

Excerpted from “Back of History (Man in the Beginning) by William Howells

This brings us . . . to the meaning of the so-called Neolithic revolution. If you generalize, and take the typical effects on culture of hunting life on the one hand and of farming life on the other, you can see that something stupendous took place . . . it was a breaking of one of nature’s bonds, the freeing of man from the limits of the natural supply of food.

...simple hunter-gatherers... have a few crude ideas about conservation and some...exerted themselves in pious rites¹ to make the game more plentiful. But that is wishful thinking; nature is in control, not they. Nature goads them about from spot to spot like howling monkeys, and there is nothing they can do about it. They cannot stockpile their food: when they have eaten, it is high time to start thinking about the next meal. Around any camp there are only so many wild animals and so many edible plants, because of the balance of nature. When these have been hunted or picked beyond a given point, the supply becomes too short and cannot recover, perhaps, for that season. What do the people in the camp do? They pick up and move on, to a place where the game is untouched. So this band must have enough territory to keep rebuilding the supply, it must preserve the supply against poachers, and it must move, move, move.

What about the numbers of people? Since they are actually part of the balance of nature themselves, they will be limited to a number which their territory can support in its worst (not its best) years. So the whole human population must be relatively sparse and spread out.

And the size of the band? Actually the simplest family can carry on this kind of a life, the man to hunt and the woman to collect vegetables, insects, water and firewood and to tend to odd jobs. But this leaves them with no help if they have need of it, while larger groups may not only protect themselves better but hunt more effectively, whether by co-operating in a rabbit drive or by multiplying the chances of finding and killing a large animal on which all can feed. However, the size of the band soon reaches a point at which it presses too hard on the food supply. There will simply not be enough food

within their radius of action around the camp, or the band itself will not be able to move fast enough and far enough to tap the resources it needs. Only once in a while can bands come together in tribal meetings, and then perhaps when a natural crop—a cactus pear or a kind of grub — comes into season, and for a while creates plenty for everybody. The rest of the time the bands must keep their distance, and the number of each will be something like fifty souls, more or less.

These laws of nature have teeth in them: many such peoples accept the necessity of killing some of their infants at birth because the mother already has all the young children she can cope with on the march; and most of them ruthlessly abandon the sick or the helplessly old to freeze or starve. If, rarely, they put forth efforts on the aged one’s behalf, these efforts are visibly strenuous. Such action is not subhuman callousness. Even though they may appear to take it calmly, the people have no choice at all in what they do, or even the face they put upon it.

We see, in fact, human beings like ourselves trapped, without knowing it, in a life which prevents them from having higher material inventions and social combinations. Small nomadic bands can hardly become civilized if they cannot even set up substantial households. They must find some escape from nomadism first, and from isolation and the limits of small numbers. They must find some escape from the tread-mill of food-getting, which has them almost always either hunting or getting ready to hunt, and so keeps them from having any specialization of their energies, and makes the only division of labor that between the animal-hunting man and the plant-hunting woman. This escape was found with domestication, when the ordinary balance of nature was broken and food was made to grow not by nature but by man. Camps changed to villages, and dozens of people to hundreds.

¹ I.e. religious rituals designed to increase the amount of animals to hunt.

Excerpted from “The Worst Mistake in the History of the Human Race” by Jared Diamond

... recent discoveries suggest that the adoption of agriculture, supposedly our most decisive step toward a better life, was in many ways a catastrophe from which we have never recovered. With agriculture came the gross social and sexual inequality, the disease and despotism that curse our existence.

... While the case for the progressivist² view seems overwhelming, it's hard to prove. How do you show that the lives of people 10,000 years ago got better when they abandoned hunting and gathering for farming? Until recently, archaeologists had to resort to indirect tests, whose results (surprisingly) failed to support the progressivist view. Here's one example of an indirect test: 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

² Progressivist: Someone who believes that human history is a history of constant progress and improvement of the human condition, usually due to technological advances.

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, considerably greater than the recommended daily allowance for people of their size. It's almost inconceivable 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.

(As for prehistoric gatherer-hunter peoples versus agriculturalists) usually the only human remains available for study are skeletons, but they permit a surprising number of deductions. To begin with, a skeleton reveals its owner's sex, weight, and approximate age. In the few cases where there are many skeletons, one can construct mortality tables like the ones life insurance companies use to calculate expected life span and risk of death at any given age. Paleopathologists can also calculate growth rates by measuring bones of people of different ages, examining teeth for enamel defects (signs of childhood malnutrition), and recognizing scars left on bones by anemia, tuberculosis, leprosy, and other diseases.

At Dickson Mounds, located near the confluence of the Spoon and Illinois Rivers, archaeologists have excavated some 800 skeletons that paint a picture of the health changes that occurred when a hunter-gatherer culture gave way to intensive maize (corn) farming around A.D. 1150... Compared to the hunter-gatherers who preceded them, the farmers had a nearly 50 percent increase in malnutrition, a fourfold increase in iron- deficiency anemia, a threefold rise... in infectious disease in general, and an increase in degenerative conditions of the spine, probably reflecting a lot of hard physical labor.

There are at least three sets of reasons to explain the findings that agriculture was bad for health. First, hunter-gatherers enjoyed a varied diet, while early farmers obtained most of their food from one or a few starchy crops. The farmers gained cheap calories at the cost of poor nutrition... Second, because of dependence on a limited number of

crops, farmers ran the risk of starvation if one crop failed. Finally, the mere fact that agriculture encouraged people to clump together in crowded societies, many of which then carried on trade with other crowded societies, led to the spread of parasites and infectious disease...Epidemics couldn't take hold when populations were scattered in small bands that constantly shifted camp (as in the gatherer-hunter lifestyle).

Besides malnutrition, starvation, and epidemic diseases, farming helped bring another curse upon humanity: deep class divisions. Hunter-gatherers have little or no stored food, and no concentrated food sources, like an orchard or a herd of cows: they live off the wild plants and animals they obtain each day. Therefore, there can be no kings, no class of social parasites who grow fat on food seized from others. Only in farming populations could a healthy, non-producing elite set itself above the disease-ridden masses. Skeletons from Greek tombs at Mycenae c.³ 1500 BCE. suggest that royals enjoyed a better diet than commoners, since the royal skeletons were two or three inches taller and had better teeth (on the average, one instead of six cavities or missing teeth). Among Chilean mummies from c. CE. 1000, the elite were distinguished not only by ornaments and gold hair clips but also by a fourfold lower rate of bone lesions caused by disease.

Farming may have encouraged inequality between the sexes, as well. Freed from the need to transport their babies during a nomadic existence, and under pressure to produce more hands to till the fields, farming women tended to have more frequent pregnancies than their hunter-gatherer counterparts— with consequent drains on their health...

...As for the claim that agriculture encouraged the flowering of art by providing us with leisure time, modern hunter-gatherers have at least as much free time as do farmers. The whole emphasis on leisure time

as a critical factor seems to me misguided. Gorillas have had ample free time to build their own Parthenon, had they wanted to. While post-agricultural technological advances did make new art forms possible and preservation of art easier, great paintings and sculptures were already being produced by hunter-gatherers 15,000 years ago...

Thus with the advent of agriculture an elite became better off, but most people became worse off. Instead of swallowing the progressivist party line that we chose agriculture because it was good for us, we must ask how we got trapped by it despite its pitfalls.

³ c. means "circa" or "approximately". Used to indicate when a precise date is unavailable.

