

1



2



Foraging Society
Average forager produced ~5,000 kcal/cap/day

Farming Society
Following start of Holocene, different histories
More energies put into permanence in place, i.e., buildings, villages, towns, eventually cities
Less-egalitarian relations and institutions
States & Empires
Solar energy captured and processed through control of (intensifiable) domesticated plants and animals
Average farmer produced double-triple kcals/day/capita, up to 30,000 in some non-industrial examples

3

What is a complex society in archaeology?

Pre-agricultural societies are sometimes called **small-scale societies**. Characterized by:

- low absolute populations and population density
- tendency to remain mobile through much of the year
- kinship is primary organizing force
- local social (status) differences emerge from various kinship roles, age-grades (junior-senior), variously recognized gender roles, and personal achievements (cannot be passed to kids)

4

What is a complex society in archaeology?

Complex societies: differentiation in social, political, and/or economic structure combined with organization that integrates diverse structural parts into a whole. Characterized by:

- higher populations and population densities
- permanent (sedentary) towns and cities
- kinship is still important, but groups and individuals can/do relate to one another through membership in different “civic” organizations and institutions (e.g., political, economic, religious, etc.), **and through residence (i.e., State citizenship)** [Latin *civilis* (“civil”), related to *civis* (“citizen”) and *civitas* (“city”)] – beware the oft-loaded term, “civilization”
- social differences emerge from one’s membership in a higher-status kin group, or by one’s membership into an elite social class, specialist occupation, control of production and extraction of surpluses, etc.
- Not always permanent (never really, over time...)

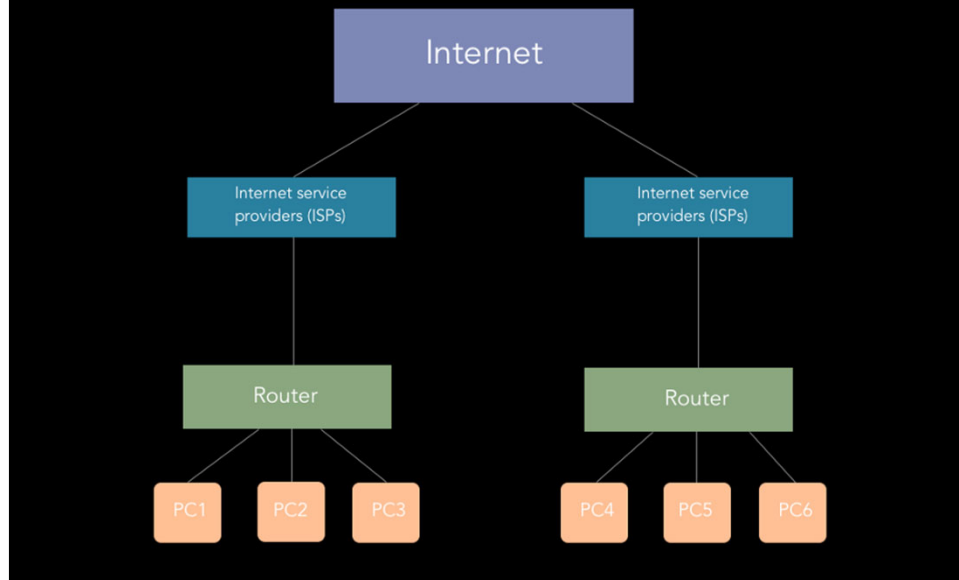
5

What is a complex society in archaeology?

- In the simplest of terms, a “complex” society is one that has both more **kinds of parts** and a **greater number of parts**, that are somehow integrated.

6

A complex computer network.



7

What is a complex society in archaeology?

- In the simplest of terms, a “complex” society is one that has both more **kinds of parts** and a **greater number of parts**, that are integrated, increasingly permanent.
- This **does not make them objectively better** than small-scale societies! Using terms like “complex” and “small-scale” could lead to the misconception that a hierarchy of societal-types (or species) exists. It does not! In many ways, what we today think of as negative (slavery, inequality, racism, poverty, large-scale/organized violence--WAR) developed alongside some kinds of complex societies

8

A VERY BRIEF HISTORY OF ARCHAEOLOGISTS/ANTHROPOLOGISTS STUDYING SOCIETAL “COMPLEXITY”

9

Lewis Henry Morgan (1818-1881)

Ethnologist

- **Cultural Evolution:**
when new forms of social or sociopolitical organization appear (is not about migration) -- **IS NOT BIOLOGICAL EVOLUTION!**

- Morgan described three broad stages of cultural development & hypothesized **evolutionary** changes between them

savagery

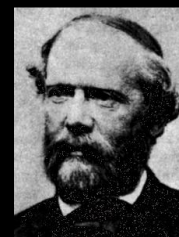
food from
wild resources

barbarism

sedentary
agriculture

civilization

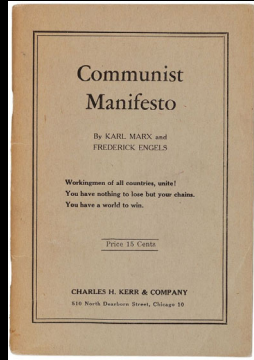
Urban/state –
civic society



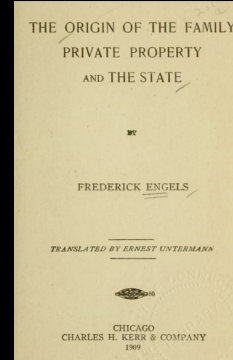
Morgan's broad, comparative, evolutionary development of Human Culture, not “peoples,” not “races” (today, we don't use these terms, but these were the terms common at the time to categorize how societies acquired food and other technologies)

10

Early “ethnologist” Morgan was read by **Karl Marx** and **Frederick Engels**, and thus had an impact on world history. Even though Morgan was wrong about some things, the *revolutionary* idea for Marx and Engels was that society (like populations of living organisms) can and does change – i.e., we’re not stuck with what we have at the moment, revolutionary change always occurs.



1848



1884

11

Vere Gordon Childe (1892-1957) – A Revolutionary Thinker - Archaeologist

- A materialist; concerned with workers' rights; a Marxist (socially/politically, on ideas of history)
- Studied archaeology at Oxford University
 - Studied Eastern Europe when most focused on the Classics and Western Europe
 - Realized the “big” **cultural transitions mostly happened outside of western Europe**
 - Called transitions “**revolutions**”
 - 1st - Neolithic revolution = switch to farming
 - 2nd - Urban revolution = switch to States, also cities
- **Big deal: idea that prehistoric changes (e.g., farming) were on par with recent changes (e.g., industrial revolution), one could not have happened without effects by earlier, social, technological, and productive changes**

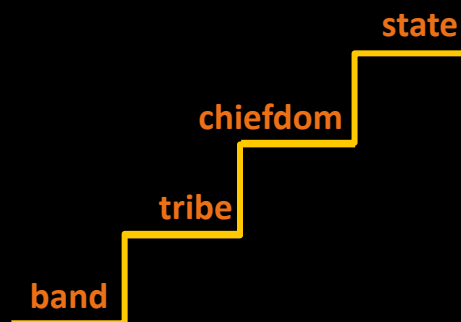


12

Elman Service (1915-1996)

Ethnologist/Cultural Anthropologist

- Defined **types** of societies (based on documented ethnographic evidence), which include more emphasis on political organization:



13

(Political) States

State: A governmental entity that persists by politically controlling a territory

- State governments are internally specialized and a hierarchically organized decision-making apparatus
- Presence of at least 2 social strata/classes (simplified – elite ruling class vs. commoners) → **stratified**
- Ruling class supports professional classes: full-time craft producers, merchants & traders, “police” force and armies, religious priestly class, media, educated classes, etc.
- States had/have the power to levy and collect taxes, declare war, establish and enforce laws, etc., and they try to limit other “non-state” groups’/institutions’ ability to do similarly i.e., States work to maintain a “**monopoly of violence**” and a “**monopoly of law**”
- States have been said to be the “**killer of kinship**” wherein state powers limit what “kinship” elsewhere always did to organize people and society (again, “civilization” is about citizenship and residence based on state-defined borders, law, punishment, and who can inherit land and wealth)
- Many states appear to have supported an official religion, and monarchs/rulers often were considered to be of supernatural origin themselves
- Development of the **State** closely intertwined with development of earliest **cities/urbanism**

14

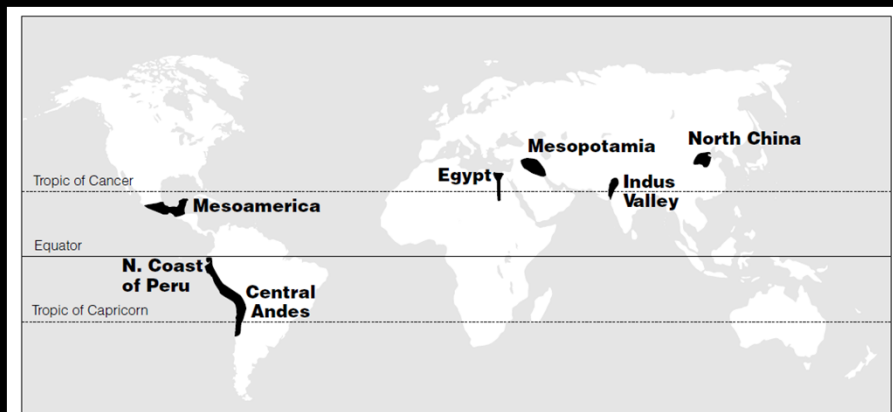
States



Washington, D.C. – the “classic” layout of a State’s political capital
[internally specialized and a hierarchically organized decision-making apparatus]

15

Earliest States & Urban Societies



16

The earliest city-states are in Mesopotamia

Continuing Evolutionary Processes:
Neolithic → Urban Revolution

Fertile Crescent



Childe's "Revolutions"



Mesopotamia



The flat plain between the Tigris and Euphrates rivers in southern Iraq

17

Long-term changes in the Fertile Crescent

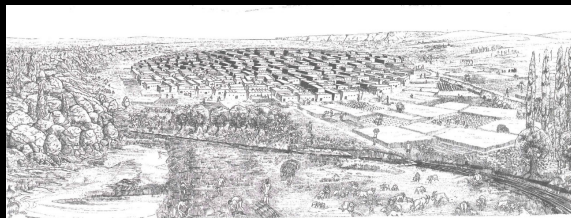


Ohalo II, campsites: ~ 19,000 BC

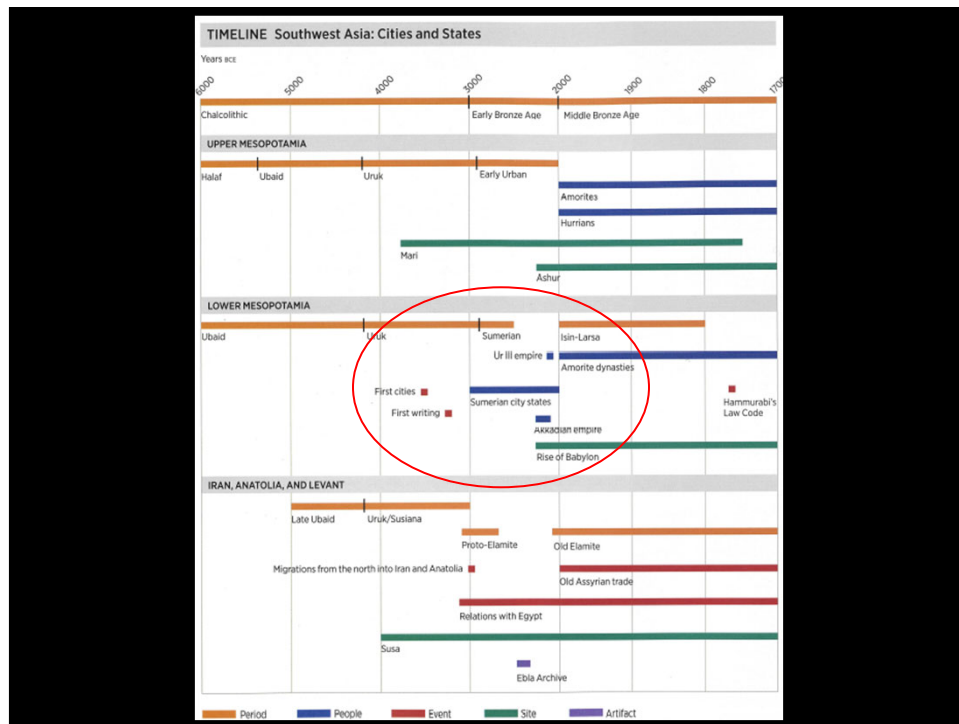


Abu Hureyra 1, early village:
~ 11,500 – 10,000 ya

Abu Hureyra 2b,
large agricultural
village: ~ 9,700 –
7,000 ya (early Neolithic)




18




19

Defining Mesopotamia




- Fertile fields and plains
- Seasonal rains and mountain streams
- Timber, stone, and metals

Northern/Upper Mesopotamia




later home to Assyrian states

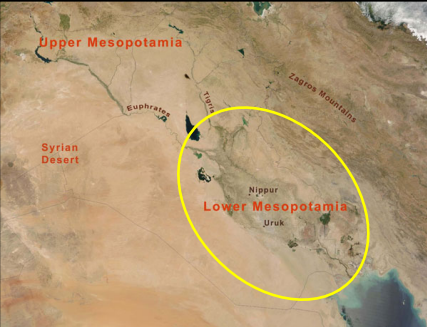


20

Defining Mesopotamia




Southern/Lower Mesopotamia, a.k.a. Sumer



a.k.a., Sumer and Akkad, Babylonia after 2000 BC

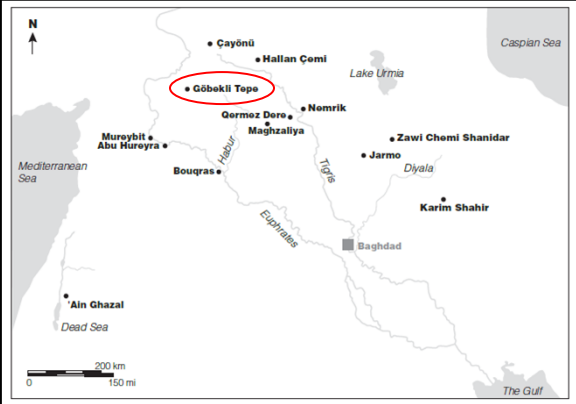
- Marshy areas and wide, barren plains
- Major rivers for urban-sponsored irrigation
- Minimal natural mineral resources



21

Early Holocene/Neolithic Agricultural Villages

- Earliest farming villages in Mesopotamia appear ca. 7000 BC in the north
- Communities were small: a few houses, each with several rooms



22

Göbekli Tepe, Anatolia (Turkey) – non-farming Epi-Paleolithic—Neolithic transition site (on the periphery of the world's first farming villages!) – **anomaly?**



23

Early Mesopotamian Agricultural Villages

- By 6,500 BC, agriculture had spread to Sumer (southern Mesopotamia), where canal irrigation was necessary
- At first, villages were small, but they grew quickly throughout the **'Ubaid period (beginning ~5,500 BC)**.

*Late 'Ubaid tell
damaged in 2003 by
US military activity*



24

Economy and Mesopotamian State Formation

- During the 'Ubaid period, we see the rise of **temples** as a key institution for the functioning of later Mesopotamian political systems
 - temples for pilgrimages, religious rites, royal patronage, AND economic functions



25

Mesopotamian temples

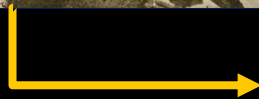
- The earliest temples in Mesopotamia-proper are at **Eridu**.
- During its early 'Ubaid occupation, Eridu was mostly a residential town, but it had one nonresidential structure.



26

Mesopotamian temples

- At the deepest (earliest) levels, this mud brick building at Eridu was about 10x10 ft. and had a possible altar with burned offerings
- Over 2000 years, 17+ superimposed temples were built on top



27

How did the temple work?

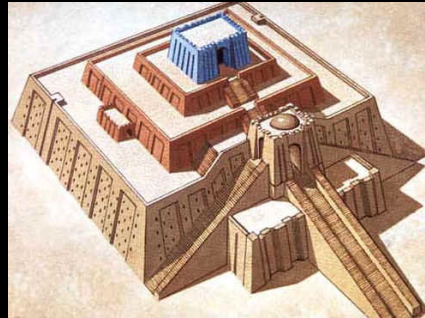
- Mesopotamian temples received goods through tribute (taxes?) and redistributed some of these goods to the populace during feasts
- From early on, temples were associated with storage and redistributive facilities



28

How did the temple work?

- Temples became managed by administrators (priests?) who coordinated labor projects (e.g., canal building), allocated irrigated water, and controlled the distribution of food and specialized crafts
- As the success of temples grew, so did the power of the administrators. Later, this power was manifested in bigger temples and **ziggurats**, which required incredible amounts of labor to construct.

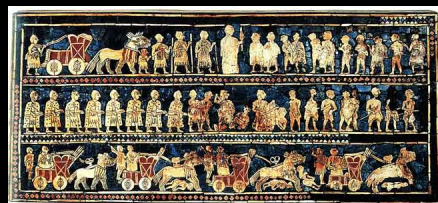


Ziggurat – a rectangular stepped tower, often surmounted by a temple, common later in the Early Dynastic Period

29

Temple, Society, and State

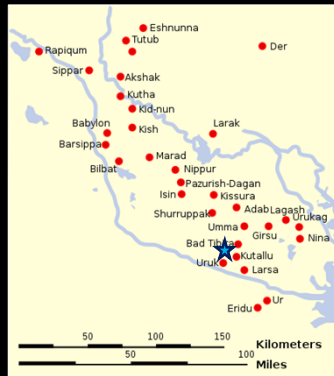
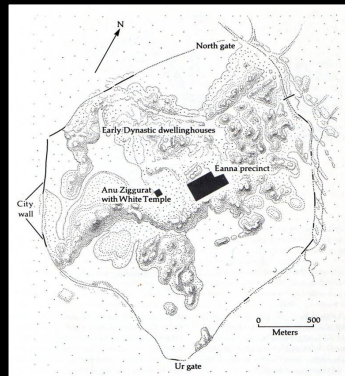
- By the **Uruk period (beginning ~4000 BC)**, archaeologists have no trouble identifying socio-political hierarchies.
- At this time, we have major urbanizing centers (world's first cities) based on surplus agriculture and temple management: a **1st city – Uruk (and a handful of others – see text)**.
- By the **Early Dynastic period (beginning ~2800-2350 BC)**, Uruk continues to expand, and other rival centers vie for autonomy and power.



30

Uruk (appears in Bible as Erech, modern name Warka, legend states it was built by Gilgamesh)

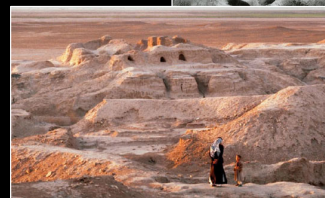
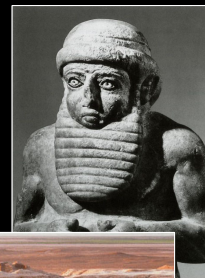
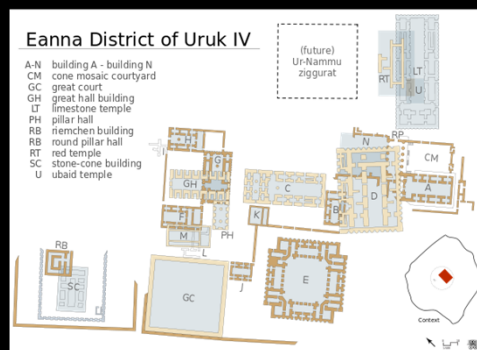
- In Uruk period, a small settlement was founded at Uruk
- By Early Dynastic period, it covered roughly 1.5 square miles, and was occupied by 20,000+ people



31

Mesopotamian Hierarchy

- The high-quality architecture of the Eanna precinct and its proximity to the temples suggest that **priest-kings/queens** were in power.



32

Mesopotamian Hierarchy

- The economic power of Mesopotamian royalty derived from taxation and trade, and exploitation of captives and slaves
- Seal stones**: inscribed stones used by administrators to impress a symbol on wet pieces of clay or bitumen to keep track of goods

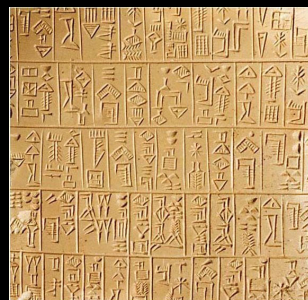


33

Writing – eventual development of Cuneiform

- Scribes recorded **economic transactions** on **clay tablets**
- Symbols were mostly ideographs; some were pictographs
- Eventually, script was simplified further into **cuneiform**, combining earlier forms with symbols for sounds and concepts

Cuneiform						
Pictographic sign c. 3100 BCE						
Interpretation	Star	?Stream	Ear of barley	Bull's head	Bowl	Head and bowl
Cuneiform sign c. 2400 BCE						
Cuneiform sign c. 700 BCE, turned 90°						
Meaning	God, sky	Water, seed, sun	Barley	Ox	Food, bread	To eat



34

Specialized Division of Labor

- Accountant
- Architect
- Astrologer
- Baker
- Barber
- Basket maker
- Boatman
- Brewer
- Brick maker
- Butcher
- Carpenter
- Cartwright
- Chariot driver
- Confectioner
- Cook
- Cup bearer
- Diviner
- Exorcist
- Farmer
- Fisherman
- Goldsmith
- Herald
- Horse trainer
- Mayor
- Merchant
- Musician
- Physician
- Potter
- Priest
- Bodyguard
- Scholar
- Shepherd
- Singer
- Soldier
- Stone carver
- Tailor
- Tavern keeper
- Tax collector
- Veterinarian
- Weaver

**** No need to try to memorize these specific occupations!**

35

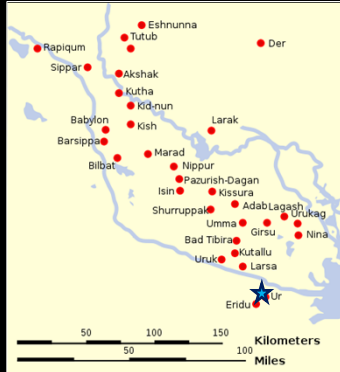
Early Dynastic Mesopotamia

- By the end of the Uruk period, there was substantial economic and political competition among multiple different city-states throughout Mesopotamia
- Material correlates: **defensive features, material trappings of despotic rulers**



36

Early Dynastic UR (city)



- Major late military, political, & economic rival of Uruk
- Bible states Ur as the birthplace of Abraham
- Renowned for its **cemetery**: 2500 burials excavated by Leonard Wooley in the 1920s
- Most graves had few or no grave goods; 20 extremely elaborated

37

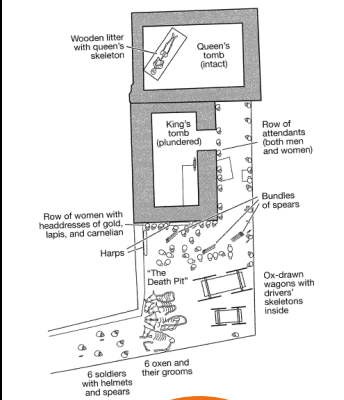
Early Dynastic UR





38

Early Dynastic UR

- Burial of **Queen Pu-abi**



The diagram illustrates the layout of the Queen Pu-abi tomb. Key features include: a wooden litter with the queen's skeleton; the queen's tomb (intact); a plundered king's tomb; a row of attendants (both men and women); bundles of spears; a row of women with headdresses of gold, lapis, and carnelian; harps; "The Death Pit"; ox-drawn wagons with drivers' skeletons inside; 6 oxen and their grooms; and 6 soldiers with helmets and spears.

39

Early Dynastic Mesopotamia

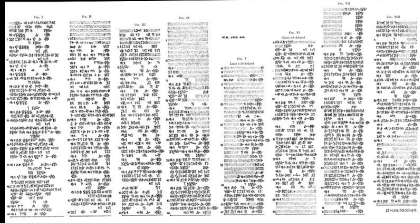
- One important arena of specialization: **military**
- Warfare became ever more important, leading to the rise and fall of several successive polities
- Development of **empire** – “macro-states”
- Empire**: large states with heterogeneous ethnic & cultural composition; formed through conquest/coercion; to extract wealth (food, resources/human labor)

carving of Akkadian emperor, Naram-Sin, conquering communities of Zagros Mountains, Iran, ~4,250 ya



40

Sumerian King List



• 1st copy from 3rd Dynasty Ur (2100-2000 BC)

Told of earlier “descent” of kings and kingship from “heaven”

A list of ruling kings, initially said to live and rule for more than 1000 yrs

Creation of a ruling “ideology”, ideology that states and kings are “natural” and supported by god(s)

Supported “empire” – idea that all of Mesopotamia (really the whole world) has always been ruled by god-kings

41

History of State consolidation and break up in Mesopotamia - Empires

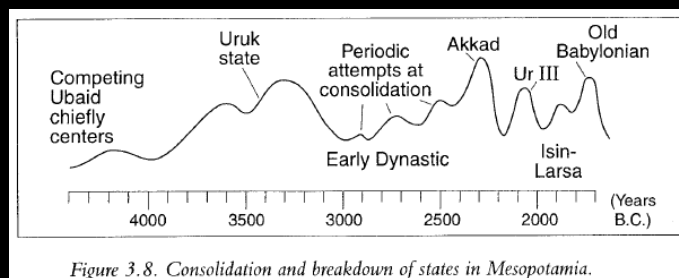


Figure 3.8. Consolidation and breakdown of states in Mesopotamia.



~2500-2000 BC

Develop of major Ziggurat temples, which required HUGE labor force
Development & speed-up of imperial conquest by nascent Empires, “supra-urbanism / mega-states”
Development of what is called “moralizing gods” religions

42

LETTER

<https://doi.org/10.1038/s41586-019-1043-4>

Complex societies precede moralizing gods throughout world history

Harvey Whitehouse^{1,15}, Pieter François^{1,2,15}, Patrick E. Savage^{1,3,15a}, Thomas E. Currie⁴, Kevin C. Feeney⁵, Enrico Cioni⁶, Rosalind Purcell⁷, Robert M. Ross^{1,7,8}, Jennifer Larson⁹, John Baines¹⁰, Barend ter Haar¹¹, Alan Covey¹² & Peter Turchin^{13,14}



Shamash (by 4,200 BC), ancient Mesopotamian god of the sun, justice, morality, and truth. Seen here sitting on a throne, judging other gods and kings.

“Moralizing gods” = deities who have a moral code, and “punish” those who break codes or make direct affronts to the gods

Examples: “moralizing high gods” such as the Abrahamic God; “broad supernatural punishment” concepts such as karma in Buddhism

“Moralizing gods” religions follow origins of complexity, develop near start of Empires with large populations containing multiple ethnicities

Moralizing gods help sustain and expand multi-ethnic, multi-cultural empires (cosmopolitan society)

43

Table 9.1 Chronological table of selected periods in Mesopotamia
(Calibrated dates of prehistoric periods are taken from Hours, Aurenche, Cauvin, Cauvin, Copeland, and Sanlaville 1994; Evin 1995; Porada, Hansen, Dunham, and Babcock 1992)

Periods	Approximate years BC
Early Holocene and Neolithic	10,000–6,000
Hassuna	7,100–6,600
Samarra	7,000–6,300
Halaf	6,400–5,500
Ubaid	6,500–4,000
Uruk	4,000–3,100
Early Dynastic	2,800–2,350
Old Akkadian/Akkade	2,350–2,200
Ur III	2,100–2,000
Old Babylonian	2,000–1,600
Old Assyrian	1,950–1,750
Middle Babylonian/Kassite	1,600–1,150
Middle Assyrian	1,400–1,000
Neo-Babylonian	1,000–539
Neo-Assyrian	1,000–610
Late Babylonian	
Achaemenid Persian	539–333
Hellenistic/Seleucid	333–190
Parthian and Sasanian dynasties	190 BC–AD 642
Islamic conquest	AD 642

44