Time Function

by James P. Dawson

One facet of our daily lives is the awareness of time. We know that time passes from personal experience and observations. Time, as experienced, is a one-way flow at a pace that is slow enough to be perceptible. People fell, think, and act in the time flow. Webster's Dictionary defines time as: The general concept, relation or fact of continuous or successive existence, capable of division into measurable portions, and comprising the past, present and future. The philosophy of time bears powerfully on human emotions. Not only do individuals regret the past, they also fear the future, not least because the alleged flow of time seems to be sweeping them toward their deaths, as swimmers are swept toward a waterfall.

There are several ways we refer to time.

Geologic Time .

The geologic time scale is one of the longest time wise and supposedly represents the Earth's natural history. Radioactive dating, fossil placement within rock layers, and even tree rings are used to place natural objects within this time scale. Trees' annual rings can be used to measure time, since they are usually formed at the rate of one per year. The ring widths are then converted to relative values called indices, which are averaged for each year to obtain a chronological record. These growth layers can also provide evidence of environmental changes, such as a past volcanic and glacial activities, avalanches, flooding, earthquakes, frosts, and tree epidemics. The problem with tree rings is under sudden climatic changes, such as listed above, multiple rings can be induced for one year.

Biological Clocks

Most living organisms develop a circadian (sometimes called diumal) rhythma term coined by Frans Halberg in 1959; ***circa*** means "**roughly,**" and ***dian*** means "**daily**"in which a series of events in the organism are repeated on a regular basis. The biorhythms or biological clocks are often synchronized with the natural day-and-night cycle of about 24 hours and are usually independent of other external factors in the environment. For example, certain flowers open and close with the rising or setting Sun, and seas glow with the bioluminescence of single-celled organisms as they swarm every 23 hours.

Calendars

Man has devised a calendar for tracking annual time. It is thought that the first calendars were based on movements of the moon. Some archaeologists have argued that many stone structures from early times (like Stonehenge in England) were intended to keep track of a calendar based on the apparent movement of the Sun, but the earliest calendar of which we know was based on the 365 day, was the Egyptian calendar. Early astronomers also used a calendar of 360 days. The main three calendars used today are the Gregorian, the Hebrew and the Muslim calendars.

Gregorian		Hebrew		Muslim	
Month	**No. Days**	**Month**	**No. Days**	**Month**	**No. Days**
January	**31**	**Tishri**	**30**	**Muharram**	**30**
February	**28 (29)**	**Heshvan**	**29 (30)**	**Safar**	**29**
March	**31**	**Kislev**	**29 (30)**	**Rabi' I**	**30**
April	**30**	**Tebet**	**29**	**Rabi' II**	**29**
May	**31**	**Shebat**	**30**	**Jumada I**	**30**
June	**30**	**Adar**	**29 (30)**	**Jumada II**	**29**
July	**31**	**Nisan**	**30**	**Rajab**	**30**
August	**31**	**Iyar**	**29**	**Sha'aban**	**29**
September	**30**	**Sivan**	**30**	**Ramadhan**	**30**
October	**31**	**Tammuz**	**29**	**Shawwal**	**29**
November	**30**	**Ab**	**30**	**Dhul Qa'ada**	**30**
December	**31**	**Elul**	**29**	**Dhul Hijja**	**29 (30)**

The Hebrew calendar is based on the motion of the Moon. The calendar begins at the biblical Creation, which is calculated to have occurred 3,760 years before the modern Christian era. The current Hebrew year is 5758. In the Hebrew calendar, the new year begins with the month of Tishri, which falls at the same time as our September or October. The Hebrew week lasts for 7 days, following the example of the Babylonian calendar, with the last day of the week being the Sabbath. There are 12 lunar months in a year; every other month is either 30 or 29 days long. Because the Hebrew year is 11 days shorter than the solar year, a 13th month, called ve-Adar, is added seven times during every 19-year cycle.

The Muslim calendar begins at the day and year when Mohammed fled from Mecca to Medina, July 16, 622, on the Gregorian calendar. As in the Hebrew calendar, the months are based on the motion of the moon, and the number of days in each month alternates between 29 and 30 days. The new year begins with the month of Muharram, which falls during our August or September. This lunar calendar consists of a 354' day year. Leap years (with one extra day) occur often.

The Romans developed complex lunar-solar calendars that were often influenced by political considerations. The astronomer Sosigenes suggested to Caesar that a calendar of 365 days plus a leap day added every four years would simplify matters. The result is known as the Julian calendar. The year 46 B.C. was given 445 days to compensate for past errors. The new calendar began in 45 B.C., and standardized the year at 365 days and 6 hours. Although a great improvement over its predecessors, the Julian calendar was slightly longer than the solar year, with the result that the solstices and equinoxes drifted from their calendar dates. This discrepancy also affected certain Christian holy days, such as Easter. Thus, in 1582, Pope Gregory XIII introduced a new calendar, which was developed by astronomer Christopher Clavius. The Gregorian calendar, a correction of the Julian calendar, added 11 days to restore the date of the actual vernal equinox to March 21 and to reposition ecclesiastical holidays. Thursday, October 4,1582, was followed by Friday, October 15,1582. The Gregorian mean year is 11 minutes and 14 seconds longer than the mean solar year, and is equal to 365.2425 days

Time is frequently described as the fourth dimension, and is very important to scientific observation because the events that scientists attempt to measure and explain all occur within a time frame. However, we know from Einstein's Theory of Relativity that there is no standard or absolute time frame, because time can be defined only by measurement.

The measurement of time is based on reoccurring natural phenomena. For example, a year is defined as the amount of time it takes for the Earth to make one complete revolution around the Sun. A day is defined as the amount of time it takes for the Earth to make one complete revolution on its axis. The year and the day are then broken down into more arbitrary units-months, hours, seconds, and so on.

Measured Time

In theory, such conditions near the speed of light may be called a form of "time travel." As to the physical movement back and forth in time-as in H. G. Wells's novel *The Time Machine*-no one knows for sure, but some scientists have serious reservations.

Ephemeris Time

Tables that give the daily positions of the Sun, Moon, and planets are based on ***ephemeris time*** (ET), which progresses at a precisely uniform rate. Introduced on January 1, 1960, to free astronomical computations from the effect of the Earth's rotational irregularities, ephemeris time is measured from the orbital motion of a planet, such as the Earth, or the motion of the Moon around the Earth (which is the standard for measuring ephemeris time). It is determined from observations of the Sun, Moon, or planets, by calculating when, according to the rate of passage of ephemeris time, one of these objects should reach its observed position among the stars. When using the Moon and Earth system to determine ephemeris time, the position of the Moon with respect to the stars is determined with a transit instrument, from occultations, or by photography.

Atomic Time

Atomic clocks work by measuring how atoms vibrate. Though known for several decades earlier, ***atomic*** time was not adopted until 1972 as the primary reference for all scientific timing. One of the most accurate and stable time measurements is based on the microwave resonances of certain atoms in a magnetic field, especially by counting the cycles of an electromagnetic signal in resonance with cesium atoms. An atomic second was defined in 1967, by the Thirteenth General Conference of Weights and Measures (under the International Commission on Weights and Measures) as 9,192,631,770 oscillations of the atom cesium' 133. Such clocks are accurate to within a few billionths of a second over intervals of a minute or less (or one~thousandth [0.001] of a second in 300 years). Cesium clocks are often referred to as primary clocks because they present extremely precise and accurate time for scientific, research, industrial, defense, and public needs. Secondary clocks are less accurate and must be calibrated from time to time, such as quartz crystal clocks.

A new type of atomic clock is being developed that uses lasers instead of magnets *to* control and detect the oscillations of cesium atoms. In the future, scientists hope for accuracy of nearly one part in a billion billion-which corresponds to an error of less than 1 second since creation.

TODAY'S TIME

One of the most difficult tasks is keeping accurate time around the world. The world's time-keeping network involves atomic clocks in more than 26 countries sending their information from satellites around the world to Sevres, France to formulate the coordinated universal time scale, as the planet's central time reference. The time is determined by averaging the signals emanating from more than 180 atomic clocks, from 36 laboratories throughout the 26 nations.

All of the above time measurements are affected by the speed of light as a constant in their mathematical definitions.
Newton's laws of motion apply in most familiar situations, but in the world of subatomic particles at high velocities or strong gravitational fields, some of the physical laws seem to break down. 1 Einstein and others have shown that objects cannot travel faster than the speed of light, which is 186,291 miles per second. According to Einstein's theory of relativity, if an object were to travel at the speed of light its mass would become infinite. Since it would take an infinite force to accelerate an infinite mass, it seems one should forget about anything traveling faster than the speed of light. But now scientists suggest that a particle called a tachyon (from the Greek for "swift") may travel faster than the speed of light and cannot be slowed down. 2 Some scientists believe that if tachyons could be detected and harnessed, they would help one to communicate anywhere in the universe instantaneously. 3 So far the particle has not been found, but the new theoretical physics does account for this possibility. Einstein's theory deals with conditions in which gravitational forces are not present and elements are at a constant velocity, and this environment does not exist on the earth. Relativity refers to the idea that velocity of an object can be determined only relative to the observer. The speed of light then could be a function of time, because time can only be defined by measurement. 4 The two basic clocks by which time is measured are:

1) the dynamical time clock whose divisions are governed by the period the earth takes to make a complete orbit around the sun which is affected by gravitational pulls between the planets; and
2) the electromagnetic or atomic clock which is governed by the electron's orbit around its nucleus.

The evidence suggests that the clocks run at different rates. Studies have been made of the differences between these two times and their possible effects on our systems, 5 and the point of reference is apparently the key. In the dynamical clock the point of reference is inside the environment of the measurement and is thus subject to the forces inside the sphere of influence. In the atomic clock system the point of reference is external to the environment of the measurement and is not subject to internal forces. Essentially all of the scientific laws have a time or speed of light function within their mathematical treatment. Then since the speed of light **(CDK)** is decreasing, as shown in **Figure 1** (See **Decay of the Speed of Light**), the relative atomic time would also decrease as a function of **CDK**. You can calculate the relative times for historical and biblical events, as shown in **Table II .**

Table II Relative Times After Creation (AC) and Atomic Time

Patriarch	Age at sons birth	Son's birth AC BC	Patriarch's Life Span Years BC	Atomic Time Millions of years	Speed of Light Times c Now
Creation	0	0 5792			
Adam	230	230 5562	930 . . .(5792-4862)	14,800	10,600,000
Seth	205	435 5357	912 . . . (5562-4650)	12,500	
Enos	190	625 5167	906 . . . (5357-4452)	10,100	
Cainaan	170	795 4997	910 . . . (5167-4257)	8,960	
Mahalaleel	165	960 4832	895 . . . (4997-4102)	7,620	
Jared	162	1122 . 4670	962 . . . (4832-3870)	6,420	
Enoch	164	1287 . 4505	365 . . . (4670-4305)	5,340	
Methusalah	187	1474 . 4318	969 . . . (4505-3536)	4,350	5,800,000
Lamech	182	1656 . 4136	777 . . . (4318-3541)	3,350	
Noah	502	2158 . 3634	950 . . . (4136-3186)	2,500	4,300,000
Shem	100	2258 . 3534	600 . . . (3634-3034)	816	
Arphaxad	135	2393 . 3399	535 . . . (3534-2999)	596	
Cainan	130	2523 . 3269	460 . . . (3399-2939)	358	
Salah	130	2653 . 3139	433 . . . (3269-2836)	196	
Eber	134	2787 . 3005	404 . . . (3139-2735)	97	
Peleg	130	2917 . 2875	339 . . . (3005-2666)	63	
Reu	132	3049 . 2742	339 . . . (2875-2536)	8	78,000
Serug	130	3179 . 2613	330 . . . (2743-2413)	5,000 years	
Nahor	179	3358 . 2434	208 . . . (2613-2405)		
Terah	130	3488 . 2304	205 . . . (2434-2229)	4,000 years	c=c now approx.
Abraham	100	3588 . 2204	175 . . . (2304-2129)		
Isaac	60	3648 . 2144	180 . . . (2204-2024)		
Jacob	91	3739. 2053	147 . . . (2144-1997)		

They are time dependent and are subject to revision based on the relative time measurement and/or the point of reference. Among the items which change as a function of the speed of light (**CDK**) are the atomic time intervals, Planck's constant, the Rydberg constant, the gyromagnetic ratio, and the rate of radio active decay; all of which would imply that atomic processes would slow down as a result of **CDK** (the speed of light decay). The fact that atomic processes are slowing would also indicate that the specific heats, viscosity and diffusivity coefficients which are proportional to 1/***c,*** as well as some reaction rates as governed by chemical kinetics would be altered. The **CDK** also affects the rates for osmotic and diffusion transfers. Thus the very processes which we use to determine the age of geologic strata and the mechanism for determining the formation of the geologic ages have themselves been undergoing changes as the speed of light has decreased since creation. An example of this was demonstrated in the studies on the **"Genesis Rock"** returned from the moon. The gamma ray count suggested that the rock may be 4 billion years old, thus the name Genesis. However, when we fractured the rock **6** we found the particles shown in **Figures 99 through 102.**

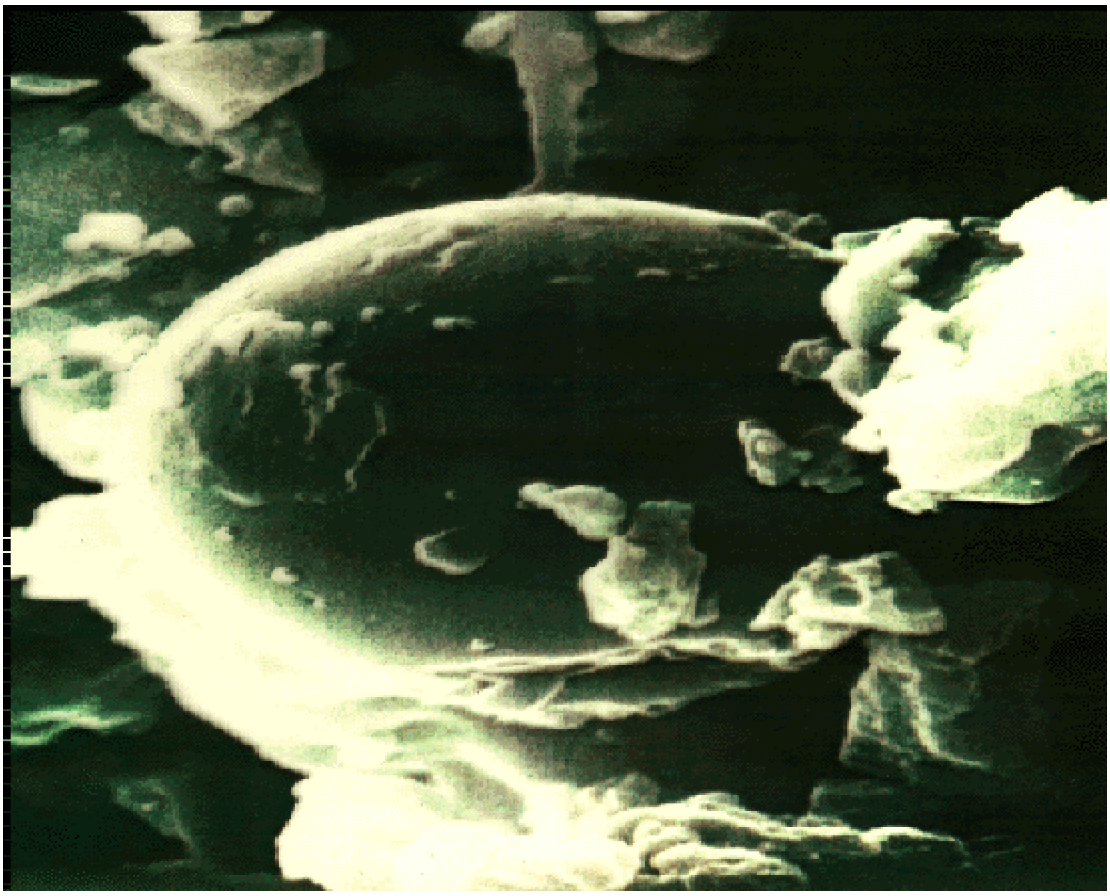

Figure 99 Glass Sphere inside Genesis Rock

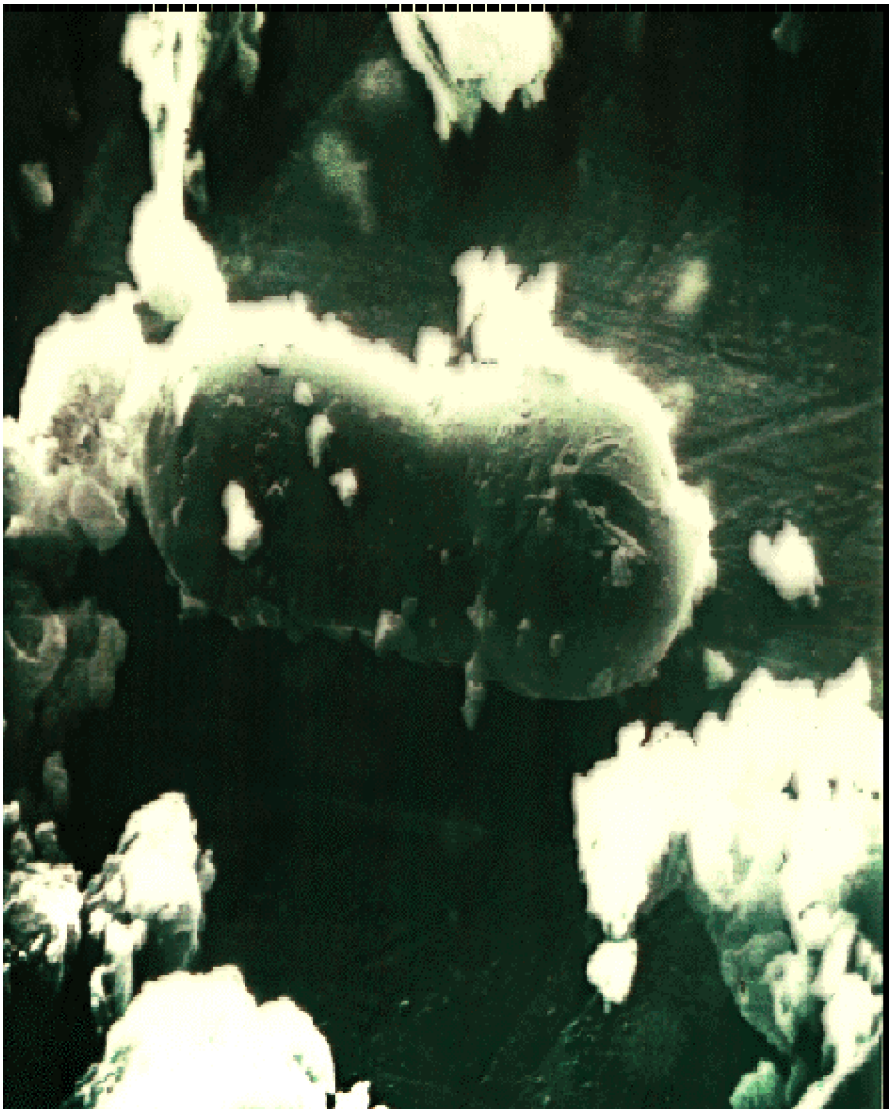

Figure 100 Glass Dumbbell in Genesis Rock

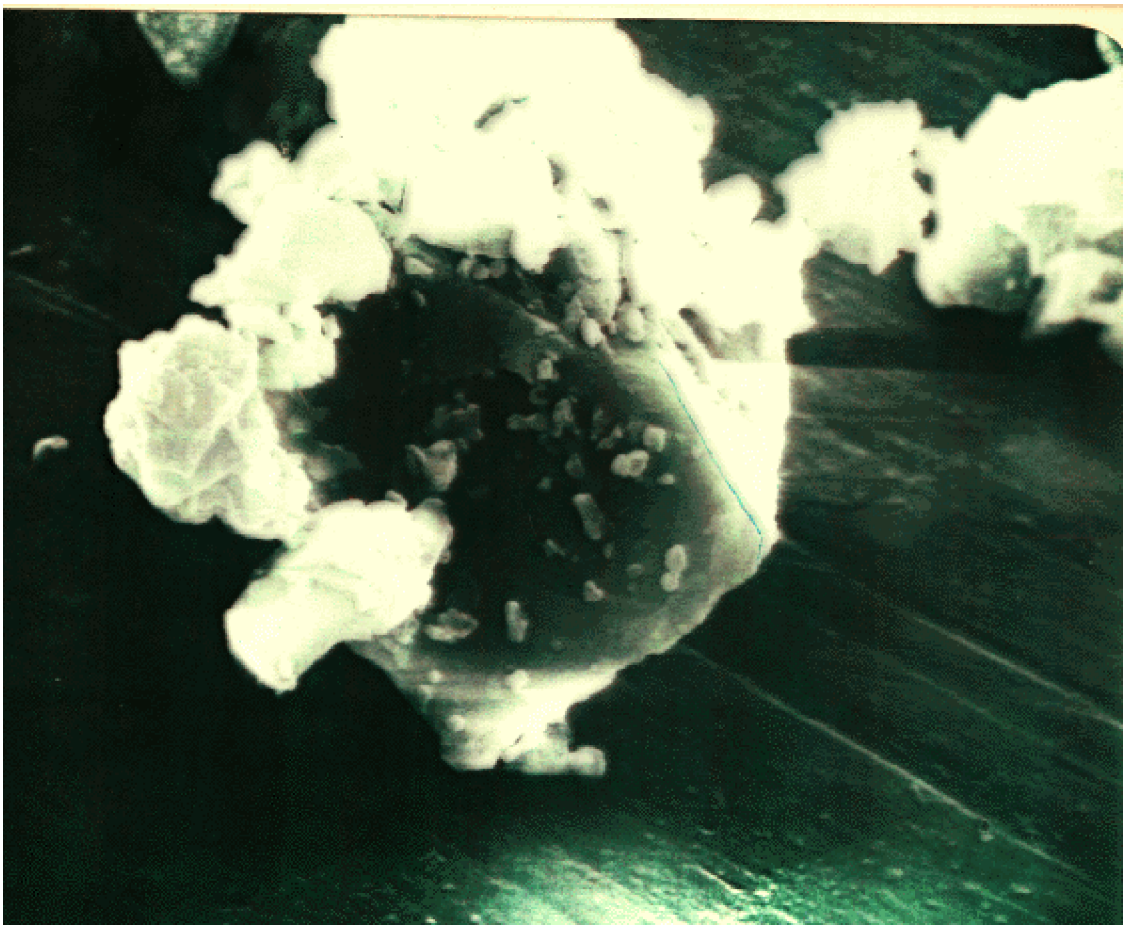

Figure 101...Glass Cube in Genesis Rock

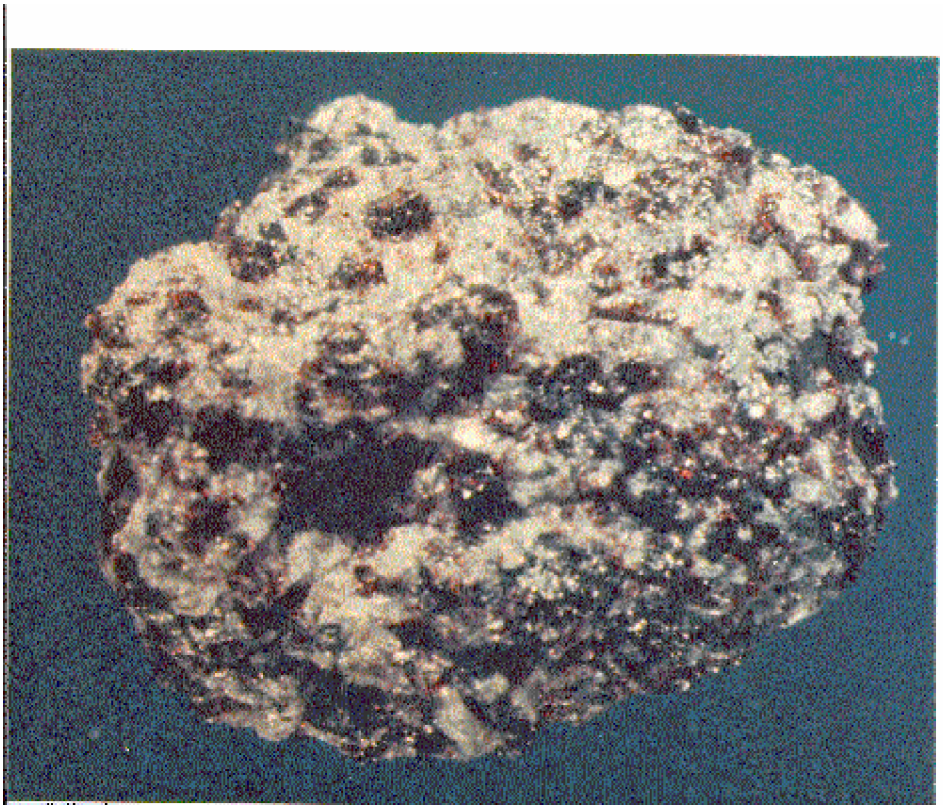

Figure 101 Genesis Rock, Lunar Sample

The individual fragments of the rock could not have been formed at the same time, because of differing physical parameters for formation, and the age measurements were not valid, since the counting value assumes a decay from the time the rock was formed. This is why NASA dropped the idea of using the lunar samples as an age criterion in measurements. Many of the methods used to measure age are in question when used to interpret ages of more than 10,000 years. This information has led many scientists to "**rethink**" the definition of geologic ages based on these "**time**" measurements. Also, many live specimens of the "**index fossils**" have been found in recent years.

Twenty years ago earth scientists believed that it took millions of years for oil to form and they also believed that all such oil formation and basins originated from organic material deposits. However, we can now make a good grade of crude oil in an afternoon in the laboratory from both organic and inorganic material. Scientists are using these methods to recycle garbage and trash, but at this time it is not economically feasible for commercial application, but may soon be due to environmental considerations. NASA is studying similar methods for extracting both water and fuel from carbonaceous rocks on the lunar surface to support moon stations and interplanetary flights. It would be economically feasible on the lunar surface due to the high cost of transporting sufficient supplies to the moon. They have also developed similar techniques to make industrial grade diamonds. Science at one time considered the process would take eons of time. Many precious stones, ie, rubies, emeralds, and sapphires are being made by these methods. They are so perfect in physical properties vis-a-vis natural gems that the government

passed laws requiring that the manmade gems be sold as "**artificia**l" gems. Scientific "**fact**" is constantly being altered due to new data and discoveries.

In 1900 the German physicist Max Planck proposed that light, heat, and other forms of radiation come in tiny bundles, which he called ***quanta*.** The amount of energy in a single particle depended on the frequency and can be given by the following equation: $E = h\nu$, where ν is the frequency of the wave and h is a constant that came to be called Planck's constant. Eventually scientists came to think of that single bundle of energy as a particle called a ***photon*.** The problem with the photon is that it exhibits both corpuscular and wave properties which are in direct conflict with the definitions of theoretical physics. Another problem stems from the fact that the frequency ν is defined as $\nu = c/\mathbf{M}$, where **M** is the wavelength and c is the speed of light. Einstein's theory indicates that $E = mc^2$, where the energy is proportional to the mass and the speed of light. This equates energy, mass, frequency, and wavelength as proportional to the speed of light. If the speed of light changes, the relationship between these would be affected. So time, light and energy are fully interrelated and their application is a matter of perspective.

For example, if a closed car is speeding down the highway at 70 miles per hour and a fly flies from the back seat to the front seat, is he flying 70+ miles per hour? The answer is relative to the point of reference. If the point of reference is outside the vehicle, the answer is 70+, but if it is inside the vehicle it is just a fraction of one mile per hour. The fly's speed is relative to his stable environment. The atmosphere in the car is not moving with respect to the fly.

We see time from the perspective of our world. The sun rises and sets, we age and "**time**" passes. But God's perspective is from outside this world. He could not create this world if He was inside it - He is external to the world. If He was in heaven when He created the Universe [7] then heaven is beyond this universe. Then God's view of time is incomprehensible to us because we do not have a basis for comparison or measurement. As discussed in the article on **Lifetimes,** God gave Adam eternal life, he was not meant to die. But when he sinned, sin brought in death. [8] and the lifetime of man was decreased to just under 1000 years. However, man became unrighteous and his lifetime was reduced to 120 years [9] and then to 70 years. [10]
The decrease in lifetime was due to sin, but Christ took away the believers sins [11] and gave us His righteous. [12] We have an approximate life span of 70 years now, but in the Millennial Reign of Christ the span will be near 1000 years and when the New Heaven comes, we will live forever. [13]
God had no beginning and will have no end. Christ said "I am the Alpha and the Omega, the beginning and the end. [14] From God's perspective there is no time, but from man's view everything is controlled by a time function. God has placed a time function on all of his scientific laws, and only He can control or alter time. The Scripture relates three times when God held time still. [15] And altered the suns position and He states that He will alter the heavens in the future. [16]

Many people don't believe these stories in the Bible and they don't believe in miracles. I wonder what these individuals would have said about television or the moon landing two hundred years ago, or wireless telephones fifty years ago. We call events and things miracles when we cannot explain them or they go against our common experience.

We believe that science can explain anything, but have you ever wondered what science can really explain or even define. Modern man continually confuses information with knowledge and

knowledge with wisdom. Science, for the most part, has rejected the idea of miracles and has used this as a knowledgeable reason to reject the Bible. If one takes into consideration that science cannot explain or define its own laws, then where is wisdom?

If one actually lists the things that men of science do not understand, it is surprising how little man really understands. Take electricity, for example. **Electricity** is defined as the flow of electrons, but that is not a satisfactory definition since one cannot define an electron except in terms of electricity or charged particles. The definition for lightning is the uncontrolled dissipation of electrical energy, but energy is defined mathematically in terms of time and the speed of light and this results in a cyclic definition. One can describe how energy or electricity behaves under controlled conditions; one can control it, use it and even pipe it around - but cannot define it.

One can make all sorts of calculations of the effect of **magnetism** on charged particles, on electrical fields, etc., but one cannot define it. One can calculate the attraction between objects and particularly metals. One can "**magnetize**" iron, but cannot "**magnetize**" aluminum. However, if an alloy of aluminum and 3% of iron is compounded, it can be made into a "**super magnet**" but the exact mechanism for the change is not known. One cannot produce an exact definition or define the basic principle for magnetism. There is even magnetism between people. Why does one pick a particular spouse? Why do some people repel others? It is animal magnetism or charisma that exists. One knows when it exists, both in terms of animate and inanimate objects, but it isn't quantitatively defined.

Gravity is another force that science cannot define. One can only oppose it with a greater force in the opposite direction. The effect of gravity can be demonstrated, measured, and mathematically treated as an attractive force or as a constant of acceleration, but science cannot define it.

One cannot define the methodology of **molecular changes**, but one can demonstrate it and through experimentation predict percentage yields. If one takes the hydrogen atom from the top carbon atom of a molecule of egg white and moves it to the third carbon atom in the chain we make an atom of rattlesnake venom. Why? We don't know. Chemists can put together all kinds of compounds, using various chemicals. In most cases, they will know how these chemicals will react under a given set of circumstances, but these reactions will all be based on probability. If one has ten items and mixes them with ten other items, ten new items are not necessarily formed. One may get eight of one kind and two of another. In fact, one doesn't really understand the processes that occur when we combine various kinds of chemicals, atoms, or molecules. One can see how they react and can use this knowledge, but one cannot define these reactions in terms of absolute percentages of the resulting reactants or products.

What makes something **alive**? One can look into a person's eye and see love, hate, serenity, fear, joy, sadness, the emotional byproducts of life, but one cannot define what one sees. **17** What is this "**spark**" that makes something alive? One cannot define it, but one can certainly tell when it is missing. Scientists do not understand what causes life to exist or not exist; only the presence or absence can be detected, but it is undefinable.

Science defines **light** as the movement of energy in corpuscular form (photons) and in a wave motion. But this definition is a direct contradiction to science's own laws that something cannot

exist in two forms and dimensions at the same time. It is a complete anomaly. Light moves through the atmosphere or space like a radio wave, so one can say that it possesses a wave motion. It also behaves as though it were composed of corpuscles or solid particles, like atoms. These small, distinct particles, as was mentioned earlier, are photons; but what, exactly, are they?

Among all of the above processes, the only consistent definitive observation that one can make is that they all contain some sort of **energy** . . . some sort of capacity to do work and this capacity or energy is a function of the **speed of light** and **time.**

Many scientists reject the idea of physical miracles because it is believed that all physical phenomena can be explained by scientific principles. But these same principles are not defined, as stated above. Science cannot define **electricity, magnetism, gravity, molecular motion, life processes, light, time, or energy.** There is nothing in creation that does not contain at least one of these undefined principles.

The Bible tells that when Christ was on earth He performed a series of miracles. These miracles were not just to entertain but were to demonstrate God's complete sovereignty over all things. The scientific principles that cannot be defined were controlled by Christ as follows:

Gravity: He walked on water, **18** in the process defying or controlling gravity. Not only that, but the Word of His mouth enabled Peter to walk on water. **19**
Magnetism: His Word alone is attracting millions to Him, even over a span of almost 2,000 years. It is a magnetism that changes men's lives. The heart of man is continually evil, **20** but when Christ enters, all changes; there is a new creation. **21**
Molecular motion: Jesus took water and turned it into wine. **22** He controlled the molecular motion and the molecular processes. He controlled the movement of the atoms.
Life processes: He told Lazarus to get up and come out of the tomb, **23** which Lazarus promptly did. He healed people of various infirmities. He controlled life processes. Christ is the resurrection.
Electricity: The Bible says that when He comes, it will be as lightning **24** flashing from the east to the west. He is the force that holds all things together, the "nuclear glue" of science. He is omnipresent and created all things. **25**
Light: The Bible says that Christ is the light of the world. **26** He is universally constant.
Time: He is the Alpha and Omega, the beginning and the end. **27** Before time He was **28** and there will be no end to His Kingdom. **29**

All the things that science cannot define, Christ has demonstrated full knowledge of and control over the laws that govern them. These are God's laws and this knowledge is Wisdom. We are further told that Christ is the source of all power and energy. **30** Christ is the one who holds all things together. He, not science, is the only one who has ever been able to utilize all of the mysterious energy forms we've discussed. So science cannot define the above laws. Is there one thing on this earth that does not contain at least one of the above? Mankind has the knowledge to use the above principles, but does not seek the wisdom which applies to them. When one encounters a verse like, "in the days of Peleg the earth was divided" or "a thousand years is as a day and a day like a thousand years," one should consider the source and accept it as definitive and ask the Lord how to apply it. Many do not take the Bible as the inerrant Word of God, but many do accept the authority of the Written Word, **31** and therefore claim it is inerrant. **32** The

book of Genesis and particularly the chronology of the Patriarchs is considered by some to be in question, 33 but many also consider it complete and authoritative. 34
Isaiah said:

"And the wisdom of their wise men shall perish, and the discernment of their discerning men shall be concealed." Isaiah 29:14

I Corinthians repeats this thought:

For it is written, I will destroy the wisdom of the wise, and will bring to nothing the understanding of the prudent. Where is the wise? Where is the scholar? Where is the disputer of this world? Hath not God made foolish the wisdom of this world? I Corinthians 1:19

Man has used his theory and definitions of time to question the validity of the Bible. The major question is when was the earth formed. The differences in the Bible's version of creation and Science's Big Bang Theory is a function of time. Both consider the universe to have been instantaneously formed, the Bible says by the Word of God, thousands of years ago, and science says from the rapid expansion of a small particle, four billion years ago. However, science does not say where the small particle originated. The scientific theories and the Bible are in agreement that there was a super continent at the beginning of Earth. 35 But they differ greatly in the time frame in which the continents were set adrift.(See Days of Peleg) The scientific theories indicate that Pangaea, the name science has given to the super continent, started breaking up millions of years ago, 36 whereas the Bible states that it occurred in the days of Peleg. 37 If one takes the Biblical chronology literally, then the breakup of Gottsland, my name for the super continent, was approximately 4000 years ago. This difference in time frames presents a significant problem.

It has been suggested that a continental breakup in Peleg's time, approximately 2000 B. C., would have caused great destruction on the earth and history shows evidence of civilization before that time. The effects of the continental breakup would be a function of how the event occurred and the point of reference. The scientific community agrees that the volcanic action and earthquakes are probably caused by the subduction and movement of land masses or plates, but this would occur only on the leading edge of the continental movement, not in the interior of the continents. There probably would have been surface destruction at the breakpoint of the continents, but it probably would not have been much effect on a very large percentage of the continent. It would be the same problem when the earth was divided. The atmospheric sheath would not necessarily be affected and ones in the interior of the continent would not notice a great change in their immediate environment and the area in the center of the movement would experience very little destruction if any. Thus the people around the center of the continental movement 38 would probably experience little or no disruption because there would be little or no perceivable movement at the epicenter. Any point on earth is traveling at more than 1000 miles per hour, relative to a reference point outside the atmosphere, but would be stationary if the reference point is on the earth. One does not experience any sensation of the speed because our environment moves at the same speed. The earth and its atmospheric sheath are also traveling 33,000 miles per hour in its orbit around the sun, but only the radiation effects are felt on earth.

This date is based on the sea-floor spreading measurements of 1.5 cm/yr, **39** which converts to 126,000 yrs/mi or 760 million years for the separation of the North American continent from Europe. The Sea-floor spreading movement data are based on estimates utilizing the information available, and these data indicate differences of hundreds of millions of years, depending on which continental movement is considered.. Scientific equipment and instrumentation were not available for direct measurements of this small incremental movement at the ocean depths of the mid Atlantic riff. Measurements taken during the International Geophysical Year (1967-68) indicate that the South American continent was moving away from Africa at the rate of 15 to 18 inches/year, placing the separation at 4 million years ago for the separation. Satellite measurements in 1971- 72, indicate an 11 in/yr movement, or approximately 6 million years for the separation. Satellite measurements for 1975 show an 8 in/yr movement yielding a separation time of almost 9 million years. These data would indicate that the speed of the continental movement is decreasing. The current Global Positioning Satellite System (GPS) measurements are taken at a different location but do show an additional slowdown in the rate of movement. These data were not available to the authors of the early continental drift articles when the 465 million year date was suggested.

Current research and studies on the continental movement are directed at modern affects on geophysics, volcanology and fault displacement, and are not challenging the original geometry or the time of the breakup of Pangaea because it has no bearing on their research. An extrapolation of the GPS data for South American data show that South America and Africa were joined between 87,000 and 2,000 years ago, the larger number being a linear extrapolation and the smaller a minimal exponential extrapolation. The extrapolation is based on insufficient data to be adamant about the time required for movement, but the methodology is the same as the extrapolation of the sea-floor spreading data used to arrive at the continental drift number. The whole point is none of the physical measurements provide sufficient data for an accurate extrapolation; however the new data from satellite measurements tend to show the continental drift started much later than 465 million years ago. Recent discussions with Dr. William A. Hess, former director of the National Ocean and Atmospheric Administration's GPS program, indicated that at present the GPS system has 24 satellites in orbit, providing GPS data for the entire world and several new more sophisticated satellites are to be launched this year.
The current use of the GPS by earth scientists is focused on areas of interest concerning major faults and volcanoes. However, the receiving stations do provide information on continental drift and several countries including England, Japan, Peru, Brazil, and some African nations have installed or are installing receiving stations. Earth receiving stations see approximately 6 to 8 satellites at the same time. This translates into approximately 18 data points per satellite pass. Based on four satellite data signals for locating the receiving stations position, this produces a massive amount (approximately 100,000 data points per year per location) of actual locational data for analyzing the movement of the receiving station. These data will provide a much more accurate analyses of the continental movement by providing sufficient data for accurate extrapolations. The observation point of the satellite removes the problem of an earth bound reference point. The annual and five year averages over the next twenty years should indicate the extent of the slowing of the movement and provide the basis for an accurate extrapolation to the time of initial movement. The current physical data indicate thousands of years for the initial movement rather than 100's of millions of years since the breakup of Gottsland.

It appears that the initial breakup of Gottsland could have occurred in the days of Peleg. The geologic dating presents the same problems, since most methods of atomic dating are questionable beyond 10,000 years, and are also dependent on the speed of light. The Geologist and Earth Scientist use the index fossils to decide the age of the strata and the Archeologist uses the strata to determine the age of the fossils. Whose definition does one use?

The conclusion from the above is that God controls time and man can only measure it under controlled conditions.

The secret things belong unto the LORD our God: but those things which are revealed belong unto us and to our children for ever, that we may do all the words of this law. Deuteronomy 29:29 [KJV]

Now that you have read these articles on the web pages, www.aaronc.com and www.jpdawson.com and seen how God works through individuals, through His creation and nature, through countries and history and how He reveals Himself through prophecy it is time to take a look inside yourself.

I would appreciate your comments and suggestions. E-mail to **JPDawson**

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6 R.C. Birkebak and J. P. Dawson, "Thermal Radiation Properties of Lunar Material," Apollo 11 Lunar Science Conference, American Association for the Advancement of Science, Washington, D. C. (1970): 724.

7 Genesis 1:1 [KJV] In the beginning God created the heaven and the earth.

8 Romans 5:12 [KJV] Wherefore, as by one man sin entered into the world, and death by sin; and so death passed upon all men, for that all have sinned:

9 Genesis 6:3 [KJV] And the LORD said, My spirit shall not always strive with man, for that he also is flesh: yet his days shall be an hundred and twenty years.

10 Psalms 90:10 [KJV] The days of our years are threescore years and ten; and if by reason of strength they be fourscore years, yet is their strength labour and sorrow; for it is soon cut off, and we fly away.

11 Romans 5:12 [KJV] Wherefore, as by one man sin entered into the world, and death by sin; and so death passed upon all men, for that all have sinned:

12 2 Corinthians 9:9 [KJV] (As it is written, He hath dispersed abroad; he hath given to the poor: his righteousness remaineth for ever.

Romans 6:20 [KJV] For when ye were the servants of sin, ye were free from righteousness.

13 John 3:16 [KJV] For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.

14 Revelation 1:8 [KJV] I am Alpha and Omega, the beginning and the ending, saith the Lord, which is, and which was, and which is to come, the Almighty.

Revelation 1:17 [KJV] And when I saw him, I fell at his feet as dead. And he laid his right hand upon me, saying unto me, Fear not; I am the first and the last:

15 Joshua 10:12-14 [KJV] Then spake Joshua to the LORD in the day when the LORD delivered up the Amorites before the children of Israel, and he said in the sight of Israel, Sun, stand thou still upon Gibeon; and thou, Moon, in the valley of Ajalon. And the sun stood still, and the moon stayed, until the people had avenged themselves upon their enemies. Is not this written in the book of Jasher? So the sun stood still in the midst of heaven, and hasted not to go down about a whole day. And there was no day like that before it or after it, that the LORD hearkened unto the voice of a man: for the LORD fought for Israel.

Exodus 10:21 - 23 [KJV] And the LORD said unto Moses, Stretch out thine hand toward heaven, that there may be darkness over the land of Egypt, even darkness which may be

felt. And Moses stretched forth his hand toward heaven; and there was a thick darkness in all the land of Egypt three days: They saw not one another, neither rose any from his place for three days: but all the children of Israel had light in their dwellings.
2 Kings 20:11 [KJV] And Isaiah the prophet cried unto the LORD: and he brought the shadow ten degrees backward, by which it had gone down in the dial of Ahaz.
16 Amos 8:9 [KJV] And it shall come to pass in that day, saith the Lord GOD, that I will cause the sun to go down at noon, and I will darken the earth in the clear day:
Luke 23:44 - 45 [KJV] And it was about the sixth hour, and there was a darkness over all the earth until the ninth hour. And the sun was darkened, and the veil of the temple was rent in the midst.
Isaiah 13:10 [KJV] For the stars of heaven and the constellations thereof shall not give their light: the sun shall be darkened in his going forth, and the moon shall not cause her light to shine.
Joel 2:10 [KJV] The earth shall quake before them; the heavens shall tremble: the sun and the moon shall be dark, and the stars shall withdraw their shining:
Matthew 24:29 - 31 [KJV] Immediately after the tribulation of those days shall the sun be darkened, and the moon shall not give her light, and the stars shall fall from heaven, and the powers of the heavens shall be shaken: And then shall appear the sign of the Son of man in heaven: and then shall all the tribes of the earth mourn, and they shall see the Son of man coming in the clouds of heaven with power and great glory. And he shall send his angels with a great sound of a trumpet, and they shall gather together his elect from the four winds, from one end of heaven to the other.
17 Matthew 6:22 states that the eye is the window to the soul.
18 Matthew 14:25 And in the fourth watch of the night Jesus went unto them, walking on the sea.
Mark 6:4 But Jesus, said unto them, A prophet is not without honour, but in his own country, and among his own kin, and in his own house.
John 6:19. So when they had rowed about five and twenty or thirty furlongs, they see Jesus walking on the sea, and drawing nigh unto the ship: and they were afraid.
19 Matthew 14:28-29. And Peter answered him and said, Lord, if it be thou, bid me come unto thee on the water. And he said, Come. And when Peter was come down out of the ship, he walked on the water, to go to Jesus.
20 Genesis 6:5. And GOD saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually.
21 II Corinthians 5:17. Therefore if any man be in Christ, he is a new creature: old things are passed away; behold, all things are become new.
22 John 2:1. And the third day there was a marriage in Cana of Galilee; and the mother of Jesus was there:
23 John 11:43. And when he thus had spoken, he cried with a loud voice, Lazarus, come forth.
24 Matthew 24:27. For as the lightning cometh out of the east, and shineth even unto the west; so shall also the coming of the Son of man be.
25 Ephesians 3:9. And to make all men see what is the fellowship of the mystery, which from the beginning of the world hath been hid in God, who created all things by Jesus Christ:

26 John 8:12. Then spake Jesus again unto them, saying, I am the light of the world: he that followeth me shall not walk in darkness, but shall have the light of life.
27 Revelation 1:1. The Revelation of Jesus Christ, which God gave unto him, to shew unto his servants things which must shortly come to pass; and he sent and signified it by his angel unto his servant John:
28 I Peter 1:20. Who verily was foreordained before the foundation of the world, but was manifest in these last times for you,
29 Luke 1:33. And he shall reign over the house of Jacob for ever; and of his kingdom there shall be no end.
30 Matthew 28:1. In the end of the sabbath, as it began to dawn toward the first day of the week, came Mary Magdalene and the other Mary to see the sepulcher.
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35 Genesis 1:9 [KJV] And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so.

36 Dietz, "The Breakup of Pangaea," 78.

37 Genesis 10:25. And unto Eber were born two sons: the name of one was Peleg; for in his days was the earth divided; and his brother's name was Joktan.

38 Ezekiel 38:12 [KJV] To take a spoil, and to take a prey; to turn thine hand upon the desolate places that are now inhabited, and upon the people that are gathered out of the nations, which have gotten cattle and goods, that dwell in the midst of the land.

39 Robert S Dietz, "The Breakup of Pangaea," 182 ; H. H. Hess, "Sea-Floor Spreading," 559.