PART II: ‘ALL THE COLOURS OF THE EMPIRE’

VIDEO TRANSCRIPT

[MUSIC PLAYING]

Rome at the height of its power felt that it needed no wall circuit. Its walls are its legions on the far distant frontiers. But at a couple of moments in the city’s history when it felt threatened, it did construct defensive walls.

Behind me is the earliest defensive wall circuit, the so-called Servian Wall ascribed to Rome’s legendary kings, or at least it’s a fourth century republican rebuild of that early walled circuit, in grey Grotta Oscura tufa stone. We’re actually on the inside of the walls here, and there would have been an earth rampart sloping up that way to the top of the walls.

As the city grew, this wall circuit became obsolete, the city simply expanded past it. In the imperial period, this area up here what’s now Rome’s railway station district. It was full of gardens and pavilions, fountains and grottos, and the wall here became a pleasant place to take the evening air. But later emperors, when Rome began to be threatened again, did build a larger defensive circuit further out, this time out of massive brick and concrete materials, creating a formidable defensive line, many traces of which still survive today.

The first building material that the Romans could use in quantity here that was stone, was the local volcanic stone, tufa. This is what the hills of Rome are actually made of. It was right on site and therefore very easy and cost efficient to transport it down from the hill quarries into buildings.

As Rome’s reach and ambition expanded, it began to look for building stones which could take a finer or more decorative treatment than the rather nasty and coarse local tufa. And they found travertine in quarry beds on the road down to Tivoli, a wonderful local limestone that really works very well. It has a nice pleasing texture, it can take a pretty fine edge for carving detail, and it is strong. So, it is used all over Rome, in temple architecture, doorsills, windowsills, and so on, and in fact you’ll still see it all over the modern city today.

Now what really revolutionised Roman building was concrete. Here they had a material that was
cheap, easy to mix on site with unskilled labour, and could be laid in any form, any scale, it was immensely strong. So, this is the load-bearing stuff. This is concrete with an aggregate of stone in for strength and solidity, actually in the basement of a restaurant in central Rome-- it's amazing what you find down here.

On the surface of it is this lovely diamond-shaped lattice of stone work. We call this in Latin, opus reticulatum. These are pyramid-shaped bits of stone, again easy and cheap to make, and they're pushed into the concrete just as a protective surface material, to give a bit of exterior rigour to the architecture. But, really, this is where the heavy lifting is done. Wonderful example of Roman concrete engineering and architecture. Forming the basement, in fact, of an immense theatre that would have towered above us, all supported by this stuff.

The final refinement in Roman building materials came when they started using bricks to face their concrete. Bricks are even simpler to lay in a regular solid pattern, than those stone nodules and opus reticulatum. So brick-faced concrete-- what the Romans called opus latericium--whether they're laid in traditional, horizontal courses, or worked up into arch elements or vaulted elements, even used decoratively to give a nice surface to an apartment block or a market building, they made Roman architecture, an architecture of scale, of speed and flexibility, as never before.

As Rome's empire grew wider and bigger, the city had access to all the stone quarries across it and at this point, Rome became flooded with beautiful coloured marbles-- yellow giallo antico from Numidia, Roman North Africa. Wonderful polishable pink and grey granite from Aswan in Egypt, that they used often for column shafts, mottled grey pavonazzetto from Turkey-- greens, white, yellows, pinks, and blacks, from Greece and the eastern Mediterranean. And these marbles were used to great effect, both for their beautiful intrinsic colours, but also as a symbol, a gazetteer, of the reach and power and wealth of the Roman Empire, and its emperors.

We saw earlier that Rome was a well-connected transport hub, combining land and river and sea routes in one excellent location. And as the city and then its empire grew, a network of great roadways connected it to its far frontiers, leading to Rome's reputation as a place where all roads meet.

What we can see clearly here is how these arterial roads, leading up from the city centre through the valleys between Rome's hills, through gates in the city wall circuits, and out to the wider empire, give a sort of framework, or structure to the city. The Via Flaminia, the modern Via del Corso, running up to the north past Augustus's tomb, for example, to the south roads running down to Ostia on the seacoast, or the Via Appia, paved in the late fourth century BC, as a military highway. To the east, roads lead out to Praeneste, and at Porta Maggiore, where we see the baker's tomb, two of these roads fork at a great gateway. And many other roads ran to and from the city. These roads, of course, are vital arteries for trade. The food supplies, and all the other kinds of mercantile goods that poured into the city to sustain it and embellish it, had to come along these roads or up the river.
Travellers of all sorts walked along them, military dispatch riders charged over them, and out on the frontiers, especially, roads were military highways—ways of getting large bodies of troops quickly to and from danger zones. These Roman roads had a highly developed technology. They were very well surveyed for a start, everybody's heard of Roman roads being dead straight, and sometimes that involved rather deliberate and spectacular bits of engineering to bend the landscape to man's will—cuttings and embankments, viaducts, bridges, sometimes even tunnels—to ensure that these roads ran straight and true.

Once the route had been surveyed and chosen, the road bed would be prepared by excavating drainage ditches down either side, then there'd be a well compacted, gravel substrate laid down, and on top of that different layers of rock and gravel built up, and then a final top course—fine, heavy-duty volcanic basalt pavers, really massively heavy, durable blackstones—and they laid these in a sort of jigsaw puzzle format, that gave a lovely hard-wearing and top surface to the roads. In short they could take the thunder of hooves, and the rumble of wheels, and the march of footsteps of thousands, millions of people marching on them every year. These roads were important to Rome, important to Rome's emperors, as a vital part of the infrastructure of the city and the empire.

We're back here in the Hebeden Coin Room in the Ashmolean Museum, to look at a couple of coins that tell us about how these roads were thought about and advertised on the coins. Here, for example, is a coin with the first emperor, Augustus. The front of the coin has the portrait of the emperor, Augustus, and the dedication to him by the senate and people, SPQR. On the back, it has a nice arch with a chariot on top, drawn, I think, by a couple of animals and it says around the edge, "quod viae munitae sunt", because he's restored the roads. So, the restoration of Italy's road network, keeping all the vital goods and troops flowing up and down the peninsula of Italy from Rome out to its empire, is an important job of the emperor. And we know that he himself restored the consular Via Flaminia, the road north out of Rome, and encouraged lots of other rich senators to do the same, advertising that fact on the coins.

Later on, a century or so later, the emperor Trajan, also a great building emperor, built new roads to function as the veins and arteries of that empire to keep the traffic flowing up and down them. And here on this coin, he shows us one of these roads. This is the Via Traiana it tells us here on the bottom, the Trajan Road, and it has above the caption a personification of a female figure of the road, where she's holding, you can see here, a wheel to symbolise the wheeled traffic that is now trundling safely up and down that road from Beneventum to Brindisium, in the southern part of Italy, an important port. And that wheeled traffic may be taking ship there from the seaways of the empire beyond.