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INVESTIGATION LIBRARY

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TEXT 01

TOOLS FROM HUNTER-GATHERER SOCIETIES

Hunter-gathering societies have used various types of stones, as well as bone and antler, to make a variety of tools such as scrapers, blades, arrows, spearheads, needles, awls, fishhooks, and harpoons. The 6.5- to 6.7-cm (2.5- to 2.6-inch) flint blades on the left are from North Africa, dating from 5000–4500 BCE. The 5.7- x 4.6-cm (2.2- x 1.8-inch) scraper on the right is made of green jasper, dates from 5200 to 2500 BCE, and was found in the south-central Sahara Desert.



Sources

<http://www.worldmuseumofman.org/display.php?item=1167>

<http://www.worldmuseumofman.org/display.php?item=434>



THINGS TO THINK ABOUT

For what purposes do you think these tools were used? Compare the tools from different societies. How are they similar to each other? How are they different? Which tools seem easier to use?

TEXT 02

TOOLS FROM AN AGRICULTURAL SOCIETY

These metal tools include a crescent-shaped scythe used in the harvesting of grain and a square-end hoe used for weeding and other farming activities. They were excavated in contemporary Spain, and date from the fourth century BCE.



Source

http://intercentres.edu.gva.es/albait/ELS%20IBERS%205/lagricultura_i_els_teixits.html



THINGS TO THINK ABOUT

How do these objects fit with the important quality of life factors you have already identified? How do your conclusions about these objects fit with the guesses you made earlier?

TEXT 03

HUNTER-GATHERER SHELTERS



Hunter-gatherer societies were (and some still are) generally nomadic, with individual communities often numbering fewer than 50 people. Their settlements were often found in caves or other natural shelters. Sometimes shelters were made of building materials that could be taken apart, moved, and put back together. This artist's illustration shows an encampment of Sioux on the Great Plains of North America. Hunter-gatherers around the world lived a similar lifestyle for millennia.

Image Credit

A lithograph by Karl Bodmer, c. 1840 © CORBIS.

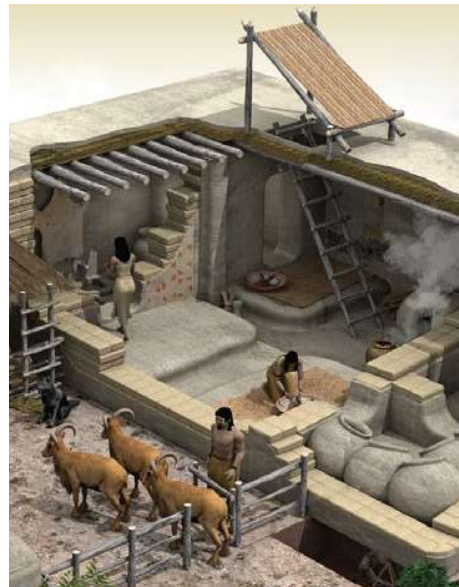


THINGS TO THINK ABOUT

Do these shelters (teepees) look comfortable? How many people do you think could live in one of these shelters? What else do you notice about the lifestyle depicted here?

TEXT 04

MAP & ILLUSTRATION OF LIFE IN CATAL HUYUK



THINGS TO THINK ABOUT

Compare the hunter-gatherer shelters with the layout and illustration of dwellings in Catal Huyuk. Do you like the idea of that many people living so close together? Which lifestyle would you prefer?

Catal Huyuk, in modern Turkey, was one of the first places in the world where humans lived in dense settlements. From about 7500 to 5700 BCE, an estimated average of between 5,000 and 8,000 people lived in mud-brick houses with rooftops serving as streets. James Mellaart, the British archaeologist who excavated Catal Huyuk in 1958, produced this drawing of the settlement's layout. Alongside is an artist's illustration of an individual dwelling.

Sources

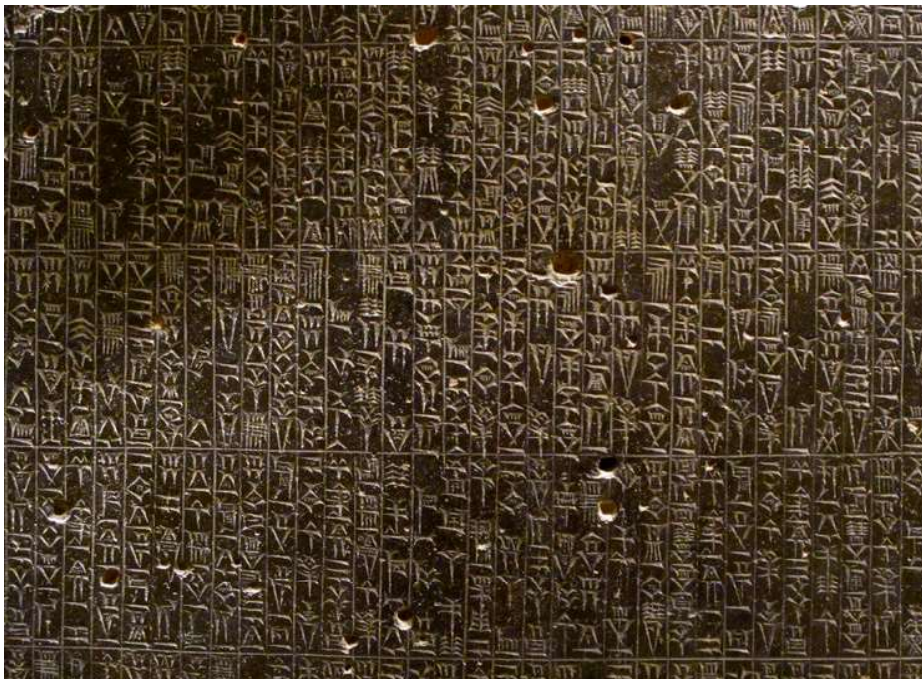
<http://makingmaps.net/2008/10/13/cartocacoethes-why-the-worlds-oldest-map-isnt-a-map/>

http://www.ediciona.com/portafolio/image/5/2/0/5/casa_catal_huyuk_5025.jpg

TEXT 05

THE CODE OF HAMMURABI

Babylon was an agriculture-based city-state in Mesopotamia, which is in modern-day Iraq. In about 1772 BCE, Babylonian king Hammurabi issued a set of 282 laws known now as the Code of Hammurabi. Written in the Akkadian language and in cuneiform script, the code sets out rules — and the punishments for breaking them — for a variety of social interactions. These excerpts are translations of some of the laws from the Code of Hammurabi.



THINGS TO THINK ABOUT

How does the Code of Hammurabi reflect a transition to an agricultural society? What kind of laws might have existed in a hunter-gatherer society? Do the laws recorded here sound reasonable to you? What impact does this exhibit have on your ideas about quality of life?

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48. If any one owe a debt for a loan, and a storm [destroys] the grain, or the harvest fail, or the grain does not grow for lack of water; in that year he need not give his creditor any grain, he [erases his debt] and pays no rent for this year.
 55. If any one open his ditches to water his crop, but is careless, and the water flood the field of his neighbor, then he shall pay his neighbor [grain] for his loss.
 63. If [a man who rents a field] transform waste land into arable fields and return it to its owner, the latter shall pay him for one year ten gur for ten gan.
 64. If any one hand over his garden to a gardener to work, the gardener shall pay to its owner two-thirds of the produce of the garden, for so long as he has it in possession, and the other third shall he keep.

253. If any one agree with another to tend his field, give him seed, entrust a yoke of oxen to him, and bind him to cultivate the field, if he steal the [grain] or plants, and take them for himself, his hands shall be hewn off.

268. If any one hire an ox for threshing, the amount of the hire is twenty ka of [grain].

271. If any one hire oxen, cart and driver, he shall pay one hundred and eighty ka of [grain] per day.

Conversions

Gur and ka are units of volume. One gur is about 300 liters or 80 gallons; one ka is about one liter or one quarter of a gallon. A gan is a unit of area. Ten gan is about one acre or just over 4,000 square meters or 43,000 square feet.

Image credit

Detail of the Stele of Hammurabi © Gianni Dagli Orti/CORBIS.

Source

<http://avalon.law.yale.edu/ancient/hamframe.asp>

TEXT 06

PAPYRUS LANSING — ADVICE TO A YOUNG EGYPTIAN

This anonymous Egyptian text known as the Papyrus Lansing was written between 1350 and 1200 BCE. At the time, the government was growing in size and required more people to be educated as scribes. This document served as both a text for student scribes to practice copying and an encouragement for their choice of profession.

See for yourself with your own eye. The occupations lie before you.

The washerman's day is going up, going down. All his limbs are weak, [from] whitening his neighbors' clothes every day, from washing their linen.

The maker of pots is smeared with soil.... His hands, his feet are full of clay; he is like one who lives in the bog.

The [odor of the] cobbler...is penetrating. His hands are red...like one who is smeared with blood...

The watchman...spends a night of toil just as one on whom the sun shines.

The merchants travel downstream and upstream. They are as busy as can be, carrying goods from one town to another. They supply him who has wants....

The carpenter who is in the shipyard carries the timber and stacks it. If he gives today the output of yesterday, woe to his limbs! The shipwright stands behind him to tell him evil things. His outworker who is in the fields, his is the toughest of all the jobs. He spends the day loaded with his tools, tied to his tool box. When he returns home at night, he is loaded with the tool box and the timbers, his drinking mug, and his whetstones.

The scribe, he alone, records the output of all of them.

Source

Miriam Lichtheim, *Ancient Egyptian Literature: A Book of Readings, Volume II: The New Kingdom* (Berkeley: University of California Press, 1976) 169–72.



THINGS TO
THINK ABOUT

Consider the range of jobs that are discussed in this text. Which of these jobs are appealing to you? Which seem unappealing? Do you think this degree of specialization of work was an improvement to quality of life?

TEXT 07

FOODS CONSUMED DURING THE PALEOLITHIC ERA

Foods available:

- Insects, fish, shellfish and other marine animals, reptiles, birds, wild [land] mammals, and eggs
- Plant leaves, seaweed, sea grasses, and algae
- Roots
- Tubers
- Berries and wild fruits
- Nuts and seeds
- Honey (occasionally)

Foods not available:

- Dairy (except for human milk during early childhood)
- Cereal grains (with the exception of occasional intake in the Upper Paleolithic)
- Legumes (except certain varieties that were consumed seasonally)
- Isolated sugar
- Isolated oils
- Alcohol
- Refined salt (even sea salt would be available only to shore-based populations, who may have dipped their food in sea water)

Source

Pedro Carrera-Bastos, Maelan Fontes-Villalba, James H O'Keefe, Staffan Lindeberg, Loren Cordain, "The Western Diet and Lifestyle and Diseases of Civilization." *Research Reports in Clinical Cardiology* (March 8, 2011).



THINGS TO THINK ABOUT

A lot of these next texts relate to physical health and well-being. Looking first at the available foods in the Paleolithic era, what limitations do you see in this diet? Do you see any advantages to having only this set of foods available?

TEXT 08

MARK NATHAN COHEN,
EXCERPT FROM
*HEALTH AND THE RISE
OF CIVILIZATION*

Mark Nathan Cohen is an American anthropologist. In his book *Health and the Rise of Civilization*, he examines the biology and health of early humans.

There is evidence that primitive populations suffer relatively low rates of many diseases compared to the more affluent modern societies. Primitive populations appear to enjoy several nutritional advantages over our affluent modern societies that protect them from many of the diseases that now afflict us. These include high bulk diets, diets with relatively few calories in proportion to other nutrients, diets low in total fat (and particularly low in saturated fat), and diets high in potassium and low in sodium. These advantages are common to such groups and appear to help protect them against a series of conditions that plague the more affluent of modern populations. Diabetes appears to be extremely rare in primitive groups (both hunter-gatherers and farmers) as are circulatory problems, including high blood pressure, heart disease, and strokes. Similarly, disorders associated with poor bowel function, such as appendicitis, hemorrhoids, and bowel cancers are extremely rare. Rates of many other types of cancer — particularly breast and lung — appear to be low in most small-scale societies. This is true even when corrected for the small proportion of the elderly often observed. Even those cancers that we now consider to be diseases of underdevelopment may be the historical product of changes in human behavior involving food storage or the human-assisted spread of infections. The record of the skeletons suggests that cancers were comparatively rare in prehistory.

Source

Mark Nathan Cohen, *Health and the Rise of Civilization* (New Haven, CT: Yale UP, 1989) 138.

TEXT 09

JARED DIAMOND, EXCERPT FROM “THE WORST MISTAKE IN THE HISTORY OF THE HUMAN RACE”

Jared Diamond is a professor of geography at UCLA, best known for his book *Guns, Germs and Steel*. The main idea of this short article is clearly reflected in its title.

How do you show that the lives of people 10,000 years ago got better when they abandoned hunting and gathering for farming? Are twentieth century hunter-gatherers really worse off than farmers? Scattered throughout the world, several dozen groups of so-called primitive people, like the Kalahari Bushmen, continue to support themselves that way. It turns out that these people have plenty of leisure time, sleep a good deal, and work less hard than their farming neighbors. For instance, the average time devoted each week to obtaining food is only 12 to 19 hours for one group of Bushmen, 14 hours or less for the Hadza nomads of Tanzania. One Bushman, when asked why he hadn't emulated neighboring tribes by adopting agriculture, replied, "Why should we, when there are so many mongongo nuts in the world?"

While farmers concentrate on high-carbohydrate crops like rice and potatoes, the mix of wild plants and animals in the diets of surviving hunter-gatherers provides more protein and a better balance of other nutrients. In one study, the Bushmen's average daily food intake (during a month when food was plentiful) was 2,140 calories and 93 grams of protein. This is considerably greater than the recommended daily allowance for people of their size. It's almost impossible to imagine that Bushmen, who eat 75 or so wild plants, could die of starvation the way hundreds of thousands of Irish farmers and their families did during the potato famine of the 1840s.

Source

Jared Diamond, "The Worst Mistake in the History of the Human Race," *Discover* magazine (May 1987) 64–66.



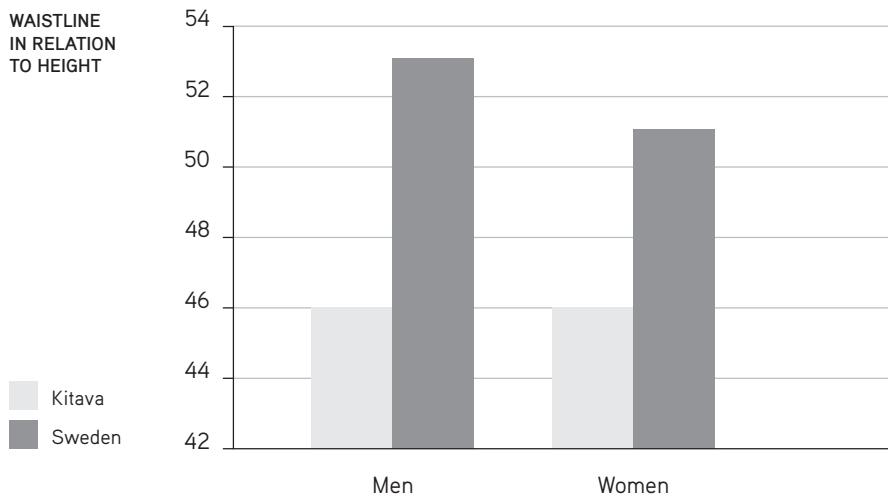
THINGS TO THINK ABOUT

When you look at the texts from Cohen and Diamond, think about how they address health problems caused by agriculture. What kinds of evidence are used in their arguments? Do you believe this evidence?

TEXT 10

WAIST CIRCUMFERENCE IN KITAVANS & HEALTHY SWEDES

Kitava is an island off the coast of Papua New Guinea. The inhabitants of this island and their diet and lifestyle have been the subject of medical research due to their reported excellent health and traditional diet. This graph establishes a ratio of waist size (in centimeters) to height (in meters). A higher overall number suggests a larger waistline in relation to height.



Source

Pedro Carrera-Bastos, Maelan Fontes-Villalba, James H O’Keefe, Staffan Lindeberg, Loren Cordain, “The Western Diet and Lifestyle and Diseases of Civilization,” *Research Reports in Clinical Cardiology* (March 8, 2011).



THINGS TO THINK ABOUT

Look at the waistline comparison of Kitavans and Swedish people. Does this document potentially support the findings of Cohen and Diamond? How do the arguments of Cohen and Diamond contribute to your investigation so far? Do their claims generally agree with your guesses? Or do these documents make you rethink the claims you’ve made so far?

TEXT 11

RICHARD LEE, FROM “WHAT HUNTERS DO FOR A LIVING”

Richard Lee is a Canadian anthropologist who has written a number of books and articles on hunter-gatherer societies in southern Africa. This excerpt describes the lifestyle of a Bushmen tribe.

A woman gathers on one day enough food to feed her family for three days, and spends the rest of her time resting in camp, doing embroidery, visiting other camps, or entertaining visitors from other camps. For each day at home, kitchen routines, such as cooking, nut cracking, collecting firewood, and fetching water, occupy one to three hours of her time. This rhythm of steady work and steady leisure is maintained throughout the year. The hunters tend to work more frequently than the women, but their schedule is uneven. It is not unusual for a man to hunt avidly for a week and then do no hunting at all for two or three weeks. Since hunting is an unpredictable business and subject to magical control, hunters sometimes experience a run of bad luck and stop hunting for a month or longer. During these periods, visiting, entertaining, and especially dancing are the primary activities of men.

Source

Richard Lee, “What Hunters Do for a Living,” in *Man the Hunter*, eds. R.B. Lee and I. DeVore (Chicago: Aldine, 1968).



THINGS TO
THINK ABOUT

With these texts we are looking more at daily life. What do you think about the lifestyle of the Bushmen? Does this look like an appealing way of life? What do you think about the different roles for men and women in Bushmen culture? Do you think Lee is making a statement about this society in general? What might he be suggesting?

TEXT 12

MARSHALL SAHLINS, EXCERPT FROM “THE ORIGINAL AFFLUENT SOCIETY”

Marshall Sahlins is an American anthropologist who is best known for his theory that hunter-gatherers were “the original affluent society,” which was first expressed in a symposium given in 1966. As a result, many anthropologists shifted their attitudes and changed their ideas about hunter-gathering societies, much in the way that new theories and findings led scientists to change their minds about topics like the size of the Universe and continental drift. Originally, many scientists looked at such societies as primitive and constantly near the edge of starvation. Sahlins suggests instead — using ethnographic studies of diet, work, and leisure time — that hunter-gathering societies were much more stable and prosperous than previously thought because they had few material wants beyond those necessary for survival.

The world’s most primitive people have few possessions, but they are not poor. Poverty is not a certain small amount of goods, nor is it just a relation between means and ends; above all it is a relation between people. Poverty is a social status. As such it is the invention of civilization. It has grown with civilization, at once as an invidious [or unjust] distinction between classes and more importantly as a tributary relation that can render agrarian peasants more susceptible to natural catastrophes than any winter camp of Alaskan Eskimo [hunter-gatherers].

Source

Marshall Sahlins, “The Original Affluent Society,” *Stone Age Economics* (Hawthorn, NY: Aldine de Gruyter, 1972). <http://www.eco-action.org/dt/affluent.html>



THINGS TO
THINK ABOUT

As you read the Sahlins text, consider the information given in the introductory note as well as the text itself. What was the main idea expressed by Sahlins? Why do you think this may have been controversial at the time? Compare Sahlins with other scholars we’ve seen in big history, like Hubble or Wegener. How did they get their peers to change their minds?

TEXT 13

KEVIN REILLY, *EXCERPT
FROM THE WEST AND
THE WORLD: A HISTORY
OF CIVILIZATION*

Kevin Reilly is a professor of humanities at Raritan Valley Community College and was the cofounder and first president of the World History Association.

The most obvious achievements of the first civilizations are the monuments — the pyramids, temples, palaces, statues, and treasures — that were created for the new ruling class of kings, nobles, priests, and their officials. But civilized life is much more than the capacity to create monuments.

Civilized life is secure life. At the most basic level this means security from the sudden destruction that village communities might suffer. Civilized life gives the feeling of permanence. It offers regularity, stability, order, even routine. Plans can be made. Expectations can be realized. People can be expected to act predictably, according to the rules.

The first cities were able to attain stability with walls that shielded the inhabitants from nomads and armies, with the first codes of law that defined human relationships, with police and officials that enforced the laws, and with institutions that functioned beyond the lives of their particular members. City life offered considerably more permanence and security than village life.

Source

Kevin Reilly, *The West and the World: A History of Civilization* (New York: Harper Collins, 1989).



THINGS TO
THINK ABOUT

What does Reilly seem to be saying about agricultural societies? How is his approach different from the arguments of Sahlins or Diamond? Which do you prefer? Which lifestyle do you think best matches up with your own ideas of quality of life?