violent conditions—such as the Flood—then today's measurements of the rates of geologic processes mean nothing in interpreting earth history. In fact, they not only mean nothing, they are totally misleading. To geologists who are in bondage to the doctrine of uniformitarianism, these sobering words of Sigurdur Thorarinsson should help produce an agonizing reappraisal of the entire concept.

> An Icelander who has studied geology and geomorphology at foreign universities is later taught by experience in his own homeland *that the time scale he had been trained to attach to geological developments is misleading when assessments are made of the forces—constructive and destructive—which have moulded and are still moulding the face of Iceland. What elsewhere may take thousands of years may be accomplished here in one century.* All the same he is amazed whenever he comes to Surtsey, *because the same development may take a few weeks or even a few days here.*[12]

References

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[4]Rusch, Wilbert H., Sr., 1970. Review of Surtsey: the new island in the North Atlantic. (In) Why not Creation, ed. Walter E. Lammerts. Presbyterian and Reformed Publishing Co. Pp. 138-140. Also Whitcomb, John H., Jr. 1973. The World that Perished. Baker Book House, Grand Rapids Michigan. Pp. 142-143.

[5]Thorarinsson, Sigurdur, (Solvi Eysteinsson, trans.), 1967. Surtsey: the new island in the North Atlantic. The Viking Press, New York. Pp. 39-40 (Emphasis added.) (Out of print.)

[6]Thorarinsson, Sigurdur, 1965. Surtsey, island born of fire. *National Geographic* 127 (5): 726.

[7]Reference 5, p. 23.

[8]Fredriksson, Sturla, 1975. Surtsey. John Wiley and Sons, New York. P. VII. (Emphasis added.)

[9]*Ibid.*, Plate 9, facing page 31. (Emphasis added.)

[10]*Ibid.* p. 37.

[11]*Ibid.*, p. 71.

[12]Reference 5, p. 39. (Emphasis added.)

PANGAEA SHATTERED

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Current geological facts and theory support the concept of plate tectonics—continental drift and sea-floor spreading. A short time span for such drift is shown to be reasonable being supported by rapid rates of sedimentation and fossil formation. Further, there is no viable theory for magnetic reversals of the Earth's magnetic field. Plate tectonics may be used, in part, to explain the distribution of flora and fauna as well as some of the ethnic groups on Earth.

Introduction

Since the mid-1960's there has been a radical change in the thinking of the geo-scientists. Before that time it was generally believed that the continents were fixed as to location and the only significant changes that took place were subsidence of sedimentary basins, the formation of geosynclines and mountain building supported by a concept of isostasy. Now, due to many facts that have come to light—magnetic stripes on the ocean floor, geometric fit of the coastlines, strike of shear zones, island chains and island arcs—it is seen that the continents have not always been in the positions they now occupy. In fact, they can be reassembled, much like a giant jigsaw puzzle, into a former single supercontinent called Pangaea (all land), composed of two major parts, Laurasia in the northern hemisphere and Gondwanaland in the southern hemisphere. Information is rather sketchy and inconclusive, being mostly confined to the Applachian and Ural Mountains regarding pre-Pangaea continents.

During the Deluge there could have been some continental drifting, as shown by mountain belts such as the Urals and the Applachian Mountains which appear to be older than the land mass known geologically as Pangaea. This supercontinent lay astride the equator and apparently reached well into both the Antarctic and Arctic regions. The Tethys Sea was an embayment between Laurasia and Gondwanaland and the entire supercontinent of Pangaea was surrounded by Panthalassa, the world ocean and ancestral Pacific.

Noah's Ark, it is suggested, came to rest on the mountains of Ararat near the western end of the Tethys Sea. During the century following the Deluge, Noah and his progeny would have migrated to the area of Babel. At this time the tongues were confounded; and perhaps 100 years later (during Peleg's lifetime) Pangaea started to break up. Between these two events the peoples could have migrated to the farthest regions of Pangaea. At an easy slow pace of 16km per day (10 miles per day) it would have taken at most two years. There would have been no need for land bridges or ships as both man and animals could have easily walked to any part of Pangaea without difficulty. The historical distribution of peoples, vegetation and animals could have easily come about during the two centuries following the Flood; and their separation due to the breakup of Pangaea would have kept them isolated.

Dr. John Piley[1] indicates that there is an ethnic connection between the black-skinned peoples in lands bordering the Indian Ocean, in particular, E. Africa,

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