TWO REVOLUTIONS

"Of all changes in the pattern of human life, the most radical came with the beginnings of agriculture and the domestication of animals."

H. W. F. Saggs

Introduction

The first section of this course will focus on the ordering of the urban world. We will begin this section by exploring the impact the Neolithic Revolution had on the rise of urbanism. The Neolithic Revolution was humankind's transition toward agriculture. Beginning at about c. 12,000 to 8000 BCE, hunting and gathering communities in certain locations throughout the world began adopting a sedentary lifestyle. The domestication of plant life and animals made this change in human life possible. After tracing how human life changed as a consequence of this revolution, we will next explore the development of urbanism (civilization) in various regions of the world. The earliest manifestations of urbanism developed in Mesopotamia, Egypt, India and China. Experimentation and adaptation allowed for populations in these regions to develop cities, governmental institutions, trade, writing and so forth. Continuity did exist between these early civilizations. For example, all were located near an abundant supply of water in the form of rivers (River Valley Civilizations). As we explore this period in history, be sure to think about both the continuity and differences between these civilizations. After completing this section and the required reading you should be able to do the following:

- Identify the main socioeconomic characteristics of Paleolithic communities.
- Identify the Neolithic Revolution and explain the impact this revolution had on humankind.
- Identify the main characteristics of the Urban Revolution.

I. The Neolithic Revolution and the Move Toward Sedentary Life

A. Human life in the Paleolithic (Old Stone) Age was engaged in a hunting/gathering based "economy." The hunting and gathering economy practiced by Paleolithic groups shaped the characteristics of their society.

<table>
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<th>Table 1: Archeological Time</th>
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<tr>
<td><strong>Paleolithic (Old Stone Age)</strong></td>
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<td>Lower - 5,000,000-125,000 years ago</td>
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<tr>
<td>Middle - 125,000-35,000 years ago</td>
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<tr>
<td>Upper - 35,000 to 9,000BC</td>
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<td><strong>Mesolithic (Middle Stone Age)</strong> 9,000 - 7,000 BCE</td>
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<td><strong>Neolithic (New Stone Age)</strong> 7,000-4,000 BCE</td>
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<tr>
<td><strong>Age of Metal (Copper/Bronze)</strong> 4,000-2,000 BCE</td>
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1. Paleolithic communities (bands) had a population density of about 35-50 members.

2. Paleolithic communities exploited a variety of plant and animal resources forcing them to be constantly on the move.
   
   a) This movement was not chaotic, but rather a systematic one as these bands followed their food sources (animal migration and plant cycles).

3. Both men and women were equally important in ensuring the survival of the band, knowledge was shared, and there was no accumulation of private property.

4. Reflective thinking (thinking about human existence or the world that surrounds humans) was practiced during this period.
   
   a) Evidence of reflective thinking can be found in the in the cave paintings at Altamira (Spain) and Lascaux (France).

Images 321i01/02: Cave paintings Altamira, Spain and Lascaux, France

b) The Rock Shelters of Bhimbetka (Madhya Pradesh) display paintings that also emphasize reflective thinking.

Image 321i03: Cave painting Bhimbetka

c) Evidence of reflective thinking can also be found in burial sites and in items of worship such as Venus figurines.

Image 321i04: Venus of Willendorf, Germany

B. Beginning about c. 12,000-8,000 BCE certain communities began a transition from hunting and gathering to agriculture as a form of food production.

1. Referred to as the Neolithic (New Stone Age) Revolution, historians argue that this was the first major revolutionary change in human history.
   
   a) Women are believed to have developed agricultural since they served as the primary gatherers during the Paleolithic period.

2. Systematic crop cultivation and domestication of animals (intentional breeding) produced a stable and regular food supply, but at a cost.
   
   a) Humans became dependent for survival on a limited number of plants and the success of the harvest.

   b) Crops became vulnerable to weather and settlements were vulnerable to contagious disease.

   c) Finally, a demand for physical labor for planting and harvesting was on the rise.

Map 321m01: Movement of Agriculture
C. Pastoralism, an alternative lifestyle that developed in grasslands, also emerged during this period.

1. It relied on herding domesticated animals.
2. Pastoralists were constantly on the move searching for grazing lands.
3. They also sustained a systematic movement.

II. The Reordering of the Socioeconomic and Political World

A. The transition from hunting and gathering to agriculture produced major transformations in human life.

1. Villages became the primary place of habitation.
2. Surplus production and needs promoted the specialization of labor.
   a) For example, specialization in pottery, metallurgy (copper) and textile.
   b) It also stimulated technological innovations.
3. Surplus, specialization, and the acquisition of private property each contributed to the rise of social differentiation.

B. The adoption of agriculture also altered the relationship between men and women. It facilitated the rise of patriarchy.

1. Gerda Lerner, a professor of history, defines patriarchy as "a historic creation formed by men and women in a process that took nearly 2500 years to its completion."

2. It is, according to Lerner, "the manifestation and the institutionalization of male dominance over women and children in the family and the extension of male dominance over women in society in general."


Gender is a cultural definition of behavior defined as appropriate to the sexes in a given society at a given time. Gender is a set of cultural roles. Unfortunately, the term is used both in academic discourse and in the media as interchangeable with sex. Such usage is unfortunate, because it hides and mystifies the difference between the biological given (sex) and the culturally created (gender).

C. Neolithic settlements developed throughout the world.

1. A vast number of Neolithic sites have been uncovered in China.
Table 2: Neolithic Traditions of China

<table>
<thead>
<tr>
<th>Yangshao</th>
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<tr>
<td>Dawenkou</td>
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<td>Longshan</td>
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<td>Liangzhu</td>
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<td>Majiabang</td>
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a) The most recognized and most extensive of these Neolithic cultures was Yangshao.

b) Yangshao villages primarily grew millet. Evidence suggests that chestnuts, hazelnut, and pine nuts were also gathered for consumption.

Image 321i05: Yangshao Settlement

c) A variety of fauna was consumed such as wild boar, musk deer and rabbit. Fishing seems to have been important because of their appearance as a decoration motif in Yangshao pottery elements.

Image 321i06: Yangshao Bowl

2. One of the most extensive excavated Neolithic sites in the Indo-Pakistan subcontinent is Mehrgarh.

Image 321i07: Mehrgarh

a) Located near Quetta in Baluchistan, the origins of this Neolithic community has been dated to c. 7000 BCE.

b) Residents of Mehrgarh cultivated wheat and barley and had domesticated cattle, sheep, and goats.

c) Eventually wheel thrown pottery was adopted by this culture.

Image 321i08: Female Figure - Mehrgarh

3. Çatalhöyük, another example of a Neolithic settlement, was founded in c. 7000 BCE in southern Turkey and is currently under excavation.

a) Below are fragments from reports on recent archeological findings at Çatalhöyük.
Field Report: Çatalhöyük

In general, the people seemed to have mainly prepared and eaten soups or toasted grains and nuts, with little evidence for bread and other ground foods. Nuts of wild almond, pistachio, acorn and hackberry, as well as seeds from leafy greens demonstrate a variety of high protein and vitamin-rich wild resources that they consumed daily.

Eleni Asouti and Jon Hather of the Institute of Archaeology are studying the charcoal found in the flotation samples. First results revealed a wide variety of woody plants used as firewood by the site's inhabitants. Willows and poplars (Salicaceae), elm (Ulmus), alder (Alnus) . . . are amongst the taxa recovered so far. Some of these were used for other purposes as well, such as construction wood (Juniperus, Quercus) and the manufacture of containers and domestic utensils . . .

Large quantities of animal bones and teeth were recovered during the 1998 field season, reflecting good preservation conditions for bone at the site. Sheep and goat bones predominate, while lower frequencies of cattle, wild horses and asses, red deer, wild boar, foxes, dogs and birds were found. The domestic/wild status of the cattle, sheep and goats at Çatalhöyük is still under investigation, but the wide range of animal sizes evident for each of these animals might suggest that both wild and domestic varieties were present.

Questions for analysis: What have recent archeological excavations uncovered at this Neolithic site? What do these discoveries tell us about life at Çatalhöyük?

Images 321i09/10: Artist's Recreation of Çatalhöyük/Individual Dwelling

III. The Urban Revolution and the Rise of the State

A. Settled farming villages and towns were the product of the Neolithic Revolution. The transition from villages and towns to cities is referred to as the Urban Revolution.

1. It is important to point out that urbanism did not automatically follow the move to agriculture.

2. This second revolution would have major implications on the history of humankind as it gave rise to civilization.

3. The meaning of civilization has changed over the centuries. In this course we will use the term civilization to define a certain type of SEPO (social, economic, political organization) practiced by humans.

B. What caused this second revolution?

1. The social archeologist Vere Gordon Childe (1892-1957) "suggested that civilization resulted from increasing specialization which was made possible by technological innovations which allowed for increased production and the accumulation of surplus."

Image 321i011: Vere Gordon Childe
2. In turn, "the development of effective irrigation agriculture combined with fishing and animal husbandry afforded the surplus necessary to support a growing number of specialists."

C. Childe identified a series of characteristics that distinguished the Urban Revolution from earlier forms of settlements. This list has been modified by Charles Keith Maisels in *Early Civilizations of the Old World* and is provided below.

1. **Cities** - more extensive and densely settled that previous settlements.

2. **Monumental public buildings** - that symbolized the concentration of social surplus.

3. **State organization** - dominant and permanent whose solidarity had to be maintained by ideological devices.

4. **Ruling class and functionaries** - that included priests, civil leaders and military leaders. These ruling classes conferred benefits on their subjects by providing planning and organization.

5. **Concentration of surplus** - through tithe or tax. Each primary producer paid over his surplus as a tithe or tax to a deity or divine king, who then sponsored specialist activities.

6. **Organic social solidarity** - through the interdependent the interdependence of agricultural producers, craftsmen, traders, priests, and members of the ruling class.

7. **Temples and shrines** - representative of social solidarity (ideology).

8. **Full-time specialists** - who worked for organizations that commanded surplus from peasants. For example, craftsmen, transport workers, merchants, officials, and priests were supported by agricultural surplus.

9. **Specialists in representative art** - such as full-time sculptors, engravers, etc. . . who developed artistic expression in conceptualized and sophisticated styles.

10. **Writing and numerical notation** - management of surplus and the administration of revenues compelled societies to invent systems of recording specialists in these areas lay the foundations for the next characteristic

11. **Exact and predictive sciences** - that include mathematics, astronomy and calendrical sciences. The invention of writing enabled the leisured class to develop the exact and predictive sciences of arithmetic, geometry, and astronomy calendars allowed for regulation of agricultural economy

12. **Regular foreign trade** - involving large volumes and long distances

**IV. Early State Organization: City States, Kingdoms, and Empires**

A. Bruce Trigger defines a state as “a politically organized society that is regarded by those who live in it as sovereign or politically independent and has leaders who control its social, political, economic, and cultural activities.” In answering the question what gave rise to the state in ancient times, there is no shortage of theories.
1. Karl Wittfogel (1896-1988), to take one example, argued that the necessity for large-scale irrigation had an organizing effect on hydraulic societies as the “scheduling of water use, maintenance of canals, and defense of canals from hostile neighbors all were forces at work within hydraulic societies.”

   a) In other words, the coordination of activities associated with irrigation would have socioeconomic and political implications and lead to state formation.

2. The earliest forms of states to develop in ancient times were city-states and territorial states (kingdoms). Later, empires would evolve. Let us take a moment to briefly define the characteristics of these early states.

   a) City-states were independent urban centers that controlled an agricultural hinterland.

   b) Kingdoms were larger in scale than city-states and directly controlled territory that included more than one urban center.

   c) Empires were the largest scale polities and characterized by following:

      (1) The control and manipulation of human and material resources over vast areas.

      (2) The development and utilization of technology.

      (3) The development and implementation of political and social organization over a sizeable territory.

      (4) The development and implementation of an ideology that justified the exercise of power.

B. The basic principle governing social relationships in early states was horizontal divisions referred to as classes (Roman = classis).

   1. These classes displaced kinship as the main organizing principle of society.

   2. Power was based primarily on the control of agricultural surpluses.

C. Historians conclude that all early civilizations most likely had some form of kingship ruling over the state.

   1. Kingship means that “sovereignty, or supreme authority, was symbolically embodied in an individual rather than in some collectivity of people.”

   2. Kings were viewed as being responsible for the general welfare of their realms. Some of the duties assigned to these rulers included:

      a) Insuring order and prosperity.

      b) Providing defense from foreign enemies.
c) Serving as an intermediary with the supernatural.

3. The stability of kingship was both guarded and symbolized by dynastic succession.