Imperial Rome and Ostia

The construction of Imperial Rome

COLIN CHANT:
The splendidly evocative ruins of ancient Rome have long been a challenge to historians and archaeologists intent on reconstructing how that city once looked and functioned. During the imperial period the city grew larger than any before in the western world. How was the city constructed and what were the materials used? How was it defended? How was the population supplied with food and water? How were the people housed and entertained? Above all how did the Romans make the city work? This model shows how Rome might have looked during the reign of the Emperor Constantine. The population at its peak was probably a million, enormous by ancient standards, and five times that of Alexandria, the next largest city in the Roman Empire. Meeting even the basic needs of such a population - let alone the construction of monumental public buildings surely required considerable engineering and organisational ability. Yet the Romans themselves have the reputation of contributing nothing 9f note to the history of technology. By this account, they were completely uninventive, all they did was to appropriate the innovations of the peoples they conquered. How can we reconcile these two judgements? The ancient history of Rome lasted some thousand years, From the time when it was ruled by kings, through the republican period, which lasted some four centuries, and then into the empire, when Rome reached the height of its power. It's necessary to consider these things in the context of Rome's physical development.
It combines fertile land with ready access to the sea, by
means of the river Tiber.

Equally vital was high ground for defensive purposes the famous Seven Hills of Rome. As the city expanded into the valleys the marshy ground between the hills was drained by channelling an existing stream into the River Tiber. This became Rome's main sewer: the Cloacae Maxima, still in use nine centuries later during the reign of Constantine. Indeed it is still in use today, despite modem landfill on the banks of the Tiber. The first stone defences were built in the early republican era, the so-called Servian Wall. They were carefully constructed with a locally quarried material called tuba, a softish sedimentary volcanic ash. Easy to quarry, it continued to be used in the imperial period even after concrete became the main building material.

JANET DELAINE:
Although we tend to think about Roman construction of the imperial period in terms of concrete, there was in fact a viable alternative, which was very much used in the re.. . earlier republican period. and this is the use of large squared blocks of tufa as we have here. The use of these large tufa blocks continued in fact for some particular functions, usually large public buildings, right into the middle of the first century and beyond. Notice how fine the joints are between the stones. This means that work has to take place both at the quarry, and on site, whereas concrete requires far less skilled labour.

COLIN CHANT:
Stone was also used to replace wood for building bridges. Stone arches were necessary to span the river, as in the Pons Cestius, built during the late republic, and then replaced in the imperial period. The facing material of the later bridge was travertine, another local stone. This bridge has been rebuilt many times, but it still serves its original function - connecting the right bank of the river with the Tiber Island.

Another important masonry structure is the Porta Maggiore, built in the early imperial period. This monumental double arch is also constructed with travertine, a kind of limestone from nearby Tivoli. Travertine, a much harder material than tufa, but more difficult to quarry, was

increasingly used as a building material in early imperial buildings. Beneath the Porta Maggiore survives .a portion of road. Like all major roads in the vicinity of Rome, it was paved with basalt, a very durable, local volcanic rock. Even in this deep ruts were worn by the constant traffic of wheeled carts.