



Pre-History and the Neolithic Revolution

The First Humans & Pre-History

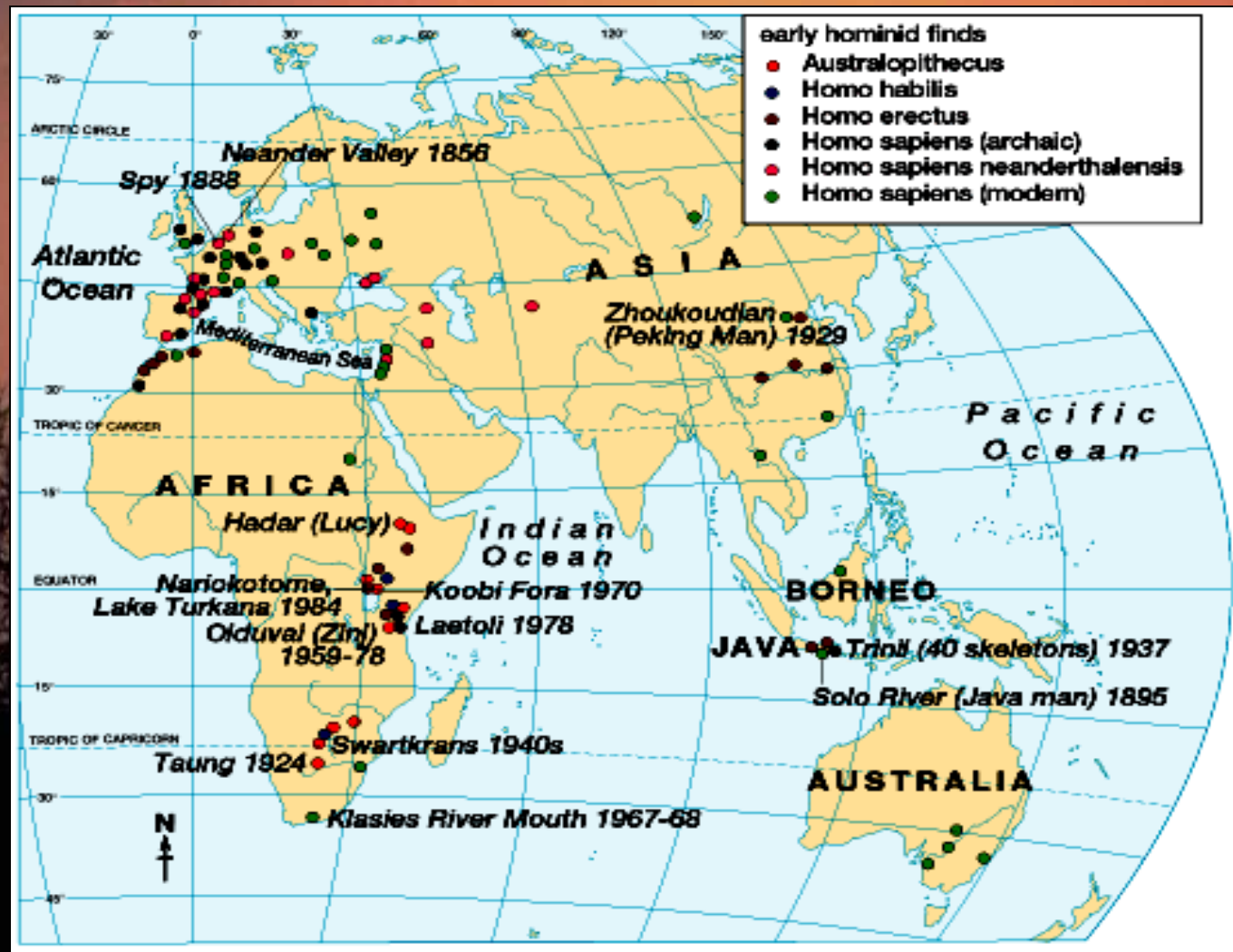
Theories on prehistory and early man constantly change as new evidence comes to light.

- Louis Leakey, British paleoanthropologist →



Prehistory= before writing

Early Discoveries



The Paleolithic Age

- **"Paleolithic" --> "Old Stone" Age**
- **2,500,000 BCE - 10,000 BCE**
- **Made tools**



- **hunting (men) & gathering (women)**
→ small bands of 20-30 humans
- **NOMADIC** (moving from place to place)

The Paleolithic Age

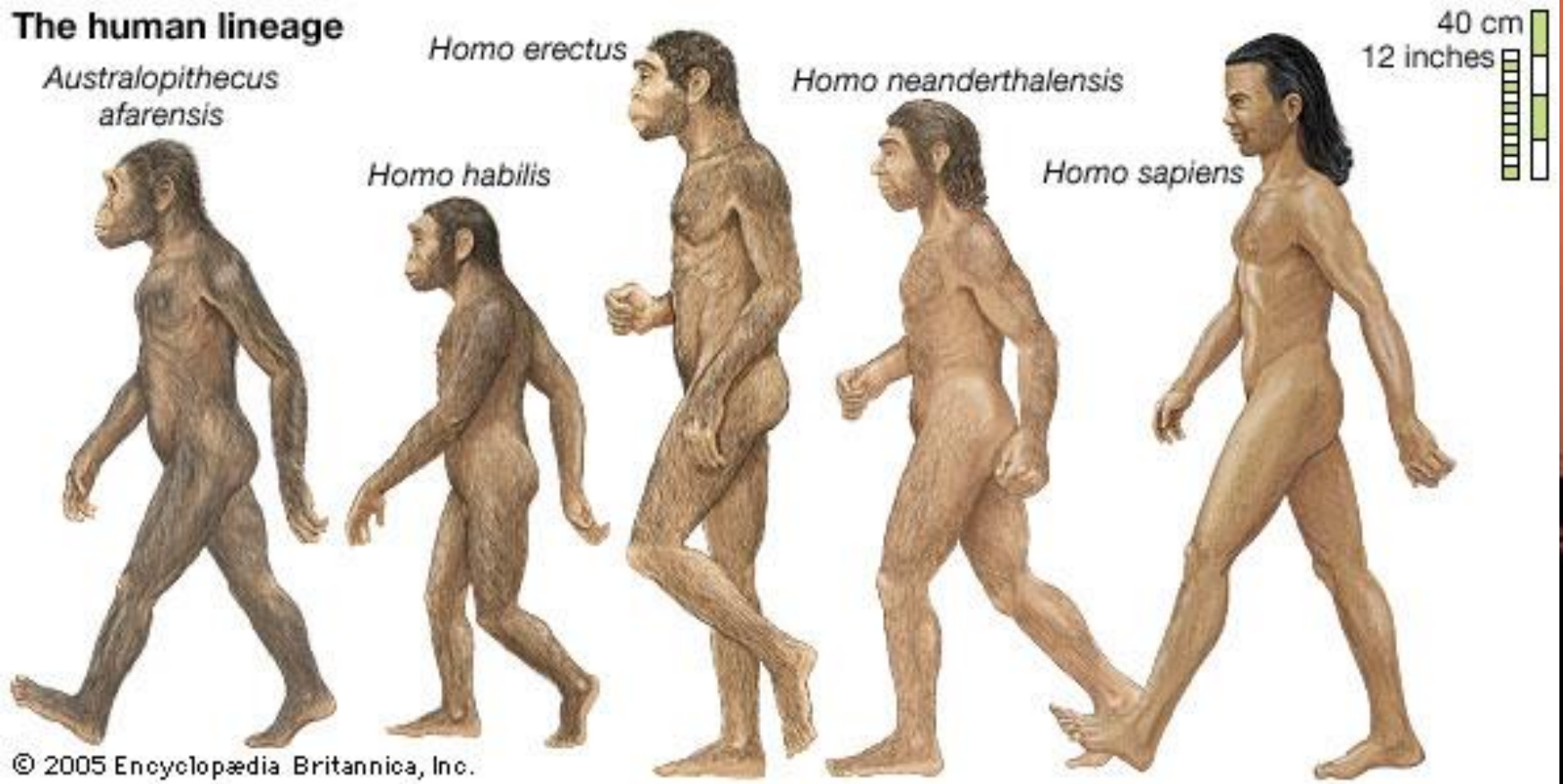
- Humans during this period found shelter in caves.
- Cave paintings left behind.

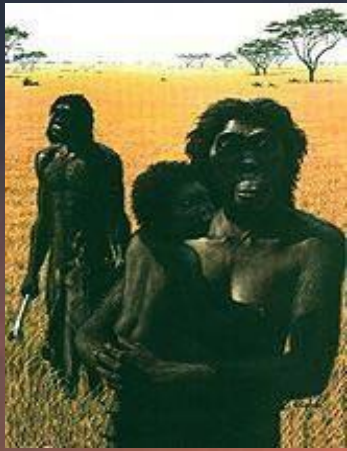


Purpose??



5 Stages of Hominids – Pre-History

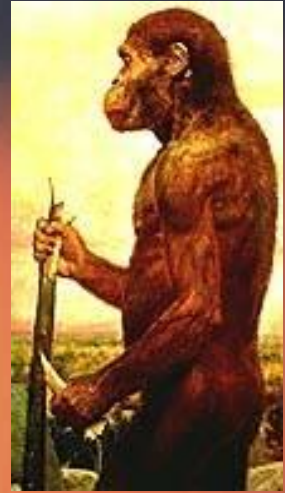




Stage 1

4,000,000 BCE - 1,000,000 BCE

- **Hominids** --> any member of the family of two-legged primates that includes all humans.
- **Australopithecus** - "southern ape"
 - "Lucy" (Johansen) Great Rift Valley - Ethiopia
 - diggers; lacked language, short, furry, omnivores

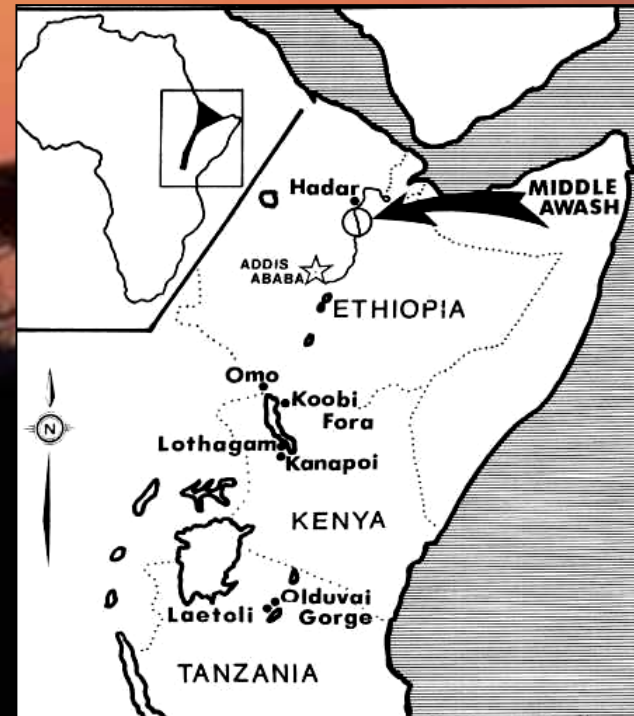
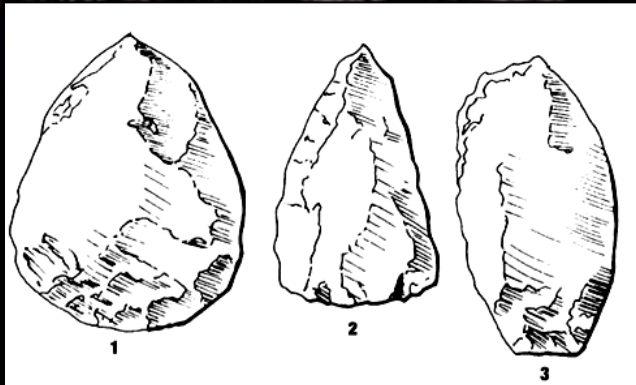


- An **Opposable Thumb**

Stage 2



- **HOMO HABILIS**
- ("Man of Skills" or "handy man")
- found in East Africa (Louis and Mary Leakey - Kenya)
- Created & used stone tools
- lacked complex language



Stage 3



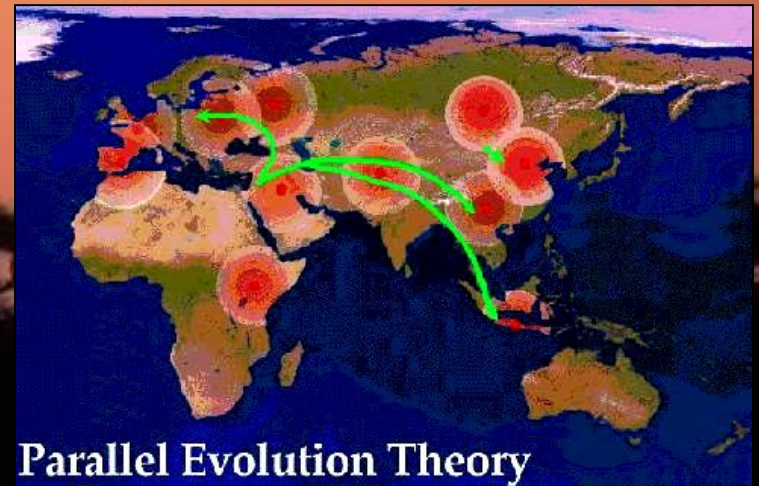
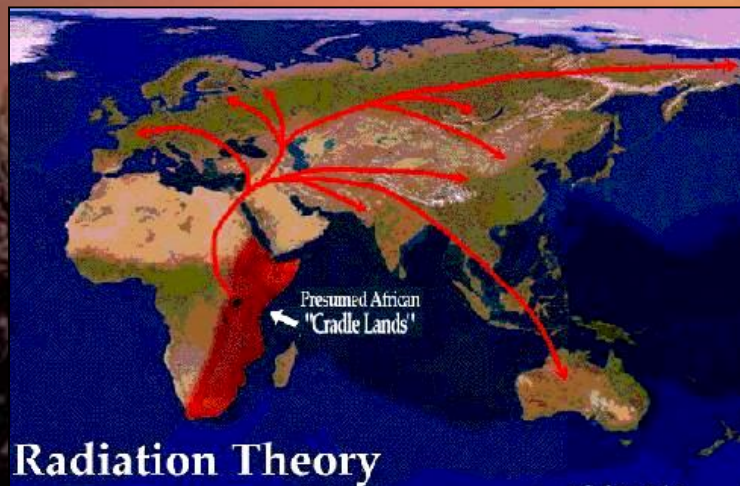
1,600,000 BCE - 30,000 BCE

- **HOMO ERECTUS** ("Upright Human Being")
 - **BIPEDALISM**
 - Larger and more complex, varied tools --> primitive technology
 - First hominid to migrate and leave Africa for Europe and Asia.
 - First to use fire (500,000 BCE)



Differing Human Migration Theories

Are we all Africans "under the skin"????



Stage 4

200,000 BCE - 10,000 BCE



HOMO SAPIENS
("Wise Human Being")

Neanderthals

(200,000 BCE - 30,000 BCE)

Cro-Magnons

(40,000 BCE - 10,000 BCE)

Stage 4

NEANDERTHALS:

- Neander Valley, Germany (1856)
- First humans to bury their dead.
- Made clothes from animal skins.
- Lived in caves and tents.

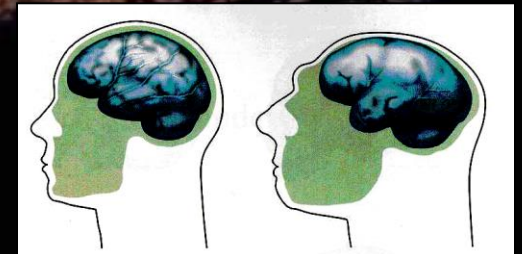


Stage 4

NEANDERTHALS



Early Hut/Tent



Stage 5

CRO-MAGNONs:

- **Homo sapiens sapiens**
("Wise, wise human")



- By 30,000 BCE they replaced Neanderthals.

Homo sapiens sapiens in Europe



The Journey of Mankind – The Peopling of the World



JOURNEY OF MANKIND The Peopling of the World

The **Bradshaw Foundation**, in association with **Stephen Oppenheimer**, presents a virtual global journey of modern man over the last 160,000 years. The map will show for the first time the interaction of migration and climate over this period. We are the descendants of a few small groups of tropical Africans who united in the face of adversity, not only to the point of survival but to the development of a sophisticated social interaction and culture expressed through many forms. Based on a synthesis of the mtDNA and Y chromosome evidence with archaeology, climatology and fossil study, Stephen Oppenheimer has tracked the routes and timing of migration, placing it in context with ancient rock art around the world.

100 / 100

This may take several minutes to load depending on your connection speed



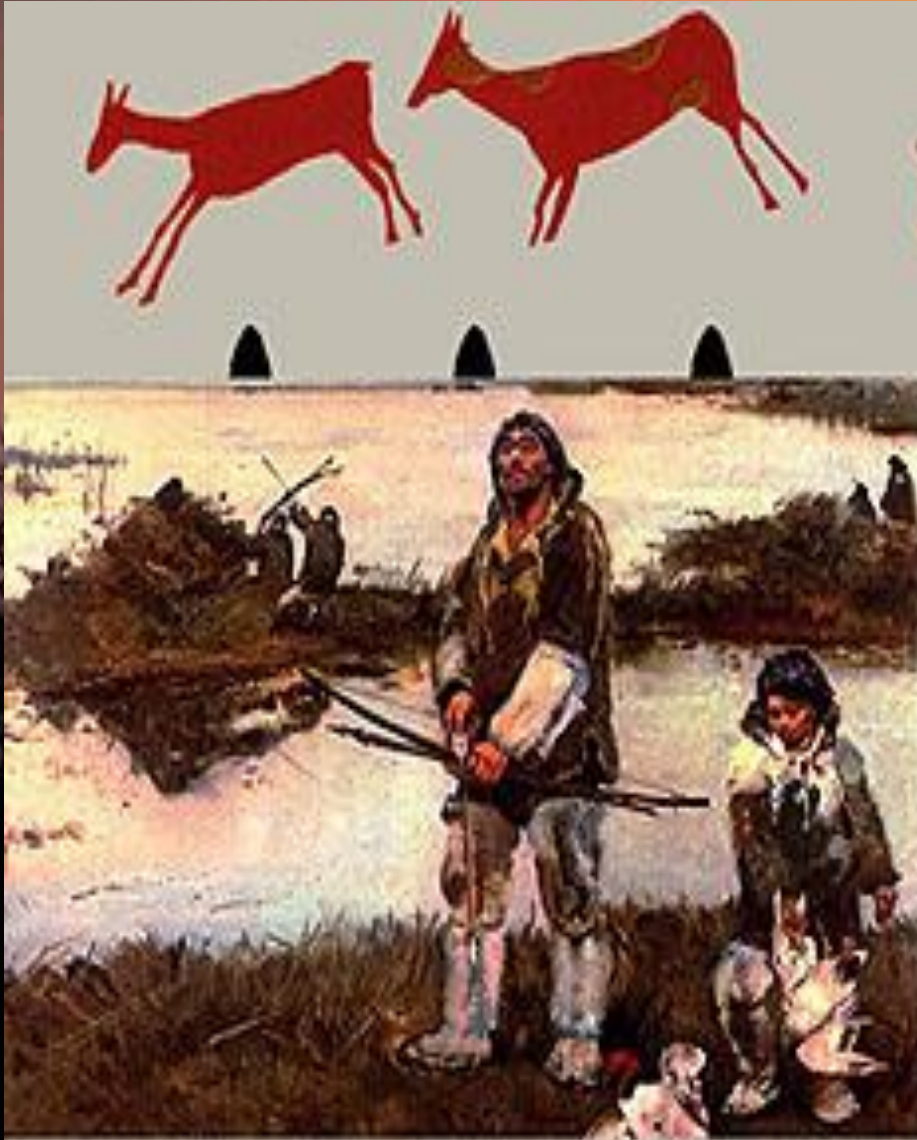
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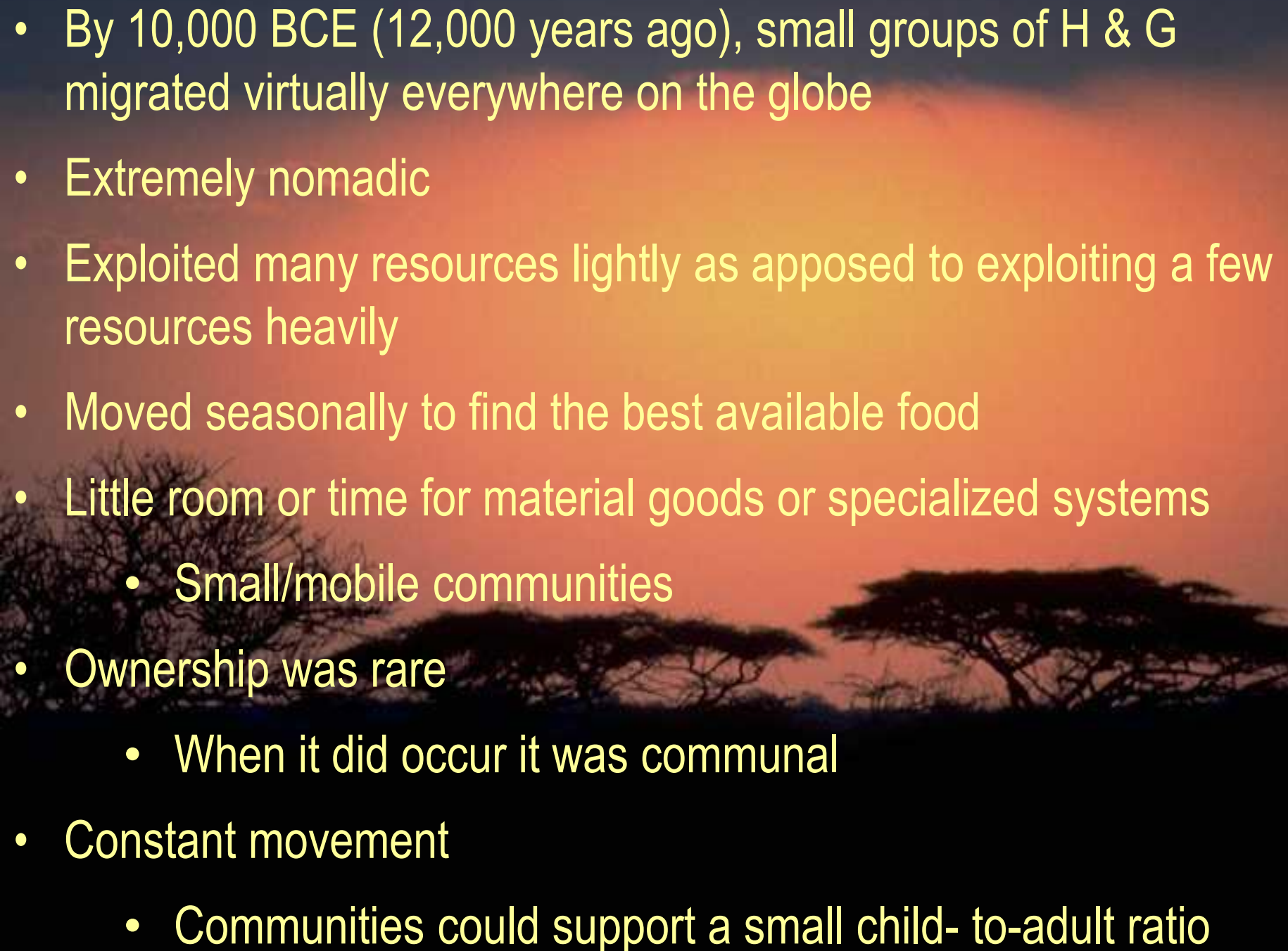
Before the Neolithic Revolution



PALEOLITHIC HUMANS or *OLD STONE AGE HUMANS*

hunt & gather for over 100,000 years (fully modern human beings)



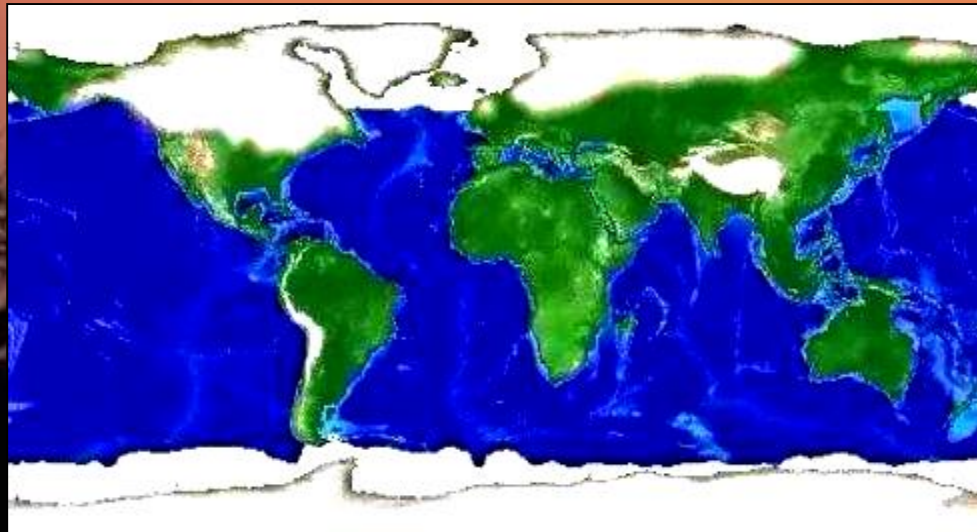
- 
- By 10,000 BCE (12,000 years ago), small groups of H & G migrated virtually everywhere on the globe
 - Extremely nomadic
 - Exploited many resources lightly as apposed to exploiting a few resources heavily
 - Moved seasonally to find the best available food
 - Little room or time for material goods or specialized systems
 - Small/mobile communities
 - Ownership was rare
 - When it did occur it was communal
 - Constant movement
 - Communities could support a small child- to-adult ratio

- Archaeologists estimate that the activity of gathering in temperate & tropic areas provided 75 to 80% of calories with hunting providing the balance.
- In modern H & G cultures, women usually gather, while the men specialize in hunting
 - gender specialization is not universal
- H-Gs accumulate an intimate knowledge of the land, food sources, dangers, and opportunities
 - knowledge is largely communal and enjoy diverse diet
- Small, personal world defined by the band (50 to 250 people)
- Usually marry outside of the band
- HGs have no accumulated wealth to steal
- Attitude toward outsiders tends to be cautiously friendly rather than hostile

- Small, continuously moving communities → little opportunity for economic specialization to develop
- What one person knows and believes, the entire group tends to know and believe. Life is communal; cultural and technical knowledge and skills are widely diffused.
- A rough egalitarianism tends to prevail, and there are no sharp social distinctions. Some individuals may enjoy more status than others, but there are few if any class distinctions

The Last Ice Age

70,000 BCE - 10,000 BCE





But,

the great climate changes at the end of the last Ice Age would disrupt this harmony throughout the world and start a revolution!

The Neolithic Age

- "Neolithic" → "New Stone" Age
- 10,000 BCE - 4,000 BCE
- Gradual shift from:
 - Nomadic lifestyle → settled, stationary lifestyle.
 - Hunting/Gathering → agricultural production and domestication of animals.

The Neolithic Revolution

**Tigris-Euphrates
Mesopotamia**

**Nile River
Egypt**

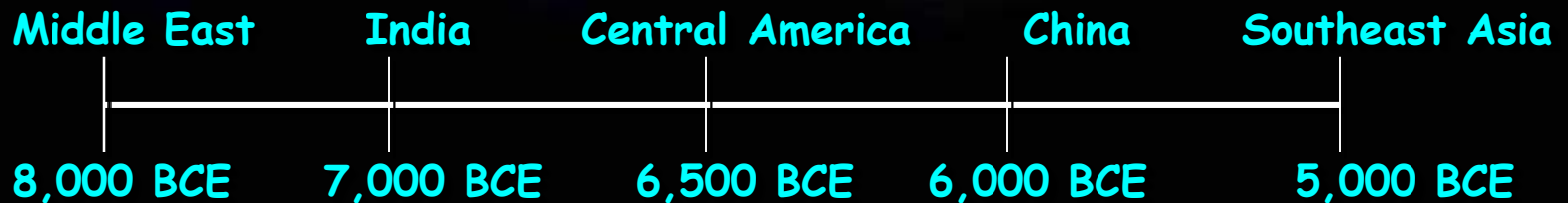
**Development
of Agriculture in the
4 Early River Valley
Civilizations**

**Indus River
Mohenjo-Daro**

**Huang He River
China**

The Neolithic Revolution

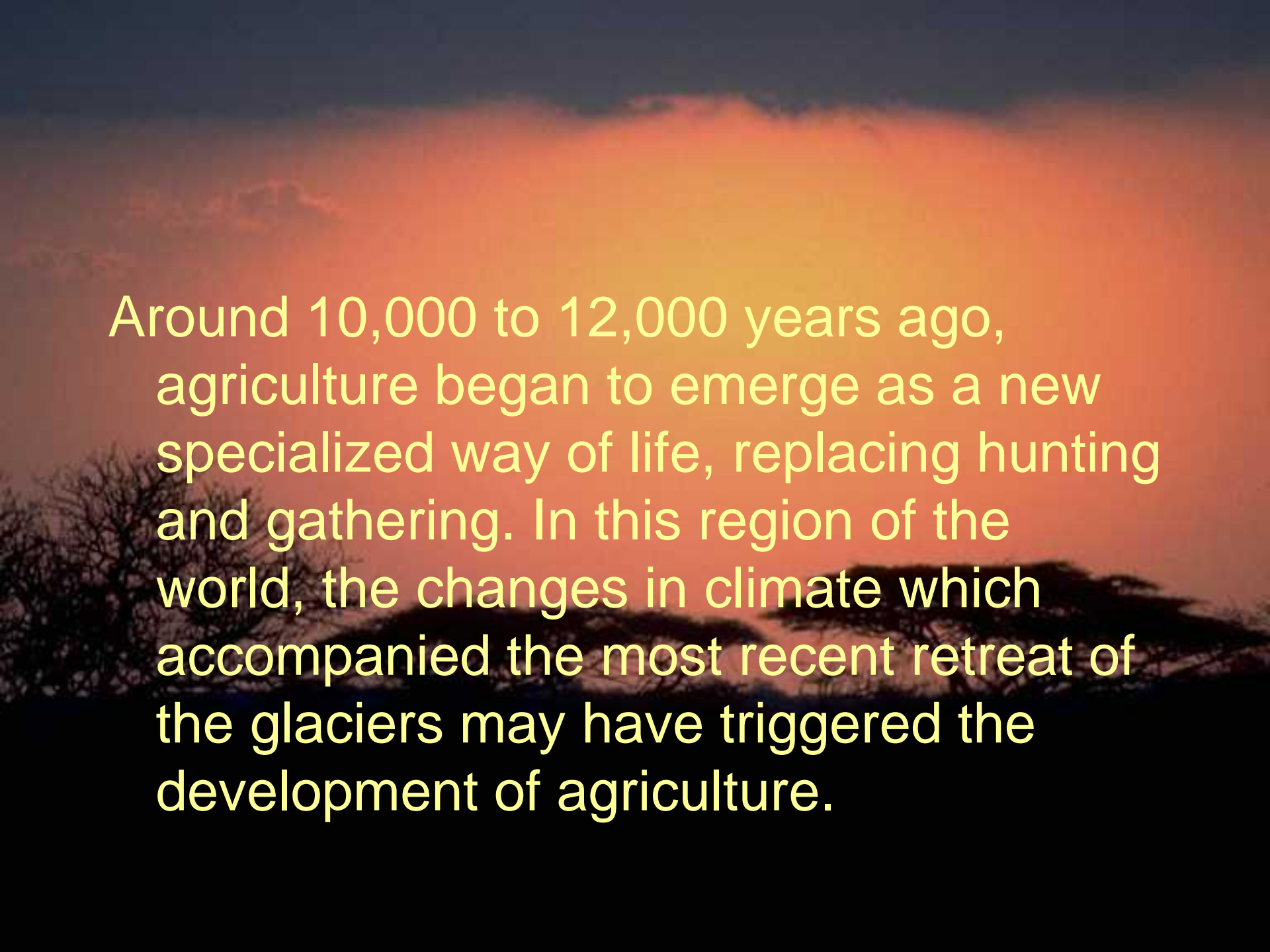
- 8,000 BCE - 5,000 BCE
- Agriculture developed independently in different parts of the world.
 - **SLASH-AND-BURN Farming**



A.K.A.

The Agricultural Revolution

Why do you think the
development of
agriculture occurred
around the same time in
several different places?

The background of the slide is a photograph of a sunset or sunrise. The sky is filled with warm, orange and yellow light, with some darker clouds visible. The foreground is dark, showing the silhouettes of trees and hills. The text is overlaid on this background in a yellow, sans-serif font.

Around 10,000 to 12,000 years ago, agriculture began to emerge as a new specialized way of life, replacing hunting and gathering. In this region of the world, the changes in climate which accompanied the most recent retreat of the glaciers may have triggered the development of agriculture.

- Agriculture means sedentism
- Living permanently in one place. This was itself new to human beings, and it may have seemed very constraining to the first people to experience this way of life. Living in one spot permanently means exploiting a relatively small amount of **land very intensively** (rather than exploiting a large amount of land extensively, as hunter-gatherers did), and over a long period of time.

Domestication of Animals

The same kinds of genetic transformations occurred in the animals domesticated by early farmers and pastoralists. The process of selective breeding of animals was at first unintentional and probably unobserved. For example, large, aggressive, and big-horned bulls were probably too dangerous to keep around and so did not survive to reproduce these characteristics. Thus, over time, early farmers unwittingly altered the genetic make-up of the life forms they most relied on

- Modifications of body size reflecting the uses to which the animal is put, loss of speed and agility, loss or decrease in size of horns or other natural weapons, biological specialization for human needs (e.g., wool production in sheep), occurred. Subtler changes in disposition and intelligence occurred also. Some species of domestic animals could not now survive without human care and protection.



Wild Pig



Domesticated Pig



Urial Sheep



Domesticated Sheep



Wild Auroch Bull



Domesticated Cow



Wild Bezoar Goat



Domesticated Goat

The Neolithic Revolution

Why do some
archaeologists believe
that women were the
first farmers?

Early Settled Communities

- Growing crops on a regular basis made possible the support of larger populations.
- More permanent, settled communities emerged.
- 9,000 BCE → Earliest Agricultural Settlement at **JARMO** (northern Iraq) → **wheat**



Early Settled Communities

- 8,000 BCE → Largest Early Settlement at **Çatal Hüyük** (Modern Turkey) → 6,000 inhabitants
- 12 cultivated crops
- Division of labor
- Engaged in trade
- Organized religion
- Small military



An obsidian dagger

Early Settled Communities



Çatal Hüyük





**Why is the
"Neolithic Revolution"
a turning point
in human history??**



**What is the
next step in the
development of
human settlements??**

CITIES !



CIVILIZATIONS !!



**What are the
characteristics
of a civilization???**

CIVILIZATION

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graph TD; C[CIVILIZATION] --> AC((Advanced Cities)); C --> AT((Advanced Technology)); C --> SW((Specialized Workers)); C --> CI((Complex Institutions)); C --> RK((Record-Keeping));
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Advanced
Cities

Advanced
Technology

Specialized
Workers

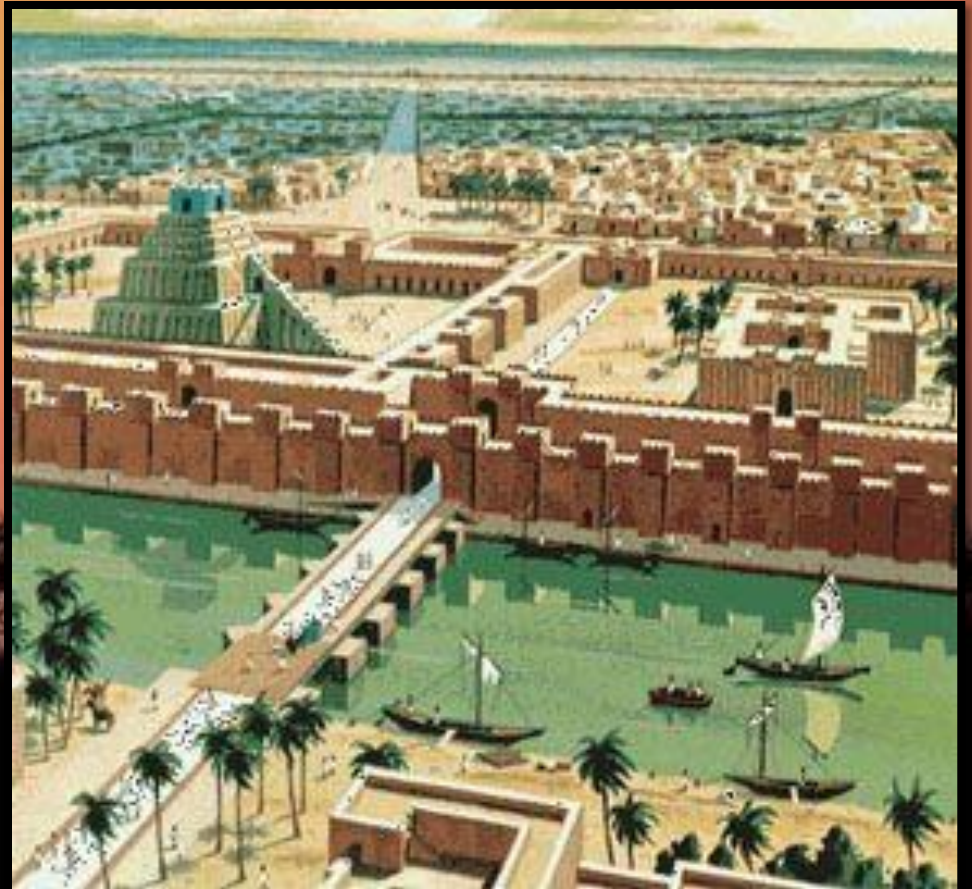
Complex
Institutions

Record-
Keeping

Eight Components of Civilization:

1. Cities

- Agriculture allowed for a surplus (which was difficult to move)
- River valleys: agriculture required a stable source of water



Eight Components of Civilization:

2. Government



- Issues laws, collects taxes, organizes defense, monitors/rations food supply
- Bureaucracy - managing government through departments of officials
- Protecting the surplus was of the utmost importance

Eight Components of Civilization:

3. Religion

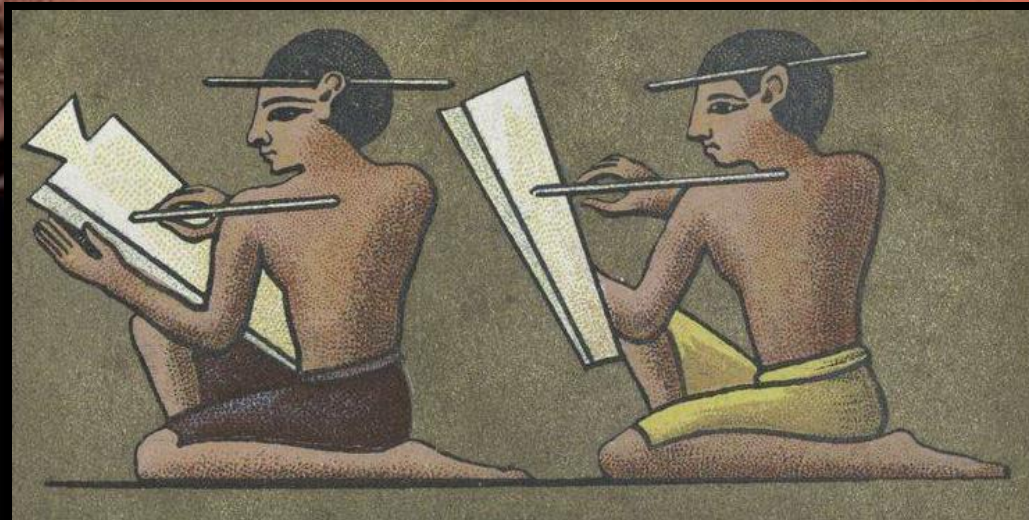


- People believed in higher beings
- Polytheistic - many gods
- People wanted to gain favor with the gods

Eight Components of Civilization:

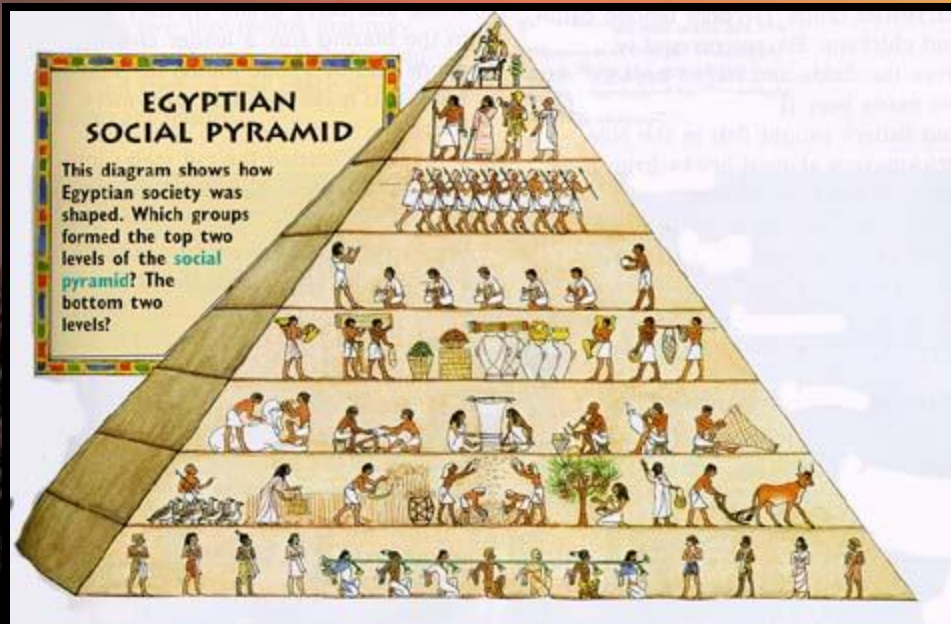
4. Writing

- Crucial skill for early civilizations
- Pictograms - simple drawings to show words
- Scribes - as writing became complex these trained experts learned to read and write



Eight Components of Civilization:

5. Social Classes

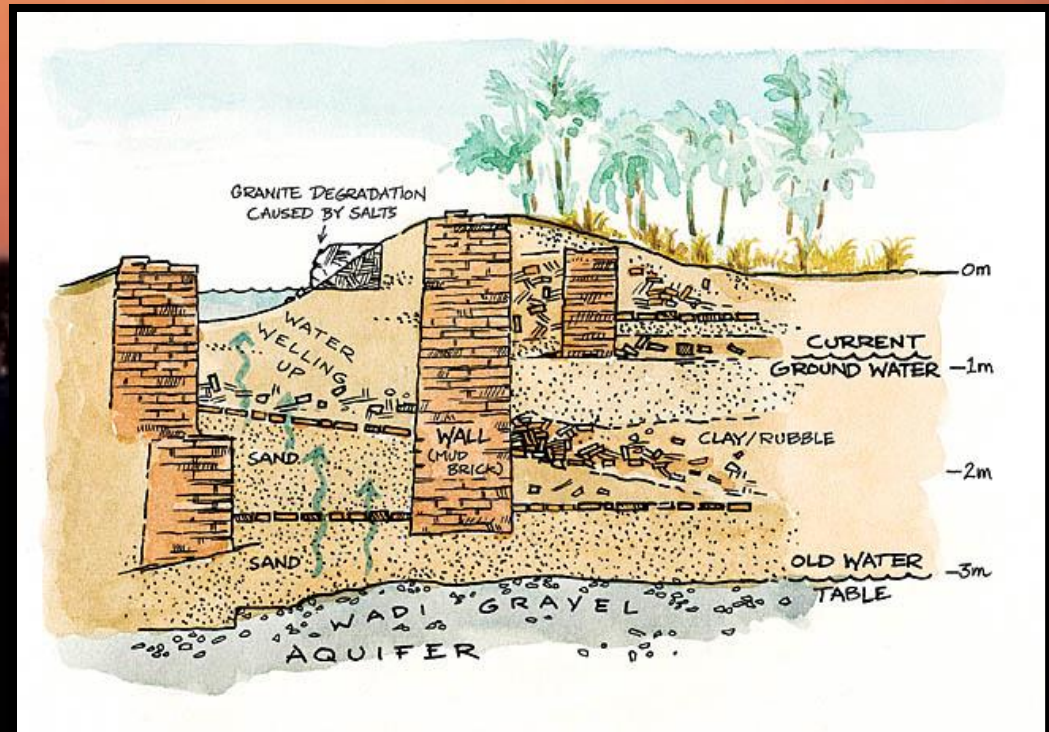


- People were ranked according to their jobs/occupations
- Priests and nobles were at the top level of society
- Next, came merchants, artisans, peasant farmers, and finally.....slaves.

Eight Components of Civilization:

6. Public Works

- Monumental architecture - temples, palaces
- Irrigation systems, roads and bridges
- Defensive walls



Eight Components of Civilization:

7. Job Specialization



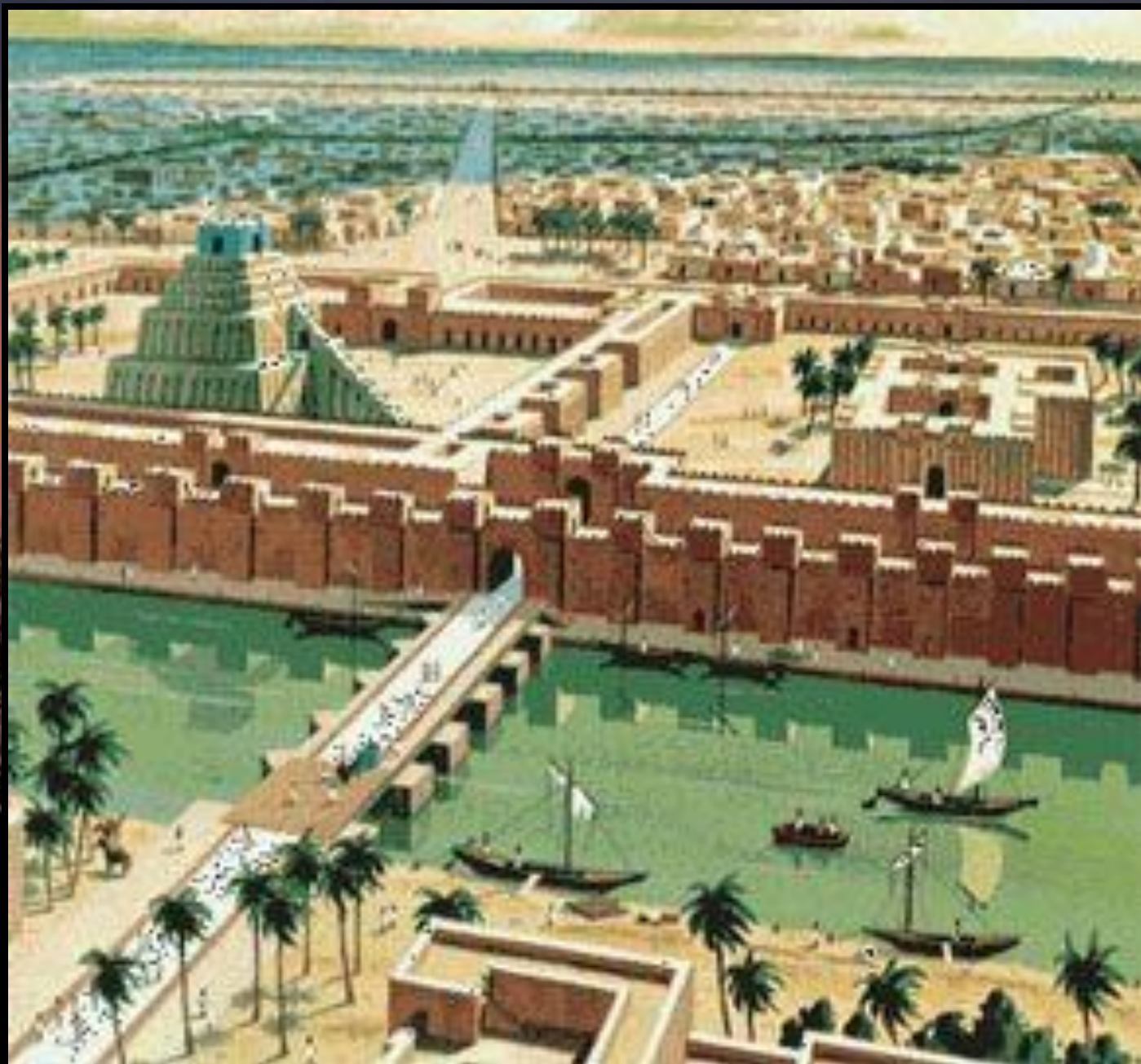
- Specialization brought expertise
- Artisans - skilled craft workers who made pottery or woven goods

Eight Components of Civilization:

8. Art and Architecture

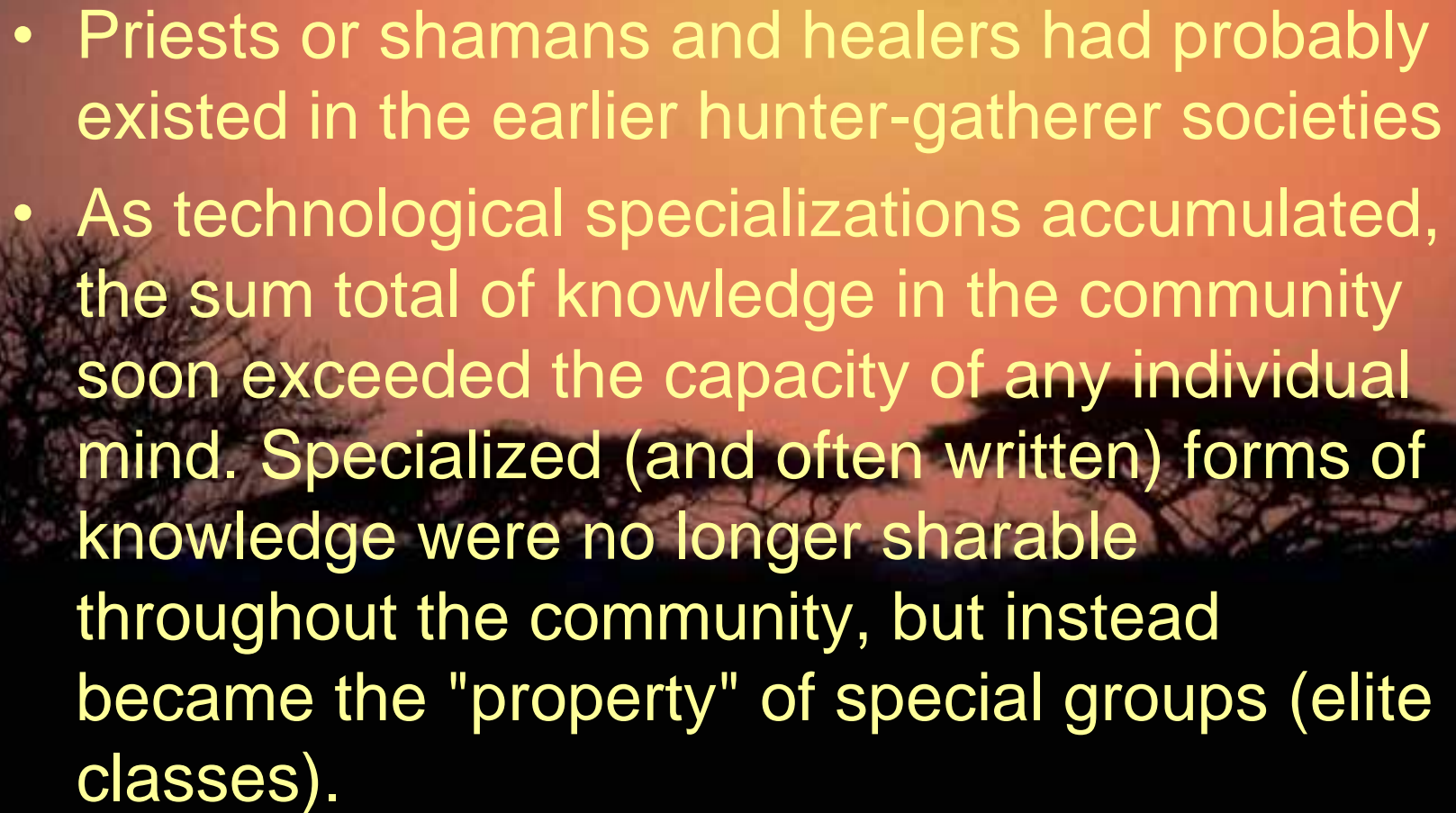
- Expressed the beliefs and values of people who created them
- Temples and palaces reassured people of the strength and power of their government and religion





Specialization

- The specializations are almost endless--and they continue in our own times. The earliest were: bakers, brewers, weavers, dyers, carpenters, potters, stone and metal-workers, farmers, soldiers, priests (interpreting signs), medicine men and women (shamans and healers), merchants, artists, scribes, story tellers, teachers, slaves, and kings.

- 
- Priests or shamans and healers had probably existed in the earlier hunter-gatherer societies
 - As technological specializations accumulated, the sum total of knowledge in the community soon exceeded the capacity of any individual mind. Specialized (and often written) forms of knowledge were no longer sharable throughout the community, but instead became the "property" of special groups (elite classes).

Pottery

- Another advantage of sedentary life is the ability to use household objects made of baked clay. Hunter-gatherers have no use for pottery because they have to carry their possessions with them. Agriculturalists, in contrast, can accumulate This discovery was made many times by human communities all over the globe, and seems to have occurred almost as soon as they settled down in one place.
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