fish, pigeons, the great tit, gulls, salamanders, and men. Let us state that we believe these illustrations are given honestly in the belief that they are examples of actual origin of new basic types. However, every such case used merely shows more completely that variants within basic types *do* occur, *but* there is *no known demonstration* of the origin of a *new* basic type. It is popular to say, "The origin of new basic types is a demonstrated fact" (and you will be shown pictures of variants within types to prove it), but the *natural facts* of science tell us, "Microevolution, yes. Macroevolution, *no*!" This is a natural scientific fact (i.e., it can be demonstrated) of tremendous importance, one which merits deep and thoughtful study.

Valiant efforts of paleontologists to demonstrate the origin of species often fall into the same category as that portrayed above. Simpson's[18] best case of supposed speciation, that of the study of *Kosmoceras* (ammonites) by Brinkman,[19] through 13 meters of sediments, and today P. G. Williamson's[20] fine study of speciation in snails and mollusks through 400 meters of sediments, are heralded by some as a demonstration of macroevolution. But let us not confuse the origin of possibly good species within a basic type with origin of new types. Brinkman's study of new species of ammonites merely began with ammonites and ended with ammonites. Williamson's study began with snails and clams and ended with snails and clams. That is not the program assumed by macroevolution. The development of new species *within* a basic type (ammonites, or snails, or clams) is not the development of new basic types. Proclamation by the uninformed that the development of new basic types is a demonstrated fact adds to the sad confusion of many eager students.

### Conclusion

The paragraphs of this article are concerned entirely with items proven in the laboratory. We as natural scientists deal with natural truths. If a morsel of knowledge is presented, the modern scientist (he tells us) will refuse it unless it has been demonstrated in the laboratory to be naturally true. The items in these paragraphs are completely mundane. Therefore, they should not disturb anyone who claims to be a modern scientist. With this understanding I present the following biological principle which should have been recognized and put in use many years ago:

> The Principle of Limited Variation: Genetic variation (variability) in animals and plants can go no farther than to produce new variants *within basic types already in existence.*

No exception to this principle (law) has been demonstrated. Its truth is verified every time a new organism is born, hatched, or sprouted. We live in a cosmos where natural principles cannot change with the passing of time. If any of these principles changed a chaos would immediately ensue. I welcome the opinions of my scientific colleagues.

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# THE NECESSITY OF CONTINENTAL RE-LOCATION IN THE CREATIONIST MODEL

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Ever since Alfred Wegener offered his theory of continental "drift" in the early twentieth century there has been a continual controversy about whether or not the land masses we consider the Western Hemisphere and the Eastern Hemisphere were once joined and later split to form the Atlantic Ocean Basin. During the 1960's, research dealing with the spreading of the sea floor added credibility to the idea that sections of the earth's crust, called plates, not only moved in the past but still are moving, although at barely

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perceptible rates. Currently, the majority of earth scientists hold to the contention that the surface of the earth has, indeed, been rearranged over time.

Such a theory has been generally unacceptable to fundamental creationists, primarily because of the tens or even hundreds of millions of years required in the "orthodox" model of continental movement between the beginning of that movement and the present. Of course, lenghts of time anywhere near that vast are not available for processes involving the earth, given a strict interpretation of Genesis. But the figure of many millions of years was arrived at based virtually entirely upon a uniformitarian interpretation of processes occurring today. This is the same principle that makes up the foundation of uniformitarian theory as a whole, that is, natural processes in the past were essentially the same as what we observe today. The entire creationist model, based on the Genesis record, presumes the opposite: the processes of the past, as manifestations of the handiwork of a sovereign God, are in no way contingent upon the present. So to the creationist the nature of historical events and processes in earth history, such as the speed at which they occurred, cannot be described or measured simply based on contemporary events and processes. Therefore, the creationist who has no problem accepting the *fact* that the earth had an origin, despite the dating discrepancy between the 4.5 billion years of the uniformitarians and the 6000 years or so of the Biblical creationist, need not categorically reject the theory of continental movement solely because of the discrepancy between 100 million years and 4000 years ago—the approximate time of "Peleg's division"[1]—as the times the two respective models would assign to the separation of the continents.

On the other hand, the details provided in Scripture concerning the Flood of Noah not only necessitate the rearrangement of the continental land masses from an originally entirely contiguous alignment, they also require that such a rearrangement was after the Flood. The global pre-Columbian anthropological and zoological distribution could hardly have been achieved within the space of less than 4000 years from a single starting point following the Flood with the present locations of the continents by anything short of twentieth century transportation technology. Consider, for a moment, the plausibility of all human and nonaquatic animal life being assembled together atop Mount Ararat following a flood of worldwide proportions. If the six continents and various major islands of the world were situated then as we find them today, how could the kangaroo find its way from northeastern Turkey to the island continent of Australia? How could the bulky tapir have crossed several thousand miles of Atlantic Ocean to its current habitat in the jungles of South America? How could the remarkable civilization of the Incas, the Mayas, and the Aztecs have had the time first to cross the entire Atlantic Ocean from the Old World to the New and then reach such a level of advancement in the less-than-ideal environment of the South and Central American mountains or swamps in less than 4000 years?

With an imagination that probably is not as stretched as it would seem at first glance, one can visualize the thrusting apart of a single land mass into two separate hemispheres, the subsequently formed gap being filled in with water from the recent Flood. Continental movement is often described as being a cause for mountain building. Sudden and extensive continental relocation, which certainly is no more drastic than a worldwide flood occurring within forty days, *could* account for the appearance of significant yet largely isolated cultures in mountainous environments, cultures which appear to have started at lower elevations.[2] The best examples of these high elevation civilizations are to be found in the Rocky Mountain-Andes Mountain system and on the southern slopes of the Himalaya Range, which is thought to have formed as the result of the Indian subcontinent splitting away from southeastern Africa and colliding with southern Asia. If this last mentioned event took place in a manner consistent with the Creation model, that is, recently and swiftly, it could account for the physiological similarities between the natives of India and many Africans. At the same time, Indians exhibit surprisingly few physical characteristics in common with the peoples of Central Asia or the Orient.

Indeed, the Flood of Noah was responsible for many of the vast animal graveyards and other anomalous fossils that have been discovered around the world. However, a great number of the more curious examples surely were not the result of aquatic devastation but rather the result of extremely severe, and apparently not localized, tectonic activity within the last few thousand years.[3] A classic example is the so-called "Beresovka mammoth," an incredibly well-preserved specimen of a creature indigenous to temperate climates that was unearthed in the early twentieth century in Siberia.[4] The condition of the animal itself along with the circumstances surrounding its death indicate a very unusual situation transpired there, possibly violent and extensive tectonic activity.[5]

Finally, even though there has been some controversy about the geological significance of the intriguingly mysterious reference in Genesis 10:25 to Peleg,[6, 7] a study of the etymological background of the name, "Peleg," shows that the derivation of the word involves meanings that include a physical dividing asunder, as earthquake, and "watercourse," perhaps a reference to a recent formation of a body of water, i.e., the Atlantic Ocean. Whatever the reason Peleg received his name, it is clear that a very significant geological event took place in his lifetime, which appears to have been nearly contemporaneous with the incident at the Tower of Nimrod's Babel,[8] at which time the Lord "did scatter them abroad upon the face of all the earth."[9]

While the "orthodox" theory of continental "drift" is certainly incompatible with the Biblical account of Creation and subsequent events in the earth's history, some significant movement of most, if not all, of the earth's crust is not only compatible with Scripture, it is expressly or indirectly indicated by several passages in the Book of Genesis. The only difference is in the time-frame implied in the Scriptural model, both in terms of the recency of the event and of the speed at which it took place.

*(Continued on page 225)*