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Man's First Strides (The Prehistoric Era)

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Abstract

The first steps taken by Man in the long journey towards the establishment of the first known settled society. From the end of the last ice age to this, point which had taken 12000 years. The book explains the changes in climate, which made the first appearance of agriculture and the domestication of animals possible after many thousands of years of food collection and hunting for food. The first attempts to build settled communities are explained, which finally were calumniated in the establishment of stable settlements at the south of modern-day Iraq, where irrigated agriculture was practiced for the first time in history on the edges of its southern marshes. The people known as the Ubaid who were attracted to this place by the temperate climate and the rich resources of the land found such settlement as Ur, Eridu and Uruk. These people, explains the book, practiced irrigated agriculture and pottery and it was from archaeological findings of such pottery and the symbols engraved on them that their history became known to us. However, not having any form of writing, explains the book, the reason why historians had placed al- Ubaid people in the prehistory period, as they have not passed to us any documented written history. The beginning of history as defined by historians and ascertained by the author begins only with the invention of writing which was accomplished by the next People to live in this area who were the Sumerians.

Keywords: Ubaid, Ur, Eridu; Uruk, Iraq.

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1. Starting Era

The terms "History" and "Pre-history" are linked together in the narration of changes and continuity of the human past over time. By "Pre-history" it is meant the recovery of knowledge of the past in an area where no written records exist. Such knowledge may be derived however from studying paintings, drawings, carvings, and other artifacts left by the prehistoric people. This definition suggests clearly that "History" which again studies the human past depends on the existence of written records in addition to the above-mentioned tools. As such we may state that "History" begins with the appearance of the oldest form of writing, which is the "Cuneiform" invented by the Sumerians 3200 BC. This justifies the title of the book authored by Kramer, "History Begins in Sumer" [1].

In the long time-line of prehistory as seen by historian`s certain land marks may be selected to define some of the turning points in the development of mankind and pin point some of the major changes in this development, which are related to our subject. The reader may be referred to the complete prehistoric time- line in Wikipedia [2] detailed information. It is very interesting to note that Man "*Homes Sapiens"* first appeared in Africa 200,000 years ago where climatic conditions were favorable while vast ice sheets were covering much of North America, Northern Europe, and Asia. The last Glacial Maximum over these parts was about 26,000 years ago and deglaciation in the northern hemisphere only commenced at about 20,000 years ago. The humid period began at 14,800 years in North Africa. The region known later on as the Sahara, and similarly the Arabian Peninsula were wet and fertile and aquifers were full. In northern Mesopotamia 10,000- 9,000 years ago cultivation of barley and wheat began. At first, they were used for beer, gruel, and soup, eventually for bread. In early agriculture at this time, the planting stick was used, but it was replaced by a primitive plow in subsequent centuries.

Later on between 8,200 and 8,000 years ago a sudden decrease of global temperatures led to drier conditions in East Africa and the Arabian Peninsula. Civilizations developed in the Mesopotamia/Fertile Crescent region 6,000 years ago (4000 BC), and the region began to see migrations from the Arabian Peninsula at about (3900 BC) due to rapid and intense dry phase, which began there. At that time, Ubaid culture was predominant in Mesopotamia. Later on Sumerians of the Uruk period continued the Ubaid culture and built on it in Southern Mesopotamia (3750 -3150 BC), followed by the next Sumerian Period of Jemdet Nasr (3150- 2900BC). These periods saw the emergence of urban life in Mesopotamia, which flourished later on to form the Sumerian civilization. It was then and there when writing was invented, triggering the beginning of recorded history.

In the preceding lines, the impact of climatic changes on the history of our planet Earth was given from the historians' point of view. About the geologic aspect of the same, geologists talk of the *"Holocene"* as being the current geological epoch that began about 11,700 years ago. This epoch it is thought to be the longest warm and "stable" climatic period of the last 400,000 years which may have played a significant role in facilitating the development of human civilization. Being so it

encompasses the advent of agriculture and the birth and spread of civilizations during our human history. In supporting evidence of this development, the geological findings from Greenland ice measurements of oxygen isotopes indicate that the last ice age ended about 11000 BC and suggests that the extremely cold period ended about 9000BC [3], Figure 1.

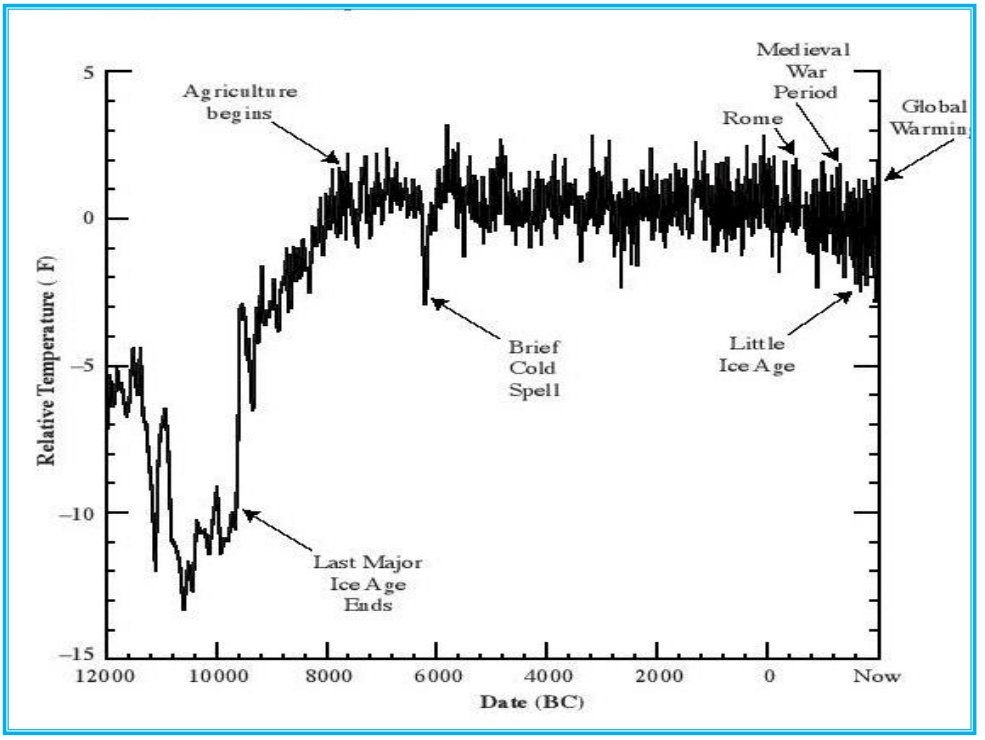

Figure 1: Temperature from 12,000(BC) to the present from Greenland ice measurements of Oxygen isotopes [3].

In a book titled "The Evolution of Civilization- an Introduction to Historic Analysis" [4], the author divides the development of human society throughout history into stages whereby the first stage was marked by roaming individuals of food collectors who in later stage aggregated into wandering groups of hunters and food collectors. In a still later stage these wandering groups had to settle but their style of life did not change much, and they still depended for their subsistence on collecting food and hunting, which deserved them the description of "Parasitic" societies. The final stage of this development was reached when these societies became producing societies by practicing agriculture and animal husbandry. The same author goes on to state that the western civilization is the descendant of what he calls the "Grain Civilization" indicating the type of agricultural product grown by this civilization, which prevailed in Western Asia, in contrast to the " Maize Civilization" in South

America and the “Rice Civilization” in the far east. This “Grain Civilization” being the oldest of all civilizations may have started probably not far from Armenia about nine thousand years ago. Because these people knew nothing about replenishing the fertility of soil, they practiced “shifting cultivation” moving to new fields when yield declined in their old fields. In this course of movement they found in various alluvial river valleys sites adapted to permanent large-scale settlements. In addition, in such valleys, the annual flood replenished the fertility of the soil by depositing a layer of fertile sediment. Accordingly, the need for “shifting cultivation” ended and the possibility of permanent, eventually urban, settlements was offered. This possibility was realized in four alluvial valleys of the Old World, in Mesopotamia during the six millennium BC, in the Nile valley shortly afterwards, in the Indus River valley early in the third millennium BC, and in the Huang Ho Valley of China late in the third millennium BC. Mesopotamia, which means, "the land between the rivers” was the name given by Herodotus (484-425BC) the Greek historian to the land between the Tigris and Euphrates Rivers in Iraq and northeastern Syria. An example of the “shifting cultivation” was revealed by the archeological excavations in Göbekli Tepe, an archaeological site in the Southeastern Anatolia Region of Turkey, approximately 12 km northeast of the city of Şanlıurfa close to the Euphrates River. The advent of agriculture and animal husbandry brought new realities to human life in the area, at about the beginning of the 8th millennium BC [5]. The development of irrigated agriculture in Southern Mesopotamia, however, seems to be an issue of conflict between historians. While Kramer [1] gives full credit of this to the Sumerians, another theory held by Sousa [6] gives a different story. He claims that after the end of the last ice age at about 15000 years ago at times when the present days` Arabian Peninsula was flourishing region, a new period of long draught had followed. It compelled the inhabitants, all of them from the Semitic Race, to immigrate towards the north and settle in northern Mesopotamia in Syria at about 9000 BC. These people already had some knowledge of the irrigated agriculture techniques and animal husbandry.

At a later stage, some of these people moved towards the southern part of Mesopotamia where the land was more fertile and water resources of the two rivers were abundant, and according to Sussa these Simetic people were the ones who had the credit of introducing irrigated agriculture in Southern Mesopotamia. Sousa claims however may not be correct, as excavations had shown that other people which historians have called Al- Ubaid had already inhabited the area. On theirs origin they did not have enough knowledge, but similar to the Sumerians they were definitely not Semitic. These people also practiced irrigated agriculture. So it seems that irrigation agriculture was firmly established by these people in the southern part of Mesopotamia before the gradual movement of the Aryan Sumerians into the region around (4000BC-3000BC).

The Sumerians had first inhabited the marshes of southern Iraq after their immigration from most probably Elam at the western part of the present-day Iran, or from an area located between North India, Afghanistan and Baluchistan and settled first in Bahrain after crossing the sea before moving to Iraq. The Sumerians

intermingled with these Al- Ubaid in their cities for quite a long time before everything took up the Sumerian culture as the dominant culture of the land. The Semitic Culture seemed to have a presence at some time afterwards.

Sousa quotes from the writings of the German archeologist Anton Mortgate, who had worked in archeological sites in Iraq (1920, 1930) and became the director of Berlin Museum and later, professor of ancient history of the Near East in Berlin University since 1947. He stated that the transition to the pure Sumerian culture took a long period. He believed that the cuneiform writing had developed during a period of about 700 years (3500- 2800 BC) from a pictographic form containing symbols, shapes and pictures, which may be called (Protoliterate) to a more symbolic form then to reach finally the vocal type of writing of the cuneiform. While we agree with all the historians that the Sumerians were the founders of the first ancient great civilization, nobody can deny the role of Al- Ubaid in laying down the foundations of the Sumerian Civilization itself.

The period, which is normally tagged after the Ubaid culture, extended from 6500 BC to 3800 BC. It was the prehistoric period preceding the development of the Sumerian culture. The name was derived from the first discovery of its presence during the excavation of Tell al- Ubaid near the old city of Ur at the extreme Southern Mesopotamian delta. It seems, however, that the Al- Ubaid culture was built on the remains of a previous obscure culture named the "Halafians" which archeologist link with Anatolia, and the lack of rupture between the "Halafians" and "Ubaidans" cultures suggest peaceful transition.

Historians and archaeologists used the term Ubaid, however, to indicate the practices of people spread over a wide area in the near east; in Turkey and Syria and later on in Southern Mesopotamia. This term was mainly linked to the type of pottery discovered over sites in the region which had similar characteristics, but according to Carter **[7]** the Ubaid did not only have regional manifestations, but also hybrid origins. In Figure 2 the locations of the Ubaid settlements in Turkey, Syria and upper part of Mesopotamia are shown, but for the purpose of this work emphasis is put mainly on the Ubaid settled in Southern Mesopotamia. The "heartland" of Ubaid was centered in Ur, Eridu, Tell Oueili, and Uruk, Figure 3.

In the development of the Ubaid culture in Southern Mesopotamia, four stages can be observed, which may be described as follows:

***Ubaid 0*:** (6500-5400BC). This is the earliest Ubaid phase which was excavated in Tel al Ubaid.

***Ubaid 1*:** (5400-4700BC). Which is also called Eridu phase in connection with Eridu city.

This phase is limited to south of Iraq, on what was the shores of the Persian Gulf. This phase saw also the establishment of the first permanent settlements south of the 130 mm rainfall isohyets. The people in this phase pioneered the growing of grains in the extreme conditions of aridity, but they were helped by high water tables due to the proximity of the marshes and the gulf. In one, striking finds in "Tell Al-Oueili" the French Archeologists Roux came across carefully constructed mud-brick houses together with dozens of small and square pits surrounded by thin walls

"tauf" which were interpreted as infrastructures to "granaries". The village was in a flat region crisscrossed by shallow streams and partly marshy. The inhabitants domesticated zebus (A type of water buffalos) and pigs [7].

Ubaid 2: (4880- 4500BC). In this period the development of extensive canal networks was seen together with major settlements. Evidence from Choga Mami (4700- 4600BC), a site in Diyala province in middle Iraq at the Mandali region, indicated that irrigated agriculture had developed there and rapidly spread elsewhere. This development required collective effort and centralized coordination of labour in Mesopotamia.

***Ubaid 3*:** In the Period 4500- 4000BC intensive and rapid urbanization was noticed with the Ubaid culture spreading to northern Mesopotamia. Ubaid artifacts were found spread over the whole region which also indicated the growth of a trading system that stretched from the Mediterranean coast through to Oman.

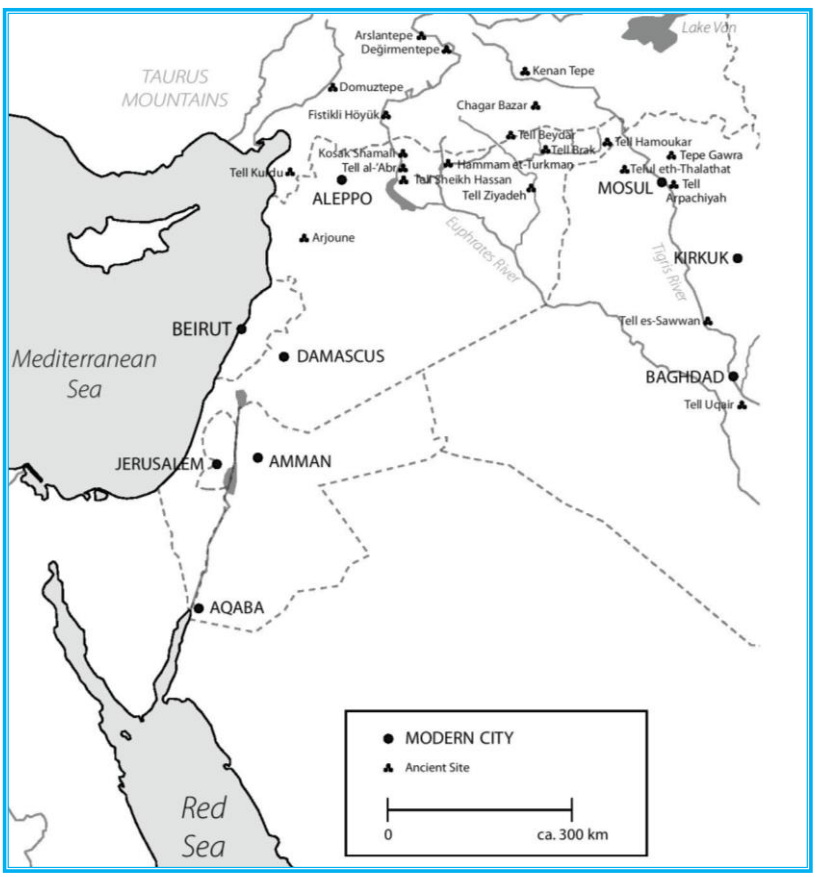

Figure 2: Ancient Ubaid Settlements in Turkey, Syria and upper Mesopotamia [8].

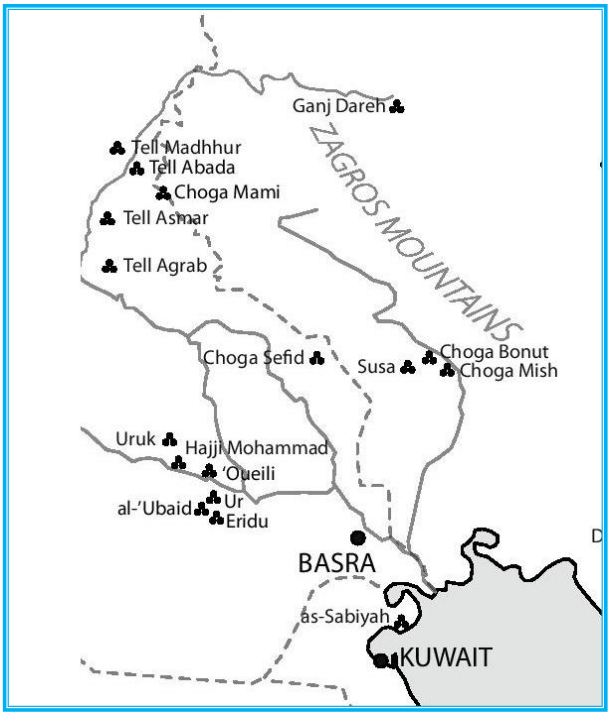

Figure 3: Ubaid Settlements in Southern Mesopotamia[7].

The Ubaid culture was characterized by large village settlements without walls, and by multi-roomed rectangular mud- brick houses. Large settlement sites were around 10 hectares in area which were surrounded by smaller village sites of less than 1 hectare. The bulk of the population was agricultural laborers, farmers and seasonal pastoralists. Agriculture and animal husbandry were widely practiced in the permanent settlements, while nomadic tribes domesticated animals and were looking for pasture as far north as Turkey and Zagros mountains in the northeast.

Following this, a period of gradual transition from the Ubaid culture to a new period named after Uruk (Warka) took place. This period saw the emergence of urban life in Mesopotamia. It was followed by the Jemdet Nasr period which continued into the Early Dynastic period of the Sumerian civilization. Uruk's growth was supported by its geographical location in the southern part of Mesopotamia on the Euphrates River.

The gradual and eventual domestication of native grain from the Zagros foothills (the Emmer strain grain) and the extensive irrigation techniques that were developed helped the area to support a vast variety of edible vegetation such as barley and rye in addition to grain[9].

This domestication of grain and the proximity to rivers enabled Uruk's growth into the largest early Sumerian settlement, in both population and area.

The Uruk period is normally assigned by scholars to the period (4000–3200 BC)

followed by the Jemdet- Nasr period (3100–2900 BC) which is considered only as one step higher up in the ladder of development. The names of these two periods were assigned in a conference on archeological findings, which was held in Baghdad in 1930. In spite of the fact that each period was tagged after the site of the town where particular type of pottery was salvaged, other aspects were similar. Uruk (Warka) was located close to the site of Ur, while Jemdet Nasr was located to the northeast of Uruk, about 80 km south of Baghdad within the area of Babylon.
Differentiation between the two periods was based on the mass production of pottery, and the technology used in Jemdet- Nasr period as compared to that of Uruk. Both of these periods had shown a marked departure from the previous Ubaid period in the technological innovations, social life and urbanization and the use of seals, bullae and cylinders, which were used to mark the potteries. The pictorial symbols used on these artifacts called the *"Protoliterate"* was the forerunner to the first form of writing that is "*Cuneiform."*
According to some scholars, the transition from the Ubaid culture to the Uruk (Warka) culture took place, within the period (4000- 3100BC). Others believe that this occurred from 3750 BC to 3150 BC. This slight variation shows that the divides between such ancient historical periods were always blurred; which puts emphasis on the transitional nature of changes of cultures. The chart in Figure 4 illustrates the chronological order of these periods as approximated by Pollock [10].

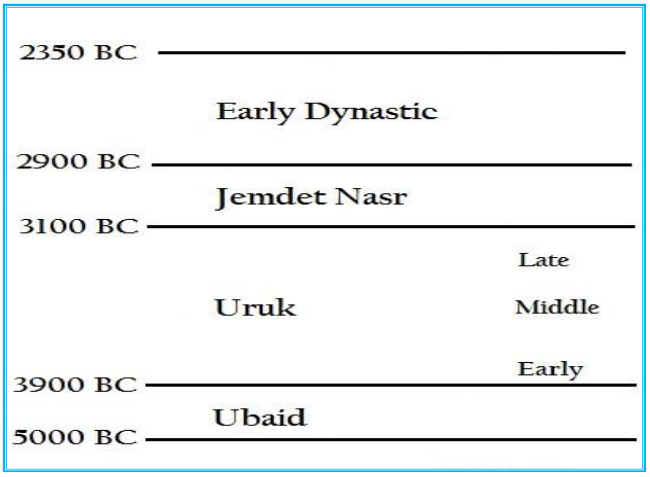

Figure 4: The Chronological order of the Periods from 5000 BC to 2350 BC [10].

Both cultures of Uruk and Jemdet- Nasr were basically agriculture dependent. Adams; however, repeatedly stressed the importance of pastoralism as another component of the distinctive Mesopotamian ecological adaptation [11]. He pointed out that in many ways pastoralism and agriculture represented complementary not competitive strategies in the face of environmental realties. Vast areas of land that

was not cultivated due to lack of irrigation water, nonetheless, provided adequate pasture for cattle herds during much of the year, and animals were also grazed on fallow lands. This and the technological advances and specialization of work witnessed during this era favored the concentration of population in large villages while the countryside was littered with hamlets supporting farming and pasteurizing. The abundant agricultural and animal products opened also new venues of trade to farther regions, and helped advance the pottery industry which produced various means of storing and exporting vessels for these products besides producing cooking and eating utensils and other tools. Through trade the influence of Uruk extended northwards and to the east with relative ease; Figure 5 gives an insight of such extent.

Figure 5: Location map of Uruk showing its area of influence.

Both Uruk and Jemdet- Nasr periods gave a strong drive towards urbanization as some of the villages grew into small towns due to the immigrants` flux. This was a direct result of work specialization and the appearance of such professions like traders, craftsmen and artisans so this process laid the foundation to the founding of city states of the next era of the Early Dynasties. This influx to small towns did not strain the rural population and did not endanger the sustainability of agriculture and pastoralism as more people converged on the area. In the winter of 1967, an archeological expedition led by Adams and Nissen embarked on a reconnaissance

survey around the site of Uruk to study the hydrology, ecology and ancient irrigation system in an area of 2800 square kilometers. The work was concentrated on locating ancient settlements and the remains of old irrigation canals from looking at the mounds and Tells littering the landscape. By examining artifacts left in these mounds, they could reach an estimate of the number and sizes of these settlements which are tabulated as in table (1**)** [11]**.**

Table 1: Settlement in Uruk area according types and period.

	Villages	Towns	Urban Centers	Cities
Early Dynastic II/ III	17	6	8	2
Early Dynastic I Gemdet- Nasr	124	20	2	1
Late Uruk	112	10	1	-
Early Uruk	17	3	1?	-

This table indicates clearly the growth of population in the area and their concentration in urban centers which reflects the degree of urbanization that took place and the development of more villages into towns at the height of Sumerian civilization in the II and III Dynastic periods. This also indicates the shifting of villages due to various reasons, which could have been; the control of irrigation water by upstream dwellers who could shut off water supplies from downstream users, drying up of some of the feeder canals as cited by Nissen [12], or may be due to clustering of villages together for defensive reasons, Figure 6.

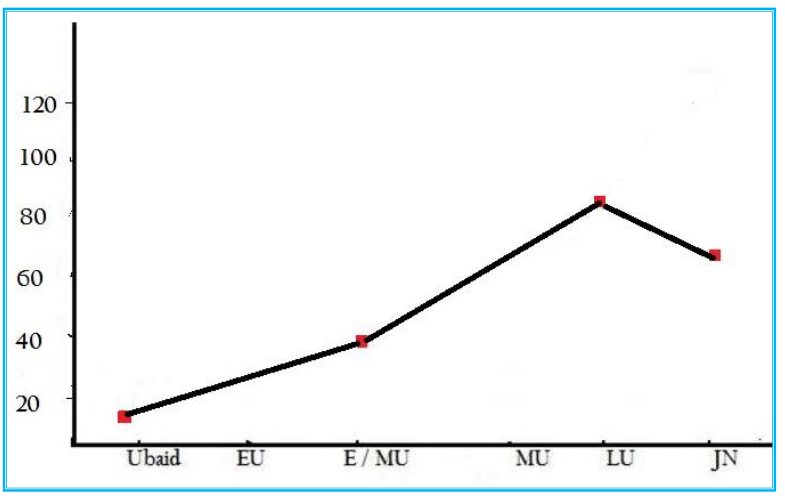

Figure 6: Number of settlements (on the Y- Axis), versus the Periods, Ubaid, EU (Early Uruk), E-/ M (Early Medium Uruk), LU / (Late Uruk), and JN (Jemdet- Nasr) [11]**.**

Adams [11] gives also estimates of areas inhabited in hectares, which were reproduced by Pollock (1992), as shown in the diagram presented in Figure 7.

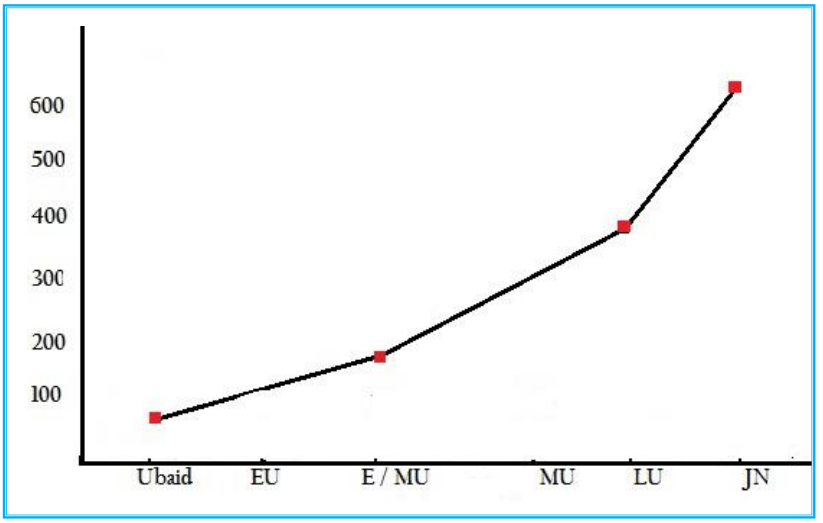

Figure 7: Total area of settlements in Hectares (on the Y- Axis), versus the Periods, Ubaid, EU (Early Uruk), E-/ M (Early Medium Uruk), LU / (Late Uruk), and JN (Jemdet- Nasr) [11] .

All these changes aggregated in the establishment and growth of city-states as a political and governance system and opened the door wide open for the Sumerian civilization to flourish as the first civilization in human history.

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