The Road to Sumer: A Look into the Development of Mesopotamia’s Early Cultures Using the Multilinear Evolution Theory

Kristina Countryman  
Department of Anthropology  
Florida Atlantic University - Beta of Florida

People in the western world today cannot imagine a life outside of the capitalist societies in which they live. Nor do they take into account the novelty of this subsistence. Considering the 200,000 years of our modern human existence, the way we live today is incredibly unique. Even our decision to become agriculturalists, some 10,000 years ago, is a very modern advancement! We have spent the vast majority of our existence subsiding by hunting and gathering. This shift in subsistence methods is incredibly important. Living an agricultural, and therefore, sedentary life, is significantly more labor intensive, and requires a considerable amount of planning and organization. Our agriculturalist ways soon led to the development of villages, towns, cities, and eventually highly structured states, or “civilizations” (Wenke, p.269; 1999).

This phenomenon of “civilizations”, (besides the development of agriculture itself), is one of the most mysterious events in all of human history. The question is this: why? Why did complex state level societies emerge? Why did we decide to settle down in large cities with a centralized, governmental rule, rather than abiding by our own rules in small hunter/gather bands? While there are many theories on this topic, they are somewhat limiting because most seem to address the issue of how rather than why. Even to this day, there is no single accepted theory, and some theories seem to fit certain civilizations better than others. In this paper I wish to address the question of “why” utilizing the development of ancient Mesopotamia as an example, in conjunction with the Multilinear Evolution theory.

The theory I found to be most effective with the information on Mesopotamia was the Multilinear Evolution theory proposed by the near eastern archaeologist, Robert McCormick Adams. Multilinear Evolution theory assigns no one event as the cause of the development of the state, but rather, several events
leading to its formation. Factors such as hydraulic agriculture, the collecting of and redistribution of surpluses, economic specializations, economic concentrations, growth in administration, and warfare are all included as causes to the formation of a state (Wenke, p.332; 1999). I believe that it was these factors, experienced in the early cultures of Halaf, Samarra, ‘Ubaid, and the first state of Uruk, that led to the rise of the Sumerian civilization in ancient Mesopotamia.

The Environment of Mesopotamia

In the area known as Mesopotamia, which literally means “the land between two rivers”, is where the earliest civilizations arose. The rivers are the Tigris and the Euphrates, which run mainly through the modern day territory of Iraq. However, the term “Mesopotamia” now seems to be more inclusive, referring to the areas surrounding Iraq and the two rivers, namely, north-east Syria, south-east Turkey, and south-west Iran (Reade, p.4; 1991). The heartland of Mesopotamia, the place where the first complex settlements were drawn, is concentrated in the southern alluvial flood-plains of the Tigris and Euphrates rivers that extend out into the Persian Gulf. Mesopotamian soil is very rich and well-suited for agriculture due to the constant alluvial deposits from the rivers. The climate of Southern Mesopotamia itself is very hot and desert-like, and provides little rainfall. Yet, with proper irrigation from the rivers, this land makes for ideal agricultural conditions. The Zagros and Taurus mountains surrounding Mesopotamia also served ancient farmers well, as their green foothills provided excellent grazing grounds for sheep, goats, and cattle (Wenke, p.388-89; 1999). These highland areas also provide a more temperate environment, opposite of the desert environment in the southern plains, in which rainfall agriculture can be practiced.

Early Indicators of Complexity: Hassuna, Halaf, and Samarra

Many archaeologists have tried to define what exactly a civilization, or state society, is. The most agreed upon characteristics of a state society include: social stratification, agricultural intensification (i.e. irrigation), economic specialization, centralized authority, urbanism, warfare, and monumental architecture (Wenke, p.332; 1999), (Matthews, p.95; 2003). These characteristics of a state society are almost identical to what Robert McCormick Adams lists as the causes of a state society. With all of these characteristics stated, it is now possible to analyze their presence in the early cultures of Mesopotamia.

Mesopotamia was home to several Neolithic farming communities well before we define it as a state-level society with the beginnings of the Sumerian civilization. Most famously associated with early Southwest Asian complexity are the early Neolithic sites of Catal Huyuk in Turkey, and Jericho in Jordan.
Although these sites are not in the Mesopotamian heartland, but rather in the surrounding areas, they are still considered key sites in the archaeological sequence of Mesopotamia. The most notable early indicators of rising social complexity within Mesopotamia came with two ceramic styles known as Halafian and Samarran. These styles spread across large areas of Mesopotamia, which shows not only increasing trade, but also increasing uniformity to one culture. Hassuna, which predates Halafian, was another ceramic style associated with this cultural transition period however it was not as widespread as Halafian and Samarran. Hassuna pottery seems to be restricted to the Northern Mesopotamian area, and is simpler in shape and decoration than that of Samarran and Halafian (Reade, p.15; 1991).

Much of what archaeologists use for a chronology of the past is based on the typology of pottery styles or other material remains. This is because ceramic styles changed over time in art styles, forms, and even methods of production. This technique of dating is known as relative chronology, and it allows archaeologists to determine the age of a site by relating its material remains to the material remains found at other sites, and obtain an age without using an expensive absolute dating method, such as carbon dating. These cultures are also named after the sites from which they were found. For example, Tell Halaf (Halafian), Samarra (Samarran), Tell Hassuna (Hassuna), and the later sites of Tell al-‘Ubaid (‘Ubaid), Uruk, and Jemdet Nasr (Reade, p.15; 1991), (Matthews, p.65; 2003). Halafian culture not only showed a step towards higher civilization with the widespread use of its pottery, it also showed progression with the first appearance of metal use in Mesopotamia. The appearance of seals is also seen here for the first time, with the use of the clay stamp seal (Riley, p.29-31; 1969). Finding seals is especially important when tracing rising civilizations, as seals were generally used for administrative purposes of tracking and controlling goods, indicating a rising level of administrative authority (Wenke, p.407; 1999).

**Rising complexity in the ‘Ubaid Period**

While the Halafian and Hassuna cultures were present in the North, and the Samarran in central Mesopotamia respectively, another style soon flourished in the South. This style has since been recognized as belonging to the culture that holds a critical place in the transition into the state-level society. The ‘Ubaid is this critical culture, replacing the widespread Halafian culture, and as Riley (p.31, 1969) asserts, “(‘Ubaid) represents a considerable advance over the peasant cultures of the past.”
‘Ubaid became more widespread than any of the previous cultures, spreading over the entire area of Mesopotamia, and was probably “fully fledged” as early as 4350 B.C. (Daniel, p.67; 1968). However, ‘Ubaid occupation is usually thought to have begun as early as 6,000 B.C., to as late as 3,700 B.C. One of the main factors classifying ‘Ubaid culture as more advanced is its system of agriculture that produced an economic surplus. Having a surplus of goods allows for more economic specializations, such as full-time potters or builders, which are needed to support the high, state-level society. Simple irrigation systems were in place to effectively sustain more crops, and free more people of agricultural labors. By efficiently cultivating barley, wheat, dates, along with fishing and the use of goat, sheep, and cattle products, the ‘Ubaid culture showed the beginnings of a high society (Wenke, p.400; 1999), (Reade, p.20; 1991).

The ‘Ubaid culture was quite long lived, yet not much of its details are known. Archaeologists have the most information from the later years in the ‘Ubaid culture, starting at around 4,000 B.C. Due to the constant flooding of the rivers, little is known of the early ‘Ubaid settlements, as most have been destroyed or buried deeply beneath the sediment, making them hard for archaeologists to excavate. Also, many later Uruk settlements were built directly on top of the ‘Ubaid settlements, again, making them harder to excavate. Matthews (p.102, 2003), states only a few productive early ‘Ubaid sites at Eridu, Tell al-‘Ubaid, and Tell el-‘Oueili. For later ‘Ubaid settlements he lists twice as many sites: Eridu, Ubaid, Ur, Uruk, Tell Abada, Tepe Gawra, and Susa (Matthews, p.102, 2003).

The ‘Ubaid culture also has evidence for trade, which could not only be due to a lack of natural resources, but also due to its prime location on major waterways. Although the southern alluvial plains create excellent soil for farming, due to the annual flooding of the rivers, it also creates a few negative consequences as well. First, there is no immediate access to stone, which has obvious usefulness in the production of tools and structures, but there is also no supply of sturdy wood. Because of this deficiency, almost every structure built in ‘Ubaid times was made of sun dried mud brick, with only small amounts of stone used mainly in the platforms of the structures (Wenke, p.403; 1999), (Daniel, p.67; 1968).

From the Late ‘Ubaid period, several artifacts have been recovered containing, or made from carnelian and lapis lazuli stones, which come from the surrounding lands of Iran and Afghanistan, also indicating trade (Matthews, p.104; 2003). Living next to waterways is also an important factor for trade as it makes travel easier. Archaeologists know that peoples of Southern Mesopotamia
built and used reed boats, so it is easy to imagine travel up the two rivers or even
in the Persian Gulf, as a very possible event (Riley, p.31; 1969). These routes
would also be much easier than routes over land, due to the several harsh factors
associated with land travel, such as climate conditions, physical geography, and
lack of sophisticated transportation. Another important factor indicating a rise in
civilization, was that the ‘Ubaid culture spread universally over a large amount
of land. Unlike Halafian and Samarran cultures, which were only widespread in
northern Mesopotamia and Central Mesopotamia, ‘Ubaid spread from the South,
encompassing all the regions of Mesopotamia. ‘Ubaid remains have been found
in central Turkey, Iran, and Syria (Wenke, p.403; 1999).

The presence of towns in the ‘Ubaid period also signify a growing civiliza-
tion. Since the previous peoples in the area were simple farmers without dense
populations, the beginnings of aggregation is a very significant change toward a
state-level society. The site of Eridu is one of the earliest cities known in this
region, and quite possibly the world, with a date of around 4750 B.C. Eridu had
a cemetery, which is usually a phenomenon associated with cities, as earlier
peoples simply buried their dead underneath their houses. (Wenke, p.400; 1999),
(Daniel, p.67; 1968). The earliest known structure at Eridu is most likely a tem-
ple. Finding a temple is significant for many reasons. First, it is obvious evi-
dence for monumental architecture, which is a characteristic of a state level so-
ciety. Second, it shows the growing role of religion on society, and its confor-
mity to one set of ideals. Conformity to some set of rules or authority is neces-
sary in order for a bureaucratic state to function. Temples also seemed to have
served as storing facilities for agricultural surpluses, and in this manner, could
offer some insurance for a large population if there was a bad harvest or a
drought (Matthews, p.102, 105; 2003). There have been other mud brick build-
ings found in, and surrounding ‘Ubaid areas, but these structures are not the
large public works present in very complex civilizations. This indicates that the
‘Ubaid period was only a transitional period, not what most archaeologists
would consider a full state-level society (Wenke, p.403; 1999).

While the ‘Ubaid culture possessed some features characteristic of a
state-level society, it still cannot be clearly defined as such, as much of the evi-
dence is debatable. As mentioned earlier, evidence has been found for increased
craft specialists in pottery making. However, there isn’t any evidence for a cen-
tral authority controlling the production of the pottery. Evidence for a central
authority controlling the distribution of goods was found though, with the pres-
ence of seals (Matthews, p. 104,107; 2003). There also has not been any clear
evidence for social stratification in the ‘Ubaid period. Although, there have been
small amounts of beads of carnelian and lapis lazuli found at Tepe Gawra,
which are usually associated with prestige and upper-class peoples in later peri-
ods (Matthews, p.105; 2003).
The State of Uruk

The ‘Ubaid period ended around 3,600-3,500 B.C. with the start of the Uruk period. Uruk has been identified as the period when the first clearly defined state arose in Mesopotamia. I say clearly defined because while the previous cultures have had some of the characteristics of a state level society, Uruk indisputably represents all of the characteristics. Uruk period settlements are present in many sites throughout Mesopotamia, most famously in the city of Uruk (Warka), after which the period is named. As with the ‘Ubaid culture, Uruk settlements were very widespread. Uruk sites have been found as far north along the Euphrates river as Syria at Habuba Kabira, southeast into Turkey at Hacinebi Tepe, and southwestern Iran in the Susiana plains (Matthews, p.109; 2003). Uruk is generally divided into three eras: Early, Middle, and Late. Again, this division is based upon pottery styles.

In the Uruk period, it is one pottery type in particular, known as the bevel-rimmed bowls, that’s evolution is significant. The bevel-rimmed bowls were important because they were made from molds and mass produced throughout Mesopotamia. Production above the household level is obviously a feature of a state-level society, as other smaller societies would have no need for such large quantities of goods (Wenke, 404; 1999). Hans Nissen (p.10, 2002), has spent a career studying Uruk ceramics, and argues that “the existence of Bevelled Rim Bowls by the millions as in Babylonian or Susiana sites does indicate a high level of complexity”. Despite what the bowls were used for, be it for daily food rations for workers, votive offerings, or for standardized bread making, it still indicates that there was a central authority controlling their use (Nissen, p.10; 2002).

Another important advancement in Uruk was the use of a wheel for pottery production. Wheels could produce more pottery in a shorter amount of time than was possible by hand. This would serve the need for mass production in a growing state-level society. Nissen (p.9, 2002) points out that the pottery wheel might have been used not only because of an increase in population, but also because of an increase in other craft specializations, creating a decrease in the number of pottery specialists. As a state grows larger, it not only needs a larger production of the basic goods such as pottery, it also demands specializations in complex necessities, such as administrative figures.

One characteristic of state-level societies that is strikingly apparent in the Uruk period is warfare. As more and more city-states began to arise in Mesopotamia such as Ur, Lagash, and Umma, there also began a rising degree of warfare. The ancient city of Uruk itself was surrounded by a series of defensive
Warfare might have also been linked with the rise of urbanism, as people were safer to live in a protected city than out on the open plains of the Mesopotamia alluvium. However, during this period it is also important to note that the plains surrounding the cities were used chiefly for agriculture, forcing the majority of people to live within the city walls. Urbanism is truly experienced in the Uruk period with about 10,000 people living in the city of Uruk at 3800 B.C., to around 50,000 people in 3000 B.C. With urbanism and increased populations, Uruk had increasing levels of economic specializations to fulfill the needs of the people (Wenke, p.404, 406; 1999). Population growth was probably further continued by population growth itself. As the need for more agricultural lands and for more resources (i.e. wood, stone, water) to support a large population escalated, so did the acquisition of new territories and therefore new populations to the state.

Further evidence for a state society lies in Uruk with the presence of monumental architecture. Uruk had architecture in the form of residential buildings as well as large temples. The residential buildings are significant because of their differing qualities in construction, size, and decoration, all of which indicate separate socio-economic classes characteristic of any state-level society. One of the most important temples built during the Uruk period was the “White Temple” built around 3200-3100 B.C. in the form of a ziggurat. Ziggurats are often called “step pyramids” because they start with one large platform that is continually built upon with smaller platforms, creating a unique pyramid shape. The White Temple is twelve meters high, and is made of whitewashed mud brick, hence the name. It contained detailed decorations, niches, columns and buttresses on the outside, and altars and tables on the inside (Wenke, p.410; 1999).

Perhaps the most important advance of the Uruk period was the development of the writing system. Early indicators toward a writing system could be seen with the appearance of seals in the Halafian period, and the appearance of tokens in the Ubaid period. Seals were predominantly used for administrative record keeping, and tokens were used to represent objects that one might own such as animals, grains, clothes, and oils (Reade, p.26-27; 1991). Writing was still in its early stages during the Uruk period, but it was a complete and fully functional script by the time of the Sumerian civilization, in which it became known as cuneiform, or “wedge-shaped” writing. Seals themselves became more advanced during the Late Uruk period, with the appearance of the cylinder seal, which often showed war scenes, prisoners, kings, animals, buildings, and religious representations (Riley, p.47, 1969), (Matthews, p.113, 2003).
The Uruk period ended with the beginning of the Early Dynastic period at around 3000-2350 B.C., the period which is considered the start of Sumerian civilization. The Sumerian civilization was comprised of the previously warring city-states of the Uruk period. Sumer contained around thirteen of these city-states that were connected by a cultural tradition rather than a ruling political entity (Wenke, p.412; 1999).

**Conclusion**

After researching the varying theories on state development and the archaeological evidence of Mesopotamia, I don’t think it is possible to answer the question of “why did complex civilizations arise” with any kind of certainty. Of course one can list causes or characteristics that led to their formation, but because of human complexity, it will never be possible to have a concrete theory of “what goes up, must come down” as is possible in the realm of the natural sciences. Human complexity is simply too random, never following a predictable path. And since the earliest people never wrote down for us why they decided to live in a complex state instead of foraging for their own food, we must rely solely upon those remains they left us, and try for good guesses at what they may mean.

I do think however, that the characteristics listed in this paper for a state-level society are very helpful in trying to place some sort of order and understanding to the unpredictability of humankind. I believe Mesopotamia flourished into a high civilization because of the initial economic prosperity experienced by the farmers of the southern alluvial plains with their effective agricultural systems. This set off an entire sequence of events that helped the state society to form. As with Robert McCormick Adams, I don’t believe it was just one factor that caused the rise of civilization; I believe it was many factors. For instance, with the initial economic prosperity, farmers had more food to support the existence of larger populations, and with population growth, a need for more housing developed. The need for more housing then brought the need for specialists to build the houses, which was again made possible by the initial economic surplus of food to support these specialists who were not producing their own food. The surplus in goods creates a constant cycle of interdependence upon one another that allows for cultural advancements. Known as “Organic Solidarity” to the famous sociologist Emile Durkheim, this is when the members of a society become so intertwined that they are no longer able to support themselves without the products of the other members’ labor. This is how we live today, and this is also how the ancient Mesopotamians lived some five-thousand years ago.
REFERENCES


