Universe had a beginning point in time and it is degrading to an ultimate state of total disorder. According to the second law the Universe is not eternal.

An atheistic, naturalistic origin of the universe would require that either or both of these fundamental laws of science be violated. Either the first law was broken on a cosmic level (the matter and energy of the Universe came into being *ex nihilo*, out of nothing, a supernatural creation) or the second law was broken on a cosmic level (the entropy of the matter and the energy in the Universe was reversed into greater order on super galactic levels). In either case, at a finite time in the past, the Universe, according to these two fundamental laws of science, had a creation and a supernatural ordering of matter and energy at super galactic levels.

Therefore, looking back in time, the two laws of science can interpolate certain parameters about the Universe's origin. With no means either to create matter or energy according to the first law, the Universe was incapable of creating itself. Being unable to reverse entropy on any level above simple, single molecules, the Universe is equally incapable of giving itself its former order and beauty. As a matter of fact, with each day that passes, the Universe continually loses its base of operations to try to get back to a more ordered state. Philosophically speaking, this is a morbid state of affairs. Time and chance governed by these two laws of science, and for that matter all the laws of science, will never create even a single protein molecule in 30 billion years, much less a star. But what do these two laws further tell us about the Universe's origin?

## The Creator and Orderer of the Universe and Life

The Universe must have been given its ordered matter and energy from a highly ordered agent with an energy supply greater than the Universe's total matter and energy. Given that all the large celestial systems, such as galaxies and super clusters of galaxies, seem to be burning out at roughly the same rate and from a common starting time in the past, it appears that all parts of the Universe came into being or acquired their ordered structure at the same time. This ordered agent that gave the Universe its matter, energy, and order had several unique characteristics, forensically speaking.

First, the author of the Universe's order had to have access to all parts of the Universe at approximately the same time. This is not naturally possible since no material agent can travel faster than the speed of light to access all parts of the Universe. In other words, the agent could not be made of matter. If this agent ordered the Universe at a point when the Universe was together, as proposed by the Big Bang advocates, then the agent would not have to have exceeded the speed of light. However, in this case at the beginning of the Big Bang, the ordering agent must have operated at temperatures where no matter can exist, so in either case, the agent could not be made of matter.

Second, the Universe's creating agent had to have an energy source equal to or larger than the total energy in the Universe in order either (1) to impart that amount of energy to the Universe initially, or (2) to order the Universe's energy to the extremely ordered states from which it is currently decaying. The agent must not be made of matter (i.e. supernatural) but must also possess more matter and energy than the Universe had at its beginning in order to create and to order the Universe.

Third, the Universe's ordering agent would have to manipulate the stars, galaxies, and super clusters using quantities of complex energy unavailable in the natural realm or laws. Again, this cosmic manipulation of matter and energy into complex order must have occurred in every part of the Universe at the same time. The means of ordering all the matter and energy in the Universe is beyond any mechanism or law found in our material Universe, especially the highly disordering event of the Big Bang Theory. In other words, the cosmic ordering agent must be supernatural. In fact, these two fundamental laws militate against the natural Universe, made of matter and energy, from ever producing its own ordered matter and energy at a cosmic level of stars, galaxies, and super clusters of galaxies.

Lastly, the second law would require that the cosmic ordering agent that gave the Universe its order had to have more complex order than the most complex part of the Universe. The second law and its derivative, information theory, require that the agent which ordered the Universe must be more complex than the most complex part of the Universe. In other words, this Universe ordering agent must be more complex than man with his personality (intellect, emotion, and will) who is the most complex part of the Universe known to science. Hypothetically, the agent which ordered the Universe would have to be more complex than aliens if they existed.

In conclusion, the agent which created and ordered the Universe which is now exponentially decaying from its formerly much higher complexity must have four characteristics according to the two laws of science. First, the agent must possess more energy and order than the whole Universe. Second, the agent must be able to access and manipulate all of the energy and matter in the Universe at approximately the same

time. Third, the agent can not be made of matter because (1) it would have to exceed the speed of light to give order to the disperse Universe which no material agent can do or (2) the agent would have to operate in conditions in which no matter could exist at the beginning of the Big Bang. Lastly, this agent must be more complex than man, the most complex part of the Universe.

It might be appropriate to use the "G" word as the agent that created and ordered the Universe. If we are not talking about a personal God, rather than an impersonal, non-supernatural force of nature, as the creator of the ordered Universe, what are we talking about? The two laws of science, which govern all of the other laws of science, exclude any possibility of the Universe arising from natural causes and limit the conclusions to a supernatural, intelligent being with all the personality and power exclusively belonging to God is the agent of creation.

We have been educated to think that the natural realm as studied by science and the supernatural realm related to God have no connection with each other. We are told that there is no proof of God in nature and, therefore, any mention of God is banned from our science and educational system. It is quite the contrary according to the most fundamental laws of science. The education establishment, the courts, and the majority of the scientific establishment may be willfully blind, but the laws of science and nature are not. The very nature of the Universe and the fundamental laws of science that govern it reveal even the invisible characteristics of the Maker of the universe. Every work of art, piece of music, mechanical machine, architectural building or civil work reveals the character of their makers. So nature with its exquisite beauty and symphonic orchestration reveals the divine power and Godhead in its biological and physical structures and operations from subatomic particles to super celestial bodies.

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