Most outstanding, perhaps, were the Cro-Magnons who followed the Neanderthals. They were completely modern in appearance. There is no evidence of the kind of dwellings they built. However, in the Alps, remnants of the dwellings of the Swiss lake people are found, which are obviously well advanced Neolithic communities.

The question will be asked: If deterioration or degeneracy could produce men who looked like apes, does that not indicate that they were revert-

ing back to their ape ancestry?

In answer to this question it is important to note the statements of some of the leading authorities to the effect that even the crudest of the fossil men, the Australopithecines, show features never found among apes.

Brow ridges are not necessarily ape features, neither are sloping foreheads or projecting jaws. These features are found in variable degrees in modern man, but anthropologists do not claim that such features of modern man represent ape ancestry.

The author recently saw a hospital patient whose deficient development made him a perfect picture of the most extreme Neanderthal ever found. All of these "degenerate" features may have been produced by faulty fetal development. Furthermore, the nature of the teeth of fossil man shows that they were human and not apes or descendants of apes.

Anthropologists have been guided, since the beginning of their science over a hundred years ago, by the "evolutionary" philosophy. Every interpretation as to origin, movements, anatomy, cultures, etc., has been formulated from that point of view.

The Creation-Flood interpretation has not received the attention that it deserves from most competent anthropologists. Is it not about time that anthropologists took a new look at the evidence, and began to interpret the evidence in a new light, under the frame of reference of a different philosophy—the creation philosophy?

THE FLOOD AND THE ARK

J. Е. Schmich*

There are many questions which could be asked about the Flood, the greatest crisis which the human race has ever faced; and about the Ark, the means whereby some were saved. In this article the author attempts to answer some of these questions, and to suggest possible ways of investigating others.

Because of archeological excavations, numerous ancient civilizations have been identified. Artifacts of human handicrafts, bricks stamped with cuneiform inscriptions, pieces of pottery, ruins of cities have been used to develop stories of these people. Nothing of this sort can be found of the work of antediluvians. All has been destroyed.

Only the story in the Bible remains, which includes two very important facts. First, the moral confusion of that time is reported. Second, the account of the ark contains evidence of high level productive ability of that race of people. And aspects of the present natural environment can be used to corroborate the Biblical account of the flood of Genesis.

The Flood and Available Water

For someone to accept the fact that there was a flood, availability of sufficient water to cover this planet must seem creditable. A modern evolutionist, Heinz Haber, has made this relevant comment:

Were it not for a peculiarity in the earth's

evolution, its entire surface would consist of water extending from pole to pole without a speck of land. If the earth were a smooth sphere the quantity of water in the oceans would be sufficient to envelop the entire globe with a depth of 7,500 feet, in which case this planet would have a truly liquid surface.¹

Today, however, the oceans cover only 71 percent of the earth's area. If there was a flood, then a transition affecting the distribution of water must have taken place some time in the past. Haber has this to say about the present condition of our planet:

The altitude level of about a thousand feet above sea level is found in the wide plains of all continents and it is interrupted only to a small degree by hills and even less frequently by high mountains. The underwater level is represented by the ocean floor which extends over millions of square miles at an average depth of about three miles. It is mostly flat, but it is interspersed at many places by submarine mountain ranges and deep sea trenches.

This surprising partition into two altitude levels has been known for a number of

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decades, but it was always regarded as incidental. However, justice would not be done to the subject of this book if the circumstances were left without an explanation.

Without this partition there would be no dry land because the earth would be covered from pole to pole by one huge world wide ocean.²

These two levels must represent the limits set to drain the flood waters to provide dry land. For the water in the ocean basins is the water that once covered the entire surface of the earth.

Thou didst fix a boundary which they might not pass. They shall not return to cover the earth.³

I believe evidence now exists that there was sufficient water to produce the flood as described in Genesis.

Characteristics of Sea-Going Ark

The other question is, Was there an Ark or is it just a legend? That there was an Ark is quite evident, for without that boat, there could be no human or land animal life on earth today.

Characteristics of the design of the Ark, as given below, are based upon information given in the Bible, and upon information on the design and construction of sea-going ships from modern types back to sea-going ships of ancient people. Ship construction consists of three parts, namely: a keel, a rib-structure, and a caulked planked hull.

To those skeptics who doubt the necessity for building such a large vessel, and to afford some understanding of the magnitude of problems involved in building such a large vessel, the following suggestions are made:

- 1. Take a voyage across the North Atlantic on a slow freighter during a typical stormy period.
- 2. Visit a shipyard and observe construction of a large ocean vessel.

According to Bible authorities, the Ark was a huge boat, equivalent in size to some of the largest ocean liners. In *The Genesis Flood* Whitcomb and Morris have discussed the size of the Ark.⁴

The Ark should not be called a ship, but instead the term "scow" could be applied. A more elegant name would be a house-boat. The Ark cannot be called a ship because of the following reasons:

- 1. It had neither rudder nor propulsion.
- 2. It had no captain or crew. Noah and his family were actually passengers.
- 3. It had no home port nor port of call, yet it floated on a world-wide ocean; the only boat ever to do this. The prime characteristic of the Ark was that it did float.

Based on the above statements, a paradox can

be denoted, for any vessel without rudder control or propulsion could not float in safety for a full year on a world ocean. In fact its life would have been very short.

Here is a most definite point for the contention that the Ark was under Divine control. The voyage of the Ark illustrates the helplessness of the human race and its complete dependence upon the Creator.

The world-wide ocean that existed during the flood had a surface many times rougher than might be experienced today. The ocean water surface is divided by continents. Probably the world-wide ocean of the Genesis flood was swept by wind storms that would make modern tornadoes seem like a zephyr. Consideration also should be given to the effect of forces that caused the deformation of the earth's crust, especially the sudden formation of the ocean basins. Possibly even other conditions disturbed the ocean surface.

It seems safe to assume that the Ark was taken out of the main stream of forces that disturbed the surface of the world ocean. To preserve the lives of the human passengers as well as the animals, Divine direction must have placed the Ark in a position of comparative calm.

Features of the Ark

The Bible contains very little detailed information about the Ark except some overall dimensions. Only a few figures are given regarding size. A few details are given about the interior, the number of decks, and the fact that there was an apartment on the upper deck for the family of Noah.

Nothing is given about the construction of the hull of the Ark except that it was to be made of gopher wood and was to be covered with pitch inside and outside.⁵

The Hebrew word gopher is from the ancient Sumarian giparn, a tree not yet definitely identified. Commentators have suggested that gopher wood may have been lumber from a coniferous tree. To get wood of the required length and cross-section for a huge structure like the Ark, it would be necessary to use lumber from trees of the ante-diluvian period available during the time the Ark was under construction.

Contour of the surface of the Ark hull is not given in the Bible. The hull surface must have been designed for extreme strength. Therefore, it would be curved, stubby and smooth. The ancients of early historical times were not slow to realize that a ship designed to carry much freight had to have a stubby almost round bow and stern.

The hull of the Ark must have had a very heavy and deep keel to provide for stabilization and its hull must have been made extra thick below the water line to provide protection from the heavy debris that probably floated on the ocean surface, debris that would have severely damaged the bottom of a modern ocean liner.

Assuming the Ark had characteristics similar to post-diluvian ships, a complete picture of this great project of the ante-diluvian period would entail a multitude of construction and administration problems usually associated only with modern technological know-how. The basic design represented by the keel, rib and hull construction is similar to the design of sea-going ships of the centuries of the post-diluvian period. method of assembly of such ships varied with different peoples and different times.

Some Other Ark Details

In some respects it seems that the ante-diluvians must have done as did the ancient Greeks.

Probably Noah first built a cradle and then assembled the Ark inside such a structure, because the Bible writer reports that the waters swelled and lifted up the Ark so that it rose high above the earth and floated on the waters.

For a group of passengers and animals to survive on a world-wide ocean for over a year, certain provisions in the design of the Ark were necessary. These are: (1) means for storage of food and water, and supply of fresh air below decks; (2) water could have been drained off the upper deck surface of the Ark into huge vats; (3) food storage must have been provided to keep the food dry and clean; (4) fresh air below deck could have been supplied by a winddeflecting system, and (5) sanitation problems below decks, though serious, must have been solved.

The place where the Ark grounded must have been a place of fertile land, fresh water and an environment suitable for farming. Bible expositors agree that the mountainous land of Armenia is the site of that beach-head, although its location is not known exactly.

When Noah disembarked, his most serious problem was the lack of usable timber, so necessary to build houses for the protection of his family as well as his sons' families. Very possibly wood of the Ark was a suitable source of precious timber. Noah, his sons, and processes of decay could have demolished the scow beyond recogni-

This may have been the story of a scow and eight people. It covers one of the most critical periods of time in the history of human beings as it extends from Adam to Christ.

That this line of chronology was not broken, even during the most catastrophic period of earth's history, is quite evident to those who understand the dreadful significance of the possibility of the Ark sinking. Such a failure was not possible, for with the most helpless of all vessels ever called upon to carry life, even a scow, that vessel became the safest carrier when under Divine control.

References

¹Haber, Heinz. 19XX. Our blue planet. Charles Scribners Sons, New York, pp. 24 and 25. ²*Ibid.*, p. 26.

³Psalms 104.6-9. (All Biblical references have been taken

from the Revised Standard Version.)

4Whitcomb, John C. and Henry M. Morris. 1960. The Genesis flood. The Presbyterian and Reformed Publishing Co., Philadelphia, Pa., pp. 10 and 11.

⁵Genesis 6:14.

6Genesis 7:17 and 18.

PANORAMA OF SCIENCE

More Precambrian Pollen

Additional evidence has appeared that fossil pollen may be found where it would never have been expected according to uniformitarian theory. The account referred to here was written on behalf of the Associacion Venezolana de Geologia, Minera y Petroleo, Apartado 4400, Chacao, Estada Miranda, Venezuela, and is vouched for by several members.¹

Late in 1963, G. C. K. Dunsterville made an expedition to collect orchids around Cerro Vanamo, which is located at the westermost point on the frontier between Venezuela and British Guiana on the mountain known as Wanamu Head. He noted some shale-like beds at the base of a towering cliff of Roraima sandstone and collected samples for their possible paleontological interest.

G. Fournier, palynologist of the Mene Grande Oil Company, processed the samples and recovered well preserved pollen and spores. Subsequently L. Nijssen and J. A. Sulek, palynologists of Campania Shell de Venezuela and Creole Petroleum Corporation, respectively, processed other pieces and recovered identical plant microfossils.

British Guiana Geological Survey specialists had done radiometric testing of the Roraima formation; and, although the exact age determined in years was not stated, the formation was assigned a Precambrian, Proterozoic classification. Hence two horns of a dilemma became evident: 1) Did flowering plants live way back in the Precambrian, a billion years ago? or 2) Is radiometric age dating just a delusion?

Such anomalous results perplexed the survey scientists, and an expedition of qualified geolo-