



World archaeology

Archaeology: Differentiating Cities

Phil Perkins

Functional aspects of a city are important. We have already heard of some general functions related to the concentration of power and religion. But how does this functional differentiation appear in some other contexts, for example the Aztec city of Calixtlahuaca? Dr Michael Smith.

Michael Smith

The city is laid out on the sides and top of a hill, a small mountain actually, and there is very little settlement down on the plain. But on the sides some areas are covered with stone terrace walls, and the houses were built on top of the terraces, and other areas don't seem to have terrace walls. We don't know whether that is because they have been destroyed since the occupation period, or whether that's the way they were originally. That's one of the things we will be testing with excavation. We have also found that there is an area in the centre of the site, not too far from the big pyramids, where there tends to be a lot of fancy decorated pottery, a lot of imported wares, and this may signal an elite to high-status residential area.

Phil Perkins

Well, there seems to be a strong contrast between monumental and other areas. Is this the same at other cities, for example Maya cities?

Norman Hammond

The houses which we uncover are mainly low platforms filled with earth and rocks and covered with a layer of plaster, and the houses that stood on them are timber framed with thatched roofs and pole walls, and in fact are very similar to the houses that the present-day Maya build.

Phil Perkins

This is Norman Hammond, Professor of Archaeology at Boston University.

Norman Hammond

Now, when you go to the other end of the spectrum of structures – that is, the temples and the palaces – these are often reared up on large platforms. They are stone-walled buildings with stone-vaulted roofs, and some of the pyramids are a hundred and fifty to two hundred feet in height, with a stone temple on the top, with a great roof cone on top of that, decorated with often a sculptured figure of the dead ruler, who is commemorated by the temple and who may well be buried underneath it in a tomb in the bedrock. Palaces are where the Maya rulers lived, and these are networks of enclosed courtyards and galleries, often built up over a period of centuries, so the so-called central

acropolis at Tikal we know grew over five centuries from east to west, with new courtyards and new rulers' houses added on. Think of it as being a bit like Windsor Castle, just growing over a period of four or five hundred years. The palace at Palenque grew over a period of about a hundred and fifty years, and we have inscriptions that show us that three or four different kings added bits to it. So it's like palaces in most parts of the Old World – not built as a single unit but accumulating new structures as the functions of the building changed, and old throne rooms would be turned into store rooms, old residential rooms would be used for other purposes. Each new king may well have decided to install his own throne room and to move the focus from that of his predecessor, often his father, as a way of establishing his name and his fame at the beginning of his reign.

Phil Perkins

Let's look for functional differentiation, this time in South Asia at Anuradhapura in Sri Lanka, where recent excavations provide a sequence, from a small Iron Age village to a medieval capital in the eleventh century AD. Are cities in South Asia similar to cities in other parts of the world? Professor Robin Coningham, based at the University of Durham.

Robin Coningham

It's always very tempting to go straight to Gordon Childe and to look at the ten points of, sort of, urbanisation. And looking at the site, probably in the fourth century BC we pick up the crucial aims, the aspects of urbanisation in terms of, we have the presence of a recording system – a recording system which develops into the early Brahmi written system. We have the presence of communal effort in terms of the creation of a fortification wall and rampart around the city. We also have begun to get a good idea of the layout of the town from excavations there that probably in the fourth century we're dealing with rectangular structures, earlier structures, which are round houses, were replaced with rectangular structures. That's when the city is laid out, so we can begin to suggest that it's probably a pretty rigid grid-iron fashion that's put down. At that time we are also dealing with the creation of very large religious monuments outside the city. And at the same time this seems to be when the very large irrigation works are built. And that's crucial for supporting a large agglomeration of population in this area, because this is known as the dry zone of Sri Lanka. So in the fourth century we begin to get almost an explosion of population, and part of that we believe is actually due to the creation of hydraulic systems.

Phil Perkins

As we know, cities extend their reach into a surrounding territory and are usually the largest settlement in a hierarchical network, ranging from hamlets to villages to towns and cities. Was this also the case in Sri Lanka?

Robin Coningham

One of the elements of received wisdom is that within South Asia the cities that emerge are all centralised, and certainly this is based on literary evidence from the Arthashastra, which is dated to about the third century BC, and that suggests that actually you have a five-tier hierarchy. You have an imperial centre, and then below that you have regional centres, local centres and then

that works all its way down into villages. And so the state is actually quite hierarchical. Taxes are brought up and down through this system. Laws are presented down, and that is the way the landscape of one of these kingdoms works. And we began to think of this as being more relevant to, sort of, modern communities as well, in that when you look in the developing world the creation of cities, of urbanisation, has a huge impact on rural communities. There is a brain drain; there is a drain of resources. You get these huge primate cities which basically suck resources and skills out from the hinterland. Now, one of the problems that we have is how on earth do you actually manage to create a surplus to support all the specialists – all the monks right in the centre and all the scribes? They need to be supported. How do you generate the agricultural surplus for this and how do you channel it? We don't have towns, but what we have are monastic establishments, Buddhist establishments, which actually are serving these very small, very mobile agriculturists, and the monasteries are permanent. They are centres of literacy, of course. They are centres of education, because they are training not just monks but also villagers, and also they are centres for re-distribution.

Phil Perkins

So this is a new dimension, something different from the rest of the world. Is it possible to provide a social interpretation of this settlement pattern?

Robin Coningham

Yes. I mean, one of the big questions is how you begin to mobilise people. And to some extent, one of the buzz words that's coming in is 'heterarchy', the concept that you have multiple hierarchies, and so in a way, yes, you can look at the monasteries in terms of purely an economic role, but also they play much more of a centralising role because those monasteries are all linked to mother monasteries in Anuradhapura itself. So, in the absence of a centralised administrative structure, you actually have a religious structure, which is to all intents and purposes also a social structure, because the majority of the population will be integrated within that.