

and thereby precipitating the sudden collapse of the empire. The protracted drought may then be seen as a significant factor in the subsequent migration of foreigners into the heavily irrigated areas of Mesopotamia: the Guti from the Zagros Mountains to the east at the time of the Akkadian collapse and—in much greater numbers—the Amorites from the west during the Ur III period. A brief dry spell at circa 1300 B.C.E., perhaps coincident with the

end of the “International Period,” was followed by fluctuating, but overall above average rainfall throughout the first millennium B.C.E., during the time of the Assyrian, Babylonian, Persian, Macedonian, and Seleucid empires. Although these coincidences between climatic variations and political events are suggestive, not all ancient historians are convinced of their connection.

TOPICS IN GEOGRAPHY

ANCIENT MESOPOTAMIAN WORLDVIEWS

The Creation of the Universe. There exists no single Mesopotamian text solely devoted to the topic of creation. Rather, there are many, often conflicting, accounts embedded within larger works. None is similar to the account in Genesis in the Hebrew Bible, with its ordered creation culminating in the formation of mankind. Perhaps the most-detailed Mesopotamian creation account is to be found in the so-called Babylonian Genesis, *Enuma elish*. The poem opens with the creation of the first gods, male and female, from the mixing of the waters of the primeval ocean, Tiamat, with the primeval fresh waters, Apsu, her consort. As a result of this union, a second generation of gods is born. Their clamor is disturbing to Tiamat and Apsu. When Apsu and his vizier Mummu attempt to destroy the young gods, one of them, Ea, magically defeats Apsu and Mummu. On Apsu’s corpse, Ea builds his home, where he and his wife, Damkina, give birth to Marduk. Tiamat, who has taken a new spouse, Kingu, and given him the Tablets of Destinies, now undertakes to avenge the death of Apsu. In exchange for supreme and undisputed authority over the gods, Marduk faces Tiamat and her hordes in battle and defeats them. From her corpse, Marduk erects the heavens and the earth; her eyes become the sources of the Tigris and Euphrates Rivers. Marduk also arranges the stars, moon, and sun in the visible heavens and sets them on their courses. He completes his task by fashioning the cosmic bonds that hold the universe together and its parts in place.

The Structure of the Universe. Despite diverse traditions that treat of the creation of the heavens and the earth, the ancient Mesopotamians, throughout most of their history, maintained a remarkably consistent picture of the universe itself. They envisioned it as consisting of a series of

superposed levels separated from each other by open spaces. The uppermost levels were where the gods of heaven lived. Beneath them were the starry sky, then the earth’s surface, then the underground fresh waters of the Apsu, and, at the bottom, the underworld of the dead. Presumably the floor of each level served as the roof for the level beneath it. A first millennium B.C.E. Neo-Assyrian text identifies the floors of each level as being made of specific stones. The floor of the starry sky was said to be made of jasper, which can vary in color from sky blue to sunny yellow to the reds of sunrise and sunset to cloudy gray—all the colors of the sky as seen from the earth’s surface. A similar tradition is found in the Hebrew Bible, where the heavenly floor is described as made of (blue) sapphire bricks. The fixed stars were inscribed onto the undersurface of the sky, which rotated once a day. The sun, moon, and five visible planets moved about beneath this floor, although no preserved Mesopotamian text says precisely how. The Assyrians described the “disk” of the sun as being sixty *beru* in diameter while that of the moon was forty *beru*. (One *beru* is over ten kilometers or somewhat more than six miles.)

The Earth. First millennium B.C.E. cuneiform sources provide a fairly consistent picture of the Mesopotamian conception of the earth’s surface as a single circular continent amid a surrounding ocean. These texts include an incised map of the world with explanatory captions; a description of the realm of Sargon of Akkad, the third millennium B.C.E. “king of the world”; and descriptions of foreign lands listed in itineraries, especially of military campaigns undertaken by several Middle and Neo-Assyrian kings from the fifteenth to seventh centuries B.C.E. At the center of the world are the lands of Assyria

and Babylonia, which are traversed by the great Euphrates and Tigris Rivers. To the north are the mountains of Anatolia, where the Tigris and Euphrates rise, and beyond, the Black and Caspian Seas. To the northeast are the lands of Urartu encircling Lake Van, and beyond, the Caucasus Mountains. To the east lie the Zagros Mountains, and beyond, the vast Iranian plateau. To the southeast, the Lower Sea (the Persian Gulf) leads to Dilmun, the island of Bahrain in the Gulf, and across the sea, to Magan and Meluhha. To the west lies the Upper Sea (the Mediterranean) with its coastline reaching south to Egypt; in this sea lie the islands, foremost Cyprus and Crete.

Sources:

Alexander Heidel, *The Babylonian Genesis: The Story of Creation*, second edition (Chicago & London: University of Chicago Press, 1951).

Wayne Horowitz, *Mesopotamian Cosmic Geography*, Mesopotamian Civilizations 8 (Winona Lake, Ind.: Eisenbrauns, 1998).

CARTOGRAPHY

The Oldest Map? A wall painting in a shrine at the site of Çatal Hüyük in central Anatolia, while not a map in the strict sense, may be the oldest cartographic artifact. Dated to circa 6200 B.C.E., this painting was interpreted by the excavator as representing a bird's-eye view of the ancient site, the largest known Neolithic town in the Near East, with its congested rectangular houses packed tightly against each other without intervening streets. Behind the town, there is a view of an erupting volcano.

District Maps. The oldest map on a cuneiform tablet was found at Yorgan Tepe (ancient Gasur, later renamed Nuzi), dated to the Akkadian period (circa 2334 – circa 2193 B.C.E.). On it are indicated two ranges of hills bisected by a watercourse, nearby cities, and even the cardinal directions. From later periods come district maps in the region of Nippur, one showing an agricultural area near the city, another perhaps used as a reference tool for tax collectors.

City Maps. Clay tablets bearing ancient maps of the cities Ashur, Babylon, and Nippur—or sections of these cities—are known. When the modern excavators of Nippur superimposed a transparency of the map of the fourteenth-century-B.C.E. Kassite-period city over aerial photographs and their site plan, they noted that the ancient map fit reasonably well. The observed features of the site on the old map include the walls and their correct lengths, the ancient course of the Euphrates west of the city, the area called the “Gardens in the City,” and the general trend of the “Canal in the heart of the City.”

A Map of the World. On the obverse of a Neo-Babylonian period (early to mid first millennium B.C.E.) tablet is a map of the world. A single circular continent is shown as a disc surrounded by an ocean, which is indicated by a double ring. The Euphrates, originating in the mountains to the north, flows through the middle of the

earth. Babylon, indicated by a rectangle placed just above the middle of the map, sits astride the river. Cities and districts are indicated by circles with cuneiform captions, but not all are in their correct relative geographical order. Five triangular areas, perhaps distant islands in the sea, radiate from the outer circle. (The accompanying text suggests that there were originally eight triangles.) The northernmost region is labeled “where the sun is not seen,” suggesting that the Babylonians, during the first millennium B.C.E., may have known of the polar night. Internal evidence suggests that the map was originally composed in the late eighth or seventh century B.C.E. and the present copy made one or two centuries later.

Field Plans. Field or estate plans are the most common kinds of maps known from ancient Mesopotamia. The drawings are often rough sketches with simple notations in the plan or along the borders. In the late third millennium B.C.E., measurements were given to calculate little more than the area of the field in order to assign the proper quantity of seed grain or to collect the appropriate amount of harvest. With the increase in private ownership of land in the early second millennium B.C.E., notations included compass directions and the names of the adjacent property holders, in addition to the basic field measurements. Field plans of the first millennium B.C.E.—both of cultivated land and lots with, or intended for, buildings—appear to have served as surveys to be used in conjunction with title deeds.

Building Plans. Among the many statues of the late third millennium B.C.E. city ruler Gudea of Lagash, perhaps the best known is the one called “Architect with Plan.” In this nearly life-size statue, Gudea sits with his hands clasped reverently at his chest. On his lap rests a tablet bearing an engraved architectural plan of the E-ninnu temple, together with a stylus and a graduated ruler. Outlined in this orthogonal projection are the thick walls of the temple enclosure; details include the reinforced external buttresses and six fortified doors flanked by towers.

Itineraries. Ancient maps would not have been practical for a traveler to use when he wanted to find his way over any distance. A merchant, for example, would have needed to know how far he had to travel on any given day before he could find food and shelter. Several tablets are known, however, that either give actual distances between major resting places or list resting places that are spaced at approximately one-day travel intervals. Such lists have been of great value to modern historians attempting to locate on the ground cities whose names are mentioned in ancient texts. One such text, known from three later copies, gives the day-by-day listing of cities, towns, and caravansaries stopped at during a journey that was apparently taken by king Rim-Sin (circa 1822 – circa 1763 B.C.E.) from his capital city, Larsa, in southern Mesopotamia, to