



2nd Year Architecture
2018/2019 second Semester

History of Architecture I

Lecture (2) :

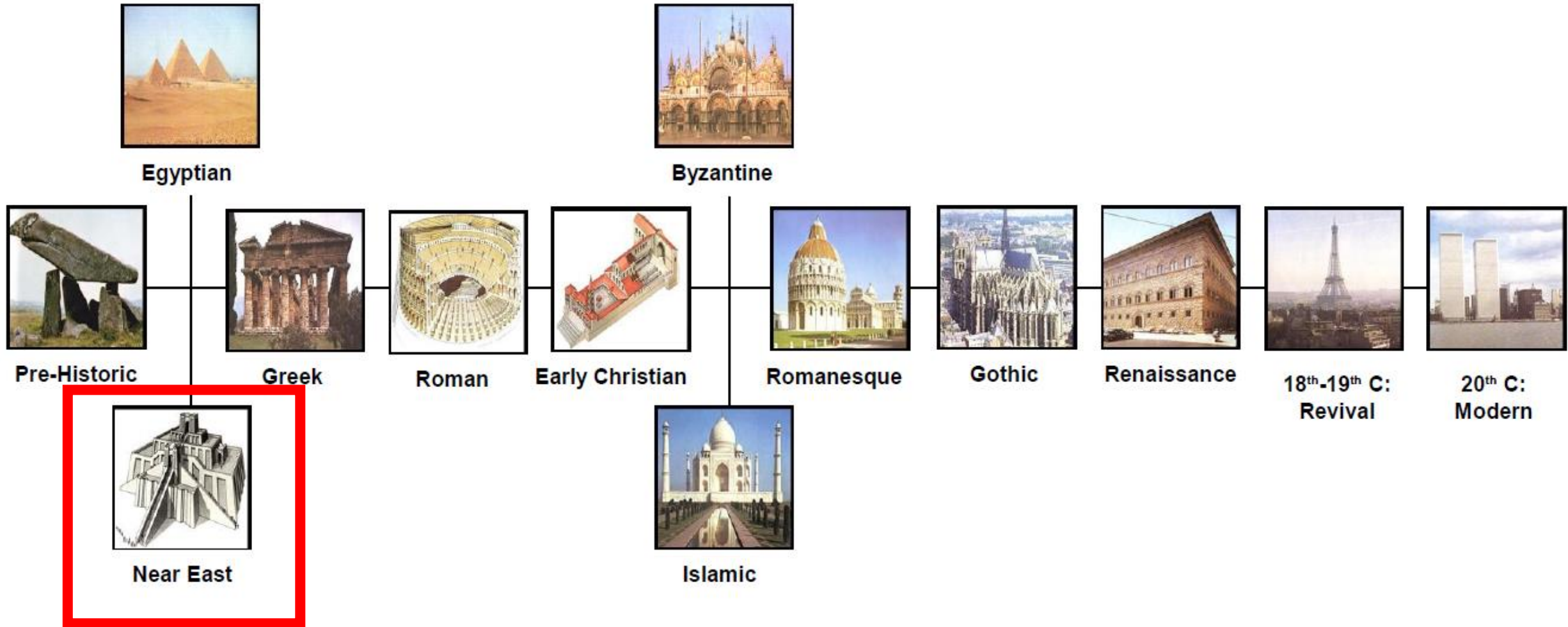
Mesopotamia 1

***by* : SEEMA K. ALFARIS**

Lecture 's information

Course name	History of Architecture I
Lecturer	Seema k. Alfaris
Course 's information	This course traces the history of Architecture from the early developments in the Paleolithic Age (Early Stone Age) to the Rome (16th century)..
The objective	<ol style="list-style-type: none">1. Understanding the Mesopotamia Architecture , and the factors which shape this Architecture.2. Understanding The Main Types of buildings that Mesopotamia famous with .

The Historical Timeline of Architecture



Location , period and
General background

Mesopotamia

Mesopotamia :The Fertile Crescent

- Refers to the geographical area occupied by contemporary Iraq, East of Syria, southwestern Iran and southeast Turkey .
- “Mesopotamia” is a Greek word that means “between the rivers”, specifically, the area between the Tigris River and Euphrates River (present day Iraq).
- The Tigris and Euphrates rivers sit in this land as dominant physical feature.



Mesopotamia

Mesopotamia :The Fertile Crescent

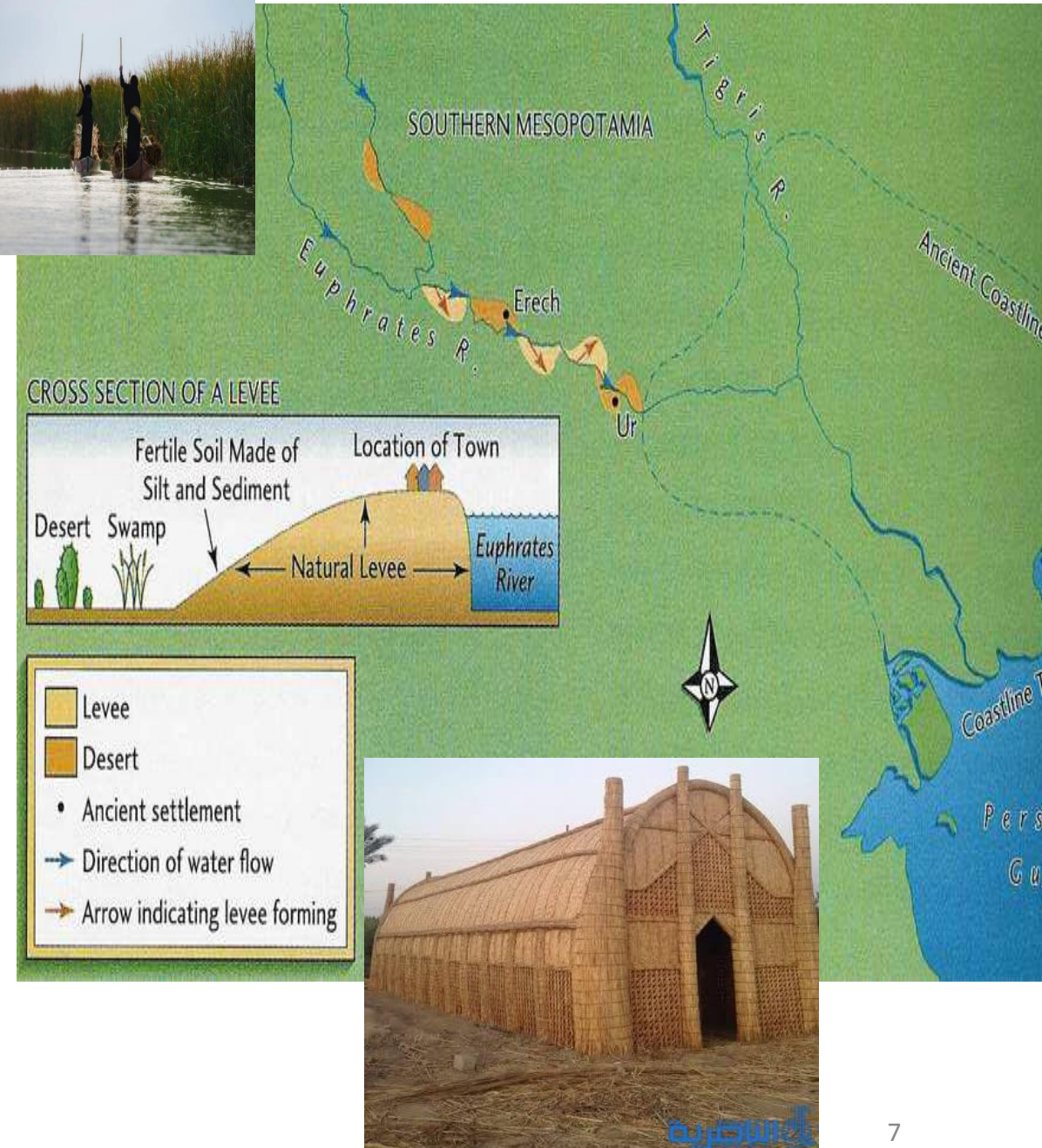
- Widely considered to be **one of the cradles of civilization by the Western world** .
- The Tigris and Euphrates, with their tributaries, form **a major river system** in Western Asia.
- They had a role in shaping Mesopotamia 's Architecture , achieving **the most important elements of settlement and prosperity** ,where the important cities were built on its fertile banks. So they were used in watering the plants.



Mesopotamia

1. Geographical Factors:

- The land of Mesopotamia was characterized by **the fertility of its territory**.
- **Mud** and its derivatives was a basic material and they made **bricks** in all forms and sizes after drying under the sun.
- Mesopotamia contain a **Natural Levees** (Embankments) produced by build-up of sedimentation over thousands of years of flooding ,**create a high and safe flood plain**.
- Make irrigation and canal construction easy
- the surrounding swamps were full of fish & waterfowl (Marshes) .
- Reeds provided food for sheep / goats and also were used as building resources.



Mesopotamia

1. Geographical Factors:

- In the northern mountainous areas, **the stone** was used in a large way. In addition, the earth was rich in minerals such as **iron, copper and tin**, all that led to the construction and various industries.
- Because **the soil in Mesopotamia is sandy and doesn't absorb water**, So, the old Mesopotamian buildings are constricted to have a appropriate methods get of surfaces water, internal courtyard and external corridors, in addition to that they developed the first drainage systems in there individual buildings and cities.



Mesopotamia

2. Climate factors:

- Little rainfall , Hot and dry climate (An extreme harsh environment) .
- Because of the **drought nature** and the abundance of dust storms, all of that product a distinctive Architectural style based on the orientation of buildings in to inside (**the introvert**).
- High-altitude external walls for the purpose of moving the air, and narrow alleys, especially in the residential sectors of cities to reduce environmental exposure and protection from difficult environmental conditions.
- Catastrophic flooding of the rivers in spring.
- Arid soil containing little minerals.
- No stone or timber resources.



Mesopotamia

3. Social Structure :

- **Agriculture** has been an important factor in the development of social life in Mesopotamia , social life was about work, especially in agriculture and construction.
- A High-level of **social organization** requires tools to communicate (The art of writing), so the symbols on stamps , used to communicate.
- **Sumerians had divided society to 4 main classes :**
 1. **The priests** : were there duty is to be sure of people's behavior in a way that doesn't infuriate the gods, because it may bring them the curse through floods and natural disasters.
 2. **Highest class:** represented by the king which being elected or chosen from God , his duty is to organize all affairs of life.
 3. **Upper class:** represented by people .
 4. **Slaves** : when the Sumerians invaded other cities they brought with them slaves who were working in the construction of temples and palaces and rich people .



Mesopotamia

4. Religion :

- Religion and faith played a central role in public and private life of the residents of Mesopotamia, and largely influenced all aspects of life including Architecture.
- The central position of religion in the life of the residents came from a sense of absolute dependence they had the will of the gods.
- Polytheistic religion consisting of over 3600 gods and demigods.

Prominent Mesopotamian gods

- Enlil (supreme god & god of air) .
- Ishtar (goddess of fertility & life).
- An (god of heaven).
- Enki (god of water & underworld).
- Shamash (god of sun and giver of law).

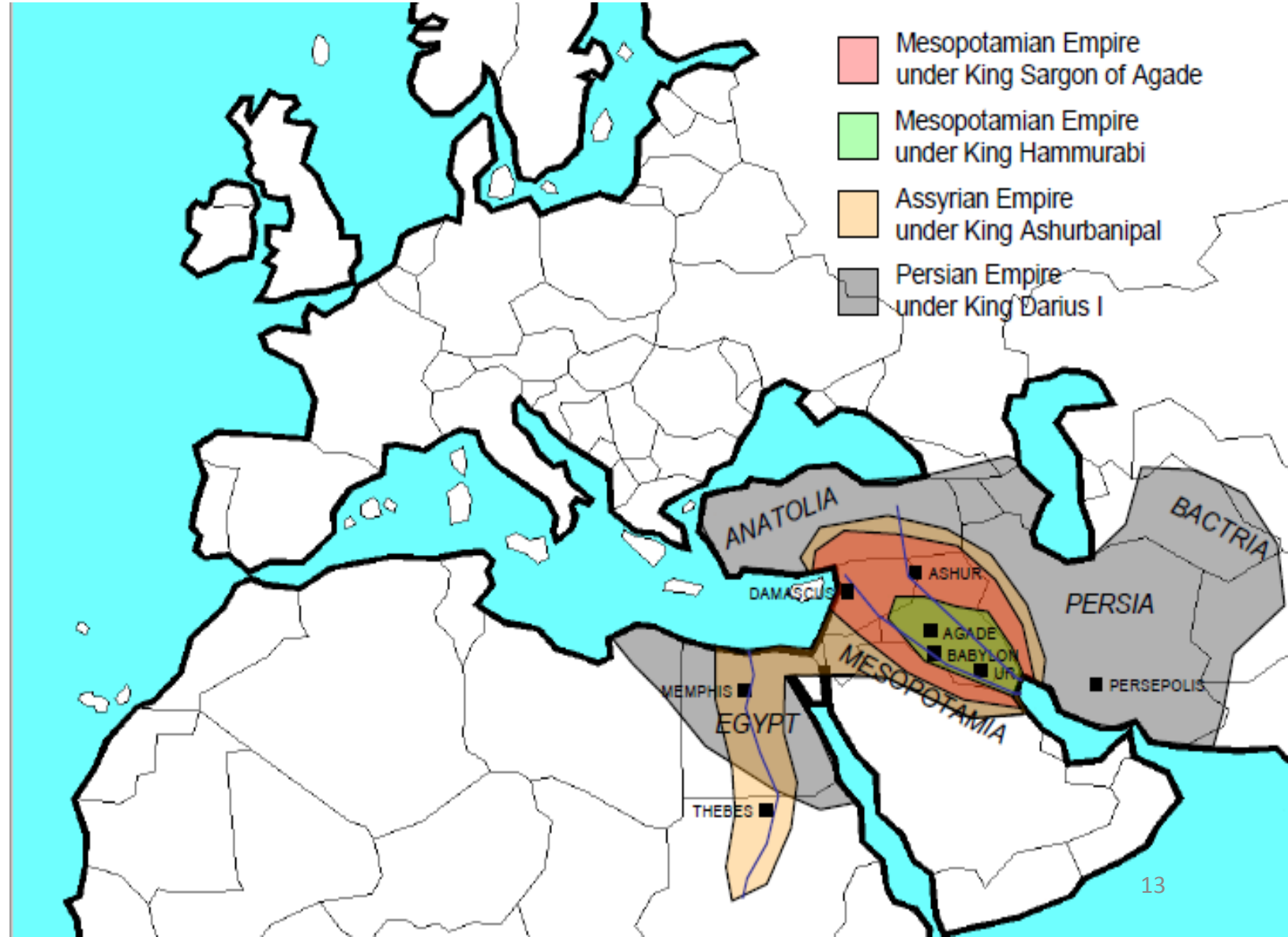


Historical Background

Mesopotamia

Mesopotamia's popular kingdoms Chronologically:

- The area witnessed the earliest rise of human civilization around 4500 BC and lasted for 5000 years .
- Transformation from prehistory, to villages and cities occurred there.
- Different cultures established city states and empires at different periods.



Mesopotamia

Mesopotamia's popular kingdoms Chronologically:

(late copper age) (Bronze age)

4500 to 2000 BC Sumerian culture, peaking in 3300 BC

2350 – 2200 BC Akkadian Period (the Third Dynasty of Ur)

(Middle Bronze age)

2000- 1600 BC Babylonian Culture

1600 – 1717 BC Kessites

(Late Bronze Age)

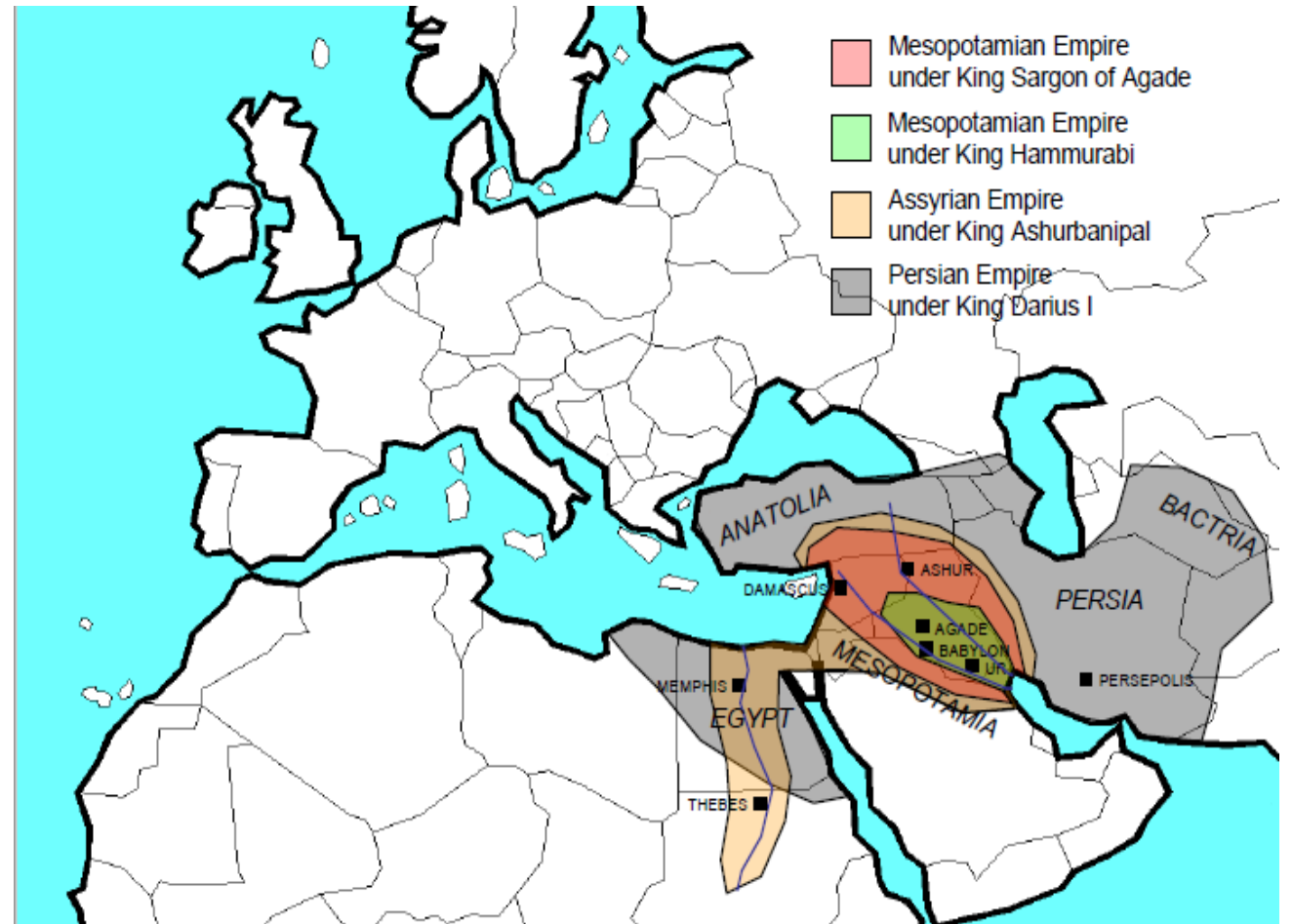
1350 – 612 BC Assyrian Culture

(Iron age)

612 – 539 BC Neo Babylonian culture

539 – 330 BC Persian culture

Bronze casting begins in the Near East.
ca. 3600 BCE

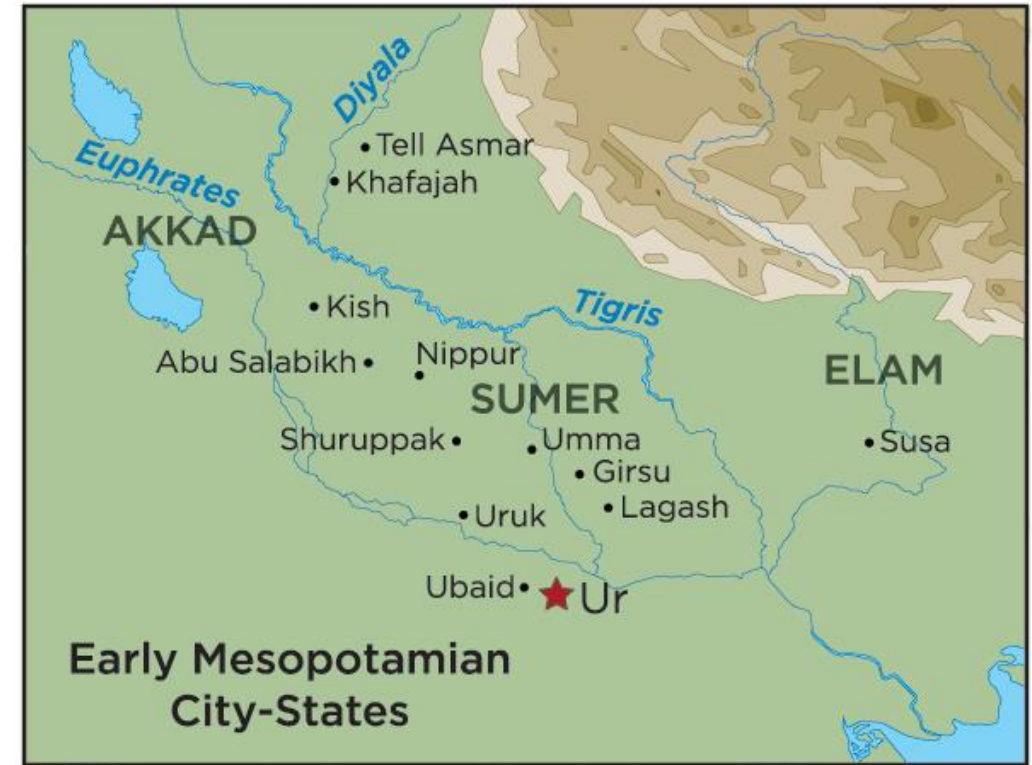


Mesopotamia

Dawn of the Sumerian breeds (4500-2000B.C)

Main characteristics :

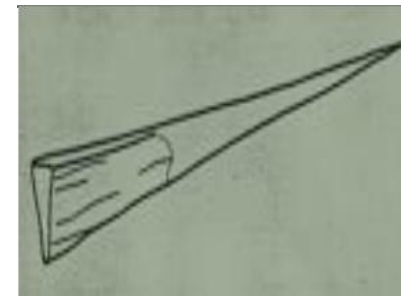
- The transition from prehistory was made around 4300 BC with the **rise of the Sumerian civilization**.
- The major cities of the Sumerian civilization were **Eridu ,Kish, Uruk and Ur**.
- Social, economic and intellectual basis.
- Irrigated fields and produced 3 main crops: (barley, dates and sesame seeds).
- Built canals, dikes, dams and drainage systems.
- Invented **the wheel** .
- Abundance of food led to steady increase of population (farm, towns, cities)



Mesopotamia

Dawn of the Sumerian breeds (4500-2000B.C)

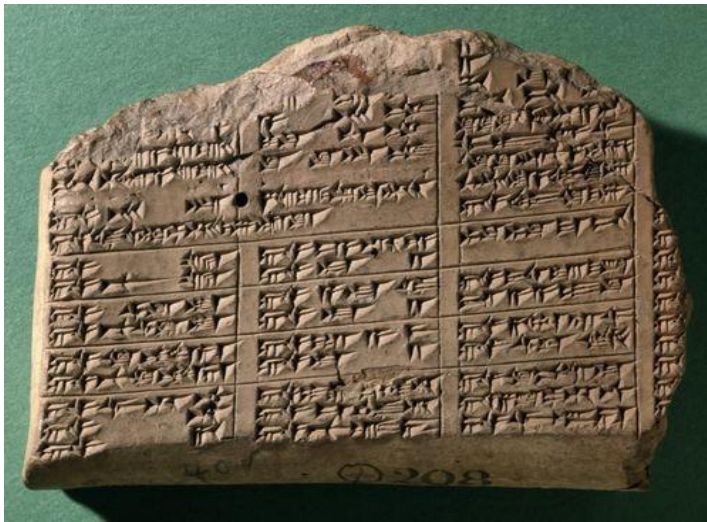
Main characteristics :



a pointed tool



- **Developing a system for writing (cuneiform writing) :** Cuneiform, from the Latin cuneus, meaning "wedge," is the term applied to a mode of writing which used a wedge-shaped stylus(a pointed tool, probably made out of a reed to make impressions on a clay surface, and also on stone, metal, and wax. Most of the clay tablets were sun-baked, making surviving tablets very fragile.
- Writing was invented in the ancient Near East in order to **record business activities**, but tablets containing medical texts and other subjects have also been found.



Mesopotamia

Dawn of the Sumerian breeds (4500-2000B.C)

Main characteristics :

- The Sumerian were the first civilization to make a **conscious attempt** of designing public buildings.
- Their buildings were reinforced with **buttresses**, and also were enclosed in walls with Ziggurat temples and palace as centers of the city.
- Developed a trade system with bartering: mainly wool and cloth for stone, metals, timber, copper, pearls and ivory.
- **Mud** was their building material, it was formed into brick, sun dried and built into massive walls. Walls were thick to compensate the weakness of mud.
- Individuals could only rent land from priests (who controlled land on behalf of gods); most of profits of trade went to temple.

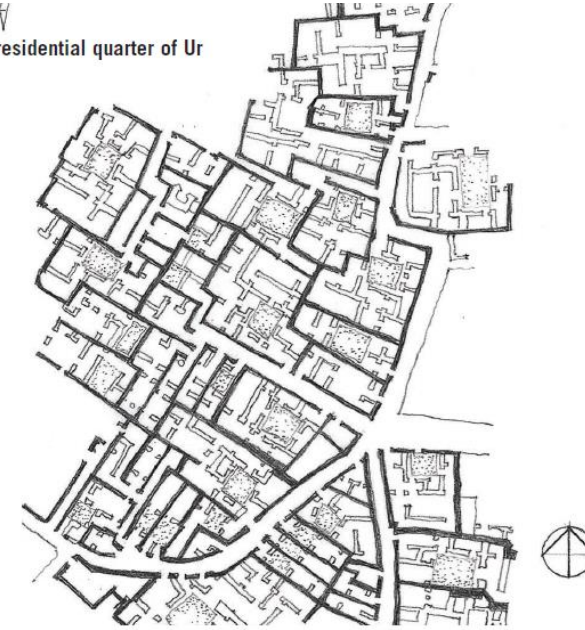


Mesopotamia

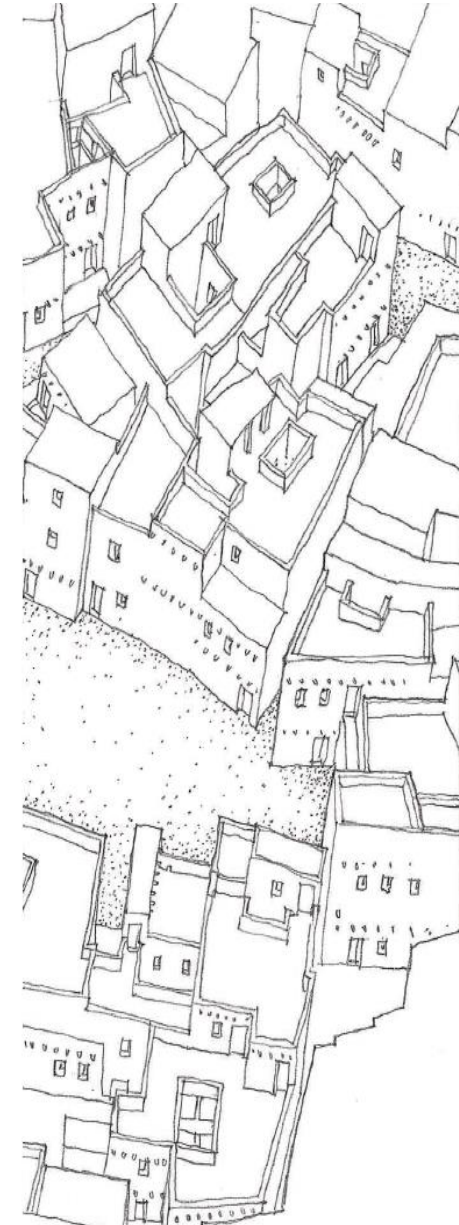
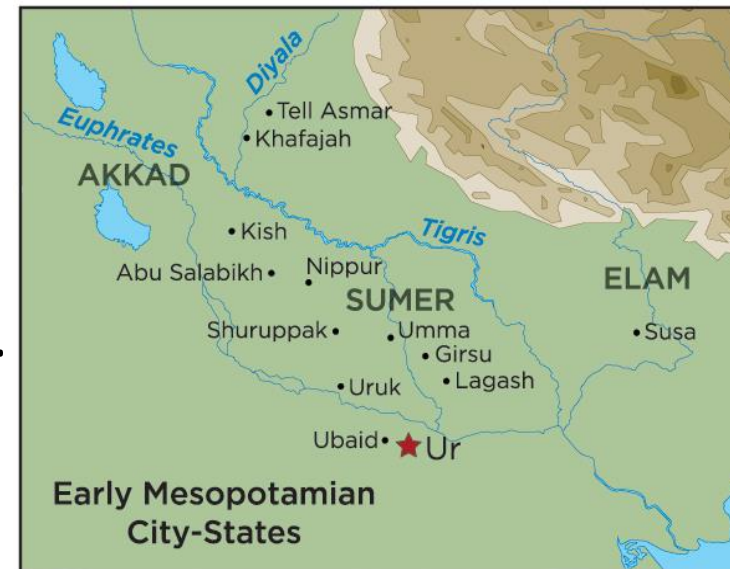
Dawn of the Sumerian breeds (4500-2000B.C.)

Ur and Uruk :

- Fabric of the city is made up of residences mixed with commercial and industrial buildings .
- The houses streets were usually punctuated by narrow openings that serve as entrance to houses .
- The houses are densely packed with narrow streets between them.
- Streets were fronted by courtyard houses of one story high.
- Temples were represent **the principal architectural monuments** of Sumerian cities.
- Famous buildings: **White temple at Uruk , Great Ziggurat at Ur and Oval temple at Khafaje .**



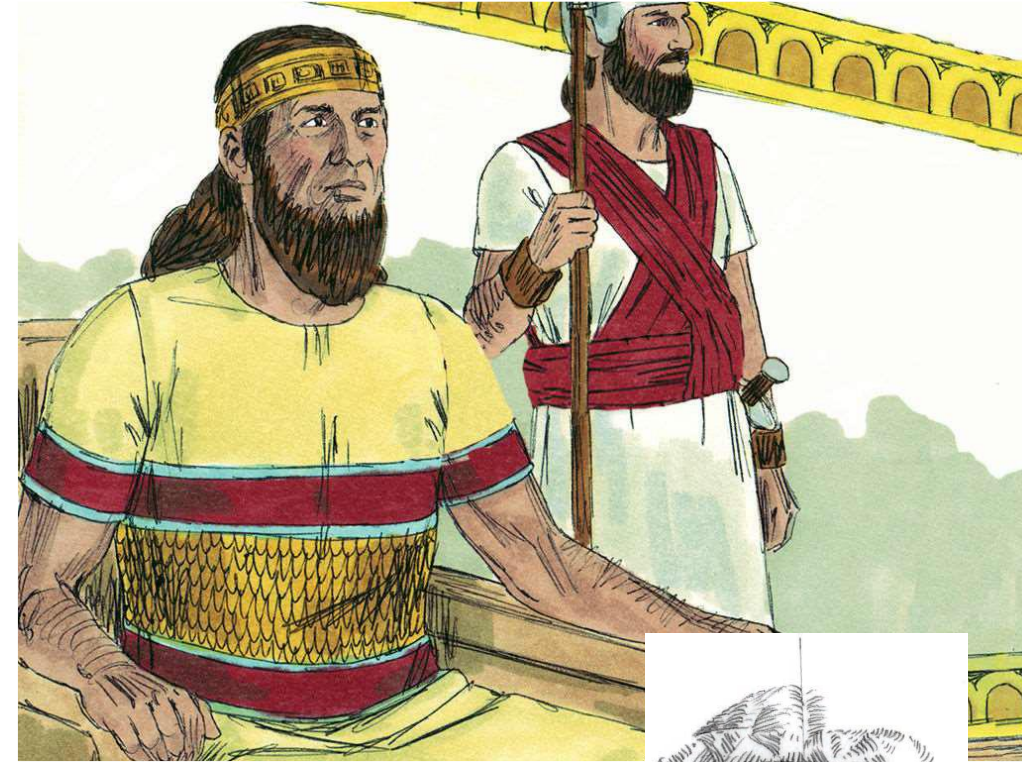
2.23 Partial plan: A residential quarter of Ur



Mesopotamia

Akkadian Dynasty (2350 – 2200) B.C

- Akkadians (the third dynasty of Ur)
- Established capital at **Akkad** .
- Akkadians came to dominate Mesopotamia (after conquering Sumerians in 2350 B.C), with the ascendancy of Sargon,(Sargon the Great) the ruler of Umma, and unified it.
- He was the first known successful centralization of power in the Mesopotamian region.
- Sargon's concept of kingship had a lasting impact on Mesopotamian culture.
- The idea of village-based civic loyalty, so important to early Sumerians, was replaced by the concept of **loyalty to a ruler**, he deliberately diminished the power of local chieftains.
- This new concept of kingship is expressed in the statue of a head representing an Akkadian ruler.



Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

- Under the control of **Hammurabi** who was exploited the turbulent situation and united Mesopotamia again under his rule in what was later known as **the Old Babylonian Empire** , and established **Babylon**.
- The Babylonian period was a period of great cultural development In engineering, astronomy and literary sports, and is still used and taught to this day, including:
 1. The calculates system : a mathematical system based on sixty as all their numbers were expressed as parts of or multiples of sixty.
 2. Devised a calendar base on cycles of the moon
 3. The engineering division of the 360-degree circle and its parts
 4. The literature level :The epigraphic Epic of Kilgames appeared In the organization of the foundations of civil life,
 5. The law of Hammurabi, which appeared as a constitution and a law regulating the civil life and dealing with citizens by the emergence of legal laws and thus the separation of religious and secular authority.



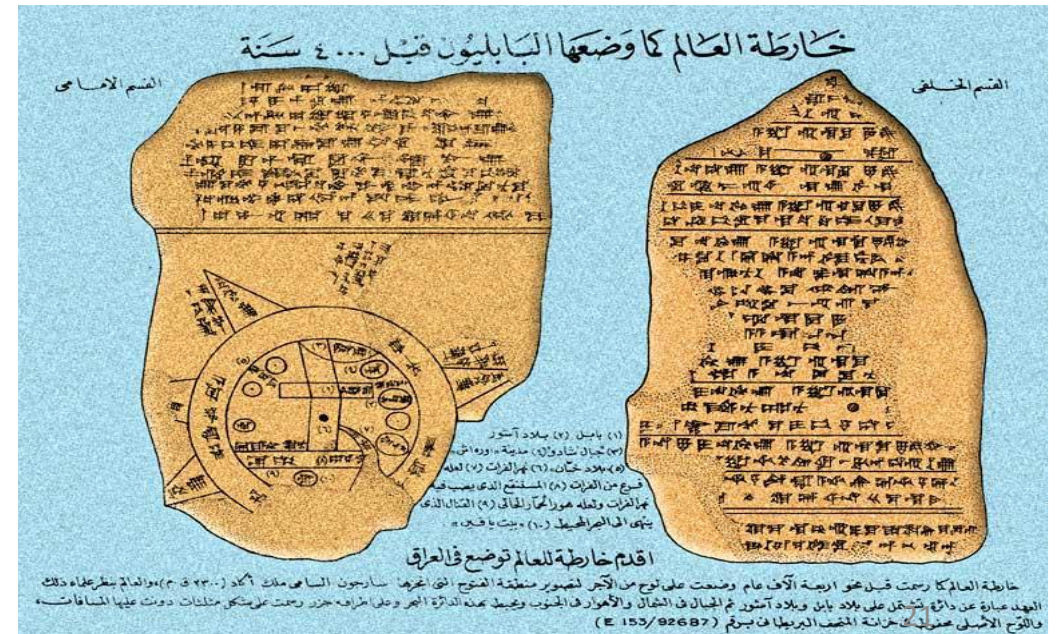
Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C



- Gilgamesh is an ancient story or epic written in Mesopotamia more than 4000 thousand years Ago.
- Gilgamesh parallels the Nippur Tablet, a six columned tablet telling the story of the creation of humans and animals, the cities and their rulers, and the great flood.
- Gilgamesh and the Nippur tablet both parallel the story of Noah and the Ark (great flood) in the Old Testament of the Jewish and Christian holy books

The oldest map for the World was drawn by the Babylonian of the old kingdom



Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

- **Babylonian art** : Traditional building was enhanced by a new form of façade ornament consisting of figures designed in **colored glazed brick work** .

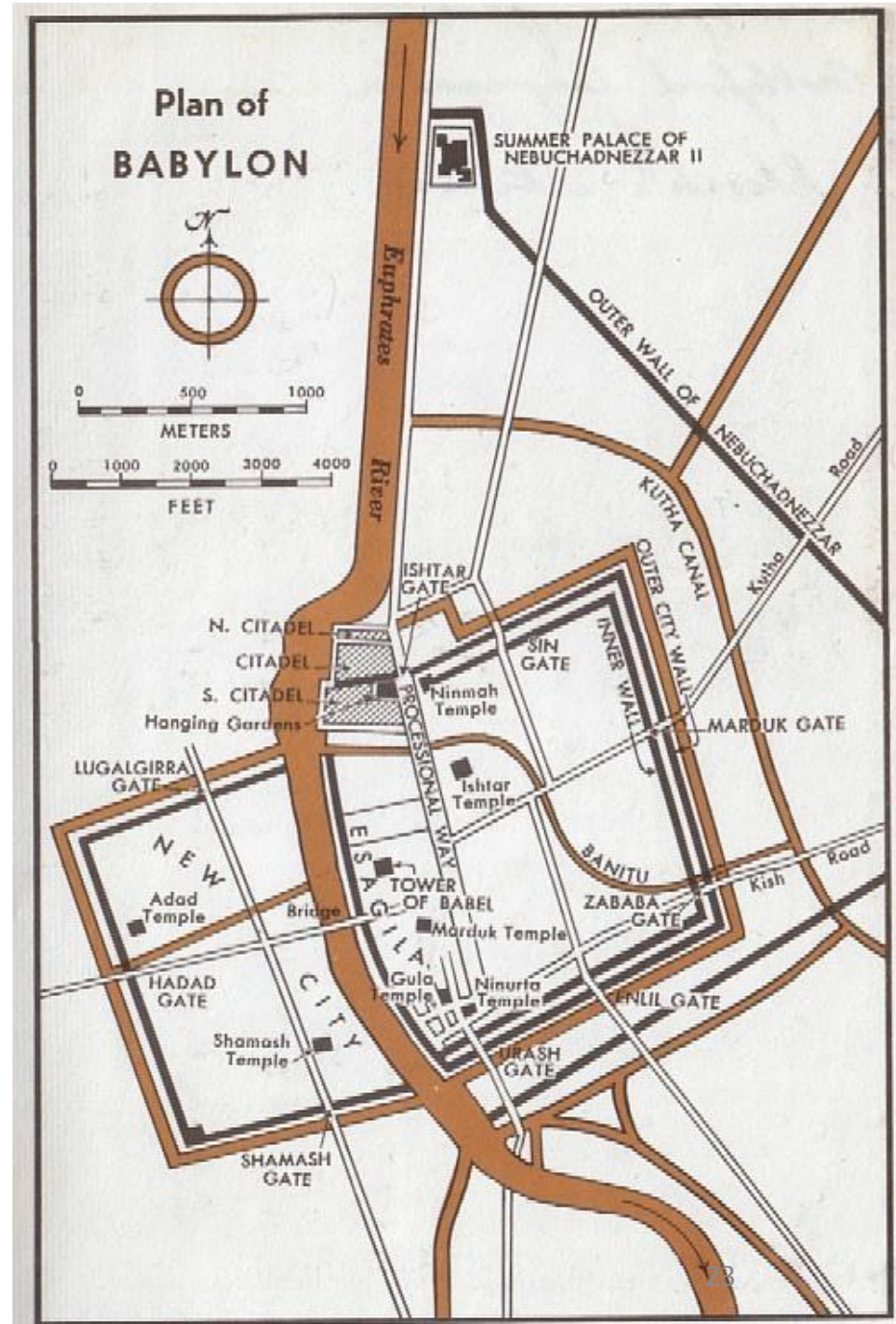


Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

Babylon city :

- The city of Babylon is shaped in the form of a **quadrangle sitting** across and pierced by the Euphrates.
- The city was surrounded by a fortification of **double walls**.
- These had **defensive towers** that project well above the walls.
- The walls also had a large **moat** in front, which was also used for navigation , the length of the wall and moat is about five and a quarter miles
- Procession street was in the middle of the city.
- The city had a palace, Nebuchadnezzar's palace, located on its northern side on the outer wall.
- Famous building : **Nebuchadnezzar's palace , Hanging gardens , Ishtar gate and Babylon tower .**



Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

Babylon city :



Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

Babylon city :

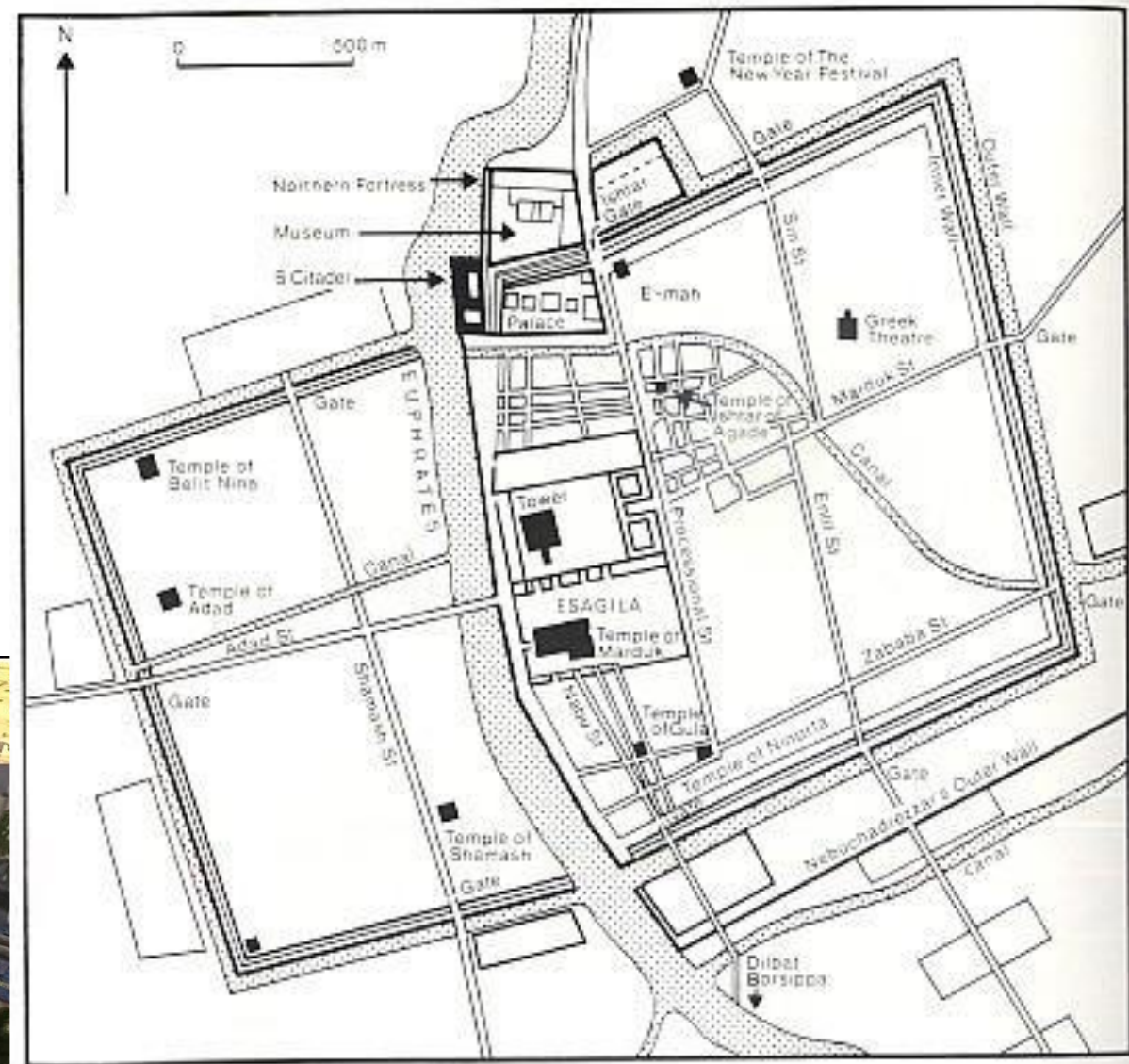
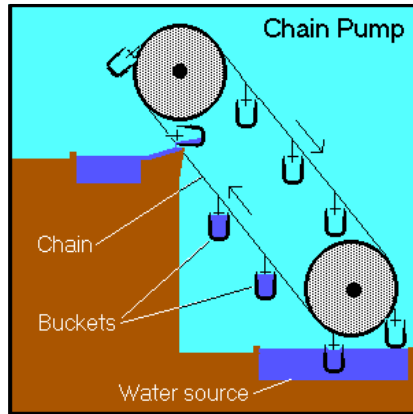


Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

Babylon city :

Hanging Garden :

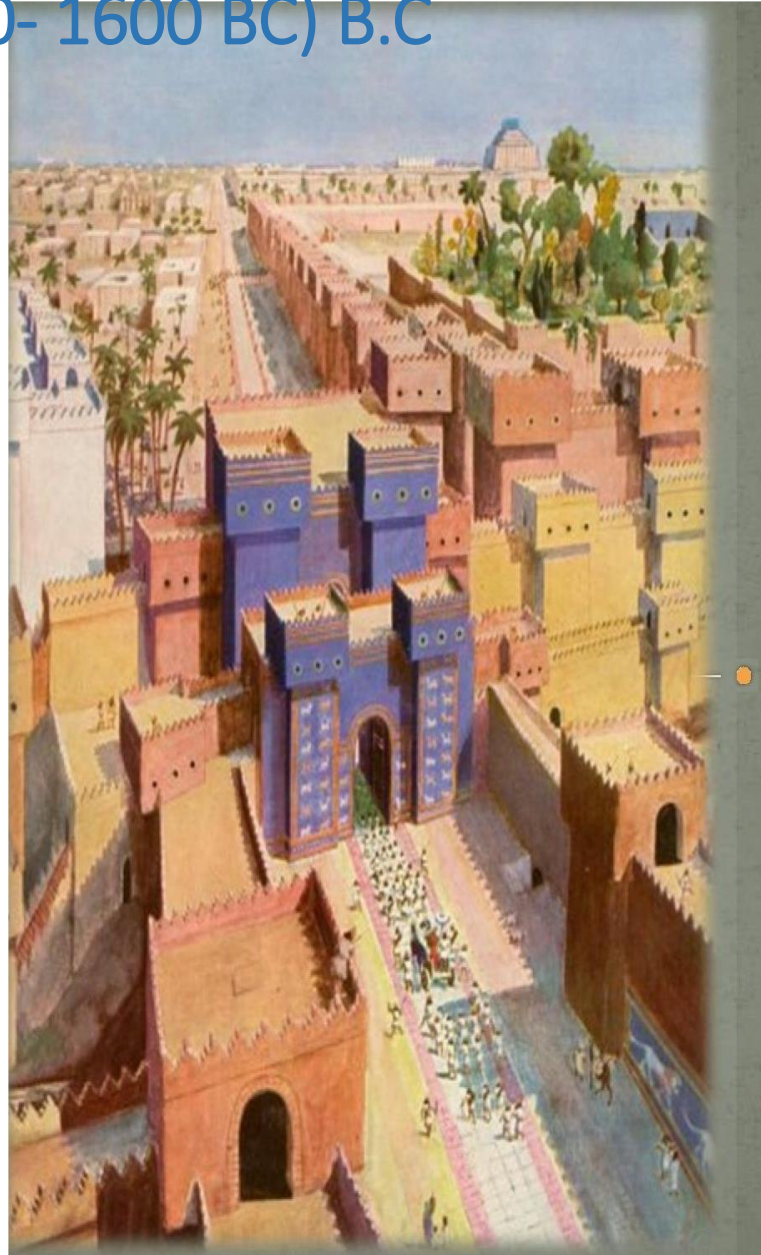
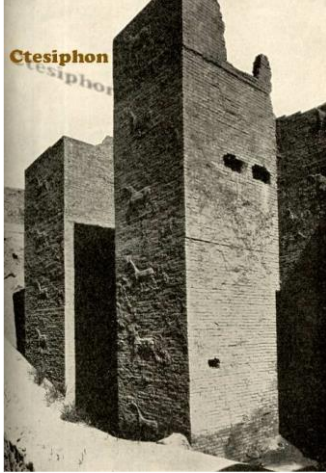


Mesopotamia

Babylonian Dynasty (2000- 1600 BC) B.C

Babylon city :

Ishtar Gate:



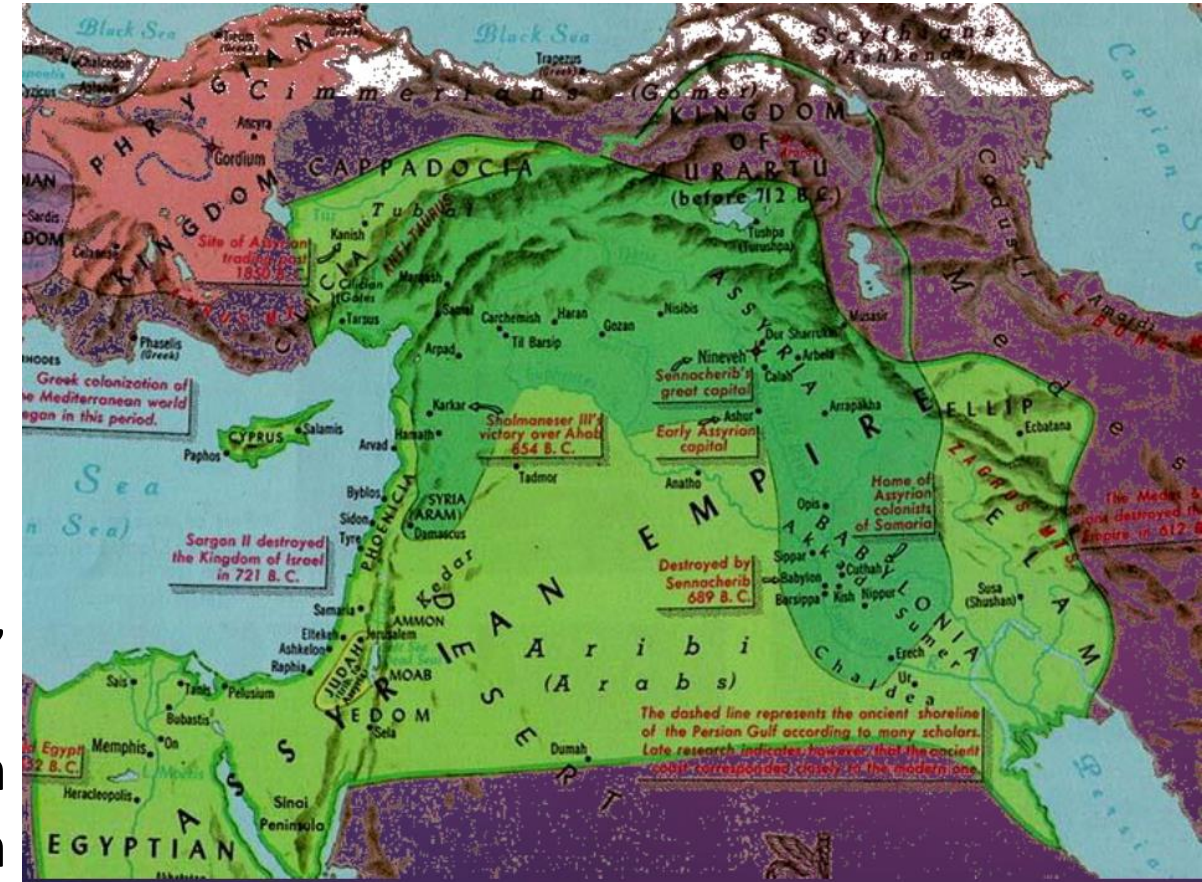
- From the palace originated a procession street(Almawkib) that cuts through the city raised above the ground to the tower of Babel.
- The procession street enters the city through the famous Ishtar gate
- The gate had a pair of projecting towers on each wall
- All the facades of gates and adjoining streets were faced with **blue glazed bricks** and ornamented with **figures of heraldic animals- lions, bulls, and dragons** .



Mesopotamia

Assyrian Culture (1350 – 612) B.C

- After **Hammurabi's death**, Babylon fell apart and **kings of Assur** controlled more of surrounding area and came to dominate .
- Assyrian reunited Mesopotamia and established **the first true empire**.
- Established many cities , including **Assyria**, **Khorsabad** (Dorshrokin) – **Nineveh** and **Nimrud** .
- **Assyria** emerged as dominant force in the north, became important trading and political center.
- Assyrian made conquered lands pay **taxes** (food, animals, metals or timber) .
- **Discovery of Iron** changed there lifestyles in weapons and in daily life , replaced wooden wheels and applied to horse drawn chariots.
- Assyrian army became most effective military force



- **During the Assyrian periods, temples lost their importance to palaces**

Mesopotamia

Assyrian Culture (1350 – 612) B.C

- **Assyrian art** is characterized by the huge quantities of murals, sculptures and winged bulls.
- The huge winged bulls appeared to guard the gates and holding ceilings.
- The mundane and most mural sculptures represent the character of the king and animals such as lions and horses .
- Assyrian Architecture Buildings were very high, that's related to the majority of using stone in construction , and also because its can be found allot in the Region.



Mesopotamia

Assyrian Culture (1350 – 612) B.C

Winged bulls

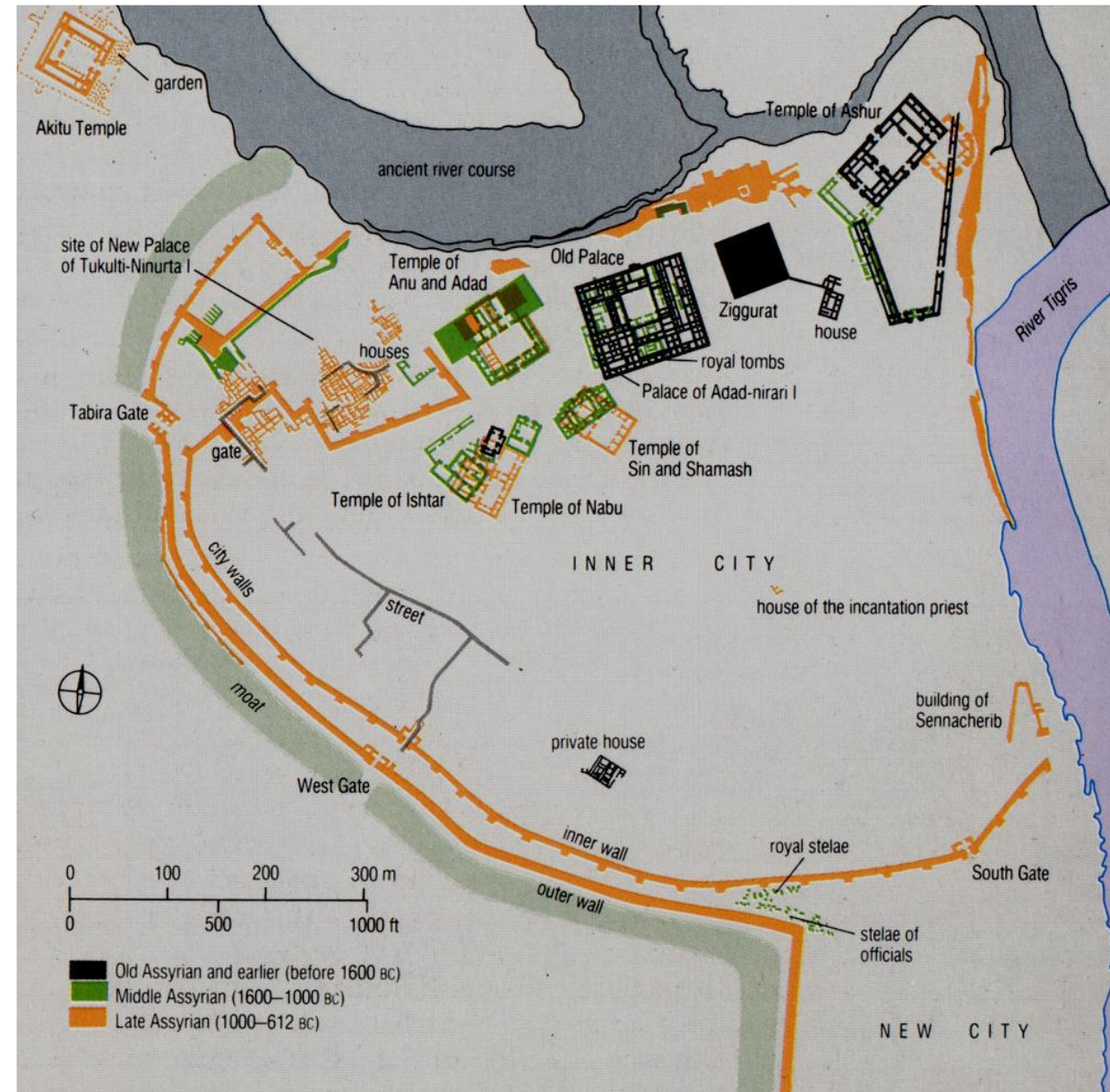


Mesopotamia

Assyrian Culture (1350 – 612) B.C

1. Assyria city :

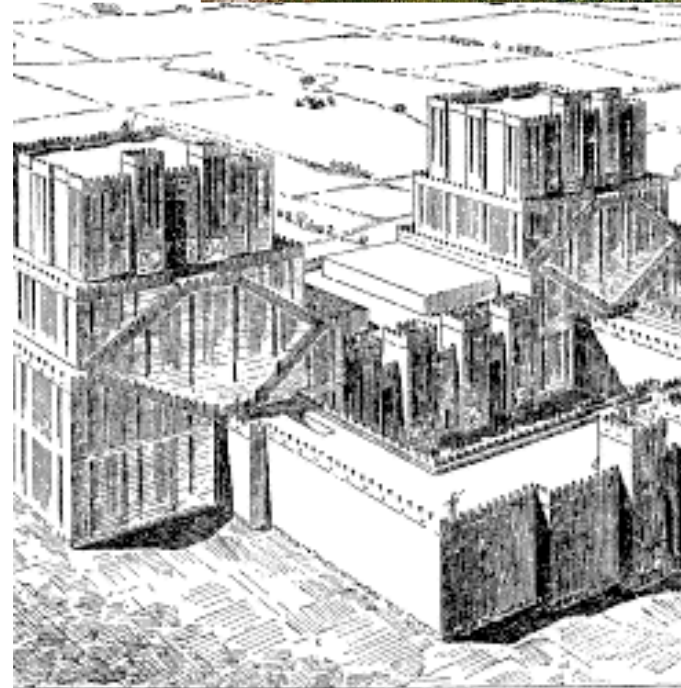
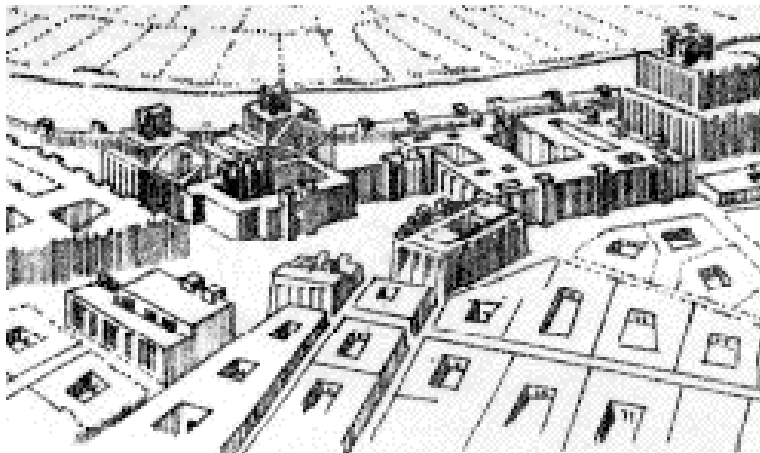
- One of the oldest Assyrian cities, most researchers associate its development to the geographical factors (location) , and also heights of its uneven rocky (up to 12 meters edges of the river next door).
- Famous buildings : **Assur temple** (The **Doubled temple**) .



Mesopotamia

Assyrian Culture (1350 – 612) B.C

1. Assyria city :



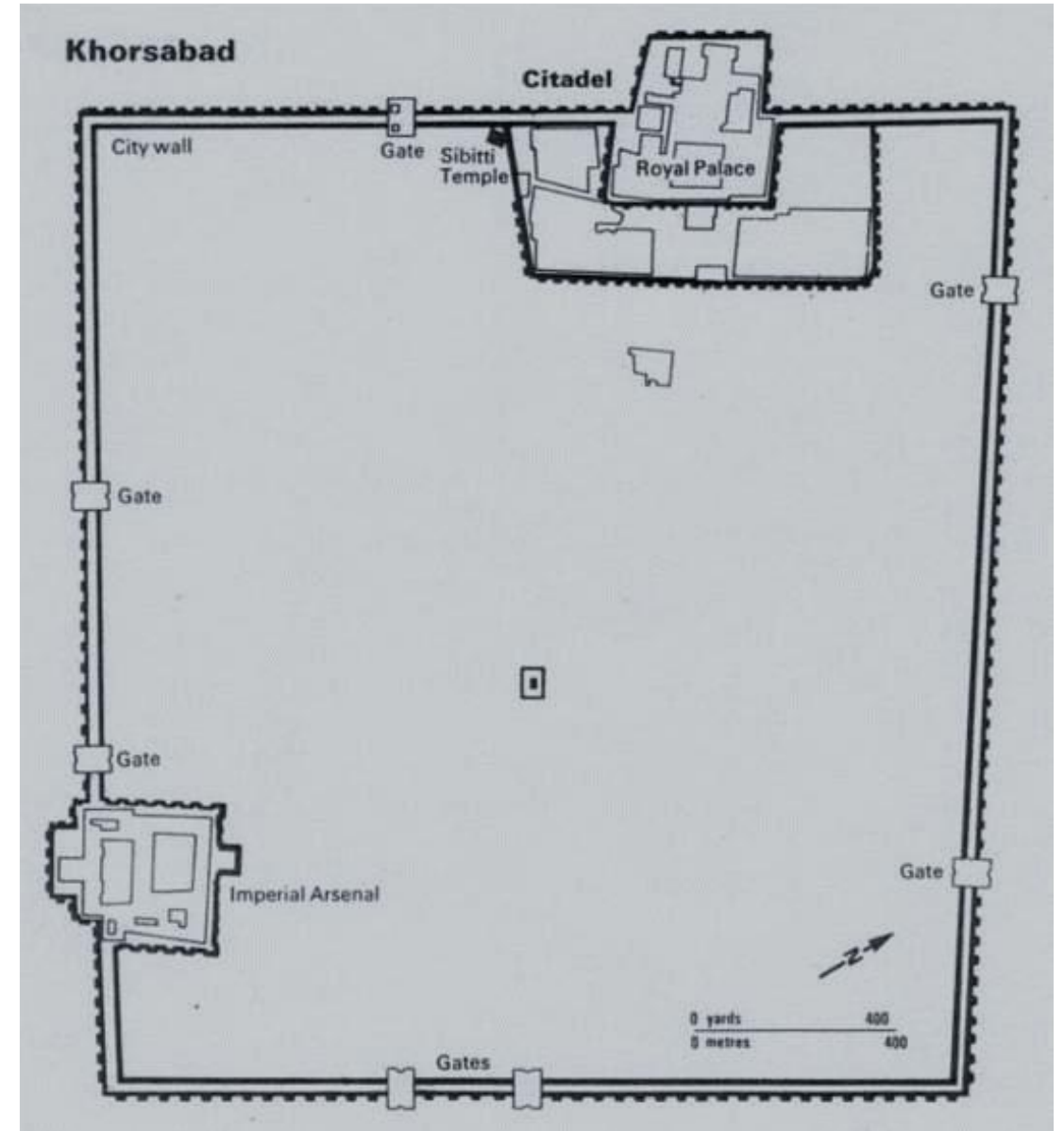
Real Ruins of
Ashur

Mesopotamia

Assyrian Culture (1350 – 612) B.C

2. Khorsabad city :

- Khorsabad , The modern name of the ancient site of Dorshukin,
- Discovered in 1843 , was built by Sargon II in 722 - 740 BC. , he is one of the greatest Assyrian kings.
- (1760 * 1675 square meters) and surrounded by bracelets It consists of 7 doors, each door bearing the name of God, guarded by two winged bulls.
- Famous buildings : **Sargon Palace is located in the north west wing, which has a huge and large complex.**

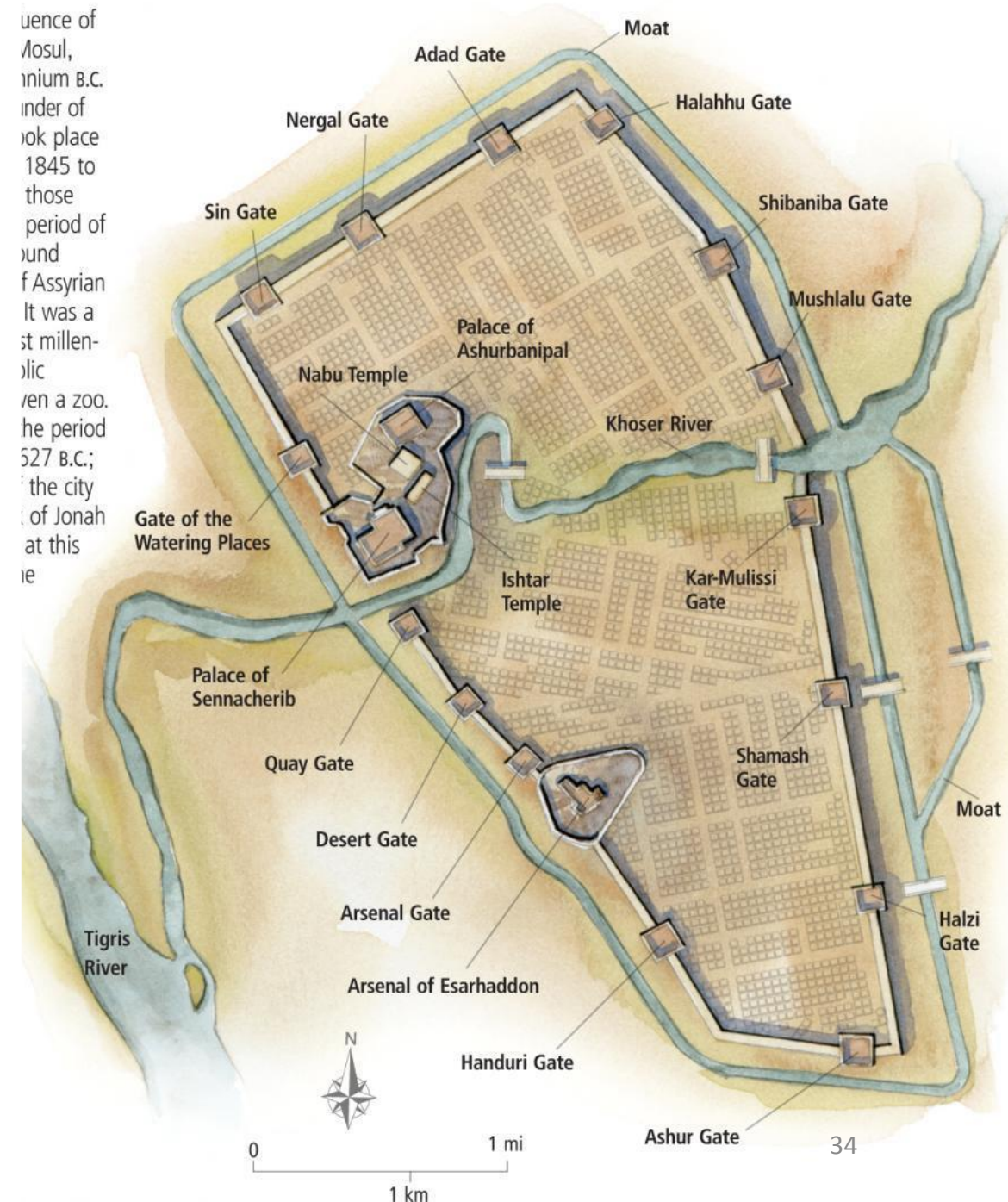
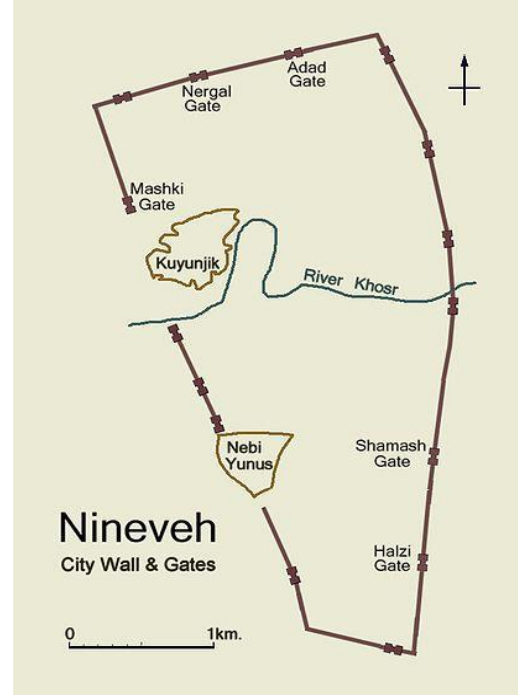


Mesopotamia

Assyrian Culture (1350 – 612) B.C

3. Nineveh city:

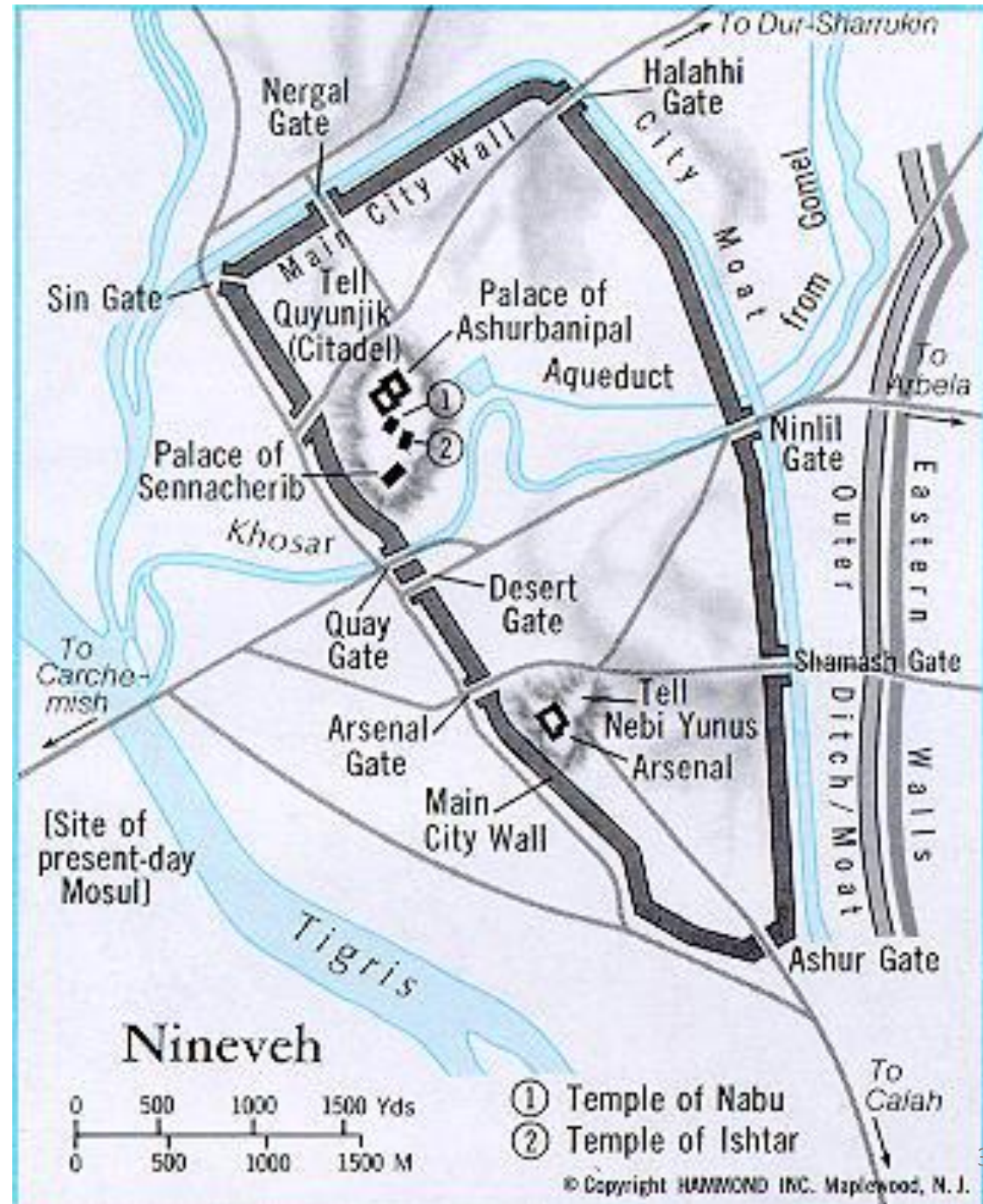
- After the death of **Sargon II** followed by the rule of his son **Sennacherib**, who moved the capital to Nineveh and since then became an important capital of the world and was famous for its palaces, temples and its irrigation projects.



Mesopotamia

Assyrian Culture (1350 – 612) B.C

3. Nineveh city:



Mesopotamia

Assyrian Culture (1350 – 612) B.C

Nineveh city gates ruins



Ashtar gate



Mashki gate



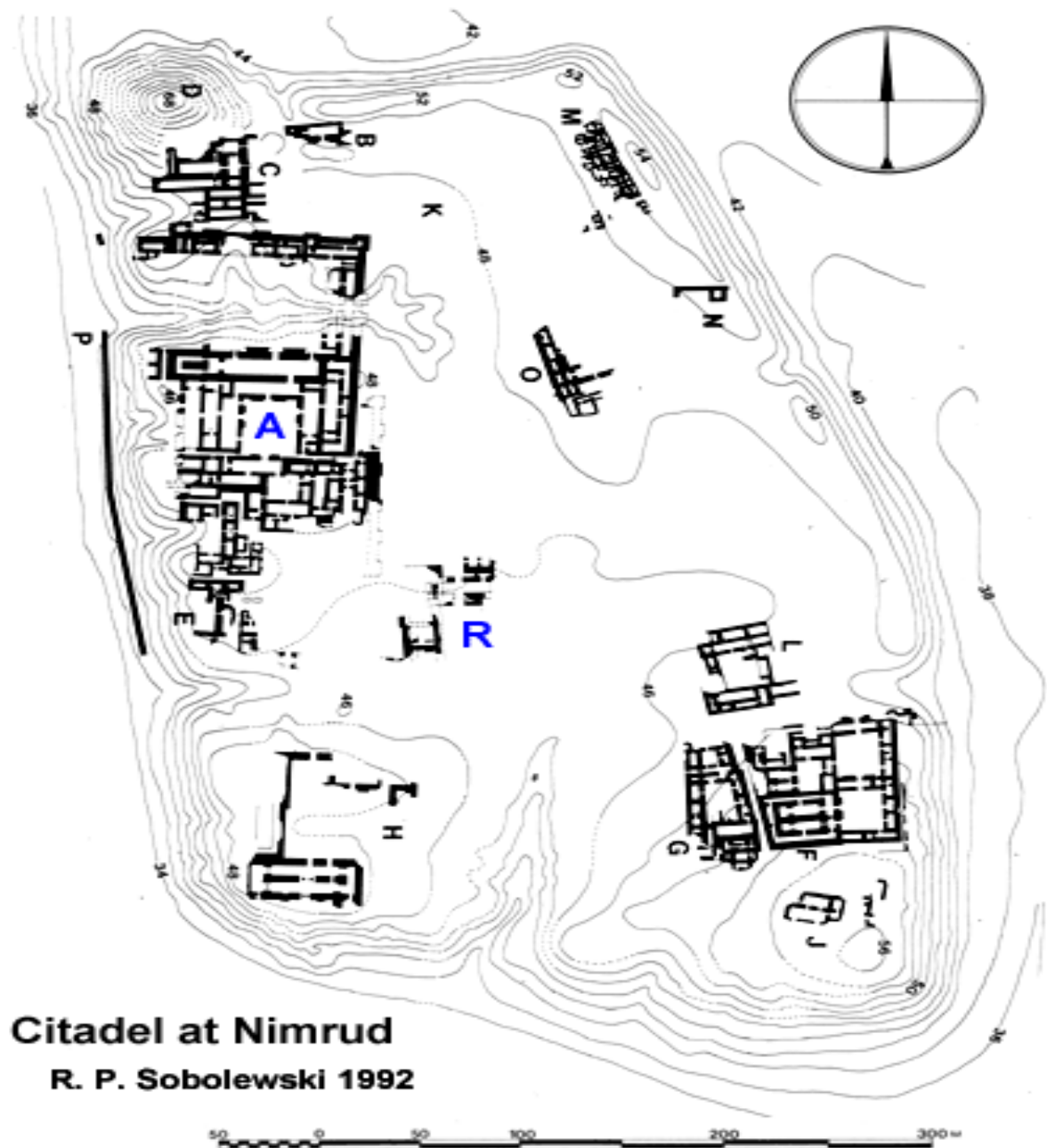
Adid gate

Mesopotamia

Assyrian Culture (1350 – 612) B.C

4. Nimrud city

- Assyrian city built by King Ashur Nasser Bal II, occupies an important strategic and defense position near Zab The Tigris.
- A wall built around a wall of 3.5 square kilometers. It was considered a political capital because it contained many Of public buildings.



A = Northwest Palace
R = Central Palace area

Mesopotamia

Assyrian Culture (1350 – 612) B.C

4. Nimrud city

Real Ruins of
Nimrud



THANK YOU ...