

# Pre-Civilization

In *A Tale of Two Cities*, Charles Dickens points out how mid-nineteenth-century Victorian England and late eighteenth-century pre-revolutionary France resembled each other: Both were monarchies in need of political and tax reform; both countries were plagued with poverty, and both countries possessed an aristocracy that was interested only in its own welfare. Dickens' London readers needed to accept this assumption if they were to believe his premise, "Revolution in all its ferocity was about to break out in Piccadilly Circus, going thence to the Tower of London."

Dickens' work speaks to an urge to seek commonalities in previous times. The time periods deemed to be most like our own are often considered more relevant, which is why certain periods of history get more attention than others. We can think of some periods, such as the Victorian age as modern man in period costume. But those periods of history not readily resembling modern times get left on the historical scrap heap. What use are they; what have they to teach us? Too often the study of history is confined to those periods that most resemble modern times. Unfortunately, studying only the "relevant" historical material gives history a rough texture. This makes it impossible to see how certain intellectual movements, politics, and culture developed.

What do those periods that don't resemble the present have to teach us? Quite a lot! The first humans faced the same problems that haunt us today: securing food, shelter, clothing themselves and families, meeting their deadlines. Early humans were "hunters and gatherers." They survived by hunting game animals and gathering edible fruits and greens. This meant traveling to another place once food gave out. Pre-civilized humankind didn't concern themselves with flight schedules, but they understood leaving one area before winter or rain made travel impossible. Further deadlines also meant knowing when to gather wood and the length of time food would keep fresh. Pre-civilized humankind, like modern humankind, struggled to survive. But cave people lacked the blessings of modern technology; they weren't Fred and Wilma Flintstone with modern appliances made of stone.

**Pre-civilization** is defined as a pre-urban form of living in which all members are involved with the production of, or securing of, the food supply. The time period for a pre-civilized **society**, the group of people who live within and comprise a given pre-civilization or civilization, varies depending on the location and surrounding physical environment. Pre-civilized and civilized societies may co-exist. The earliest pre-civilized societies were the hunters and gatherers. These societies survived by hunting and eating wild animals, and gathering fruit and roots. Once the hunters and gatherers had exhausted the food supply, and/or the climate had become too warm or cold to support them, the hunters and gatherers moved to another location. They lived off the land and were totally dependent on nature for their food and water supply.

Pre-civilized societies have left clues as to their way of life. Burial practices suggest emotional ties between members of the village. Recent archaeological excavations suggest early humankind possessed beads and jewelry. This suggests aesthetic sense.

Pre-civilized societies, therefore, possessed the following:

- Tools and weapons
- Religious beliefs
- Aesthetic sense
- Emotional ties

These societies appear to have lacked the following:

- Writing
- Written mathematical skills
- Historical memory

Human life expectancy was approximately 20 years, although skeletons have been found of humans who were 40 years old at the time of death.

Understanding pre-historical times and pre-civilization sheds light on how humankind began its journey to the present. It's a long journey, but the first steps appear to have occurred when our biological ancestors climbed down from the trees.

For further information on homo sapiens' development, see *Human Evolution*, Columbia Encyclopedia, Sixth Edition, (www.bartleyby.com) 2001–05.

## Environment's Role

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Pre-civilized societies required certain environmental factors if they were to survive. These factors included

- Access to a fresh water supply
- Access to animals, a fresh meat supply
- Access to plants, a source of nutrition
- Flora and fauna to be used for fuel and tools
- Natural shelter from the elements
- Materials, if necessary, to construct shelter from the elements
- A climate to support these items

After the discovery of agriculture, pre-civilization's environmental needs expanded to include the following:

- Arable land
- Somewhat temperate climate
- Meadows (later) for domesticated farm animals

Early humankind had an adversarial relationship with the environment. Cave men were at the mercy of the weather and the water supply, not to mention saber-toothed tigers, mastodons, and megalodons.

Pre-civilized societies most likely formed to give humankind a fighting chance against mother nature—the first examples of the adage, “two heads are better than one.” Those in search of historical commonalities may view the emergence of pre-civilization as the genesis of the corporate work group.

Hunters and gatherers' lives depended on the environment. Droughts or excessively wet weather not only threatened the food supply and water supply, but also triggered natural disasters, such as floods and fires. Worship of fire as the source of warmth and means of cooking meat may lay at the root of religious worship. But natural disasters weren't the only thing threatening the hunters and gatherers' way of life. Cave people were also prey for the animals that roamed earth. As mentioned, mastodons and saber-toothed tigers were hunters, as well as prey. Megalodons made fishing and swimming, especially at dawn and dusk, dangerous.

All of these environmental factors necessitated that the hunter and gatherer society work together. Survival depended on this. Life became even more precarious after the advent of the Ice Age, 125,000 to 28,000 BCE. Glacial temperatures threatened humankind, animals, and plants alike. While the Neanderthal human is often satirized, this species possessed a large brain cavity of 1600 cc, capable of coping with a freezing environment. Perhaps humankind inherited our will to survive from the Neanderthals.

## Geographical Zones

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The Earth is divided into five types of geographical zones in regards to human habitation. Pre-civilization most likely existed in two zones but could have existed in four of the five zones:

- **Tundra zones:** Areas of little growth or vegetation; cold climate; not conducive to human habitation
- **Agricultural zones:** Areas conducive to agriculture but not usually near trails or rivers; somewhat self-contained

- **Route zones:** Areas near water supplies with venues making it possible to travel to other points of the zone, possibly beyond the zone
- **Impact zones:** Zones lying at the borders of other zones; zones at which cultures meet; often points of recurring battles
- **Zones of refuge:** Zones conducive to human habitation but located far away from other geographical zones; zones used by humankind as a refuge from warring factions

Pre-civilization “habitation” was usually located in agricultural zones or, later, in route zones. Impact zones, zones in which frequent conflicts occurred, were the province of civilization. Conversely, zones of refuge suggest the presence of fighting usually associated with civilization.

## Time before Civilization

Time measurement is a human invention; history, in part, is a record dependent on time. This raises interesting questions: How did pre-civilization societies view time, given that they didn’t leave written records? By what means does modern society measure time when studying pre-civilization?

Cave men didn’t wear Timex watches or fret about traffic jams making them late for work. Days began shortly after sunrise, probably ending shortly after sunset. Prior to the invention of agriculture, spring and fall were migration periods. As agriculture superseded nomadic life, spring became planting time, and fall became harvest time.

This left future historians with the problem of how to define eras. “Once upon a time” fails as an historical/scientific method to answer the question of when.

It may be that the telling of time to the minute and second first emerged during industrialization. But even agricultural societies before civilization’s emergence understood that certain things—hunting, curing, gathering food supplies—had to be accomplished prior to the changes of the seasons, and the migration to winter or summer areas. Pre-civilized fishermen understood that certain fish had to be caught by a certain time. These were the essence of the first deadlines.

After civilization’s advent, agricultural societies had to follow civilizations’ timelines if they were to sell or barter their goods. Time played a role in each of the pre-civilized societies, even if early humankind did not read or tell time by the hour or minute.

In the latter nineteenth/early twentieth century, in the wake of Darwinian evolution theory, two means of telling time during pre-civilization came into use:

- Era definition
- Dating tools

Era definition of pre-civilization is based on archeological data. These eras include

- Paleolithic or old stone age, rudimentary tools: 2,500,000–120,000 BCE
- Mesolithic, transition age: 10,000 BCE–4000 BCE
- Neolithic, polished tools: 10,000–4500 BCE–Present
- Chalcolithic, stone and copper tools: 4400 BCE–Present
- Bronze Age, bronze and copper tools: 4000–3300 BCE–1000 BCE
- Iron Age, iron tools: 4000–1200 BCE–200 CE

Humankind probably evolved in Africa in the lower Pleistocene era, beginning close to two million years ago. The early hominid population lived in Africa. From Africa they migrated to the Middle East, Europe, and the Far East. The Neanderthals first emerged in present-day Germany.

Means of determining the approximate dates of pre-civilizations include the following:

- **Stratigraphy**, in cases of multiple layers of pre-civilization settlements; the older settlements lie at the bottom strata
- **Typology**, a measure in which implements at one site are compared with implements at another
- **Paleontology**, determining age by comparing human remains with animal remains of the times
- **Paleobotany**, determining the age of a pre-civilized society by comparing it to the plants found in the area

Means of precisely determining the dates of pre-civilization include the following:

- **Geochronology**, determining the age of pre-civilizations by counting the layers created by melts of water from a receding ice sheet.
- **Dendrochronology**, means of measuring climactic change by viewing the thickness in the layers in branches and around the trunks. Comparative dating of trees in pre-historic settlements has resulted in being able to date the ages of these pre-civilizations.
- **Carbon-14 dating**, determining the age of a pre-civilization by testing the decay of the carbon isotope 14 found in artifacts.

These means of determining the age of a pre-civilization work best when used in combination. Pre-civilizations did not emerge at precisely the same time, but they appear to progress through similar phases. By understanding the phases and comparing these societies with natural phenomena, it's possible to chart how pre-civilized societies evolved into civilized societies.

## Practice Test Questions

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1. Most pre-civilizations included all but one of the following:
  - A. Religious beliefs
  - B. Tools
  - C. Sun dials
  - D. Artwork
2. Most pre-civilizations excluded all but one of the following:
  - A. Medicines
  - B. History texts
  - C. Bill of sale tablets
  - D. Poetry
3. Pre-civilization would most likely exist in which zone?
  - A. Agricultural
  - B. Impact
  - C. Tundra
  - D. Route
4. What is the means for telling the differences between pre-civilized eras?
  - A. Carbon dating
  - B. DNA dating
  - C. Types of materials used
  - D. Tools
5. Which is not a means for precisely measuring time in pre-civilization?
  - A. Carbon-14 dating
  - B. Typology
  - C. Dendrochronology
  - D. Geochronology

## Answers and Explanations

- 1. C.** Pre-civilized humankind did not measure precise hours of the day. However pre-civilized society did possess tools, religious beliefs, and artwork, such as the cave paintings in modern-day Spain.
- 2. A.** Pre-civilized humankind did practice medicine and surgery. There was one practitioner who performed successful brain surgery. The other three answers pre-suppose the existence of writing. Pre-civilized hunters and gatherers didn't write.
- 3. D.** Route zones provided egress from one food-producing area to another.
- 4. C.** While increasingly complex tools emerged with time, the materials used for those tools denoted the eras during pre-civilization.
- 5. B.** Typology measures the advancement of one pre-civilized society against another by comparing the tools at both archeological sites. Carbon-14 dating measures the degree of decay of carbon in pre-civilization artifacts; Geochronology measures the imprint of layers of water left by the glaciers. Dendrology measures the climate by measuring the thickness of branches and tree trunks.