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The Median Empire reconsidered: a view from Kerkenes Dağ*

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Summary

The city on the Kerkenes Dağ in central Anatolia is the largest pre-Hellenistic urban centre on the plateau (figs 1-2). It has plausibly been identified with a city of the Medes, called Pteria by Herodotus (I.76). If the identification is accepted, the city represents an expansion and imposition of Iranian power over the northern part of the central plateau. Kerkenes might thus provide evidence concerning the first sustained cultural, political and military contact between an Iranian imperial regime and Anatolian powers. Unique circumstances and developing technologies are providing an opportunity to map the city in great detail. The data base will enable analyses of the urban dynamics of an ancient city that, by combining Iranian, Anatolian and east Greek elements in centralised urban planning, were perhaps catalytic in the formation and development of the Achaemenid Empire.

Introduction

For much of the second millennium BC the focal point of political and religious power in central Anatolia, and at times beyond, was Hattusa, the capital city of the Hittite Empire. The location of Hattusa has been interpreted in different ways: some have seen it as tucked away in its mountain fastness, whereas others have viewed it as being at the nub of natural routes linking east with west and north with south (Ramsay 1890: 33; Hamilton 1842: 396-8)¹. Hattusa, however, was exceptional in its size (most recently Neve 1996), normal Hittite cities being relatively

modest, e.g. Zippalanda², Ankuwa³ or Sarrisa⁴, exceptional in its function, particularly at its apogee in the 13th century⁵, and exceptional in its position far from the other great centres of literate urban civilisation (Müller-Karpe 1996b: fig 2). The remoteness of the area may find an echo in the construction of a prisoner of war camp close to Yozgat where, amongst others captured by the Turks in the First World War, Sir Leonard Woolley was held captive.

More generally, the centres were further south, Kültepe (ancient Kanesh/Nesha), to become Mazaca (surely the seat of the Satrap of Achaemenid Kapatuka), Hellenistic Cappadocia, then Ceasarea (the most important Roman and Byzantine city of the central plateau), and finally the Selçuk and modern centre of Kayseri. Here, then, is the natural cross roads.

Following the collapse that brought the Late Bronze Age to a close the so-called 'Hittite heartland' within the great bend in the Kızılırmak (the Classical Halys) reverted to its earlier position as a relative backwater in the evolution of states and empires. The Neo-Hittite and occasionally other city states that variously allied themselves to form the lands of Tabal seem to have been mostly to the south (Hawkins, Postgate 1988).

* A version of this paper was delivered at the British Academy Wheeler Symposium (entitled 'Anatolia: Between the Near East and Europe') held in London on 18th April 1998. Slight amendments take into account the results of further fieldwork over three seasons, but the paper is substantially unaltered. The form and emphasis strongly reflect the event for which this paper was prepared.

¹ The common assumption that the Achaemenid Royal Road between Susa and Sardis passed by Pteria appears to be without foundation, as is the assumption that Alexander the Great followed the Royal Road. French (1998) fully discusses the course of the Royal Road.

² Zippalanda is almost certainly to be identified with the site of Kuşaklı Höyük (Yozgat), (see Gurney 1995: 69-71; Gorny 1997; for the site itself see Summers et al 1995: 53-9, pls II-IVa).

³ Presumably at Alişar Höyük, (Gurney 1995: 70-1, n 9).

⁴ For the identification of Sarissa with Kuşaklı Höyük (Sivas) see Wilhelm 1995: 37-42; 1997. For the site, Müller-Karpe, 1996a: 69-94; 1996b: 305-12; 1997.

⁵ At its greatest extent Hattusa covers an area of approximately 2km² or 200ha, Zippalanda is ca. 6ha, Ankuwa (Alişar) perhaps a little bigger, Sarrisa 18.2ha. None of the smaller sites exhibit signs of crowded urban occupation typical of 'Greater Mesopotamia'. At Ankuwa there is a spacious complex appropriately named the 'mansio' by von der Osten; at Sarrisa, for which we have an increasingly complete plan, much of the urban space is taken up by temple and palace. Since this paper was written geophysical survey has revealed an outer town at Sarissa.

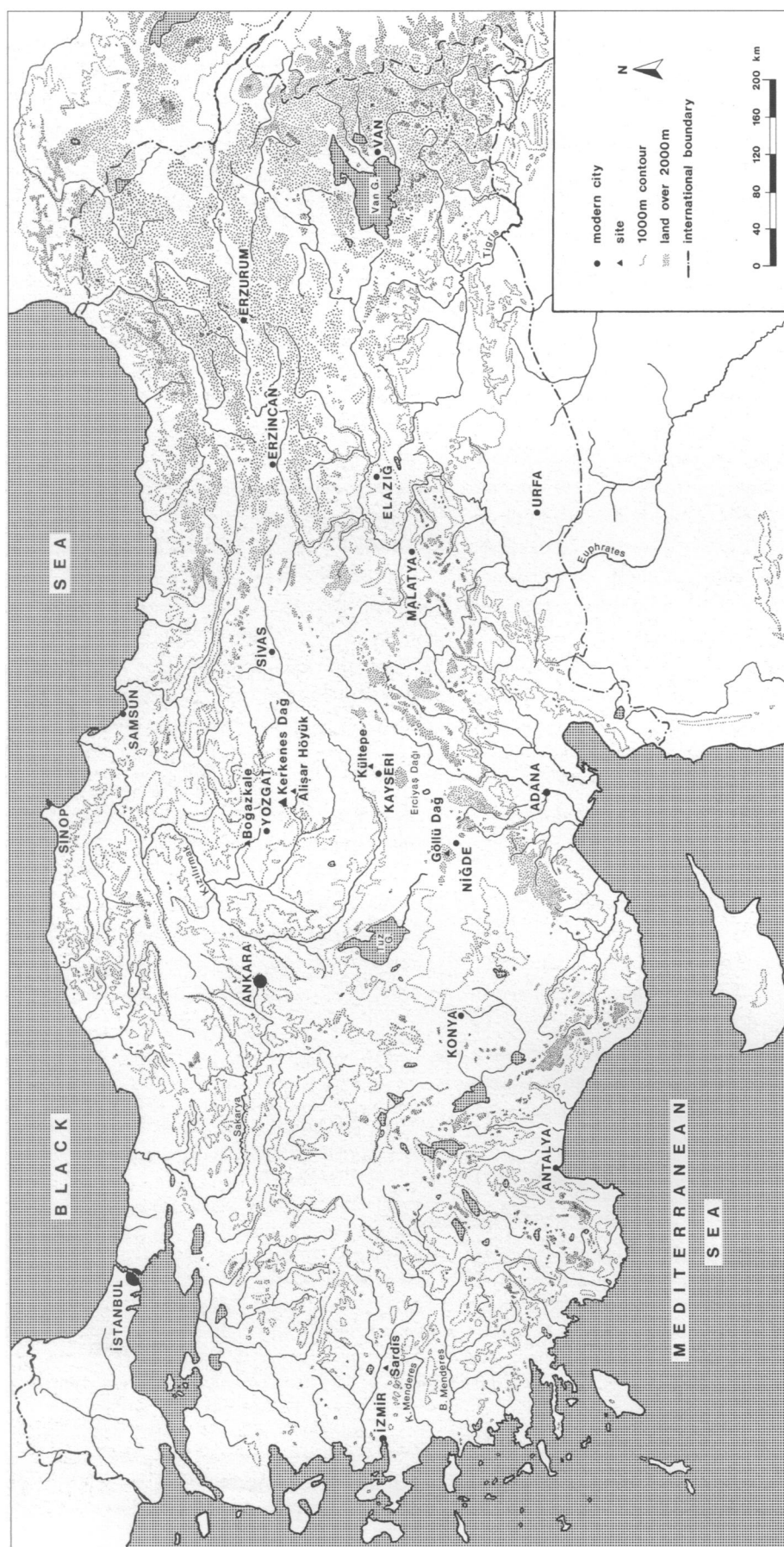


Fig 1. Map showing the location of Kerkenes and other places referred to in the text



Fig 2. The city from the Cloud 9 Hot Air Balloon, looking south with the Cappadocian plain beyond. Şahmuratlı village at centre left, Karabaş at bottom left due north of the city's north tip

Phrygia and Lydia rose in the west, the Kingdom and Empire of Urartu in the east. The centre of the Hittite world was reduced to obscurity. Certainly there were settlements, such as that at Alişar Höyük, and there was Iron Age occupation at Boğazköy (Hittite Hattusa)⁶, although hardly deserving the appellation 'urban'. The use of the term Phrygian for this region, and for the distinctive painted pottery known as Alişar IV, is misleading and should, in my opinion, be avoided (Sams 1994: xxix-xxxii; Summers 1994). This zone, embracing the transition from the northern part of the Cappadocian plain to the southern foothills of Pontus, seems to have become something of a backwater from the collapse of Hittite power onwards with but one exception: the great city on the Kerkenes Dağ.

Identification with the Median city of Pteria

The arguments for the identification of the city on the Kerkenes Dağ with Pteria, the name used by Herodotus, and the reasons for suggesting that Pteria was a Median imperial centre built after the 'Battle of the Eclipse' in 585 BC and destroyed by Croesus ca. 547 BC have been set out elsewhere (Summers 1997). More recently I have come to favour the idea that the city was in fact founded slightly before 585, perhaps as the base from which the Medes conducted their five-year war with the Lydians⁷. The arguments in favour of this earlier dating and its implications fall outside the scope of this paper and, although I will allude to some of the arguments and the evidence on which they are based, it is not my purpose here to discuss the identification further.

The location of the city

The Kerkenes Dağ is a low granitic mountain, altitude ca. 1,500m, on the northern edge of the Cappadocian plain. It lies in the province of Yozgat, 50km as the crow flies from Hattusa. The site commands the northern part of the Cappadocian plain, affording vistas of the permanently snow-capped peak of Erciyes Dağ, and controlling routes between the Black Sea and the Mediterranean, and the trans-European east-west highway. The site can thus be considered a strategic one in the sense that it dominates the surrounding area, controls an important cross roads and occupies a formidable mountain top. It exhibits both an intimidating strength and a strong sense of insecurity.

The urban setting

The city, the largest pre-Hellenistic site on the Anatolian plateau, bears a striking resemblance to Hattusa at its greatest extent; Kerkenes being a little higher is very exposed, subject to bitterly cold winds throughout the year. In a bad winter the snow will lie for several months and in 1997 we experienced frost on several August mornings. The size of the site, 2.5km², and the length of the walls, 7km, reflect, of course, choice, but also the defensible character of the mountain rim which the wall line carefully utilises to the best advantage (figs 2-4). The presence of perennial springs where fresh water issues forth from fissures in the granite must also have been a persuasive factor in site selection. The site would appear, then, to have offered advantages in terms of its prestigious position of physical dominance, defensive properties and supply of water, but also the major disadvantage of exposure to sometimes frightful weather. Seasonal occupation is a possibility, one for which evidence is hard to come by.

A new imperial foundation

A number of seemingly obvious assumptions have been made about the site for which the evidence ought to be clearly elucidated. The first of these is use of the term 'city', not in order to engage in a semantic discussion but rather because there is one striking site that offers a number of superficial parallels, a site which was certainly not a city: the earlier, Neo-Hittite, mountain-top site on the Göllü Dağ (Ark 1936; Tezcan 1969; 1992; Schirmer 1993). The Göllü Dağ site, whatever its precise date and function, was emphatically not a city but some kind of mountain-top ceremonial centre which, at an altitude of some 2,000m, can be under snow as early as mid September and as late as mid May. How, then, can we be sure that the Kerkenes Dağ site was a city, that is, an urban centre from which a region or regions were administered, a seat from which the executive powers of state were exercised? Firstly, its size and the density of built complexes within it are unarguably of urban proportions⁸. Secondly, as we shall see, the city functioned on a wide range of levels with massive public buildings that

⁶ Fascinating new evidence for early Iron Age occupation at Boğazköy is coming to light through the exemplary work of Jürgen and Ayşe Seeher (Seeher 1995; 1996; 1998).

⁷ An idea that I owe in large part to David Stronach. For doubts over the reliability of Herodotus' account of the eclipse and attendant problems see the recent discussion by Mosshammer (1981).

⁸ A range of population estimates is an outstanding goal of the project. It is expected that more complete geomagnetic data, combined with further test trenching, will enable exceptionally precise estimation of the numbers of different types of residential units from which a range of population estimates can be calculated. It is already clear that population estimates calculated on the number of people per hectare, or per square metre of roof space, based on ethno-archaeological data from the Near East, are not directly applicable to imperial centres in the highlands of central Anatolia, neither Kerkenes or Hattusa. Population estimates based on the carrying capacity of the



Fig 3. The wall looking southeast from the northern tip of the defences

provided administration, protection and storage as well as being a physical embodiment of power. Evidence for state religion or cult within the city is less clear, but one impressive 'temple' has been found beyond the walls at Karabaş. Thirdly, there is considerable differentiation between the status of what appear to be residential urban blocks, suggesting a level of social stratification commensurate with a range of urban occupations (Kühne (1994) gives a list of the criteria for identifying a city).

The second assumption is that the city was a new foundation. This, at least, is straight forward and easily dealt with. The whole defensive system is of a single design and one building period⁹, and the streets, urban blocks, public buildings and system of water management all conform to the line of defences and all exhibit a unity characterised by centralised urban planning. No evidence for settlement before the construction of the city defences and the contemporaneous laying out of the urban blocks has been seen on the balloon photographs and geophysical maps, or in the test trenches.

urban hinterland in north Mesopotamia and north Syria, whatever their merits and demerits in those areas, are extremely difficult to apply to the situation at Kerkenes, not least because it would clearly be incorrect to think of Kerkenes as being at the centre of a closed system. Traditional Near Eastern models of densely packed houses and high densities of urban population are not applicable at Kerkenes where the total population of the city perhaps numbered thousands rather than tens of thousands. Stronach (1994) discusses the size of the population of Nineveh which is perhaps analogous in some respects.

⁹ There are construction phases in the defences (e.g. towers and buttresses were butted against the outer face of the curtain wall, and the stone glacis was obviously the last element to be built), but these are details of military architecture and construction, they do not represent successive periods of building. Contrary to earlier reports (Summers et al 1996: 212-14), it is now known that the defences, built entirely of stone, had been completed when the city was destroyed.

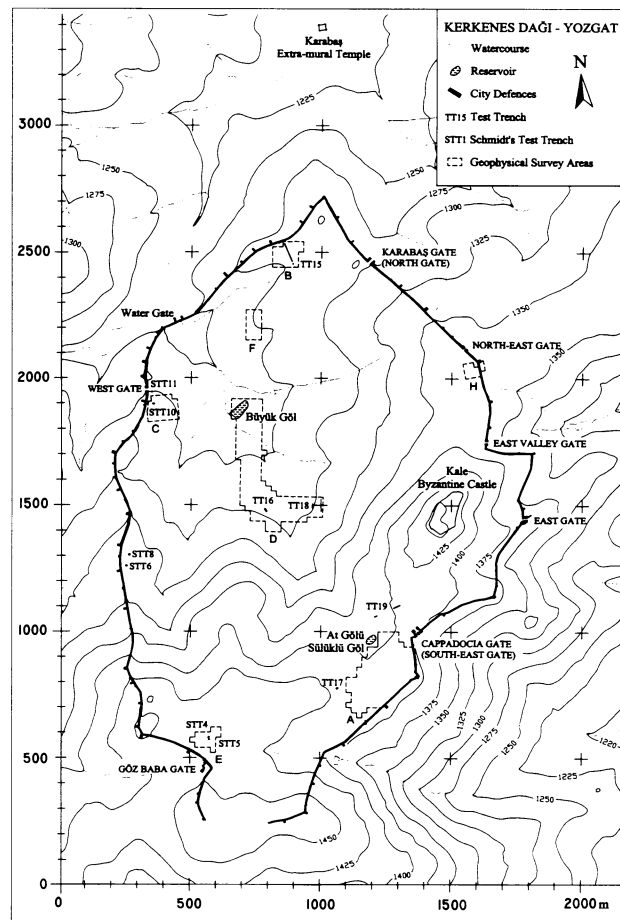


Fig 4. Plan of the city on the Kerkenes Dağ, 1998

The third assumption is that the city was 'imperial' or 'royal'. Implications of the term 'imperial' include the act of foundation (or, in other cases, re-foundation) and function as a regional or inter-regional centre for the exercise or imposition of imperial power. To avoid circularity of argument the historical identification of the city will be excluded from the brief discussion that follows.

If size alone were sufficient there would be no reason to go further. At 2.5km² the city on the Kerkenes Dağ is considerably larger than any other known Iron Age site on the Anatolian plateau. It does not, of course, compare with the Neo-Assyrian capital of Nineveh — the walls of which are ca. 12km in length, enclosing 750ha (Stronach 1994) — although Nineveh was said to contain fields and orchards within the walls, and the Kerkenes defences are slight in comparison with the 'Colossal Lydian Structure' at Sardis (Greenewalt 1997: 2, fig 1, pl 3; Greenewalt, Rautman 1998: 487-99), but for size and position the Kerkenes city is without rival in Iron Age Anatolia.

But function not size is the real criterion. In assessing function the strategic location, already alluded to, is surely indicative of at least regional control, on the one hand, and insecurity on the other. In other words, the imposition of very considerable newly won power,

physically displayed by the creation of a city that dominated the surrounding landscape, exhibits a self-confidence underscored by mighty defences.

An 'Imperial City' requires the infrastructure from which to exercise imperial rule, in today's jargon, command and control. The southern ridge at Kerkenes was selected for a huge integrated complex of public buildings that I will return to shortly. For the moment it is sufficient to emphasise that many of the functions of state could have been performed from within this sector¹⁰.

The final assumption that I wish to expand on here is that the city had but a short life. There are two reasons for discussing this: the implications for the conception and execution of urban planning and the implications for the identification of the site. Only the former will be addressed here. The city was destroyed by a catastrophic fire of such intensity that mud roofs melted and dripped onto floors like candle wax.

It is now certain that the whole city burnt with equal ferocity¹¹. Such extensive and catastrophic fire is most unlikely to have been accidental but seems, rather, to indicate systematic torching of the structures in what was, after all, typical behaviour of ancient victors. A further argument in favour of deliberate destruction is the absence of subsequent occupation. It is possible that there was some sort of continuous presence on the 'Kale', indeed it might be expected, *a priori*, that the ultimate victor would have left some form of garrison. But there is no evidence whatsoever for continued urban occupation.

The evidence revealed by our test trenches and seen on the geophysical maps indicates that the city was a continual building site from the moment of its foundation until its destruction, although the layout of the public buildings and the urban blocks indicates centralised planning and apportioning of urban space. While there

are recognisable standard architectural forms, the use of space within each urban block does not display obvious standardisation, at least within the sample currently available. It can be argued that this irregularity reflects outcrops of rock and other peculiarities in the land within each block or group of blocks, the most level areas being used first and more difficult plots being modified by surprising expenditure of effort in terracing and infilling. Nowhere have we (yet) seen evidence for superimposed construction of buildings or for structures that had come to the end of their useful life before the destruction of the city (although there were, naturally, some modifications to standing structures).

There is evidence for changes in architectural form and in building technique (discussed briefly below), and thus for some degree of urban evolution, but no evidence for dilapidation, disuse, reconstruction or replacement. It might thus be concluded that the life of the city was short, perhaps in the order of two to three generations, not more¹².

Principal urban features

The high southern zone of the city, along the ridge between the Göz Baba Gate and the terraces on the north-western slopes below the Kale display an integrated concept of urban design and city planning on a scale commensurate with the ambitious foundation, layout and construction of the city (figs 5-7). The descriptions that follow are based on a combination of ground survey and observation, interpretation of balloon photographs and geomagnetic mapping of sub-surface features. Research is still in progress: geomagnetic maps are adding considerable clarity and detail, test trenches will provide evidence for function and additional architectural information. Thus the results presented here are interim and will require much expansion and some modification as the project progresses. On the other hand, it is thought that the major results will not require substantial revision and that the broad interpretation is essentially correct, however slight the evidence on which it is currently based.

¹⁰ The one possible exception here is religious ceremony associated with religious structures or temples. At Kerkenes the existence of cultic or religious structures or complexes within the city is a major outstanding concern. If the site was indeed a Median city it is possible, (on the basis of what very little is known about later Achaemenid religious practices), but by no means certain, that there were no temples within the city.

¹¹ By one of those odd accidents of archaeological history, every one of Erich Schmidt's 14 test trenches, dug in the space of five days in 1928, failed to reveal the destruction by fire. We now know that in some cases the evidence was there but far from obvious, while at most of the locations chosen by Schmidt along the western side of the city later erosion had removed everything, including burnt mud-brick debris and floors, above the level of the stone foundations (Schmidt 1929).

¹² I am aware that arguing from modern analogy for the length of life of buildings might be open to criticism, especially when the relatively short life of many dwellings in contemporary Anatolian villages is related to the life of the poplar used for ceiling and roof beams, whereas other timbers would surely have been available in the Iron Age. It also goes without saying that a longer life span would have been anticipated for more substantial structures, such as the columned halls at Kerkenes or more sumptuous traditional houses in Anatolia. At Kerkenes, however, the evidence for the continued function of all structures up to the catastrophic end is so pervasive as to demonstrate a restricted period of existence.



Fig 5. View of the southern portion of the city from the Cloud 9 Hot Air Balloon. 'Cappadocia Gate' at the angle in the defences centre left, the large rectangle inside the Gate is the 'Polo Field' with 'Stables' to the left and 'Leech Pond' to right

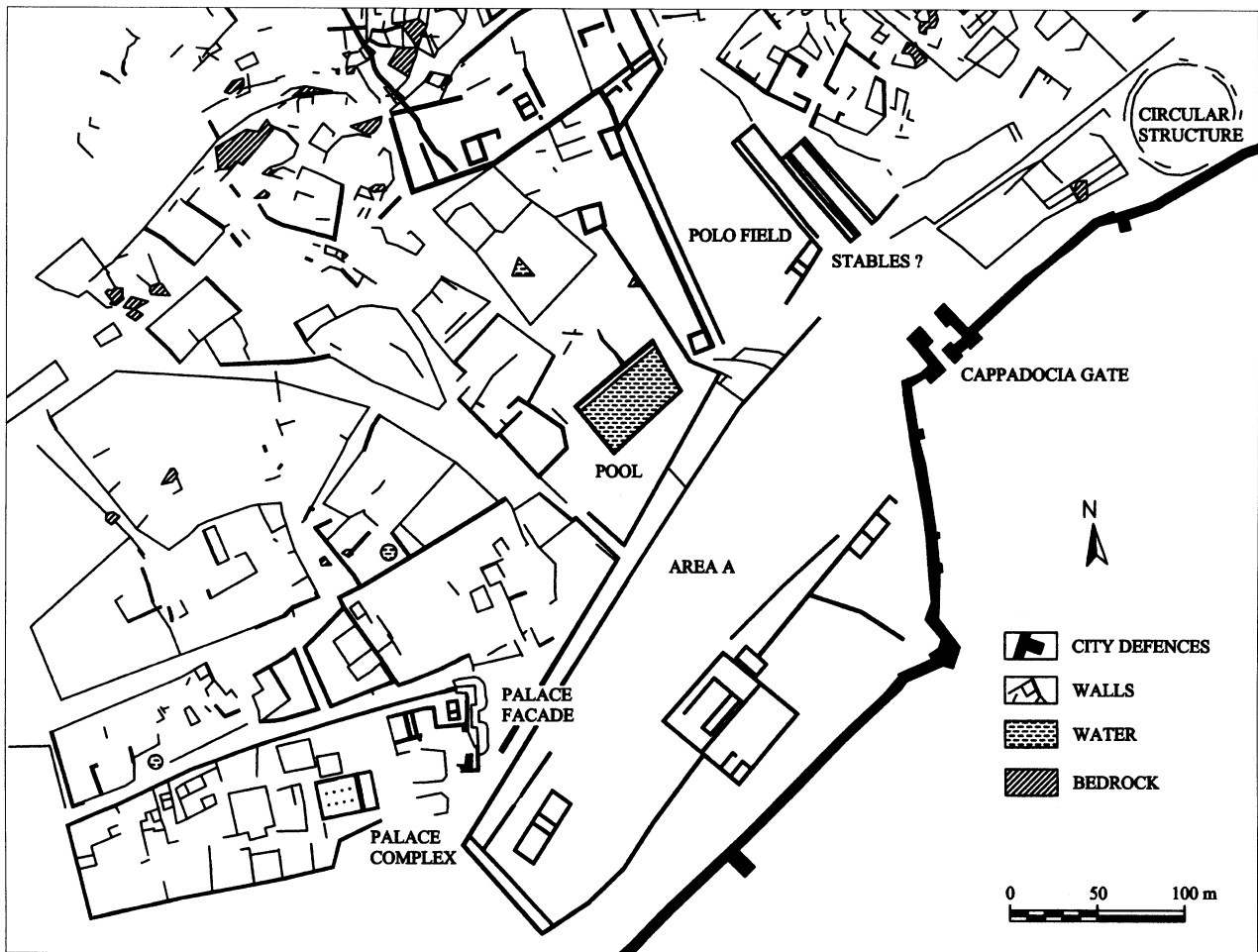


Fig 6. Plan of the public buildings on the high southern ridge shown on fig 5, revised to include results up to the end of 2000

The Suluklu Göl

The Suluklu Göl ('Leech Pond'), is an artificial stone-lined reservoir also known as the At Göl ('Horse Pond') (fig 5). It lies within a larger walled compound into which geophysical survey and ground observation have not yet revealed an entrance. The pool itself is rectangular, measuring ca. 32 by 56m. Probing with a hand auger in 1993 established that it contains about 1m of silt, making the total original depth some 3m, with a total capacity of ca. 5,376m³. Today it is fed by a spring to the southwest, much altered in recent times and consequently now normally dry by the end of August; but it can safely be assumed that there was sufficient water available to keep the pool full throughout a normal summer. It is also likely that other sources of water, including run-off from surrounding complexes helped to maintain the water level.

The pool would seem to have been created by enlarging and squaring off a natural feature and construction of a dam with a central sluice on the northern side. The dam comprises two parallel walls,

presumably with water-impervious clay between them, and a large bank that both supported the walls and reduced seepage. The other three sides have vertical walls and there is a sloping face of uncut granite around all four sides constructed in the same manner as the glacis around the city defences and the façade of the 'Palace Complex'.

The position of the enclosure and the pool is such that it would seem to have formed a focal feature for the public complexes to the east, south and west. If this is indeed the case, it implies a concept of planning and use of urban space on an imperial scale. Since the original height of the enclosure walls has not yet been established, it is not possible to assess how visible or secluded the pool would have been. Construction was evidently lavish since the much larger Büyük Göl, in the centre of the lower part of the city, and other artificial reservoirs elsewhere within the urban confines, do not appear to have been stone lined. Clearly, the Suluklu Göl was something more than a utilitarian reservoir.

The 'Palace Complex'

The complex occupies a gently sloping area on the high ridge towards the southern end of the city, some 280m west of the southern or 'Cappadocia' Gate and is more or less orientated east-west. The approach to what appears on the geomagnetic map to have been a spacious open area in front of the monumental façade seems to have been via a broad street leading from the street node inside the 'Cappadocia' Gate. On approaching the palace complex the street divides to run along each of the long sides, that on the north eventually broadening out into a plaza-like public space before veering off southwestwards to the 'Göz Baba' Gate. The southeastern end of the complex thus afforded a view over the stone-lined pool and the public buildings beyond. From elevated points within the complex the northern Cappadocia plain could have been observed with, on clear days, Mount Erciyes in the far distance. The obvious advantages of the position, good communications, splendid views, fresh water, can be countered with a conspicuous disadvantage: exposure to inclement and sometimes fearful weather.

The plan (fig 7a, revised in 2000) is based on remains extant on the surface combined with the interpretation of the geomagnetic map (fig 7b) and information from subsequent limited exposure through test trenches and clearance of fallen stone in 1996, 1999 and 2000. Understanding the surface remains is problematic for several reasons, including modification by the construction of later tumuli and shepherds' shelters, the ruinous state of the stone walls and, as revealed by the test trenches, that much of the architecture is not visible on the surface. A further significant problem is that some structures within the complex might have risen two or more stories and perhaps had basements. The plan presented contains those elements which could be surveyed or interpreted from the geophysical map with a high degree of confidence; solid wider lines represent clear walls where in places both faces could be seen, and thinner single lines represent apparent wall lines without visible faces. The overall character of the complex has thus been recovered, further elucidation of structures will require further mapping and test excavation.

The complex is enclosed by a substantial wall, some 2m wide, along the northern, western and southern sides. The total length of the complex is ca. 250m, the width at the west end is 56m and the

maximum width is 80m. The southeast corner is enigmatic, in part because of later use by shepherds and tumulus construction. The east end is monumental, comprising a sloping façade with massive buttresses flanking a large central niche all constructed of neatly fitted uncut granite slabs retaining rubble fill, in the same technique as that used for the city defences. The façade slopes upwards at an angle of around 40-45°, being preserved to a height of ca. 4m. Bed-rock outcrops at the base of the northern portion which, together with the sloping faces of the façade and marked differences in height, presumably reflect large outcrops of bed-rock that were incorporated into a monumental architectural scheme.

The remainder of the interior of the complex is divided up into more or less rectangular units. The main north-south walls that demarcate these interior divisions also mark rises in elevation from east to west, presumably dictated by rises in the underlying terrain. The larger spaces are subdivided into smaller units some of which are square or rectilinear. In the north-western sectors wall lines of actual buildings are indicated by ridges of rubble. Individual monumental buildings are not discernable amongst the surface remains.

The monumental nature of the complex, especially the façade at the eastern end, the size and the location, distinguish this complex from others within the city. The absence of entrances through the well-preserved enclosure walls into the central and western sectors of the complex could be taken as evidence in favour of a unified function and a progression from public at the front (east) end to more restricted elements at the west end. Further, the complex appears to form part of a larger planned area of public buildings. This combination of factors makes it likely that the complex was palatial. It can be assumed that the city would have contained a palatial complex of some sort and no better candidate has been recognised. Positive proof of the identification is, however, lacking, making further test excavation a priority in future research design.

The plan suggests some overall concept of the use of space within the complex, but also displays surprising irregularity and informality. From the clearance of the south end of the façade and the Test Trench it is clear that there was more than one phase of construction, giving rise to the possibility that the original conception may have been altered over time by the addition of new structures. The complex is apparently without parallel.

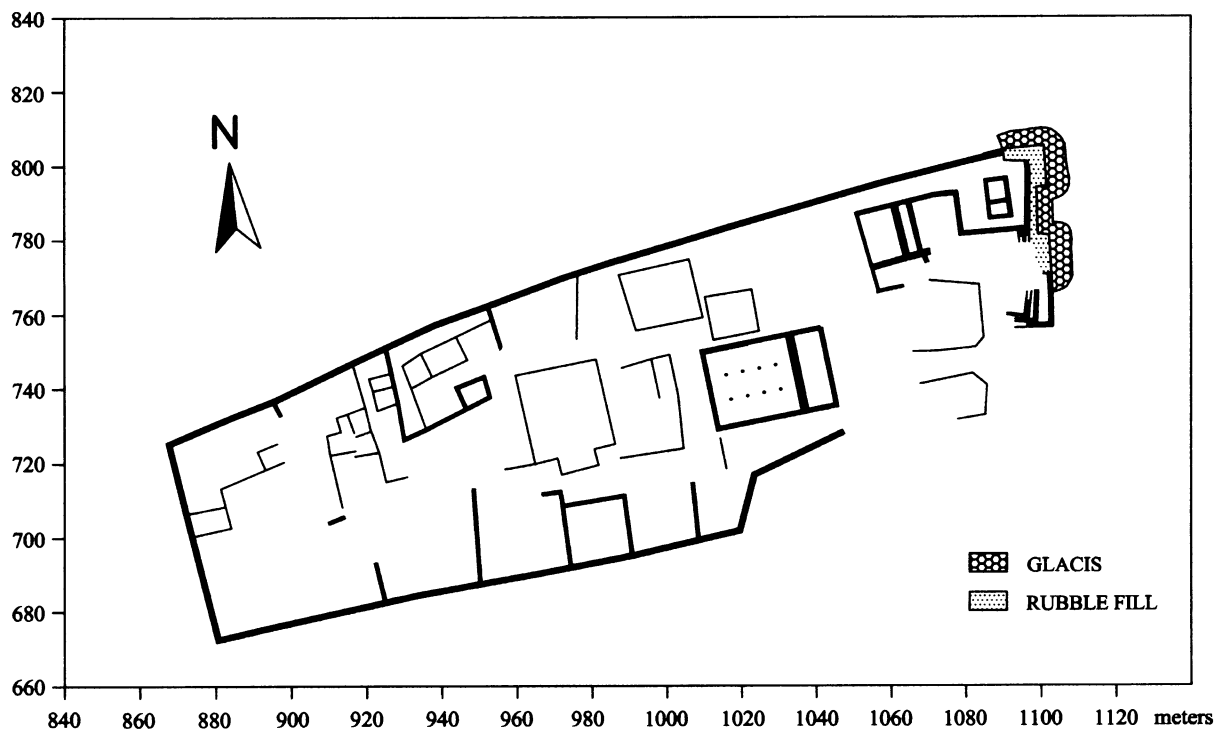


Fig 7a. Plan of 'Palace Complex' revised to include results from geophysical survey, excavation and clearance up to the end of 2000

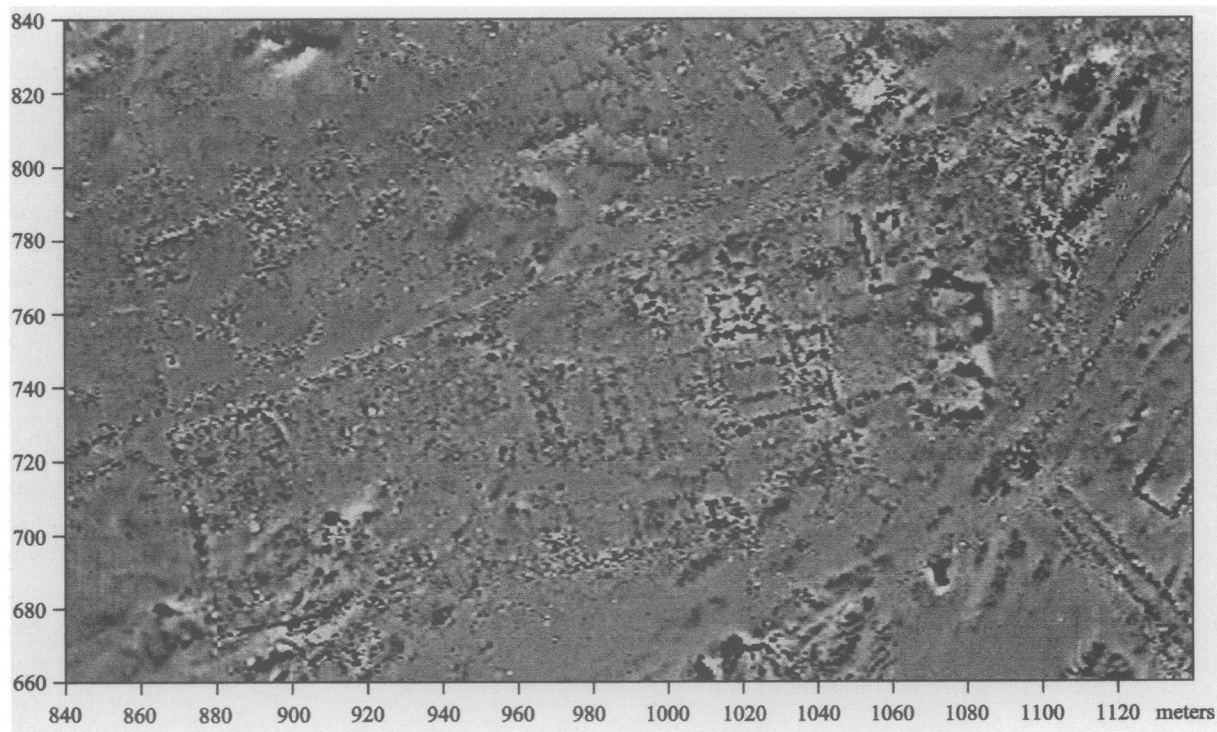


Fig 7b. Geomagnetic image of 'Palace Complex'

The 'Military Area'

The 'Military Area', Area A on fig 6, is a large, mostly level and roughly triangular area immediately inside the city wall on the west side of the 'Cappadocia Gate' and south of the road leading to the 'Palace Complex', with a commanding view over the Cappadocia plain.

At the western end, outcrops of bed-rock, later tumuli, shelters and pens obscure the relationship with the 'Cappadocia Gate', from which there must have been direct access. No entrance can be determined in the long, ca. 365m, northern wall. A natural depression, apparently devoid of ancient structures, runs along the inside of the city wall. Extant foundations of the central structure, atop an outcrop of bed-rock, comprise several distinct units.

The southeast half of this structure contains a shallow rock-cut pool that today holds water until late spring, although there is no source apart from run-off and seepage. The shallow depth and very irregular sides might be evidence that the pool was unfinished. The expansive northwestern portion of Area A is flat and fairly level with bed-rock visible in many places. It is apparently devoid of structures with the exception of a tripartite building, measuring 41 by 14m, at the southwestern end.

The southwestern limit of the Area, immediately beyond which the ground drops steeply away, is formed by a building unit some 72m long and 8m wide.

Area A is unlike any other within the city and was surely a public complex. Interpretation of the function is circumstantial and, because of the poor preservation, not likely to be significantly supplemented by further research. Although there are arguments in favour of a military function other possibilities exist — palatial, cultic, administrative — but these seem less probable and present even greater difficulties.

The urban space occupied by this complex of structures would have been highly desirable, given its proximity to the 'Cappadocia Gate', its position within the 'Public Zone', the commanding view southwards and access to the main streets within the city and an unfinished street around the inner face of the city wall. It can thus be assumed that the space was assigned a special function at the time of the city's foundation and that construction began soon thereafter.

Much of the area is level and empty, and could have provided space for the assembly of people, animals, equipment and goods. Plans of individual structures are so far without known parallel and thus of little help in determining function.

The 'Polo Field'

The 'Polo Field' is a broad flat area, maximum dimensions 75 by 138m, more or less opposite the 'Cappadocia Gate', below and west of the Terrace Structures and east of the Suluklu Göl (fig 6). The eastern side of the field side is bounded by a steep bank that presumably masks a terrace wall and a wall of large blocks forms the northern end. A range of structures is visible in the bank at the southeast corner. The western edge is formed by a long narrow structure with rectangular structures appended to the outer, western, side at either end. The west extension of Test Trench 19 failed to reveal any evidence of internal structures, floors or artefacts. It is likely that the floors of the building were raised, or intended to be raised, well above the level of the 'Polo Field' which today becomes boggy in spring as water flows down the terraces from the foot of the 'Kale'. In the Field, bed-rock is visible in many places and the present level aspect is doubtless artificial.

The function is unknown but was clearly public and related to other activities within the 'Public Zone'. The large, flat, open area, apparently devoid of structures, is suggestive of exercises, parades, animal riding, games and other public spectacles, hence our label: the 'Polo Field'. Other possibilities include a market and a place for the loading and unloading of caravans. None of these suggestions need be mutually exclusive. The long narrow structure, ca. 7.80 by 138m, along the west edge would have reduced the force of the prevailing wind and provided shelter, although the area of roofed space would have been restricted and seems to have been too narrow for tethering horses. It may have stood two or more stories high.

The terraces

To the east of and above the 'Polo Field', and west of the main north-south street, are a series of long narrow structures on artificial terraces (fig 6). Two distinct units are visible on the surface and were examined in Test Trench 19. In 1999 geomagnetic survey confirmed the correctness of the plan given here and also revealed a clear image of what appears to have been an entrance structure (not visible at all on the surface nor shown on the interim plan given here). These terraced structures fall into a class of buildings that are often interpreted as stables. The existence of stone paving together with drains might support such an identification here, hence the preliminary suggestion that they were 'imperial stables'. On the other hand, the width of the stalls is rather on the small side and other interpretations are possible, most obviously warehousing. We can, however, be confident that rows of pithoi are not present within these structures.



Fig 8. North end of the city from the Cloud 9 Hot Air Balloon: urban blocks along the inside of the defences apparently contain columned halls

The columned hall

At the north end of the city, ranged along the inside of the northwest and northeast walls, are rows of fairly regular urban blocks (fig 8). One of these was mapped with the magnetometer and appeared to contain a columned hall. This hypothesis, and other geomagnetic details, were confirmed by the careful placing of a test trench measuring 74 by 2m approximately through the centre of the urban block. The main architectural unit comprises a large hall, ca. 15 by 18m, the roof of which was supported by 15 substantial wooden columns that rested on large stone bases (fig 9). The ante-room contained three equally large columns on similar stone bases. Both rooms had laid clay floors that ran over the stone bases up to the columns themselves. (Magnetic images and plans can be found in Summers 1997 and Summers, Summers 1998.)

Above the hall and divided from it by a narrow stone paved passage is a row of three two-storied chambers. The westernmost chamber produced an ivory inlay described below.

There is no direct evidence of function. The clay floors do not suggest that animals were kept here. It is possible that the columned hall represents the central building in a residential complex to which other structures were added over time. The complex itself fills an entire urban block which is located close to a copious spring and is sheltered from prevailing weather by the slope of the terrain. Thus it is tempting to see this block as representing an elite kinship group or extended family; ivories being evidence of wealth and status. Neighbouring urban blocks appear to contain similar complexes of structures. If there do in fact turn out to be a number of adjacent blocks, each with a columned hall and other stock building types, it may be that this northern part of the city was an elite residential quarter.

With the single exception of the so-called Apadana at Altintepe near Erzincan (Summers 1993), Middle Iron Age columned halls are not known elsewhere on the Anatolian plateau (although it has to be admitted that our knowledge of Iron Age architecture on the north-central plateau is scant indeed). There are, however, parallels from Iran. The burnt buildings at ninth century Hasanlu (Dyson 1989) and Median structures at both Tepe Nushi Jan (Stronach 1969; Roaf, Stronach 1973; Stronach, Roaf 1978) and Godin Tepe III (Young 1969: 23-30, figs 36, 41, pls 27-8; Young, Levine 1974: 29-35, figs 37-38) would all seem to be generically connected to the Kerkenes columned hall.

The two-roomed buildings

On the geomagnetic maps and occasionally on the surface a distinctive building type can be readily identified: free standing two-roomed structures. They apparently occur in all areas tested except, perhaps, the high southern zone of public buildings. In some cases they appear to be particularly prominent, for example that close to the centre of the largest urban block in Area D, in the low centre of the city. Others would seem from their positions to be of secondary importance, such as those in Area B. Sometimes they occur in rows, apparently always free standing, and each building appears always to be associated with walled compounds or yards. In 1996 two such buildings were tested by excavation, in Test Trenches 16 and 18.

Superficially at least, these two-roomed structures strongly resembled megarons, although there was no indication of central hearths. The first aim of the test trenches was, then, to determine whether or not our structures at Kerkenes were indeed megarons. The second aim was to establish the function of these structures: were they residential, i.e. houses, or did they have some other function? The third aim was to discover the depth of overburden and the nature of the cultural and natural features as an aid to interpretation of the magnetic maps and to assist in future research design.

Test Trench 16, in Area D, was positioned to expose half of the most prominent structure on the magnetic map of one of the largest urban blocks in the lower part of the city (fig 10). The fact that this block was full of buildings was a surprise in itself. When the magnetometer was first taken to this area the expectation had been that the enclosures were devoid of buildings, the city having been abandoned unfinished. The north-western half of the building was selected because faint traces of walls adjoining the outer side of the north-western wall could be made out on the magnetic map.

The structure is not a megaron but a building comprising two units. At the southwest end in a small rectangular room measuring ca. 6 by 3.50m with ca. 3m wide central doorways in each of the long walls, and a good laid clay floor baked hard by the terminal conflagration, evidence for a flat roof laid across the narrower span was found in the form of mud roof debris baked hard in the final fire and preserving the impression of the layer of reeds that supported the mud roof. There was no evidence for a second storey. The larger area, measuring ca. 6 by 6m, was unroofed and was clearly a walled, unsurfaced yard rather than a room. In the half that was excavated the only entrance was the wide doorway in the



Fig 9. Test Trench 15 showing one of the stone column bases and the burnt clay floor, molten roof lies on part of the base and areas of floor



Fig 10. Two-roomed building in Area D, Test Trench 16, looking northwest

centre of the party wall with the smaller unit, and there is no reason to suspect a second doorway in the unexcavated half in this, or indeed, from the geomagnetic plans, in any other two-roomed structure. There were no features or finds within the room, and only a few stones perhaps deliberately placed in the yard. In front of the structure and contiguous with the threshold was a stone pavement.

The function is unknown. Micromorphological samples studied by Dr Wendy Matthews revealed little evidence to aid interpretation, because of the intensity of the burning and the activity of animals.

There is evidence, both in this test trench and elsewhere in the city, that some, perhaps all, of these two-roomed structures fall fairly late in the development of the city.

Status objects

A number of high status objects were recovered from the test trenches dug in 1996 (fig 11). These were chance finds, the discovery of which came as a complete surprise. Apart from being objects of interest in their own right these pieces demonstrate a certain level of luxury and artistic taste and are evidence for considerable cultural contact with the west, by which I mean the Lydian and the east Greek world, and presumably Greek colonies on the Black Sea. The survival of these objects and their good state of preservation also holds out the prospect that larger-scale excavation, should it ever become possible or desirable, might reveal the first indisputable examples of Median art (Muscarella 1987; Gentio 1986). No objects demonstrating clear eastern connections have yet come to light.

Aftermath

I hope to have demonstrated that many features of the city on the Kerkenes Dağ are without known parallel, and perhaps unique. It was, of course, a failed city; one of the great white elephants of the ancient world. Both of these phenomena, the uniqueness and the failure, require explanation. In seeking explanations it is also pertinent to consider its place in the long tradition of founding royal or imperial cities, one that went back at least as far as Akkad and perhaps culminated with New Delhi. In general, new cities were laid out according to preconceived notions or ideals. Thus Alexander laid out Alexandria in Egypt as a Greek city with temples to Greek gods, a Greek agora and so forth¹³, and Lutyens

designed New Dehli as an English city from which the British Raj was to rule in the east¹⁴. But a search for the precise urban antecedents of Kerkenes draws a blank. One way out of the problem is simply to declare that the precursors have not been found, that they lie buried beneath Hamadan, or even Sardis. Against this is the size and setting of Kerkenes, the confident adaptation of military and urban design to the particulars of the mountain-top site and the use of construction techniques, most strikingly the sloping façades and glacis, that seem to be peculiar to the local granite. That there was an urban concept with a zone of public buildings is self-evident. Also self-evident is the desire to impose order on the urban space through the creation of urban blocks, an order that not only imposed boundaries and physically defined space, but one that also provided for, and in many instances included, the creation of large level terraced areas retained by the perimeter walls of the urban blocks. The input of huge resources into the construction of walls and terraces was the result of conscious choice, of the desire to alter and manipulate the terrain into an urban landscape. Use of resources on a similar scale in the Iron Age can be seen, for instance, in the 'clay layer' at Gordion or the huge artificial terrace beneath the Achaemenid Palace at Susa (Boucharlat 1997).

Partial explanation for the uniqueness can thus be sought in the nature of the site itself and the resources that it provided. Such a deterministic approach does not, however, explain why the site was chosen in the first place, why the temple is outside, the unique complex of public buildings or the centralised division of urban space into walled blocks. Geopolitics provide a background against which the general location might be understood¹⁵.

¹⁴ The view of Herbert Baker who, in 1912, joined Edwin Lutyens in designing the government buildings for New Delhi has been brought to my attention. 'It must not be Indian, nor English, nor Roman, but it must be Imperial', quoted in Mordaunt-Crook 1987: 223.

¹⁵ It is assumed here that Kerkenes is indeed the city Herodotus calls Pteria, founded by the Medes as an imperial centre from which to rule the western portion of their empire. A different attribution, one necessitating raising of the date and devoid of any historical reference, would not invalidate the argument put forward here that the city represents the rapid rise and assertion of a new and otherwise unknown power in a previously vacuous region. Realisation that the city was of more than local importance gave rise to suggestions that it was built by the Scyths or the Cimmerians. At the root of these rather improbable ideas was the difficulty that German Hittitologists had in shedding the identification of Boğazköy/Hattusas with Pteria, first proposed by Texier. See also Bittel (1970: 156), 'it becomes not improbable after all that the old Hattusha was known as Pteria in Phrygian and Median times'.

¹³ Arrian 3.1.5-3.2.2 provides an account of the tradition. However much the story may have been embellished, I see no reason to doubt that Alexander himself dictated the line of the defences and selected sites for the public buildings (see, most recently, Fraser 1996: 175). Liverani (1997) outlines the development of modern concepts of ancient cities, both oriental and the western polis.

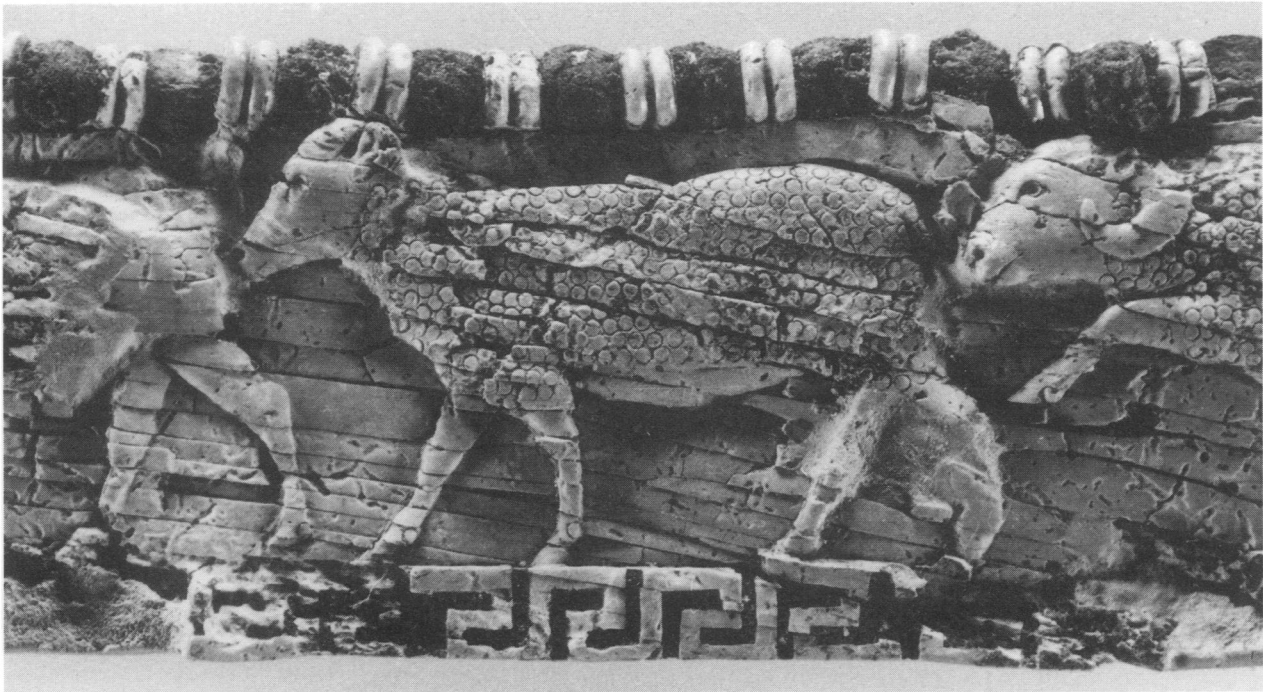


Fig 11. Part of an ivory inlay showing a ewe followed by a ram, bead and reel at top comprises amber beads backed by reflecting silver and gilded reels, the meander at bottom was probably filled with silver

For whatever reasons, an upland site was preferred to one on the plains¹⁶. The homogeneous plan of the city, lacking physical barriers between the public complex and the residential zones, suggests that, at least originally, the city was built for a foreign ethnic elite whose loyalty to, and perhaps membership of, the ruling body assured that there were no threats from within. That is, the city was built by and for the conquering Medes. It was a display of their new found power in the west, of their ambitions, of their ideas of urban civilisation, which, it could be argued, came from observation of others that they had either defeated and destroyed or who they had come to more amicable terms with, rather than from their own traditions of urbanism.

Why the failure? Firstly, the geopolitics changed when Cyrus sped westwards to Sardis and the Aegean. As the Medes had burst out of Iran into Assyria in the seventh century, now the Achaemenids swept into the east Greek world. The focus of power shifted westwards to Sardis. In the centre Cilicia was swallowed up in the

Satrapy of Kapatuka (later Cappadocia), created by Cyrus. Kapatuka presumably included the 'region' of Pteria together with that part of the Kingdom of Cilicia that lay north of the Taurus Mountains. The new centre was at Mazaca, (later Caesarea, modern Kayseri) because of the centrality alluded to earlier. Geographical shifts in the seats of power may explain decline of previous centres, but total and sudden abandonment of a city has never been a common occurrence¹⁷.

I have no 'explanation', and can only point out a few possibilities. Today it is unfashionable to cite Herodotus as evidence for anything, but he is the only written source that we have¹⁸. Following the capture of Pteria Croesus enslaved the Pterians. I assume that the city was burnt by Croesus' forces and that the inhabitants, i.e. the Pterians, who I take to have been 'Medes'¹⁹, were led off to Sardis in chains. Thus the city was both physically destroyed and

¹⁶ The possibility that seasonality was a factor is discussed above. I am most grateful to Dr Christopher Tuplin for sending me a preliminary copy of his study on Achaemenid seasonality (see now Tuplin 1998). If occupation at Kerkenes was seasonal, as I think probable, the question arises of where the population spent the winter. I would very tentatively suggest that rural estates might provide a more probable answer than migration far to the southeast.

¹⁷ Our present understanding of the archaeological evidence very strongly suggests that the city was totally abandoned after its deliberate destruction and never again became an urban or even a permanent settlement. The Kale (castle) was occupied from the later Iron Age to at least the seventh century AD. It would perhaps be surprising if Cyrus had not left a garrison there as he marched west. The Kale, however, was a fortified strong point, not an urban settlement

¹⁸ References to recent literature concerning Herodotus on the Medes is given in Summers 1997

¹⁹ 'Medes' is a difficult term. Croesus would have argued that the Pterians were loyal to the new Achaemenid regime in Iran

depopulated. If it was occupied throughout the year I imagine that only fear or compulsion would have retained an urban population. The reasons for the foundation, security and central administration, were removed once the imperial borders were extended to the Mediterranean and Aegean seas. The economic basis of the city — tribute, trade and taxation — shifted to the new centres.

In returning to the title of my paper, the 'Median Empire reconsidered: a view from Kerkenes Dağ', I shall not repeat the arguments for the identification. Nor do I wish to dwell on the conclusion that at Kerkenes there is a Median capital city of sufficient magnitude and splendour to dispel any lingering doubts that there was indeed a Median Empire in the second quarter of the sixth century BC. In the context of the conference at which this paper was originally presented, 'Anatolia: Between the Near East and Europe' a few final observations are perhaps apposite. Pteria, as I shall now call it, was neither a Near Eastern city, nor a Greek one. Iranian antecedents are as yet unknown, but it is to be hoped that the resumption of excavations at Hamadan will provide new and important evidence (Briant 1997: 42-3)²⁰.

Some elements are Anatolian: the stone glacis found for example at Bronze Age Hattusas and Iron Age Boğazköy; the solid stone wall around the mountain rim is paralleled at Göllü Dağ (Schirmer 1993), massive terracing at Gordion in both pre- and post-destruction levels. The urban planning and the enormous public complex is unique, and although an Anatolian precedent for that too could be sought at Göllü Dağ, the two sites appear to me to have

little else in common. The plan of the large and enigmatic public building beyond the walls at Karabaş, presumably a temple, is also unparalleled unless it is to be seen as a precursor of the Zendan-i Sulaiman and the Ka'bah-i Zardusht in Achaemenid Iran (Stronach 1978: 117-37). The columned hall, apparently one of several at Kerkenes, has clearer Iranian connections, at Hasanlu (Dyson 1989), Godin Tepe III (Young 1969: 23-30, figs 36, 41, pls 27-8; Young, Levine 1974: 29-35, figs 37-38) and Nush-i Jan (Stronach 1969; Roaf, Stronach 1973; Stronach, Roaf 1978) and at Achaemenid Altintepe in Turkey (Summers 1993: 94-5). For a brief survey of Median architecture see Roaf 1995. If the identification of Pteria can now be accepted we have concrete evidence for the first sustained contact between the west and Iran, evidence that shows both the strength and the frailty of the Median Empire, evidence for the public face of imperial rule displayed through a complex of imperial buildings, evidence of wealth and artistic taste. The extension of Median rule across the mountainous eastern massif absorbing what was once Urartu as far west as the Halys has become a physical reality. The importance of this brief rule, its role as a catalyst in cultural development, in both east and west, and the implications that it has for understanding the rapidity of Achaemenid expansion is just beginning to emerge. There remains much to discover and much to understand. It is confidently expected that the next few seasons at Kerkenes Dağ will produce as many surprises as the last five have done. I like to think that Sir Mortimer Wheeler would have approved.

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and hostile to Lydia. That it is legitimate to call them Medes is supported both by Stephanos and by the circumstantial evidence that lays behind the identification of Kerkenes with Pteria. Discussion of exactly what Herodotus thought would be understood by 'Pterians' is unhelpful, although he obviously intended to make clear that the Pterians were different to the White Syrians (Herodotus' usual term for the Cappadocians). Ethnicity is extremely problematic and I see no clear way of approaching the question of how Median the Pterians were, or indeed of how Median the Medes were. In the absence of written evidence, the only subject at Kerkenes that might provide at least a window is architectural form.

²⁰ In a recent volume on the foundation of ancient oriental cities (Mazzoni 1994) a number of contributions (especially relevant here are papers by Matthiae, Bergamini, Kühne and Liverani) discuss the reasons for founding new Near Eastern cities and the underlying urban concepts, including Mesopotamian models of creation, power and propaganda, economic and administrative. Kerkenes does not seem to display the characteristics typical of Mesopotamian civilisations in two important ways: (1) there is no walled citadel dividing the 'palace complex' from the rest of the city and (2) no great cultic installations have yet been identified. The ideology underlying the foundation of Kerkenes and its particular urban form might become clearer once the whole plan is available.

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