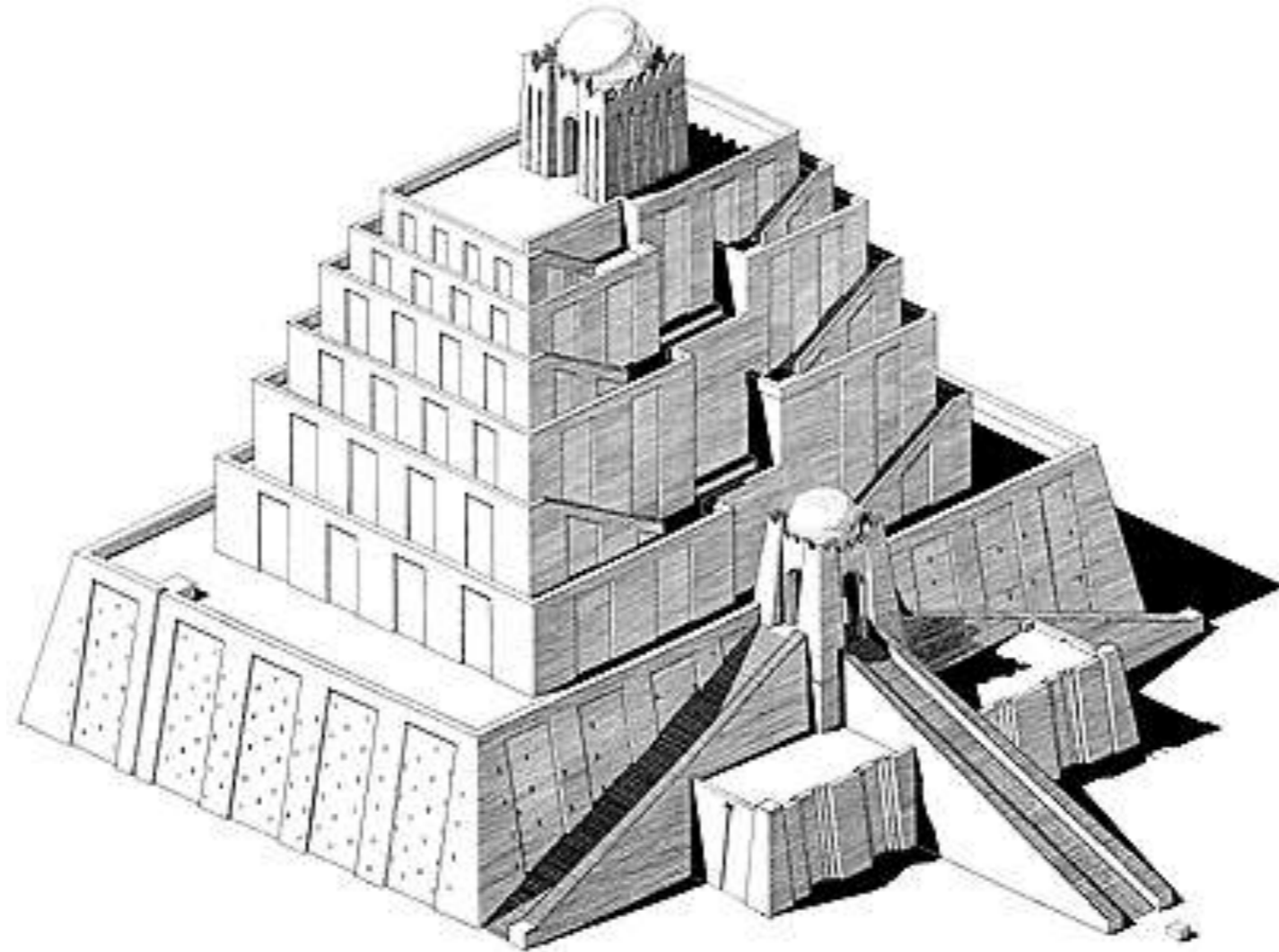


History of Architecture

Architecture of Mesopotamia



The land between the rivers

Mesopotamia: in Greek means 'land between rivers'

- **Mesos** means middle
- **Potamos** means river



Location & Weather

- The area lies between the two rivers **Tigris and Euphrates**
 - Syrian desert from the west
 - Mountain of Turkey from the north
 - Zagros mountains in Iran from the east
- The changing periods of the civilisations resulted from the **repeated invasion** by hostile groups from North and East
- **Weather:**
 - Rainy winter lasts for several weeks
 - Hot summer lasts for almost six months
 - Humid weather, disrupted by mild wind from the northeast



Geology

- The land is formed from **thick mud** or **clay**
- The area **lacks stone and wood**
- Mud was the **main building material**, manipulated into **bricks** which were **sun-dried** to use in building the walls
- Bricks were given **different colours** to use as facing, with methods of '**kiln-burnt**' and **glazed brick**
- Places where stone was not scarce, like Assyria, walls were faced **internally and externally with stone**



Mesopotamian periods

The civilizations grew marching **towards the north** starting from the **extreme south** of the region called Sumer towards Babylon and Assyria

- **Sumerian:** 3500–2340 BC
- **Akkadian:** 2300–2150 BC
- **Neo-Sumerian:** 2150–2000 BC
- **Babylon:** 1800–1600 BC
- **Assyrian:** 1400–612 BC

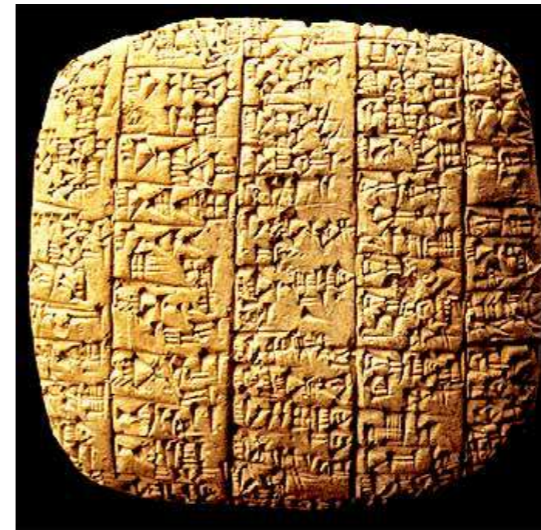
Bronze Age

- **Neo-Babylonian:** 612–538 BC
- **Persian:** 538–334 BC

Iron Age

Main Achievements

- Developed **cuneiform** - the earliest form of writing
- Made the first **wheeled vehicles**
- Developed basic **algebra and geometry**
- Created **laws** - The Code of Hammurabi, best documentation of early law codes '**Primitive constitution**'. Punishments were extremely harsh; '**An eye for an eye, a tooth for a tooth**'. And the king's authority came from the gods
- One section codified **criminal law**, that deals with offences against others, such as robbery and murder
- Another section codified **civil law**, that deals with private rights and matters, such as business contracts, taxes, and property inheritance



Religion

- The people were worshipers of the **heavenly bodies** such as the sun and the moon and the powers of nature such as wind and thunder
- **Every City has its own temple of the God, who was called 'king of the city'** and they were ruled by the high priest



Elli
God of wind



Nabu
God of wisdom
and writing



Ishtar
goddess of fertility,
love, and war



Enki
God of water

Architecture Character

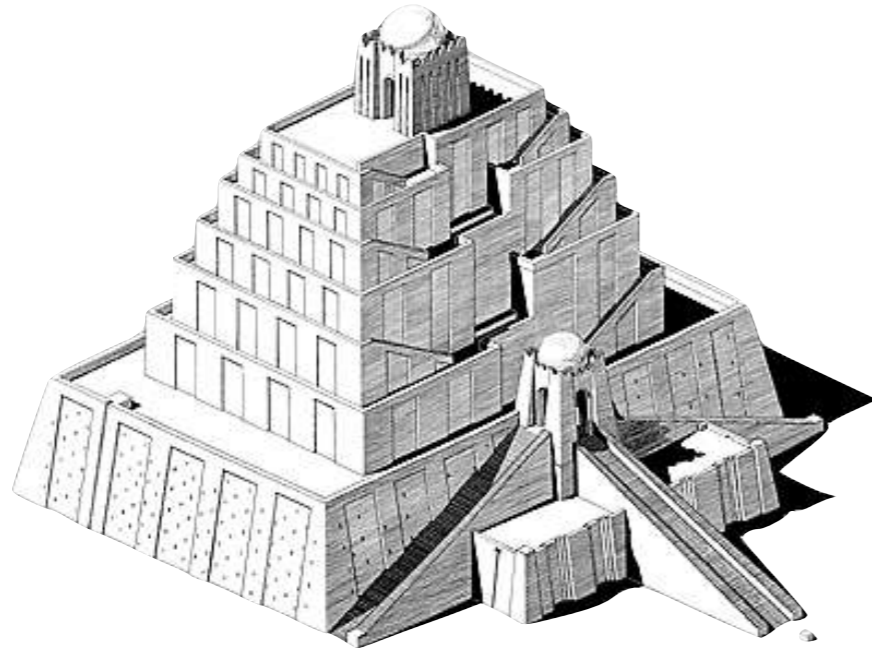
- Stone and timber were rare or unavailable
- Massive fortifications and the Outstanding constructions were **temple-complexes or palaces**
 - Tomb architecture was not common
 - The temples are typical of Babylonian Architecture
 - The palaces are typical of Assyrian Architecture



- Buildings were raised on **mud brick platforms**
- The chief temples had sacred '**ziggurats**': artificial mountains made up of tiered, rectangular stages which rose in number from one to seven in the course of Mesopotamian history



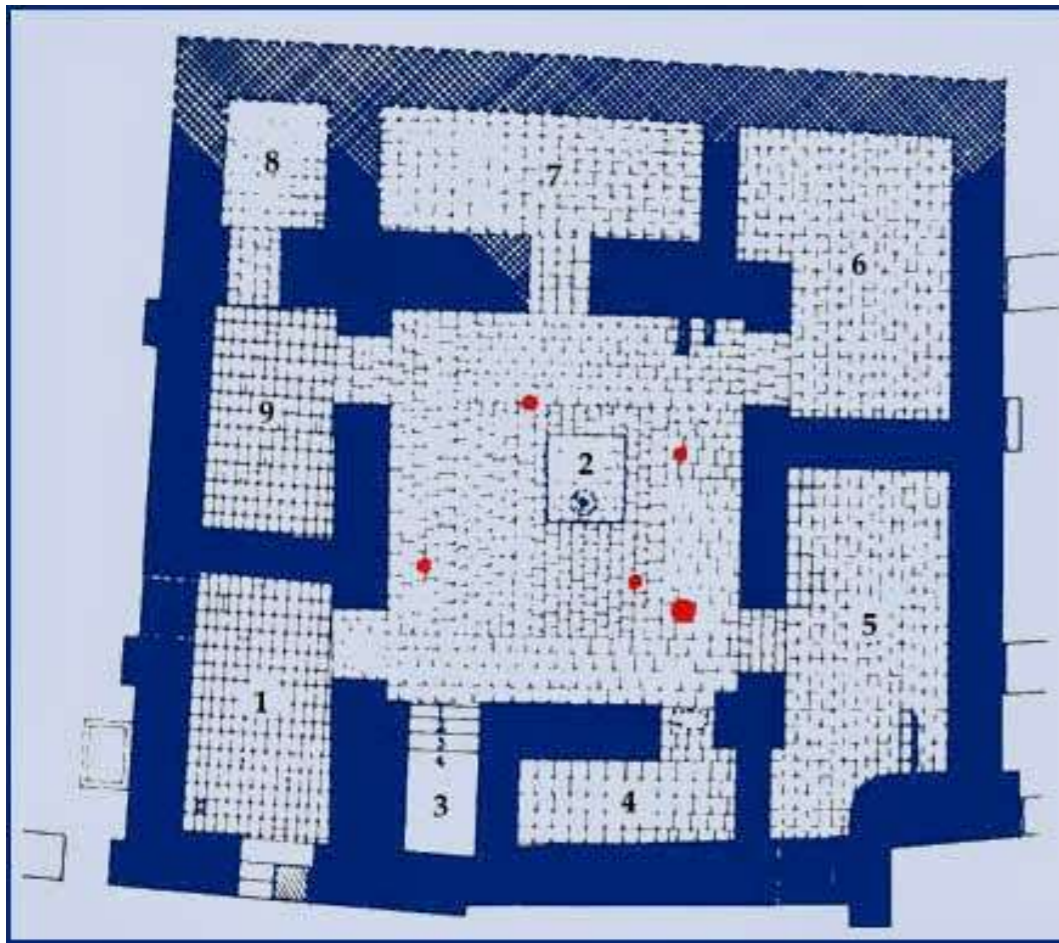
Ziggurat



A type of **rectangular temple tower** or tiered mound erected by the Sumerians, Akkadians, and Babylonians in Mesopotamia

- The Ziggurat are based on a **rectangular and sometimes oval base**
- It was constructed of **sun-baked bricks** on the core and **covered with fired bricks**
- Its **summit consisted of a shrine**
- The Ziggurat is a part of a **whole temple complex** includes services, courtyard and storages
- The concept of the ziggurat started to combine two different functions: **Religious & Secular**

- Apart from the fortifications and the ziggurats, buildings were **arranged around a court with rooms** narrow and thick walled
- **Burnt brick** was used sparingly for buildings' facings
- Walls were **white washed** or - as with the developed ziggurat- **painted in colours**



Sumerians

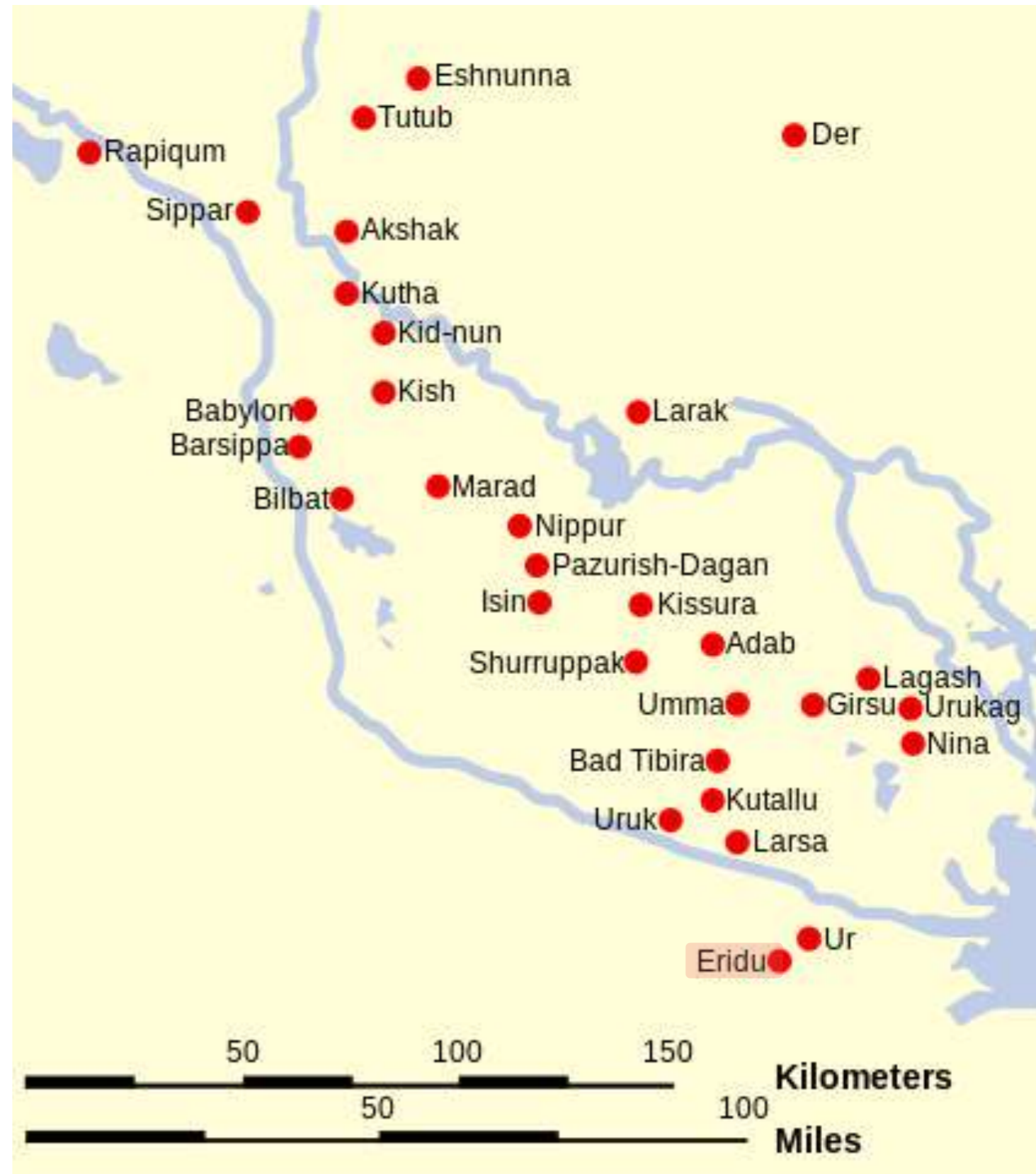
4000-2340 BC

Eridu City



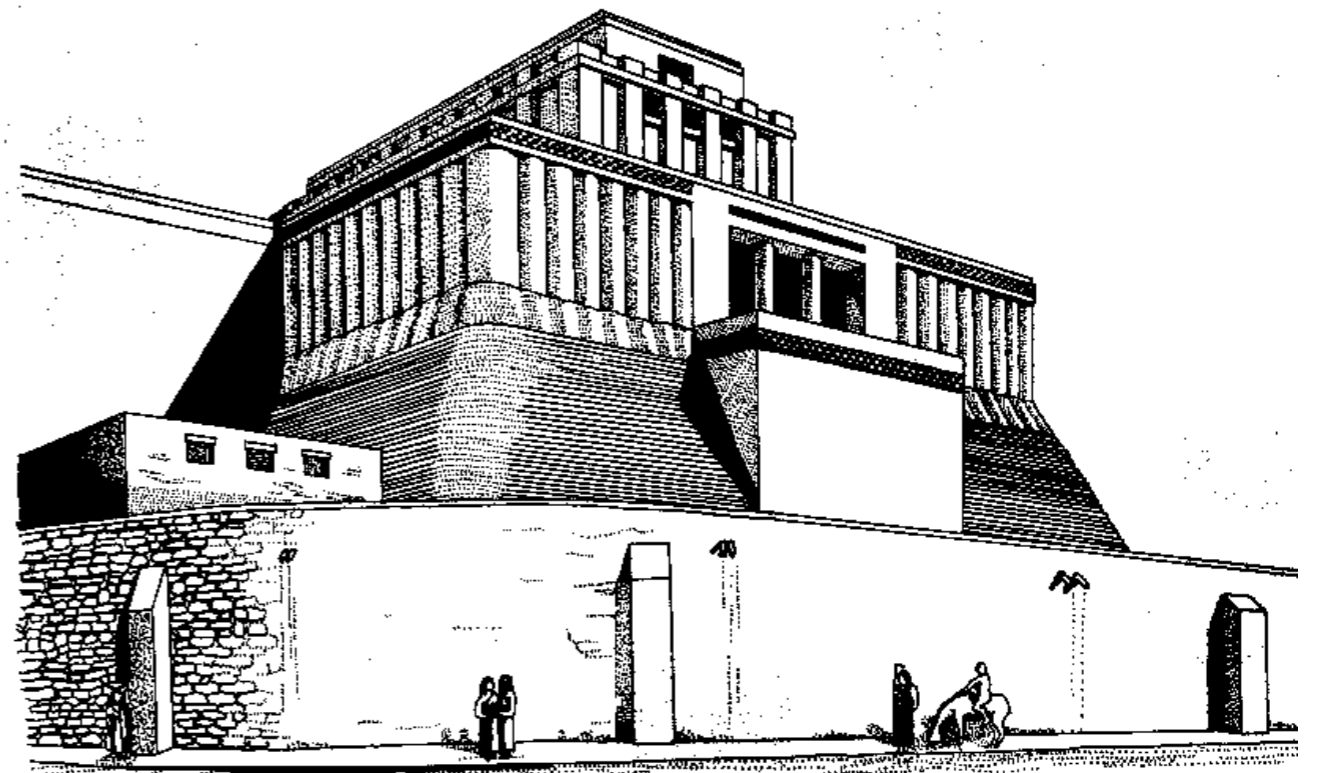
Eridu City

- The first significant example of the initial association of the Mesopotamian tradition in architecture
- In Sumerian mythology, Eridu was originally the home of **Enki [God of water]**, who was considered to have founded the city
- 4000-5000 inhabitants



Temple of Eridu

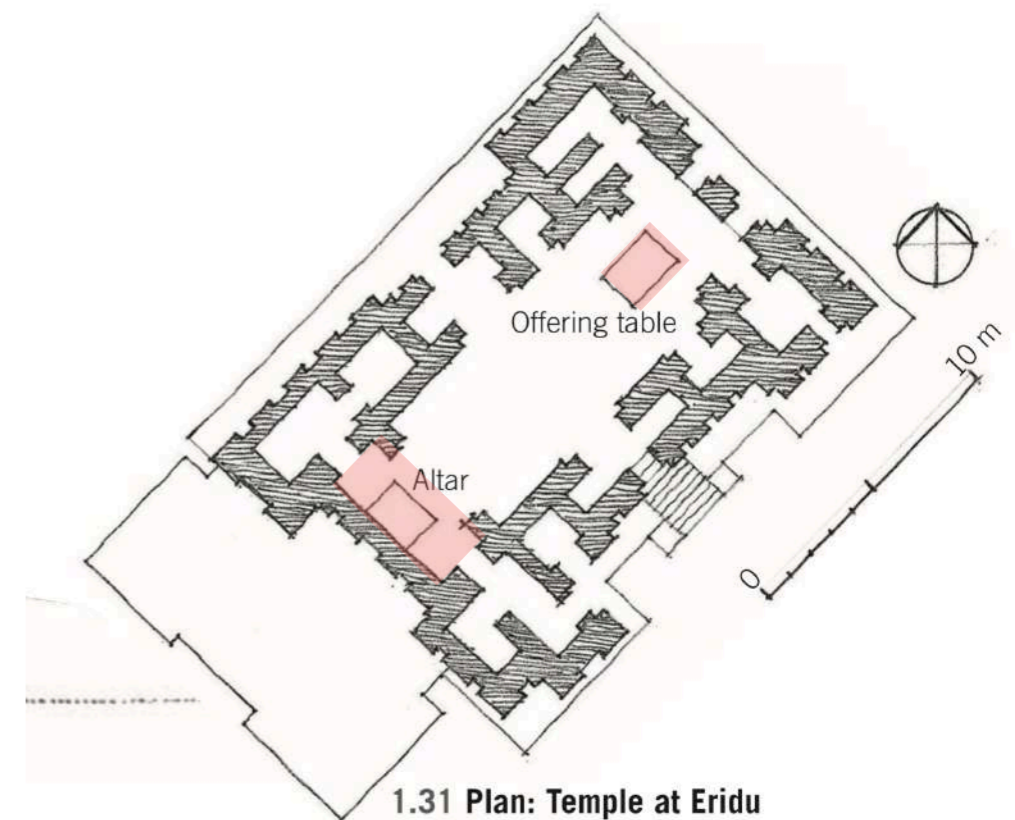
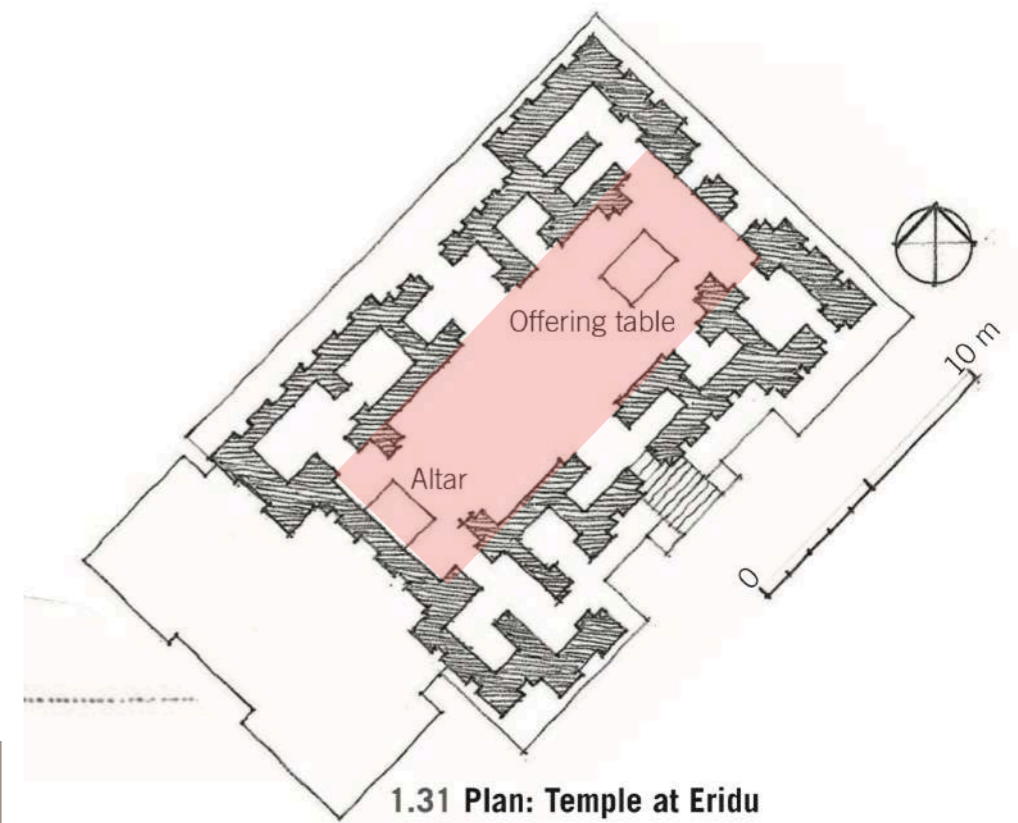
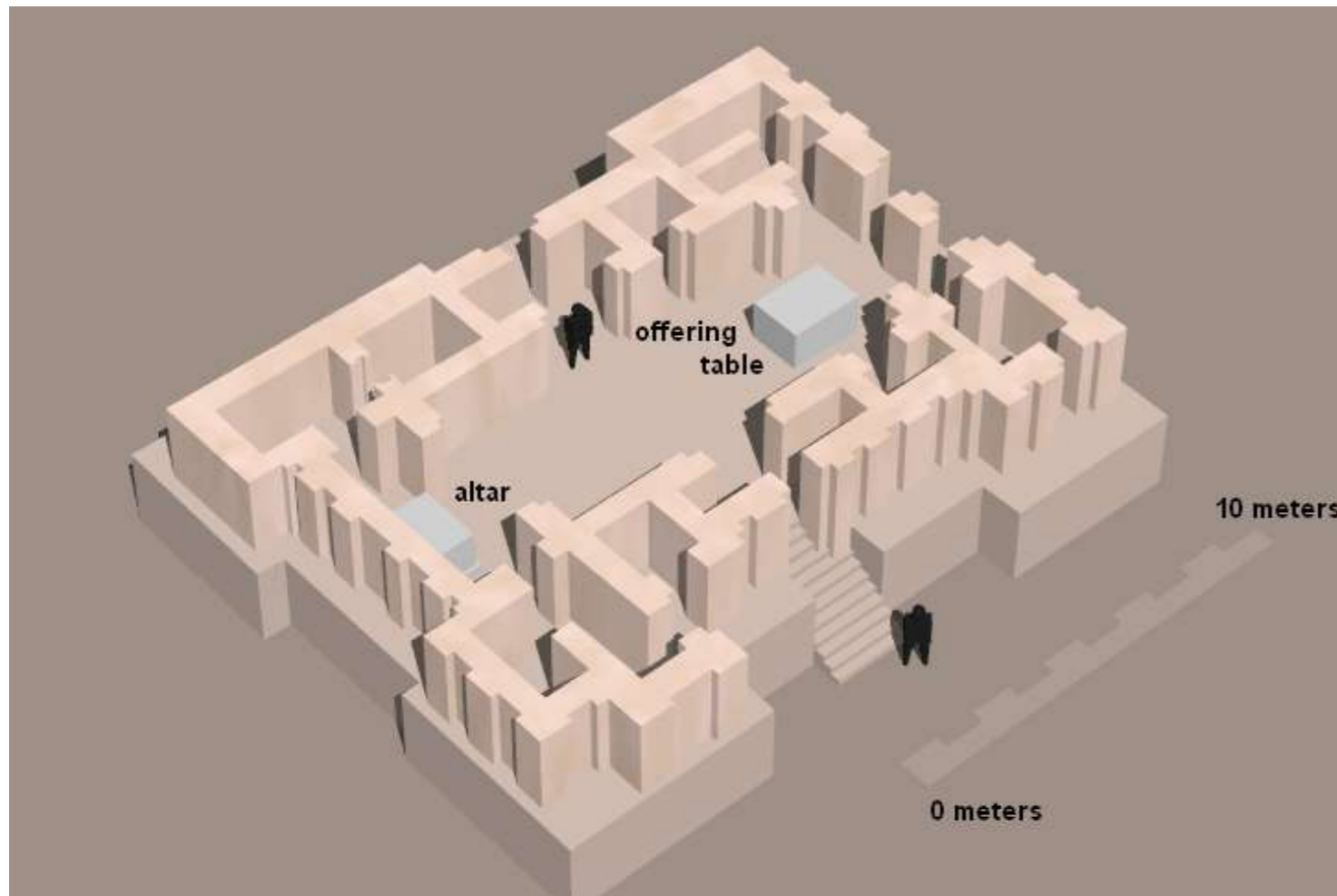
- Temple of Eridu was located on the banks of the Euphrates on the delta, positioned on an **enormous plinth of clay bricks**, painted in **vibrant colors** and was visible for miles
- Shaped by **rhythmically spaced buttresses** and roughly in a rectangular shape
- It was viewed as important **prototype** which reveals the central feature of typical Mesopotamian temple



Temple of Eridu

The Mesopotamian temple features:

- The '**cella**' or **sanctuary**
- The **altar** in a niche
- Central **offering-table** with terraces for burning

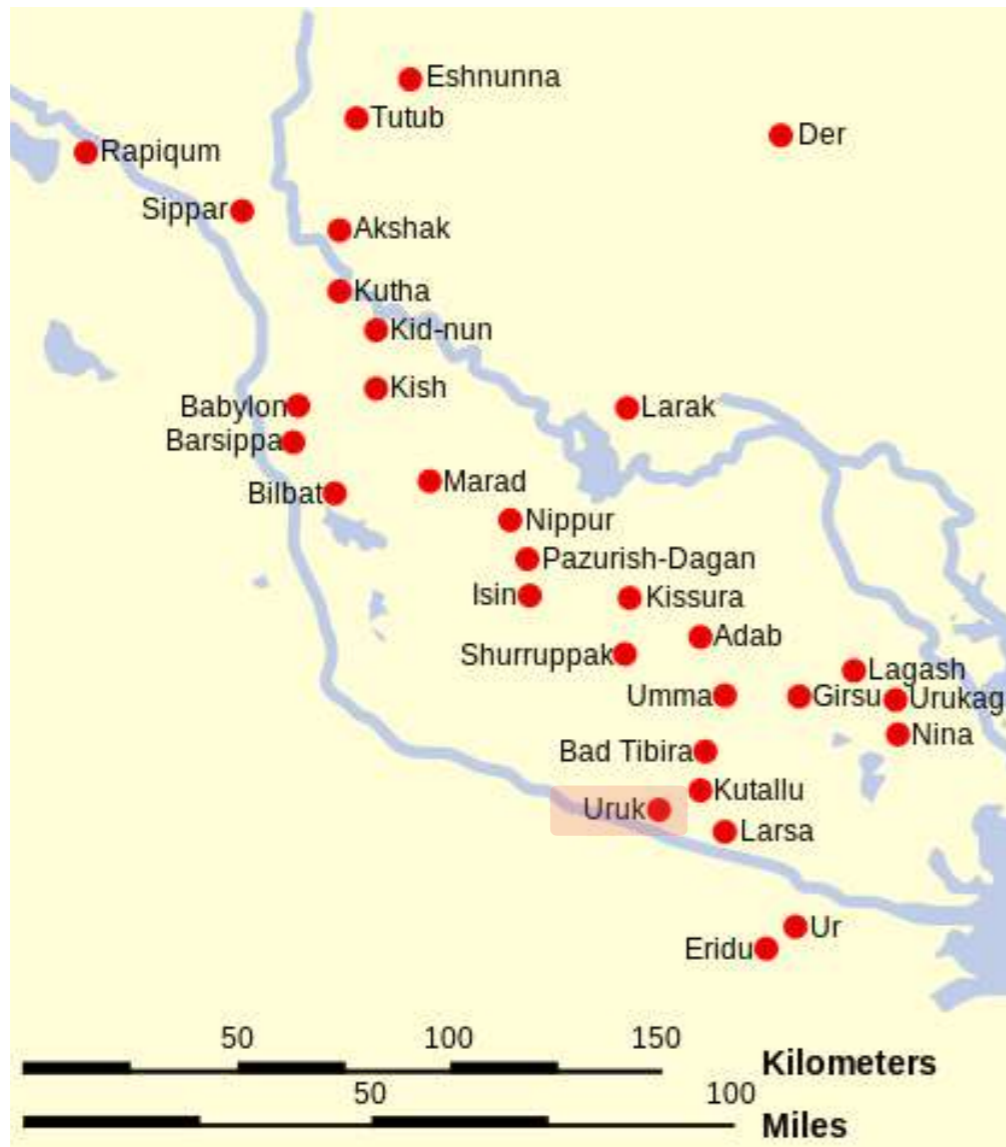


Uruk City



Uruk City

- The largest of the Sumerian cities in the early dynasty period
- One third of the city was occupied by Temples and other Public Buildings
- Uruk known for its **White temple**, dedicated to the god Anu – the god of the sky

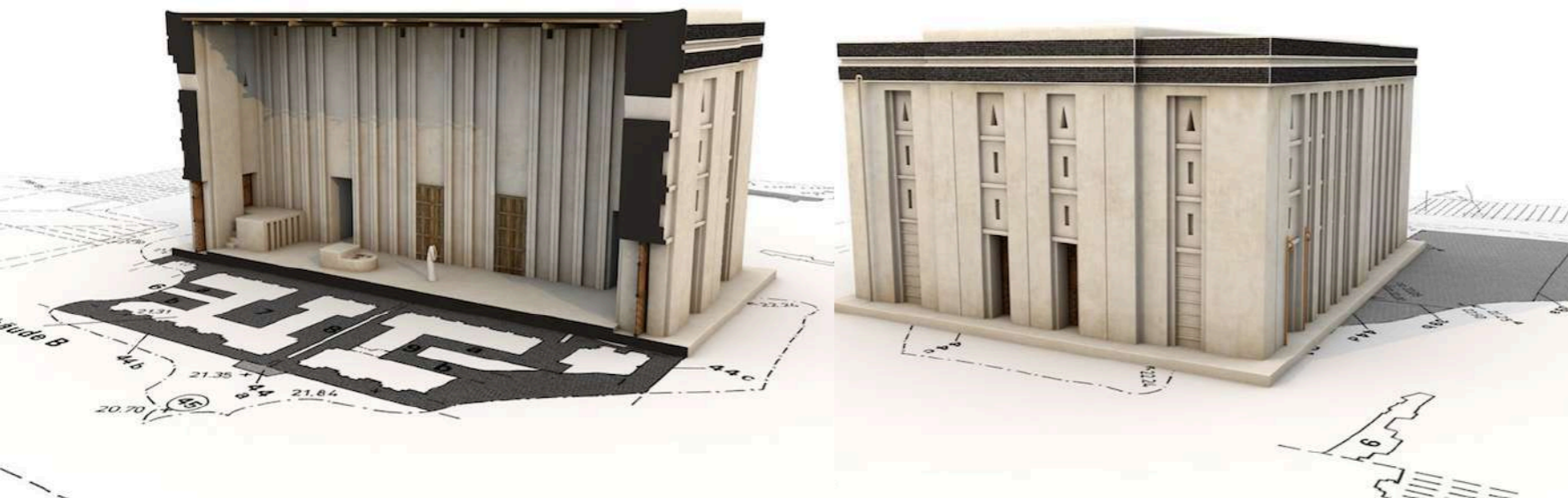
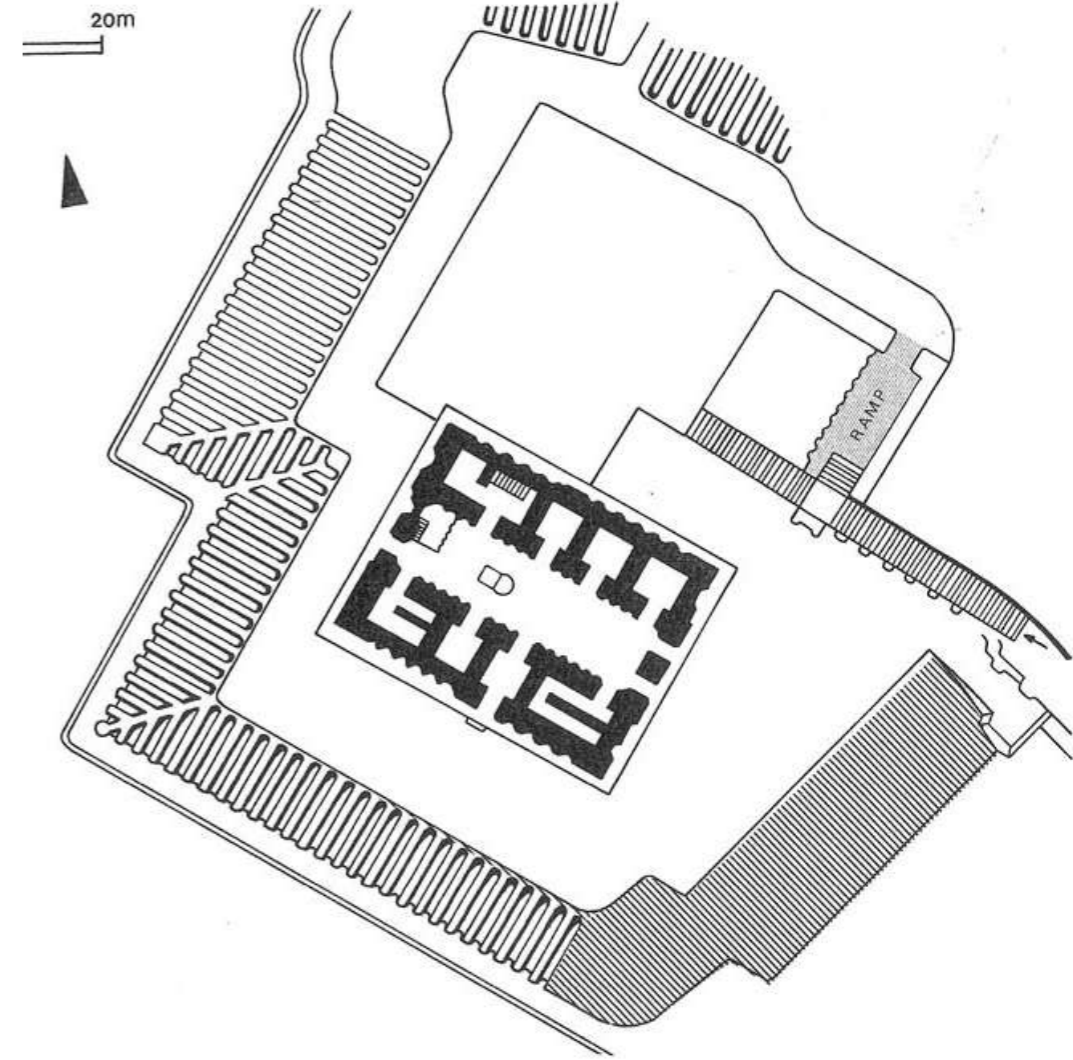


The White Temple - Uruk City

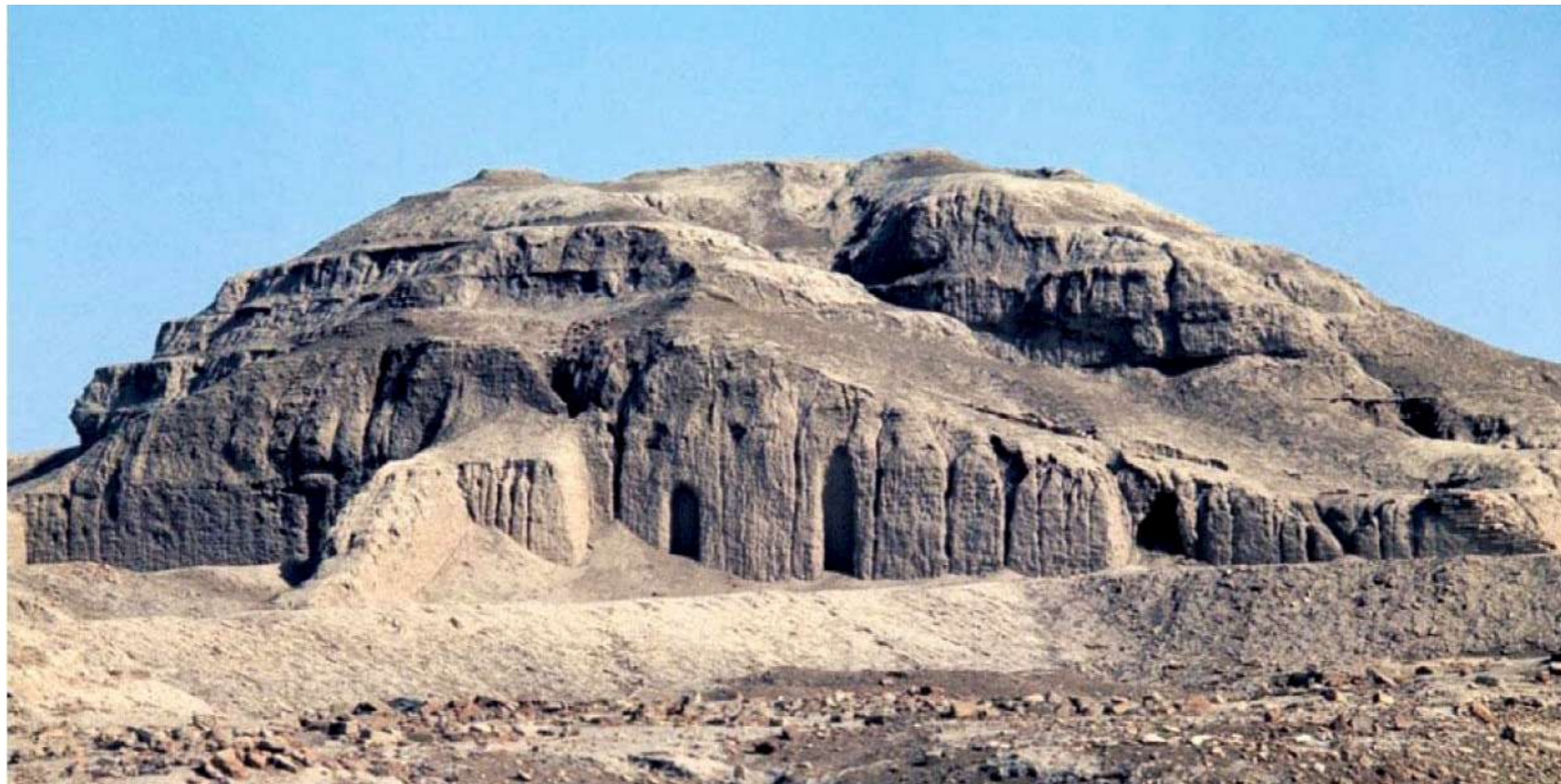


The White Temple - Uruk City

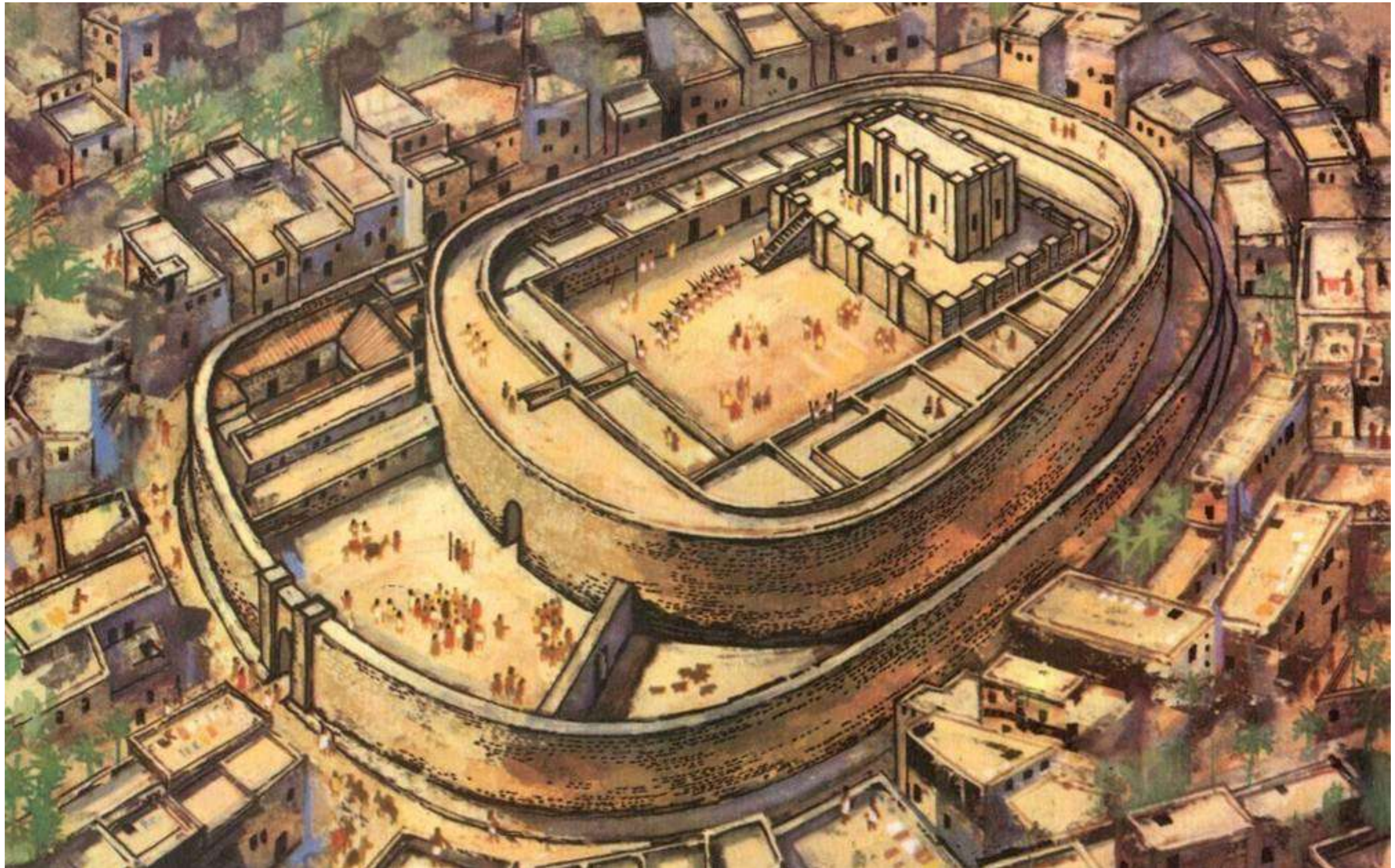
- The temple had a 13m high white sloping platform, approached through a flight of stairs with a ramp
- It had an end to end hall with a span of 4.5m, flanked on both sides by a series of smaller rooms
- In the north corner built an altar platform and offering-table in the centre
- **Shallow buttresses** formed the principal decoration of the hall and external walls



The White Temple - Uruk City

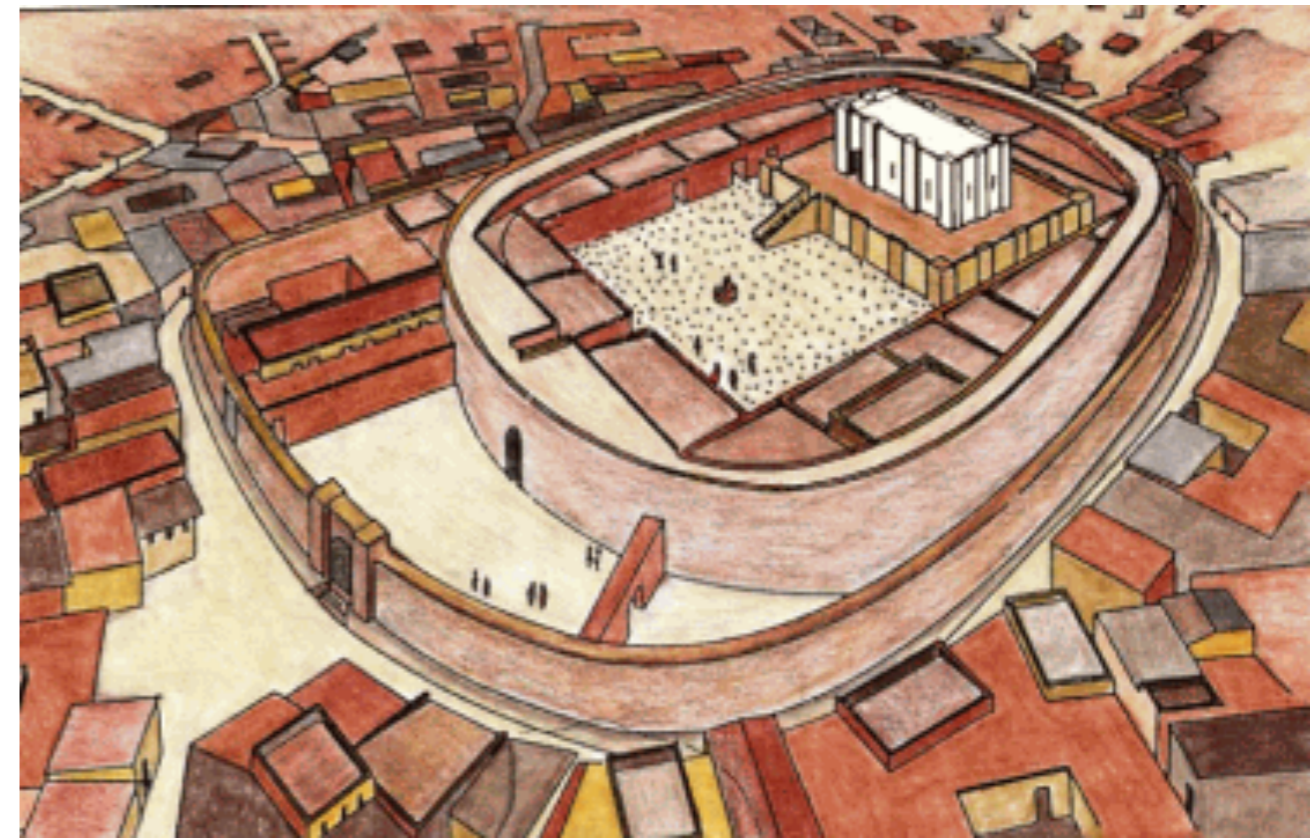
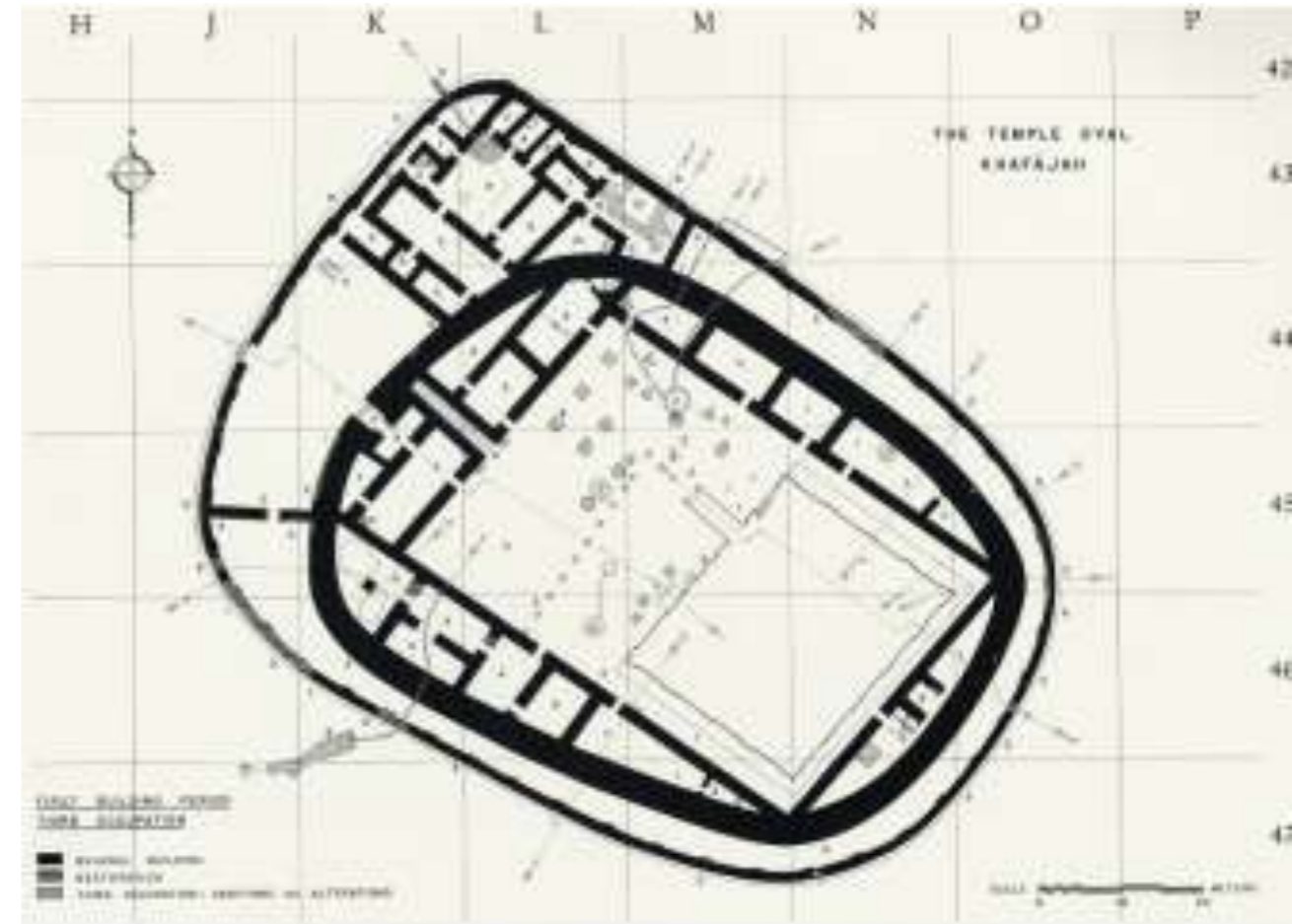


Khafaje - The Oval Temple



Khafaje - The Oval Temple

- It is enclosed in an **oval shape**, with **rectilinear arrangements within it**
- Three ascending terrace levels
- The lowest terrace made the **forecourt**, approached through an **arched gateway** from the town and having roomed building on one side
- The second terrace was surrounded by rooms used as **workshops and stores**



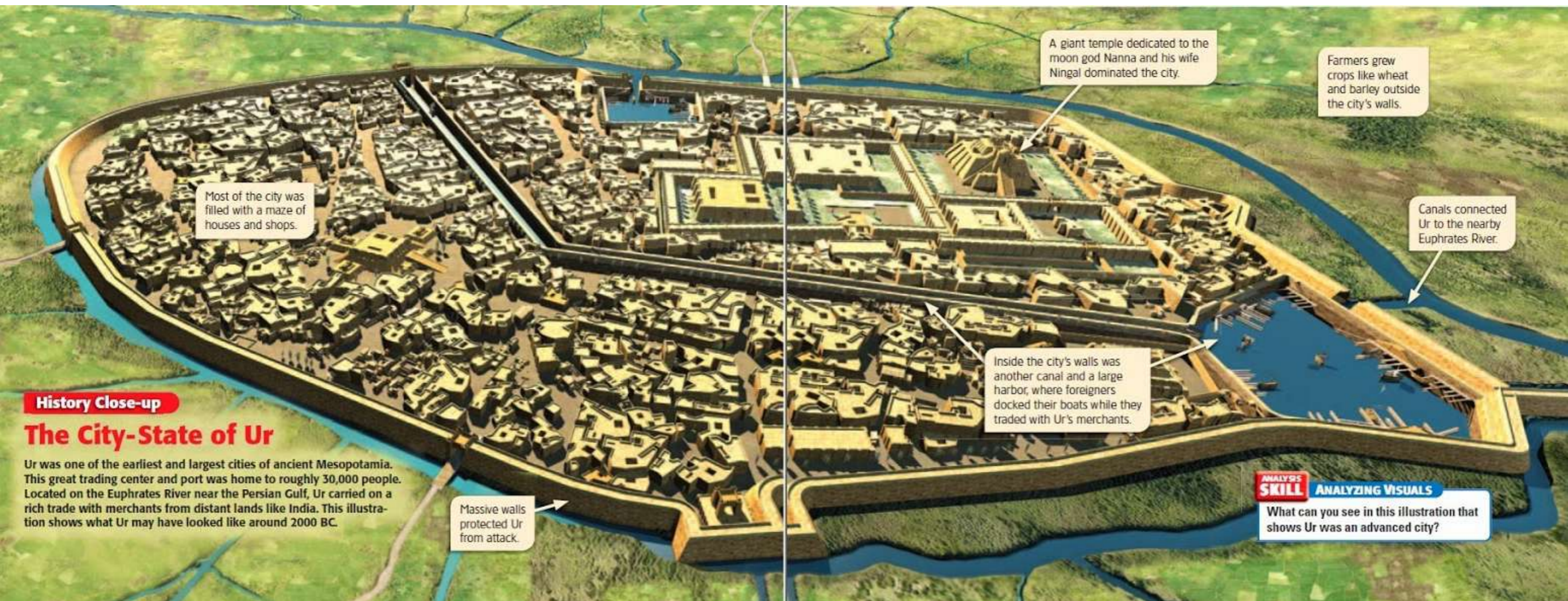
Khafaje - The Oval Temple



Neo-Sumerians

2150-2000 BC

Ur City



Ur City



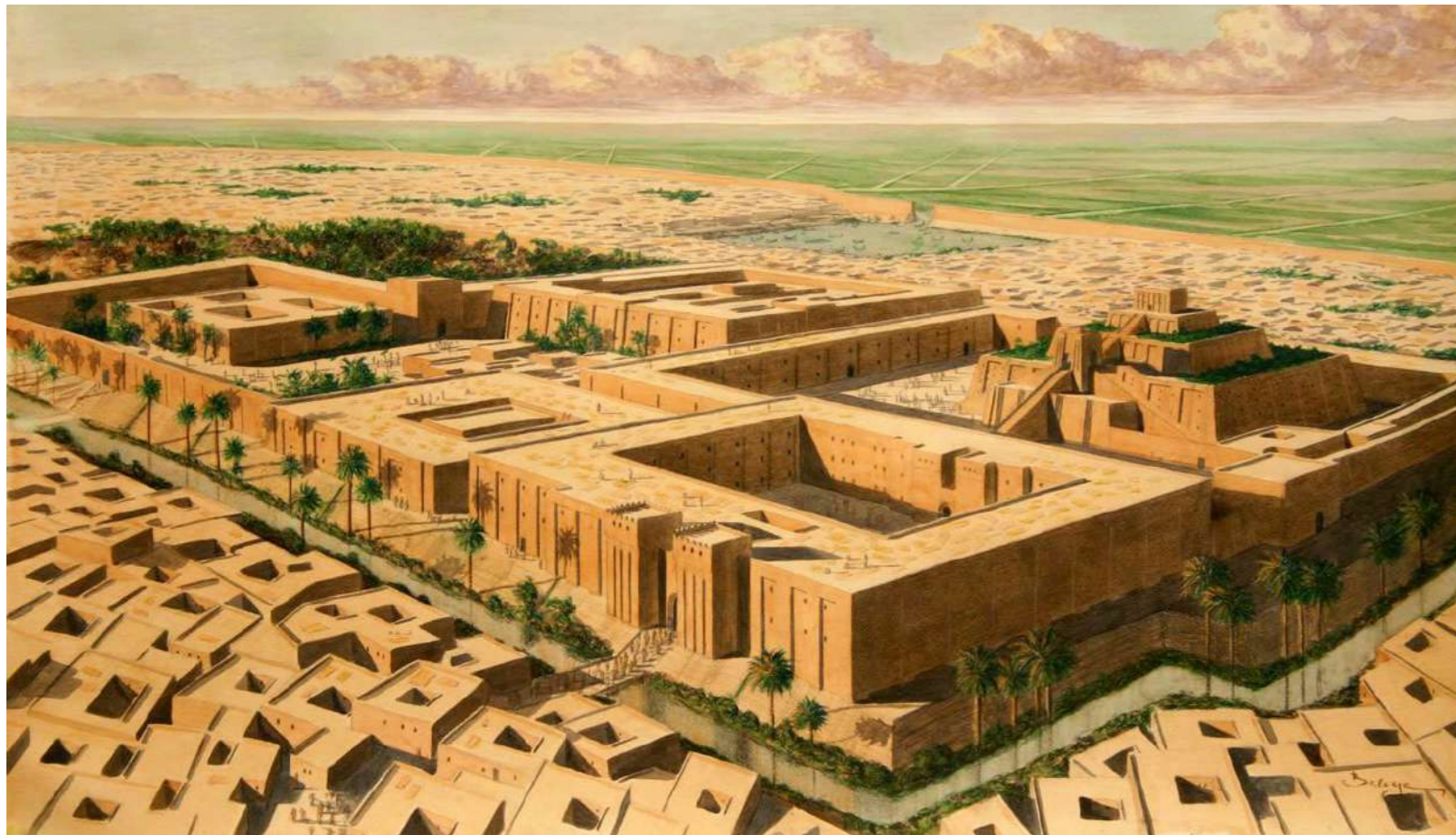
- The city of Ur was ruled by **Nanna**, the moon god
- It was almost **oval in shape** with Euphrates river coursing around its sides



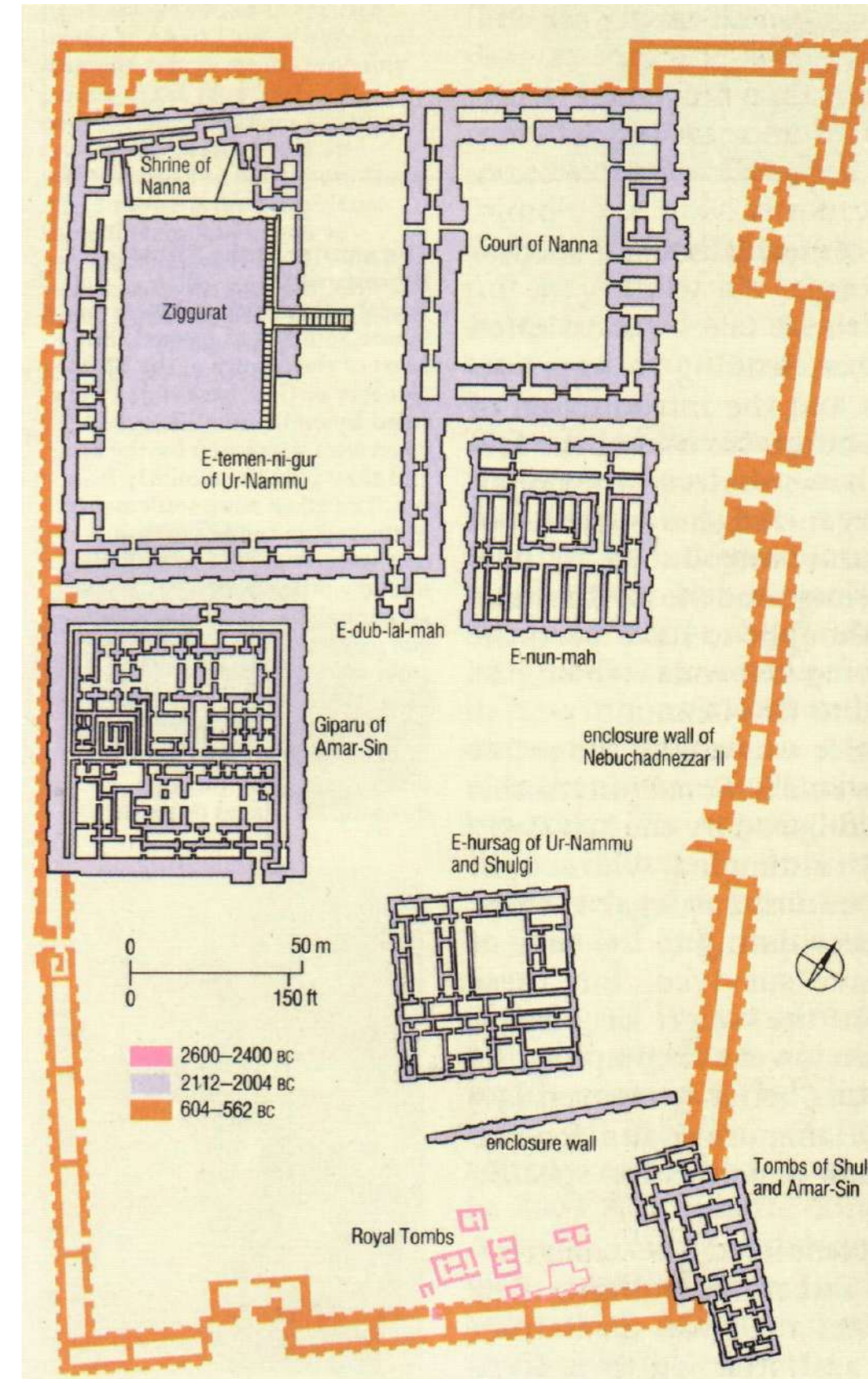
Ur City

It has the Ziggurat of UR; a complex which contains:

1. The ziggurat and its court
2. A secondary court attached to it
3. Three great temples

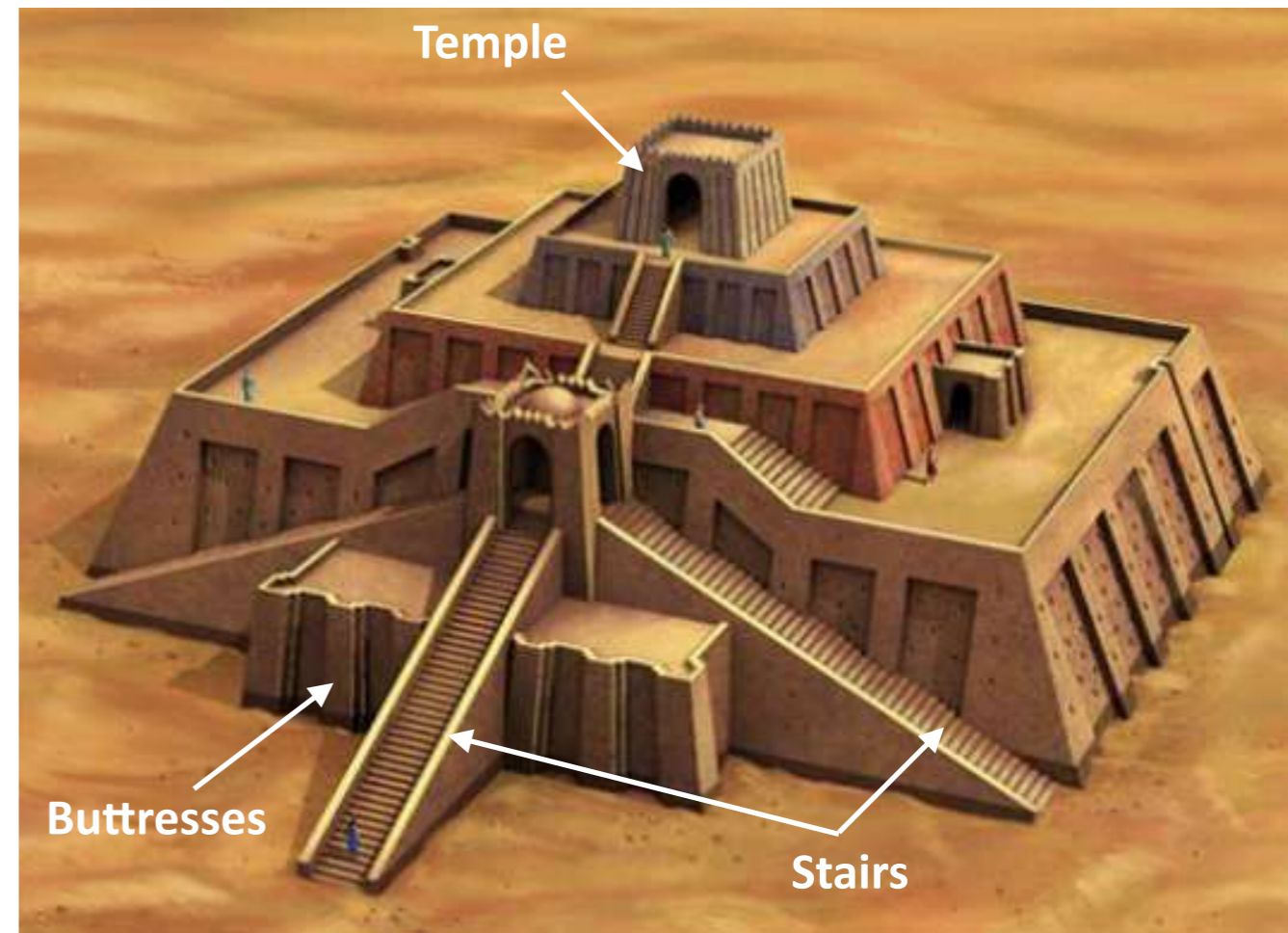


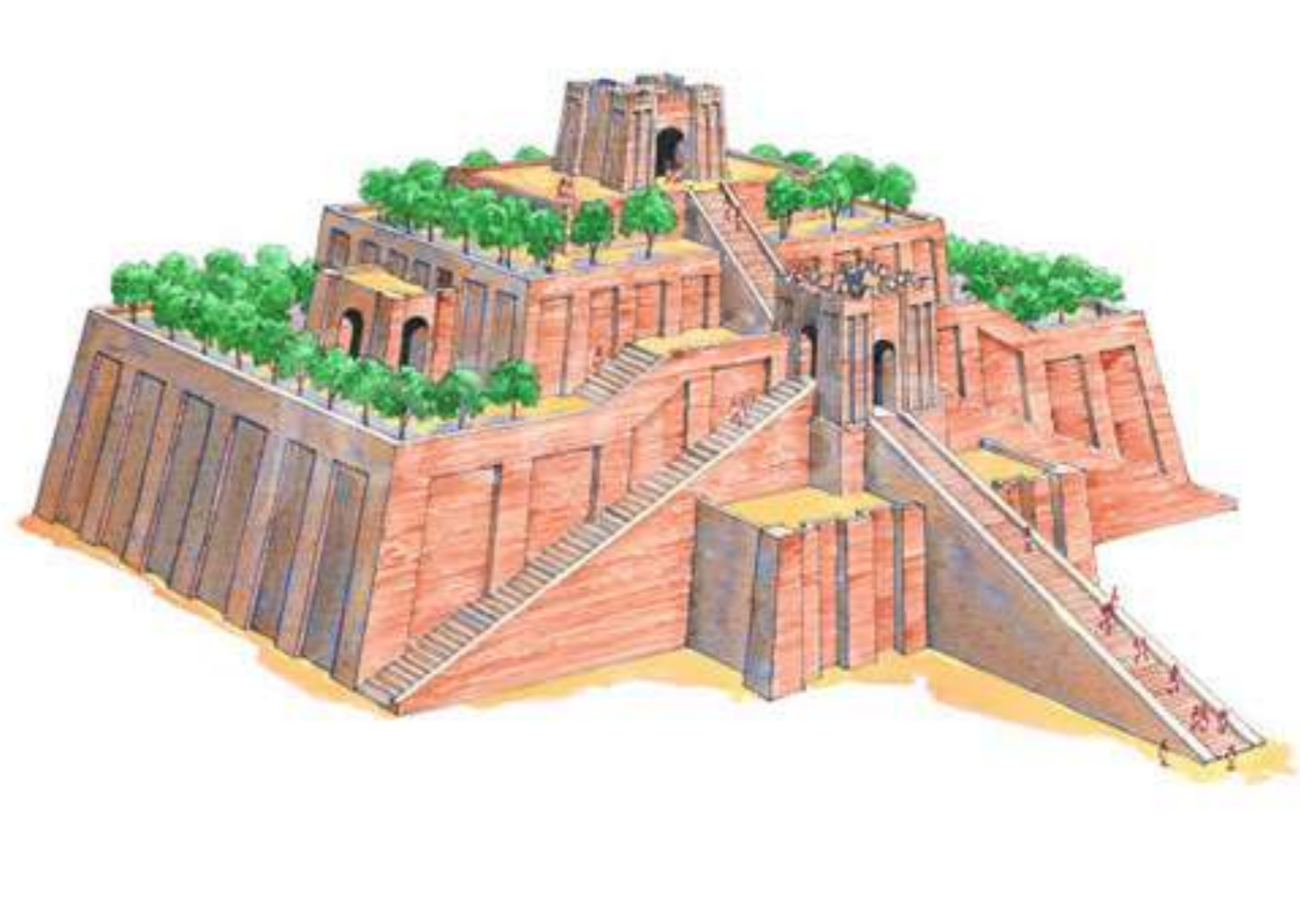
The entire complex stand on great **rectangular platform** at the heart of an oval-shaped walled city



Ziggurat of Ur (2113-2006 BC)

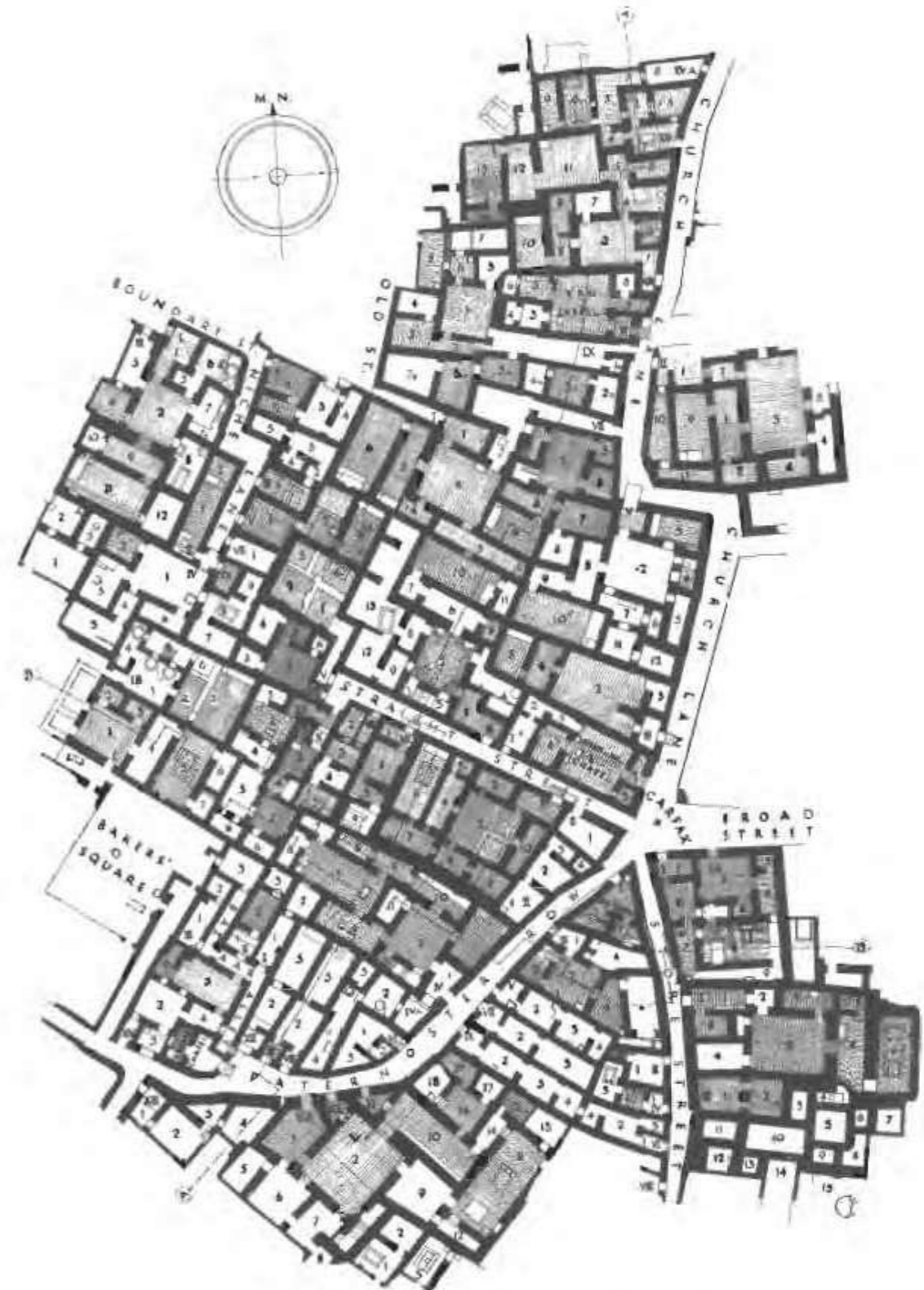
- 65m X 100m at its base and about 21m high
- Carried the usual temple on its summit
- Had a **solid core of mud bricks**, covered with a skin of **burnt brickwork**
- Its sides were **smooth and painted with shallow buttresses**
- Holes through the brick work allowed for **drainage** and the **slow drying out of the interior**
- **Trees were planted on the stages of the ziggurat** and required regular watering





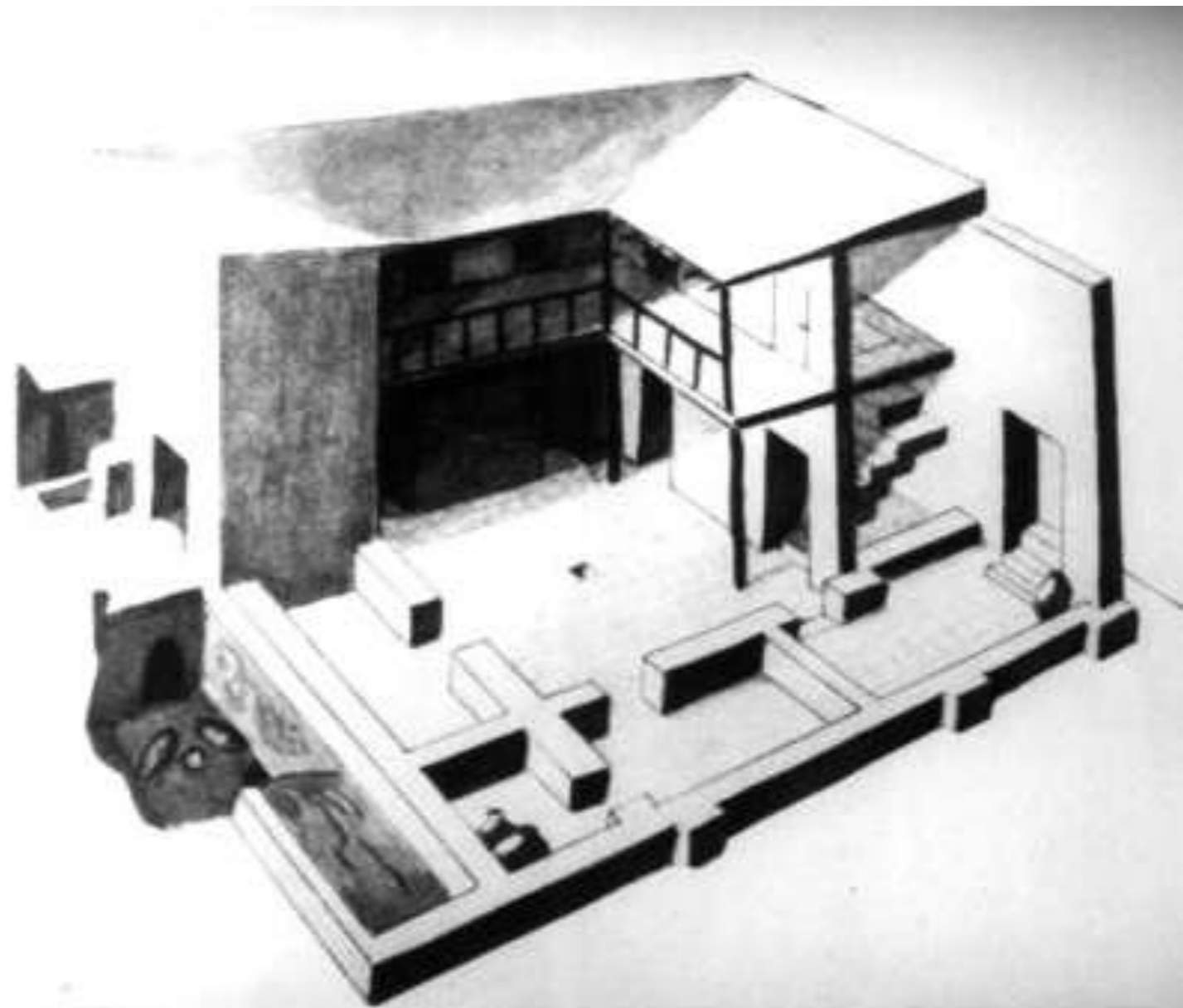
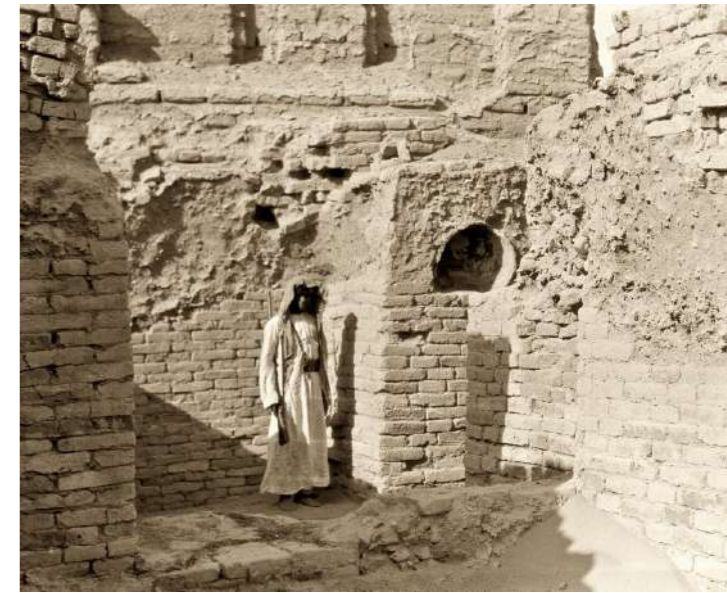
Ur Dwelling

The streets are **winding and narrow**, buildings are **windowless**, only doors open into houses that are constructed around a **central courtyard open to the sky**



Ur Dwelling

- The houses usually **12X15m**
- Middle class houses were normally **two stories**
- On the first floor they had a **kitchen for cooking, an eating area, guest room, lavatory, servants' quarters and storage**
- On the second floor family **bedrooms** were located



Assyrians

1400-612 BC

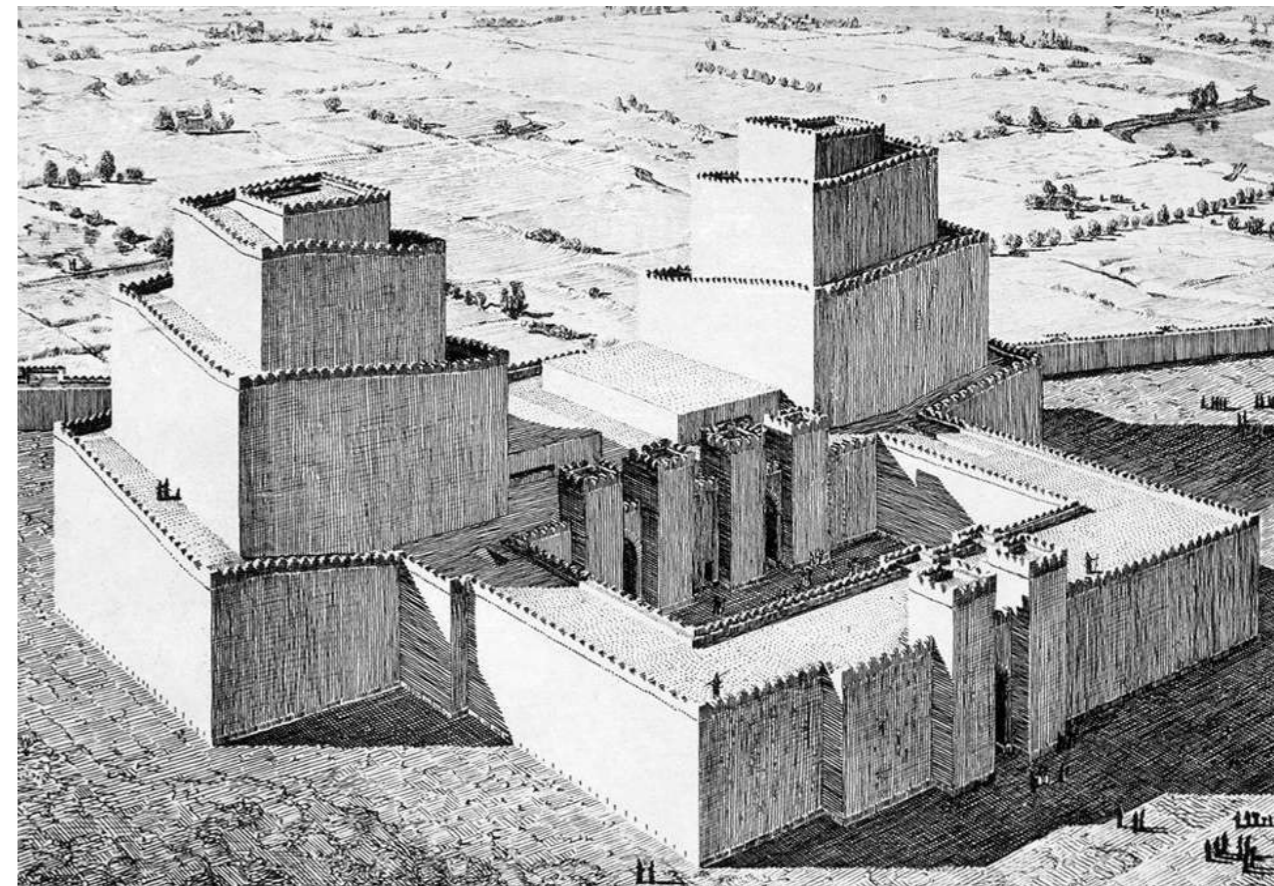
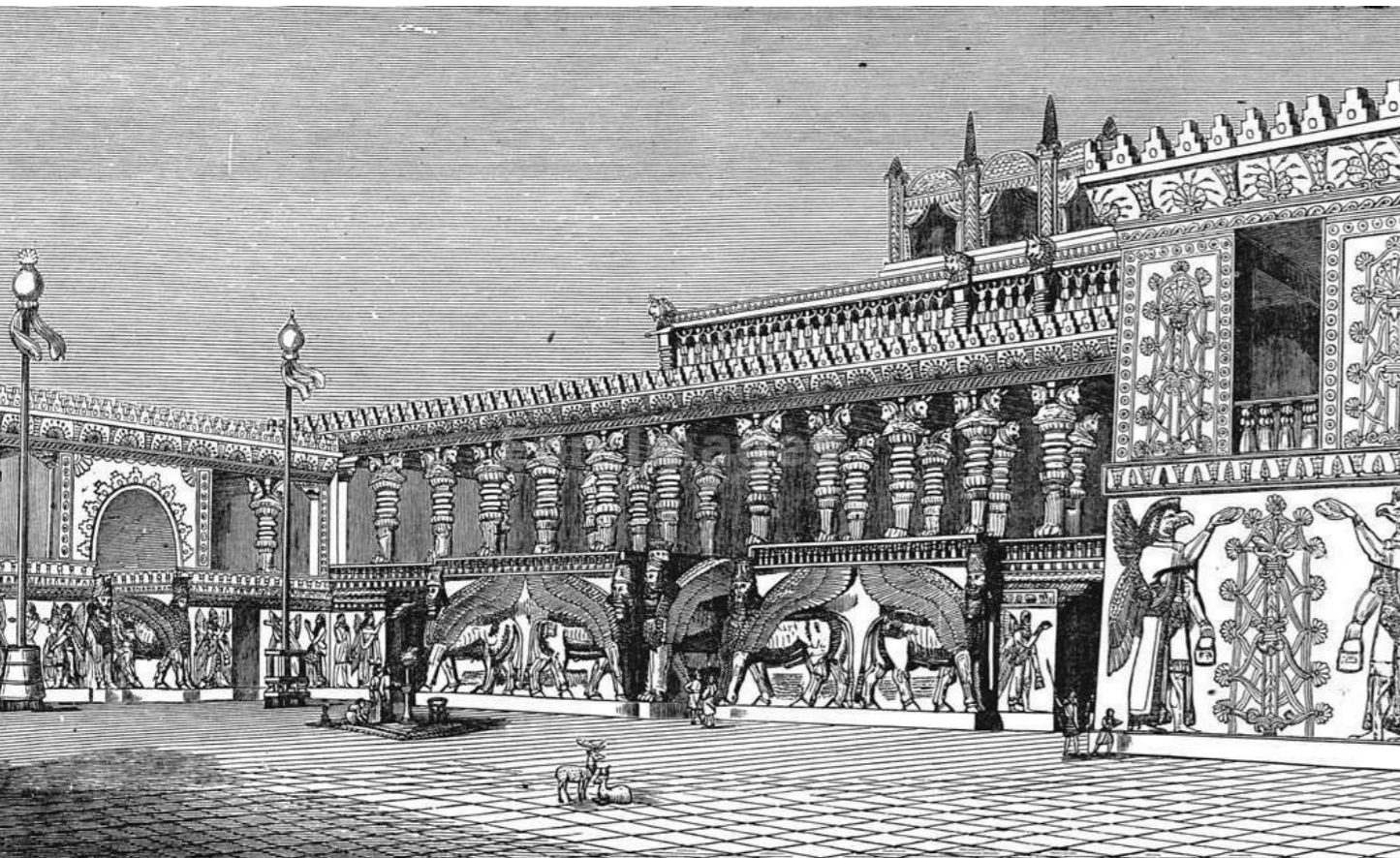


The centre of the Assyrian empire was in the city of **Assure** which was established as a true **empire** with fortified capitals built at:

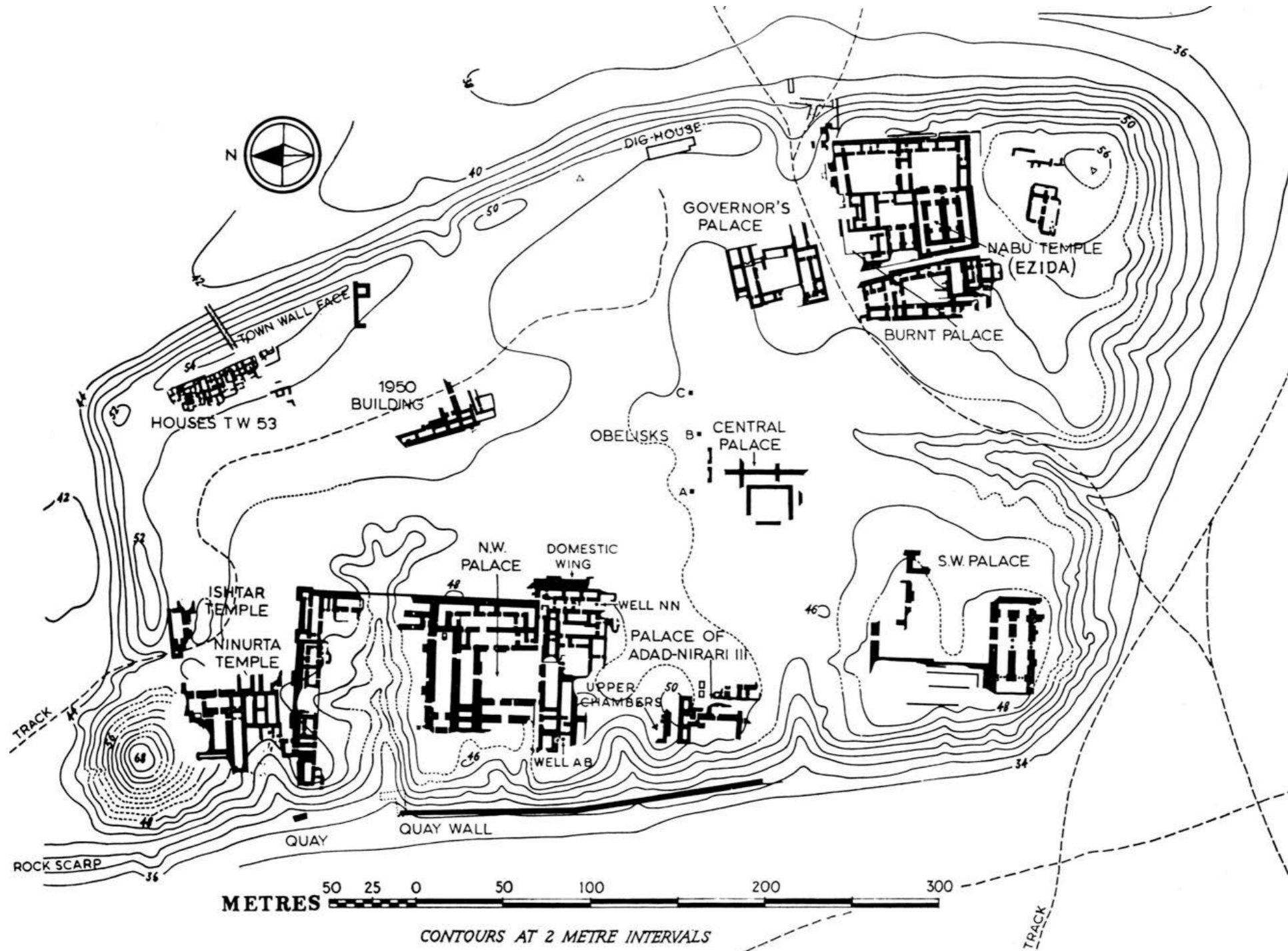
- Nimrud
- Khorsabad
- Ninveh

Assyrian Architecture

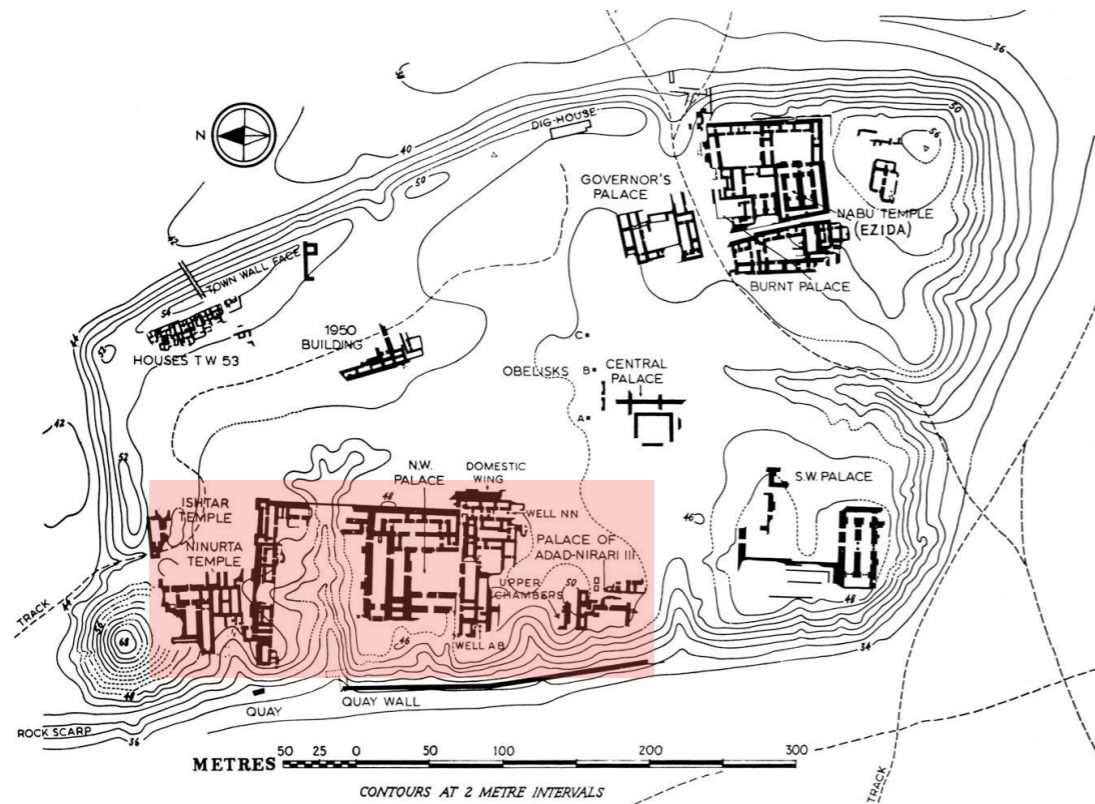
- Temples both with and without ziggurats were built
- By the late Assyrian, **palaces** were much more and important
- The use of **polychrome ornamented brickwork**, and **stone** slabs usually carved in low relief



City of Nimrud



City of Nimrud



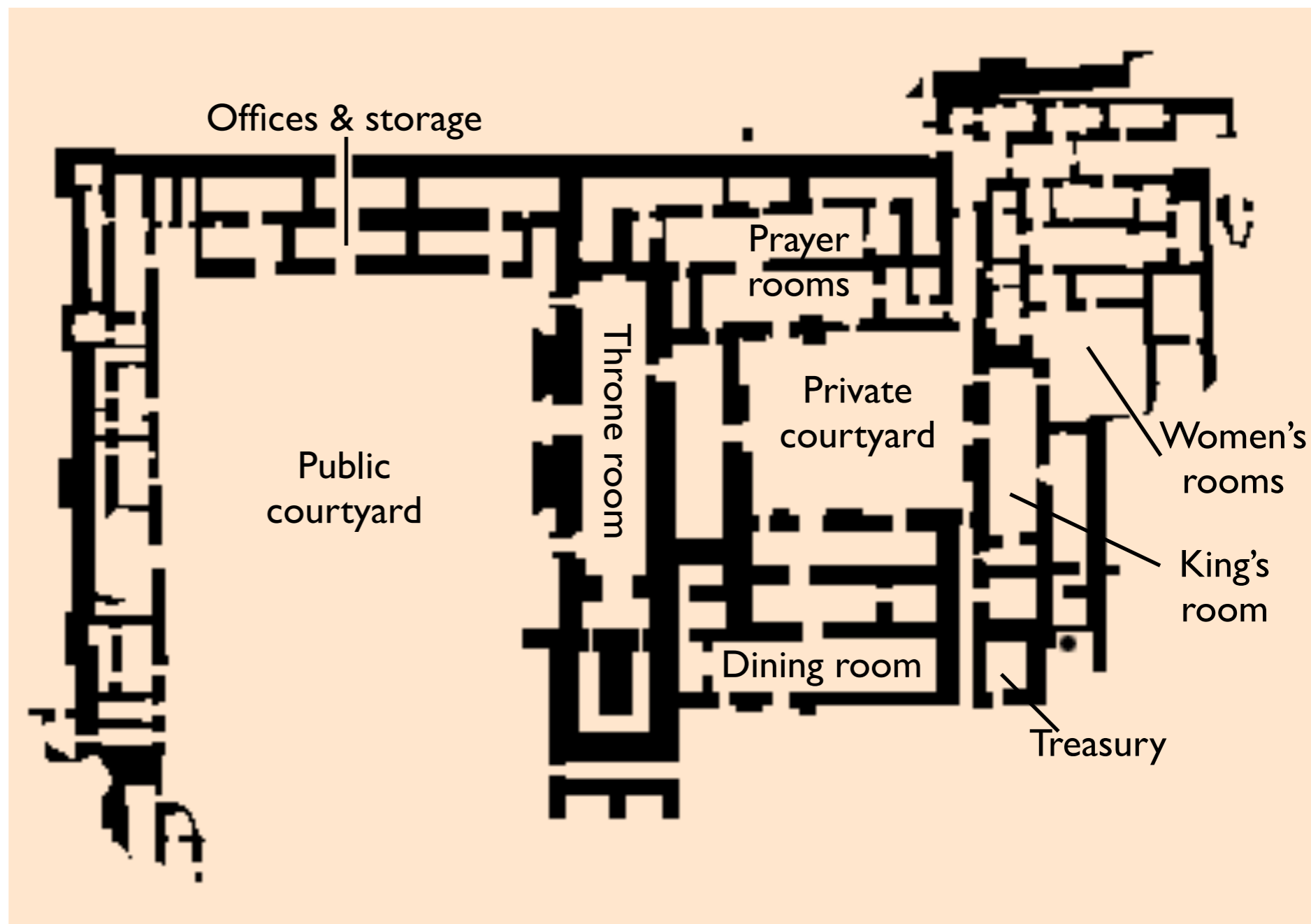
The city had a **north-west palace** comprised of a **large public court**, flanked on the north side by a **ziggurat and its temples**



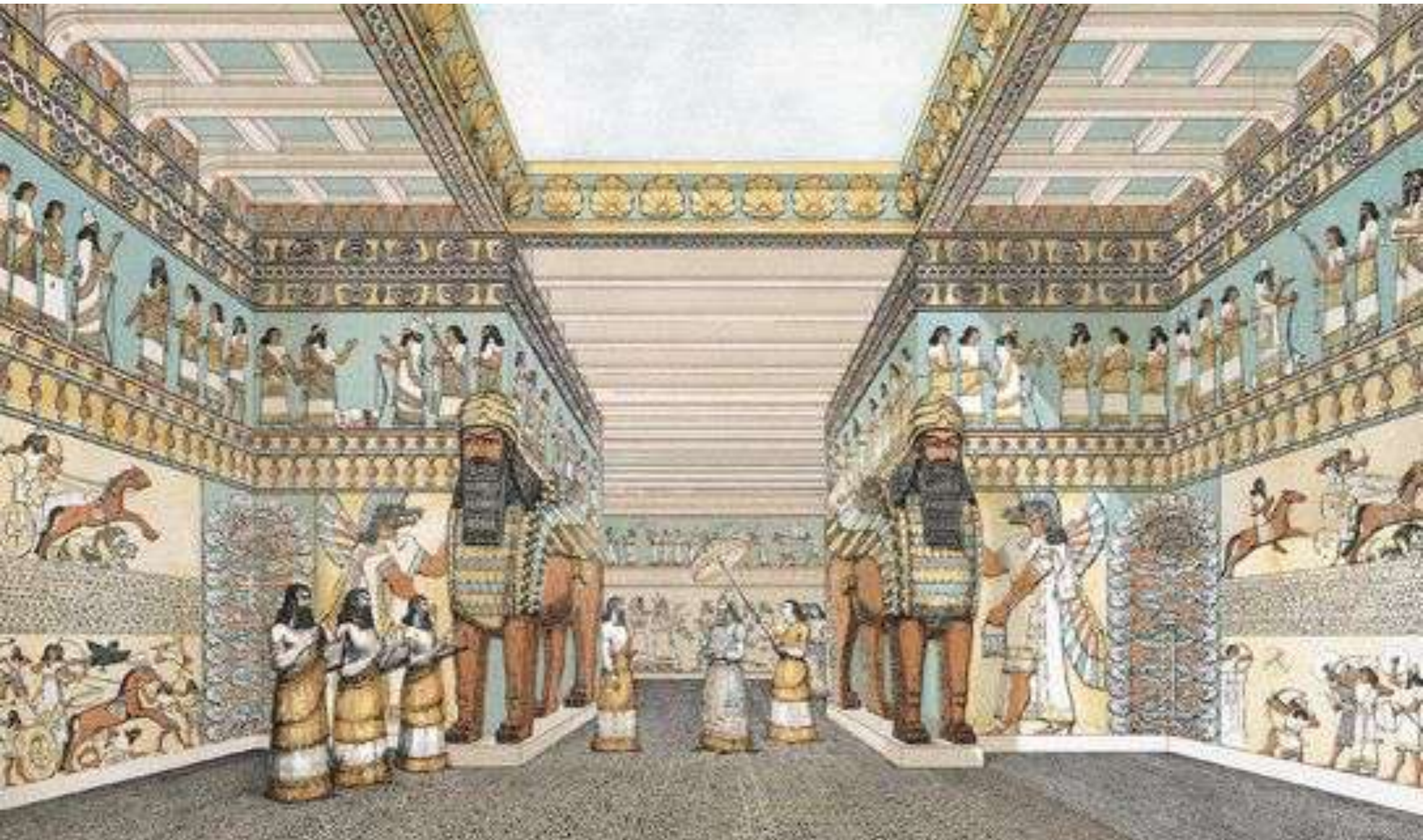
Nimrud Palace

- The palace has a **big public courtyard**, and on two sides it has **government offices and storage**, the south side is the **throne room**, and then there's a smaller **private courtyard**

- Near the private courtyard there was a **place for prayer and rituals, rooms for king and queens' private living area, and a formal dining rooms**. Near the king's rooms is the **treasury**



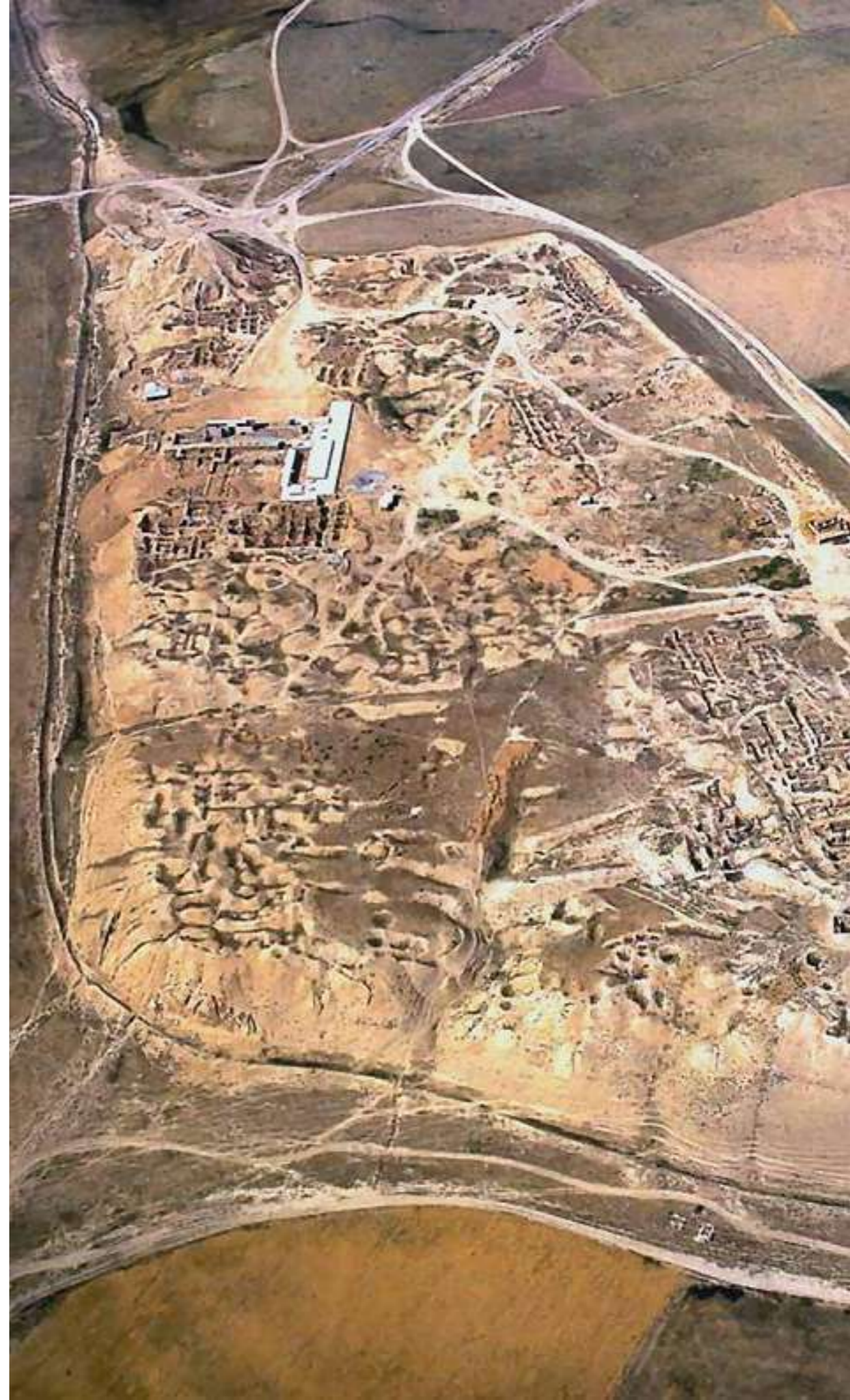
Nimrud Palace



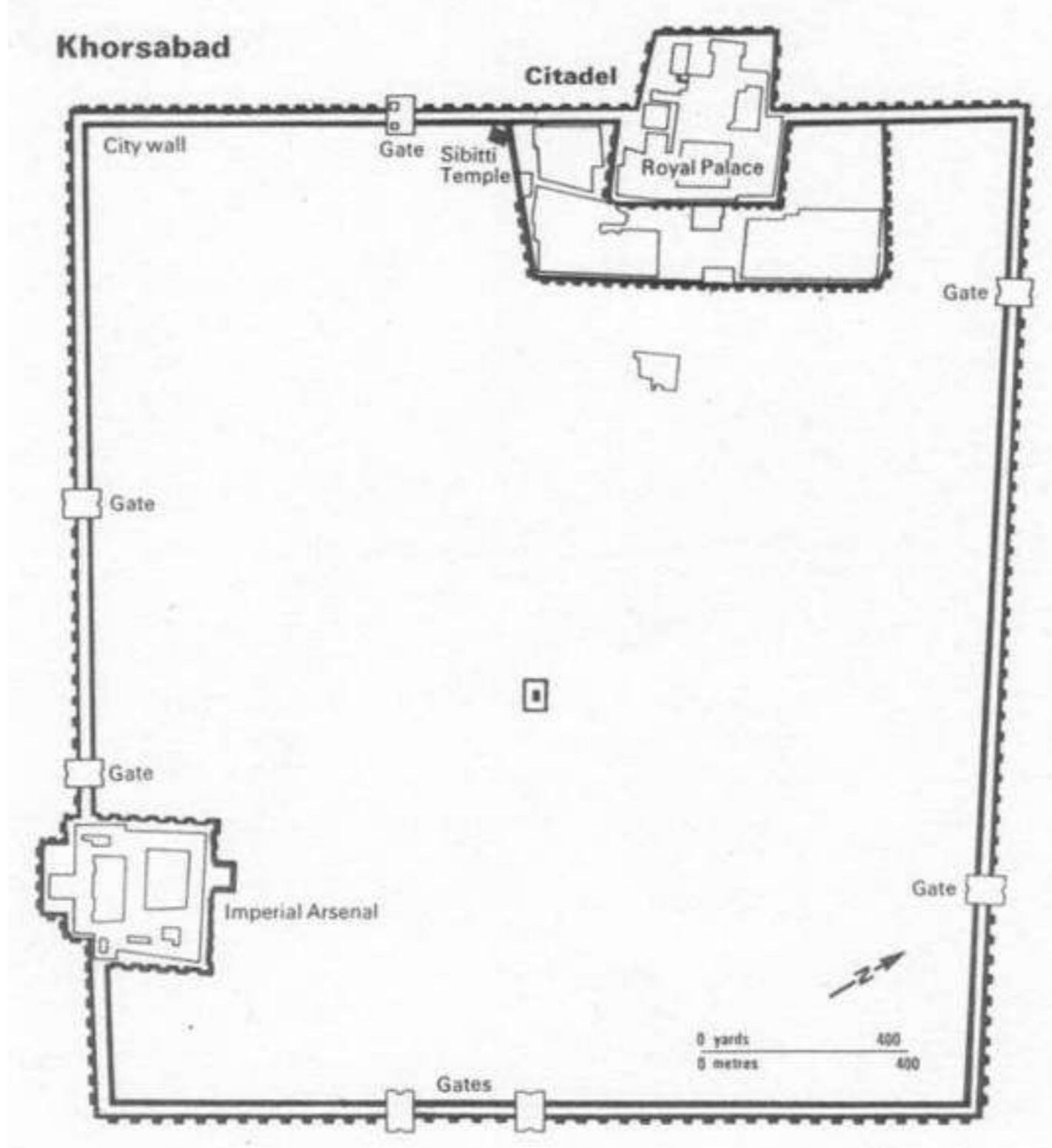
Throne room of Nimrud north-west palace

Nimrud Palace

<https://www.youtube.com/watch?v=5VC1dg1TdHc&t=13s>

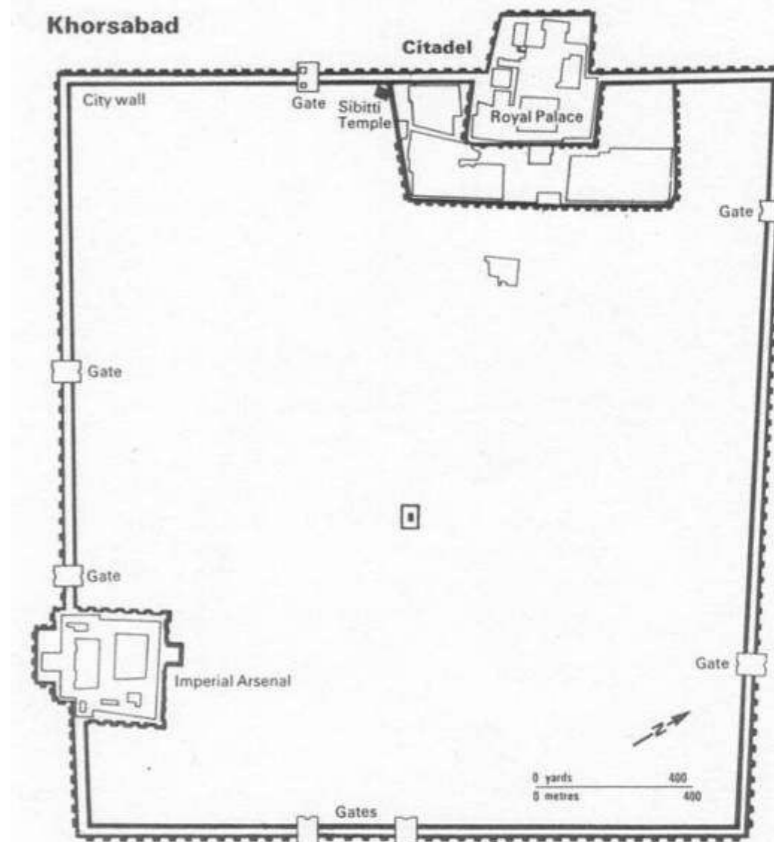
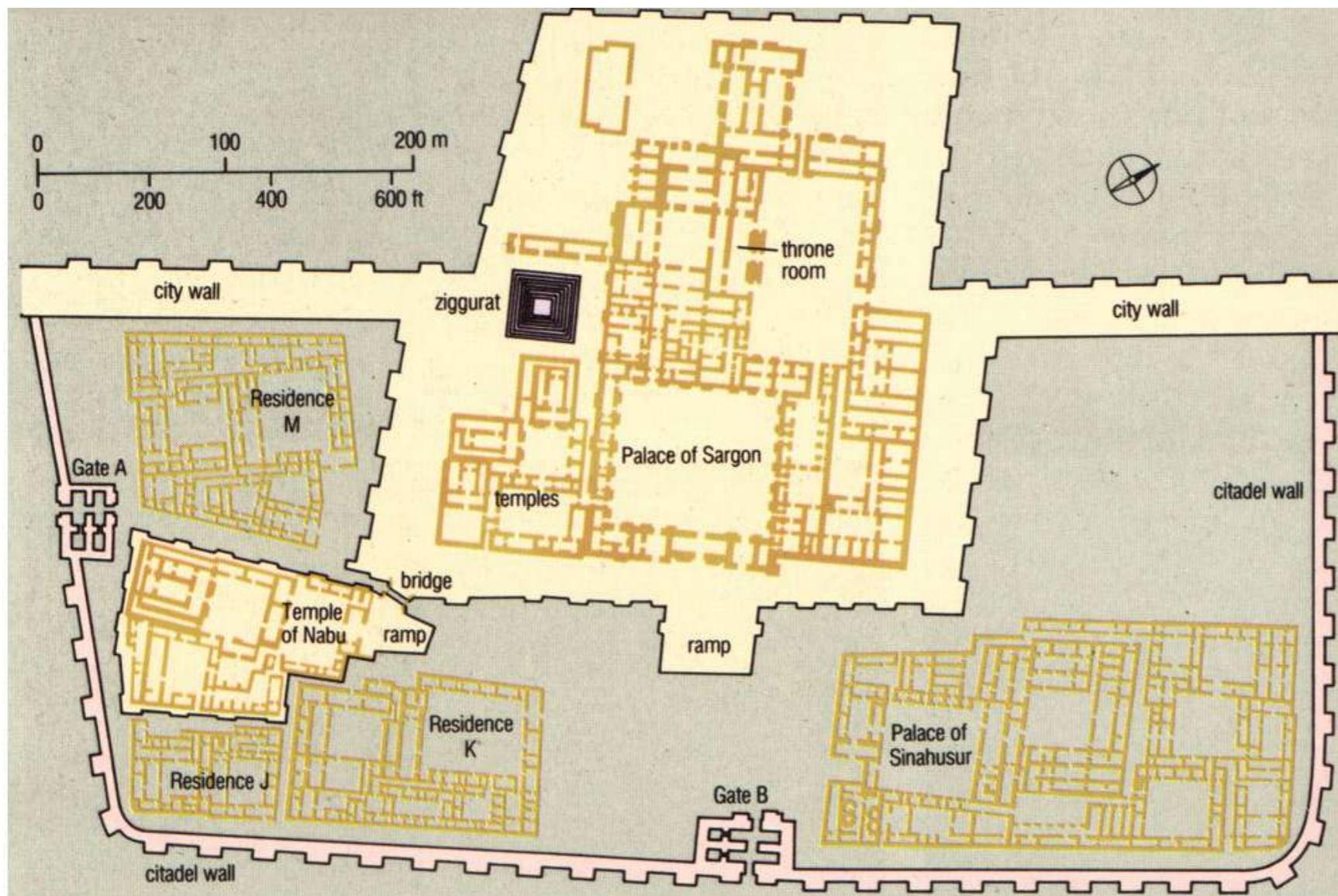


City of Khorsabad



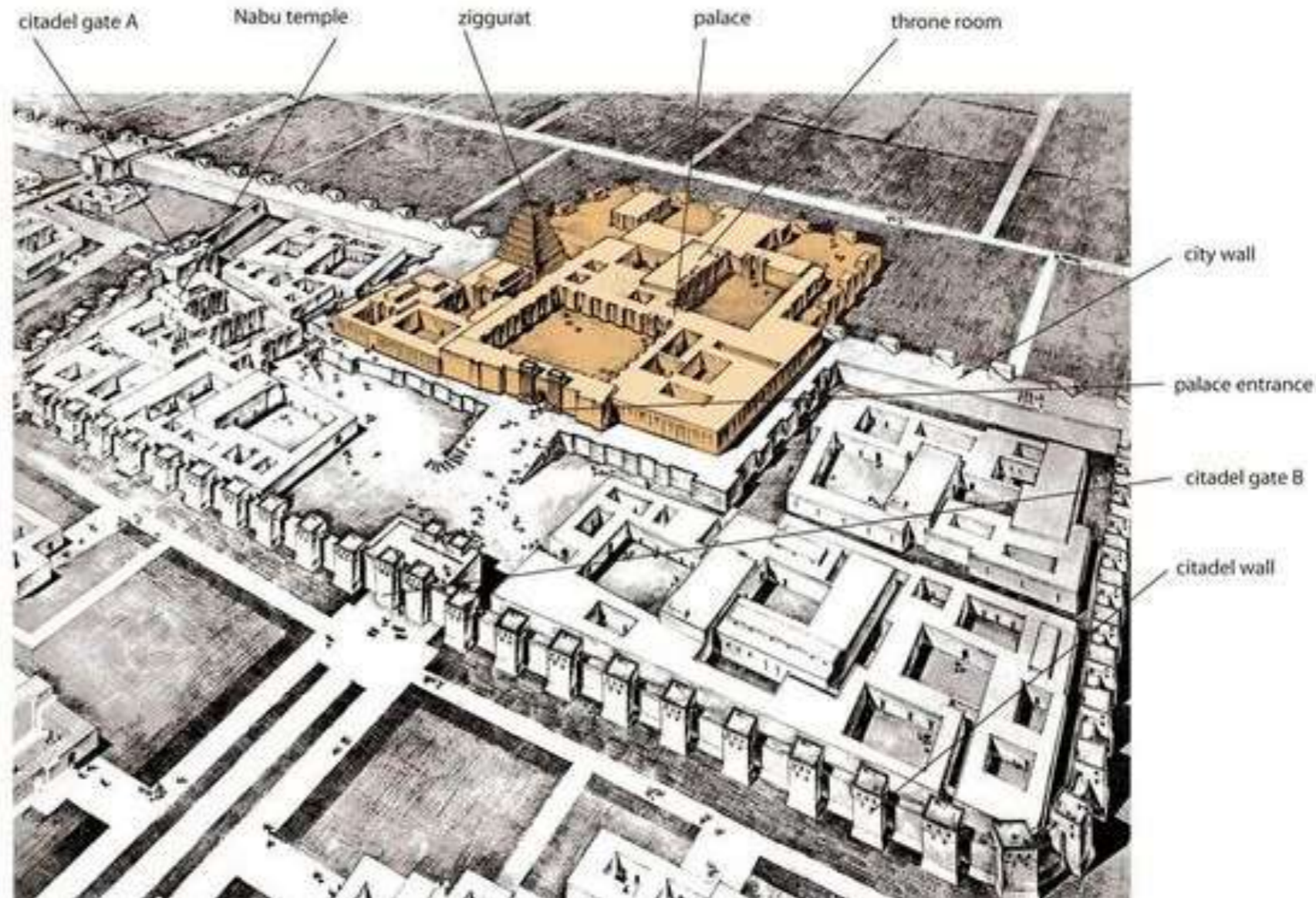
Palace of Sargon - Khorsabad

- It was built by **Sargon** (722-705 BC). It was square-planned surrounded by a fortified wall
- There were a palace for the king's brother, a temple to Nabu (god of wisdom and literature), several official buildings, and the palace of Sargon, which dominated all of them



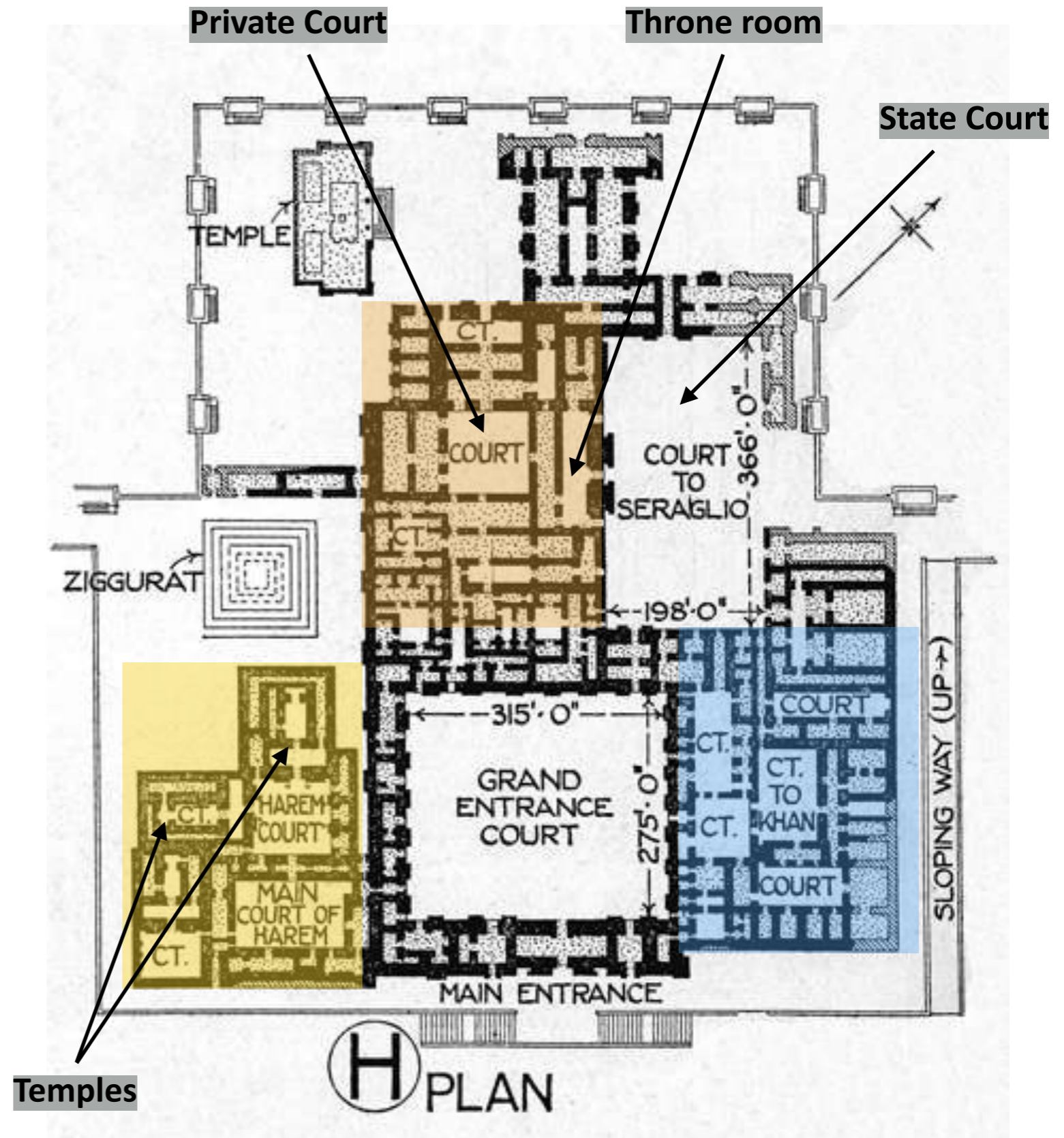
Palace of Sargon - Khorsabad

- A complex of **large and small courts**, corridors and rooms
- Each one of the buildings was **raised upon a terrace**, the palace of Sargon **reaches the level of the town walls**, and was approached by broad **ramps**
- The main entrance to the palace grand court was flanked by **great towers and guarded by man headed winged bull** nearly 3.8m high

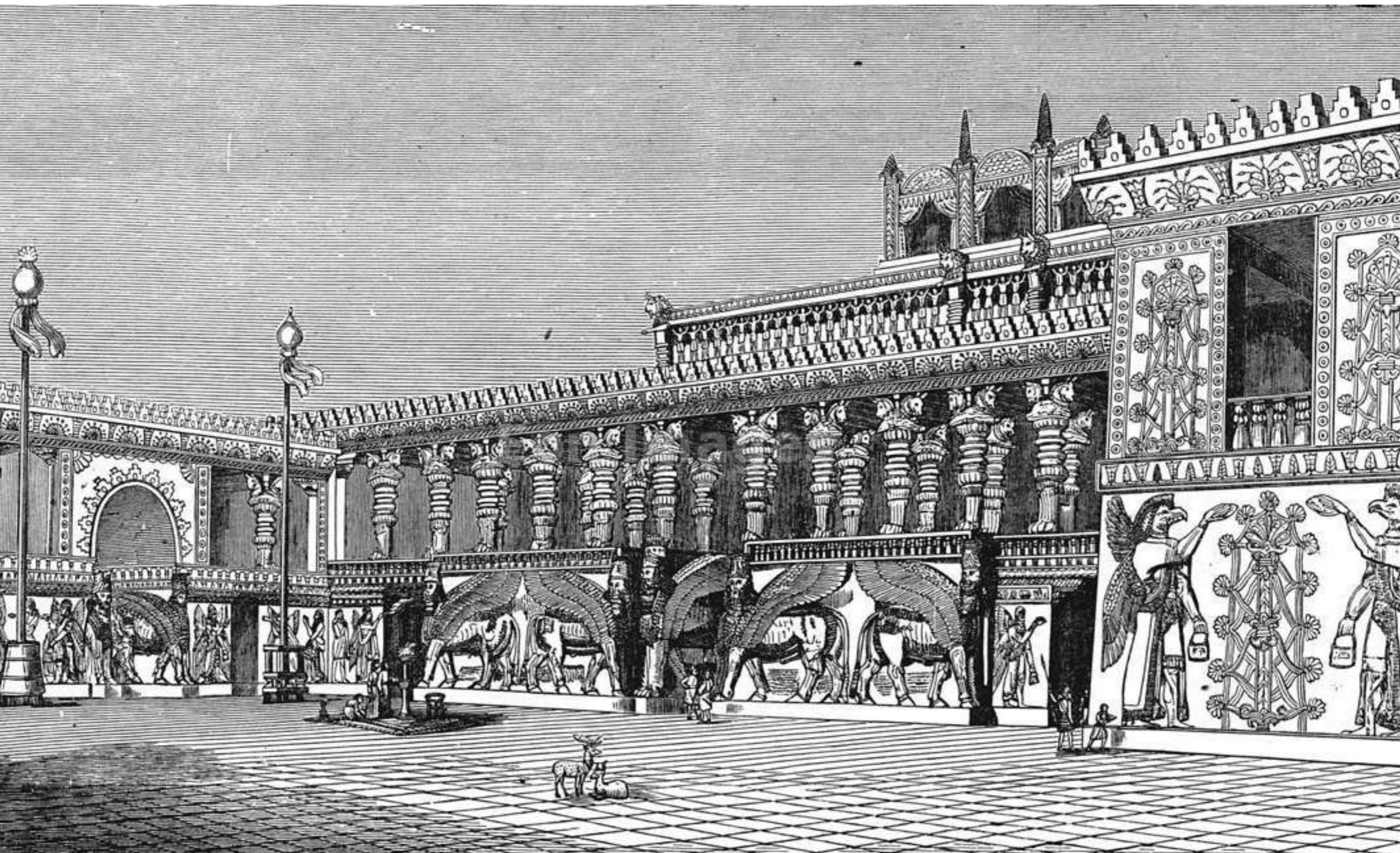


Palace of Sargon - Khorsabad

- The palace had **three main parts** surrounding the grand court
- On the left was a group of **three large and three small temples**. On the right **service quarters and administrative offices**, and opposite the **private and residential apartments with the state chambers**
- The state chambers had their own courts which had reliefs of the king and his courtiers

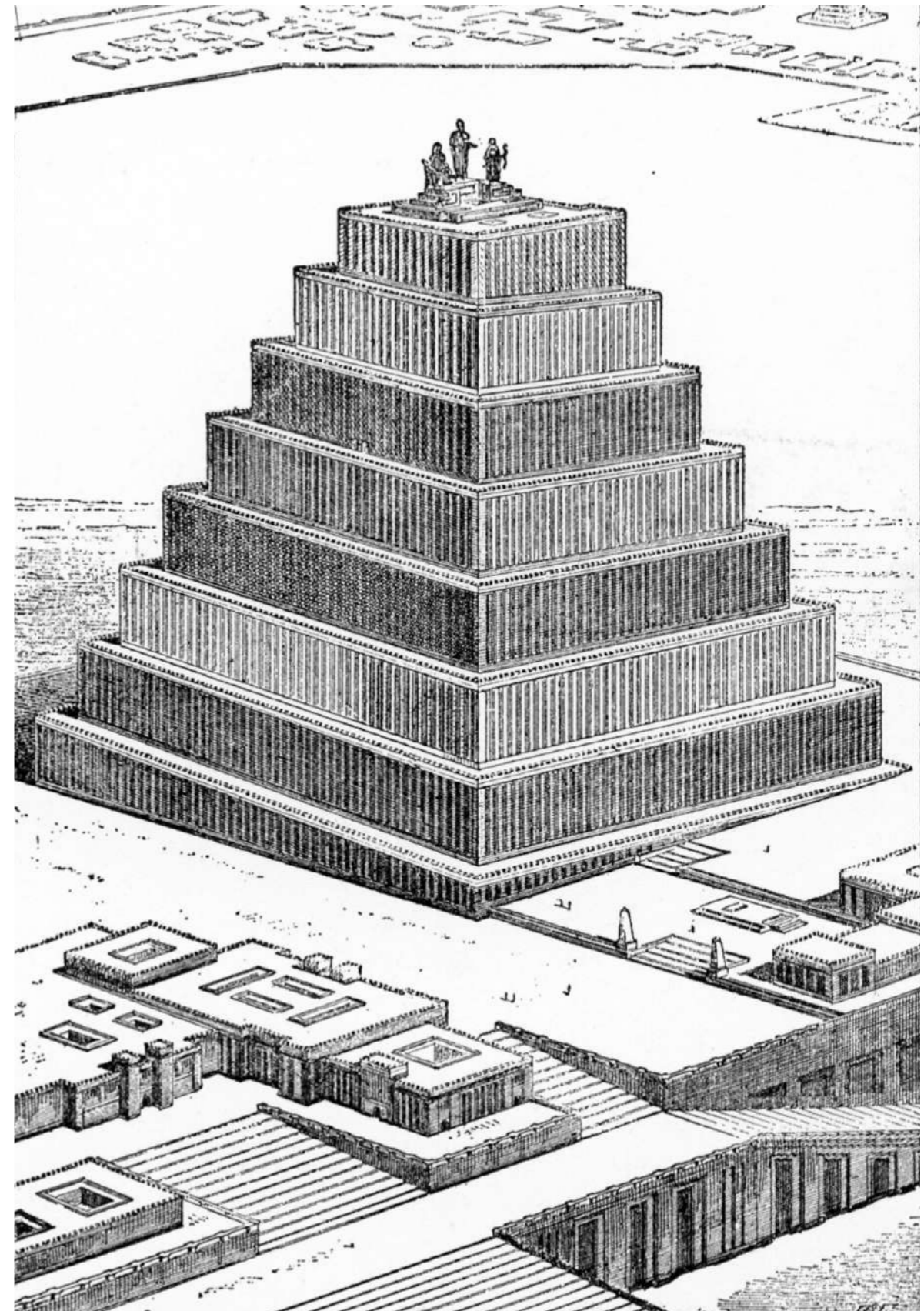
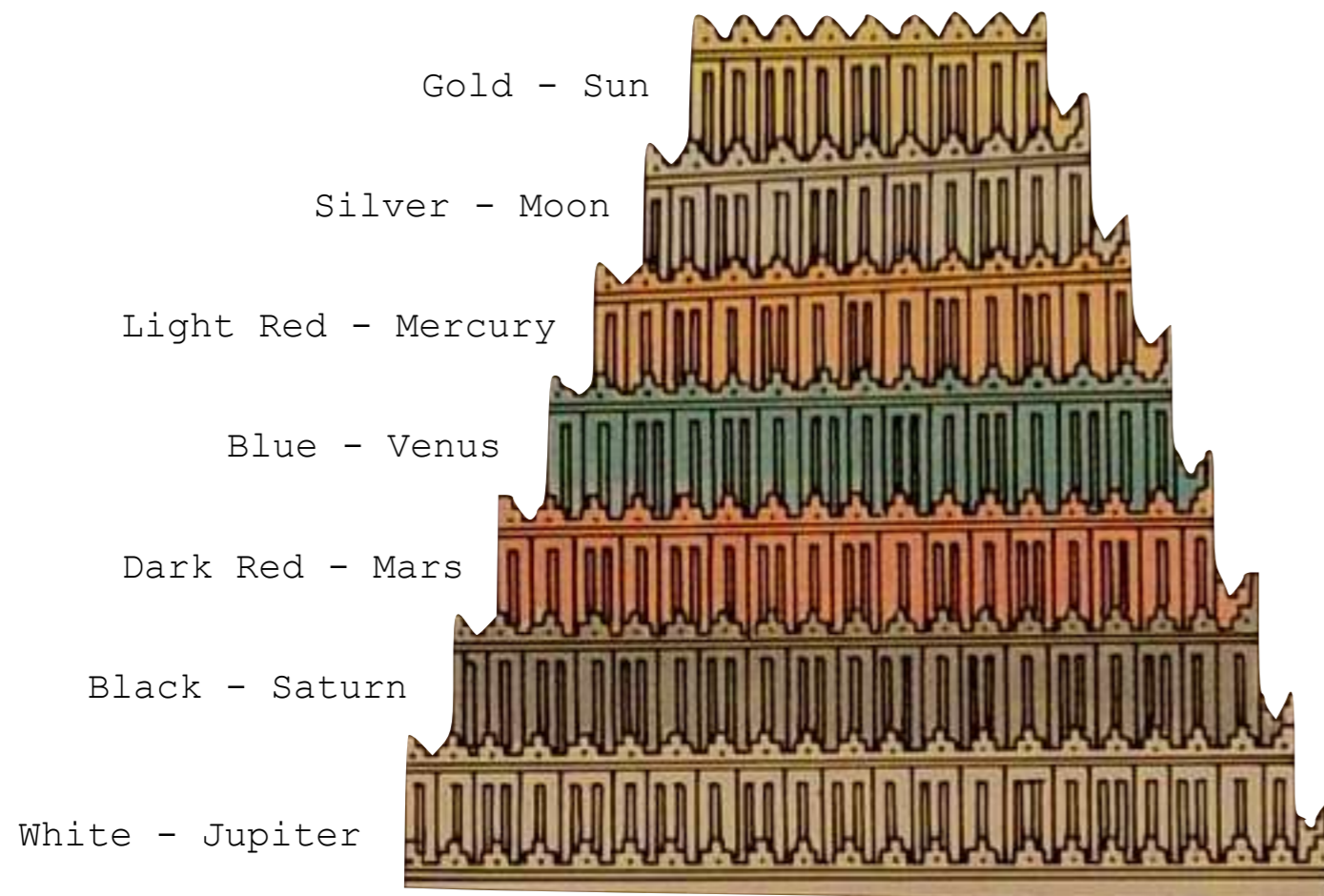


Palace of Sargon - Khorsabad



Palace of Sargon - Khorsabad

The Ziggurat is on a **square base of 45m side**, with **seven levels** rose to the same height (45m) ascended by a **winding ramp**. The successive tiers were panelled and were painted in different colours

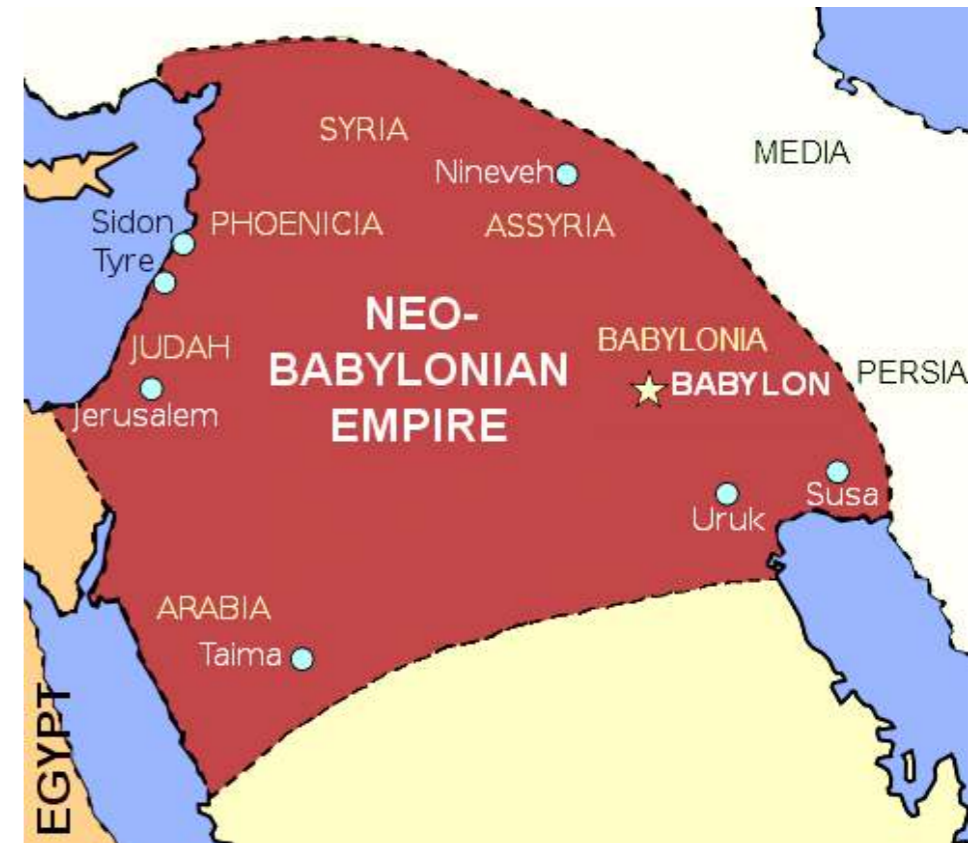


Neo-Babylonian

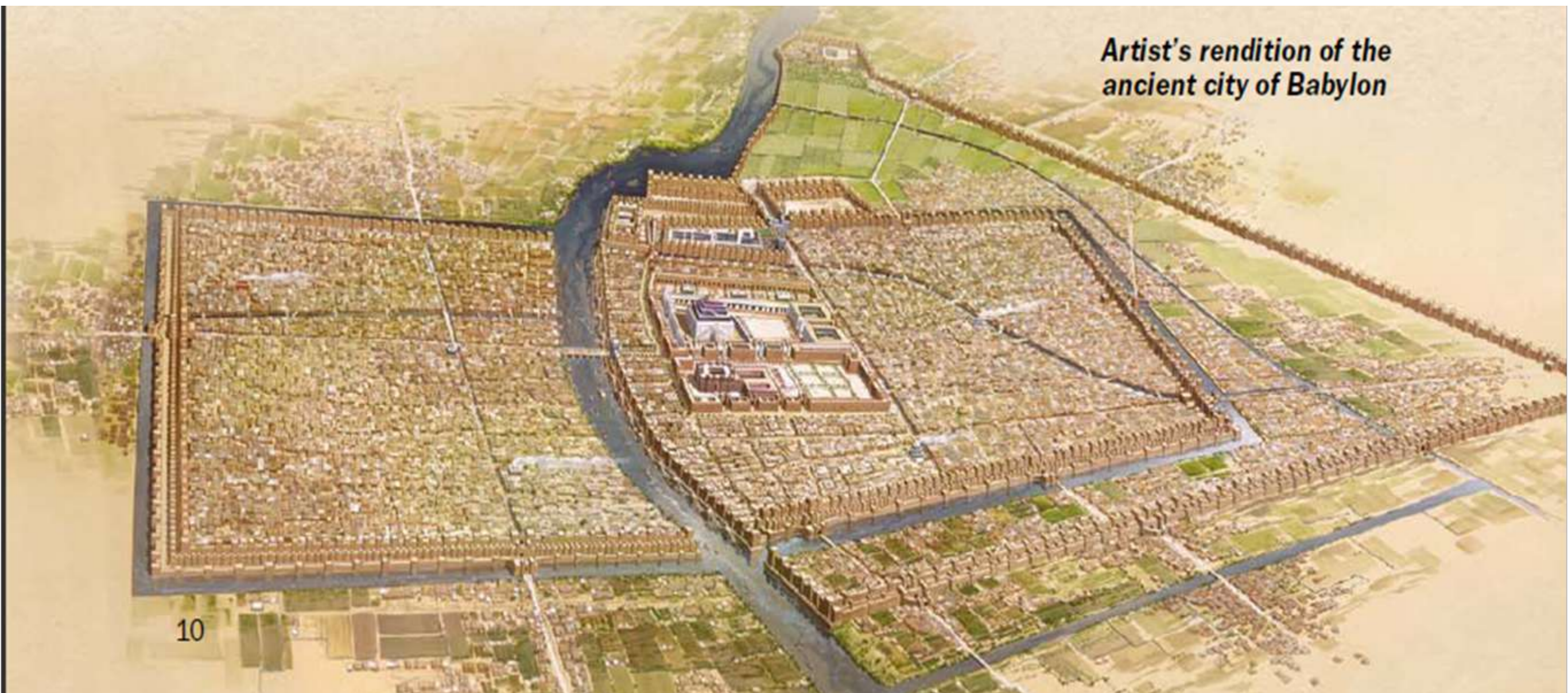
612-538 BC

City of Babylon

- Called **NEO** because Babylon had also risen earlier and became an independent city-state, most famously during the reign of **King Hammurabi**
- Babylon was rebuilt by **Nebuchadnezzar II**, with its walls and **eight gates**
- At the centre of the city was a temple complex sacred to **Marduk** (the chief Babylonian god)
- During this era Nebuchadnezzar purportedly built the "**Hanging Gardens of Babylon**" for his wife



City of Babylon



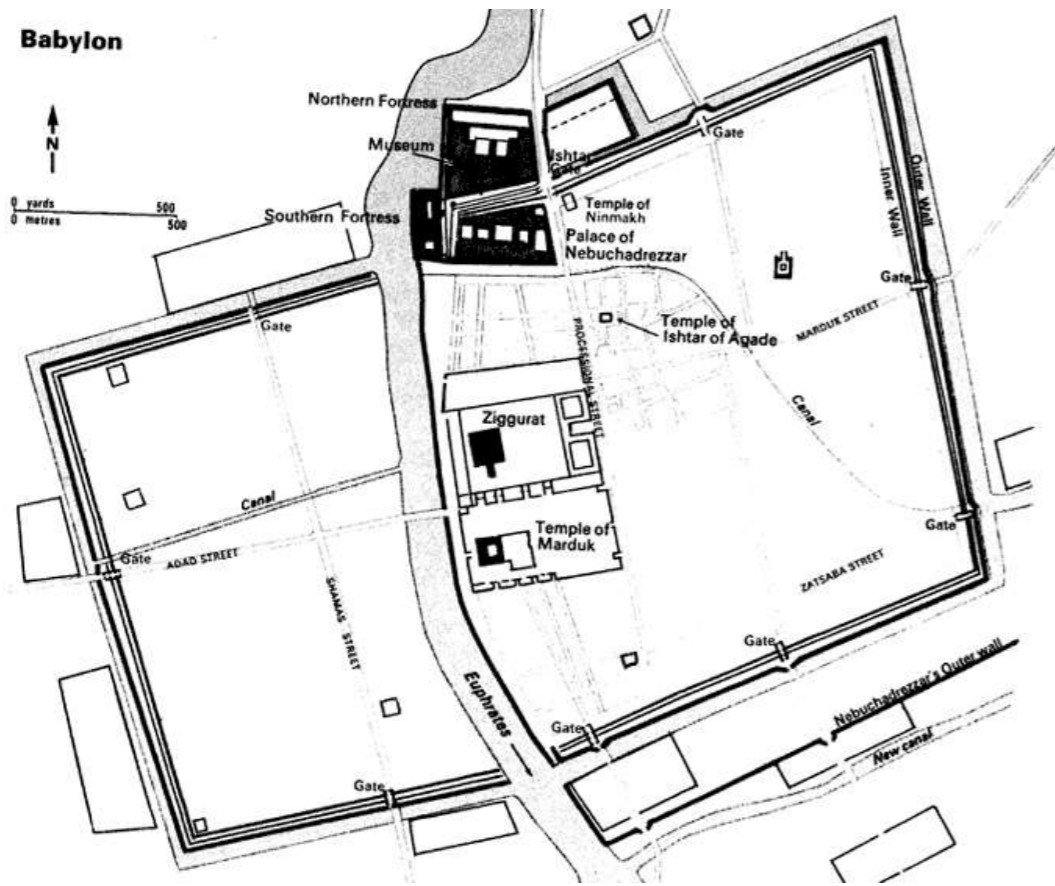
- It had an inner and outer part each heavily fortified
- The few main streets intersected starkly at the right angles terminating in **tower-framed bronze gates** where they met the walls

[https://drive.google.com/file/d/
108IrTAC1xFKRBg73ElZANLXB-ZkS29IX/view?
usp=sharing](https://drive.google.com/file/d/108IrTAC1xFKRBg73ElZANLXB-ZkS29IX/view?usp=sharing)

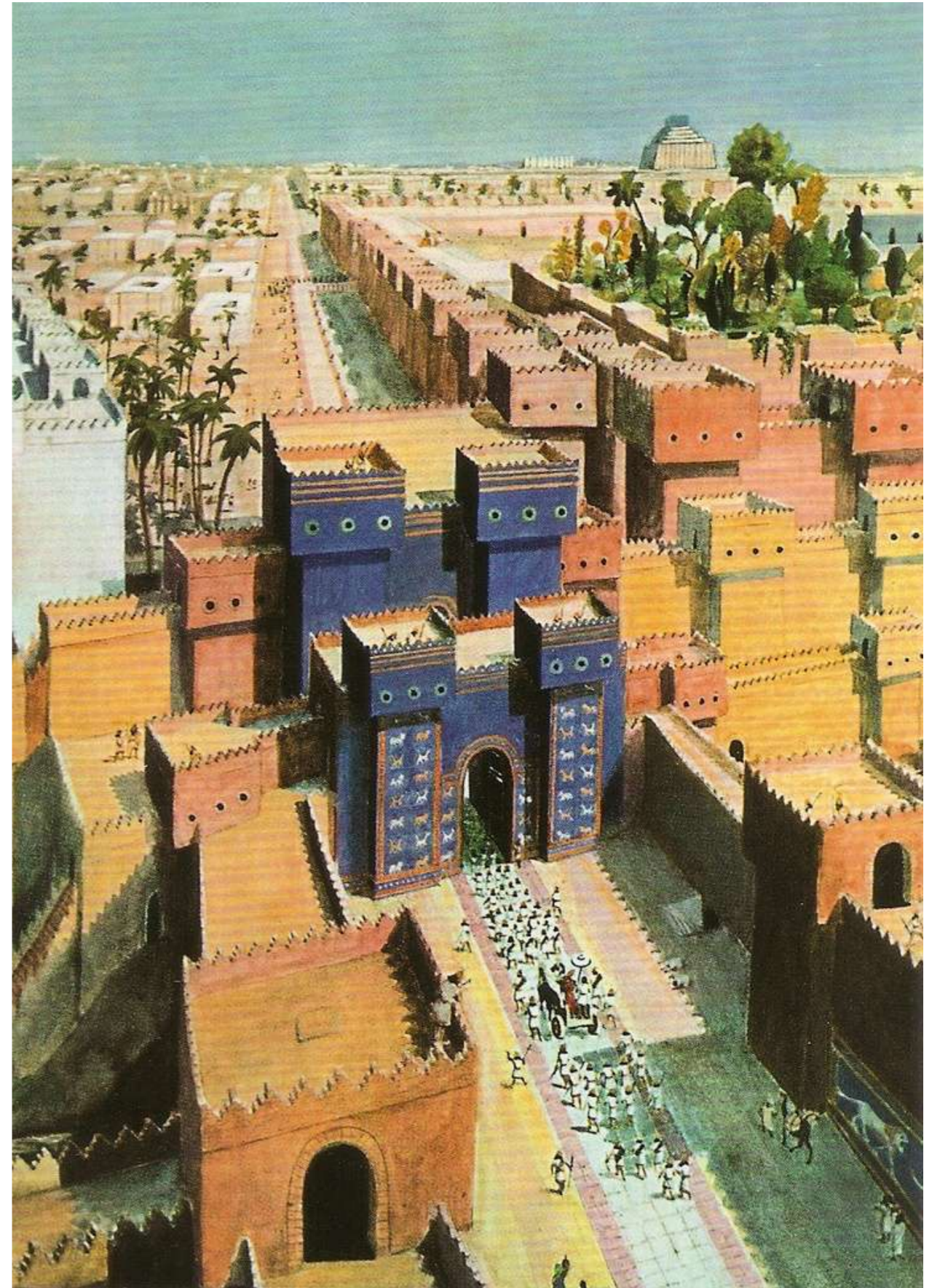
Ishtar Gate



Ishtar Gate



- The wall of the city was pierced by **eight gates each dedicated to one of the principal deities**
- Ishtar Gate is glowing in **coloured glazed bricks**, patterned with **yellow and white bulls** and dragons in relief upon a blue ground
- Formed of a **double gate**



Ishtar Gate



Ishtar Gate

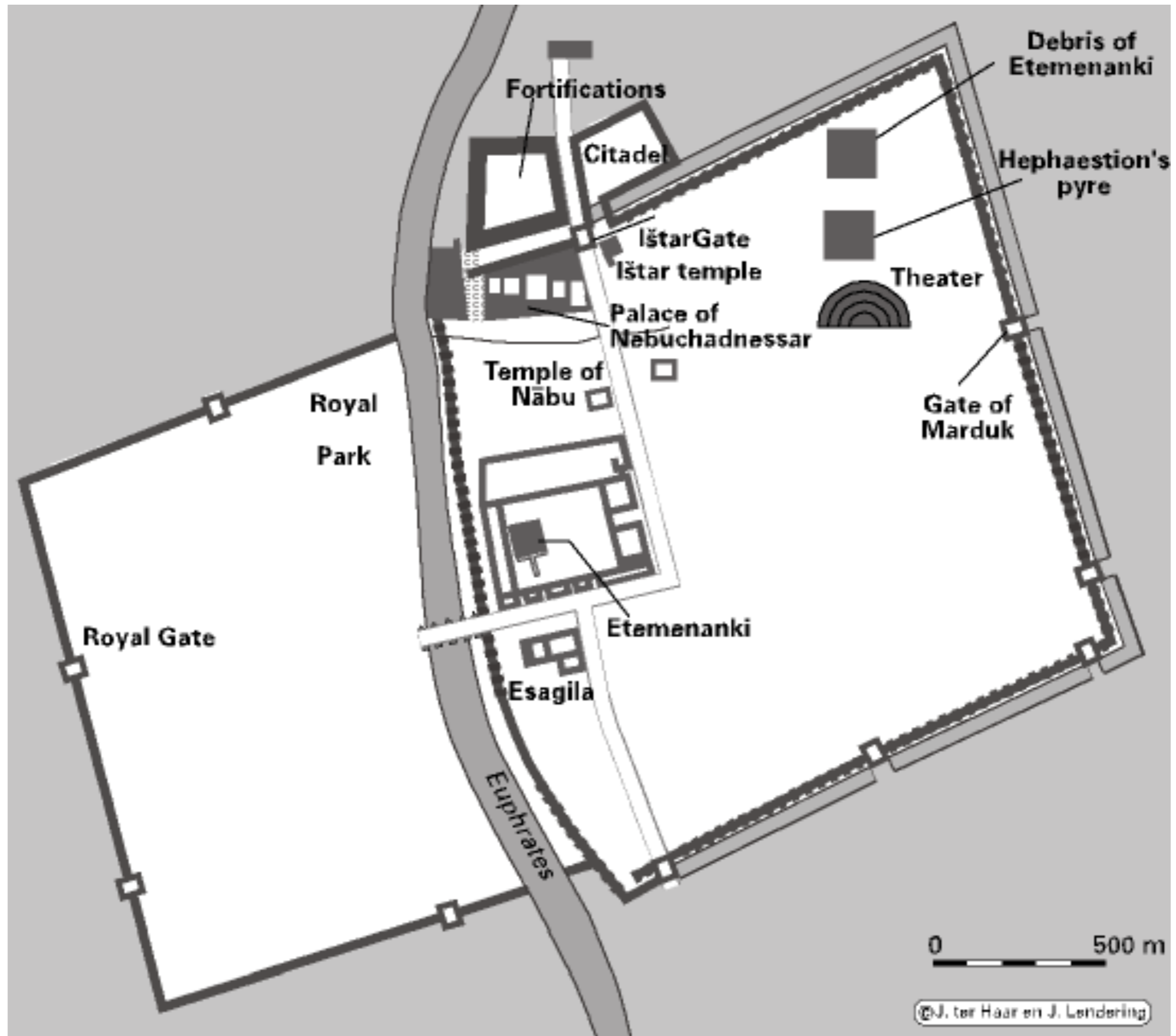


Lions and flowers decorated the processional street

The temple of Marduk (Etemenaki Ziggurat)



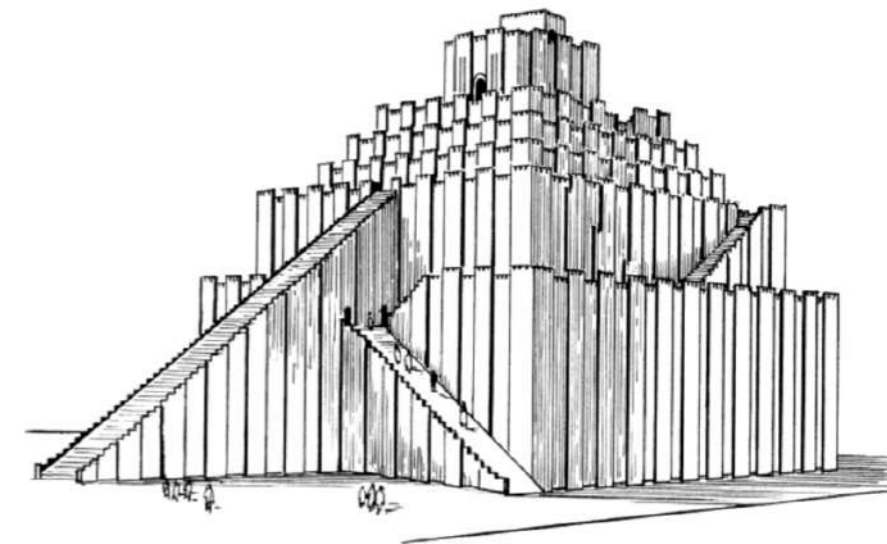
The temple of Marduk (Etemenanki Ziggurat)



The temple of Marduk (Etemenaki Ziggurat)



The temple is raised on a **ziggurat**, **seven levels** high with a **91 meter** with a square at its base. **Triple stairway approach**



The temple of Marduk (Etemenaki Ziggurat)



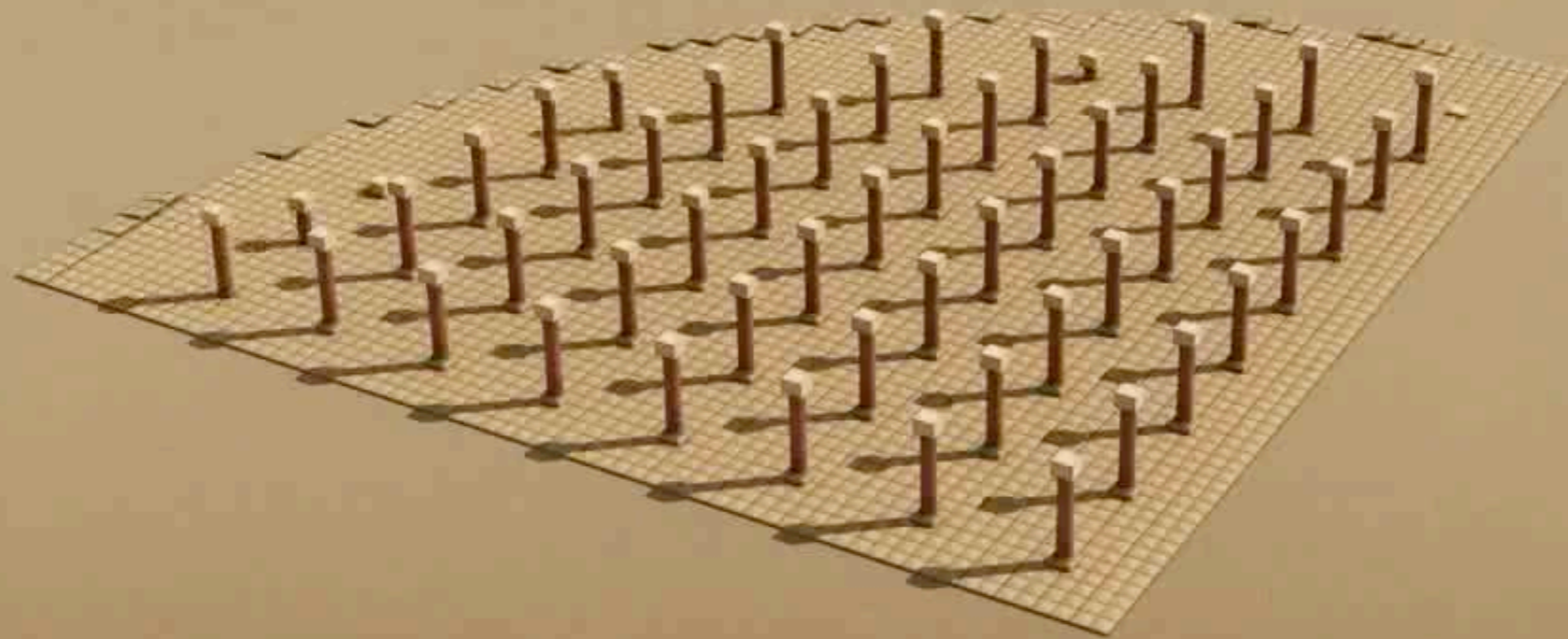
Tower of Babel??

- The story of the city (and tower) of Babel is recorded in Genesis 11:1-9. **Everyone on earth spoke the same language**. People [built] a city and a tower with its top in the sky, to make a name for themselves. God ... remarked that as one people with one language, nothing that they sought would be out of their reach. **God [made the people speak] in multiple different languages**. Unable to understand each other, the people drifted apart and scattered over the face of the earth, they stopped building the city. The name of the city was Babel from which we get the word *babbling*

The Hanging Gardens



The Hanging Gardens



<https://vimeo.com/297710331>

Youtube links:

- <https://www.youtube.com/watch?v=9GQdh2eGP-Y&t=5s>
- <https://www.youtube.com/watch?v=9uvckgMLjTM&t=9s>
- https://www.youtube.com/watch?v=sohXPx_XZ6Y
- <https://www.youtube.com/watch?v=kKGqJgYtif0&list=PLW238ps0Xyl8bDXuVFS2id1vCXH8qo3kc&index=12>

Next lecture

Ancient Egypt