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Earth's Life Cycles Contradict the Supercontinent Cycle (Pangaea - Pangaea Ultima)

[The Earth's Reproductive Life Cycles of Carbon, Nitrogen, Oxygen and Water Deny the Theory of Continental Drift]

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Extract

The theorists of continental drift created the idea of a supercontinent cycle, Pangaea - Pangaea Ultima, while they appear to have overlooked the effects of that cycle upon the Earth's reproductive life cycles of carbon, nitrogen, oxygen and water. In this essay, the author analyzes how and why the life cycles of Earth contradict the ideas proposed in the supercontinent cycle forwarded by the continental drift theorists.

The theorists of continental drift created the idea of a **supercontinent cycle**, **Pangaea - Pangaea Ultima**, where 250 million years ago a supercontinent on Earth broke up into the smaller continents of today, and 250 million years from now, today's continents will reunit in another supercontinent. In proposing such an idea, the drift theorists appear to have overlooked the effects that supercontinental cycle might have upon the Earth's **reproductive life cycles of carbon**, **nitrogen**, **oxygen** and **water**. In this essay, I analyze how and why the life cycles of Earth contradict the ideas proposed in the supercontinent cycle forwarded by the continental drift theorists.

The planet Earth is said to have come into existence around 4.5 billion years ago. The basic physical conditions that make life possible on our planet are said to reach back 2.5+ billion years. The **conditions of the existence of life** on Earth are generally referred to as *the Earth's reproductive life cycles and related processes*.

The emergence and existence of the reproductive life cycles on Earth, are derived as of the **conditions of existence of the planet Earth itself**. In

other words, there would have been an existence of 2.0 billion years of matter-energy on Earth, *without* the cycles of life, and then, for the past 2.5+ billion years the conditions of existence for life have made their appearance.

The reproductive life cycles are **the carbon cycle**, **the nitrogen cycle**, **the oxygen cycle** and, **the water cycle** [or, the hydrological cycle]. These cycles are accompanied by various **chemical**, **physical**, **geological**, **and biological processes** as well. So, when we speak about the Earth's life cycles, we are actually referring to the Earth's reproductive life cycles *and their related processes*.

Carbon is exchanged between the Earth's atmosphere and oceans and derives significance in the structure, biochemistry and nutrition for all forms of life on Earth. The processing or fixation of nitrogen allows converting nitrogen gas into a form that living organisms may utilize. Oxygen through photosynthesis forms the basis for Earth's atmosphere and living organisms. And, the hydrologic cycle, or the water cycle, pertains to the ever-moving water mass of Earth below, on and above the planet's surface. When these cycles are themselves viewed as processes over time it becomes next to impossible to identify a beginning and an end to the cycles. Any moment within each cycle may be viewed as a begin/end point.

Scientists have identified, measured and/or computed fixed amounts of carbon, nitrogen, oxygen and water within the Earth's composition. Consider some select data sets.

- · Forests store 86% of the carbon existing above ground on Earth
- · Forest store 73% of the carbon in the planet's soil
- · The Earth's oceans contain about 36,000 billion tons of carbon
- · About 42,000 billion tons of carbon exist in the Earth's biosphere
- The largest reservoir of oxygen on Earth is to be found within minerals in its crust and mantle (i.e., 99.5%) The remainder is in the biosphere and atmosphere of the Earth
- · Water precipitation (rain, hail, snow, etc.) as condensed water reaches around 505,000 cubic kilometers annually. Now, 393,000 km³ falls over the planet's oceans (estimates vary, 434,000 km³ is also given).
- · The world's water supply: ,1386,000,000 km³
- · Water in the oceans: 1,338,000,000 km³
- · It is said that the Earth's oceans supply about 86% 90% of the water that is evaporated which enters the Earth's water cycle.
- · During geological periods of extreme heat and cold (i.e., glaciers), the water level on Earth varies from over 100 meters lower than they are today, to over 50 meters higher than what they are

today.

One scientist, Paul Falkowski, has written that within the past 200 million years the production of oxygen on Earth has increased leading to the proliferation of life on our planet, and that the "delicately balanced metabolic processes on which life depends are now moving out of equilibrium".

It is often cited that had the Earth been a few degrees colder or, a few degrees hotter, at some point during its development, it would not have produced life forms. The *delicate* conditions of existence of the reproductive life cycles are dependent then upon the conditions of existence of the planet Earth. In fact, the latter produce the former according to the timeline of Earth's existence.

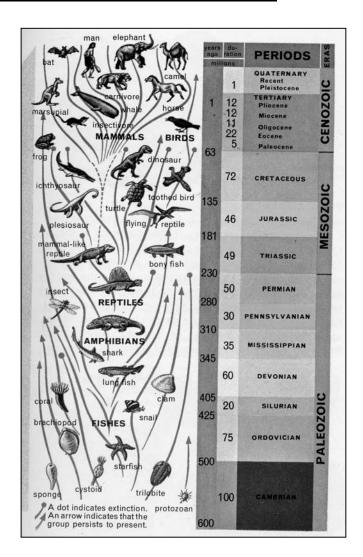
The relationship between the *conditions of existence of planet Earth* and the subsequent *conditions of existence of the reproductive life cycles on Earth* has direct bearing upon the validity the **theory of continental drift**. Further, said conditions are also relevant to understanding certain aspects of the theories of plate tectonics and the seafloor spreading of the oceans. However, in this essay, I concentrate upon the relevancy for the theory of continental drift.

Within the confines of today's established sciences, the main thesis about the existence of life is represented in a Darwinian view of the evolution of animal/plant life and human life on planet Earth. The evolution of life is a direct product of **the conditions of existence of the reproductive life cycles and related processes on Earth**. The evolution of life on Earth, then, is an indirect product of the conditions of existence of Earth, as it is mediated by the emergence of the conditions of existence of the reproductive life cycles. The question arises then whether the reproductive life cycles (and their related chemical, physical, geological, and biological processes) evolved similarly as has the identified evolution of the different forms of life on Earth.

Without the reproductive life cycles of carbon, nitrogen, oxygen and water on Earth, the existence and evolution of life itself would be impossible. (To be complete in the analysis, one must also examine other cycles, such as the sulfur cycle, the ozone-oxygen cycle, the carbon-nitrogen-oxygen cycle, among others.)

An apparent academic belief within paleontology, geology, and geography shows that the evolution of life on Earth reflects a progressive lineal development. This may be observed in the many branches drawn for the numerous species on the tree of life in the plant and animal kingdoms, which portrays a perceived linear interpretation. The tree of life is shown as

a definite singular begin point with multiple branches representing end points on the evolutionary timeline, reaching back 600 million years without any significant interruptions for the entire cycle. Neither are there any significant interruptions at the 250 million year mark, as shown in the illustration that follows.



The Periods and Eras of Paleo-Time

[Source: Rhodes, Frank H.T., et.al., Fossils: A Guide to Prehistoric Life, Illustrated by Raymond Perlman, Golden Press, New York, Racine Wisconsin, 1962, page 31. Fair use.]

Scientists have established that the *living products* of the Earth's life cycles are varied and numerous. Yet, the reproductive life cycles *and* their

conditions of existence are themselves perceived at times as unchanging. Case in point, the drift theorists appear to accept the Earth's life cycles as a baseline for that evolutionary process in that they hardly address them. In fact, the continental drift theorists cite examples from the plant and animal kingdoms to prove their idea about the continents being adrift on the face of the planet. That view of invariance is sustained by many theorists in spite of the vast literature that reports on the change in the reproductive life cycles throughout their two-billion plus years of history on Earth.

The continental drift theorists postulated that a **supercontinent**, named **Pangaea**, existed in the form of a single land mass on Earth over 250 million years ago. This supercontinental land mass, they say, broke up into separate pieces, thus forming today's continents on Earth. Conclusion: we live on Pangaea. The seven continents identified today *are* Pangaea, separate land masses resulting from the breakup of that supercontinent. That is what the drift theorists say anyway. Into the future, 250 million years from now, the cited seven continents will continue to drift and reunite once again to form another supercontinent, **Pangaea Ultima**; hence the idea of a supercontinent cycle.

Many scholars question the forces and mechanics that would produce such random drifting of the land mass on Earth. Questions arise as to which forces would cause the land mass of Earth to begin drifting, why would it come to a halt and form a single mass once again, and then what would cause that second supercontinent to reverse course and break up into separate continents once again.

Still, more basic questions arise. The theoretical positing of a **supercontinent** and a **superocean** is itself misleading. The four oceans identified today [Pacific, Atlantic, Arctic and Indian oceans] are in fact themselves a *one-world ocean*, as they are all interconnected.

Further, one does not observe in the analytical work of the drift theorists the theoretical studies that might explain how land/water tides would have existed in a supercontinental Pangaea-like world. There is no explanation of the formation of the mid-oceanic ridges that are seen today in our oceans in relation to the drifting land mass of Pangaea. There are no studies about the behavior of the reproductive life cycles and related processes in the paleo-Pangaea world.

Nonetheless, as mentioned, the drift theorists have proceeded to postulate the logical outcome of drifting continents by carrying their *surficial* analysis even further. They go on to state that the land mass on Earth has suffered similar breakups *various* times throughout the history of the Earth. Numerous breakups mean that different supercontinents have

come and gone, as the separated, broken pieces drift back together once again into forming another supercontinent every 250 million years or so. Again, the question of how the land mass on Earth drifts apart, back together again and then apart once more, over and over for hundreds of millions of years is weakly answered by the idea of "heat convection" coming from inside the Earth.

Hypothetical scenarios of the paleo-past are proposed such as a supercontinent *Rodinia* with its superocean *Mirovia* for the Neoproterozoic era; and, a supercontinent *Pannotia* with its superocean *Pan-African Ocean*. But, these are equally hypothetical as is the model of *Pangaea* with its *Panthalassic Ocean*.

Future projections of today's world geography suggest a *Pangaea Ultima* supercontinent with its *Mega-Pacific Ocean*, and an *Amasia* supercontinent with its *Mega-Atlantic Ocean* some 250 million years from now.

These scenarios of a supercontinental cycle are based upon human logic; not upon spacetime reasoning or data. It is logical to surmise that once someone states that the continents are drifting apart from a specifically identified starting point on the globe, then they must necessarily reunite at some other end point on the globe ---given the fact that the surface of the globe is precisely an enclosed oblate sphere. So, the theory may be logical in surficial terms of spheres, but not necessarily reasoned according to how matter-energy behaves.

Accordingly, during the 2.5+ billion years of life on Earth, there would have existed at least five supercontinents each with its corresponding breakup and reunification. Five of them, because according to the drift thesis, it would take a supercontinent 250 million years to drift apart on Earth and, then another 250 million years for the separated continents to drift back together again in the form of another supercontinent [2,500,000,000] [2,500,000,000] [2,500,000,000] [2,500,000,000]

Suppose for a moment that these logically derived theses about the radically transformed Earth were correct. Then the accompanying reproductive life cycles/processes during those 2.5+ billion years that life has existed on this Earth would necessarily also have undergone equally radical transformations. In fact, one would require the begin/end dates of the timelines of the life cycles to go from a single supercontinental unit with its single superoceanic unit, to the mid-term of the drift process [where we are supposedly at this time with a 7-continent form of reproductive life cycles], and, then, back again to another reunited supercontinental land mass.

Consider the following illustration that visualizes how the Earth's reproductive life cycles run parallel to the land/water mass ratio of the so-called supercontinent cycle. Scientists explain that the land/water mass ratio produces the features in the reproductive life cycles and their related processes. So, any change in the former would certainly produce changes in the latter. Today, scientists concern themselves with parts-per-million-changes in the Earth's reservoirs. It is impossible to accept the idea that the land/water mass ratio suffered continental-size changes, yet no effects occurred to the Earth's reproductive life cycles.

E	arth's Reproducti as of	ve Life Cycles	
2.5 billion years ago	250 million years ago	Today 2009	250 million years from now
Supercontinent Land Mass Formation Pangaea	Pangaea Breakup into Multiple Continents	Seven Continents on Earth	Supercontinent land mass reunited Pangaea Ultima
	Timelin	е	——

Earth's reproductive life cycles are dependent upon the land/water mass ratio. Therefore, any changes in that ratio would necessarily modify the behavior of those life cycles and related processes. To propose radical changes in the land mass to water mass ratio would require an analytical evaluation of the Earth's reproductive life cycles. Such an analysis has not been carried by drift theorists.

Given the recognized delicate nature of the Earth's reproductive life cycles, and given the fact that they are interconnected to the land/water mass, one would then expect those cycles to undergo radical change as of the radical changes in the land/water mass ratio during their supposed cycle of unification/separation/unification on the globe's continental surface.

One could not expect the reproductive life cycles/processes to remain constant, unchanged while their own essential conditions of existence change as of the land/water mass ratio on Earth.

The definition of a "delicate balance or equilibrium" in the life cycles necessarily varies from a supercontinent/superocean relationship to a relationship of multiple (say seven) continents and multiple oceans (say

four). Continental drift theorists argue their case without even a mention of variance in the Earth's life cycles. Quite the opposite, in their proposals they take the Earth's life cycles and related processes as something of a constant, something given, as though they did not suffer any change in the face of the radical changes in the land/water mass ratio. They take the linear development and evolution of life forms as a constant when they cite examples of plant life and animal life to prove their radical interpretation of continental drift.

The argument of the drift theorists requires taking so many aspects as constants, that their case makes no sense. Yet, they have argued their case, and for some unknown reason or reasons, they have convinced most sectors of the academic community for nearly 100 years about the validity of their surficial interpretative logic about randomly drifting continental mass on Earth.

Common sense tells me that the numerous *unmakings and remakings* of the super continents/oceans, would have had a corresponding number of *unmakings and remakings* of the Earth's reproductive life cycles. This evident conclusion obtains because the planet's life cycles and related processes are said to be dependent upon the composition of the land/water mass ratio on Earth; it is that simple.

In other words, the **conditions of existence of the Earth's life cycles** would necessarily have undergone numerous unmakings and remakings themselves as a function of the numerous supercontinents being separated and then coming together once again in a restructuring of the land/water mass on Earth. At least, were it the case that a supercontinent cycle actually existed or exists.

In my view, based on my studies of the measured symmetries of the land/water mass on earth, the supercontinent cycle has never existed and does not exist on Earth. And, further, there has been no radical modification of the conditions of existence of the Earth's reproductive life cycles as would be implied from the analysis of a supercontinent cycle theory. The surficial makeup of land/water mass ratio that we see today is the product of Earth's own life cycle, with the continents relatively in situ as a product of the uniform wear and tear between the relationship of land/water mass on Earth.

It is impossible for me to compare the physics and mechanics of the birth/demise/birth/demise... supercontinent cycle along with supposedly five different periods of changing reproductive life cycles on Earth. It is unnecessary to contemplate how reproductive life cycles in a Pangaea 1-continent world would be similar/different from those in a Pangaea 7-continent/4-ocean world (today's globe). Much less is it necessary to

compare *five different* Pangaea-like systems of reproductive life cycles among themselves *together* with the supposed *five different* supercontinent cycles. In fact, such studies would have to be carried out by physicists and engineers of fluid mechanics, more so than by geologists and geographers, in order to know the feasibility of the theoretical propositions of drift theorists.

No one has any idea as to what the supposed five Pangaea supercontinents or their fractional breakups may have looked like in terms of specific land/water mass ratios. The geological record is mute on this point, and I fear shall ever remain mute, for such worlds to have existed appears to be physically and fluidly impossible.

The continental drift theorists have been so intent on proving their basic single-continent thesis that in their writing they take for granted the existence of a *single reproductive life cycle*; one that has lasted supposedly 2.5+ billion years without change or modification. Only by ignoring the Earth's life cycles, have they been able to produce their *singular evolutionary supercontinent cycle thesis* together with a single evolutionary life history. Their view accepts a single reproductive life cycle that explains the entire development and evolution of plant and animal life on this planet, while at the same time arguing in favor of a radical breakup of continental land mass and water mass on Earth.

Of course the Earth's reproductive life cycles have changed throughout the planet's history. Any change in the land/water mass ratio means a change in the Earth's life cycles. Today's ecologists are crying for people to understand this simple fact of Nature. Ecologists today concern themselves with the most minute changes and the possibly devastating effects these could have on the Earth's life cycles. Drift theorists speak about entire continents switching places without any concern for the slightest change in the Earth's life cycle, as though supercontinental-cycle changes had no effect upon the life forms on Earth.

It would appear as though the theoretical prerequisite of logic has escaped them. *Pangaea* united together in a single land mass on Earth, and *Pangaea separated* into different smaller continents [as today] will not produce the same life cycles throughout their differentiated existence. The reproductive life cycles of carbon, nitrogen, oxygen and water could not have remained *exactly the same* throughout the supercontinental redistribution of land/water mass ratio on Earth *by definition of those very same life cycles*. Change the land/water mass ratio and one changes the Earth's life cycles.

Obviously, the reproductive life cycles of today are not the same ones that existed 2.5 billion years ago; nor even 250 million years ago; nor even

as they exist now, today, as they are in constant flux. But, there are no signs that they have changed so radically as to be suggested by the theory of supercontinental cycles.

Consider, the existence of a supercontinent [Pangaea] would suggest a concentration of the trees and all plant life on Earth in a particular sector of the globe. That concentration of oxygen-producing trees/plants would definitely represent a *distinct* recycling of carbon, nitrogen, oxygen and water. One would have to examine and compute the ratio of land mass to water mass at that time in order to observe the levels of the production of carbon, nitrogen and oxygen and their accommodation in land/water mass. Even such elementary aspects as precipitation, cloud formation, storms, water evaporation cycles, land/water tides, climate, etc., so many different aspects would require analysis.

Further, an array of empirical considerations would be in order for a theoretical analysis of a scenario of a supercontinent and a superocean. With a concentrated super land/water mass, one would have **super-reservoirs** where the carbon, nitrogen, and oxygen are deposited, as in the **super-land mass** (supercontinent) and the **super-water mass** (superocean).

There is no Mississippi River in Australia or on the island of Madagascar. The Mississippi River exists on the North American continent today. Its size is proportionate to its catchment and the terrestrial basin that it drains. If the land mass on Earth 250 million years ago was of Pangaea-size, as stated by the drift theorists, then one would have had **super-rivers** that would have drained that supercontinent, proportionate to that catchment and its **super-basin**. Remember, touch one spacetime event and all spacetime events are affected. Rivers exist as of and in proportion to their corresponding land mass [read, drainage basin and catchment].

Necessarily, each Pangaea-like supercontinent would have had its own super rivers, its own super lakes, and other water reservoirs in relation to and in proportion to its own land/water mass size and composition. By definition, the size of those supercontinental Pangaea-size main rivers would have been of a corresponding super size. Look at any of the continents of today and observe how the main rivers of continents drain off into the oceans in relation to their drainage basin size. Then, take a look at a theoretical drawing of Pangaea and imagine what kinds of main super rivers it would have had. Now, do not just visualize the existing main rivers transferred onto Pangaea; rather, consider where Pangaea's super rivers would have existed on her super land mass. Just imagine their size, length and width. Then, consider those measurements as of the incremental residence times for the super hydrological cycle, its super water cycle.

Further, consider such processes as solar energy being the power behind the water cycle. It is said that today 86% of the Earth's evaporation comes from the oceans, creating a cooling effect for the oceans. Imagine higher/lower surface temperatures for the land/water mass on Earth given the distinct effects from a super land/water mass concentrated on one side of the globe.

Consider some of today's numerical values for the estimated major stores of *carbon* on Earth as offered by scientists:

Sink amount in billions of metric tons:

- · Atmosphere 578 (for 1700) through 766 (for 1999)
- · Soil organic matter 1500 to 1600
- · Ocean 38,000 40,000
- · Marine sediments and sedimentary rocks 66,000,000 to 100,000,000
- · Terrestrial plains 540 to 610
- · Fossil fuel deposits 4000

The ocean deposits are the largest sink deposits of carbon on Earth. So, in an analysis of supposed drifting continents, one would have to analyze the interrelationship between land/water mass and the carbon cycle or, the carbon-nitrogen-water cycle. Just consider modifying any one of the preciously cited aspects to say that of **super-terrestrial plains**.

"Atmospheric levels [of carbon dioxide] have increased by over 30% from about 275 parts per million (ppm) in the early 1700s to just over 365 ppm today. Scientists estimate that future atmospheric levels of carbon dioxide could reach an amount between 450 to 600 ppm by the year 2100. The major sources of this gas due to human activities include fossil fuel combustion and the modification of natural plant cover found in grassland, woodland and forested ecosystems." [Michael Pidwirny] Granted there was no human activity of fuel combustion (that we know of anyway) 250 million years ago, but what about all of the natural plant and seasonal modifications from continents drifting around. Imagine and consider the super-seasonal changes from the supercontinental cycle, then try and imagine the plant and animal life within such super-seasonal environs.

One would have had extremely different size, shape, composition of the **super-reservoirs** that gave support to the **super-reproductive life cycles/processes**. Today's reproductive life cycle for water is derived as of the following data for **residence time for water** in the different reservoirs.

Water remains on average in the following reservoirs for the cited time periods:

- · Oceans 3,200 years
- · Glaciers 20 to 100 years
- · Seasonal snow cover 2 to 6 months
- · Soil moisture 1 to 2 months
- · Groundwater: shallow 100 to 200 years
- · Groundwater: deep 10,000 years
- · Lakes (retention times) 50 to 100 years
- · Rivers 2 to 6 months
- · Atmosphere 9 days

Now, the previously cited figures reflect the average residence times in reservoirs for our 7-continental reproductive hydrological cycle/process. Imagine, now for a moment, the differentiation in times when the size and concentration of the reservoirs would increase on the scale of a supercontinent, a superocean, a super-glacier corresponding to that supercontinent, super-sized lakes and super-sized rivers derived from the super-drainage basins of that supercontinent. Those cited numerical values would undergo corresponding super changes. The resulting super reproductive life cycles/processes would adjust accordingly.

One must consider the *physics and fluid mechanics* of how a supercontinent and superocean scenario would actually produce/reproduce super reproductive life cycles together with all their super physical, chemical and biological processes. One may wonder whether it would even be possible physically and mechanically to have such a system of reproductive life cycles based on such extremely concentrated amounts of land/water mass on one side of a lopsided oblate sphere (= the Earth).

After doing all that imagining, consider how super-sized rivers turn into smaller main rivers; i.e., how did the super-sized rivers of Pangaea give way to the main rivers of the continents of today. And, then ask yourself how will the main rivers of today turn into or transform into the super-sized rivers of Pangaea-Ultima 250 million years from now. In my mind, these are fruitless tasks of imagination.

But, reach out further, and consider what would happen to the gravitational relationships of the Earth as in, for example, the *extreme* water/land tides of a supercontinent and a superocean. Consider whether such a scenario could even be possible in terms of gravitational equilibrium for the rotational and revolutionary aspects of our spinning globe hurtling

throughout space. Ask yourself how did the superocean currents transform into the ocean currents of today; and, how will these transform once again back into the superocean currents of Pangaea Ultima 250 millions years from now ---without affecting the delicate reproductive life cycles of Earth. Impossible; the effects would be unimaginable. One has only to read the scientific literature of today about the minute ppm-changes to the land/water mass ratio in order to learn about possible devastating effects on the Earth's ecology.

The reason that I mention this aspect is because supposedly Pangaea's land mass was concentrated in the Earth's southern hemisphere. The east/west movement of the superocean water mass would not have been checked by any land mass around the equatorial region. Today the land mass on Earth acts as a braking mechanism on the water tides; aside from any consideration about land tides for now. With all of the land mass concentrated in a single area on the South "side" of the globe, one should ask what would have been the braking mechanism to control the ebb and flow of the East-West ocean tide waters.

When one reads about this aspect, drift theorists generally say that the theme about ocean tides has not been studied in depth yet. I ask what is there to study about a hypothetical superocean circumventing the Earth that lies beyond the laws of physics. If still not convinced, one could always study the hypothetical nature of **supercontinental land tides** as against the nature of land tides known today, and how they transform back and forth from and into one another in relation to a supercontinent/superocean land/water mass ratio.

These are basic, elementary questions that the theorists of continental drift have not even raised much less attempt to offer any answers. Where are the theoretical studies that analyze the land/water tides and the reproductive life cycles before/during/after the Pangaea period, or thbroughout the different scenarios of the supposed supercontinental cycle; there are none.

The constant production of plant and animal life on Earth for the past couple of billion Earth years attests to the equilibrium and balance found in our planet's reproductive life-cycles and related processes. Had the life-cycles been interrupted by the drifting of the continents from larger to smaller entities, or from smaller to larger entities, then one would expect to observe such breaks in the history of the plant and animal kingdoms.

Again, consult the illustration provided above regarding the evolution of life on Earth. There are no complete breaks shown from the **Cambrian** Period of 600 million years ago through the **Permian** period [supposedly

when Pangaea broke up] or until the **Quaternary** period just one million years ago.

And, even if someone were to suggest that the end of the dinosaur era [so to speak] meant the reflection of just such an interruption in the reproductive life cycle, one could not accept such a proposal. First, the demise of the dinosaurs does not correspond to the time table set forth by the drift theorists, as it occurred during the Cretaceous period [63 to 135 million years ago]. Secondly, even though particular species of plants and animals ceased to exist, the reproductive life cycle continued to exist inasmuch as its conditions of existence continued to exist throughout the periods cited. The end of particular species did not and does not mean the end of the reproductive life cycle/process itself.

I know of no studies about the Earth's reproductive life cycles *in relation to* the theory of radical continental drift [breakup and reunification]. Given the fact that each one of the projected five Pangaea supercontinents would have its own shape and composition, then the processes of separation of each one of those supercontinents would produce a distinctive set of multiple, smaller continents. In this sense, it would be reasonable to suppose that each one of the reproductive life cycles for each one of these five Pangaea scenarios would be *sui generis*, distinct and unlike the others. Were this the case, then one would expect to observe not a linear progression in the **Paleozoic/Mesozoic/Cenozoic** eras, but rather broken lines in relation to the broken supercontinental cycle.

According to the theory of supercontinental cycles, one would expect that the super-concentration of matter-energy in the form of plant and animal life on each particular super-continent would generate a distinctive system of reproduction life cycles for carbon, nitrogen, oxygen and water. One would expect to observe five different systems of reproductive life cycles recorded in the history of the Earth. Whereas the studies made by scientists today offer the impression that the reproductive life cycles are taken as a constant throughout the history of the Earth, and variations are shown only in the specifics of particular species of animal and plant life histories.

Many geographers for the past one hundred years have been essentially saying that it is possible to have radically different continental land/water mass ratios, while the reproductive life cycles supposedly remain unchanged parallel to those same histories. When in fact the inverse is true: the reproductive life cycles of carbon, nitrogen, oxygen and water are dependent upon (and exist as such as of) the conditions of existence of the land/water mass ratios on Earth. If the land/water mass ratio changed throughout that history so radically, as stated by the theorists of continental

drift, then one must expect to see equally radical changes in the reproductive life cycles. This is not, however, what the literature in the field of geography has been telling us for the past one hundred years. Quite the opposite, the literature has been silent with regard to the possible changes within the reproductive life cycles.

It is easy to propose any idea. However, each descriptive statement about a particular spacetime event affects all other descriptive statements about that spacetime event. So, even though it is easy to say that the continents drift across the face of the Earth, that single affirmation implies an infinite set of parallel affirmations. You touch one part of the system, and the entire system is affected.

When drift theorists affirmed the radical movement of the continents, they disregard the implications of that movement for other aspects of Earth's conditions of existence. They have overlooked the essential aspects of the reproductive life cycles of carbon, nitrogen, oxygen, sulfur, ozone and even that of water.

The drift theorists have concentrated their theses around the aspect of land mass [i.e., supercontinents], overlooking the complementary aspect of water mass [i.e., the behavior of the supercean during the emergence of the supercontinent]. Had they reasoned about the corollary to their supercontinent thesis, they would have faced the idea of a super water cycle head on and, probably upon its analysis would have even discarded the supercontinent cycle idea.

For had they examined the superocean they would have understood the idea behind the need for **super-reproductive life cycles**, (such as the hydrological cycle) resulting as a product of supercontinent and superocean ratios. They did not and have not addressed the concept of a super-reproductive life cycle/process, inasmuch as they have not confronted the need to study the superocean. Today's oceans and the mid-oceanic ridges are being studied no doubt, but not as of the hydrological cycle associated with the world ocean [united as one or separate as parts], but rather simply as of the seafloor spreading theses.

The idea of the existence of a supercontinent and a superocean determines the idea for the existence of *super-sized* reproductive life cycles and processes. Further, their studies of the supposed supercontinents are offered surficially, as again, they do not cover all of the needed aspects for study in that regard. The drift theorists overlook and disregard the patterns of **symmetry** between the land/water mass on Earth, which completely undermine the theses regarding randomly drifting continents on Earth. This

may be confirmed by the measured distances provided in the two volumes on *Eventpoint Cosmogeography* [www.earthmatrix.com].

Common sense tells me that the reason geographers have been silent about analyzing the theoretical and practical changes behind the reproductive life cycles on Earth is that such studies would bring down their theoretical framework.

I consider that the general makeup of land/water mass has been relatively *in situ*, uniform throughout the history of the Earth's existence. I suspect that the conditions of existence of the reproductive life cycles for the past 2.5+ billion years have been uniform, yet obviously in relation to the land/mass ratio on Earth. I further consider that the conditions of existence of the reproductive life cycles for the past 250 million years have been relatively uniform.

Because of the nature and history of the Earth's life cycles, I conclude that there was not, nor is there, any continental drifting movement *to the degree* that theorists of continental drift theory propose. For had there been such a degree of such radical movement as proposed by them, then the Earth's reproductive life cycles would now serve as evidence to those movements.

With regard to the extent of continental movement and drifting proposed by theorists of plate tectonics and seafloor spreading, a more detailed, separate essay is in order at a later date.

The conditions of existence of the reproductive life cycles of carbon, nitrogen, oxygen and water on Earth have shown themselves to be relatively the same/similar throughout the 2.5+ billion years of existence on Earth. Therefore, one may conclude that the conditions of existence established by matter-energy on Earth have existed since their inception and have produced the relative uniform history of land/water mass on Earth along with the relative uniform history of the Earth's reproductive life cycles.

The very conditions of existence of Earth's reproductive life cycles and the conditions of existence of plant and animal life on Earth are telltale of that relative history of uniform existence and development. These are old truths derived within classical geography that were abandoned for whatever reason by the theorists of continental drift, and now need to be examined once again.

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