



**UNIVERSITY OF
CAMBRIDGE**

Archaeology

Admissions Assessment

December 2016

Time allowed: one hour

Do not turn over until told to do so.

Writing, money and printing came together in the eighteenth century to produce the banknote; paper money led on to the company share and the rise of an equity market, opening up everything from the ownership of limited companies to mass capitalism. With the industrial revolution came the possibility of mechanised production, and also new potential for travel – the first fresh developments of contact at a distance since the development of the oceangoing sailing ship. With electricity – electromagnetism – came the electronic telegraph, heralding electromagnetic communication by radio wave. All of this soon merged in new configurations with the development of electronic media and the possibility of trading via the Internet. Indeed, as we shall see, these innovations lead on towards a kind of dematerialisation: energy (in the form of electronic information) begins to replace matter. It may be that this revolutionary shift heralds the end of another phase in human development...

Writing

We have seen how the engagement process, whereby humans become increasingly involved with the material culture that they themselves have created, develops a spiral of interactions. With sedentism, at the inception of the material-symbolic phase of human experience, comes the possibility of property. From the notion that goods can be systematically exchanged come commodity and value, and then measure, and units of measure, and so the development of the exact sciences. From the circumstance that objects can have value and prestige comes the possibility of inheriting wealth and authority. From the capacity for making representations of divinities come new avenues of development in religious practice and belief.

All of this helps to resolve our 'sapient paradox' – how it was that, after thousands of years living as hunter-gatherers, human societies quite rapidly changed direction and moved speedily from early sedentism towards more complex societies and urbanization. The 'material-symbolic' phase of human cognitive activity, with its greater degree of engagement with the material world proved more dynamic and expansive than the 'mythic' or 'narrative' phase. That had been an era when language was in use as an effective instrument but was restricted in its application to purely social purposes, and it did not in every case generate or facilitate a growing human impact upon the material world.

But then around 3000 BC in Mesopotamia and Egypt, around 1500 BC in China, and rather later elsewhere, we see another revolutionary development which in due course was to change the nature of human existence: writing.

Merlin Donald rightly regards writing as a defining characteristic of the 'theoretic' phase of the development of mind: the most important device facilitating what he calls 'external symbolic storage', whereby information is stored outside the body and therefore the brain. There is also the possibility of long-term retention of information, beyond the span of an individual's life and memory. In many cases writing started out as ideograms, where one sign represents one idea or one word in a language. That was true of Egyptian hieroglyphs, and of the earliest pictographic tablets of Sumer. But soon signs also came to represent sounds, and syllabic scripts were developed. This was the case for the cuneiform scripts of the Near East (and indeed became partly true for the formerly ideographic scripts also). But it is not until early in the first millennium BC that we see the widespread development of alphabetic scripts where each letter represents a sound rather than a complete syllable. We see them first in the Levant, and then in Greece and Italy. It was not until the

development of the alphabet that mass literacy became possible in Europe and Western Asia – although I have always marvelled at the capacity of the Chinese and the Japanese to use their more complex scripts with almost equal facility.

- Colin Renfrew, *Figuring it out*, Thames and Hudson 2006 pp158-9

With reference to the above passage, answer TWO of the following questions:

- How satisfactorily does Renfrew resolve the 'sapient paradox'?
- Should archaeologists be interested in writing systems? Why?
- How have human societies changed through engagement with material culture (i.e. things)?
- How useful is the concept of 'external symbolic storage' for archaeologists? Why?