

**SOMETHING MUST BE ETERNAL**  
**By Bob Stewart**

If the premise is flawed, the argument(s) based on the premise must also be flawed. This is not to say that wrong conclusions cannot be drawn from sound premises. We will survey astronomy and science for a time in order to draw our conclusions.

**Introduction**

The awesome nature of the universe has captured the attention and curiosity of man from the beginning of time. It has inspired people to wonder, poetry, song and science. It has inspired the writers of Holy Writ as well.

Psalm 19:1-3; Psalm 8:1-6; Psalm 50:1-6; Isaiah 40:21-22; Job 22:12; Acts 17:22-29; Romans 1:18-20.

The scriptures suggest that the nature and characteristics of God can be understood through what He has created, and the heavens declare His glory. We will begin our study with a brief history of the study of the heavens.

Since very early in the history of man, the examination of the heavens has been intense. Amazingly accurate conclusions have been drawn about the universe by ancient civilizations that had access to no instruments of examination or measurement (like the telescope or advanced mathematics). These civilizations such as the ancient Chinese, Egyptians, Babylonians, Mayans, Aztecs, and Greeks were able to establish very accurate calendars, maps of the cosmos and understand the difference between planets and stars hundreds of years before Christ.

Today, cosmology, (the general science and philosophy relating to the universe) draws from many "exact" sciences including astronomy, physics, astrophysics, and mathematics in order to establish various hypotheses regarding the past, present and future states of the cosmos.

Man has an insatiable appetite to know about the universe in which he lives. The goal of cosmology is to try to determine the "what?", "where?", "how?" and "when?" of the universe. This is a scientific task and, even today, requires speculation due to the limitations of science in gathering information relating to its goals. The "why?" is relegated to philosophy and religion. (The Scriptures deal principally with the "why?" question regardless of the attempts of some to make it a scientific book). When cosmologists attempt to address the "why?" they often stumble badly because there is no scientific test for motive. When Christians try to establish the "when?" they stumble badly as well making false assumptions on the nature of scripture. Often the fight is between two parties who have stumbled and are lying on the ground attempting to prove to the other that they themselves are really standing up.

Religion, philosophy and science have often blundered simply due either to the lack of truth - or the confrontation with a concept contrary to the accepted one. This confrontation has even resulted in bloodletting and execution. This has been done mostly by the Church.

An example of this mutual stumbling came early. Aristotle, (340 B.C.) In his book, *On the heavens*, was able to put forth arguments for believing the earth was a round sphere rather than a flat plate. (Eclipses of the moon, the ship moving over the horizon and the position of the North Star at various times of the year-lower in the Southern hemisphere than in the Northern were some of his observations). He ignored the idea that man would fall off the face of the earth if it weren't flat. He allowed the evidences of observation to persuade him to new conclusions and did not address the issue of "falling off". This was all well and good. But he established a model of the universe that placed the Earth fixed and stationary at the center of the universe orbited by The moon, then Mercury, Venus, The Sun (as a planet), Mars, Jupiter, Saturn and then the fixed stars. Beyond that, observance with the naked eye was not possible. He developed this model because in his mystical-religious/philosophical/mechanical thinking he believed the Earth should be at the center of the universe and that circular motion was the most perfect. So we have a blend of mysticism (or religion) and science coming together giving us incorrect information. Ptolemy, in the 4<sup>th</sup> century, adapted Aristotle's model with a few adjustments. The Christian Church adopted his model and based all theological doctrine relating to the creation on it.

Aristotle also believed that the universe was static and unchanging. The two "lights" were perfect and eternal. After all, no change meant that nothing could have started things off. There would be no development and no end to the universe. (Interestingly, the notion of no beginning or end to the universe has reappeared nearly 2,500 years later with Stephen Hawking's book, *A Brief history of Time*.)

Another Greek astronomer, following Aristotle by 70 years, theorized that the Earth was a planet like the others and revolved around the Sun. This was Aristarchus of Samos (270 B.C.) who was summarily dismissed and ignored. We will visit him a little later on. It took over 2000 years for this to be re-established. Suffice it to say that all but one of his works was destroyed when the great library of Alexandria was destroyed in 640 A.D. The library held more than 400,000 scrolls and volumes, now lost to us. Fortunately, copies of many of them were taken to other places for study.

Incidentally, there is no clear evidence as to who was responsible for the destruction of the library. Its demise began in the first century B.C. when some of it was burned inadvertently during a siege by Julius Caesar on Egyptian warships docked at the harbor of Alexandria. Between the Roman decline and the Arab ascendancy in 641 A.D., the library was finally destroyed. Legend has it that it could have been accomplished by either party based in religious motives.

Over 1800 years after Aristotle, in 1514 A.D., Nicolas Copernicus, fearing being branded by the Church as a heretic, but having proved Aristotle, Ptolemy and church

doctrine regarding the positions of the planets and stars as being false, hid his discovery and his great work *De Revolutionibus* from publication until just before his death. His discovery? The Sun was not a planet, the Earth and the remainder of the planets in the solar system revolved around the Sun, and the Earth was removed from the center of the universe. This flew in the face of the Church and its doctrine of the centrality of The Earth and Man as central to God's creation. But Copernicus, like Luther, a Christian and a Canon in the church could do no other but stand firm in the truth. He maintained circular orbits but the church fought his concepts hard. It still does today in much of its theology. But truth is truth. More was to come. When the church bases its theology on science and then science changes its previous conclusions, the church is reluctant to change with it, a very strange procedure.

It was a hundred years later that a publication by Johannes Kepler (1609), a strong Christian believer, brought the discussion into a new furor. For 2000 years, the odd movement of Mars could not be understood or defined by astronomers or theorists to his time. Working from the great Danish astronomer Tycho Brahe's mathematical accuracy, Kepler destroyed all but the Sun centered pattern of Copernicus' scheme. Using pure ingenious logic, and a fine mathematical background, he was able to solve the problem of the odd movement of Mars by establishing that the orbits of all the planets revolving about the Sun were elliptical and that the earth moved in the same way. He was not supported but rather hindered by his contemporaries, and the church was openly hostile to him even though he was correct. Late in his life, he received encouragement and vindication from another astronomer, Galileo.

The years 1609 and 1610 had major significance for astronomy. First, spectacle makers in Holland discovered that when you placed one lens over another, magnification occurs. Second, this discovery reached Padua, Italy where one Galileo Galilei taught math at the university there.

Born in Pisa, Galileo had toyed with weights, the specific gravity of metals, mechanics and other matters of early physics. He actually was the originator of the concept of gravity in that he destroyed Aristotle's concept that objects fall at different rates based on their weight. From atop the tower of Pisa, Galileo dropped balls of different weight and when they hit the ground at the same time, the world was shocked. Galileo pretty much rewrote the book on physics and astronomy when he simply desired to harmonize observable facts with supporting mathematics. He met a huge resistance and had to leave Pisa for Padua.

In Padua he constructed his own telescope. His first thought was that it could have a military defense application. So he demonstrated to the government how an enemy ship could be spotted hours before the naked eye could see it enabling more preparation time for defense. The government bought the idea, and paid Galileo handsomely. He was also awarded a life chair at Padua and received a doubling of his salary.

But Galileo's goal was not the money or tenure, but the resources to continue his studies of the universe. So he turned his telescope toward the heavens. Can you imagine the excitement. What he discovered rocked the world.

What was left of Aristotle's, Ptolemy's, and Copernicus's astronomy was erased. The perfect light of the Sun was seen to have spots and explosions, and the Moon had craters. The strange gasses of the Milky Way were seen to be myriads of stars. Moons of planets were seen and additional planets. These and other discoveries caused the world, academicians, and the church to gasp.

George Bernard Shaw (1859-1950) wrote, "Science is always wrong. It never solves a problem without raising ten more problems. Copernicus proved that Ptolemy was wrong. Kepler proved that Copernicus was wrong. Galileo proved that Aristotle was wrong. But at that point the sequence broke down, because science came up against that incalculable phenomenon, an Englishman." He was speaking about Isaac Newton. (1687)

Force and motion were central to Newton's thinking. This brought him to an examination of everything from gravity to light to energy to the heavens. Things stationary, things in motion, things spinning, things falling, things in the sky and in the heavens fascinated Newton. He began to develop math to define these realities. He invented the calculus, determined the rate of gravitational attraction and applied these new mathematical constructs to everything, from the atom to the universe. He focused on how a planet or a satellite like the Moon could maintain an orbit around the Earth and how the planets maintained orbits around the Sun. The distant stars were no longer fixed but followed the laws of gravity, force, motion and inertia like everything else. His universe operated according to a set of laws and mechanics. It was orderly and predictable. Newton also had brought the element of "time" into his equations. Based on his mathematics, the future position of the stars could be accurately predicted. His monumental work on physics, gravity, force and motion was called *Principia Mathematica*.

In writing of his discoveries, Newton said, "This most beautiful system of the Sun, planets and comets could only proceed from the council and dominion of an intelligent and powerful Being who governs all things.... And on account of His dominion He is wont to be called Lord God". In his investigations, Newton saw a God of order, not of confusion. But Newton also recognized that he didn't have a lot of the answers. He had determined the "how" of things like gravity, and was able to measure them, but had no idea as to the "why". His laws explained the mechanical universe, but not the why of it. As brilliant as Newton was, his orderly, mechanical, comfortable universe didn't quite make it. Mercury was the problem. He was, by his own mathematics and systems, unable to explain the now discovered odd movements of Mercury. Mercury had now replaced Mars as the astronomer's conundrum.

It might be at a good point to note some facts about other importantly related issues regarding the universe. This is especially important when one attempts to determine the "when" of the universe.

A. The discovery that there was a great distance from Earth to the stars came early on. The aforementioned Aristarchus of Samos (270 B.C.), in his only surviving work *On The Sizes and Distances of The Sun and Moon* postulates, by geometry, certain results regarding the sizes and distances of these bodies. They were stimulated by his observance of the solar eclipse (the Moon coming between the Sun and The Earth) and the immense shadow it cast on the Earth. He estimated enormous distances and sizes by his crude methods. The ancient Greeks, especially the stoics, wanted him banned because the popular belief was that the Sun was smaller than Greece itself. Although his calculations were far amiss, his work was noticed by Copernicus in an article he later repressed. It is a simple process to note that shadow casting in general gives us some indication of distance as well. The further away an object is from another, the more dissipated the shadow becomes. The earth casts no shadow or light on any heavenly body but the Moon.

B. The second device used to measure distances between heavenly bodies was the discovery of parallax. In 150 B. C., another Greek astronomer named Hipparchus determined the parallax of the Moon. What is parallax? It is defined as “the difference in direction of an object caused by a change in the position of the observer.” This method is used in astronomy as one way of measuring the distance of a celestial body from The Earth. How does it work? If I hold my finger before my eyes and examine it first with my left and then my right eye, it seems to move against the distant background. The closer my finger is, the more it seems to move. The further away, the less it seems to move. I can estimate the distance to my finger by the amount of this apparent movement, or parallax. If my eyes were further apart, my finger would seem to move substantially more. The longer the baseline from which we make the two observations, the better we can measure the distance to remote objects. Both Aristarchus and Hipparchus suspected great distances to the Moon, Sun and the stars because the parallax diminished as each was observed in its order. Before the invention of the telescope, the parallax of even the nearest stars was too small to detect. Not until the 19<sup>th</sup> century was the parallax of the first star measured. It became clear, from simply geometry, that the stars were an immense distance from the Earth.  
(article)

C. The third device used to measure distances came from the study of light bringing us back to Isaac Newton. Newton discovered that light was made up of different colors by passing light through a prism. He suspected this was the case when simply looking at a rainbow and trying to figure out what would cause such a phenomenon. He resolved it into its component colors of red, orange, yellow, green, blue, indigo and violet. (Demonstration) His experiments with light were not ignored.

It was an amazing thing that over 150 years later, light, magnetism and electricity all came together in the studies of Michael Faraday and a little later, James Clerk-Maxwell. We will return to them in a moment. But it was the discovery of the fact that light was a traveling reality at tremendous speed that changed the way

the universe was understood. It started with Newton but ultimately Newton's idea, that the light from a distant star reached us instantaneously, was unceremoniously discarded forever. To interject a point we will return to later we want to note, that, the speed of light translated into distance and distance combined with speed equates to time. We have a simple equation to demonstrate this and it is very simple. But first realize that we do this equation all the time. When we book a flight to a destination 3000 miles away, we ask the travel agent, "How long will it take to get there?" The travel agent tells us, "6 hours". "Oh", we say, "Then I will arrive at such and such a time." We seldom think of how fast we must travel to get there in 6 hours. But we must average 500 miles an hour to travel 3000 miles in 6 hours. Now, if we were to travel at a speed of 1000 miles an hour, how long would it take to get there? Half the time or 3 hours. The equation is simple. The distance in miles equals the speed in miles per hour times the time in hours. Or,  $D=S \times T$ . Also,  $T=D/S$ . Demonstrating the relationship between time, distance and speed is essential to understanding how our time space continuum relates to the spiritual dimension and the abode of God. We will discuss how all this came to be understood and how simple it really is, but first, look at a key element that followed Newton and began all of modern physics. Now back to Faraday and Clerk-Maxwell.

The disagreeable motion of Mercury – that is Mercury did not cooperate with Newton's system – left an opening for further work. Otherwise, we still might be living in the 17<sup>th</sup> century, even today. But a seemingly unimportant discovery in Denmark was made when the needle of a compass was seen to move in the presence of a wire carrying an electrical charge. Now magnetism and electricity had been known about for a long time- magnetism as far back as 600 B.C.- yet no relationship between them had ever been considered until 1813 when a young man named Michael Faraday, an assistant at the Royal Institute in London, moved a magnet through a loop of wire and created an electrical current. "How did this occur?" He asked. He called the magnetic force he was able to demonstrate a "magnetic field" because the current was not created unless the magnet passed through the coil. It did not occur when the magnet was motionless. Either the wire had to move or else the magnet did. The magnetic field was easily demonstrated. (Do so) He went further, however and discovered that the electrical and magnetic forces did not develop instantaneously, but took time. Ultimately, we all know the results of this discovery in our everyday lives. His discovery set much of Newtonian thinking regarding a mechanistic/instantaneously viewed universe aside. Time now became an element of physics.

Faraday noted two things. First, he said his motivation and duty was formed entirely on what he held to be the revelation of God in the written word and that the book of nature, which we all have read, is written by the finger of God. Like many before him, though lauded by men, he himself was awed by the magnificence of God. Second, when asked by the Royal Exchequer after he saw a demonstration of electricity, "But Faraday, my dear fellow, what's the use of it", Faraday replied prophetically, "Why there is every probability that you will soon be able to tax it".

James Clerk-Maxwell advanced Faraday's work. From 1855 onward, Clerk-Maxwell added the mathematics to Faraday's discoveries. He also discovered that the time it took for each field (magnetic and electrical) to respond to each other corresponded to the speed of light. He also translated this into the now known fact that changes in astral bodies came to be known by us from the light we perceive from them and that the perception was made at the time the light actually reached us. Therefore, the change actually took place at a time prior to the perception of it. Communication of all kinds he concluded after years of experimentation, took time.

This brings us back to the nature of light. Now we enter the difficult. The nature of light is describable only by enumerating its properties and behavior. It is like trying to describe "love". We can't put it into a test tube and measure it. Like the magnetic field, we know it exists, we can see its many effects but we can't see "it". So, in a like manner, we use mathematics, models and analogies to describe light, and although we find it to be a very primitive reality and the earliest we know of basking in its glow, it is tough to figure out. In the historic theories about the nature of light, two of them have vied with each other from the outset. One was defined in Clerk-Maxwell's celebrated demonstration of the electromagnetic characteristics of light waves. This came about this way. First we know that white light is made up of a hew of colors visible in a rainbow or a prism as light passes through it. Newton showed us this. Since a magnetic field could be demonstrated as having waves and wavelength, Clerk-Maxwell concluded and demonstrated that both electricity and light manifested themselves in a wave pattern and traveled at a fixed speed, much as one sees when a pebble is dropped into a pond.

He was able to measure the wavelengths of not only pond ripples but of magnetic and electrical fields. The wavelength is the distance between the crest of each wave. In light, the wavelength lengthens as it moves toward red and shortens as it moves toward blue and then violet. A.M. radio waves are generally around three feet in length. Then you have short wave radio, microwave (a few centimeters), and then colors begin to appear. Infra-red is shorter than microwaves. Visible light has a wavelength of between only forty and eighty millionths of a centimeter. Even shorter wavelengths are known as ultraviolet, X rays, and gamma rays. So each color of the light spectrum has a specific wave length. This wavelength reality has applications to both time and distance as we will see later.

The second theory about the nature of light came later at the turn of the 20<sup>th</sup> century as more properties of light were discovered. It was determined that light is composed of a flight of fast moving particles soon to be called photons. They possess energy and momentum and traveled in packets or clusters.

These two opposing discoveries were finally harmonized in what later came to be known as quantum mechanics. Both concepts were found to have some validity.

But the discovery that light did not reach us instantaneously but had velocity prompted a determination by many of the curious to try and measure what exactly that velocity was. The first discovery of the fact that light travels at a high and constant velocity was in

1676 by a Danish astronomer named Ole Christiansen. This came as he observed the moons of Jupiter in their passing behind Jupiter and in their eclipses and compared variations of them as both the orbit of Jupiter and the Earth took place around the Sun. His measurements were rough but he estimated the speed of light at 140,000 miles per second. This was remarkable in light of further advances even into the 20<sup>th</sup> century. But simple observation and patience was his key. Although his discoveries were held in some skepticism, an English astronomer, James Bradley offered corroborating evidence in 1727 using other astronomical methods.

In 1849, the French Physicist Fizeau was the first to measure the velocity of light by a method not involving astronomical observations. He measured the time of the transit of light flashes between two hills in Paris France about 8.6 kilometers apart (5.34 miles) (1 kilometer is .6214 of a mile). A beam of light was chopped into flashes by means of a rotating wheel with 720 teeth. He was able to vary the speed of the wheel. The beam of light was aimed at a mirror on the far away hill that reflected the light back to the wheel which was eclipsed by the succeeding teeth of the rotating wheel.

He and two other French astronomers, Arago and Foucault, improved the method of determination by using a rotating mirror. A pencil thin beam of light from a point source was reflected from a rapidly rotating plane mirror to another stationary mirror about 65.5 feet away. The beam was reflected back to the rotating mirror. During the time of transit, the rotating mirror was found to have rotated sufficiently to displace the focused image of the light source by a distance of about a quarter of an inch. These experiments estimated the speed of light at 185,208.2 miles per second. In 1927, notably A. A. Michaelson, along with others (especially Edward Morley) improved measuring techniques and discovered that light travels at different velocities depending on the medium through which it travels. The speed of light has now been established at 186,284.6 miles per second in a vacuum. As it intersects our atmosphere, depending on the atmospheric conditions, it is both slowed and filtered. Atmospheric conditions (gases in the atmosphere – especially moisture) filter and refract the light so that we see only certain wavelengths with the construct of our eyes. This accounts for both the blue sky and the color changes at sunrise and sunset.

How does this relate to the strange movements of Mercury?

Thermodynamics – (Greek thermos-dunamis) was originally given to that branch of science dealing with the motive power of heat, or the transformation of heat into mechanical work or vice versa. But it has expanded into the study of the conservation of energy and into the first and second laws of thermodynamics known as Carnot's principle of reversible cycle. It further finds application in the study of the age of the universe and is the greatest help in setting up the ability to recognize the reality of a spiritual universe outside of our own.

The heart of thermodynamics is the correlation between heat (energy) and work. Heat can be changed into work and work into heat. Both are easily demonstrated by our modern automobile. Fuel combusted in a compression cycle of an engine explodes and forces



the piston downward producing torque. This in turn is harnessed to power our cars. On the other hand, work produces heat in our brake system through friction. This can also be demonstrated by rubbing our hands together.

The laws of thermodynamics define this phenomenon. The first law states that, in a system, regardless of how small or large, the total amount of energy remains constant but can and does change form when it goes to work. It is a law of energy accounting. It has mathematics to determine how much energy is available to do a certain amount of work or how much work or fuel it will take to produce a certain amount of energy. The man primarily responsible for working this all out was an Englishman named James Joule in 1840-1850. Today, units of heat are measured in Joules.

The second law tells us that all processes of energy changed into work are wasteful to some degree. That waste of energy, which can no longer be usefully employed is measured as an increase in a quantity called entropy. This reality was first discovered by a brilliant young Frenchman and mathematician named Sadi Carnot. In 1824, after a 20 year study of the best steam engine in the world, Carnot published a paper proving that even for the most efficient steam engine to work, some energy would have to be thrown away never again to be reused. For example, once the steam had driven the piston, it had to be gotten out of the cylinder to make room for a new burst. While most of the energy went to move the piston, some went, with the used steam into the exhaust. Unknowingly, Carnot had established a fundamental feature of all processes: nature has a dissymmetry which declares that in any process, some energy will be wasted. And that which is wasted cannot be reused in that particular process. In our material and physical universe, the process can never return to its starting point with its original allocation of energy intact and available for use. This is called irreversibility.

Examples: Car engine – coolant and hot exhaust. The Sun and its effect. A light bulb goes out when the electricity is removed.

On the face of it, these two principles are contradictory, that is Joule states that energy remains constant and Carnot states that some is lost when it is used to produce work. It was William Thompson, later known as Lord Kelvin who actually defined the nature and application of energy as two unbreakable laws. Carnot added one other principle. The direction energy that is wasted in a process takes cannot be predicted. It is chaotic and random and subject to forces outside of predictability partly because this wasted energy tends to create its own fate. (Wildfire for example) Kelvin's Second Law, amplified by one Rudolph Clausius, states the inevitability of the increase in entropy in any process regardless of size.

Now the operation of the universe involves processes both on a microscopic level, and on a galactic level where suns burn out, processes that move all things from one state to another and it is irreversible. It has been stated by nearly every physicist, as he sees it work out, as possibly the most profound and sweeping discovery made in the history of science.

Why? Because to keep our system functioning, whether it be the universe or our bodies, energy must be continually fed into the system. (Sun/Earth) When this occurs, a waste or decay takes place. This is called entropy- the increase in the loss (or waste) of energy. (Note decaying orbits of satellites)<sup>1</sup>

A note on time and temperature. Aging (entropy) can be reduced by slowing a body's molecular or cellular movement through dropping it's temperature (cryogenics, keeping food fresh). The reverse is true. A body can be caused to accelerate it's "aging process" through raising it's temperature. (Boiling, burning, etc.)

What this means on a cosmic level is simply this: It has been determined that the universe is moving and through this observation, energy is being expended and entropy is increasing. The supply of energy from sources like the Sun is diminishing. It can't be renewed. If it is exhausting itself, it had to have been at a point when it began to exhaust itself. The universe is expanding in some places, contracting in others.\* (Bounce ball.) Some like to think that it has been doing this in cycles forever and that the universe is eternal. But even the best rubber ball will quit bouncing in time. There are only two ways in which a process could be infinite. One is for cycles (or a cyclical process) in which there is no entropy – (impossible) or cycles in which the temperature band increases, followed by cycles in which the temperature band decreases calling for some cycles to have an entropy decrease-also impossible.

We are left with one conclusion. A series of expansion/contraction cycles or any movement or process in the universe at all (the fact of which has now finally been irrefutably proved) must have started at some time. There must have been a beginning!

\*Doppler effect in light waves, red shift in bodies moving away from us and blue shift in bodies approaching us.

#### I. First Premise (On physical realities)

"Something is eternal", and, "nothing is eternal", cannot co-exist as simultaneous premises. One or the other must be true. If nothing is eternal, then all is temporal. If all is temporal then all had a beginning. If all had a beginning, then all came into being.

That all came into being from non-being is not possible. "Nothing" does not beget something. If nothing is eternal, then this argument states that everything came into existence by itself, without a source or a previously existing substance. Since this violates the law of contradiction (something cannot be itself and something else at the same time) and since the laws of Physics do not allow for this, (simple cause and effect) then something must be eternal from which everything springs.

The laws of physics (especially the 2<sup>nd</sup> law of thermodynamics) reject the eternal nature of any physical matter since all physical matter is subject to entropy.

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<sup>1</sup> See: "A Brief history of Eternity", Roy E. Peacock, Crossway Books, Wheaton, Ill. Particularly pages 70-76

Therefore, “nothing is eternal” is not possible, and thus, something must be eternal.

### **EXCURSUS ON “TIME” VERSUS “ETERNITY” OR “INFINITY”**

“Time” is not really a fourth dimension. Time is a function of creation. Without creation, time would not exist because time is a measurement of cosmic motion both on a microscopic and universal level. It is measured and governed by what the cosmos does. On our planet, time is measured by the earth’s rotation around the Sun and, to some degree, by the Moon’s rotation around the Earth.

Theoretically, it relates to light speed in that, as one approaches light speed, time slows. At light speed, time ceases. For example, if a star were to be created at point “A” and we approached point “A” from point “B” a thousand light years away, at light speed, leaving point “B” exactly one thousand years prior to the creation of point “A”, we would be at the creation occurrence. If we were able to travel faster than light, we would be there prior to “A’s” creation, likewise if we left sooner than one thousand years prior to “A’s” creation. But at our present state, our world would not see the light from “A” for a thousand years. Thus we measure time in relationship to the constants we observe in the heavens. However, in spite of the science fiction of Star Trek, achieving light speed or greater appears to be an impossibility by all the laws of quantum mechanics.

“Something is eternal”, violates the laws of Physics (second law of thermodynamics - since everything is subject to, and experiencing decay). In addition, a strong point is made denying that “something can be eternal” by relying upon the laws of Physics (and science). (The “why” of this will be presented later). There is no denying that all matter is subject to change, aging and decay. If matter itself were eternal, there would be no change or decay. We, who are made of the same “stuff” as the universe, would never grow old, change, be injured, age and die if the universe was made of eternal “stuff”.

## II.

Existence itself demands that something eternal exists, since something cannot be produced from nothing. The laws of physics are inadequate to define this possibility. Therefore, that which is eternal must, by all logic, lie outside the common laws of Physics, which define and govern the physical and material universe in which we live. Since this must be the case, the source of the temporal physical universe must be an eternal entity, not able to be defined by the laws of physics. Therefore, the laws of physics are limited. In fact they are by their own definition. Physics is defined as “The science that treats of matter and energy and of the laws governing their reciprocal interplay under conditions susceptible to precise observation, experimental control and exact measurement.” (Britannica World Language Dictionary)

The laws of physics deny that a life can spring from the non-living, non-biological or from any combination of common elements. Therefore, we suggest that the eternal entity from which the temporal universe springs must also be the source of life (or this “life

force”), and therefore, must be “alive” in some sense of the word. We’ll come back to this shortly.

For those that might be persuaded that something lies outside the laws of physics (since it is apparent that the universe came from somewhere - unexplainable by science), a new and vastly different “universe” could be envisioned, a universe comprised of entities outside the laws of physics, neither subject to nor limited by either space or time.

Some of mankind have attempted to explain this “universe” or “eternal living entity” or “different reality” in terms defined as “religious”, “paranormal”, “spiritual”, “psychic”, “mystic”, “otherworldly”, etc.,

The conflict over which of these experiences are true (if any) is considerable. There are testimonies and evidence proffered by many who claim to be conduits of these experiences. Since “something is eternal” is true, we now need a new test and definitions to determine what is the nature of this truth.

### III.

Since this eternal “stuff” falls outside the laws of physics and is, therefore, not measurable by scientific means, it is reasonable to expect that those whose reliance for truth and reality is vested totally in the laws of physics cannot accept that something lies outside the realm of what these laws define and govern. At the same time, these same people cannot explain by these same laws how the laws themselves, let alone “existence” came into being without negating the very laws they themselves rely on for all the answers. So this is left as a “mystery that we are still working on”.

One might look at it this way. The tools of physics are “physical” tools designed to measure and define “physical” realities. They, by their very nature, cannot measure and define the “non-physical”. One would need “tools” of a non-physical nature to measure and define the non-physical. However, defining the nature of what these tools would consist of, and determining if we (in this space-time continuum) could even grasp or use such tools is a matter worth considering. So let us consider it and summarize our subject thus far.

### **EXCURSUS ON ALTERNATIVE REALITIES**

The determination of whether something is real or not is usually done through measurement. Measurement employs devices, either mathematical, mechanical, electrical, chemical, sensual, or mental, to determine the “realness” of any theory, experience, postulate, perception or object coming under the scrutiny or curiosity of the examiner. These devices are limited totally to measuring the material or corporeal world from which they themselves are made. Devices cannot be constructed to measure whether or not the imaginations of the mind regarding non-corporeal entities are real, because the imagination can conjure up all kinds of images un-measurable by any instrument. Do these un-measurable imaginations constitute an alternative reality? Does

our inability to quantify them in some way render them unreal? To the schizophrenic, delusions appear to be real and affect the individual in measurable physiological ways. (John Nash).

If there is/are other realities outside of the one we experience and measure, we would be unable to construct instruments of measurement because we and all instruments we can construct are locked in this reality we call the time/space continuum. Even within our “reality”, we are challenged with mysteries we cannot solve, even with measuring devices. The origin of the universe, what causes gravity, what “life” is and where it comes from, the purpose of life and the creation, are but a few challenges that the most brilliant of humans can only guess at.

There are creatures deep in the earth and the ocean that have no concept of realities outside their own environment. They are incapable of creating instruments to measure the possibilities of “extraterrestrial” life, as it were, even if they had the capacity to wonder about it as we do. Yet we know they are there, and we can devise instruments to observe them or their movements. This is possible because we are a “higher” form of life, curious and capable of such activity. An alternative reality exists for these creatures because we are able to easily observe and define it. The nature of our being permits it.

Alternative realities outside of our time/space environment become plausible when one considers the limitations of capabilities and resources to which we have access. They are all limited to measuring our own environment. Species of a different order, not subject to the limitations of space and time, could plausibly be able to measure and examine our existence even though we cannot detect or measure theirs.

We arrogantly assume that because we are extant in this form, that all realities must be the same and therefore detectable by our devices. If they are not detected by what we can devise, then they don’t exist.

There may be alternate realities. If there is one other, perhaps this opens the door for an infinite number and variety of them. The Bible speaks frequently, and without surprise, of the relationship of this environmental reality as it is found to be in contrast (or concert) with another. The Book of Hebrews makes several comments in this regard: For example, Chapter 11:1-3, “Now faith is the assurance of things hoped for, the conviction of things not seen. For by it the men of old gained approval. By faith we understand that the worlds (ages) were prepared by the Word of God, so that what is seen was not made out of things which are visible”. In 8:4-5 it states, “Now if He (Christ) were on earth, He would not be a priest at all, since there are those who offer the gifts according to the Law; who serve a copy and shadow of the heavenly things just as Moses was warned by God when he was about to erect the Tabernacle; for, ‘See,’ He says, ‘That you make all things according to the pattern which was shown you on the mountain.’” In 9:23-24 Hebrews states, “Therefore it was necessary for the copies of the things in the heavens to be cleansed with these, (blood of calves and goats) but the heavenly things themselves with better sacrifices than these. For Christ did not enter a holy place made with hands, a mere copy of the true one, but into heaven itself, now to appear in the presence of God

for us.” In 10:1, we read, “For the Law, since it is only a shadow of the good things to come and not the very form of things, can never by the same sacrifices year by year, which they offer continually, make perfect those who draw near.” In I Corinthians 13:9-10 we read, “For we know in part, and we prophesy in part; but when the perfect comes, the partial will be done away.” These verses, and many more, indicate with ease and confidence, the existence of a realm outside of the physical universe. Later on, we will look at these verses once again in a related discussion.

#### IV.

Great names in physics, cosmology and astronomy have sought to explain the existence of the universe apart from any entity, divine or otherwise, outside what science can define. These names include Aldous Huxley, Julian Huxley, Bertrand Russell, Carl Sagan, Stephen Hawking, .....

There are other great names that have found no conflict with a divine creator. Among them are Copernicus, Newton, Kepler, Galileo, and Einstein.

In 1988, Dr. Carl Sagan of Cornell University, was invited to write the introduction to Dr. Stephen Hawking’s book, “A Brief History of Time”. In his conclusion to the introduction Dr. Sagan writes, “This is a book about God...or perhaps about the absence of God. The word God fills these pages. Hawking embarks on a quest to answer Einstein’s famous question about whether God had any choice in creating the universe. Hawking is attempting, as he explicitly states, to understand the mind of God. And this makes all the more unexpected the conclusion of the effort, at least so far: a universe with no edge in space, no beginning or end in time, and nothing for a creator to do.”

Consistently with this premise, Dr. Sagan, on one episode of his popular program “Cosmos”, elaborately demonstrated the concept of “dimension” and from this attempted to postulate the infinite nature of the physical universe, as we know it, thereby precluding the need for a creator.

Using the same argument, it can be demonstrated that the existence of an eternal entity, outside the realm of physical discovery, is also a legitimate conclusion. First, along with Dr. Sagan, we need to examine the forms of existence we can measure. We’ll call this “dealing with dimensions”.

- A. Life as we normally experience it is sustained in a three dimensional world. This means that our world and everything in and around it relates to us and we to it in height, width and depth, or in three dimensions. But because of our powers to analyze and create, we have also been able to recognize, capture or produce 1<sup>st</sup>, 2<sup>nd</sup>, (and 3<sup>rd</sup>) dimensional forms for our use and pleasure.

The 1<sup>st</sup> dimension is quite primitive. It consists of neither height, width nor depth-only length. The citizens of our 1<sup>st</sup> dimension land cannot be seen unless we use a three dimensional translator to “see” their effect and thus their identity.

With no width, depth, height, only length, can you identify or name the citizens of 1<sup>st</sup> dimension land?

1. Sound waves – only if transmitted through a solid such as water, metal bone, etc. or through a gas, like air. A transmitting substance must exist as the medium through which sound waves may travel. Not applicable in a vacuum.
2. Radio, T. V., Microwaves. Do not need a medium through which to travel. Can travel through a vacuum.
3. Magnetic fields. – demonstrate
4. Light – will pass through a vacuum but is not able to be seen apart from an atmosphere or object struck by light – 3<sup>rd</sup> dimensional stuff. Demonstrate.
5. Other various forms of energy – heat, etc.

We who live in the third dimension may both create, detect, direct or convert 1<sup>st</sup> dimensional creatures for our own use and pleasure. We can pass into the 1<sup>st</sup> dimension but not vice versa. These 1<sup>st</sup> dimensional citizens are created by 3<sup>rd</sup> dimensional realities.

B. The same holds true of the citizens of the 2<sup>nd</sup> dimensional land. These folks have length and width, but no height or depth. We can see them with our eyes. Can you name some of the citizens of 2<sup>nd</sup> dimensional land?

1. A photo
2. A reflection
3. A shadow (or silhouette)
4. A painting or drawing
5. An etching or engraving
6. A T. V. or movie picture.

All second dimensional citizens are shadows of third dimensional realities in some way, either by reflection, copy or silhouette. If we were citizens of 2<sup>nd</sup> dimensional flatland, we could not understand the concepts of up, down, under or over by experience because of the dimensional limitation in which we lived. Though the 3<sup>rd</sup> dimension exists, it could only be theorized never measured, constructed, or illustrated. Flatlanders could conceive quite easily of 1<sup>st</sup> dimensioner pensioners however. But they can never escape to the third dimension any more than 1<sup>st</sup> dimensioners can become shadows. One might ask, “could not the 3<sup>rd</sup> dimension pass through the second giving it a glimpse since the 3<sup>rd</sup> dimensioners are superior?” The answer is, if we could, the 2<sup>nd</sup> dimensioners could only see the shadow of our passing. (Sagan-Cosmos page 262-263)

C. So the 2<sup>nd</sup> dimension, like the first, is only a shadow of the third. As 3<sup>rd</sup> dimensioners, we can build 3<sup>rd</sup> dimension creatures from 2<sup>nd</sup> dimension shadows since the shadows are of 3<sup>rd</sup> dimensioners in the first place. For example, this shape is an isosceles triangle, but what is it the shadow of? It could be a

tetrahedron (Illustrate with flashlight). We can pull a tetrahedron from this shadow or this figure (a triangular prism)

From the simple square, we could pull many shapes, but the most famous representation of the 3<sup>rd</sup> dimension is the cube. What is the shadow or 2<sup>nd</sup> dimension representation of the cube? (draw)

We are 3 dimensional creatures. Every cell of all living things and every molecule of non-living things is 3 dimensional. This is because we are made of atoms – which are also 3 dimensional. We live in a multidimensional universe. We are limited by our own form from escaping our time/space continuum.

Granted Einstein's special theory of relativity, we will never be able to quite reach, let alone exceed the speed of light, and thus are locked into our dimensional sphere much like the flatlanders are bound by their 2<sup>nd</sup> dimensional universe.

- D. But, given our ability to theorize, analyze, imagine and dream, we can postulate the existence of a 4<sup>th</sup> dimension and perhaps a 5<sup>th</sup> or more based on what we have already illustrated. (We have already noted that “time” cannot be understood as a 4<sup>th</sup> dimension since it is simply a man made measuring device of the movement of the cosmos. Also, we use the term “4<sup>th</sup> dimension” simply as a point of reference for the discussion). We cannot, however, demonstrate or produce any of the stuff of the 4<sup>th</sup> dimension. We can give mathematical definition to a 4<sup>th</sup> dimension. It would be a universe where everything has height, width, depth and length-infinite in everyway – or no dimension or size at all in terms of our own limitations regarding definitions. It would not be made of the material “stuff” our 3<sup>rd</sup> dimension is made of. It would not be limited to a 3<sup>rd</sup> dimensional reality. We could not move from the limitations of our 3<sup>rd</sup> dimension, encased in a space-time continuum, to an existence we cannot actually bridge in our present form-even if the 4<sup>th</sup> dimension citizens wished to draw us there in our present state. The reason for this will be discussed later.

Another way of looking at the difficulty of definition is to remember the difficulty the flatlanders had with trying to imagine a dimension at right angles to their two. That is no problem for us. But now, imagine a dimension at right angles to our three. For example, we cannot envision the infinite 90-degree sides of the cube, but we can, according to Dr. Sagan, see its shadow. It would appear like this, perhaps.

Now, if the universe as we experience it is the shadow of the 4<sup>th</sup> dimension as the 2<sup>nd</sup> is of the 3<sup>rd</sup>, then the stuff out of which the 3<sup>rd</sup> is made may find its origin in the 4<sup>th</sup>, just as the 2<sup>nd</sup> finds its origin in the 3<sup>rd</sup>. Further, though we cannot transfer to the 4<sup>th</sup>, or even represent its mysterious form here, it must be possible to move in the opposite direction, from 4<sup>th</sup> to 3<sup>rd</sup>, just as we can move from 3<sup>rd</sup> to second.



Assuming the citizens of the 4<sup>th</sup> dimension to be superior to the citizens of the 3<sup>rd</sup>, they must be able to pass into, use, create, direct or convert lower dimensional citizens for their own use and pleasure just as we do with objects of our own dimension and the 1<sup>st</sup> and 2<sup>nd</sup>.

Here, Dr. Sagan stumbles badly. He concludes that if the stuff of the universe is infinite and therefore eternal. So we can skip the step for a creator as the needed initiator. But, the 1<sup>st</sup> and 2<sup>nd</sup> dimensions are created by the existence of the 3<sup>rd</sup>. Doesn't it stand to reason that the 3<sup>rd</sup> may be created by the existence of a 4<sup>th</sup>? Does this principle apply to a fifth or higher series of dimensions or universes?

But what if the 4<sup>th</sup> dimension or beyond contains more than just the "stuff" of objects. What if it also contains the "stuff" of life? What if there are living beings, infinite, unbounded by the space/time continuum that locks us in from exploration of any dimension but the lower ones?

## V.

The Bible has its own amazing-astounding teaching on this subject and Dr. Sagan, without his knowing, has restated a great deal of Biblical teaching.

For example: Hebrews 8:3-5; 9:19-23; 10:1. This "shadow" or "image" effect also applies to the living. We know this from Genesis 1:27. Other scriptures will be examined later. "4<sup>th</sup> dimensional beings" would include angels and spiritual forces. How do we define a dimension (or "God") using terms suited only to the 3<sup>rd</sup> dimension? What are 4<sup>th</sup> dimensional terms we could use? But then we couldn't understand them, because they are of a different "stuff" and language than we are.

But if it is possible for a 4<sup>th</sup> dimension to exist, and it certainly seems so, then more than some "strange matter" could also exist. The possibility of some "strange life" could also exist from which life springs in this dimension. If life springs from an eternally existing material 3<sup>rd</sup> dimensional universe as the evolutionists claim, then it is just as valid to perceive the infinite existence of life as it is of matter. This is the Christian conclusion. Further, the concept of "time" would not be relevant to the fourth dimension. The scriptures state this also (2 Peter 3:1-9; Psalm 39:5-6; 90:4; James 4:14; etc.) God knows the end from the beginning (Isaiah 46:8-19; 48:3-5). He is "The Alpha and Omega, The Beginning and The End". This is how He is able to make the future known to us (Isaiah 44:7-8; 45:18-25). He knows our prayer requests even before we ask them (Matthew 6:8).

## VI.

The study now turns to inter-dimensional communication. In a primitive way, 1<sup>st</sup> and 2<sup>nd</sup> dimensional species reveal their presence or "communicate" to us but can never take our

form. If they were able to take our form, the form they now hold would cease to exist. They would “die”. We on the other hand, can take the form of a second dimensional “citizen” by simply photographing ourselves. If we turned the photo into energy by burning it, the 1<sup>st</sup> dimension is now entered. We would still exist in our original form, but duplicate ourselves into the forms of lesser dimensions. For any dimensional “citizen” to go the other way would cause immediate and irrevocable destruction. Hence, we extrapolate from this illustration what would happen if we attempted to go into the 4<sup>th</sup> dimension or were drawn there in our present form. If the 4<sup>th</sup> dimension was as previously described, we would immediately dissolve and be turned into some sort of infinite spirit like creature – albeit no longer physically alive. This would be like stepping into a zero pressure vacuum. We would explode and die, every cell bursting into atoms.

So something has to change if we, in some conscious state or other, can transcend into the higher dimension and since we have no ability or power to do so on our own, this would have to be accomplished by a being from the 4<sup>th</sup> dimension itself. So, since we can, in a primitive way, enter images of ourselves into the 2<sup>nd</sup> dimension by taking the form of a second dimension “citizen”, so we can expect that a 4<sup>th</sup> dimensional being could pass into and present himself to us in this 3<sup>rd</sup> dimension by taking a 3<sup>rd</sup> dimensional form. He would not be fully in the form of his existence in the 4<sup>th</sup> dimension, but able to interact with us here. He could then prepare us for the change by some special process, assuming he wanted to have us visit or reside in a greater dimension in a different state of being.

## VII.

The Scriptures make it clear that that is exactly what has happened. The 4<sup>th</sup> dimension it calls “heaven” and the special visitor it calls “Jesus”. Other visitors have come our way (angels and demons) but Jesus is the transformer who has come our way even though no one can go to his place. Note John 3:13, 31; Exodus 33:20; John 14:1-6; Philippians 2:5-11; Hebrews 1:1-4; Colossians 1:13-23; I Corinthians 15:39-58; John 3:5-8. Note the aspect of transformation we see in the Scriptures. In fact, The Scriptures call different levels of existence or being “glory”. See I Corinthians 15:35-44. Further, we are told that we will be transferred to a glorious state with a glorious body (Note: Philippians 3:20-21; Colossians 3:1-4ff.; II Corinthians 3:17-18; I Corinthians 13:12; John 17:22-24; II Corinthians 4:16-18; Colossians 1:27; Romans 5:1-2; 8:18-23; I Thessalonians 2:12; I Peter 5:1, 4, 10; etc. (This makes the virgin birth of Jesus a relatively simple item rather than an astounding event.)

In a reverse manner, we give God human attributes, even though He is not human and does not have them. We speak of the hand, arm, eye, mouth, etc. of God. This type of imagery is called anthropomorphisms. The Scripture makes it clear that God is not a man, but a Spirit, and we must worship Him that way.

This is why he cares not to attempt to listen to 3<sup>rd</sup> dimensional jabber, but instead hears the “worship in spirit and in truth”. Note Romans 8:26-28. He hears the language of the

Spirit as The Spirit speaks through us to Him, sometimes even when we don't know it. But, we digress.

NOTE: HOW DO WE KNOW FOR SURE THAT JESUS IS FROM ANOTHER "DIMENSION?"

For Jesus to be from another dimension (which we have called the 4<sup>th</sup> for definition sake), He would have to demonstrate peculiar powers over this creation. The following worksheet allows for this study. (See: "Jesus demonstrates His deity")

Further, if it can be demonstrated that Jesus is from "somewhere else" by his actions, there would still need to be a convincing, undeniable "sign" that transcends our capabilities here in this dimension by which we can be convinced. This sign was spoken of by Jesus and it came to pass (Matthew 12:38; 16:21). Other oddities after His resurrection confirmed it even more for the disciples (John 20:26; Luke 24:13-31; Acts 1:1-11; etc.)

Therefore, we proclaim that God (4<sup>th</sup> dimensional regent) has visited us in the 3<sup>rd</sup> dimension in the person of Jesus of Nazareth and that this same Jesus of Nazareth is the anointed Messiah prophesied over a period of several thousand years. We also state that the inspiration of the Scriptures, written by men so inspired, is an understandable and simple act when all this is taken into consideration. We further state that truth resides in these Scriptures, verified by Jesus Himself, particularly in His resurrection (I Corinthians 15).

We therefore affirm the eternal realm based on a flawless premise and irrefutable evidence. We have 3<sup>rd</sup> dimensional evidence of an intrusion from the 4<sup>th</sup> dimension.

Other related subjects:

1. What should we do about the things we have learned from this study?  
(Note: 2 Peter 3:14-18 for example)
2. Where do we go when we die? What goes where?
3. What about U.F.O.'s? Are they reflections of the 4<sup>th</sup> dimension invading our space? Or true beings from another planet, solar system or galaxy?
4. What about life on other planets?
5. What is the nature of angels and demons?
6. Are fallen angels (or demons) moved into yet another dimensional reality?
7. Does the Gnostic system attempt to explain this dimensionalism?"
8. Is "Hell" a totally separate reality?
9. What is the true form of prayer, our only form of communication with the Divine?
10. What is the purpose of creation and why did God do it?
11. Since the universe is running out of gas, what will happen to life then?
12. What is our purpose here?
13. What is the purpose of reproduction, marriage and children?