tpo_21_passage_2

How did it come about that farming developed independently in a number of world centers (the Southeast Asian mainland, Southwest Asia, Central America, lowland and highland South America, and equatorial Africa) at more or less the same time? Agriculture developed slowly among populations that had an extensive knowledge of plants and animals. Changing from hunting and gathering to agriculture had no immediate advantages. To start with, it forced the population to abandon the nomad's life and become sedentary, to develop methods of storage and, often, systems of irrigation. While hunter-gatherers always had the "option "of moving elsewhere when the resources were exhausted, this became more difficult with farming. Furthermore, as the archaeological record shows, the state of health of agriculturalists was worse than that of their contemporary hunter-gatherers. Traditionally, it was believed that the transition to agriculture was the result of a worldwide population crisis. It was argued that once hunter-gatherers had occupied the whole world, the population started to grow everywhere and food became scarce; agriculture would have been a solution to this problem. We know, however, that contemporary hunter-gatherer societies control their population in a variety of ways. The idea of a world population crisis is "therefore "unlikely, although population pressure might have arisen in some areas. Climatic changes at the end of the glacial period 13,000 years ago have been proposed to account for the emergence of farming. "The temperature increased dramatically in a short period of time (years rather than centuries), allowing for a growth of the hunting-gathering population due to the abundance of resources. " There were, however, fluctuations in the climatic conditions, with the consequences that wet conditions were followed by dry ones, so that the availability of plants and animals oscillated brusquely. It would appear that the instability of the climatic conditions led populations that had originally been nomadic to settle down and develop a sedentary style of life, which led in turn to population growth and to the need to increase the amount of food available. Farming originated in these conditions. Later on, it became very difficult to change because of the significant expansion of these populations. It could be argued, however, that these conditions are not sufficient to explain the origins of agriculture. "Earth had experienced previous periods of climatic change, and yet agriculture had not been developed. " It is archaeologist Steven Mithen's thesis, brilliantly developed in his book The Prehistory of the Mind (1996), that approximately 40,000 years ago the human mind developed cognitive fluidity, that is, the integration of the specializations of the mind: technical, natural history (geared to understanding the behavior and distribution of natural resources), social intelligence, and the linguistic capacity. Cognitive fluidity explains the appearance of art, religion, and sophisticated speech. Once humans possessed such a mind, they were able to find an "imaginative "solution to a situation of severe economic crisis such as the farming dilemma described earlier. Mithen proposes the existence of four mental elements to account for the emergence of farming: (1) the ability to develop tools that could be used intensively to harvest and process plant resources; (2) the tendency to use plants and animals as the medium to acquire social prestige and power; (3) the tendency to develop "social relationships" with animals structurally similar to those developed with people-specifically, the ability to think of animals as people (anthropomorphism) and of people as animals (totemism); and (4) the tendency to manipulate plants and animals. The fact that some societies domesticated animals and plants, discovered the use of metal tools, became

literate, and developed a state should not make us forget that others developed pastoralism or horticulture (vegetable gardening) but remained illiterate and at low levels of productivity; a few entered the modern period as hunting and gathering societies. It is anthropologically important to inquire into the conditions that made some societies adopt agriculture while others remained hunter-gatherers or horticulturalists. However, it should be kept in mind that many societies that knew of agriculture more or less consciously avoided it. Whether Mithen's explanation is satisfactory is open to "contention", and some authors have recently emphasized the importance of other factors.

question 1

According to paragraph 1, all of the following are advantages of hunting and gathering over agriculture EXCEPT:

A It is a healthier lifestyle.

B It requires less knowledge of plants and animals.

C It does not need storage capabilities.

D It is not tied to any specific location.

question 2

Which of the following best describes the way paragraph 2 is organized?

A A possible explanation for a phenomenon is presented and then criticized.

B Two similar ways of accounting for a puzzling fact are considered.

C Early societies' response to a problem is contrasted with contemporary societies' response.

D A prehistoric development is first explained in traditional terms and then in contemporary terms.

question 3

Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

A The resources needed by the growing hunting and gathering population increased rapidly once temperatures rose.

B Dramatic temperature increases and the simultaneous growth of the hunting and gathering population led to the need for more resources.

C Higher temperatures led to the existence of increased resources, thus enabling the hunting and gathering population to grow.

D The dramatic temperature increase occurred during the few years when abundant resources allowed the hunting and gathering population to grow.

question 4

According to paragraph 3, the abundance of resources fluctuated sharply after the end of the glacial period because

A locally abundant resources were quickly exhausted by hunter-gatherers

B the temperature became much higher in some areas over others

C different types of plants and animals became available as the climate changed

D the amount of rainfall varied radically from one period to the next

question 5

It can be inferred from paragraph 4 that it was difficult for people to change from farming back to hunting and gathering because

A people had become more used to different types of food

B climatic conditions were no longer favorable for hunting and gathering

C populations had become too large to be supported by hunting and gathering

D the farmer’ s sedentary life was easier than the hunter-gatherer’ s nomadic life

question 6

Why does the author state that “Earth had experienced previous periods of climatic change, and yet agriculture had not been developed” ?

A To suggest that climate change had occurred long before the development of agriculture

B To argue that climate change does not properly explain why agriculture developed

C To challenge the assumption that agriculture developed only in some parts of the world

D To question the claim that climate change occurred at the time when agriculture developed

question 7

According to paragraph 5, Steven Mithen believes that all of the following contributed to the emergence of farming EXCEPT

A the development of a mind flexible enough to come up with solutions to complex problems

B the tendency to use plants and animals to acquire power

C the tendency to emphasize the differences between animals and people

D the ability to make tools that could be used for the large-scale harvesting of plants

question 8

According to paragraph 6, which of the following is a weakness of Mithen’ s explanation?

A It does not clearly distinguish agriculture from pastoralism and horticulture.

B It fails to explain why some societies adopted agriculture while others did not.

C It explains the domestication of plants and animals but not the development of metal tools.

D It overlooks the fact that illiteracy and low productivity remain problems even today.

question 9

Look at the four squares [ ] that indicate where the following sentence could be added to the passage.

How did it come about that farming developed independently in a number of world centers (the Southeast Asian mainland, Southwest Asia, Central America, lowland and highland South America, and equatorial Africa) at more or less the same time? Agriculture developed slowly among populations that had an extensive knowledge of plants and animals. [] Changing from hunting and gathering to agriculture had no immediate advantages. [] To start with, it forced the population to abandon the nomad's life and become sedentary, to develop methods of storage and, often, systems of irrigation. [] While hunter-gatherers always had the "option "of moving elsewhere when the resources were exhausted, this became more difficult with farming. [] Furthermore, as the archaeological record shows, the state of health of agriculturalists was worse than that of their contemporary hunter-gatherers. Traditionally, it was believed that the transition to agriculture was the result of a worldwide population crisis. It was argued that once hunter-gatherers had occupied the whole world, the population started to grow everywhere and food became scarce; agriculture would have been a solution to this problem. We know, however, that contemporary hunter-gatherer societies control their population in a variety of ways. The idea of a world population crisis is "therefore "unlikely, although population pressure might have arisen in some areas. Climatic changes at the end of the glacial period 13,000 years ago have been proposed to account for the emergence of farming. "The temperature increased dramatically in a short period of time (years rather than centuries), allowing for a growth of the hunting-gathering population due to the abundance of resources. " There were, however, fluctuations in the climatic conditions, with the consequences that wet conditions were followed by dry ones, so that the availability of plants and animals oscillated brusquely. It would appear that the instability of the climatic conditions led populations that had originally been nomadic to settle down and develop a sedentary style of life, which led in turn to population growth and to the need to increase the amount of food available. Farming originated in these conditions. Later on, it became very difficult to change because of the significant expansion of these populations. It could be argued, however, that these conditions are not sufficient to explain the origins of agriculture. "Earth had experienced previous periods of climatic change, and yet agriculture had not been developed. " It is archaeologist Steven Mithen's thesis, brilliantly developed in his book The Prehistory of the Mind (1996), that approximately 40,000 years ago the human mind developed cognitive fluidity, that is, the integration of the specializations of the mind: technical, natural history (geared to understanding the behavior and distribution of natural resources), social intelligence, and the linguistic capacity. Cognitive fluidity explains the appearance of art, religion, and sophisticated speech. Once humans possessed such a mind, they were able to find an "imaginative "solution to a situation of severe economic crisis such as the farming dilemma described earlier. Mithen proposes the existence of four mental elements to account for the emergence of farming: (1) the ability to develop tools that could be used intensively to harvest and process plant resources; (2) the tendency to use plants and animals as the medium to acquire social prestige and power; (3) the tendency to develop "social relationships" with animals structurally similar to those developed with people-specifically, the ability to think of animals as people (anthropomorphism) and of people as animals (totemism); and (4) the

tendency to manipulate plants and animals. The fact that some societies domesticated animals and plants, discovered the use of metal tools, became literate, and developed a state should not make us forget that others developed pastoralism or horticulture (vegetable gardening) but remained illiterate and at low levels of productivity; a few entered the modern period as hunting and gathering societies. It is anthropologically important to inquire into the conditions that made some societies adopt agriculture while others remained hunter-gatherers or horticulturalists. However, it should be kept in mind that many societies that knew of agriculture more or less consciously avoided it. Whether Mithen's explanation is satisfactory is open to "contention", and some authors have recently emphasized the importance of other factors.

question 10

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

A. One obstacle to the transition from a nomadic lifestyle to the sedentary lifestyle required by agriculture was that hunter-gatherers had not developed storage techniques.

B. It seems unlikely that agriculture emerged in response to a food shortage brought on by a worldwide population crisis that developed once the whole world was occupied.

C. The origins of agriculture may be linked to climate change at the end of the last ice age, but this does not explain why earlier climatic instability had not led to agriculture.

D. The only available means of understanding the social organization and technical abilities of ancient hunter-gatherer societies is the study of contemporary hunter-gatherers.

E. One recent theory suggests that the invention of agriculture was made possible by the integration of various mental capacities in the human mind.

F. Little is known about why only some societies that adopted agriculture rapidly progressed to using metal tools, becoming literate, and developing a state.