

An examination of archaeological evidence, linguistics, and literary traditions shows that a local Mesopotamian river valley flood cannot adequately explain the biblical flood.

Creationists and evolutionists disagree about the Flood. Creationists argue that the Bible is a divinely inspired document and its record of the Flood describes an actual historical event, a

The Flood: Just a local catastrophe?

by
William
H. Shea

universal deluge. Evolutionists have responded to the biblical narrative in various ways. Some have dismissed it as unhistorical and unworthy of serious examination. Others, however, have provided an explanation that does not accord with the creationist view. They suggest that there was a historical event that provided the basis for the story, but the story has been blown up out of all proportion from the original event. They think there was a serious local flood in either the Tigris or Euphrates River (or both), and that this flood was built up to such an extent that by the time the story reached the biblical writer or writers, it had been exaggerated into a universal deluge.

The local flood theory

This theory began with an archaeologist. Sir Leonard Woolley was excavating at Ur in southern Iraq in the late 1920s when in one particularly deep trench his workmen came to a sterile deposit of clay without any further signs of civilization. He had his workmen continue to dig through this level. When they got deeper,

they came to another layer of occupation. Standing in the trench with one of his workmen and his wife, he asked the question, "You know what that is, don't you?" The workman looked puzzled but his wife promptly responded, "That's Noah's Flood!" And so was born the theory of the local flood in Mesopotamia as an explanation for the biblical flood.

After World War II, Sir Max Mallowan, while digging at Nimrud (Calah), proposed a revision in Woolley's theory. He wanted to assign the biblical flood to a different level of flood deposit in Mesopotamian sites. While Woolley's flood was dated to approximately 3500 B.C. in conventional archaeological dating, Professor Mallowan proposed a date of 2900 B.C. to the stratum that gave rise to the Mesopotamian and then biblical flood stories.

Our purpose here is not to evaluate or endorse these archaeological dates, but to use them as a basis for comparison. The local flood theory raises many problems, which may be examined from three different perspectives: archaeology, linguistics, and literary traditions. Such an examination will determine whether the biblical flood story ultimately goes back to the story of a local river flood in Mesopotamia or to the Bible as a historical record of a universal deluge.

Test of archaeology

When it comes to archaeology, there is considerable difficulty in trying to find the right stratum in various cities to connect with the biblical flood. That is because there are different flood levels at different Mesopotamian cities, and other cities with no flood levels at all. Thus the picture of the local floods in Mesopotamia is like a patchwork quilt in which many of the patches differ.

Consider the deposits from the earlier period that Woolley favored as providing an explanation for the Flood. These have been found at only two sites: Ur and Nineveh. The differences between these two sites should be noted. Nineveh is on the Tigris in northern Iraq. Ur is located on a canal off of the Euphrates River in southern Iraq. Thus, these two cities are at opposite ends of the country and are located on different rivers. None of the other sites, between them that have been excavated have produced the same "flood" layer.

Woolley's evidence shows that the flood did not even cover all of the city of Ur. The local inhabitants may have considered the flood serious, but it was hardly the type that could have been built up into universal proportions.

Well, what about the flood level from a later period, about 2900 B.C.? Here at least we have four cities involved: Kish, Shuruppak, Uruk (biblical Erech), and Lagash. Kish is the northernmost of these four cities and located near Babylon. Shuruppak was located on a canal in the center of southern Mesopotamia. It is famous in literary tradition as the city from which Atra-hasis, the flood hero, sailed. Uruk is located on the same canal as Shuruppak but is quite a bit farther south. Lagash is located on a canal farther to the east in southern Mesopotamia. The sterile soil layer at Lagash, however, probably did not come from a local river or canal flood but was rather from the foundation of one of the temples of Lagash, according to Andre Parrot, who excavated Telloh in 1930-1931.

The excavations at Kish led to four different levels of clay, not one. They extended over a period of about four centuries, according to the excavators. The earliest was dated to about 3300 B.C., the latest to about 2900 B.C. The last or uppermost level was about one foot thick. The question then is, which one of these four local flood levels should be chosen as the basis for building a flood legend for the biblical text? None of them seems to be that significant, and the multiple layers dampen enthusiasm for identifying any of them with the biblical story.

The other two sites might seem to be a little more legitimate candidates. Shuruppak, the modern Tell Fara, was excavated by Eric Schmidt. In his 1930-1931 excavations, Schmidt found a deposit of alluvium two feet thick that dated to the early third millennium B.C. Uruk was located on the same canal but quite a distance farther south. Julius Jordan in his 1929 excavations found there a sterile stratum five feet thick.

Thus, of the four sites involved in this time period, one had multiple levels of local flood deposits; one had no flood deposit at all; and two had one level of deposit. That about matches with the two sites of the early period, which had deposits too. So they play off evenly against each other, the early and the later

floods. Floods have continued until modern times. There was a large flood of central Iraq in 1948.

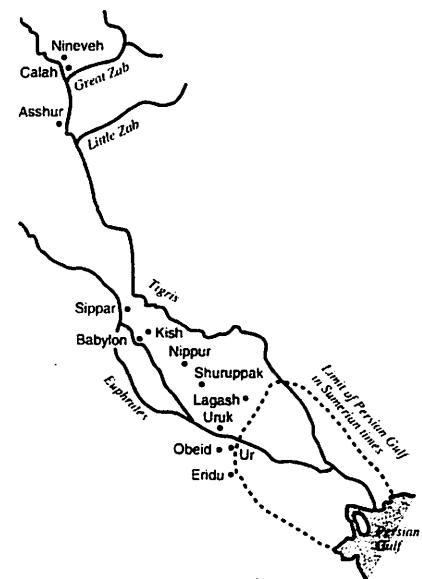
It is interesting to note that most of these sites were excavated at about the same time, from 1929 to 1932. Thus the local flood story seems an idea that was in vogue around 1930, triggered by Woolley's suggestion.

When the pattern is considered as a whole, however, there is very little archaeological proof for such a theory. The flood deposits by the rivers were hit and miss, sometimes affecting one city and not another one nearby. Of the six sites studied from this point of view, only one of them was located on a major river, Nineveh on the Tigris. The rest were located on canal branches off the rivers, not the rivers themselves. Thus, one should probably call this theory the local Mesopotamian canal theory of the Flood.

The test of linguistics

People who lived in this area during these river floods were well acquainted with them and they described them in various ways. They had another word, however, for the Great Deluge. That word was *abubu* in Akkadian. This word was used for the Great Deluge through which the Flood hero brought his family by means of the ark. The term was never used for local river floods. It was used in one other way, however, to describe the onslaught of the Assyrian army under certain kings. In these cases, the Assyrian army overwhelmed their enemies like the *abubu*. This comparison is far more valid when it is compared with the Great Deluge of Mesopotamian tradition, rather than with a local river valley flood. That is how strong the Assyrian kings wanted to say that they were.

Biblical Hebrew does something similar. It has a special word for the Noahic Flood, and that word is *mabbul*. This word is used in only two places, in Genesis 6-9 and Psalm 29. Psalm 29 says that "The Lord sat enthroned at the Flood" (v. 10, NKJV). This means Noah's flood, not just any river valley flood. This is a psalm about the storm of God's power. Baal is not the storm god. Yahweh is, and He controls the elements of nature to suit His purposes. This was true even during the greatest eruption of nature that this world has seen in the



Map of Mesopotamia, showing places connected with major flooding.

past, the Noahic Deluge. Just as the kings of Assyria compared the forces of their army to the greatest power ever seen in nature, so Yahweh compared His power over nature to the greatest demonstration of His power ever seen on earth.

There may be a relation between these two words, if the one in East Semitic added the consonants when it came over into West Semitic, or vice versa if the term travelled in the opposite direction. This yields the composite term of (*m*)*abubu(l)*. The etymological original of the word is obscure in both languages, but what it was applied to is eminently clear: It was meant only for the Great Deluge in both languages, and was not used for any local river valley flooding.

The test of literary traditions

These Flood stories have two main elements. One deals with the extent of the Flood in terms of description, the other deals with its results. In both cases, in both cultures, and in both languages, the difference between the Great Flood and local floods was well known and recognized. The first aspect of this is the subject of inclusive terminology as found in the biblical Flood story. The question here is, How inclusive was that lan-

guage? Gerhard Hasel has covered this subject in his article "The Biblical View of the Extent of the Flood" (see "Bibliography"). As Hasel points out, the phrase "the face of all the earth" is used 46 times in Genesis 6-9. The phrase "all flesh" is used 13 times. The phrase

Floods on Mars?

How could Mars have a flood? Yet how else would you explain the presence of interconnected valley systems, giant scour marks, eroded crater walls and huge channels? It appears that a giant catastrophic flood once occurred on the "red planet," with giant rivers more than 60 miles (100 km) across, perhaps as deep as 1500 feet (500 meters), with water moving at the speed of up to 120 miles (200 km) per hour.¹ Mars may have had an ocean that contained more water than the Caribbean and Mediterranean Seas combined. It has been estimated that the floods may have filled the Martian ocean in a few weeks.

Where did that water come from and where is it now? The water appears to have gushed with great force from large cracks in the surface of Mars, like the "fountains of the deep." Why it suddenly gushed out and where it went are unanswered questions. But the evidence of flooding is there. One can get an impression of what it must have been like by visiting the Channeled Scabland of eastern Washington, which was also formed by catastrophic flooding over a volcanic landscape.² Perhaps one of the Martian space probes being sent in the next few years will reveal some of the mysteries of the Martian floods.

"every living thing" is used three times. And Genesis 7:19 uses "under the whole heaven." These phrases refer to the extent of the Flood. It is true that in Hebrew the word *all* does not always mean 100 percent, but here in Genesis 6-9 where it is backed up by the multiplicity of such phrases, it certainly should mean that.

The Gilgamesh version of the flood story says the same thing, "all of mankind had returned to clay" (XI:133). Utnapishtim, the Flood hero, opened the hatch of his ark and looked for dry land. It is also interesting to note that it was not the rise of the rivers from the melting snows in Anatolia that caused the Flood. According to Utnapishtim, it was the coming of the storm that caused the flood: a storm that came out of the clouds accompanied by lightning in the sky. When he got ready to test the possibilities of leaving the ark, he sent forth birds too, like Noah. The first two birds, a dove and a swallow, came back to the ark because, "no resting place for it was visible" (XI:148, 151). There is no question here about the vast, earth-encompassing extent of the Flood.

The part about the actual storm of the Flood is missing from the tablet of the Sumerian Eridu Genesis and the Atra-hasid epic. But their surviving portions tell us about the aftermath in the pantheon. An extraordinarily strong argument broke out among the gods. Most of them were sorry that they had

brought the Flood and destroyed humankind. Enlil, however, the prime minister god who was the chief one to order the Flood, had the opposite reaction. He found out that some people had escaped the flood and survived. He was enraged. The purpose of the Flood was to wipe out all of humankind, and the fact that a few had escaped was utterly contrary to his purposes. Hence his rage. He had been tricked by Enki (Ea), the god of wisdom, who had told the Flood hero to build a boat and take his family and animals aboard the boat to escape the Flood.

Some of the dialogue over this dichotomy can be picked up in the Atra-hasid epic. The birth goddess who had given shape to humankind regretted the decision to bring the Flood: "In the assembly of the gods, How did I, with them, command total destruction?" She laments that Anu, the chief god, agreed with this decision, "He who did not consider but brought about a flood and consigned the peoples to destruction?" Again she asks where the gods have gone: "They, who did not consider but brought about a flood and consigned the peoples to destruction? You have decided upon total destruction" (*Atrahasis*, pp. 95, 97, 99). The anger of Enlil is revealed when he questions, "Where did life escape? How did man survive in the destruction?" (*Ibid.*, p. 101). Enki has to confess that he was "responsible for saving life." The same idea is conveyed

1. V. R. Baker, "The Spokane Flood Controversy and the Martian Outflow Channels," *Science* 202 (1979), pp. 1249-1256.
2. V. R. Baker *et al.*, "Ancient Oceans, Ice Sheets and the Hydrological Cycle on Mars," *Nature* 352 (1991), pp. 589-594.

The worldwide distribution of Flood stories; each dot represents a local version. Adapted from *Seventh-day Adventist Bible Dictionary*, rev. ed (Washington, D.C.: Review and Herald Publ. Assn., 1979), p. 374.

by the information that Enki gave the Flood hero Ziusudra in the Sumerian story. In warning him to prepare for the coming of the Flood said, "the decision, that mankind is to be destroyed, has been made: a verdict, a command by the [divine] assembly, cannot be revoked" (*Journal of Biblical Literature* 100 [1981]: 523).

From all of this, it is clear that it was the intent of Enlil to destroy all of humankind with the Flood. The gods in the assembly voted to go along with him in this, but regretted doing so later. But when some of humankind did escape, Enlil's purpose was thwarted and he was enraged because he had set out to destroy every living human being, and it was only because Enki tricked him that some people escaped.

The biblical flood story comes close to that but makes a moral distinction that the Mesopotamian version does not. God was disgusted with the wickedness of humankind, but decided to rescue the few righteous in the world through the use of Noah's ark (Genesis 6:4-8). One cannot do this on either the biblical or the Babylonian scale with only a local river valley flood. A universal deluge that virtually wipes out humankind is required. ☐

William H. Shea, (M.D., Loma Linda University; Ph.D., University of Michigan), is an associate director of the Biblical Research Institute at the General Conference. His address is 12501 Old Columbia Pike; Silver Spring, MD 20904-6600; U.S.A.

Bibliography

- On local Mesopotamian river floods and the archaeological evidence that they have left behind, see Lloyd R. Bailey, *Noah: The Person and the Story in History and Tradition* (Columbia: University of South Carolina, 1989), pp. 28-37.
- For the Sumerian flood story see Thorkild Jacobsen, "The Eridu Genesis," *Journal of Biblical Literature* 100 (1981): 513-529.
- For the Old Babylonian flood story see W. G. Lambert and A. R. Millard, *Atra-hasis: The Babylonian Story of the Flood* (Oxford: Clarendon, 1969).
- For the Neo-Assyrian flood story see J. B. Pritchard, ed., *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton: Princeton University, 1955), pp. 93-96.
- For the biblical language for the extent of the Flood see Gerhard F. Hasel, "The Biblical View of the Extent of the Flood," *Origins* 2 (1975), pp. 77-95.

Geologic Evidence of the Genesis Flood

An event such as the flood narrated in Genesis would be expected to leave significant evidence in earth's rock layers. When these layers are examined, a number of important findings suggest a Flood interpretation. During a worldwide flood, one would expect both rapid and widespread catastrophic activity, and evidence for this can be seen. However, we need to keep in mind that in dealing with a past event such as the Flood, we are dealing with interpretations instead of direct observation.

Here are some features of the rocks that point to a worldwide flood.

1. Marine sediments on the continents. Around the world, about half of the sediments on our present continents come from the sea. How did so much marine material come to be on the continents? We would expect it to stay in the ocean. The widespread distribution of oceans on the continents is certainly a different situation from the present—and one that is consistent with a worldwide flood.

2. Abundant underwater activity on the continents. Evidence of this is seen in large ancient underwater "submarine fans" and other underwater deposits such as turbidites found on the continents. Turbidites are masses of rocks, silt, sand, and clay particles laid down in layers underwater. Studies of turbidites have shown that huge deposits several meters thick and covering as much as 100,000 square kilometers can be laid down in the oceans in a matter of hours following earthquakes. Thousands of sediment layers on the continents, once thought to have been deposited over long ages in shallow water, are now seen as rapid turbidite deposits, as expected during the Genesis flood.

3. Widely distributed, unique sediments. Many geologically unique terrestrial sediment layers cover such vast areas that it is difficult to believe that they were deposited slowly under non-catastrophic conditions. For ex-

ample, in the western United States, the Shinarump conglomerate, which is around 30 meters thick, covers almost 250,000 square kilometers. The 100 meter-thick Morrison Formation, which contains many dinosaur remains, extends over 1,000,000 square kilometers and the petrified-wood-bearing Chinle group covers 800,000 square kilometers.

4. Lack of erosion at the gaps in the sedimentary layers. Frequently there are gaps in the sequence of the sedimentary layers of earth. We can identify these gaps by comparison with other series of layers and fossils found elsewhere. Often a widespread geological layer, dated to a particular time by the standard geologic time scale, will lie just beneath one assumed to be many millions of years younger. The layers representing the long time assumed between the layers are missing in these particular localities. Yet at these gaps the lower layers show little evidence of the erosion that would surely have taken place if they had been around for many millions of years. In fact, according to present average rates of erosion, the layers involved—and much more—should be eroded away in this length of time. The virtual lack of erosion at most of these gaps suggests rapid deposition, as would be expected of the Flood, when there was little time for erosion.

5. Incomplete ecological systems. In several fossil-bearing layers, such as the Coconino Sandstone of the Grand Canyon region and the Morrison Formation of the western United States, we find good fossil evidence for animals, but little or no evidence of plants. The animals would require plants for food. Yet only a few plants have been found in the Morrison, which harbors many dinosaur remains, and no plants have been found in the Coconino, with its hundreds of animal trackways. How could the animals survive for millions of years as suggested for the deposition of these formations without adequate nutrition?

The sorting activity and rapid action expected by the waters of the Flood appear to be a more plausible explanation.

—Ariel A. Roth, Ph.D.
Geoscience Research Institute