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Thiruvithancode, Kanyakumari, Tamilnadu, India.

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This is to certify that Dr/~~Mr~~/~~Mrs~~/~~Ms~~ Seema Gopal. T. G., Asst. Prof. in History

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THE LEGACY OF SUMERIAN'S

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Abstract:
Sumaria is the earliest known civilization in the historical region of southern Mesopotamia (now southern Iraq), emerging during the Chalcolithic and early Bronze Ages between the sixth and fifth millennium BC. It is also one of the first civilizations in the world, along with ancient Egypt, the Caral-Supe civilization, the Indus Valley civilization, the Minoan civilization, and ancient China. Living along the valleys of the Tigris and Euphrates, Sumerian farmers grew an abundance of grain and other crops, the surplus from which enabled them to form urban settlements.

Introduction:

Sumeria was first permanently settled by West Asian people who spoke the Sumerian language a non-Semitic and non-Indo-European agglutinative language isolate. In contrast to its Semitic neighbours, it was not an inflected language.

Others have suggested that the Sumerians were a North African people who migrated from the Green Sahara into the Middle East and were responsible for the spread of farming in the Middle East. However, with evidence strongly suggesting the first farmers originated from the Fertile Crescent, this suggestion is often discarded. Alternatively. A recent (2013) genetic analysis of four ancient Mesopotamian skeletal DNA samples suggests an association of the Sumerians with Indus Valley Civilization, possibly as a result of ancient Indus-Mesopotamia relations. According to some data, the Sumerians are associated with the Hurrians and Urartians, and the Caucasus is considered their homeland.

They drained the marshes for agriculture, developed trade, and established industries, including weaving, leatherwork, metalwork, masonry , and pottery. Sumerian civilization took form in the Uruk period (4th millennium BC), continuing into the Jemdet Nasr and Early Dynastic periods. During the 3rd millennium BC, a close cultural symbiosis developed between the Sumerians, who spoke a language isolate, and Akkadians, which gave rise to widespread bilingualism. The influence of Sumerian on Akkadian (and *vice versa*) is evident in all areas.

The Sumerian city of Eridu, on the coast of the Persian Gulf, is considered to have been one of the oldest cities, where three separate cultures may have fused: that of peasant Ubaidian farmers, living in mud-brick huts and practicing irrigation; that of mobile nomadic Semitic pastoralists living in black tents and following herds of sheep and goats; and that of fisher folk, living in reed huts in the marshlands, who may have been the ancestors of the Sumerians.

Ubaid period

The Ubaid period is marked by a distinctive style of fine quality painted pottery which spread throughout Mesopotamia and the Persian Gulf. The oldest evidence for occupation comes from Tell el-'Oueili'. Environmental conditions in southern Mesopotamia were favourable to human occupation. It appears that this culture was derived from the Samarrian culture from northern Mesopotomia. It is not known whether or not these were the actual Sumerians who are identified with the later Uruk culture.

Uruk period

Artifacts, and even colonies of this Uruk civilization have been found over a wide area—from the Taurus Mountains in Turkey, to the Mediterranean Sea in the west, and as far east as western Iran.

The Uruk period civilization, exported by Sumerian traders and colonists had an effect on all surrounding peoples, who gradually evolved their own comparable, competing economies and cultures.

Sumerian cities during the Uruk period were probably theocratic and were most likely headed by a priest-king (*ensi*), assisted by a council of elders, including both men and women. It is quite possible that the later Sumerian pantheon was modeled upon this political structure. There was little evidence of organized warfare or professional soldiers during the Uruk period, During this period Uruk became the most urbanized city in the world, surpassing for the first time 50,000 inhabitants.

The ancient Sumerian king list includes the early dynasties of several prominent cities from this period. The first set of names on the list is of kings said to have reigned before a major flood occurred. These early names may be fictional, and include some legendary and mythological figures, such as Alulim and Dumizid.

Early Dynastic Period

The syllabic writing started to develop from the early pictograms. The center of Sumerian culture

remained in southern Mesopotamia, even though rulers soon began expanding into neighboring areas, and neighboring Semitic groups.

The earliest king authenticated through archaeological evidence is Enmebaragesi of Kish (Early Dynastic I), whose name is also mentioned in the *Epic of Gilgamesh*—leading to the suggestion that Gilgamesh himself might have been a historical king of Uruk. As the *Epic of Gilgamesh* shows, this period was associated with increased war. Cities became walled, and increased in size as undefended villages in southern Mesopotamia disappeared.

The dynasty of Lagash (2500–2270 BC), though omitted from the king list, is well attested through several important monuments and many archaeological finds.

Gutian period

Following the downfall of the Akkadian Empire at the hands of Gutians, another native Sumerian ruler, Gudea of Lagash, rose to local prominence and continued the practices of the Sargonid kings' claims to divinity. The previous Lagash dynasty, Gudea and his descendants also promoted artistic development.

Population:

Uruk, one of Sumer's largest cities, has been estimated to have had a population of 50,000–80,000 at its height; given the other cities in Sumer, and the large agricultural population, a rough estimate for Sumer's population might be 0.8 million to 1.5 million. The world population at this time has been estimated at about 27 million.

The Sumerians spoke a language isolate, but a number of linguists have claimed to detect a substrate language of unknown. The archaeological record shows clear uninterrupted cultural continuity from the time of the early Ubaid period (5300–4700 BC C-14) settlements in southern Mesopotamia. The Sumerian people who settled here farmed the lands in this region that were made fertile by silt deposited by the Tigris and the Euphrates.

Some archaeologists have speculated that the original speakers of ancient Sumerian may have been farmers, who moved down from the north of Mesopotamia after perfecting irrigation agriculture there. The Ubaid period pottery of southern Mesopotamia has been connected via Choga Mami transitional ware to the pottery of the Samarra period culture. They were the first to practice a primitive form of irrigation agriculture along the middle Tigris River and its tributaries. The connection is most clearly seen at Tell el-'Oueili near Larsa, excavated by the French in the 1980s, where eight levels yielded pre-Ubaid pottery resembling Samarran ware.

Culture:

There is considerable evidence concerning Sumerian music. Lyres and flutes were played, among the best-known examples being the Lyres of Ur.

Inscriptions describing the reforms of king Urukagina of Lagash (c. 2350 BC) say that he abolished the former custom of polyandry in his country, prescribing that a woman who took multiple husbands be stoned with rocks upon which her crime had been written.

Sumerian culture was male-dominated and stratified. The Code of Ur-Nammu, the oldest such codification yet discovered, dating to the Ur III, reveals a glimpse at societal structure in late Sumerian law. Beneath the *lu-gal* ("great man" or king), all members of society belonged to one of two basic strata: The "*lu*" or free person, and the slave (male, *arad*; female *geme*). The son of a *lu* was called a *dumu-nita* until he married. A woman (*munus*) went from being a daughter (*dumu-mi*), to a wife (*dam*), then if she outlived her husband, a widow (*numasu*) and she could then remarry another man who was from the same tribe.

Marriages were usually arranged by the parents of the bride and groom; engagements were usually completed through the approval of contracts recorded on clay tablets. These marriages became legal as soon as the groom delivered a bridal gift to his bride's father. One Sumerian proverb describes the ideal, happy marriage through the mouth of a husband who boasts that his wife has borne him eight sons and is still eager to have sex.

The Sumerians generally seem to have discouraged premarital sex.[65] Neither Sumerian nor Akkadian had a word exactly corresponding to the English word 'virginity'.

Language and writing

The most important archaeological discoveries in Sumer are a large number of clay tablets written in cuneiform script. Sumerian writing is considered to be a great milestone in the development of humanity's ability to not only create historical records but also in creating pieces of literature, both in the form of poetic epics and stories as well as prayers and laws.

Although pictures-that is, hieroglyphs-were used first, cuneiform and then ideograms (where symbols were made to represent ideas) soon followed.

Triangular or wedge-shaped reeds were used to write on moist clay. A large body of hundreds of thousands of texts in the Sumerian language have survived, including personal and business letters, receipts, lexical lists, laws, hymns, prayers, stories, and daily records. Full libraries of

clay tablets have been found. Monumental inscriptions and texts on different objects, like statues or bricks, are also very common. Many texts survive in multiple copies because they were repeatedly transcribed by scribes in training. Sumerian continued to be the language of religion and law in Mesopotamia long after Semitic speakers had become dominant.

Religion:

The Sumerians credited their divinities for all matters pertaining to them and exhibited humility in the face of cosmic forces, such as death and divine wrath.

Sumerian religion seems to have been founded upon two separate cosmogenic myths. The first saw creation as the result of a series of *hieroi gamoi* or sacred marriages, involving the reconciliation of opposites, postulated as a coming together of male and female divine beings, the gods.

This pattern continued to influence regional Mesopotamian myths. Thus, in the later Akkadian Enuma Elish, creation was seen as the union of fresh and salt water, between male Abzu, and female Tiamat. The products of that union, Lahm and Lahmu, "the muddy ones", were titles given to the gate keepers of the E-Abzu temple of Enki in Eridu, the first Sumerian city.

Another important Sumerian hieros gamos was that between Ki, here known as Ninhursag or "Lady of the Mountains", and Enki of Eridu, the god of fresh water which brought forth greenery and pasture.

At an early stage, following the dawn of recorded history, Nippur, in central Mesopotamia, replaced Eridu in the south as the primary temple city, whose priests exercised political hegemony on the other city-states. Nippur retained this status throughout the Sumerian period.

Deities

Sumerians believed in an anthropomorphic polytheism, or the belief in many gods in human form. There was no common set of gods; each city-state had its own patrons, temples, and priest-kings. Nonetheless, these were not exclusive; the gods of one city were often acknowledged elsewhere. Sumerian speakers were among the earliest people to record their beliefs in writing, and were a major inspiration in later Mesopotamian mythology, religion, and astrology.

Sumerian gods were often associated with different cities, and their religious importance often waxed and waned with those cities' political power. The gods were said to have created human beings from clay for the purpose of serving them. The temples organized the mass labour projects needed for irrigation agriculture. Citizens had a labor duty to the temple, though they could avoid it by a payment of silver.

Cosmology

Sumerians believed that the universe consisted of a flat disk enclosed by a dome. The Sumerian afterlife involved a descent into a gloomy netherworld to spend eternity in a wretched existence as a Gidim (ghost).

Temple and temple organisation

Ziggurats (Sumerian temples) each had an individual name and consisted of a forecourt, with a central pond for purification. The temple itself had a central nave with aisles along either side. Flanking the aisles would be rooms for the priests. At one end would stand the podium and a mudbrick table for animal and vegetable sacrifices. Granaries and storehouses were usually located near the temples. After a time the Sumerians began to place the temples on top of multi-layered square constructions built as a series of rising terraces, giving rise to the Ziggurat style.

Funerary practices

It was believed that when people died, they would be confined to a gloomy world of Ereshkigal, whose realm was guarded by gateways with various monsters designed to prevent people entering or leaving. The dead were buried outside the city walls in graveyards where a small mound covered the corpse, along with offerings to monsters and a small amount of food. Those who could afford it sought burial at Dilmun. Human sacrifice was found in the death pits at the Ur royal cemetery where Queen Puabi was accompanied in death by her servants.

Agriculture and hunting

The Sumerians adopted an agricultural lifestyle perhaps as early as c. 5000–4500 BC. The region demonstrated a number of core agricultural techniques, including organized irrigation, large-scale intensive cultivation of land, monocropping involving the use of plough agriculture, and the use of an agricultural specialized labour force under bureaucratic control. The necessity to manage temple accounts with this organization led to the development of writing (c. 3500 BC).

In the early Sumerian Uruk period, the primitive pictograms suggest that sheep, goats, cattle, and pigs were domesticated. They used oxen as their primary beasts of burden and donkeys or equids as their primary transport animal and "woollen clothing as well as rugs were made from the wool or hair of the animals. By the side of the house was an enclosed garden planted with trees and other plants; wheat and probably other cereals were sown in the

fields, and the shaduf was already employed for the purpose of irrigation. Plants were also grown in pots or vases."

The Sumerians were one of the first known beer-drinking societies. Cereals were plentiful and were the key ingredient in their early brew. They brewed multiple kinds of beer consisting of wheat, barley, and mixed grain beers. Beer brewing was very important to the Sumerians. It was referenced in the Epic of Gilgamesh when Enkidu was introduced to the food and beer of Gilgamesh's people: "Drink the beer, as is the custom of the land... He drank the beer-seven jugs! and became expansive and sang with joy!"

The Sumerians practiced similar irrigation techniques as those used in Egypt. American anthropologist Robert McCormick Adams says that irrigation development was associated with urbanization, and that 89% of the population lived in the cities.

They grew barley, chickpeas, lentils, wheat, dates, onions, garlic, lettuce, leeks and mustard. Sumerians caught many fish and hunted fowl and gazelle.

Sumerian agriculture depended heavily on irrigation. The irrigation was accomplished by the use of shaduf, canals, channels, dykes, weirs, and reservoirs. The frequent violent floods of the Tigris, and less so, of the Euphrates, meant that canals required frequent repair and continual removal of silt, and survey markers and boundary stones needed to be continually replaced. The government required individuals to work on the canals in a corvée, although the rich were able to exempt themselves.

As is known from the "*Sumerian Farmer's Almanac*", after the flood season and after the Spring equinox and the *Akitu* or New Year Festival, using the canals, farmers would flood their fields and then drain the water. Next they made oxen stomp the ground and kill weeds. They then dragged the fields with pickaxes. After drying, they plowed, harrowed, and raked the ground three times, and pulverized it with a mattock, before planting seed. Unfortunately, the high evaporation rate resulted in a gradual increase in the salinity of the fields. By the Ur III period, farmers had switched from wheat to the more salt-tolerant barley as their principal crop.

Art

The Sumerians were great creators, nothing proving this more than their art. Sumerian artifacts show great detail and ornamentation, with fine semi-precious stones imported from other lands, such as lapis lazuli, marble, and diorite, and precious metals like hammered gold, incorporated into the design. Since stone was rare it was reserved for sculpture. The most widespread material in Sumer was clay, as a result many Sumerian objects are made of clay. Metals such as gold, silver, copper, and bronze, along with shells and gemstones, were used for the finest sculpture and inlays. Small stones of all kinds, including more precious stones such as lapis lazuli, alabaster, and serpentine, were used for cylinder seals.

Some of the most famous masterpieces are the Lyres of Ur, which are considered to be the world's oldest surviving stringed instruments. They have been discovered by Leonard Woolley when the Royal Cemetery of Ur has been excavated between from 1922 and 1934.

Architecture

The Tigris-Euphrates plain lacked minerals and trees. Sumerian structures were made of plano-convex mudbrick, not fixed with mortar or cement. Mud-brick buildings eventually deteriorate, so they were periodically destroyed, leveled, and rebuilt on the same spot. This constant rebuilding gradually raised the level of cities, which thus came to be elevated above the surrounding plain. The resultant hills, known as tells, are found throughout the ancient Near East.

According to Archibald Sayce, the primitive pictograms of the early Sumerian (i.e. Uruk) era suggest that "Stone was scarce, but was already cut into blocks and seals. Brick was the ordinary building material, and with it cities, forts, temples and houses were constructed. The city was provided with towers and stood on an artificial platform; the house also had a tower-like appearance. It was provided with a door which turned on a hinge, and could be opened with a sort of key; the city gate was on a larger scale, and seems to have been double. The foundation stones-or rather bricks-of a house were consecrated by certain objects that were deposited under them."

The most impressive and famous of Sumerian buildings are the ziggurats, large layered platforms that supported temples. Sumerian cylinder seals also depict houses built from reeds not unlike those built by the Marsh Arabs of Southern Iraq until as recently as 400 CE. The Sumerians also developed the arch, which enabled them to develop a strong type of dome. They built this by constructing and linking several arches. Sumerian temples and palaces made use of more advanced materials and techniques, such as buttresses, recesses, half columns, and clay nails.

Economy and trade

Discoveries of obsidian from far-away locations in Anatolia and lapis lazuli from Badakhshan in northeastern Afghanistan, beads from Dilmun (modern Bahrain), and several seals inscribed with the Indus Valley script suggest a remarkably wide-ranging network of ancient trade

centered on the Persian Gulf. For example, Imports to Ur came from many parts of the world. In particular, the metals of all types had to be imported.

The *Epic of Gilgamesh* refers to trade with far lands for goods, such as wood, that were scarce in Mesopotamia. In particular, cedar from Lebanon was prized. The finding of resin in the tomb of Queen Puabi at Ur, indicates it was traded from as far away as Mozambique.

The Sumerians used slaves, although they were not a major part of the economy. Slave women worked as weavers, pressers, millers, and porters.

Sumerian potters decorated pots with cedar oil paints. The potters used a bow drill to produce the fire needed for baking the pottery. Sumerian masons and jewelers knew and made use of alabaster (calcite), ivory, iron, gold, silver, carneli an, and lapis lazuli.

Trade with the Indus valley

Evidence for imports from the Indus to Ur can be found from around 2350 BC. Various objects made with shell species that are characteristic of the Indus coast, particularly *Trubinella Pyrum* and *Fasciolaria Trapezium*, have been found in the archaeological sites of Mesopotamia dating from around 2500–2000 BC. Carnelian beads from the Indus were found in the Sumerian tombs of Ur, the Royal Cemetery at Ur, dating to 2600–2450. In particular, carnelian beads with an etched design in white were probably imported from the Indus Valley, and made according to a technique of acid-etching developed by the Harappans. Lapis lazuli was imported in great quantity by Egypt, and already used in many tombs of the Naqada II period (c. 3200 BC). Lapis lazuli probably originated in northern Afghanistan, as no other sources are known, and had to be transported across the Iranian plateau to Mesopotamia, and then Egypt.

Several Indus seals with Harappan script have also been found in Mesopotamia, particularly in Ur, Babylon and Kish.

Gudea, the ruler of the Neo-Summerian Empire at Lagash, is recorded as having imported "translucent carnelian" from Meluhha, generally thought to be the Indus Valley area. Various inscriptions also mention the presence of Meluhha traders and interpreters in Mesopotamia. About twenty seals have been found from the Akkadian and Ur III sites, that have connections with Harappa and often use Harappan symbols or writing.

The Indus Valley Civilization only flourished in its most developed form between 2400 and 1800 BC, but at the time of these exchanges, it was a much larger entity than the Mesopotamian civilization, covering an area of 1.2 million square meters with thousands of settlements, compared to an area of only about 65 000 square meters for the occupied area of Mesopotamia, while the largest cities were comparable in size at about 30–40,000 inhabitants.

Military

The constant wars among the Sumerian city-states for 2000 years helped to develop the military technology and techniques of Sumer to a high level. The first war recorded in any detail was between Lagash and Umma in c. 2450 BC on a stele called the Stele of the Vultures. It shows the king of Lagash leading a Sumerian army consisting mostly of infantry. The infantry carried spears, wore copper helmets, and carried rectangular shields. The spearmen are shown arranged in what resembles the phalanx formation, which requires training and discipline; this implies that the Sumerians may have made use of professional soldiers.

The Sumerian military used carts harnessed to onagers. These early chariots functioned less effectively in combat than did later designs, and some have suggested that these chariots served primarily as transports, though the crew carried battle-axes and lances. The Sumerian chariot comprised a four or two-wheeled device manned by a crew of two and harnessed to four onagers. The cart was composed of a woven basket and the wheels had a solid three-piece design.

Sumerian cities were surrounded by defensive walls. The Sumerians engaged in siege warfare between their cities, but the mudbrick walls were able to deter some foes.

Legacy

Evidence of wheeled vehicles appeared in the mid-4th millennium BC, near-simultaneously in Mesopotamia, the Northern Caucasus (Maykop culture) and Central Europe. The wheel initially took the form of the potter's wheel. The new concept led to wheeled vehicles and mill wheels. The Sumerians' cuneiform script is the oldest (or second oldest after the Egyptian hieroglyphs) which has been deciphered (the status of even older inscriptions such as the Jiahu symbols and Tartaria tablets is controversial). The Sumerians were among the first astronomers, mapping the stars into sets of constellations, many of which survived in the zodiac and were also recognized by the ancient Greeks. They were also aware of the five planets that are easily visible to the naked eye.

They invented and developed arithmetic by using several different number systems including a mixed radix system with an alternating base 10 and base 6. This sexagesimal system became the standard number system in Sumer and Babylonia. They may have invented military formations and introduced the basic divisions between infantry, cavalry, and archers. They developed the first known codified

legal and administrative systems, complete with courts, jails, and government records. The first true city-states arose in Sumer, roughly contemporaneously with similar entities in what are now Syria and Lebanon. Several centuries after the invention of cuneiform, the use of writing expanded beyond debt/payment certificates and inventory lists to be applied for the first time, about 2600 BC, to messages and mail delivery, history, legend, mathematics, astronomical records, and other pursuits. Conjointly with the spread of writing, the first formal schools were established, usually under the auspices of a city-state's primary temple.

Conclusion:

The Sumerian city-states rose to power during the prehistoric Ubaid and Uruk periods. Sumerian written history reaches back to the 27th century BC and before, but the historical record remains obscure until the Early Dynastic III period, c. 23rd century BC, when a now deciphered syllabary writing system was developed, which has allowed archaeologists to read contemporary records and inscriptions. The Akkadian Empire was the first state that successfully united larger parts of Mesopotamia in the 23rd century BC. After the Gutian period, the Ur III kingdom similarly united parts of northern and southern Mesopotamia. It ended in the face of Amorite incursions at the beginning of the second millennium BC. The Amorite "dynasty of Isin" persisted until c. 1700 BC, when Mesopotamia was united under Babylonian rule. The Sumerians were eventually absorbed into the Akkadian (Assyro-Babylonian) population.

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