**The First Civilisations**

Civilisation, in the strict sense of people living in cities, goes back just over 5,000 years. The first indications of it are the great edifices found in very different parts of the world – the pyramids in Egypt and Central America, the ziggurats (staged tower temples) of Iraq, the palace of Knossos in Crete, the fortress at Mycenae in mainland Greece, and the grid-planned 4,000 year old cities of Harappa and Mohenjodero on the Indus. For this reason the archaeologist Gordon Childe baptised the change ‘the urban revolution’. The remains are stunning enough in themselves. Even more amazing is the fact that they were built by peoples who a few generations previously had known nothing but a purely rural life based on fairly rudimentary agriculture. Now they were in possession of elaborate construction skills, capable of quarrying, transporting, erecting and carving huge chunks of rock, and then decorating them with elaborate artistic works – even, in certain cases (the Mesopotamian, the Egyptian, the Ethiopian, the Chinese and the Meso-American), of developing scripts with which to describe how they behaved and felt. In Eurasia and Africa they also learnt at this stage to obtain copper and tin from rock oxides, and some time afterwards to fuse them into a harder metal, bronze, for making ornaments and weapons – hence the often used terms for the period, the ‘Copper’ and ‘Bronze’ Ages.

 None of this could have happened without a prior change in the way in which people made their livelihood, a change that was initially centred on agriculture. The earliest forms of agriculture, using fairly elementary techniques and involving naturally found varieties of plants and animals, could lead over generations to slow increases in agricultural productivity, enabling some peoples to gain a satisfactory livelihood while continuing to enjoy considerable leisure. But conditions were by no means always as idyllic as is suggested by some romanticised ‘noble savage’ accounts of indigenous peoples. There were many cases in which the growth in food output did little more than keep abreast with the rise in population. People were exposed to sudden famines by natural events beyond their control, ‘droughts or floods, tempests or frosts, blights or hailstorms’. The history of the pre-Hispanic peoples of Meso-America, for example, is one of years in which they found it easy to feed themselves interspersed with unexpected and devastating famines.

 There were only two options if such groups were to maintain their settled way of life. One was to resort to raiding other agriculturists for food, so that warfare became a growing feature of such societies. Stone battle axes and flint daggers became increasingly common, for instance, in the later stages of the neolithic revolution in Europe. The other option was to develop more intensive and productive forms of agriculture. There was a premium on technological innovation. Farming groups which undertook it could survive the threat of famine. Those which did not eventually died out or fell apart.

 Innovation could mean simply improving existing crop varieties or learning to fatten domesticated animals more effectively. But it could also mean much more far-reaching changes. One was the discovery, in Eurasia and Africa, that large domesticated mammals (initially oxen, much later horses) pulling a shaped piece of wood – a plough – through the soil could be much more effective in breaking up the ground for sowing than any hand-held hoe. Another was the building of dams and ditches to protect crops from flooding and to channel water to areas of land that would otherwise become parched and infertile. Then there was the collection of animal dung as fertiliser to avoid exhausting the soil and having to clear new land every few years. Other techniques discovered in one part of the world or another were the draining of marshland, the digging of wells, the terracing of hillsides and the laborious cultivation and then transplanting of rice seedlings (in southern China).

 These new techniques, like all human labour, had a double aspect. On the one hand they provided people with additional means of livelihood. Groups which previously had only been able to produce enough for subsistence could begin to produce a surplus. On the other hand, there were changes in people’s social relations.

 The new techniques depended upon different forms of cooperation between people. The use of the plough, for instance, encouraged an increased division of labour between the sexes, since it was a form of heavy labour not easily done by women bearing or nursing children. The building and maintenance of regular irrigation channels required the cooperation of dozens or even hundreds of households. It also encouraged a division between those who supervised work and those who undertook it. The storing of food encouraged the emergence of groups responsible for maintaining and supervising the food stocks. The existence of a surplus for the first time permitted some people to be freed from agricultural activities to concentrate on craftwork, preparing for warfare or exchanging local products for those of other peoples.

 Gordon Childe described the transformation which occurred in Mesopotamia between 5,000 and 6,000 years ago as people settled in the river valleys of the Tigris and Euphrates. They found land which was extremely fertile, but which could only be cultivated by ‘drainage and irrigation works’, which depended upon ‘cooperative effort’. More recently Maisels has suggested people discovered that by making small breaches in the banks between river channels they could irrigate wide areas of land and increase output considerably. But they could not afford to consume all the extra harvest immediately, so some was put aside to protect against harvest failure.

 Grain was stored in sizeable buildings which, standing out from the surrounding land, came to symbolise the continuity and preservation of social life. Those who supervised the granaries became the most prestigious group in society, overseeing the life of the rest of the population as they gathered in, stored and distributed the surplus. The storehouses and their controllers came to seem like powers over and above society, the key to its success, which demanded obedience and praise from the mass of the people. They took on an almost supernatural aspect. The storehouses were the first temples, their superintendents the first priests. Other social groups congregated around the temples, concerned with building work, specialised handicrafts, cooking for and clothing the temple specialists, transporting food to the temples and organising the long distance exchange of products. Over the centuries the agricultural villages grew into towns and the towns into the first cities, such as Uruk, Lagash, Nippur, Kish and Ur (from which the biblical patriarch Abraham supposedly came).

 A somewhat similar process occurred some two and a half millennia later in Meso-America. Irrigation does not seem to have played such a central role, at least initially, since maize was a bountiful enough crop to provide a surplus without it in good years. But vulnerability to crop failures encouraged the storage of surpluses and some form of co-ordination between localities with different climates. There was a great advantage for the population as a whole if a specialised group of people coordinated production, kept account of the seasons and looked after the storehouses. Here, too, storehouses turned, over time, into temples and supervisors into priests, giving rise to the successive cultures of the Olmecs, Teotihuacan, the Zapotecs and the Mayas, as is shown by their huge sculptures, magnificent pyramids, temples, ceremonial brick ball courts and elaborately planned cities (Teotihuacan’s population rose to perhaps 100,000 in the early centuries AD).

 In both the Middle East and Meso-America something else of historic importance occurred. The groups of priestly administrators who collected and distributed the stockpiles belonging to the temples began to make marks on stone or clay to keep a record of incomings and outgoings. Over time pictorial images of particular things were standardised, sometimes coming to express the sound of the word for the object they portrayed, until a way was provided of giving permanent visual expression of people’s sentences and thoughts. In this way writing was invented. The temple guardians also had time and leisure to make detailed observations of the sky at night, correlating the movements of the moon, the planets and the stars with those of the sun. Their ability to predict future movements and events such as eclipses gave them a near magical status. But they also learnt to produce calendars based on the moon and the sun which enabled people to work out the best time of the year for planting crops. Such efforts led to mathematics and astronomy taking root in the temples, even if in the magical form of astrology. As Gordon Childe put it, ‘The accumulation of a substantial social surplus in the temple treasuries – or rather granaries – was actually the occasion of the cultural advance thatwe have taken as the criterion of civilisation’.

 Once writing had been developed by the earliest civilisations in Mesopotamia and Meso-America, it was adopted by many of the peoples who came into contact with them, using their own variants to write in their own languages. It spread at great speed across the Middle East some 5,000 years ago, and on into central, eastern and south Asia, north east Africa and Mediterranean Europe. It was used by all Meso-American civilisations from the Olmecs on. There were, however, civilisations which managed to develop to a high degree without writing – most significantly those in South America, which used markings as an aid to memory without ever moving on to transcribe the spoken word.

 There is only room here to provide a few examples of the transition to intensive agriculture and urban life. It happened in several different parts of the world as people took up new ways of gaining a livelihood. There were also many instances of agricultural societies going at least part of the way in this direction, reaching a level where hundreds or even thousands of people could be mobilised to construct imposing stone edifices – as with the stone temples of the third and fourth millennium BC in Malta, the stone circles of western Europe (of which Stonehenge is the best known), the giant statues of Easter Island and the stepped platforms of Tahiti. Soemtimes the move towards ‘civilisation’ would be influenced to some degree by developments elsewhere. But this does not alter the fact that the processes leading to the formation of towns and cities, and often to the invention of writing, began independently in several different locations because of the internal dynamic of society once agriculture advanced beyond a certain point. This makes a nonsense of any claim that one group of the world’s people are somehow ‘superior’ to others because they arrived at ‘civilisation’ first.

Assignment

Write a double-entry (also known as “dialectical”) journal responding to this article. On the left side of the page, make notes from the text. On the right side, respond to it with your own thoughts. You need to choose at least 3 sections of the text to make notes and respond to with questions, challenges, agreements, etc.