

Volume 1 of 2

**Roads on the frontier between Rome and Persia:
Euphratesia, Osrhoene and Mesopotamia from AD 363 to 602**

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DECLARATION

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

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Word count: 93515 (excluding gazetteer, bibliography and endnotes, but including annexes)

December 2008

ABSTRACT

This thesis examines the physical evidence for ancient bridges and roads in the three most eastern provinces of the Roman Empire. Its focus is the two and a half centuries before the Arab invasions when population reached a peak. It uses satellite photographs from Google Earth to place the roads in a geographical context and contains many maps. The thesis describes twenty-four stone bridges in the provinces concerned which are thought to date from the Roman period and contains photographs of these where possible.

Field research has included a large number of visits to SE Turkey and two visits to Syria. On the basis of the material evidence and the ancient sources, in particular the Peutinger Table (which are discussed in a specific chapter), the thesis examines the course of the roads and their users; it also addresses the reasons for construction of the roads, together with associated issues such as the disappearance of wheeled vehicles.

The thesis describes the ancient cities, the settlement pattern and the fortifications of this region, which lay on a much troubled frontier with frequent warfare between Rome and Persia. It discusses how warfare and the construction of fortifications modified the nature of the region in the sixth century AD and then examines issues arising from the existence of the road network such as defence of the frontier, trade and the impact that commercial and social links, as well as the road network itself, had on relations between the two great empires of Late Antiquity.

Annexes short reviews of archaeological work in the area and of medieval and modern travellers who have passed through it. A gazetteer of cities and fortresses mentioned in the text is attached at the end.

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Abbreviations

AFRBA	<i>Armies and frontiers in Roman and Byzantine Anatolia</i> , (ed.) S. Mitchell, Oxford 1983
AJA	American Journal of Archaeology
AT	Antonine Itinerary
CERP	<i>Cities of the Eastern Roman Provinces</i> , Jones, AHM, ed.2, 1971
CJ	Codex Justinianus
CSCO	Corpus Scriptorum Christianorum Orientalium
CTh	Codex Theodosianus
DRBE	<i>Defence of the Roman and Byzantine East</i> , (ed.) P. Freeman and D. Kennedy, 1986 Oxford
EFRE	<i>The Eastern Frontier of the Roman Empire</i> , (ed.) D.S. French and C.S. Lightfoot, Oxford 1989
EI	Encyclopedia Iranica
ETAAS	<i>Eastern Turkey: an architectural and archaeological survey</i> (especially volume III), Sinclair, T.S., London 1989
ND	Notitia Dignitatum
PG	Patrologia Graeca
PT	Peutinger Table
PWRE	Pauly-Wissowa Realenzyklopedie
RC	Ravenna Cosmographer
REFPW	<i>The Roman Eastern frontier and the Persian Wars, part II, AD 363-630: a narrative sourcebook</i> , Greatrex, G. and Lieu, N.C.
TAVO	<i>Tübingen Atlas des Vorderen Orients</i>
UCLA	University of California, Los Angeles

Introduction

This thesis is concerned with roads and communications in those eastern provinces of the later Roman Empire bordering on Persia, especially during the two and a half centuries before the Arab invasions. This region was a contested area, frequently affected by raiding and warfare, but from the death of the emperor Julian in AD 363 to the death of Maurice in 602 the frontier between Rome and Persia remained fairly stable. It was also an area which was crossed by long-distance trading routes in use from the early Assyrian contacts with the Hittites right through to the early Middle Ages until the devastation wrought by the Mongols – and then again until the creation of sea links from Europe to the Far East, which circumvented the land routes in the 18th century. Here particular attention is paid to the roads and bridges of the region, as well as its ancient cities and fortresses; the study also seeks to draw conclusions about the role of the frontier, trade and the nature of the economy in the period examined and the region's role as a zone of interchange between the two major civilisations of the time in western Asia and Europe: the later Roman (or early Byzantine) empire and Sassanian Persia.

The thesis is based on a study of the primary and secondary sources for the buildings and history of the region and on the results of fieldwork obtained during four recent visits to the Tigris and several years' work doing a survey with satellite photographs around Zeugma on the Euphrates¹. During these visits I was able to examine the bridges concerned and was then able to place them in the context of the associated roads with the help of satellite photographs and the available topographic maps. Visits to the cities and towns of the region and a review of the remains of buildings of the period have also allowed me to put these roads in the context of the urban settlements and to draw conclusions about the nature of this region during the period under review.

Satellite photographs available free of charge from Google Earth have been used extensively in the course of the research for this thesis and are discussed in Chapter 1. Many high resolution extracts are included and this new tool has been used to illustrate the context of the sites and roads, as well as to provide locations and altitudes, which

supplement information obtained via a hand-held GPS instrument. Maps are for the most part drawn by me using as a base digital versions of the 1:500 000 Tactical Pilotage Charts for the region (see annex K).

The ancient written sources referred to are described briefly in Chapter 2. Secondary material of major importance is described in the body of the text. The two main articles published by me in 2000 and 2001 in *Anatolian Studies* are listed as “co-authored” (Comfort, A., Abadie-Reynal, C. and Ergeç, R., (2000), Comfort, A. and Ergeç, R., (2001)). This is because the conditions under which the permit for excavation at Zeugma was granted required the name of the Turkish co-director of the project to be included. Catherine Abadie-Reynal (the French co-director) was shown the text of the first article and made some comments, which were included, but she did not wish to be indicated as co-author for the second article; Rifat Ergeç did not provide any comments on either article since his knowledge of English was too limited.

For the political history of the region during this period, no summary is included here. I have relied on Bury’s *History of the Later Roman Empire*, completed where appropriate by Stein’s *Histoire du Bas-Empire* and the Cambridge Ancient History (Volume XIV). A further important study is the *Cambridge Companion to the Age of Justinian*². For the events discussed in the text there are a large number of extracts from ancient sources included in chronological order in Greatrex. and Lieu, “The Roman Eastern Frontier and the Persian Wars”.

At the opening of the fifth century AD Rome and Persia had already been at war on many occasions. Following the first contacts by Lucullus and Pompey and the annexation of Syria in around 65BC, Rome had waged many aggressive campaigns against the Parthians (after 226AD, the Sassanians), in particular under Crassus (53BC), Trajan (AD115), Lucius Verus (165), Septimius Severus (198), Caracalla and Macrinus (217/8), Alexander Severus (231), Gordian (241), Carus (283), Galerius (296-8) and finally Julian (363). In turn, the Parthians and Sassanians had mounted invasions of Roman Syria and Mesopotamia under Ardashir (230 and 237), Shapur I (256 and 260) and Shapur II (359). In the fifth and sixth centuries the two great powers of antiquity continued their rivalry and ultimately the

conflict brought both to such a weakened state that Arab armies of early Islam were able to defeat Rome and Persia easily and quickly during the seventh century³.

The main theatre of warfare along the frontier between Rome and Persia had initially been in the mountainous region of Armenia, because it was here that the key to control of Mesopotamia was thought to lie. In 83BC Tigranes of Armenia had taken control of the northern provinces formerly controlled by Parthia and Seleucid Syria. Following his defeats by Lucullus and then Pompey (in 66BC), control of Armenia had swung between Rome and Persia on several occasions. Although the role of Armenia in the struggle between Rome and Persia was to be a crucial one during these centuries, this thesis concentrates on the areas to the south-west of Armenia which were more important for the confrontation which took place during the sixth century.

The northern end of the 'fertile crescent' passes along the southern edge of mountain ranges, such as the Anti-Taurus, between Armenia and Mesopotamia. It is this region which is of particular concern here. The cities are discussed in chapter 5 and in the Gazetteer. The relatively dense population and the riches of the cities between the Mediterranean and the Tigris were to constitute a major attraction for raids by the Persians on many occasions. The origins of their wealth are difficult to pin down but seem to have been linked firstly to commerce.

Despite the obvious interest of both sides - from a modern perspective - in the negotiation of a peaceful equilibrium, mutual recognition of a certain equivalence of power was achieved only late in the history of the unsettled relations between Rome and Persia. According to Ammianus⁴, the emperor Constantius wrote to Shapur addressing him as his brother. It seems to have been during the fifth century AD that the elaborate arrangements described in Constantine Porphyrogenitus' *De Caerimoniis* for diplomatic protocol and the reception of Persian ambassadors were established⁵. These implied recognition of an equality of status between the two sovereigns. But such recognition did not prevent the struggle almost to the death which occurred at the end of the period, following the murder of the emperor Maurice.

During the fifth and sixth centuries the frontier between Rome and Persia followed a line running roughly north-south from Lazica on the Black Sea to Circesium, a town fortified by Diocletian and situated at the junction of the river Khabur with the Euphrates. In particular this frontier allocated to Rome all of the territory adjoining the upper Euphrates and some to the east of the Tigris in the region of Amida (now Diyarbakir) with the river Batman (then known as the Nymphius) forming the eastern frontier of the Roman province of Mesopotamia (see Chapter 6). In this period the term 'Mesopotamia' thus refers to the northern-most regions between Tigris and Euphrates stretching to the south only as far as the city of Nisibis, near the northern edge of the Mesopotamian plain that stretches down to the Persian Gulf. It was Nisibis which was the main bone of contention for centuries and its role will be discussed at length in the following chapter.

To the south-west of the Roman province of Mesopotamia was Osrhoene, with its capital at Edessa (now Şanlıurfa). Circesium on the Euphrates lay at the southern-most point of this province whose western border was also the river Euphrates. Osrhoene seems to have been closely connected in the minds of contemporaries with the province of Mesopotamia and indeed there is no natural boundary⁶.

On the other side of the river to the north and west of Osrhoene lay the ancient kingdom of Commagene, with its capital at Samosata. However, in a reorganisation of the provincial boundaries under Diocletian this area had lost its political importance and was incorporated by Constantius II into a new province called Euphratesia with a capital far to the south at Hierapolis (now Manbij). Annex F contains a brief presentation of each province, including maps.

All three provinces of Mesopotamia, Osrhoene and Euphratesia lay on the eastern fringe of the Roman Empire beyond the other rich cities of Syria and Phoenicia, on or near the Mediterranean coast. However, they too were relatively wealthy provinces with an important transit trade for luxury goods coming from the east into the Roman Empire, in particular, silk. All three had their own civil governors but for military purposes they formed a part of the large area under the authority of the *Magister Militum per Orientem*.

They are grouped together in this thesis because of their cultural affinities (see discussion of language below) and because of their shared dependence for administrative and economic reasons on Antioch, even though they lay beyond the boundaries of Syria proper after the reforms of Diocletian and Constantius.

The frontier with Persia had been established with some degree of permanence following the disastrous outcome of the expedition to Ctesiphon mounted by Julian. This was not to be the last such invasion – Heraclius was able ultimately to conquer the Sassanians and recapture all the lost Byzantine provinces in AD 629 – but Julian’s death on campaign in AD 363 was followed by the appointment of Jovian, who concluded a peace treaty which allowed him to extricate the army only by the surrender of territory. Under the terms of the treaty the ‘trans-Tigritane’ provinces of Arzanene, Zabdicene and Corduene were lost to Rome⁷.

The major cities of Edessa and Amida were retained, together with Ingilene and Sophanene, the areas north of Amida, but on the west and south bank of the Tigris (which runs for a long distance west-east) Bezabde was lost already to Shapur in AD359, while Nisibis, together with the region stretching south-east to the city of Singara (not far from modern Mosul), were also surrendered as a result of Julian’s death in 363. It was this loss of Nisibis, the strategic, commercial and cultural centre of the region, which coloured the history of eastern frontier of the Roman Empire during the period up to the Arab invasions⁸. It lay on the river *Mygdonius* (now known as the Djaghdjagh), which pierces the chain of hills to the north of the city (now called ‘Nusaybin’). The steep southern escarpment of these hills – the Tur Abdin, but known to the Romans as Mount Masius - was then, and remains today, an important geographical and cultural boundary between the plains of lower Mesopotamia and the highlands of the Taurus, Anatolia and Armenia. It constitutes an impressive barrier running east-west; but from AD 363 the political frontier must have crossed this escarpment north-south. The exact line of the frontier is uncertain but is discussed below in chapter 6.

Although seen as a shameful surrender by many at the time, at least the treaty of AD363 allowed peace to be established for a relatively lengthy period between the two empires.

The Persians were to mount invasions during the sixth century, but none of these seem to have had as their objective a permanent occupation of land and cities beyond the line established in AD363. However, the disputes separating the two sides were to become increasingly bitter until in the early seventh century each seems to have sought a total victory with consequences disastrous for both sides. During the period under review here, the fifth century was to prove remarkably peaceful by the standards of what came before and after. But even in periods of high tension it is unlikely that the frontier became an impassable barrier to trade and travellers.

Today the regions examined here are located for the most part in south-eastern Turkey, although the neighbouring parts of modern Syria and Iraq were always closely linked to the fate of the late Roman provinces of Euphratesia, Osrhoene and (northern) Mesopotamia. For maps of the region today, see below; for maps of the region in antiquity see Annex F, pages 258/259. Substantial parts of the Roman provinces concerned are today to be found inside the borders of modern Syria. Although the Euphrates region of Syria has also been visited, most field-work connected with the preparation of this thesis has been undertaken in Turkey.

During the period under review the principal cultural identity of most of the people living in these provinces was Aramaic. Greek, however, was also widely spoken and was the main language of administration, both for the state and for the Christian church, especially west of the river Euphrates; it was probably also used by educated people and for commerce, but the balance between Syriac and Greek is unclear. Latin also continued – at least during the fifth century - to have an important role in the army and for legal matters, but this was declining. The university of Beirut, an early Roman colony, continued to teach Roman law in Latin at least until the reign of Justinian, but this was probably an exception⁹. A few inscriptions in Latin survive in these provinces but for the most part these commemorate building projects carried out during the early empire (see, for example, the descriptions of bridges 16 and 19 in Annex A after Chapter 3). The language of the countryside and of most the citizens of the main towns - and also the language often used for writing - was Syriac, a version of eastern Aramaic. In this period Syriac was spoken across much of the Fertile Crescent; it was a major literary language throughout the Middle East from the

second to the eighth century AD. The name ‘Syriac’ is sometimes used broadly to refer to all Eastern Aramaic languages spoken by Christian groups; at its most specific, it refers to the classical language of Edessa, which became the liturgical language of much of Christianity in the East, spreading as far as China. Following the Arab conquests, Syriac was initially the medium of communication and culture for Arabs and, to a lesser extent, Persians. Although primarily a Christian medium of expression, Syriac had a fundamental influence on the development of Arabic which replaced it towards the end of the eighth century.

Most inscriptions of a public nature are in Greek, but there are very few of these known to the east of the Euphrates¹⁰. There is a commemoration in Greek for completion of some public works near Derik and close to the probable course of the road from Constantia to Nisibis¹¹; this construction may have been associated with the fortress of *Bismideon*, mentioned by Procopius in this area. Others reported in the same article include a reference to the appointment of a στρατηγος (‘magister militum’) at the fortress of Hisarkaya (see gazetteer), which could be Belisarius - of the name only three letters are preserved; there are various inscriptions reported also from the walls of Diyarbakir, of which three refer to the repair of the walls by the στρατελατος Theodore, probably a general of Heraclius¹².

The language used for funerary inscriptions is often Greek west of the Euphrates and Syriac east of the Euphrates (the *necropoleis* of Zeugma on both banks of the river provided an interesting study on this topic, unfortunately not yet published). In regard to the funerary inscriptions of Gaziantep museum, almost all use Greek; those of Urfa museum are divided between the two languages with some important people (as indicated by the appearance of their carved busts) having inscriptions in Syriac, but Greek appears to dominate also here with the phrase ‘αλοιπε χαιρε’ appearing with great regularity¹³. Few other inscriptions are available for study from this region, but given the evident flourishing of Syriac historiography and religious writing during the period it is strange that Greek was so widely used in a private, funerary context. Although Syriac is still spoken in the Syrian Orthodox monasteries of the Tur Abdin and in a few villages, a large majority of the population today is Kurdish. Of course the language of administration in Turkey is Turkish and in Syria it is Arabic. The process by which Kurdish-speakers came to dominate the

region remains unclear. But it is evident that it has never possessed political autonomy, at least not since the largely pre-historic empires of the Mitanni and Urartu. Assyrians, Medes and Persians, Hellenistic Greeks, Parthians, Romans, Byzantines, Arabs, Mongols and Turks have all played a substantial role in its history.

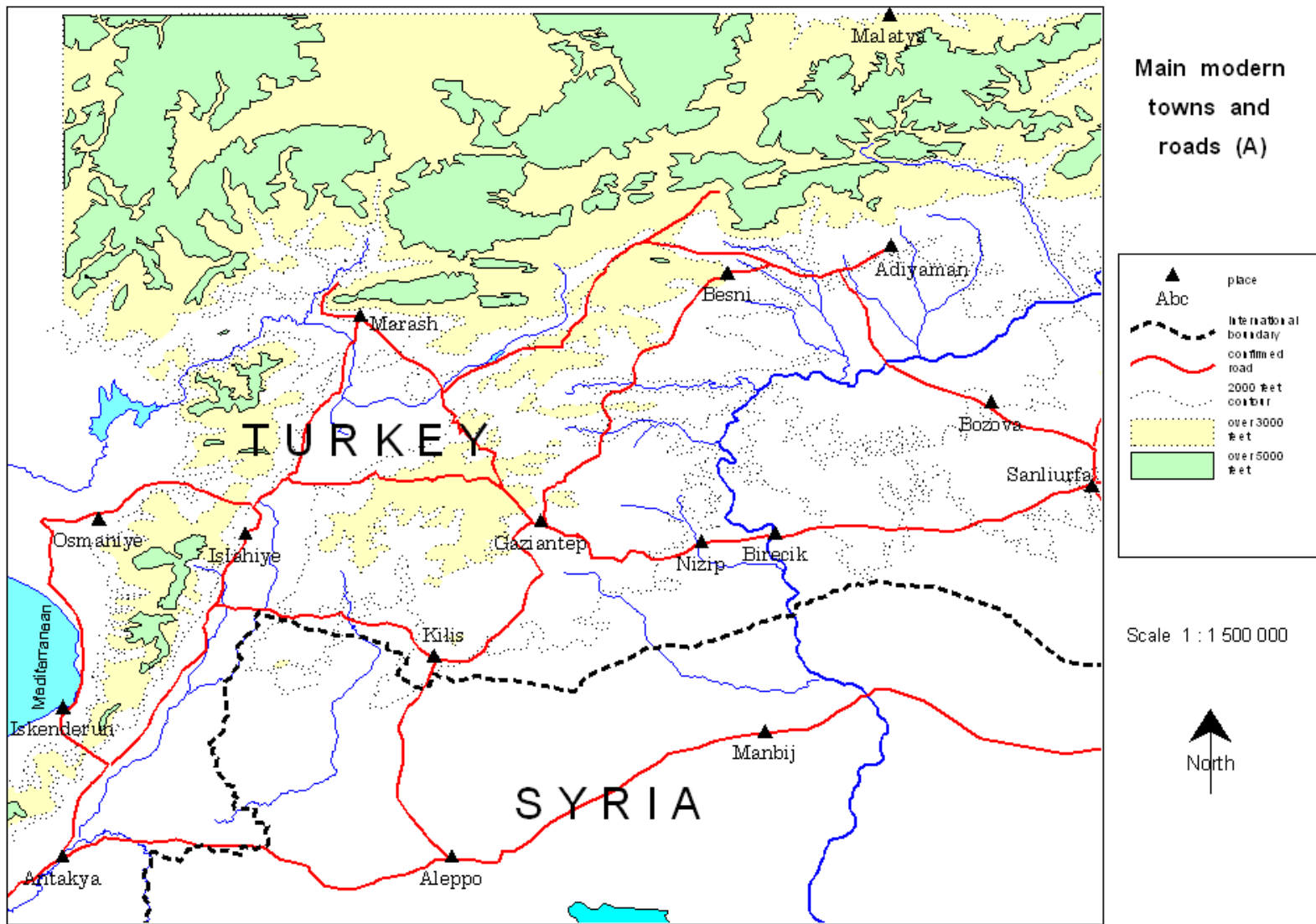
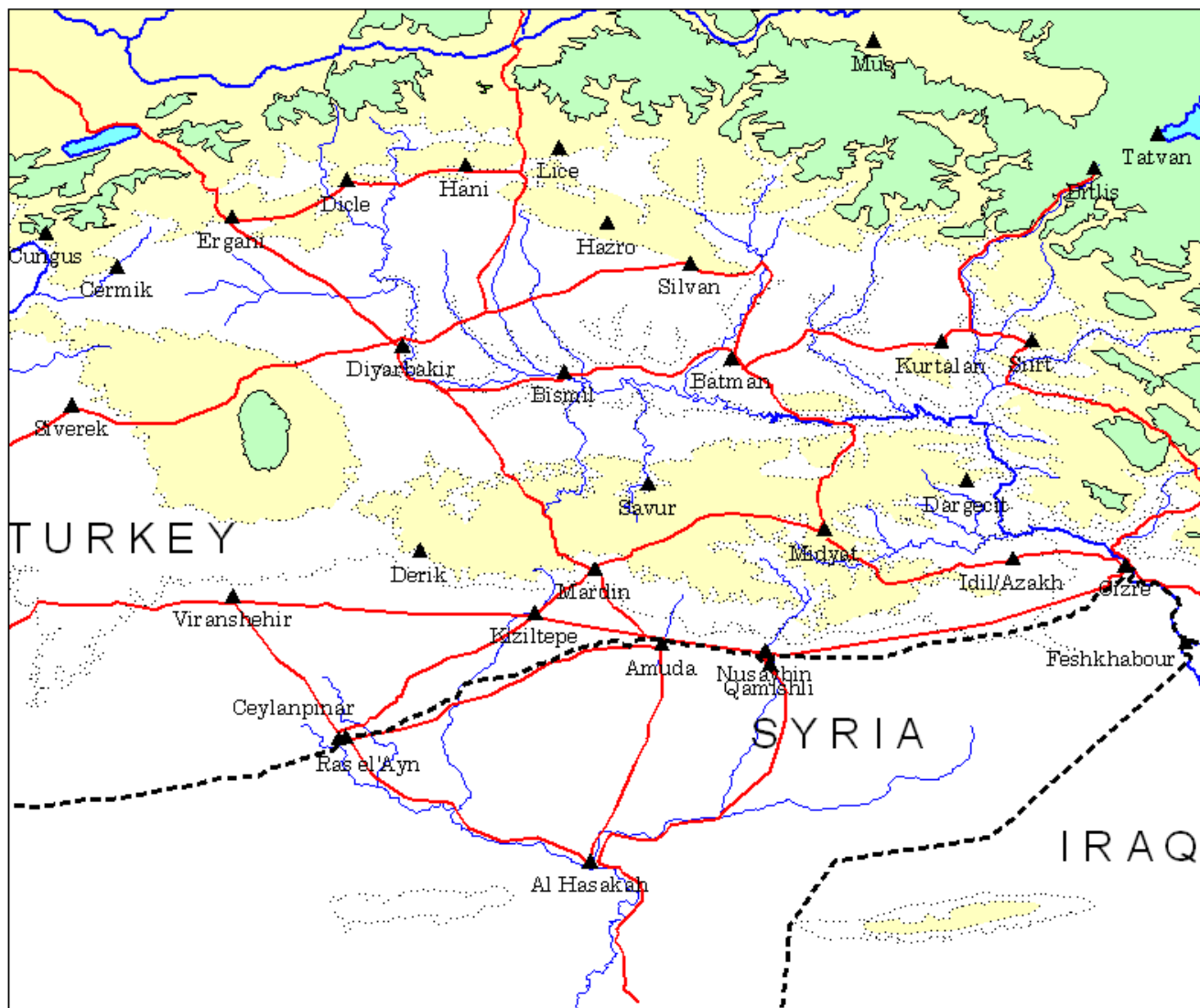
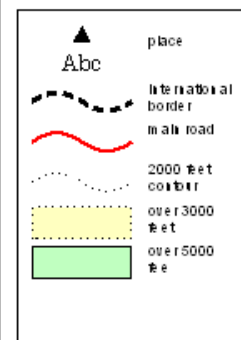


Figure 1



Main modern towns and roads (B)



Scale 1 : 1 670 000



Chapter 1: Methodology and finds

The thesis is based on a study of the primary and secondary sources for the buildings and historical geography of the region and on the results of fieldwork obtained during four recent visits to the Tigris and several years' work doing a survey with satellite photographs around Zeugma on the Euphrates¹⁴. The recent field work focussed in particular on ancient bridges and roads in this region. In particular I was able to examine the bridges concerned and was then able to place them in the context of the associated roads with the help of satellite photographs and the available topographic maps. Visits to the cities and fortresses of the region and a review of the remains of buildings of the period have also allowed me to put these roads in the context of the urban settlements and fortifications.

During earlier work around Zeugma high-resolution Russian satellite photographs taken by the KVR-1000 camera were used, as well as lower-resolution Landsat and Corona images. Such imagery acquired for a specific purpose is expensive but details provided with the image ("metadata") include the date, time, height of camera and angle of view; such information can assist in interpretation of details of archaeological interest. They may also be turned into detailed topographic maps with grids, using ground control points such as cross-roads which have been identified by GPS ("global positioning system").

For this thesis the area concerned was too large to permit the further acquisition of such imagery, because of the cost and the difficulty of storing and manipulating such large quantities of information. However, satellite photographs available on-line free of charge from Google Earth have been used extensively¹⁵: for much of the region coverage is only available in the form of rather lower-resolution photographs (15m) which are not of great use to archaeologists, but many high resolution photographs were made available on Google Earth in the course of the research and a large number of extracts are included below. The base photographs come from different suppliers and are at various resolutions; these are frequently now less than 1m and more high-resolution imagery of the region is being added at frequent intervals. In many cases the imagery now available free from Google Earth is in higher resolution and therefore more valuable to archaeologists than that bought for large sums of money from Russian and American suppliers 12 years ago. Apart

from linear features, such as ancient roads, artificial mounds or *hüyüks* can easily be identified and occasionally the bridges and other structures may also be seen.

Even the less detailed Google Earth photographs are often of value since they may be tilted and shown in three dimensions with the terrain clearly indicated. Higher resolutions (down to 2.4m in multispectral or colour imagery and much less in “panchromatic” or black and white) permit more detailed analysis of bridges, roads and settlements since even objects such as cars or lorries are sometimes clearly visible. This new tool has been used to illustrate the context of the sites and roads, as well as to provide measurements, locations and altitudes, which supplement information obtained via a hand-held GPS instrument and tape-measure. Google Earth has also proved invaluable in planning and following up visits on the ground. References provided below in terms of latitude and longitude may be easily located on Google Earth by removing the symbols and separating latitude from longitude with a comma only; thus ‘37°07’11’’ N; 38°09’21’’ E’ (representing the location of an ancient cistern at Ekenek) may be placed in the box at the top left hand side in the Google Earth screen and will immediately take the viewer to the spot concerned when shown as 37 07 11 N, 38 09 21 E.

Although viewing such imagery is much easier on screen than on paper, some examples of how such images were used to find and plot ancient roads are included below, which show how the photos have been used in assisting the field research. It should be noted that, although the satellite photos come from different sources at various resolutions the ‘zoom’ facility allows a viewer to examine on screen any feature both at the maximum degree of detail available in the photo concerned and that feature in relation to any other, while the ‘tilt’ facility makes it possible to view a feature in the context of the surrounding terrain.

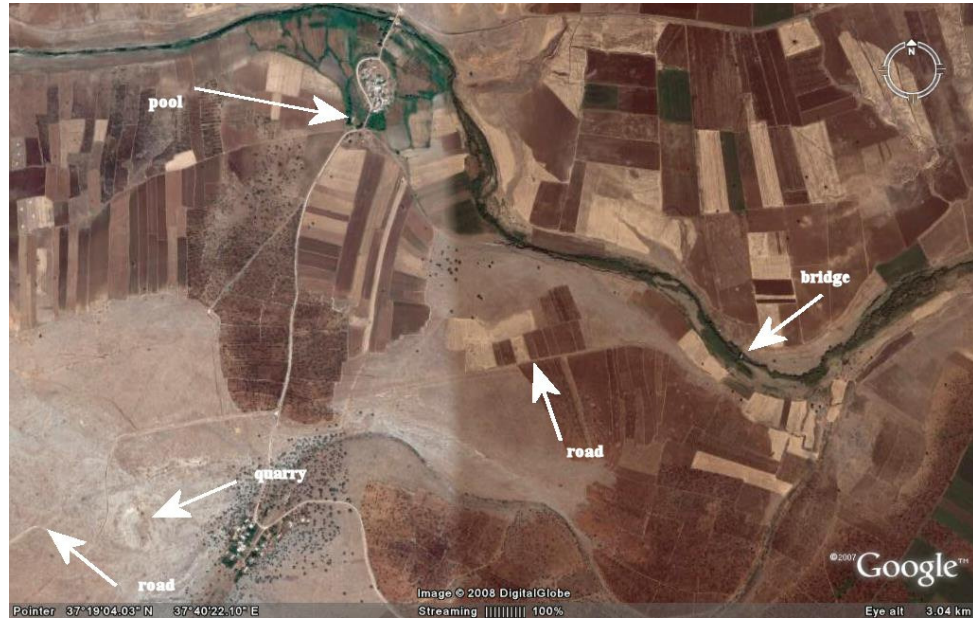
Examples of research undertaken with satellite imagery

A) The Roman road from Doliche to Samosata



Arrows indicate the position of forts. The bottom one was well-preserved until recently (see photo below). The satellite photograph assists in locating sites along the road, in mapping the road itself and in measuring distance, for example between forts whose position has been fixed using a hand-held GPS device. In this case the course of the road is evident on the ground since it has been used for much of its length as the foundation for a modern tarmac road. Where this is not the case (as below on the section approaching the bridge) its course is still evident as a lane or as a field-boundary. Thus, even if it has been possible to visit only a part of the course of the ancient road on the ground, it is often possible to locate much more of it using the satellite photos.





The second photo from Google Earth above shows the valley of the Merzumen. The village at the top is Yarimca, probable site of an 'Aquae' symbol shown on the Peutinger Table. The bridge indicated is number 20) in Chapter 3 (annex A) below.

B) The Roman road along the Euphrates



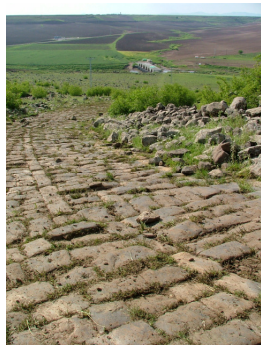
Road descending from the plateau to the Merzumen river near Rumkale



The path below the castle of Rumkale and along the Euphrates was subject to flooding. This ancient road passes over the mountain SW of the castle and its course is marked on the ground by a zig-zag turn, shown above and on the satellite photo, and by cisterns in the nearby village of Kösel. The road shown descends to the north-east into the Merzumen valley and is 3.1m wide at the hairpin turn..

The position of the bridge crossing the Merzumen - 'Marsyas' in antiquity, a tributary of the Euphrates - was marked on the ground only by rubble in the river. The sites of both this bridge and another whose footings were found by Wagner have now been inundated by the Birecik dam. The route concerned is that treated at number 12 in Chapter 4- part 1. This part of the road was found after discussions with local people and ground research which concluded that the Roman road must have passed inland at this point given the conditions along the river Euphrates itself. The Google Earth photographs shows slightly more information than the Russian KVR-1000 image which was used at the time (1987). The satellite photos helped in preliminary identification of the rough course of this road, but the work involved a process of cross-checking on the ground and then the further identification on the satellite photo of features, such as the zig-zag above, which had been located during field-research with the help of local people. The final map of archaeological features is drawn using the satellite photo as a base and then adding additional features located on the ground.

C) The Roman road north of Amida

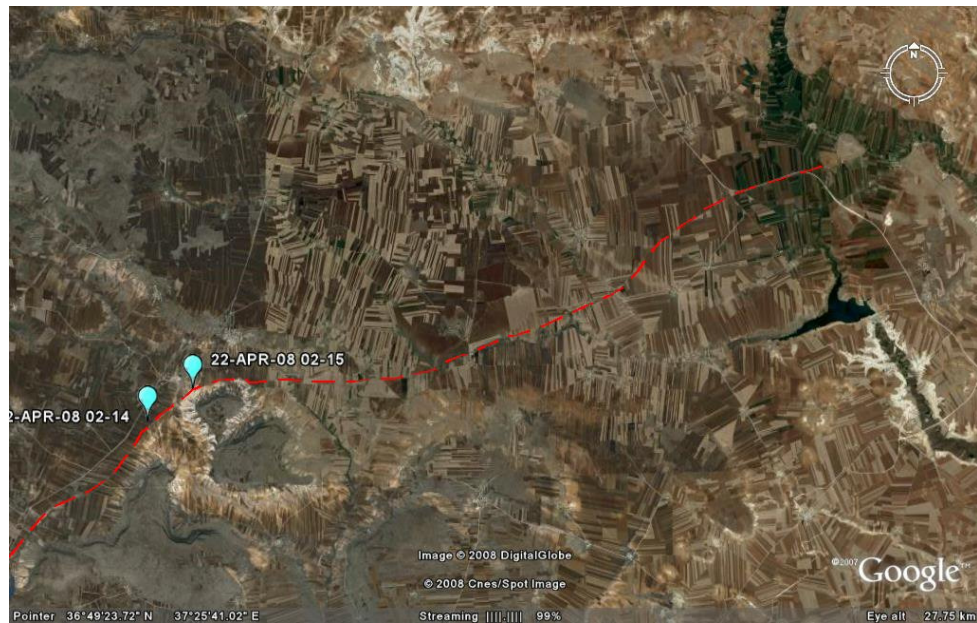


View of the road where it mounts the escarpment. Above: satellite picture from Google Earth; left: ground photo looking towards the Roman bridge of Karaköprü.



The road is visible on Google Earth for its entire course between Amida (Diyarbakır) and the bridge of Karaköprü (18km to the north) and beyond. The bridge was located by chance following a discussion with the mayor of Hantepe, a nearby village. The course of the paved road back to Amida was then traced using Google Earth, but also with some further exploration on foot. The positions indicated along the course of the road with a square are GPS readings: that at the hamlet of Sancar indicates another, much smaller bridge. Heading south is a point indicated above as 'RROADS'; this was the furthest point reached on foot and many paving stones were visible at this point even though they had often been displaced by ploughing. The remainder of the road back to Diyarbakir was again clearly visible on the satellite photograph as a country-lane or field boundary. The road here is part of route 1 discussed in Chapter 4- part 1.

D) Roman road north-east of Kilis



With the assistance of a colleague at the museum of Gaziantep, the person who found a milestone now in the museum was located at the village of Kazıklı in April 2008. He indicated both the find-spot and another point further along the Roman road to the north-east (both GPS readings marked with blue teardrop above - milestone find-spot is Apr 08-02-14); the course of the road was indicated by a sizable bank with many stones from the road heaped along its course, but no paving stones still in place. With the aid of Google

Earth the likely course of the road has been plotted above from a point near Kilis to Tilbeshar, a Bronze Age city 34 km south-west of Zeugma; this stretch probably corresponds to that from the Roman *mansio* of either 'Regia' or 'Ad Serta' to that of 'Ad Zociandem' (see route 9 in Chapter 4 - part 1). The course of the ancient road beyond the second teardrop (08-02-15) has been identified using the line created by field boundaries and lanes along an axis heading east or ENE towards Tilbeshar (the pale patch at the right end of the dotted red line in the photo above).

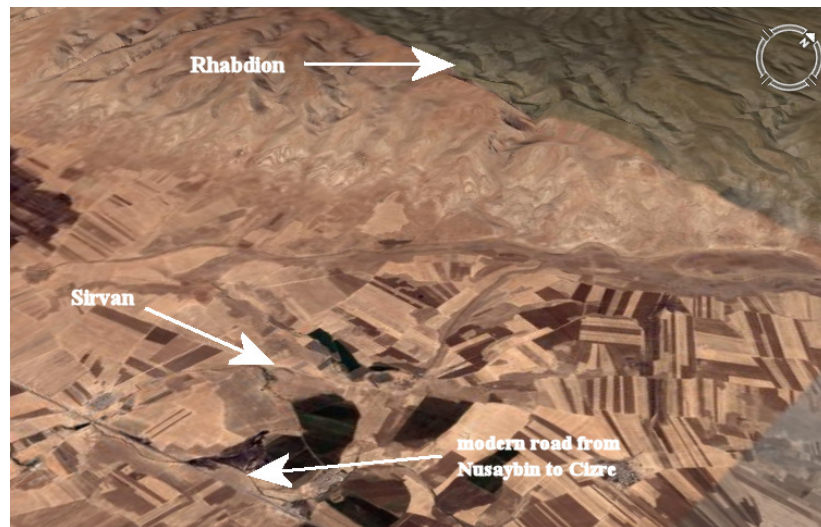
E) Roman fortresses:

i) Bezabde

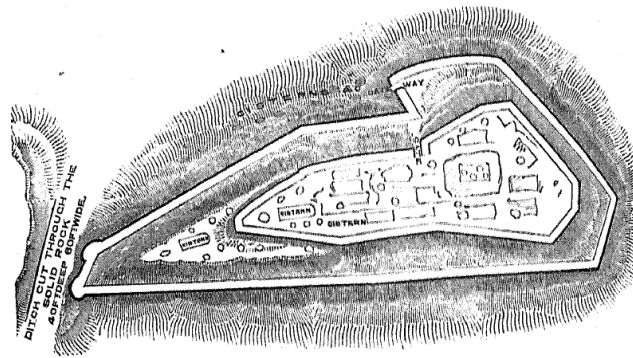


This extract from Google Earth has been tilted so as to show the position of the Roman fortress of Bezabde on the Tigris in relation to the Persian fortress of Finik on the east bank, with steep cliffs behind. The outline of the Roman fortress is clearly visible but the northern part of the fortifications has been eroded by the Tigris. Although the fort had been located by the team of Algaze in 1998, Google Earth has made it possible to see clearly for the first time the outline of the fortress and the position of buildings inside it. By zooming in to a maximum extent it is already now possible to draw a plan of the fortress and its internal structures. Google Earth also allows the position of the fortress in relation to its twin on the north bank of the Tigris at Finik to be clearly indicated and for its strategic importance to be revealed in relation to the river and the highlands of the Tur Abdin to the west.

ii) Rhabdion



The castle of Rhabdion or Hatem Tai Kalesi is not shown on any modern maps. However, its outline was known from the sketch-map published by Consul Taylor in 1865. For information on the fortress, see Gazetteer.



No. 3. Plan of Hatan Tai Castle (ancient Sisauranon).
 N.B.—All the circular marks are cisterns excavated out of the solid rock.

The sketch-map was wrongly thought by him to be of the neighbouring castle of Sisauranon or Sirvan; despite this mistake, it has now been possible to identify clearly the position of Rhabdion using Google Earth and the descriptions of Taylor and of Gertrude Bell¹⁶, even without any visit to the site on the ground. (This is currently impossible for security reasons, but a visit to the hamlet of Sirvan in 2007 and discussions with a local landowner confirmed the existence of Rhabdion some kilometers to the north.) The Google Earth photograph shows – in addition to the fortress itself – interesting structures to the north of the fortress which have not been investigated.

iii) Rhipalthas



The photo above appears to show a late Roman fortress at a point on the river Tigris 16km west of Hasankeyf (see Gazetteer). The site has not yet been visited because it is very difficult to reach by road. It apparently guards a crossing of the river and may be the fortress of Rhipalthas, mentioned in the *Notitia Dignitatum*, which is shown by Dillemann as possibly located at this position (see also fortresses section of Gazetteer under 'Rhipalthas'). Once again, it should be possible to draw a rather accurate plan of the fortress using this photo. Without Google Earth, the fortress would never have been identified: it is not shown in the survey of the river valley conducted by Algaze in 1988 presumably because the fortress is above the level directly affected by the proposed Ilisu dam. (It is also unclear whether his team was able to explore this section of the valley, which is particularly inaccessible.)

Despite the existence for this stretch of the river of high-resolution photography, Google Earth has so far failed to reveal the course of a Roman road following the south bank of the river at this point, although it constituted the border with Persia after AD 363.

No other features likely to be of Roman origin were discovered on the satellite photograph along the section of river from its junction with the Batman Su ('*Nymphius*') to Hasankeyf, although there are references in the sources to the construction by Constantius II to various fortresses along the river apart from Amida and Cephas. Unfortunately the section of the river around Hasankeyf further east is not available in high resolution, but a road has been discovered along a mountain ridge above the north bank during field research; this apparently linked Hasankeyf to a bridge on the next tributary joining the Tigris from the north (Şeyhosel on the Garzan Su) and then continued to a fortress at Tilli, also on the Tigris, this time at its junction with the Bohtan Su. (See bridge 8 in Annex A after Chapter 3.)

Field research

Field research has been extensive, but handicapped in certain respects. In the period 1995 to 2002 relatively easy access to the area around Zeugma was available to me on an official basis as a member of the Franco-Turkish team conducting rescue excavations in advance of completion of the Birecik dam on the river Euphrates. Two visits were also made to Syria, especially to the region of Aleppo and the Euphrates valley.

During annual visits to Zeugma, many points were investigated along the reservoir created by the Birecik dam for a 100 km stretch of the Euphrates up to the Ataturk dam (as well as the 20kms south of Birecik to the Carchemish dam). These visits also made possible an examination of possible routes of the Roman roads along the river as well as the roads leading west to Doliche, north-east to Samosata, east to Edessa, south-east to Harran and south-west to Aleppo and Antioch. Results are briefly discussed in the two articles in *Anatolian Studies* referred to in note 1. Specific finds of Roman roads were the route from Doliche to Samosata (with traces of many small forts at approximately 1-mile intervals), traces of the frontier road along the river (see above for one section near Rumkale), traces east of Zeugma including kerb-stones and a large cistern. These all concern roads whose construction probably dates from the early period of Roman occupation (c. 70-170 AD). Further traces were found only in 2008 of the roads to Zeugma from Cyrrhus and Kilis - following reports of the Roman milestone from Kazıklı (see above); and from Germaniceia to Samosata (near Pazarcik at Ufacikli). Many ancient bridges and forts were found and photographed in the course of these years, but were not at that time the object of specific research. All the routes and bridges concerned are discussed below in chapters 3 and 4.

During the period of the doctoral studentship at Exeter University field research was conducted mainly around the upper reaches of the Tigris in South-East Turkey. But although efforts were made to obtain a permit to study in particular roads and bridges that would be drowned by the prospective Ilisu dam, no such permit was granted. Visits from 2006 to 2008 were therefore made without a research visa and research could only be undertaken under the strictly limited conditions applicable to tourist visas. Most sites could be visited by road and photographed, with their precise location noted by GPS, but

measurement, drawing and detailed research into, for example, the masonry of the ancient bridges, was not possible. Nevertheless, a rather thorough investigation on the ground was undertaken of most of the area discussed in this thesis. Where possible ancient settlements and fortifications were visited and photographed; many more ancient bridges have been located, in particular those mentioned briefly in the survey of Algaze.

Although these visits made possible only brief examinations of the bridges, roads and other sites found, much information was collected. In regard to bridges, size of blocks; existence of cutwaters; slope of carriageway; rough dimensions; and number of piers and arches were some of the features observed. It has been possible with the help of Google Earth to identify, locate precisely and photograph many forts and bridges not elsewhere published. Remains of ancient roads were also found north of Diyarbakır¹⁷ and east of Hasankeyf¹⁸ and some, but not all, of the known ancient towns and fortresses were visited. Details are again to be found in relation to the routes and sites concerned below.

Fieldwork has also been hampered by the existence of a state of severe tension at some times and some locations in south-east Turkey arising from the activities of the PKK. The conflict with the Turkish armed forces has resulted in the presence of large military forces and many checkpoints. Permission to visit individual known sites was not always forthcoming from the local commanders of the 'Jandarma'. In particular, the late Roman fortresses at Çattepe (Tilli) and Hatem Tai Kalesi (Rhabdion) were not reached by me despite several efforts.

For the reasons described, this work can only be considered as a preliminary survey. Full physical and stylistic analysis of the masonry would require a larger team and the full support of the Turkish and Syrian authorities. Ideally, study of the satellite photographs should be accompanied by detailed measurements and photogrammetric analysis of the standing monuments, especially where the survival of the latter is threatened by the construction of dams. Remains were still being discovered by me in April 2008 (when the bridge at Antağ – no.7 in chapter 3 - was first discovered); more time and unhampered access would certainly allow for further remains of bridges, settlements and roads to be identified. However, it should be noted that the remains of at least one of the bridges described below (Habeş; number 19 in annex A) were destroyed by the Birecik dam,

completed in 2002. If the Ilisu dam is indeed constructed as planned (completion in 2013?) destruction of the remains of several of the other bridges, roads and fortifications is likely.

* * * *

Despite the limitations described above, the approach adopted has had advantages. This preliminary survey on a broad scale and covering a large area has allowed a picture to be presented of the road network as a whole. While architectural drawings and technical analyses of the bridges have not been undertaken, it has been possible to visit many sites in person which have been very little frequented by others. In several cases, Miss Gertrude Bell was the last person with an interest in archaeology and ancient history to have visited and described several of the places mentioned below, such as Fafi; her two visits took place in 1909 and 1911 and did not allow her to reach more than a few of those places here mentioned. More recently, some specialists such as Gernot Wiessner, have done more detailed research, especially on the Christian buildings of the Tur Abdin, but there have been very few recent visitors who have been able to go beyond the principal tourist destinations, such as Mardin; no synthesis covering roads and fortresses in the larger area concerned by this thesis exists elsewhere, other than the information included in the most helpful '*Eastern Turkey: an architectural and archaeological survey*' of Tom Sinclair (1989). The latter work covers a broader area both in terms of geography and historical periods. Necessarily, the information included on the late Roman period is incomplete.

Direct personal knowledge obtained for the area has made possible both descriptions of many sites not elsewhere referred to and assessments of the descriptions of others such as Consul Taylor, Mark Sykes and Sinclair himself (see below). It has also established a basis of knowledge concerning roads, bridges and fortifications which may serve further research. Given the difficult security situation, it must remain doubtful whether any further research on a large number of places described will be possible in the near future.

Filed-work conducted by others: Apart from the invaluable discussion of ancient routes by Dillemann, published in 1962, which includes references to various remains of Roman roads and bridges found by others, especially in what is now eastern Syria, some details of

the Roman road network in north-east Syria are provided by Poidebard who visited the region – especially the Syrian sections - and photographed many remains from the air¹⁹. Other than this, no detailed or consistent search has been conducted for Roman roads and bridges in this region. Other chance finds of roads and bridges further north in Turkey were made by Taylor, the British Consul in Diyarbakır in the mid-1800s, by Chapot at the turn of the 19th century²⁰ and by other travelers passing through the region such as Von der Osten²¹ and Sykes²². More recent travellers such as Gertrude Bell, Maria Marlia Mango²³ and Gernot Wiessner²⁴ have concentrated on the religious architecture of the Tur Abdin, which is not considered here. The travellers to the region whose accounts I have consulted are listed in Annex J. Starred names indicate those who have contributed material used in the thesis.

Archaeological work concerning the late Roman period has been infrequent. Relevant studies are listed in Annex H.

* * * * *

Maps constitute an important part of the discussion which follows. Those included with the text are for the most part drawn by me using the programme MapMaker Pro and, as a base, digital versions of the 1:500 000 ‘Tactical Pilotage Charts’ for the region (see annex K). Although accurate at this broad scale, the charts do not provide more than summary information in regard to the topography. Rivers and contours at 250-foot intervals are indicated together with information in regard to the larger settlements and main roads. Although Turkish military maps down to 1:20 000 exist, these are rarely accessible. Maps below 1: 500 000 are not available to the public and certainly not in a digital format. In any case, for this thesis, its broad geographical scope makes 1: 500 000 an appropriate base scale, especially for regions crossing international borders. Those in the text below show their approximate scale²⁵. Superimposed on the base map, some contour lines, water courses and modern settlements were drawn, but ancient features - and in particular the course of the roads - has frequently been estimated in relation to the topography and other features shown, using my personal knowledge of the area.

In regard to the reports from nineteenth century travellers, the mapmaker Richard Kiepert had already indicated on his series of maps of Asia Minor the assumed course of their routes, together with much else of antiquarian interest. The information then available for ancient settlements, roads and bridges was included on the sheets for Malatya, Diyarbekir, Haleb and Nsebin (Nisibis) of his *Karte von Kleinasien*, published in 1911. This information was an important input into the preliminary study of potential sites for bridges and way-stations along the Roman roads. In some cases important sites mentioned by travellers such as Consul Taylor have still not been visited by me, often because of the security situation but also because they are difficult to find or have been destroyed by dams. But, on the whole, it has been possible to locate the sites mentioned by such travellers using the maps of Kiepert and the modern maps listed in Annex K, in conjunction with Google Earth.

One serious difficulty in using the available maps has been the large number of versions of place-names applied to the same spot. The only original topographic maps available to me (at a scale of 1:100 000) have been Russian and place-names on these maps are of course in Cyrillic script. But many village names have been changed in recent decades; a fact which can involve a laborious correlation of the old names, which may still be in local use, and the official names. Other names used by early travellers may simply be unidentifiable because of the process of population displacement and resultant name changes over the last 200 years.

Chapter 2 : The sources

A wide range of authors is cited in the text which follows. However, although many and varied, the written sources for the history of the late fourth to sixth centuries in the eastern Roman empire are still insufficient to give anywhere near a complete picture of life in the provinces concerned. As discussed below in Chapter 6, the economic and social life of these provinces is particularly hard to decipher. Sources for Sassanian history are exiguous (mainly Tabari, who wrote long after the events which he describes).

In some areas of the Roman Empire the study of inscriptions and the results of archaeological excavations and surveys are able to fill in gaps in the historical record. This is not yet really the case for the areas concerned here; annex G briefly reviews the little archaeological work which has so far been undertaken. The few inscriptions from the area are discussed in the Introduction.

The ancient written sources for the late eastern Roman Empire and its Persian neighbour fall into several groups. These are indicated below, followed by a discussion of the main texts used in this thesis. However, some categories overlap, in particular writers of chronicles and ecclesiastical history. I have indicated either the period of history which each writer covers or their own period of activity. The writers which I have been able to consult include the following (L=Latin; G=Greek; S=Syriac; A=Armenian; Ar=Arabic):

Geographical:

Ptolemy (G - 2nd century AD) and the author of the '*Periplus of the Erythrean Sea*' are of earlier periods but contain information useful here. The '*Itinerarium Antonini*' (L - 3rd to 4th century AD) and the '*Peutinger Table*' (L- 4th to early 5th century), as well as the anonymous '*Expositio Totius Mundi et Gentium*' (L - 4th century AD), are essential tools, discussed below, as are the '*Notitia Dignitatum*' (L - c.AD400 for eastern empire), Hierocles (G - before AD 535) and George of Cyprus (G – AD 600-610).

The *classicising historians* who wrote secular history:

Ammianus Marcellinus (L - covering in particular the fourth century); Procopius of Caesarea (G – ob. AD 554; see below); Agathias (G – history of AD 552-558); Menander Protector (G – history of 538-582, but only from fragments); Theophylact Simocatta (G – fl.c.AD 630). (The *Historia Augusta* is also used at one point for Verus' Parthian campaign.)

The writers of *chronicles*: Pawstos (A – history to AD 384 but fl.c.AD 450); Moses Khorenatsi (A – c.AD 450); Malalas (G – c.AD 491-578); Joshua the Stylite (S – history AD 502-506); anonymous author of *Chronicle of Edessa*, (S - c.540); John of Ephesus (S – c.AD 507-586); Evagrius (G – c.AD 536-600); the *Chronicon Paschale* (G to AD 627); Sebeos (A – fl.c.AD 645); Theophanes (G - c.AD 758-817); Tabari (Ar – AD 838-923); Michael the Syrian (S - 12th century but using earlier material); Anonymi auctoris Chronicon ad annum 1234 (S).

The writers of *ecclesiastical history*: Socrates Scholasticus (G – born c.AD 380); Theodoret (G – 'History', c.AD 393-457); Zachariah of Mitylene (S – history of AD 450-491); Dionysius of Tel-Mahre (S – also known as 'Chronicle of Zuqnin', fl. C. AD 785).

Lives and hagiography: Philostratos (G – c. AD 170 to 247); Theodore of Sykeon (G – ob.AD 613); John Moschos (G – also 'geographical' ob.AD 619); Theodoret (G – 'Monks of Syria'); and once again John of Ephesus.

Other: Codex of Theodosius and Corpus Iuris Civilis of Justinian (L); Libanius (G – c. AD 314-394), although a writer of the fourth century his letters and orations provide information sometimes relevant to later periods; John Lydus (G – AD490-c.570); *The anonymous Byzantine treatise on strategy* (G), c.540.

The 'narrative sourcebooks' on the Roman eastern frontier and the Persian wars (parts 1 and especially 2), compiled and edited by Greatrex and Lieu, are also a crucial tool and include extracts from other authors which I have not always been able to consult in specific editions.

The Peutinger Table and Antonine Itinerary

The discussion in Chapter 4 below of the Roman roads and their course through the eastern provinces relies heavily on a controversial source, the *Peutinger Table* (PT). The PT is inaccurate as a world map and does not contain information which could have been directly used by travellers, especially given its extreme elongation. However, much of the information is seemingly based on various itineraries, that is, lists of place-names or stopping places indicating the distances between them. Such itineraries were evidently created to be used by travellers, although not necessarily for the ‘general public’. While it has been shown that the information in the PT in regard to distances is frequently unreliable, apparently because of errors introduced by copyists, for the place-names themselves – at least for the eastern provinces – independent corroboration for many of these names is provided by the Ravenna Cosmographer. Some common sources may have been used but the documents are sufficiently different to act as controls on each other²⁶.

The *Peutinger Table* itself seems to have undergone several revisions but is normally considered to have been last updated in regard to the eastern empire at the end of the fourth century²⁷, i.e. about the same time as the eastern portion of the *Notitia Dignitatum* (see below). In a critical article of 2005²⁸, Salway has accepted the antique origins of the Table; he draws attention to the recently discovered notes on a similar map – now destroyed – last seen in the bishop’s palace in Padova at some point in the last two decades of the fifteenth century. He points out that the representations of the four great cities of Rome, Constantinople, Antioch and Alexandria are compatible with any date between the mid-fourth and mid-sixth centuries, but in any case should be placed after 330 when Constantinople became capital of the Roman Empire.

The purpose of the Table remains obscure. Even the most eastern areas use Latin as a base language and not Greek, possibly indicating that the entire map was intended for use in a western context. It has recently been claimed as a part of the decorative backdrop to the apse in a basilica or audience hall in the palaces of the later Roman emperors²⁹. In this case, the function of the map would have been ideological, reinforcing the claims of Rome to world empire, rather than informative. One such basilica is still standing in Trier. Talbert has suggested that the PT was displayed with Rome at the centre (allowing for the

disappearance of three sheets from the left-hand end) and served as a reminder of the glory of the Empire. However, given the very detailed nature of the information included on the PT, rather than a role as decoration for the apse of an audience hall, its purpose seems more likely to me to be that of a functional work of reference for an imperial court: those responsible for sending out messengers from the court to outlying provinces would need to provide the messenger with instructions and to calculate how long the message might take to arrive. The dispatcher of a messenger would have gone to the map, possibly affixed to a wall, and then drawn up a separate list of places and distances to be included in the instructions handed to the messenger.

But the discussion on the purpose of the document does not invalidate the accuracy or importance of the material which it contains, since this is apparently drawn either from itineraries or else from the '*tabellaria*' erected in several places throughout the empire³⁰. Such 'documents' were indeed for the use of travellers and therefore needed to be accurate. The best-known surviving collection of itineraries is the Antonine Itinerary (AI), possibly composed during the third century for the emperor Caracalla; the most detailed *tabellarium* or 'stadiasmos'³¹ is that found recently at the port of Patara, the main entrance-point to Lycia³², which dates from AD 45 in the reign of the emperor Claudius. Only the first of these is directly relevant to this thesis and it provides information for the region discussed here only as far east as Edessa. But it cannot itself have been used as a source for the PT, at least in this region, since the routes treated are different.

For Mesopotamia, Osrhoene and Euphratesia the routes shown in both the PT and the AI are examined in Chapter 4, part 1. There are many places mentioned which have still not been satisfactorily identified, but some of the places shown are not likely to have been towns but rather inns (*mansiones*) maintained by the state, although this cannot yet be proven³³; the smaller *mansiones* shown on the PT or mentioned in the itineraries may have left few material traces visible on the ground today. The main omissions from the PT in the provinces concerned here are the city of Amida, whose position is indicated by a tower symbol but no name (possibly an error by an early copyist), and the road known from the AI to have crossed the Euphrates at Ceciliana (east of Hierapolis/Manbij). There are several other confusing routes shown which bear little relation to reality on the ground (for example, the winding route shown south of Edessa to 'Tigubis', which is in fact likely to

have been on a straight line from near Batnae to Singara - see route 6 in Chapter 4, part 1); the fact that Ressaina is also portrayed as lying to the north of Edessa (when in fact it lies 120km ESE) effectively precludes the idea that this was a map intended directly for use by travellers, as was claimed by Konrad Miller³⁴. But the mention of Harran twice (as 'Charris' and 'Charra') supports the contention that the PT was drawn up using data from different itineraries which overlap at some points. Little reliance can be placed on the distances provided in either the PT or the Antonine Itinerary (AI) because frequently differing figures are given even for a similar or the same route.

An interesting feature of the PT is that no frontier is shown to the east, despite the fact that several of the routes continue to Nisibis and beyond, i.e. across the frontiers of the empire after AD 363. The name 'Persia' does, however, appear in large letters beginning at a point between Hatra and Nisibis. Possibly this indicates an awareness of the frontier, but there is no attempt to indicate between which cities Roman territory ended and Persian territory began. (There is no frontier shown to the north of the Empire either, but the roads shown in the east extend far beyond the frontier with Persia, unlike the case of other borders.)

I believe that the author and revisers of the PT must have used itineraries stored in a library originally used by an imperial court, but possibly not that of Ravenna, since the sources used by the Ravenna Cosmographer were different (see below). If the original documents did indeed have some form of official status, then the stopping places indicated are also likely to have been official inns or *mansiones* used by the *cursus publicus* and the route shown was probably an important road. The role of the *cursus publicus* and the *mansiones* is discussed in chapter 4, part 3. It is therefore assumed in this thesis that the routes shown in the PT correspond to the principal Roman roads of the region. However, there are cases where a road must have existed but is not shown on the PT (e.g. Antioch-Germaniceia – see route 10 in Chapter 4, part 1) and others where the routes indicated in the AI and the PT differ (e.g. between Zeugma and Edessa – route 3)³⁵.

Several photographs of extracts from the PT are included in the text of Chapter 4 and for each route described the place-names and distances shown on the PT and AI are provided.

The Ravenna Cosmographer

Although in its present form this document is known to have been compiled by a monk at Ravenna during the seventh century, it is likely that it is also based on earlier itineraries; it comprises simply lists of place names grouped by province or region without distances indicated. The order of names, however, often indicates that the author was transcribing them either from a map showing routes, like the PT, or else itineraries such as the AI.

There are many errors of transcription. For the eastern provinces the compiler often says that he relied on ‘Castorius’, who has been presumed to be the author of an early version of the Peutinger Table³⁶. However, there are names here which do not correspond to the PT and others which offer a different spelling. Given the frequency of errors by copyists for both documents, it is entirely possible that the spellings preserved by the Cosmographer are in some cases more accurate than those of the PT.

It is evident, however, that the Cosmographer had access to sources additional to a precursor of the Peutinger Table since many more names are cited than those which appear in the PT (see Annex B). As in the PT, there are large numbers of names for areas beyond the Roman Empire to the east, including names from three districts of ‘India’ (‘India Serica Bactrianis’; ‘India Dimirica’; and ‘India maior’ or Elam), from ‘Parthia’, from ‘Arabia maior’, from ‘Hyrcania’ and from two Medias – Maior and Minor. Once again, I would suggest that the source for these names is likely to have been itineraries, in this case preserved in the library of a monastery at the time of writing but originating from some official depositary.

The place-names occurring in the Ravenna Cosmography for the regions examined and listed in annex B are of interest as a control on the PT; they also offer an indicator of the level of geographical knowledge of this region then prevailing in the west, although it must be doubtful both whether the itineraries used by the Ravenna Cosmographer were in fact used by westerners and whether his own work was widely read.

The Notitia Antiochena

This short list of bishoprics for the patriarchate of Antioch was compiled in AD 570 by - or for - Anastasius of Antioch. Honigmann studied the various versions, including one in Syriac, and published a complete edition in *Byzantinische Zeitschrift* in 1925³⁷, which includes a useful sketch-map showing the locations of known bishoprics, reproduced with the text at Annex C.

There are a number of place-names otherwise unknown. It is interesting that the ecclesiastical organization does not always correspond to the administrative units: Euphratesia seems to be wholly included under the metropolitan of Hierapolis (although the metropolitan of Sergiopolis/Resafa also covers the cities of Zenobia and Oresa, which have all three sometimes been reckoned to lie within Euphratesia). The province of Osrhoene seems to correspond to the cities under the ecclesiastical jurisdiction of the metropolitan bishop of Edessa, but for Mesopotamia there was a metropolitan bishop at Dara as well as the one in Amida. The latter's 'territory' also seems to have included cities outside the province of Mesopotamia in the various Armenian provinces established by Justinian (Belabitene, Citharizon, Arsamosata, Ingila (Carcathiocerta), as well as Martyropolis and Cepha.

The places mentioned are a further control for cities mentioned elsewhere, since every city must have had its own bishop. The fact that there are a number of otherwise unknown names confirms the independence of this Notitia as a source of geographical information.

Hierocles and George of Cyprus

For the fifth and sixth centuries these two writers provide the most complete and consistent source of place-names. Hierocles was a Byzantine geographer of the sixth century to whom is attributed the work entitled *Synekdemos*, which contains a table of administrative divisions or 'eparchies' of the Empire and a list of 912 cities throughout the empire. The

work is dated by its most recent editor, Honigmann, to the reign of Justinian, but before 535. George of Cyprus is known for his *Descriptio Orbis Romani*, written in the decade 600-610. This duplicates much of the information in the ‘Synekdemos’, but adds for upper Mesopotamia a large number of names of fortresses. George’s work is limited to the Diocese of Oriens and to Egypt.

The two writers are briefly mentioned in Appendix 3 - ‘Dioceses and Provinces’ - of AHM Jones, *Later Roman Empire* (pp1451-1461). Jones believed that Hierocles obtained his information from a document of the latter part of the reign of Theodosius II, but that there had been some later revision. He also considered George of Cyprus to have written his work at the beginning of the reign of Justinian, i.e. some 20 years later than the estimate of Honigmann.

The relevant extracts from both authors are included here at Annex D. It is apparent that for the three provinces examined here the names of cities are the same.

Expositio totius mundi et gentium

All though the text is corrupt, the author of this work is considered by the editor (Rougé) to have been a merchant of Tyre and to have possessed first-hand knowledge of many cities of the east and therefore to provide information which may be relied on for the region concerned by this thesis. The work is dated by the editor to AD 359, but this is uncertain³⁸.

His description of the cities of Mesopotamia (section V) contains only about 14 lines; it makes several references to trade and business, which are referred to especially in Chapter 6 below. He mentions Nisibis and Edessa (twice) but not Amida, which may have been intended in place of one of the references to Edessa. The details provided are, however, sparse and far from offering a complete picture of the region. The manufacture of specific products is not mentioned for individual cities of this region, unlike for many Syrian cities. The term Mesopotamia seems to be used to include both the provinces of ‘Mesopotamia’ and ‘Osrhoene’ (see Annex F).

The description of Syria which follows (section VI) is longer and provides more information, but unfortunately not for 'Syria Coele', as he describes it, rather than *Euphratesia* which was the name given to this province from some point during the reign of Constantius II (337-361)³⁹.

The Notitia Dignitatum

This document (ND) has been defined as the 'official handbook of the civil and military officials in the later Roman Empire'⁴⁰ and the text indeed shows that the ND was held in the imperial chancery (the office of the *primicerius notariorum*). Its condition is incomplete and it appears to be partly an abstract, partly an exact transcript of an official register. The only manuscript (*Codex Spirensis*) dates from 1551. In regard to the eastern empire the most recent information included dates from AD 397 but much concerns the earlier fourth century. The first part of the ND gives a list of the officials in the Eastern Empire: "*Notitia dignitatum omnium tam civilium quam militarium in partibus Orientis*"; the second part gives a corresponding list for the Western Empire. The insignia of the officials and of the army units are shown by drawings. Jones discusses the ND in some detail in Appendix II of the *Later Roman Empire*⁴¹. He believed that the armies of the Eastern frontier provinces remained in the Notitia '*...much as Diocletian left them*'.

New editions of the ND have been promised for some time⁴²; Seeck's edition (available on the Internet) dates from 1876 and has been criticized by Brennan as being too tidy. But Seeck drew attention to the fact that even the original of the ND must have been severely corrupted; subsequent copies left out names and included whole lines in the wrong place⁴³. Brennan has also drawn attention to the pitfalls of using the ND which, as Jones also confirms, was subject to many revisions and contains some evident mistakes⁴⁴. According to Brennan, it was compiled less for functional than for ideological purposes; thus he claims that it represents '*...the new institutional political culture of the later Roman empire*' and embodies the militarization of the empire carried out by Diocletian. Its preparation would have been a part of the 'construction of authority' carried out by imperial bodies in the wake of the civil wars and barbarian invasions. In this respect, there are evident parallels with the claims of other commentators on the Peutinger Table.

However, for the purpose of this thesis, the ND is important mostly because of the information provided for the location of military units during the fourth century. Even if incomplete, there is no reason to doubt the accuracy of what the ND tells us on this subject. It states, for example, that *Cephas* (see Gazetteer - now Hasankeyf) was the base of the prefect of the Second Parthian Legion. It is argued below that the border even after AD 363 followed the Tigris to the east of Hasankeyf and then south to a point not far from Bezabde. The presence of the legion at Cephas may be taken as supporting evidence for this idea. The omission of the fortress at *Bezabde* (see Gazetteer) from the ND may also constitute proof that it dates from after AD359 when Constantius II lost the fortress/town to the Shapur.

The ND also refers at Section XIII (*'Insignia viri illustris comitis largitionum'*) to the *comes commerciorum*. A discussion of this point is included in section 2 of Chapter 6.

An extract including the relevant sections is included at Annex E.

Procopius of Caesarea

Of Procopius' three great works it is *De Aedificiis* or the 'Buildings' which is of most concern for the thesis, but there are also many references in what follows to his *Persian Wars* and to the *Secret History*. All three are now recognised as 'genre' works applying particular standards which sometimes affect adversely their accuracy and usefulness to modern historians⁴⁵.

Book 2 is devoted to Mesopotamia and Syria, that is, about one sixth of the total length of the *Buildings*. The information included is of particular interest for this thesis insofar as he includes the names of many cities whose fortifications were strengthened – apparently in the reign of Justinian, but also of other fortresses, some of which have still not been identified⁴⁶. Procopius attended many of the events which he describes in the conflict with the Persians on the eastern frontier, especially the battle of Dara in AD 530. Although his geographic information is for this reason rather complete for north Mesopotamia, he cannot have visited many of the fortresses which he lists in the 'Buildings'.

The 'Buildings' is a work of panegyric; Procopius ascribes to Justinian many building projects which are now thought more likely to have been constructed in the reigns of his predecessors, in particular, Anastasius. The discovery that work at Dara was wrongly ascribed by Procopius to Justinian when in fact it was carried out in the reign of Anastasius has led some commentators to invalidate all of Procopius' information concerning this region⁴⁷. Once again, there is also a strong possibility that the work constitutes part of an ideological exercise in building morale by displaying an important part of the '*renovatio imperii*' undertaken by Justinian in this and other areas. However, in the absence of detailed comparative studies, there is little reason to doubt the validity of most of his detailed information, even if in some cases the building work concerned was carried out by the predecessors of Justinian. His descriptions of Dara, Martyropolis and Zenobia, for example, have been shown to be accurate⁴⁸.

Procopius says towards the beginning of the *Buildings* that Justinian strengthened the 'Roman domain' by a multitude of soldiers and that "... *by constructing strongholds he built a wall along all its remote frontiers*"⁴⁹. This was an exaggeration but in Book 2 he goes on to list the cities whose walls were strengthened and the forts reconstructed. He also describes Amida, Dara, Sisauranon (and the road to Rhabdion discussed in Chapter 4.1 below) and, in Chapter 4,

"...*all the other forts which lie in the mountains, forming a line from there and from the city of Daras all the way to Amida, namelyand all the others which have been there from ancient times, and which had previously been fenced about in most ridiculous fashion, he rebuilt and made safe, transforming them to their present aspect as to both beauty and strength, and making them impregnable, so that actually they are thrown out as a mighty bulwark to shield the land of the Romans*".

Many of the places named by Procopius in this and subsequent sections have not been identified but he provides information, which taken together with the other fortresses already mentioned in the *Notitia Dignitatum* and George of Cyprus, allow one to conclude that the area was heavily militarised during the sixth century. The nature of this militarisation and the consequences for the region are discussed in chapters 5 and 6.1 below. Procopius' conclusion – that Mesopotamia had been made "...*manifestly inaccessible to the Persian nation*" - is not borne out by subsequent events and the loss of Dara in the reign of Justinian's successor, but it is clear that a major effort was undertaken

to defend the region through fortification. Procopius himself recognises that this building work was undertaken as part of a broad project to protect the area against the Persians.

Whitby points out that Procopius was not seeking to provide a gazetteer of all defence installations, nor to analyse Rome's defensive strategy, nor to highlight the chronological development of Roman fortifications⁵⁰. Some places such as Dara are treated by Procopius in great detail, but others such as Amida receive only a very summary reference. Certainly, a detailed comparative study of the standing remains of the fortifications, some of which are described in the gazetteer of this thesis, would be a necessary basis for gauging their importance. But, as Whitby mentions, in AD 606 Khusro II in his successful attacks on Roman Syria and Cilicia was held up for a long period by the need to besiege not only Dara, but also the fortresses of Cephass and Mardin. The defences described by Procopius (and the *καστρα* listed by George of Cyprus) were real enough and for most of the sixth century constituted an effective barrier to Persian invasion and raiding. The Persian attack on Syria in 540 and the loss of Antioch were major disasters, but in this case the Persian attack was through the Euphrates corridor and the fortifications further north were not tested⁵¹.

In some other regions, Procopius also refers to the construction of roads and bridges. This is not the case for Euphratesia and Mesopotamia. However, he does mention roads and wagons at various points in the *Wars* and suppression of part of the public post in the *Secret History*. These aspects are discussed below, especially in Chapter 4. Such references constitute valuable information which is used wherever possible in this thesis; the works of Procopius do not however provide any basis for assessing the economic or strategic importance of the road network as such.

Chapter 3 : Bridges

The principal structures still standing which indicate the course of ancient roads are bridges. Twenty-four stone bridges in or near the Roman provinces examined here seem likely to date from the Roman period and are described in detail below at Annex A. No detailed analysis involving photogrammetry or careful measurement has been possible for the reasons described in Chapter 1 above. Several are in any case only poorly preserved.

The bridges cannot be divided into groups according to period of construction: many are likely to have been rebuilt, possibly on several occasions. Several of those found west of the Euphrates appear in their current condition to be from the Severan period, i.e. the first half of the third century AD, but those to the east of the river, while generally later, may also have had earlier predecessors in several cases. Although of great interest as individual artefacts, in this thesis the main concern has been their role in identifying the course of the ancient roads and the evidence which they represent for public investment during the Roman period to facilitate traffic. They are therefore presented after the general discussion below, as individual constructions grouped by river, but in the context of the road network, which is then described in the following chapter. The presentation of each bridge includes a reference to the road which it carried.

General considerations

The many surviving ancient bridges were constructed in the region despite the dryness of the climate and the small number of strongly flowing rivers other than the Euphrates and Tigris. Evidently, these are stone bridges and no remains of bridges made of wood are known, although pontoon bridges in various periods did cross both Tigris (for example, during the medieval period at Mosul) and Euphrates (for example, those at Zeugma and Capersana, cut to prevent the advance of the Persians in AD 360⁵²). Stone bridges are remarkable not only for their longevity but also for what they represent. Even today construction of a bridge is a major and expensive investment. For ancient societies they must frequently have constituted the most visible and impressive constructions in areas which might otherwise be wholly devoid of large buildings, although they do often seem

originally to have been accompanied by ‘caravanserais’ or hostels for travellers which may also sometimes have been big public buildings. Only wealthy empires could normally carry out such work, because of its intrinsic expense and because of the organisational and technical skills required. Labour and materials may also sometimes have had to be brought over long distances.

In this region, there is often no direct evidence to show who was in fact responsible for bridge construction. We know that emperors were not the only constructors of stone bridges in the Near East; Theodoret of Cyrrhus declares that in his role as bishop for a see covering a large part of *Cyrrhestica*, and therefore of ‘Euphratesia’, he constructed bridges. Two stone bridges of this period are still extant near Cyrrhus (see 23 and 24 below)⁵³. Bishop Nonnos of Edessa is also stated to have built bridges⁵⁴. Presumably, therefore, promoting trade and facilitating travel was an important function for community leaders such as bishops during the later Roman Empire, as well as for emperors. Indeed the responsibility for financing and construction of public works, whether fortifications or bridges, is frequently unclear, as is the context and purpose⁵⁵. In particular, it is not evident to what extent civil authorities and bishops acted on the instructions of the imperial government’s representatives. Evidently, the bridges near Cyrrhus were not constructed for military purposes and this is likely to have been true for others. But there is little evidence of a specific responsibility imposed by the Late Roman state on civic authorities to improve infrastructure for economic reasons either, even if this must frequently have been the motivation for such building works.

West of the Euphrates, there are inscriptions associated with bridges of the early empire on the Cendere and the Kara Su (nos.16 and 19 in the annex below) which indicate that local cities paid for the former and that locally-based legions were responsible for the actual construction of both. Tile stamps with the name of one of these legions (*Legio IV Scythica*) have also been found close to the Roman bridge of the Kara Su near Süpürgüç (no.18), while a brief inscription in a quarry above the nearby bridge at Habeş (no.19) indicates construction by the same legion⁵⁶. For later periods, on the other hand, the role of the army is rarely attested: as in the case of the bridges of Cyrrhus, a predecessor of the Ongözköprü at Diyarbakır (no. 3) is stated in a Syriac chronicle to have been constructed by the bishop of Amida near the end of the fifth century. In other cases written evidence is absent and

only indirect evidence such as the likely date of the accompanying road or else stylistic criteria can suggest the probable authority responsible.

In Turkey and other modern countries of the region ancient bridges are still treated with considerable respect and sometimes become the object of efforts to preserve and refurbish them, even if a modern bridge has been built alongside. Unfortunately such efforts may cause major changes in their appearance and do not always result in restorations faithful to the original. The ancient bridges of the region are however for the most part in ruins and may not have functioned for many centuries, although some seem to have remained in use well into the 20th century. One in particular – that near Kahta on the river Cendere (no.16 below) – is still used by modern vehicles even today and is substantially unchanged. A tractor is also shown in a photograph below crossing one of the bridges near Cyrrhus (no.23).

Many of the ancient and early medieval bridges which are still visible must have been built for wheeled transport because their width substantially exceeds that needed for pack-animals; they may be much larger, for example, than Ottoman pack-horse bridges of which examples also remain in this region⁵⁷. The skills and technology required for the construction of large bridges also existed in the early Middle Ages, especially during the Seljuk and Artukid periods, but such skills then seem later to have fallen into disuse and not to have been recovered until modern times. In general, the width of the bridges must be related to their carrying capacity in terms of traffic; the wider the bridge the higher the volume of traffic and, presumably, the more complex and prosperous the economy of the region served. This implies of course that the economic development which required large bridges was more advanced in the late Roman and early medieval periods than it was in later periods lasting right up until the nineteenth century.

Despite the hazards of crossing large rivers by fording or in small boats, large fixed bridges have hardly been constructed in the region since the Middle Ages. Some have in fact only been put in place across the Euphrates in recent times; the bridge between Urfa and Gaziantep at Birecik - the only fixed link for several hundred kilometres of river between Malatya and the Syrian border - was constructed in 1956.

Many famous early medieval bridges are to be found in Anatolia to the north of this region⁵⁸. In the provinces concerned here, although large bridges may frequently be Roman, those at Hasankeyf (no.5) and Memijkan (see after no.8) are known to be of the Artukid period (11th and 12th centuries AD). They are cited here below when there is good reason to suspect a Roman predecessor. The ruins of the bridge at Köprüköy (no.6) may also be from the Artukid period but the bridge lies on a route probably developed by the Romans after AD 363 and the loss of the province of Arzanene to the Persians. Means of dating bridges are discussed below but none is reliable unless documentary evidence or inscriptions are available.

Purpose of bridges

Bridges may in themselves constitute major pieces of evidence both for trade and for investment by public authorities to support that trade. The big Sangarios bridge of Justinian⁵⁹ in western Anatolia, which dates from around AD 560, seems to have been constructed as part of a series of bridges and other infrastructure works designed to facilitate trade and the transport of agricultural produce to the capital⁶⁰. It is, however, true that bridges may also be constructed for purposes other than facilitating the passage of commercial traffic. Military needs could have been at the origin of decisions to make such major public investments and military engineers were no doubt frequently involved in their design and construction.

There are however strategic considerations which militate against the construction of large stone bridges, especially in frontier areas. Firstly, an army would not be expected to cross major rivers regularly in a frontier zone, if the rivers concerned constituted an international border. Any permanent bridges would constitute an invitation to raiding by the enemy and outright invasion. In order to cross rivers behind the border, military supplies being brought to the fortresses near the frontier might need stone bridges and good roads, but only if the border zone was a permanent feature which could justify investment in permanent infrastructure.

Crossing a major river on the frontier for military purposes such as a raid would not normally require construction even of a fixed wooden bridge, such as those known to have

crossed the Danube⁶¹; we know that armies in antiquity frequently crossed the Tigris and Euphrates by pontoon bridges. Pontoon bridges might also be preferred because a fixed wooden or stone bridge might not cope with the rises in water level associated with spring flooding. Much of the damage done to the ancient bridges of the area seems to have been the result of such natural causes rather than deliberate destruction⁶². But any major construction project attested by the ruins of an ancient bridge – even for a fixed wooden bridge – implies a commitment to crossing the river concerned over a period of years and surely not for a single military campaign, for which a temporary pontoon bridge would normally have sufficed.

Both on the main streams and on the tributary rivers flowing into the Tigris and Euphrates stone bridges are likely to have been more frequent in this area compared to fixed wooden ones because of the shortage of good timber for construction, although the military on both sides certainly must have obtained some large timbers for the construction of siege engines and ballistae. A fortunate consequence of this reliance on stone for construction is the preservation of evidence for roads and trade routes throughout the Middle East, although such bridges are rarely still preserved in their entirety.

Evidence of bridges in frontier zones, even when ruined, is extremely important since such remains constitute fixed points indicating the course of roads, which are also likely to have been used for non-military purposes for the reasons explained above. Some of these ancient roads and bridges are mentioned by Louis Dillemann⁶³ and a few are referred to in chapter 4 below. Others have been located only recently, especially in the course of archaeological surveys associated with the construction of dams on the Tigris and Euphrates. All of these and in particular those visited by me are discussed below.

Dating the bridges

As indicated above, the presence of inscriptions is rare and in many cases dating has to rely on considerations of style and methods of construction. Stone bridges in frontier zones are likely to have been constructed when conditions were stable and especially when a programme of administrative re-organisation and road construction was under way such as occurred in north Mesopotamia and Osroene in the times of Septimius Severus and

Constantius II. Justinian also reorganised the administration of the region, in particular of Armenia, and a large-scale rebuilding campaign is attested by the *Buildings* of Procopius, although many of the works which mentions are now ascribed to the predecessors of Justinian, as discussed in Chapter 2.

Unfortunately, for the provinces examined here Procopius does not refer to bridges, although he mentions a large number of works of fortification. Since bridges, such as that over the Sangarios in western Anatolia, are mentioned by him elsewhere, it might be concluded that few of the bridges described can be claimed to date from the reign of Justinian. But this conclusion cannot be certain. Emperors, kings and those responsible at local levels seem to have considered it their duty in several different historical periods in the Middle East to respond to the needs of travellers by constructing roads, inns and bridges to facilitate travel and commerce. Even in the time of Maurice, whose historian Theophylact reports no particular construction activity, it cannot be excluded that Roman bridges and road infrastructure were built far to the east beyond the *Nymphius*/Batman Su, after the province of Arzanene had been returned to the Romans by Khusro II (see the Annex below for a discussion on this point in regard to no.6).

Bridges crossing rivers which actually constituted an international frontier (such as the *Nymphius* from AD 363 to 591) are a particular case. They may have been built at a time when both banks were within the territory of a single state; or, less likely, if they began or continued in operation as physical links between rival empires, there may have been a common agreement for construction and maintenance. No records exist for the principal example of such a bridge in this region (Harap köprüsü – no.6 below) which might indicate such a joint project; a date is proposed in this case in the period AD 298 to 363 when it was situated wholly in ‘Roman’ territory – or, more correctly, in the territory of an Armenian prince dependent on the Romans.

The dating of the most of the bridges described below is unfortunately but necessarily approximate, except where inscriptions or other written evidence is available. In regard to dating late Roman masonry in general, even the substantial remains of Kutahya and Nicomedia castles did not allow Clive Foss to arrive at any sort of precision for the four main periods of construction of those fortifications, although the early period at Kutahya

may also coincide with the 5th and 6th centuries⁶⁴. Stylistic differences may also be misleading, but it does seem possible to distinguish those ancient bridges of the area belonging to the late Roman period from those constructed in the early Middle Ages (e.g. by the Seljuks or Artukids). Thus, the size of the stone blocks used seems to have been substantially larger in the Roman period. Other than the construction styles (including factors such as the presence of cutwaters, the size of blocks, slope of the carriageway, width, parapets, hollow cores, shape of arch) masonry and mortar analysis might permit more precise dating in the future, but only inscriptions or references in other ancient written sources can provide precise chronography.

Often such inscriptions and references are lacking. But it is here assumed that bridges east of the Euphrates must date from the time of Septimius Severus or later since the Romans seem unlikely to have had the time to build bridges during the very brief earlier occupation under Trajan. Those located west of the Euphrates are for the most part earlier, but they are also listed here for the sake of completeness and because of their importance in the routes discussed in the following chapter.

Crossing rivers in antiquity

In the pre-modern world the normal method of crossing a large river was by small ferry-boat or by fording. Fords are present even on the Tigris and Euphrates, frequently using gravel banks which used to cross the river on a long diagonal and were passable at times of low water. They are marked as such on the Turkish military maps at 1: 100 000 (of which I was able to view copies for the Euphrates area around Zeugma). Many of these fords have now vanished in the reservoirs created by the large number of dams that have been and are still being constructed. They could only be used when the rivers were not too high; otherwise – and in the absence of a boat or of a bridge – crossing a river was necessarily by swimming, sometimes supported by a balloon in the form of a blown-up animal skin, as shown in the Assyrian reliefs in the British Museum. Even when rivers were not in spate, crossing could be very dangerous and boats would normally set off on a diagonal ending up a long way down stream from the point of departure. The boat would then be towed or dragged back up to the ferry point by hand⁶⁵.

Fixed bridges on major rivers subject to annual flooding were rare. Nevertheless, stone bridges on the upper Tigris did exist in antiquity and one at least is still there, although it was rebuilt in the Middle Ages. This is the ‘Ongöz’ bridge at Diyarbakır, for whose original construction the earliest reference available dates to the end of the fifth century⁶⁶. Others on the Tigris whose remains are still visible – for the moment - are at Hasankeyf, Cizre and, possibly, Feshkhabur - now in Iraq just south of the border with Turkey⁶⁷. On the Euphrates, investigations in the late 1990s failed to discover evidence of a stone bridge at Zeugma but we know from Ammianus Marcellinus, who as mentioned above was personally responsible for ‘severing’ them in the face of a Persian advance, that wooden bridges, probably floating on pontoons, existed both there and at *Capersana* (whose likely location is now identified as ‘Ayni’, a village now under water but 30km north of Zeugma⁶⁸) in the fourth century. The remains of bridges described in the Annex are therefore for the most part those of stone bridges on tributary rivers leading into the Euphrates and Tigris.

The Euphrates bridge at Zeugma, which was probably a pontoon bridge as indicated above, is known to have been the location of a customs point at which tolls were levied⁶⁹. Because of the greater ease of crossing natural obstacles represented by roads and bridges, such tolls on bridges were presumably accepted by merchants who would find it difficult to circumvent them. In fact the construction of a bridge may sometimes have been carried out specifically with a view to gaining revenue from tolls. The fort of ‘*Commercium*’ on the Danube in Pannonia was self-evidently a centre for trade as well as being a military strongpoint and presumably was also associated with a wooden bridge⁷⁰. Roman coins found in Gothic-held territory on the northern bank provide further evidence for cross-border trade in the mid-fourth century; a high proportion found date from the reign of Constantius II⁷¹. Apparently commercial dealings were permitted by Valens at only two points on the Danube⁷², just as trade between Late Roman and Sassanian empires was supposed to take place only at Callinicum, Artaxata and Nisibis; presumably bridges existed at both of the points on the Danube at which trading took place, although this is not explicitly stated by Themistius. Similarly, on and around the Euphrates and the Tigris Roman emperors constructed both wooden and stone bridges, but of course only those in stone survive.

The Sassanian kings also constructed bridges; in Iran it seems that endowment of bridges was considered during this period to be an act of ‘religious and social merit’⁷³. At least one of those in northern Mesopotamia discussed in the annex below (Şeyhosel – no. 8) may in fact have been constructed by the Persians for we also know of several stone bridges in the southern Zagros mountains dating to this period. A description of the known Sassanian bridges with a complete bibliography is included in an article on bridges by Huff on ‘pre-islamic bridges’ in the *Encyclopedia Iranica*⁷⁴. Unfortunately, cutwaters, ashlar blocks and iron clamps are not seen by Huff as particularly distinctive features of Sassanian bridges; in any case, they occur frequently in bridges both west and east of the Roman/Persian frontier. Ardashir is thought to have constructed the 6-arched bridge on the road from Ctesiphon to Istakhr, near Persepolis, in the 5th century; Shapur I built a larger bridge with 8 arches (‘Pol-e Dokhtar’) crossing the Khorramabad river, which is one of a group of several bridges in the southern Zagros, as well as the large dam-bridge of Shustar, for which he used Roman prisoners of war captured in his campaign into Syria of AD 260. The latter construction consisted of a road carried on arches above the barrage on the river Karun which stretched for 550 meters⁷⁵.

Some Sassanian bridges were thus also weirs designed to assist in irrigation and this feature, at least, is not shared with Roman bridges, possibly because of higher rainfall further west obviating the need for such structures. But it seems impossible, at least for the present, to distinguish Roman and Sassanian bridges on stylistic grounds. It is even possible that the skilled workmen and technology involved in bridge construction were on occasion imported from the Roman Empire, but proof is usually lacking. Shapur certainly used captured Roman legionaries on construction projects, as described above, and there was a Persian tradition of taking artisans from Roman cities which had been sacked back to Mesopotamia and Persia. According to Tabari, Kavad (488-531) also constructed canals and bridges, while Khusro restored many wood and masonry bridges, as well as building castles and towers along the highways⁷⁶.

Roman bridges in Turkey and elsewhere have been the object of a number of monographs, none of which provide a complete list of the bridges of this region. Evidently the Turkish publications in the list below tend to be more specialised and show a greater number of bridges in Euphratesia, Osrhoene and northern Mesopotamia, but even these are far from

complete and also have more medieval than Roman bridges listed. The publications treating ancient bridges of south-east Turkey and the region are, in chronological order:

Gazzola, P., 1963, *Ponti romani*, Florence Vol 2 (also has 7 bridges from Palestine)⁷⁷

İlter, F., 1974, *Güney-doğu Anadolu erken devir Türk köprülerinin yapısal ve süsleyici öğeler yönünden değerlendirilmesi*, Anadolu (Anatolia) XVIII, 31-49

Çulpan, C., 1975, *Türk taş köprüleri: ortaçağdan Osmanlı devri sonuna kadar*, Ankara⁷⁸

Tunç, G., 1978, *Taş Köprülerimiz*, Ankara⁷⁹ - regrettably, many of the bridges mentioned are not illustrated

İlter, F., 1978, *Osmanlılara kadar Anadolu Türk köprüleri*, Ankara⁸⁰

O'Connor, C., 1993, *Roman Bridges*, Cambridge⁸¹

Galliazzo, V., 1996, *I ponti romani*, Treviso⁸²

Dillemann also lists 10 bridges in the region of north Mesopotamia, none of which is recorded in the publications listed above⁸³. Four of these (Cizre, Nisibis, Dara and Zergin) I have been able to visit and photographs are attached in the annex. The others are for the most part now in Syria and are discussed briefly under 'Osroene' below. Outside the provinces examined in this thesis, bridges in southern Syria and the Hauran have been discussed in a recent article in *Antike Welt*⁸⁴. To the east Sir Aurel Stein also found two bridges near Eski Mosul and east of the Djebel Singar, which he ascribed to the Roman period (evidently preceding AD 363 when the area was handed back to the Persians)⁸⁵. Dillemann has thrown doubt on the period of their construction⁸⁶, but that over the Wadi el Murr is illustrated in Stein's article and corresponds strikingly to another bridge over the Merzumen Su at Yarımca, on the Roman road between Doliche and Samosata some 450km further west⁸⁷ (number 20 below). Stein also describes elsewhere several Sassanian bridges in the Zagros⁸⁸. All of these are outside the area under examination here.

Remains of a further bridge at Feshkabur on the Tigris are mentioned in an article of 1876 by a German engineer who investigated the region but are not visible today on the high resolution satellite photograph of the area available on Google Earth⁸⁹. It was at this point that Dillemann believed the route from Nisibis crossed the river on the way to Arbela. Thereafter it would have continued to the Iranian plateau to the east and to Ctesiphon to the south.

Annex A (to Chapter 3):

*Bridges of the Roman period listed by province and river*⁹⁰

Mesopotamia

*River Devegeçidi*⁹¹:

1) *Karaköprü*

Position:	38°04'02" N; 40°08'28" E. 19 km NNE of Diyarbakır
Number of arches:	six; span 7.6m
Length:	approx. 70m
Width:	7m50
Road:	Amida-Malatya; nearest way-station on PT: <i>Coissa</i> (Şerbetin). See Ch.4-1, route 1

Even at its narrowest point there is room for at least one large cart. It is possible that the parapets of new stone currently in place were not present on the original bridge, which would make the roadway about 7m wide, enough for two carts. The high point of the central arches is also about 7m from river level and the slope up is gentle. The piers are about 4m20 broad and protected by cutwaters on the west, upstream, side - diagonal faces 4m across. (The plans of the architect for the Highways Authority were consulted.) The road at the south end of the bridge is 8m wide. The bridge rises slightly towards the middle.

The river below had rather little water when my first visit took place in May 2006 but was in spate in April 2007. (Some water is now being taken for irrigation since there is a new large irrigation canal on top of the ridge to the north.) This bridge was recently repaired by the Turkish Highways Authority but it seems to have been abandoned many centuries ago, since there is an Artukid bridge of AD 1218 (Halil Viran Köprü) only 7kms to the north-east, near the junction of the Devegeçidi Su - or "Camel-ford river" - with the Tigris, and an Ottoman bridge 6.5km to the south-west (Sultan Murad Köprü), near the crossing of the modern road from Diyarbakır to Ergani⁹². A small concrete bridge some 200m to the west currently avoids the need for modern traffic to make use of the Roman bridge.



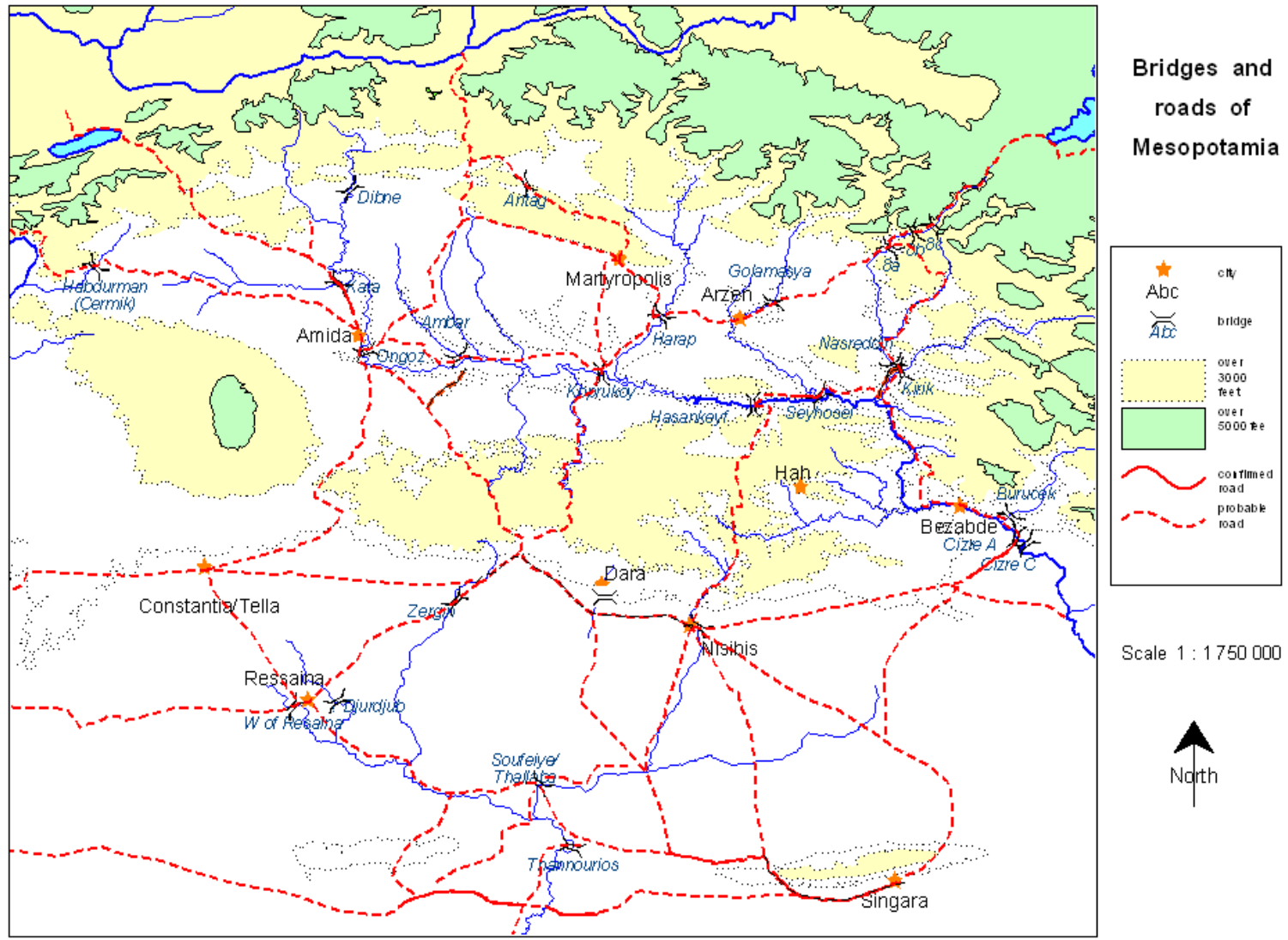


Figure 2

The Karaköprü has apparently never been studied or published in a scholarly review. The paved road which approaches the Roman bridge is described below in Chapter 4. The bridge itself is undated. (An inscription was mentioned by the workmen restoring the bridge, but has apparently vanished.)

A further, poorly-preserved and smaller ancient bridge takes the road over a gully 2.5km to the south of the *Karaköprü* near the hamlet of *Sançar*, which is largely built from the paving stones taken from the road.

The road, discussed also in Chapter 4 below (route 1), divides north of the bridge with the right-hand branch apparently going to the caravanserai at Tepehan and the left to an ancient village with remains of a mill near the top of the ridge (now called Ilek). It continues NNW to the village of *Şerbetin* (modern name: Kalkan), where there are two well-known tombs of the early 16th century and another ancient caravanserai. From there the ancient road is likely to have continued north-west to the Taurus passes near Ergani-Maden, although a branch road must have gone to the ancient city of Eğil. The modern town has a fine ancient citadel perched above the Tigris, which is unfortunately dammed near this point with the reservoir now covering some of the fine free-standing stone tombs of a royal dynasty, which seem to have been carved from the natural rock. It is these tombs which have led to the identification of the city with ancient Carcathiocerta, the capital of the Armenian principality of Ingilene in the Hellenistic period and then of Sophene⁹³.

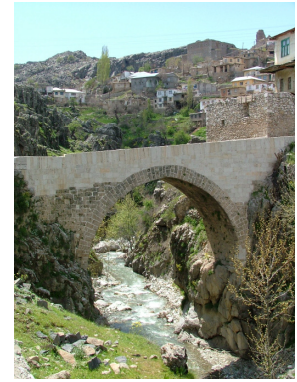
The Roman road and the bridge may have been built by the emperor Constantius II, who is known to have fortified *Amida* in AD 354⁹⁴. Apart from the road, ‘Kara Köprü’ appears to be Roman on grounds of style (rounded arches, triangular breakwaters, road rising slightly towards the middle, size of stone blocks and minimum road width of about 4m50). The restoration project has added stone parapets by analogy with the Roman bridge at Kiakhta, which is still in use and lies 120km to the ESE, but it is not certain that these parapets existed originally in this case.

In addition to the road connected with ‘Karaköprü’, there was an apparently ancient route heading north-west from Diyarbakir/Amida towards the Euphrates near the modern towns of Çermik (38°07’51” N, 39°26’36” E, elev. 647m) and Çungus (38°12’40” N, 39°17’24”, elev. 977m)⁹⁵. There is a medieval bridge of AD 1198 at Çermik called the Haburman, with some apparently ancient stones at the base of the piers, and another such bridge at Çungus (see photos below).

On the way to these bridges there is an ancient caravanserai called the Han-I Gevran, described by Sinclair as ‘perhaps late 13th or early 14th century’ (38°02’47” N, 39°51’59” E), at the village of Hantepe. I was informed by local people that there were two other old bridges in this area on or near the Devegeçidi river, at least one of which has now been covered by the waters of the nearby dam (at a village called ‘Köprükoy’). Their dates of construction could not be verified.



Haburman Köprüsü, Çermik



Çungus

River Tigris (Dicle)

2) Dibne:

Position:	approx. 38°23'09" N, 40°12'19" E, elev. 726m; nearly 50km north of Diyarbakir and about 5km north of the village of Döğer.
Number of arches:	two
Length:	unknown
Width:	unknown
Road:	possibly an otherwise unknown Roman road from Amida to Palu

The Dicle dam, in addition to damaging the monuments of Eğil (see gazetteer), has regrettably destroyed an ancient bridge to the north on this Tigris tributary which is known by the same name as the river and as the old village (Dibne, now called Döğer). Sinclair described the bridge (no longer extant) as follows:

“...at the end of the downward slope of the castle rock’s upper face. There are two rounded arches with a span of about 25ft [about 8m]. From the w[est] bank, which is higher than the e[ast], to the middle of the e[ast] arch, the roadway is horizontal, after which there is a short downward slope. The arches are later than the pier, the former prob[ably] Ottoman, the latter perhaps early Turkish, poss[ibly] Roman. The masonry of the arches has smaller blocks, is yellow rather than grey and has a fresher and less chipped appearance. A clear divide can be seen on the w. inner face of the w. arch. The road from the w[est] came at a high level northwards along the rocky slopes facing the fort. After crossing the river it went up the gully beneath the fort to the saddle.”

He indicates that the fort was probably of the Hellenistic period. I visited the site of the bridge and the fort in April 2007 and was given a drawing by a local resident which confirms Sinclair’s description above. The hillside above is covered in pottery which may well be Hellenistic, but the walls of the fort are just piled rubble of uncut field-stones and may be earlier or later. The old road on the west side makes an abrupt turn south towards Eğil.

There is no obvious reason why a Roman road should have crossed this area; it therefore seemed possible to me that the original bridge was also Hellenistic and might have carried a

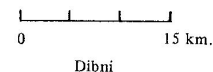
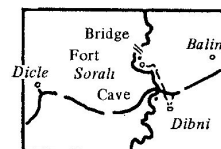
road to Eğıl (Carcathiocerta) from the north-east, possibly crossing the Taurus via the Birkleyin pass, 24 km to the east of the Dibne bridge, and thus linking Sophene and Ingilene with other Armenian principalities to the east. The predecessor of the highly-finished construction photographed by Sykes (see below) seems likely to have been beyond the capacity of local builders serving only local needs, although Sinclair's judgement was that only the piers were pre-Ottoman, “..possibly Roman”.

However, it is also possible that the bridge does indeed mark the course of a Roman road, not mentioned on the Peutinger Table nor by any other written source, since Mark Sykes (who travelled this route through a gorge in 1907) describes another route to Palu across the Taurus north of the bridge⁹⁶ :

“... One first crossed a range of hills and went north-west up a deep valley, passing the village of Ure. The valley turns into a great gorge, in which there was a small fountain with a round arch and, a little beyond the fountain, a section about 20 yards long of **solid paved road**. Rise to a small flat tableland called the Pirasan Dasht (after the village of Pirasan, which is in the preceding valley). Then cross a broad valley and over the watershed range by a pass called “Weshin” or “Koshun”. At the southern entrance to the pass was a large coppermine which from time to time was managed by foreign engineers. The descent to Palu was quick.”

I have not been able to identify the course of such a route since the photographs on Google Earth for this region are not yet available in high resolution. The region is very little known archaeologically and needs further investigation.

The castle of Ziata, described in the gazetteer and now called Amini Kale, at the confluence of the Dibne and the Tigris, lies 14km south of this bridge. A further castle on the Tigris south of this junction was at Selman Kalesi, originally ‘Jubeyr’ according to Consul Taylor⁹⁷. It seems possible that these fortresses were associated with an important late Roman route across the Taurus heading north from Amida, but there are no references amongst the written sources to support this (see discussion in Chapter 4-1, route 1). I have not been able to visit these fortresses.

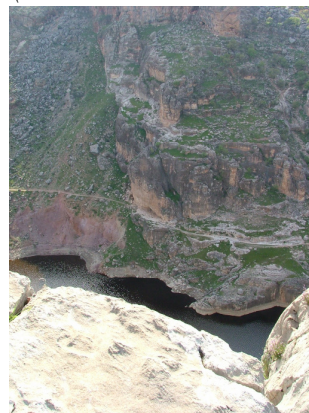




Photograph by Sykes of the bridge at Dibne (known to him as the Solali bridge) in 1907.



Site of destroyed bridge in 2007



Road turning south; view from fort

3) *Ongöz* (Diyarbakir)

Position:	37°53' 14" N, 40°13'45" E; 2.3 km south from old city
Number of arches:	Ten
Length:	150m
Width:	7-11m
Road:	Amida to Tigranocerta (Ch.4-1, route 2); nearest way-station: <i>Ad Tigren</i> (Amida)

The original bridge was possibly constructed around AD 485 by bishop Sa'oro of Amida, formerly a monk at the abbey of Qartmin (now Mar Gabriel)⁹⁸. Greatrex points out that it was therefore constructed less than 20 years before the city of Amida was captured by Kavadh in AD 502⁹⁹. The bridge of course may have had a predecessor, constructed possibly by Constantius II when the walls of the city were first built, and in any case it was substantially reconstructed in the Middle Ages¹⁰⁰.

There is said to be an inscription, possibly below the normal water level, describing its destruction by logs brought down by floods.

The bridge was built to maintain communications with areas to the east of Amida and in particular to serve roads along the north bank of the Tigris to Arzen and Armenia, as well as to Martyropolis after its foundation in AD 410. Other ancient bridges downstream are listed below.



4) Köprükoy

Position:	37°48'54" N, 40°57'25" E; 6km south-west of the junction of the Batman Su with the Tigris
Number of arches:	Destroyed; originally at least 4
Length:	River is 80m wide at this point
Width:	Approx 6m40
Road:	Possibly Mardin/Savur/Martyropolis

This bridge is one of those located by the expedition of Guillermo Algaze in 1988. I have visited both banks of the Tigris to view the bridge but am uncertain as to its date of construction. Its location at a point only 2.7km from the Batman Su, and therefore from the frontier between Rome and Persia after AD 363 would indicate that a Roman bridge very likely existed at this point to facilitate military communications across the Tigris after the surrender of the district of Arzanene to the Persians, but there are no clear signs of a frontier road west along the south bank of the Tigris from *Cepha* to this bridge.

The terrain is rugged and barren; it happens to be covered by a high resolution satellite photograph on Google Earth and it is most unlikely that a Roman road would pass unnoticed on such a photograph in this sort of terrain. The fortress at Rhipalthas, discussed in the gazetteer, seems more likely to have guarded a north-south than an east-west route. Access to this bridge also seems to have been from the south and possibly via a road linking the Roman fortresses of *Dara*, *Mardin*, *Sauras* (Savur) and *Idriphthon* (Bozresa-Hisarkaya?) – see Chapter 4(route 2) and gazetteer. The road crossing the bridge would have continued up towards *Martyropolis* (now Silvan), possibly via the fortress of *Samocharta*.

Three piers are visible in the river, one of which it was possible to examine in detail because it adjoins the south bank. The masonry seems at first sight to be closer in style to the Artukid bridge at Hasankeyf than to the Roman bridge of Karaköprü, but its poor state of preservation makes it impossible to exclude a Late Roman date (between AD 363 and 602). It is in any case much smaller than the one at Hasankeyf. A triangular cutwater has a diagonal length of 3m50 with the breadth of that part of the pier which would have supported the roadway approximately 6m40. The gap between the pier on the south bank and the next one in the river itself was about 7m50. There does not appear to have been any rounded buttress on the down-stream side, as is apparent for example in the bridge at Şeyhosel, described below.



A further ancient bridge was located by Algaze's team some 10km to the south-east at 37°46'54" N, 41°01'22" E, beyond the Batman Su/Tigris confluence (see Google photo above). This 'bridge', called locally 'Sahinli Duzu', is apparently the footing for a much earlier crossing – possibly of Assyrian date, given that the city of Tushan (Ziyaret Tepe)¹⁰¹ lies only 20km to the west. Wooden planks may have bridged the gap between piers which have now vanished. Only some stones set artificially in the south bank are apparent and there is nothing on the north bank visible at all.

5) *Cepha* (Hasankeyf)

Position:	37°42'50" N, 41°24'40" E; 30km SE of Batman
Number of arches:	Originally, five
Length:	River approx. 165m wide
Width:	(Bridge reconstructed in Middle Ages)
Road:	Possibly Nisibis/Tigranocerta; way-station: <i>Sitae</i>

There are two massive stone piers in the river and one arch on the north side. According to Ibn Hawkal the existing bridge was built in 1116 by Fahreddin Karaaslan. The northern approach starts low on the flood plain and slopes up to reach the same level as the southern approach where it begins on the cliff above the river. The bridge had rooms on each side of the road, which may have been for toll collecting or for housing travelers. The roadway was carried across the central span of the bridge on a timber arch and through towers on the supporting piers. The timber arch could be removed in times of siege, thus rendering the city inaccessible. The bridge is described by Sinclair¹⁰². He notes inter alia two worn reliefs, probably signs of the zodiac, on each side of the upstream beaks of the piers.

Hasankeyf is known to have been a legionary base¹⁰³ but few remains of the Roman period are visible. (Sinclair mentions only the fortifications at the very end of the citadel which may possibly be late Roman; see also recent excavations mentioned in the gazetteer.) It was for a while capital of the Roman province of Arzanene (before AD363, see Gazetteer), a fact which implies close links with the north bank. Therefore it seems highly probable that there was already a Roman bridge here in the Roman period, possibly again with a wooden superstructure based on piers of masonry and natural stone. The masonry now visible is unlikely however to be Roman.

If there was indeed a Roman bridge here then it is likely to have carried a road from Nisibis and Dara in the south to Arzen and perhaps on to Armenia. In this case *Cephas* may be identical with *Sitae*, a place mentioned in the Peutinger Table and the Σιται of Ptolemy (see discussion of route 2 in part 1 of Chapter 4 below).





Below Hasankeyf Lightfoot thought that he saw the pillar for a Tigris bridge in mid-stream by the fortress of Tilli (see gazetteer), together with an abutment on the bank; this seems unlikely but a photograph has recently been published and there must be a possibility of a bridge here even if it is entirely unclear what route the road on the south side would have taken¹⁰⁴. An alternative possibility is that there was some form of river harbour here to shelter shipping. I have been prevented from visiting the site to inspect it, but it will also disappear when the Ilisu dam is completed.

There are ruins of ancient stone bridges crossing the Tigris at Cizre, see below, and perhaps Feshkabour, but these were medieval. At the beginning of the 20th century there was a ferry at Feshkabour and not a bridge¹⁰⁵. No other stone bridges crossing the river's main stream are known from the late Roman period.

Nymphius (Batman):

6) *Harap*

Position:	37°59'19" N, 41°09'09" E; about 10km N of Batman
Number of arches:	Originally 30? Now 9 piers visible on Google Earth
Length:	River-bed now about 730m wide
Width:	Approx. 8m
Road:	Amida-Tigranocerta; way-station: <i>Colchana</i> (?)

This was perhaps the most important ancient bridge located by the expedition of Guillermo Algaze in 1988 (p252 Site 27 Fig 2). The remaining stone piers indicate a bridge wide enough for two carts to pass. The Batman Su, or river Nymphius in antiquity, was the border between Rome and Persia from AD 363 until at least the reign of Maurice when Arzanene and Moxoene seem to have been returned to the Romans by Khusro II in gratitude for his restoration to the Persian throne.

The river valley is wide here and there may have been once as many as 30 piers. Three apart from the footing on the east bank are still visible, together with a stump on the east bank separated from these piers by 475 meters. This stump is still only mid-stream if the gravel river-bed is taken as a whole, so the bridge would have been very long indeed. The superstructure was washed away a long time ago and may have been wooden. The masonry of the piers appears to be late Roman, an appreciation already made in Algaze's report in which this bridge is first mentioned¹⁰⁶.

In AD 503 when the Roman army under the general Patricius retreated eastwards towards Arzanene from Amida before the advancing army of Kavadh (which had been sent to relieve a Roman siege of the city), they found themselves unable to ford the river Nymphius which was then in spate. The route south across the Tigris towards Mardin and Nisibis may also have been blocked¹⁰⁷. This account indicates that there was at that time no permanent bridge over the *Nymphius*. 26 years later in AD 529, according to Malalas¹⁰⁸ the general Hermogenes defeated a Persian army of 6000 men who had come to capture Martyropolis. Although a first battle was inconclusive, in the second encounter the Romans were victorious and many Persians drowned in the *Nymphius*. They might not have done so if they had been able to retreat across a bridge.

The extant – and justly famous - ‘Malabadi bridge’ due east of Silvan/Martyropolis is thought to be Artukid. So the Harap bridge, whose ruins are still visible today, must be earlier than this medieval bridge and it must have been demolished before AD 503 (possibly following the treaty of 363). Alternatively, it was only constructed later, either by Justinian after the battle of AD 529 or possibly even in the time of Maurice, if the Romans did indeed re-establish control over the province of Arzanene at this time¹⁰⁹.

If it was constructed before AD 363 then it is likely that it constituted an important link on a Roman route joining Amida and the west to Arzen and the Bitlis pass, Lake Van and Armenia (route 2 in Chapter 4 below). Unfortunately we have at the moment very little other evidence of a Roman presence east of the river Batman (*Nymphius*) and the sources are vague in regard to Roman control of Arzanene, a province which was repeatedly ravaged by the Romans in the course of the sixth century. In 1983 Whitby examined the known place-names in Arzanene and believed that there was sufficient evidence to conclude that the area was surrendered to the Romans under Maurice by Khusro II in AD 591, contrary to the views of Honigmann, as expressed in *Die Ostgrenze des byzantinischen Reiches*¹¹⁰. Both in the first part of the fourth century AD – and also at the end of the sixth century during the reign of Maurice - the border was thus well to the east of the *Nymphius* river, even though the province of Arzanene which lies just east of the river Nymphius and north of the Tigris, provided, as Whitby says, “a vital link between the central Persian provinces in the lower Tigris plains and the sensitive frontier regions of Persarmenia”¹¹¹ (p205). The province was also said during the early sixth century to have been the personal fiefdom of Kavadh, the Persian emperor in the time of Justinian¹¹².

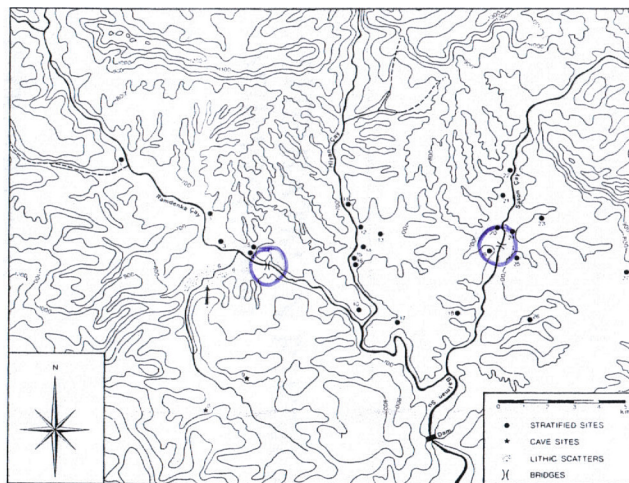
On balance, it seems more likely that the construction of the Harap bridge was a part of Roman efforts to control the area east of the Nymphius during the third and fourth centuries, although this is nowhere specifically mentioned in the ancient sources. A further substantial Roman bridge on the Kızılsu, near its junction with the Tigris just north of Cizre, may be contemporary and may indicate Roman attempts during the period before 363 to improve a road up the Tigris valley to Arzanene¹¹³ (see discussion of Bürücek bridge, no. 11 below). The extent to which the Harap bridge continued in use after AD 363 and the surrender of Arzanene to the Persians - but during the period of rather good relations between Rome and Persia during the fifth century - remains wholly obscure. But at some point before AD 503 it ceased to exist.

The expedition of Algaze found settlements near the west end of the Harap bridge which may also have been Roman¹¹⁴. Most regrettably, a final report was never published so the details of these sites are not in the public domain¹¹⁵. Sinclair has proposed to identify the settlements with *Colchana*, a way-station mentioned in the 'Peutinger Table'¹¹⁶ (see route 2 in Chapter 4 - 1).



Two further ancient bridges north of the Malabadi Köprü and of the lake formed by the adjacent dam were found by an archaeological survey in the 1980s around the upper Batman or Kulp Su¹¹⁷. Both of these were apparently Ottoman or late medieval and the

sites have not yet been visited by me. They may now have been destroyed by the dam by the Malabadi bridge (the ‘Batman dam’) – see photo and map below. Sinclair refers to one of these – apparently the most western one - as having a single arch, being 31.5m long. It lay east of Boşat and was called Kemek or Kenok Köprüsü¹¹⁸.



7) Antağ (Gömeş Perdi)

- Position:** 38° 22' 06" N, 40° 43' 38" E; 60km NNE of Diyarbakır and 12km SSE of Lice
- Number of arches:** One pointed, plus two small rounded ones
- Length:** Approx. 40m
- Width:** Approx. 6m
- Road:** Martyropolis-Citharizon (not shown on PT)

The bridge was found only in April 2008 on the occasion of an unsuccessful search for the nearby fortress of Attachas. It lies on a branch of the Kulp Su which flows into the Batman Su. The bridge probably carried an important road linking Martyropolis with Citharizon via Pheison and the pass at Illyrisos, near the resurgence of the Dıbnê branch of the Tigris (Birkleyin caves). This road may only have been created in the reign of Justinian when

Citharizon and Martyropolis were turned into fortresses which were the seats of the *Dux Armeniae* and the *Dux Mesopotamiae* respectively.

The ramp leading up to the bridge on the south side is 6m wide. Carts could have crossed the bridge but possibly not the heavy 'plaustra' of the old *cursus clabularis*.

The pointed arch may be a sign of reconstruction in the Middle Ages; if not then this bridge, possibly dating from around 540, would constitute one of the first example of its use. For a discussion of the road see end of route 6 below in Chapter 4.



*River Nicephorion*¹¹⁹ (Garzan Su):

8) *Şeyhosel*

Position:	37° 44' 54" N, 41° 35' 37" E; 16.4 km ENE from Hasankeyf along the north bank of the Tigris
Number of arches:	One
Length:	Approx. 30m
Width:	Approx. 4m50
Road:	Cephas-Tilli (not shown on PT)

An ancient bridge was found in 1988 by Algaze¹²⁰ near a hamlet called Müdevver on the Garzan Su 2.8 km, as the crow flies, from its confluence with the Tigris. Although Hasankeyf is the nearest town, the bridge must be approached by road from the north-west.

It is wide with a rubble core and ashlar facing. The river is normally about 10m wide here and was spanned by a single stone arch whose risings are still visible on the piers. (No precise measurements were possible at the bridge on the occasion of my visit but the stone blocks are about 30x70 cms.) An abandoned settlement (Şeyhosel) was visible on the east side of the river and was visited the following year (May 2007), when the river was in spate. A ruined caravanserai is still to be seen in the settlement and is built of stone, unlike the other buildings, some of which appear to have been occupied in the recent past. There are stones from an ancient water-mill on the west bank about 200m from the hamlet of Müdevver. A paved road passed westwards along the mountain ridge to Hasankeyf; rough paving stones are currently visible at several points as the road mounts westwards towards the ridge together with a cleverly constructed cistern under an overhanging rock about 1km from the bridge. Further up we were informed that the road passes by a watchtower. Initial reports that it also passed through a substantial abandoned settlement on top of the ridge, apparently with stone sarcophagi, were denied on our second visit in 2007.

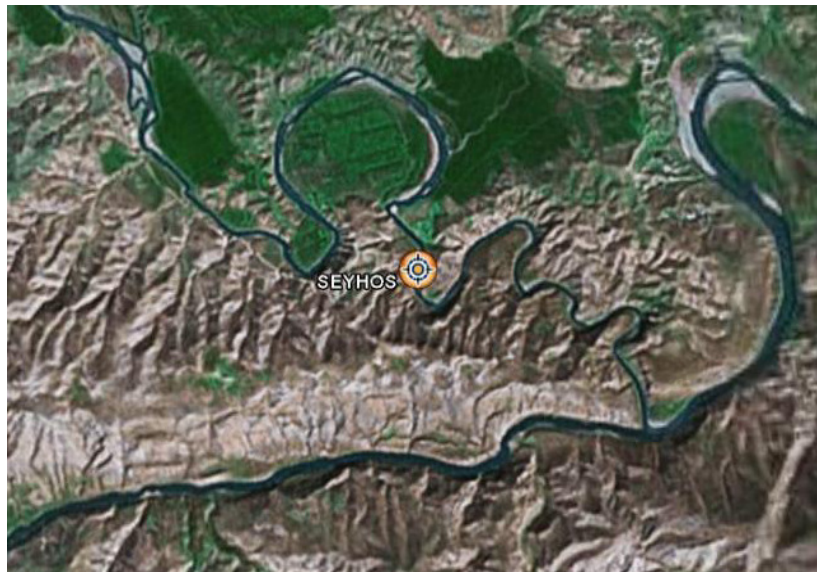
A large ruined church is also reported by the villagers of Müdevver to lie on the west bank near the confluence with the Tigris, but could not be found because of poor weather conditions on the occasion of our visit and because there are no roads approaching this church. This area along the north bank of the Tigris was, it seems, not investigated by Algaze's team in 1988. The walls of the church apparently stand only to head-height. All except the road and watchtower along the ridge will disappear on completion of the Ilisu dam.

The course of the road carried by the bridge evidently came from the west (presumably from a point on the north side of the bridge at Cepha/Hasankeyf), along the mountain ridge which follows the north bank of the Tigris. The range north of the river at this point was called mount Melabason¹²¹ in late Roman times, but the name may also have been applied to the mountains south of the river.



To the east the road is likely to have continued to the Roman fort at Tilli/Çattepe (see Nasreddin Köprüsü, no.8 below and gazetteer) but this area has still not yet been investigated by me because of clashes between the Turkish army and the PKK.

In style the bridge of Şeyhosel seems Roman, but its location could indicate construction by the Persians, perhaps using Roman engineers. Although no cutwaters are visible for the protection of the bridge abutments, there are rounded buttresses on the downstream side. The main pillars are of ashlar limestone with a rubble core and concrete. On balance, it seems most likely to have been constructed in the third or fourth century by the Romans to carry a road along the north bank of the Tigris from Hasankeyf. Possibly this road divided near Tilli, with one branch turning north to Armenia and one south along the east bank of the Tigris to Cizre and Arbela. The existence of the Harap bridge, which may have been constructed at the same time, and of the city of Tigranocerta at Arzen implies a second route eastwards from Amida but this may have been more specifically destined to continue up the Bitlis gorge to Lake Van. The route from Tilli northwards to Lake Van via the Nasreddin bridge (see below) may have gone via Hizan.





* * * *

A further impressive ancient bridge is visible 14.8km NW of Şeyhosel which is known as Memijkan¹²². It was constructed in the Artukid period and does not appear to have had a Roman predecessor.



It is highly likely that a third ancient bridge crossed the Garzan Su at a point further to the north-west where there are currently also road and rail bridges (İkiköprü). This was the obvious crossing point for the road from *Amida* to *Arzen* (now believed to have been ‘Tigranocerta’) and then on to *Artaxata*. Although the evidence could not be inspected closely, there are traces of an old structure underneath the modern bridge and there is a carved block placed next to the modern bridge which seems to commemorate construction of a medieval bridge at this point.



* * * *

A fourth bridge on the Garzan which could also originally have been Roman was located by Consul Taylor in the middle of the nineteenth century (1861-63)¹²³. Taylor was the British Consul in Diyarbakır. Above Arzen he found on the same side of the river (left bank, south-east at this point) remains of another large city (p27).

“Opposite the ruins, on the right bank of the Arzen [Garzan] Su, which was formerly spanned at this part by a fine stone bridge, whose foundations peer above the stream, is the fine old ruin known now by the names of Kalla Sheikh Baj and Kalla Anushirvan. It is situated on a high hill of conglomerate, the usual rock formation here, having at its summit a circumference of 1½ mile.”

On the occasion of my visit in spring 2007 the river was in spate and only a few stones were visible above the water. A second visit in April 2008, but to the fortress on the north-west bank allowed for a further examination with binoculars but little was to be seen. There are however reported to be piers still in place underwater¹²⁴. In regard to the settlement on the left bank, Sinclair identified at Golamasya ‘traces of [the] old settlement’s walls’, which seem to correspond to those found by Consul Taylor. There is a stone-lined pool said to flow warm in winter and cool in summer. Opposite lies Anushirvan Kale, a Persian/Roman and later Kurdish castle of the 16th century whose fortifications have been partly destroyed - Taylor’s ‘Kalla Sheikh Baj’. The whole area could also correspond to ‘Chlomaron’, the sixth century site in Arzanene discussed by Whitby and treated above in regard to the Harap Köprüsü. In that case the bridge could have been constructed in the time of the emperor Maurice.

*River Kentrites*¹²⁵ (Bohtan Su and Bitlis Çay):

9) *Nasreddin*

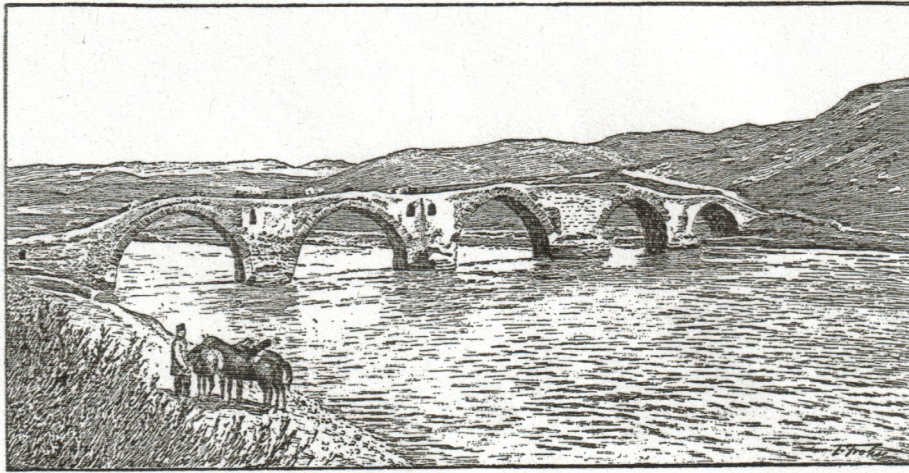
Position:	37°49'18" N, 41°49'44" E; 9.5km SSW of Siirt
Number of arches:	Five
Length:	Approx. 140m
Width:	Approx. 6m
Road:	Tilli-Bitlis (Lake Van and Armenia)? (not shown on PT)

The 'Nasreddin Köprüsü' is described by Sinclair as "medieval, much restored"¹²⁶. It is currently in use and in fine condition, but its existing structure appears to be mostly of the 19th century and has been restored even more recently. It does have semi-circular buttresses on the downstream side, possibly an ancient feature (as well as small cutwaters on the upstream side), and, since it probably served in the medieval period a trade route to Siirt coming from Arzen and the west, the bridge does indeed probably contain a core that is much older. It is well known in the area and is easily wide enough for two cars to pass abreast.

Because of a military presence in this area I was able only to pace the bridge and measurements are therefore approximate.

The bridge is also shown by Algaze on his map of the area (spelled 'Nasr ed-Din Köprü') with an ancient settlement nearby at Azakce Tepe¹²⁷. Since the final report for his expedition was not prepared nothing further is known about this settlement. The bridge crosses the Bitlis Cay, also known as the Keser Su, and a route continues south along the right (east) bank, firstly to the confluence with the larger Bohtan Su and then on to the major confluence with the Tigris at Tilli or Çattepe, which lies 11 km from the Nasreddin bridge. This was an important Roman site that is mentioned in both the articles by Algaze cited in the footnotes and in a separate article by Chris Lightfoot¹²⁸, who suggests that it was the original pre-AD 363 base for the '*Equites scutari indigenae Pafenses*', a unit mentioned in the Notitia Dignitatum as based at Assara (probably Maserte, NE of Mardin)¹²⁹. In view of the existence of this base it seems quite likely that the Nasreddin Köprü had a Roman predecessor (and that the ruined bridge of Şeyhosel – no.8 above - was also built in the late Roman period). The Roman fort was however presumably abandoned in AD 363 with the surrender of the 'Transtigritane provinces' by Jovian to the Persians.

The road north of Tilli would also have led in the Roman period in the direction of the (much later) city of Siirt and on towards Armenia, probably via the Bitlis pass. There was however an alternative route from Siirt to Lake Van via Hizan. At Eski Hizan there is another large fort for which Roman origins have been claimed¹³⁰.



Brücke über den Bitlis-tschai.

The last picture above is reproduced from Lehnamm-Haupt's *'Armenien Einst und Jetzt'*, published in Berlin in 1910, evidently before the most recent renovation of this bridge.

The route up the Bitlis Cay to the town of Bitlis and then on to Lake Van and Armenia is described in Chapter 5. Although the upper valley is outside the area which could be conceived as Mesopotamia there are several ancient bridges marking the importance of this route in ancient and medieval times.

Bridges were noted by me at 3 points apart from Bitlis itself during a journey up the valley in May 2006. These were:

- a) 38°10'34.6" N, 41°49'19.8" E; elevation 731m (two bridges of which one is apparently ancient)
- b) 38°13'25.3" N, 41°53'25.9" E, elevation 849m
- c) 38°14'20.1" N, 41°56'56.0" E, elevation 986m

Twin arches, apparently ancient. There was also an old medieval caravanserai nearby.

- d) 38°15'00.2" N, 41°57'23.8" E, elevation 1031m.

a)



b)



c)



d)



10) *Kırık*

Position:	37°48'47" N, 41°50'49" E
Number of arches:	Possibly 7
Length:	Approx. 100m
Width:	4m
Road:	Bezabde-Tilli (and on to Armenia – not shown on PT)

This bridge is ruined, unlike the nearby Nasreddin bridge. It lies only 1.8km away to the south-east but is on the Bohtan Su and was built to take a road coming from the south and then, presumably, rising to Siirt. However, the bridge also may have very ancient origins. It has a superstructure partly in brick but a stone arch that looks as though it could be Roman – but could possibly be Sassanian or even later. Only one of a possible seven arches is standing. There is an unsightly modern aqueduct fixed to the bridge.

The ancient road would have come up the Tigris gorge from Cizre, 63km to the south-east; for most of this distance the river would have constituted the border between Rome and Persia after AD363. There is no road apparent on the west bank but there was probably a road on the east bank since at least Parthian times (see Chapter 4, routes 1 and 2). The Bürücek bridge (below, no.11) would have lain on the same route and at least for some decades of the third century the area would have been under Roman control.

Much of this attractive gorge of the Tigris, including both Nasreddin and Kırık bridges, will disappear when the Ilisu dam has been constructed.



River Kızılsu /Kazrik gorge:

11) Bürücek

Position:	37°22'51"N, 42°10'07"E, some 1.8km from the confluence of the Kızılsu with the Tigris
Number of arches:	Possibly nine; three piers standing
Length:	River-bed 150m
Width:	Approx. 6m
Road:	Arbela-Finik-Tilli (and on to Bitlis, Lake Van and Armenia)

This impressive ruined bridge was also located by Algaze in 1988¹³¹. It forms a part of a complex of settlements and other features which include forts on either side of the Kazrik gorge to the east, a Parthian relief and an aqueduct cut into the rock on the river's north bank at the beginning of this gorge. 8.3km to the WNW is the Parthian fort of Finik which lay opposite the important Roman fortress on the west bank of the Tigris at Bezabde (all described in the article by Algaze cited).

Three piers are visible in the gravel bed of the river, but once again there must originally have been many more given the total width of the river-bed. The foundations of the piers have shifted and they are no longer all horizontal. The best preserved is that closest to the north-west bank of the Kızılsu. The main part of the pillar is 3m80 long and 6m20 broad, with a triangular projection downstream whose sides are each 4m80. Upstream there is no cutwater, but there is a rectangular buttress projecting about 1m40 (and again 6m20 broad).

The masonry seems Roman, although this is at first sight unlikely for a bridge on the east bank of the Tigris. There are large ashlar blocks for the facing, with a rubble core. It must have carried a road coming from the south (via Arbela, Feshkabur and Cizre) and continuing up the gorge. There is an old road to Finik along the river, which is visible on the high resolution photograph of this region on Google Earth (see below). As mentioned below in Chapter [4], Algaze found higher up the river in the Tigris gorge traces of a road 'carved out of the limestone cliffs flanking the east bank of the river',¹³². There are Parthian reliefs both near Finik and in the Kazrik gorge but whether this road and bridge was built by the Parthians, the Romans or the Sassanians remains for the moment wholly unclear. In the late Roman period and in particular the fifth and sixth centuries AD the area seems to have been a centre for monastic activity with several monasteries reported by Fiey which were dependent on Nisibis¹³³, i.e. on a metropolitan bishop in the area controlled by the Sassanian Persians; it is also likely that the Armenian princes of Corduene lived at Finik. Ammianus Marcellinus has a famous story of his scouting expedition in this region which involved a visit to a friend called Jovinian who had been educated in the Roman empire but was the prince of Corduene and apparently owed allegiance to the Sassanian king¹³⁴.

The bridge is unaffected by the Ilisu dam. There has been talk of a further dam near Cizre but this too will probably be constructed to the north of the ruined bridge.

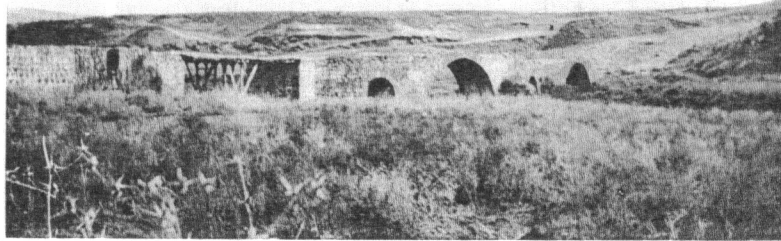




12) Cizre

Position:	37°19'09"N, 42°11'37"E; originally near south gate of city
Number of arches:	Four
Length:	Approx. 45m
Width:	Approx. 7m
Road:	Bezabde to Tigris crossings at Cizre and Fesh-Khabour?

This bridge is not in fact on the Kizilsu but to the south, on the west bank of the Tigris. It is included here for convenience. Poidebard published one photo of a bridge which he believed to be Roman at the entrance to Cizre but stated that there were three bridges (*Traces de Rome*, p159), apparently all over a branch or meander of the Tigris which turned the town into an island. Only one of these seems to be extant today in the town itself and water no longer flows along the branch river. His photo is reproduced below (Plate CLVIII, 1). A different photograph of the same bridge is reproduced by Dillemann who describes it as a 'pont sur le bras mort à l'ouest de Djezireh ibn 'Omar'¹³⁵.



This may be the same as Sinclair's Bridge A¹³⁶, visited by me in May 2007 and said to be known locally as 'Telkabin köprüsü'. The bridge is now in poor condition but still in use. It appears to have brought a road from the south into the town whose remaining medieval walls are only about 80m away. It is not clear why a Roman road should be approaching Cizre in this way since the late Roman fortress of Bezabde is thought to have been 15km to the north-west at Hendek.



Sinclair's bridge B was not found by me and may no longer be extant. It apparently took a road from the city up into the Tur Abdin towards Idil (formerly *Hazor*¹³⁷). It may also have been the 'Kleine brücke' mentioned by Preusser who visited Cizre in 1909¹³⁸, which appears to have been medieval and possibly contemporary with the Tigris bridge described below.

The fine Artukid bridge just south of Cizre (39°19'02" N; 42°13'16" E) is visible from a distance but its remaining arches are now in Syria and impossible to get close to, at least from the east bank in Turkey. It has signs from the zodiac carved into its south side. This bridge must certainly be an important indication of a long-distance trade route active in the early Middle Ages. That such a route existed in the Roman period is also clear from traces of road found west of Cizre but it is possible that this road from Nisibis to Arbela (Irbil) crossed the Tigris some way to the south at Feshkabour in Iraq. However, no-one has suggested the Artukid stone bridge had a Roman predecessor and if there was a crossing here constructed after the acquisition of the Trans-Tigritane provinces by Galerius at the end of the third century then it is likely to have been a pontoon bridge.

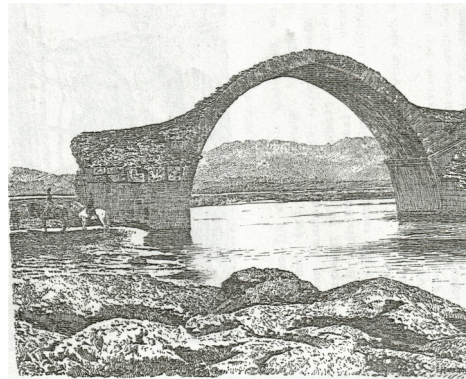


From the east



From the north (above Cizre)

Preusser¹³⁹ and Lehmann-Haupt visited this area at the beginning of the 20th century. The latter's drawing of the bridge is reproduced below¹⁴⁰:



River Mygdonius (Djaghdjagh)

13) Nisibis

Position:	37°04'11"N, 41°13'17"E
Number of arches:	possibly eight
Length:	at least 45m
Width:	about 4.5m
Road:	Nisibis-Tigris crossings (see Ch.4-1, route 1)

Outside the environs of the Tigris and in the Mesopotamian plain south of the crest of the Tur Abdin there are the other bridges mentioned by Dillemann and listed at the beginning of this chapter. One of these was photographed by Gertrude Bell in 1911 and is currently in a military area just south-east of the town of Nusaybin and very close to the border with Syria. It cannot be photographed or measured at present (measurements above are estimated from Google Earth), but in any case the ground level has risen further and little is visible of the bridge. Even in 1911 it would seem that much of the bridge was covered by

silt since originally the Djaghdjagh river (*Mygdonius*) must have flowed more rapidly here and with a considerably deeper bed.

It is difficult to deduce anything concerning the date of construction but Dillemann, writing in 1962, considered the bridge to be Roman. The only surviving remains of the town of Nisibis which are visible today – apart from the fifth century Baptistery of St James, whose surroundings have recently been excavated - are also now in a mined “no-man’s-land” on the Turkish border with Syria about 250m from the bridge and currently inaccessible. They consist of a few pillars of a temple. Photos are included below of both these sites.



Photo from the Gertrude Bell archive, University of Newcastle, April 1911

River at Dara

14) Dara

i) Position: 37°04'11"N, 41°13'17"E

Number of arches: two
Length: 23m
Width: 6.8m
Road: Inside city

ii) Position: 110m to SSW of i)
Number of arches: unknown
Length: surviving remains 10m only
Width: about 5m

The bridge of Dara is evidently of the early sixth century, the period of construction of the city. It lies inside the walls near the south water-gate; there are remains of what may be a second bridge just to the south of these walls but these have been associated by Whitby with an outlying fortification and conduits for the river¹⁴¹. Neither have any particular significance for the routes across the region but they are of course good evidence for styles of construction. The hard limestone of which they and the walls of the city were constructed was quarried just to the west of the town and the presence of good building stone may have been an important factor in the location of the city.

Procopius recounts how the river could be diverted into a chasm close to the city to prevent water being available to besiegers¹⁴². The river crossed by the bridges was dry on the occasion of my visit and in the satellite photos. This may be because in summer the water all goes underground near the north 'water-gates' of the town. But possibly much of the river's water is now taken for irrigation.

It is probably the inner bridge which is that mentioned by Dillemann (see beginning of this chapter) since it is rather more impressive and larger. The large size of the individual blocks used without mortar is an indication that imperial architects were here using the same techniques and plans as those used much earlier for example in the Cendere bridge (see below, no. 16), which dates from c. AD 200.





Dara – Bridge 1



Bridge 2

River Arzamon (Gümüş Çay/Zergan)

15) Kızıltepe/Dunaysir

Position:	37°08'29"N, 40°30'31"E
Number of arches:	Probably one
Length:	River-bed 20m wide
Width:	Unclear
Road:	Ressaina-Nisibis; nearest way-station <i>Rene?</i> – see Ch.4-1, route 3

The border between the Roman provinces of Mesopotamia and Osrhoene is often unclear. Since the fortress city of Constantia (now Viranşehir) was apparently considered as belonging to Mesopotamia, this town too which lies to the east of Constantia must have been a part of the province of Mesopotamia although areas to the south seem to have been included in Osrhoene.

Kızıltepe is known for the Artukid great mosque constructed in 1204, when the town was known as 'Dunaysir'. Tell Ermen nearby no longer seems to exist as a separate entity but was thought by some early European travellers to the area to have been Tigranocerta (now convincingly identified by Sinclair with Arzen). The town was visited by Sachau¹⁴³ and Gabriel¹⁴⁴ and the latter drew attention to a bridge which is about 400m north of the mosque.

This bridge however was not that identified by Dillemann as of Roman origin. The latter lies at "Zergin", 9km south of Kızıltepe on a small river known in the ancient world as the *Arzamon*. Remains of an older bridge were located here in May 2007 at the village of Hocaköy (old name Abdul Imam) on the same river, whose modern name is the Gümüş Çay, but which is still known locally as the 'Zergan'. This river is today an important boundary between federations of Kurdish tribes.

There are remains of a large mill some 60m to the north with two shafts; the mill ceased to operate only in 1950 but is evidently much older. The settlement mound on the east side from the bridge used to be called Koru (new name: Büyüktepe). The bridge was said to

have been unintentionally destroyed by a tank, which attempted to cross it in around 1955. The remains indicate a bridge 5.5m wide, possibly with two arches. This bridge probably served the Roman road from Ras el-Ain to Nisibis.



Mill



Bridge foundations



Mound on east bank

The bridge in Kızıltepe whose photograph is shown below is probably contemporary with the mosque.



Osrhoene

The province had no substantial rivers other than the Euphrates itself and the small tributaries called in the ancient world the *Balissus* (Balikh), which runs south from Harran, and the *Chaboras* (Khabur) which formed the border with Persia and was apparently at that period marshy. No major bridges are known in Osrhoene other than those mentioned by Dillemann and listed at the beginning of this chapter. In that part of Osrhoene which remained Roman after AD 363 the following 5 bridges (which are now all in Syria and formerly lay close to the boundary between Osrhoene and Mesopotamia) can be located roughly and provisionally, but they have not been seen by me nor are photographs available:

* *Soufeiyé* (on the Djaghdjagh south of Nisibis but 13km north of its confluence with the Chabur)¹⁴⁵. This may have belonged to the province of Mesopotamia before AD 363 but it is uncertain whether it lay thereafter in Persian or Roman territory. The bridge would be near or in the modern town of Al Hasakah and on route 5, as described in Chapter 4-1.

* *Diurdjub river* (22 km east of Ras el-Ain – Resaina to the Romans).

* *Ras el-Ain* (8km west)¹⁴⁶

* *Tell Tuneynir* (Thannourios – bridge across the Khabur river)¹⁴⁷

* a further bridge on the Khabur but 14km upstream.

The bridges east and west of Ras el-Ain (and therefore of the modern twin town of Ceylanpinar) may well have carried the Roman road from Harran to Nisibis (also route 3 in Chapter 4-1). That at Djurdjub seems a little far south for this road but there may have been a variant heading east from Resaina, which passed south of Amouda. Not enough is known about the area of the junction of the Djaghdjagh and Khabur rivers to draw conclusions about the precise course of the road network in this area or about the role of the three other bridges in this network. Irrigation has taken most of the water of the Djaghdjagh and changed the appearance of the region drastically. The satellite photographs on Google Earth are not much help.

* * * * *

Euphratesia

Because this region was turned into a Roman province substantially earlier than Osrhoene and Mesopotamia it contains roads and bridges which were built for the most part in the second and third centuries AD. Their use continued in many cases right into modern times. Such usage is not normally attested by the written sources in the fifth and sixth centuries, when the province was known as Euphratesia, although the inclusion of routes crossing these bridges on the Peutinger Table may be taken as an indication of use at least up to the end of the fourth century AD.

Bridges 16, 17, 18 and 20 below are situated on the course of the Roman road from *Doliche* to *Samosata* and then continuing on via the 'river route' to Malatya. Bridge 18 (Habeş) indicates that a road went south along the river Euphrates from the point at which the river makes a sharp change of direction from west to south, beneath towering cliffs to a crossing point at Ayni (*Capersana*). From there it is likely to have gone on to *Edessa*. Its course has not been found so the road is unlikely to have been paved.

Bridge 21 (Rumkale) is a puzzle: either it was built to serve a Roman fortress on the site of the present medieval castle or else there was an attempt to build a road along the river bank below the castle, which was then abandoned – perhaps because of flooding - in favour of a route across the mountain behind.

River Chabinas (Cendere, later Kahta Çay)

16) Cendere

Position:	37°55'59" N, 38°36'35" E; 16km N of Kahta
Number of arches:	One, diameter approx. 34m
Length:	120m
Width:	7m
Road:	Samosata to Malatya via the Euphrates; between way-stations of <i>Charmodara</i> and <i>Heba</i>

This is deservedly the most famous Roman bridge of the whole of the south-east of Turkey. It is exceptional in being well-documented because of the inscriptions still visible on the pillars at each end of the bridge. As indicated by Hellenkemper¹⁴⁸ and confirmed by the inscription in the photo below, it was built by Legio XVI Flavia Firma between 198 and 200 under Septimius Severus and financed by four cities of Commagene¹⁴⁹.

The bridge is distinctive for several reasons; the most noteworthy feature are the three columns (originally four) set up two on each side of the bridge with inscriptions dedicating the bridge to the emperor, his wife Julia Domna and his sons, Caracalla and Geta. That of Geta was removed following his assassination. There are also substantial parapets, a feature which does not occur on most other surviving Roman bridges in this region. (Those which have been replaced on the Karaköprü, north of Diyarbakır, no.1 above, are not original; the Cyrrhus bridges have none.)

The bridge lies close to the ancient city of Arsameia (now Eskikale), the winter capital of the kingdom of Commagene but not known to be important in the Roman period; it carried the road north-east along the Euphrates frontier from Samosata across the Chabinas (now Cendere, a branch of the Kahta river). It remains in use for modern traffic.



River Singas (Göksu)

17) Göksu

Position:	37°26'33" N, 38°09'50" E; 3km from the confluence with the Euphrates
Number of arches:	Originally one large (diameter approx. 30m) and two small
Length:	Approx. 60m
Width:	10m
Road:	Doliche to Samosata (Ch. 4-1, route 8); nearest way-station <i>Tarsa</i> .

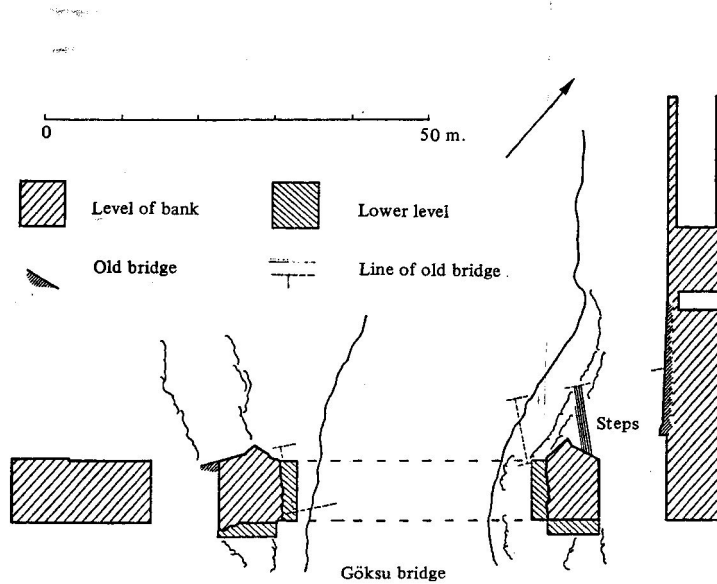
This bridge is on the Roman road from Doliche to Samosata¹⁵⁰. The nearest large village is Kuyulu (old name: Turuş), the *Tharse* of the Peutinger Table which has a large settlement mound, quarries and a large necropolis with tombs cut into the natural rock. There is a substantial Roman tower or temple at the smaller village called Burç which is approximately 5km north of the bridge¹⁵¹. The funerary monument of the dynasty of Commagene, in the form of a large mound of stones with pillars at Sesönk, lies some 8 km north-west of the bridge on a mountain-top¹⁵².

The bridge replaced another one on the site, presumably Flavian, although my photos indicate that the footings for the earlier bridge were a couple of meters upstream and not immediately under the present bridge as indicated in Sinclair's plan below¹⁵³. The present bridge is ruined but substantial portions remain and on the grounds of similarities of style to the Cendere bridge (no. 16 above) is dated by Sinclair to c. AD 200 (p172/173). The central arch was destroyed only in the late 19th or early 20th century and remained in use until then. The central span is about 31m and the carriageway is judged by Sinclair to have been originally 15m above the river. As shown in the sketch plan below, the road over the bridge makes an abrupt left turn as it joins the north-east bank. This would have been difficult for carts to negotiate.



Photo: Barbara Tolle





The bridge has been well-known for a long time. According to LeStrange the Goksu was formerly known as the Singas and the bridge lay close to a small town called Sanjah. Ibn Hawkal considered it to be one of the wonders of the world and the bridge is described in detail by Yakut¹⁵⁴. It was reported in modern times by Dörner and by Hellenkemper¹⁵⁵.

18) Süpürgüç

Position: 37°25'50" N, 37°53'39" E; 18.5km NNE of Rumkale
Number of arches: Originally six
Length: Approx. 75m
Width: (missing record)
Road: Doliche to Samosata (Ch.4-1, route 8); between way-stations of *Sugga* and *Tarsa*

The Roman passes over a limestone plateau which contains three villages with large freestanding Roman tombs (Elif, Hisar and Hasanoğlu). Just after these to the north the road descends towards the 'black river' (Kara Su - possibly the *Singas* in antiquity but this

name is also claimed for the Goksu). The bridge and the monuments were first reported by Chapot who travelled through the area on horseback at the beginning of the 19th century¹⁵⁶. Wagner has published some details of the bridge¹⁵⁷; he also found roof tiles nearby which indicate that the still extant ruined Roman bridge was built by Legio IV Scythica¹⁵⁸, probably at the same time as the better-known Severan bridges at 1) and 2) above.

The bridge was apparently repaired by the Ottoman Sultan Murad IV who reigned from 1623 to 1640. Unfortunately since Wagner visited it in the 1970s one more arch appears to have fallen. A comparison of the Severan bridges is included below under bridge 20 (Rumkale).



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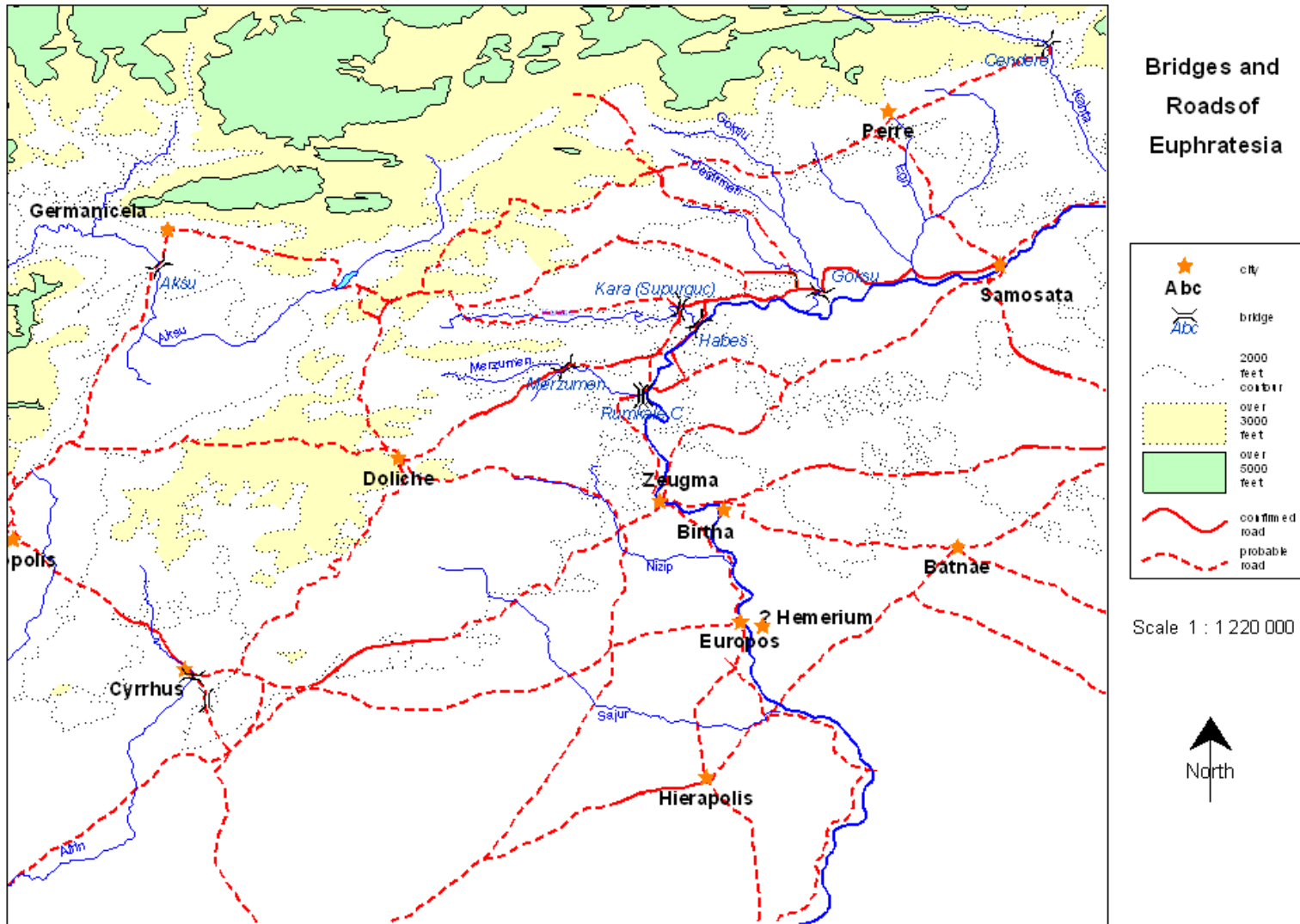


Figure 3

19) Habeş

Position:	37°24'10" N, 37°56'11" E; 17km NNE of Rumkale
Number of arches:	unknown
Length:	approximately 40m
Width:	5m10 (8 rows of blocks high - about 3m)
Road:	Sura-Zeugma-Samosata (Ch.4-1. route 12); way-station <i>Ad ponte Singe</i> (?)

The existence of this bridge was referred to by Chapot but he never visited it¹⁵⁹. I went to see it in 1999 shortly before it was covered by the water of the Birecik dam and published a picture of it in an article concerning the crossing points of the Euphrates¹⁶⁰. According to local people, it continued to operate until the 1960s when several spans were washed away in a big flood. The bridge lay at about 40m from the confluence of the Kara Su with the Euphrates in a deep gorge. A family of Kurds were living in a house constructed over one part of the bridge and informed us that the name of the locality was 'Habeş'.

The bridge would have carried a road coming from the south along the west bank of the Euphrates and must have started at Ayni where there is known to have been an important crossing point, presumably for a road continuing from the east bank to Edessa. There are many remains of ancient churches and other buildings in this area of north-west Osrhoene. The road along the river-bank north of Ayni was not visible from the far bank, presumably because rock-falls and erosion from the 300m high cliffs above the river (and below the villages of Hisar and Elif) had built up deposits which covered it. North of the bridge some paving was visible at a point where the modern and ancient road rises up towards the village of Akbudak (old name: Süpürgüç). Near this village there must have been a junction with the road from Doliche to Samosata.

There was a brief inscription about 50m above and 80m south of the bridge on a quarried rock-face. It read 'Legio IIII Schyt Operosa Felix'¹⁶¹. The bridge must have risen from a point south of the Kara Su in a conventional manner but its arch (now disappeared) would have had to join a pier on the north side immediately abutting a cliff face, along which it had to make a right-angle turn to reach a point about 20m to the right at which its road could join 'dry land' by turning left and then proceed north.

Its size and style of masonry are similar to the other Severan bridges listed by Wagner (see 'Rumkale' below). It is also likely to have been built at the same period as the large square tombs in the three villages above on the plateau to the south-west, called Elif, Hasanoğlu and Hisar¹⁶².



River Marsyas (Merzumen)

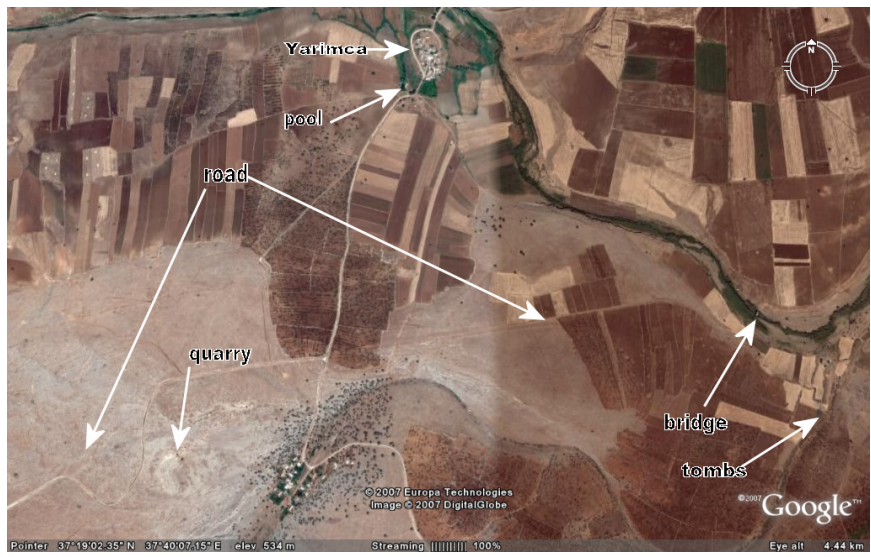
20) Yarımca

Position:	37°18'58" N, 37°40'59" E; 1.7km SE of the village
Number of arches:	One
Length:	23.5m (exterior of arch, measured on Google Earth)
Width:	7.1m
Road:	Doliche-Samosata (Ch.4-1, route 8); nearest way-station <i>Sugga</i>

Only a single arch is extant, but the road evidently carried the Roman road from Doliche to Samosata, whose course is clear on satellite photographs and in many places also on the ground. Nearby in the village of Yarımca there is a stone-lined pool which may have been associated with a bathing establishment since the Peutinger Table shows at this point the symbol for 'Aquae' of baths. Behind the village to the south-east of the road as it mounts the hill back towards Doliche (and Gaziantep) is a quarry which presumably was the source of the stone for the bridge. One wall of this quarry has a curious figure carved on its walls with remarkable long fingers. There are also rock-cut tombs nearby, one of which has a carved bull's head with long horns¹⁶³.

Wagner reported in 1977 that there was a bridge at Yarımca¹⁶⁴ but he cannot have seen it since he describes it as "...*der ebenfalls nur in geringen Fundamentresten nachweisbar ist...*".

Although this bridge and number 17 above on the Kara Su are the most striking remains of the Roman road from Doliche to Samosata, there are also a watchtower and a culvert some kilometers south-west of Yarımca on the plateau. The latter has been roughly repaired but seems for the most part Roman and was published by me in *Anatolian Studies*¹⁶⁵ (see also discussion in Ch.4-1, route 8).



21) Rumkale

Position:	37°16'26" N, 37°50'20" E; about 200m from former confluence of Merzumen and Euphrates
Number of arches:	Probably one, diameter approx. 20m
Length:	About 50m
Width:	Unknown
Road:	Originally part of Soura-Samosata road along the Euphrates (Ch.4-1, route 12; later a local road for a fortified point on the site of Rumkale? Way-station: <i>Arulis</i> ?

This bridge is one of several that used to cross the Merzumen below Rumkale. All have now been inundated by the Birecik dam. It was identified as a Roman bridge by Wagner¹⁶⁶. He found blocks 46cm high (*'Bruestungsquadern mit angearbeiteten, auskragendem Deckplatten'* – “balustrade blocks with jutting out flat slabs”) but there may have been some further deterioration in the period leading up to my visit in 1997 (see photos below). The likelihood that this was an important Roman site, perhaps *Arulis*, is increased by the existence of three substantial aqueducts bringing water from the Merzumen, one of which passes in a tunnel through the neck of the ‘peninsula’ linking the castle to the mountain behind.

The bridge was located about 200m from the confluence of the Merzumen with the Euphrates and is possibly an indication that the fortress of Rumkale was already an important Roman site, although the extant fortifications are from a much later period and it is known to have been a seat of the Armenian patriarch in the early Middle Ages. However the road going south probably did not continue along the river bank below the fortress but went over the mountain behind to the west, so this bridge cannot have carried much traffic. In my article of 2001, I suggest that there may have been a first road built along the river to a point opposite the town of Halfeti on the east bank of the Euphrates, but that this road was subject to flooding and therefore abandoned in favour of a route across the mountain behind Rumkale, rejoining the Euphrates some 5km to the south.

There was the pier of a medieval bridge, some 50m downstream of the Roman one here illustrated.



The photos below were taken by me evidently before the remains were covered by the water of the Birecik dam. But in the photo above the water has already risen and drowned the side valley of the Merzumen which approaches the Euphrates from the west.

Other bridges at Rumkale include remains of an apparently medieval bridge and of the original road bridge to the south-west of the castle. The latter was attested only by rubble in the river Merzumen (in a section now also under the water of the Birecik dam) but the road descending to it from the south makes clear zigzags – also visible on the satellite photos – and the mayor of the nearby village claimed that there had indeed been a bridge once at this point.



Piers of Roman bridge



Medieval bridge

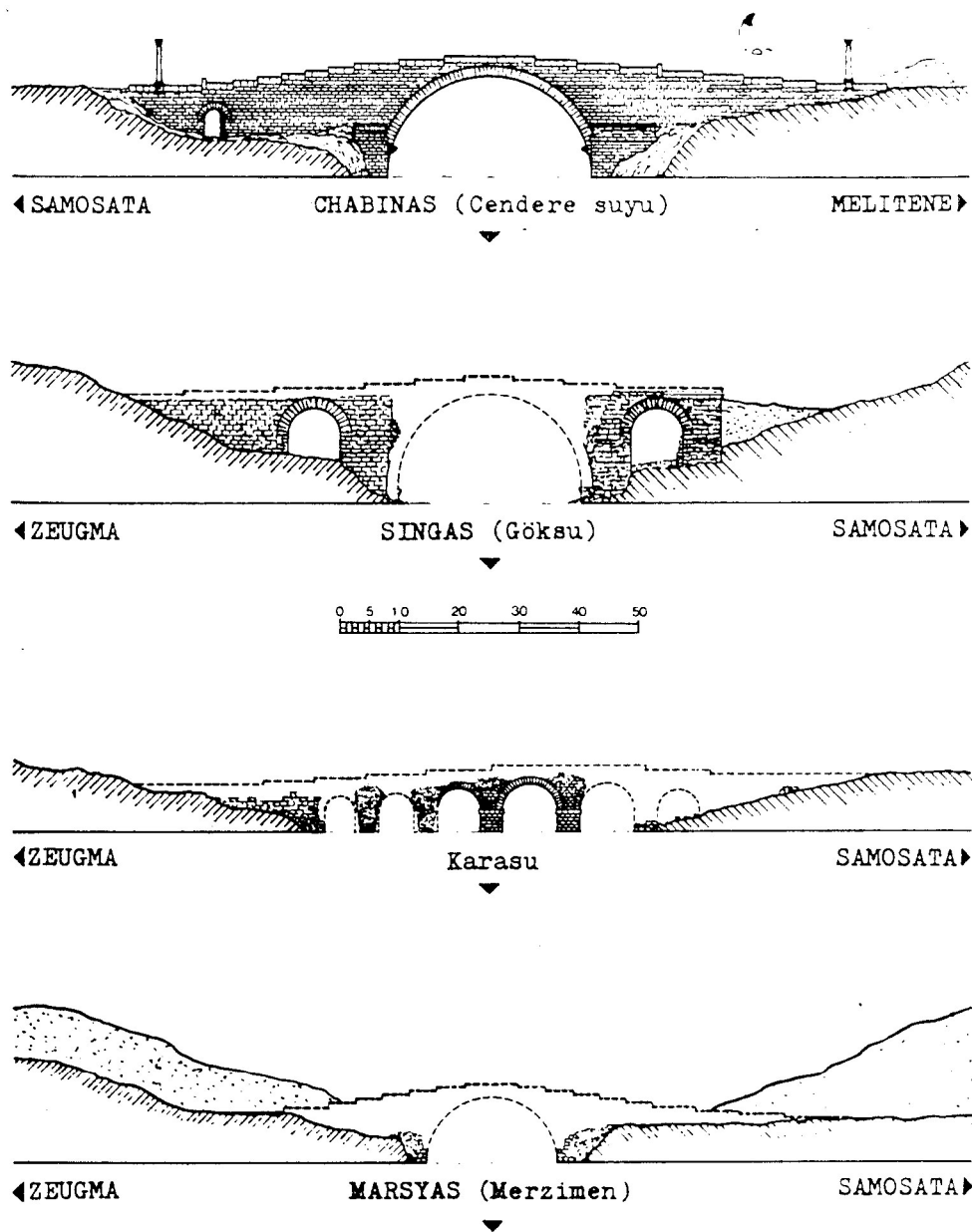


Rubble from Merzumen
(upper crossing)



Road from Zeugma
descending to Merzumen

From near this upper bridge two leats left the river at different levels. The lower aqueduct served the village below Rumkale; the higher passed through a large tunnel still extant in 1997 which crossed through the neck of rock on which the castle of Rumkale stands and then continued south in an aqueduct which apparently fed a mill opposite the existing town of Halfeti.



Textabb.5. Römische Brücken im Verlauf der Euphratstraße von Melitene nach Zeugma.

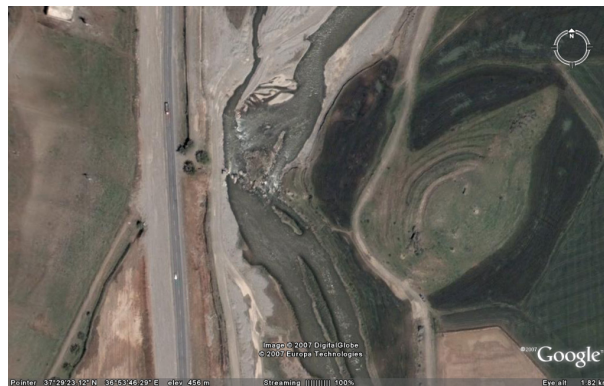
Source: Wagner, J. (1977) *Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients*, Limes: Akten des XI. Internationalen Limeskongresses, p682

Aksu

22) Marash

Position:	37°29'24"N, 36°53'44"E; 10km south of Kahramanmaraş
Number of arches:	probably five
Length:	approx. 50m
Width:	uncertain
Road:	Antioch-Germaniceia (Ch.4-1, route 10); no known way-station nearby

This bridge has not been studied by me in detail, having been seen only by chance during a long journey to Kahramanmaraş from Gaziantep. It is situated at an elevation of 456m and is mentioned by Sinclair as 'probably Roman'¹⁶⁷. It constitutes important evidence for the Roman road from Antioch up the rift valley north to Germaniceia (now Kahramanmaraş). The mound on the east bank visible in the photographs is probably originally of the Bronze Age and shows a striking continuity of the route into the Roman period.



Wagner states that Roman work can be detected at a few points under the medieval restoration, which used small stones. The ancient blocks range from 70cms to 1.40 in length. The first pier on the left (east) bank has been damaged by a modern irrigation channel, but five or six piers can be assumed, each with upstream cutwaters¹⁶⁸.

Sabun/Afrin

23 and 24) The bridges of Cyrrhus

i)

Position: 37°29'24"N, 36°53'44"E

Number of arches: Six

Length: 110m

Width: 6m

ii)

Position: 1km SE of i)

Number of arches: Three

Length: 65m

Width: 5.5m

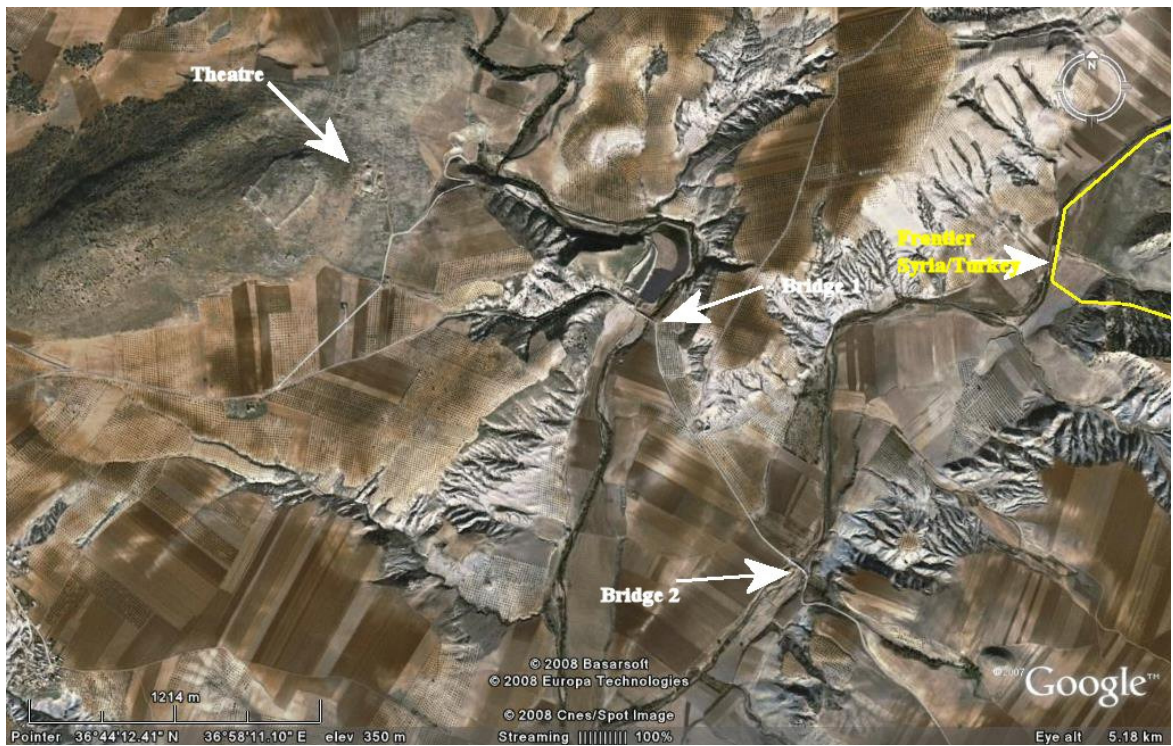
Road: Antioch-Cyrrhus (-Kilis-Doliche); Ch.4-1, route 8; nearest way-station
Cyrrhus

There are at least two still extant, a short distance east of the ruins of the town, both apparently built by bishop Theodoret in about AD 450. In addition to these bridges, Theodoret states in epistle 81 that he built colonnades, an aqueduct and baths. The bridge shown below over the Sabun river is evidently still in use and was photographed by me in 1999, before this thesis was conceived and when I had no especial interest in Roman bridges. Its position and measurements have been taken from Google Earth.

The first has six arches in total (five only are visible in the photograph below and five were also mentioned by Cumont who passed this way in 1907¹⁶⁹, but two were possibly small ones). The bridges are referred to in an article also of 1907¹⁷⁰, which mentions the second bridge across the river Afrin to the south-east on the road from Killis to Cyrrhus, as having only one arch. However, a photograph published by Jörg Wagner in the 'Limes' report of 1977 shows it as being very similar to the Sabun bridge but with three arches and this is confirmed by Cumont¹⁷¹ and by a sketch by Chapot¹⁷².

Cumont notes that the bridges were still standing despite the removal of the bronze 'tenons' which held the stones together and had originally been sealed with lead. The roadway is still of large rectangular paving stones but there is no parapet. There are triangular buttresses or cutwaters on the upstream side.

These bridges must have served the roads to Doliche, Killis and *Beroea* (Aleppo). In the map published on page 678 in his article, Wagner shows the Roman bridges in the region of the Euphrates, including these two and a third – also on the Afrin but some 20km to the SSW. No photograph of the last bridge is included and I have not seen it either on the ground or on Google Earth; the bridge is indicated as carrying the road from Antioch to Zeugma and must be located close to the modern village of Qastal Kechik. These bridges are all of course today located in Syria.



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Chapter 4 : Roads

This chapter is divided into three parts. The first examines the course of the roads. The second examines the nature of the road-users. The third looks at the context and in particular at the purpose of the roads. To assist in the identification of the large number of place-names a simple table is attached at the end of each route section and a gazetteer is appended at the end of the thesis.

Part 1: Course of the roads

The principal ancient source is the Peutinger Table (PT); the rather earlier Antonine Itinerary (AI)¹⁷³ often gives conflicting routes between Syria and Osrhoene (but does not concern Mesopotamia at all). Some further names – probably from ancient itineraries - are supplied by the Ravenna Cosmographer (see Annex D at the end of this chapter), although these are often unidentified. The date and purpose of the PT are discussed in Chapter 2 above, in which the other major sources are also introduced. For the area under examination here the PT is believed to be based on information deriving from the late 4th century and is therefore from the beginning of the period under review. Chains of cities mentioned by the Alexandrine geographer Ptolemy (ca.90-168 AD) are thought to have been based on itineraries and are therefore sometimes relevant. There are also for particular routes, such as that to Babylon and the Far East, specific itineraries such as the ‘*Parthian Stations*’ of Isidore of Charax (although these all clearly apply to earlier periods).

Konrad Miller’s ‘*Itineraria Romana*’, published in 1916, provides maps and identifications of stations mentioned in the PT and AI. In many cases these seem to be based largely on guesswork and on a necessarily incomplete geographical knowledge. They remain however a good starting point for an analysis of the roads of this region. Schachermeyer’s article on ‘Mesopotamia’ in Pauly-Wissowa’s *Realenzyklopedie* (RE 15, 1105-1163), also looks in detail at some of the routes in this region but offers little that is new. Honigmann’s lengthy article on ‘Syria’ (RE 7, 1549-1727) does however provide many useful identifications, some of which are discussed below.

The main modern source of information on late Roman roads in Mesopotamia and Osrhoene is Louis Dillemann, whose work was published in 1962. His remarkable study is often difficult to

follow because of the large number of unfamiliar place-names and its elliptical style, but it remains the basis for any analysis of the roads in these provinces, since he successfully brought together information from a wide range of sources. Dillemann was a Belgian officer; given that the local information was collected by him during a period when France was responsible for the government of Syria, it is not surprising that his study is especially complete for areas south of the border with Turkey. Apart from his personal knowledge of the terrain, Dillemann also relied on the detailed itineraries prepared for the British War Office by Captain, later Colonel, F.R. Maunsell. The latter's *'Military Report on Eastern Turkey-in-Asia'* was published initially as a confidential document in 1893 and is available only in part from the British Library; the final version, used by Dillemann, was originally classified 'secret'. It dates from 1904 but the crucial volume is available in the UK only from the National Archives at Kew. Much of the information was however included in the 'Asia Minor' and 'Mesopotamia' volumes published later by the Naval Intelligence Division of the British War Office in its series of geographical handbooks¹⁷⁴.

The Barrington Atlas of the Greek and Roman World (maps 67 and 89) shows several roads crossing the area concerned here. It also identifies the location of many of the place-names mentioned below. Although the indications provided and the details in the accompanying reference books are extremely useful, the roads shown are not always certain and many are omitted, while the identifications of places are not always correct¹⁷⁵.

According to Dillemann, the network of Roman roads in upper Mesopotamia described below was constructed '*en dur*', by which he apparently meant that it was paved¹⁷⁶. However, this is unlikely to be true for the network as a whole since we know from, for example, the photographs of Poidebard taken in the 1920s, that long stretches were simply hard surfaces cleared of obstacles. A recent study of Roman roads in Syria also concluded that outside towns paved roads were rare¹⁷⁷. The specific sections of "*voies pavés ou empierrés*" cited by Dillemann are for the most part no longer visible, perhaps because covered by tarmac, and I have not therefore been able to show their precise positions, although the letter next to each sighting mentioned below corresponds to a letter shown at the approximate position on the maps at figures 4 (page 105) and 12 (page 145).

They are as follows:

- a) Zeugma-Edessa: paving near Charmelik¹⁷⁸;

- b) Edessa-Harran: large paving stones on a short stretch to the north-west of Harran¹⁷⁹;
- c) Ressaina–Lacus Beberaci: a made-up stretch in front of ‘Tell Oum Gargan’¹⁸⁰;
- d) Samosata-Edessa¹⁸¹;
- e) Diyarbakir–Cüngüs: west of Cermik (formerly Abarné)¹⁸², which may have been the route followed by Ammianus Marcellinus after the fall of Amida¹⁸³;
- f) Nisibis-Cizre and Singara-Bezabde: east of ‘Demir Qapou’ on the road from Ezdin Dag near Bazeft (but only 2m60 wide compared to 6m for the road near Cizre heading west to Nisibis)¹⁸⁴;
- g) Resaina–Constantia: ‘voie antique empierré’¹⁸⁵ ;
- h) and, doubtfully, a stretch of road on the route Nisibis-Eski Mosul¹⁸⁶.

Von der Osten and others also mention several stretches of paved road (see j) and k) on page 145) in north-west Euphratesia, between Marash (*Germaniceia*), Adiyaman (*Perre*) and Malatya (*Melitene*)¹⁸⁷. (I can confirm one stretch of paved road which is mentioned by Von der Osten near Ufacıklı (east of Pazarcik and Karamanmaraş), which I visited in April 2008 (k). On his maps of the frontier near Nisibis, Poidebard shows various stretches of road discovered by him from the air¹⁸⁸, in particular one near Cizre of which he published a photograph of a rubble core (l). There are several other sections of paved road in Euphratesia and Syria, west of the Euphrates. That on the road from Antioch to Chalcis, for example, is well-known and has been discussed inter alia by French¹⁸⁹. It lies outside the province of Euphratesia. Other stretches within the three provinces under review have been found by me in recent years near Rumkale (m); 20km north of Diyarbakır (n); and east of Hasankeyf (o). These are discussed below. Most of the course of the road from Doliche to Samosata (route 8 below) is clear but for other reasons; paving has not been found.

Milestones are a source of evidence which is frequently important for identifying the course of Roman roads in other parts of the empire. In north Syria and further east surviving milestones are rare. This seems to be partly because of a habit of local Muslim people which involves re-using bits of stone, preferably cylindrical but frequently broken into fragments, as grave-stones¹⁹⁰. But in any case it appears that milestones with inscriptions ceased to be erected during the period under review, although they are sometimes referred to as landmarks, for example by western pilgrims travelling to Edessa¹⁹¹. Construction and maintenance of roads may sometimes have involved the rendering of milestones with a plaster covering; inscriptions were then painted onto otherwise ‘anepigraphic’ stones, but such painted inscriptions have not been found preserved in this region and even unscribed milestones are rare. The few milestones known for this region are discussed below in relation to their find-sites¹⁹². Two have been found recently, north and south of

Gaziantep¹⁹³. Three – apparently unpublished – are in the courtyard of the museum at Karhramanmaraş.

Bridges provide of course essential information on the course of the roads. They were discussed in detail in the preceding chapter and are referred to where appropriate also in this chapter.

The routes examined in the text are shown on the accompanying maps, which also indicate where ancient roads have been verified. Apart from paving, the existence of bridges and lines of kerbstones are taken as certain indicators of roads. The Reverend Poidebard thought that he had seen the trace of several roads from the air and produced on this basis a fine map of the network between Chalcis and the Tigris. Doubt has been thrown on some of these by Dillemann and it does seem that many of the accompanying forts and *castella* identified by Poidebard as Roman in fact date from other periods¹⁹⁴.

The question of the use of the routes described here in the various periods of antiquity is a thorny one. It is addressed in parts 2) and 3) of this chapter. Although routes did doubtless continue in use for centuries because of the existence of wells, cisterns and hostels for travellers it must also be true that their relative importance for commerce differed with the waxing and waning of the importance of individual cities and the position of the frontier. The clearest example of this seems to have been a decline in the later Roman period of the importance of *Zeugma* and the route west-east to Edessa in favour of *Hierapolis* and a route to Edessa from the south-west, crossing the Euphrates at *Caeciliana*. On the other hand, it is likely that traffic continued on all the routes described to some extent. Roman bridges have in some cases continued in use until the present day and villagers have described to me their memories of the passage of camel caravans both crossing the Euphrates at Zeugma by boat and following the Euphrates further north from the ford (and former bridge) at *Ayni/Capersana* across the bridge on the Kara Su at *Habeş*, which remained in use until it was swept away in the 1960s.

Several of the routes discussed below terminate well inside Persian territory even though the PT is based on a Late Roman document and therefore on knowledge available in the Roman Empire, not the Sassanian. Since it must have been compiled after 363 for this region, it implies a rather intense cross-border traffic, but of course this cannot be proven.

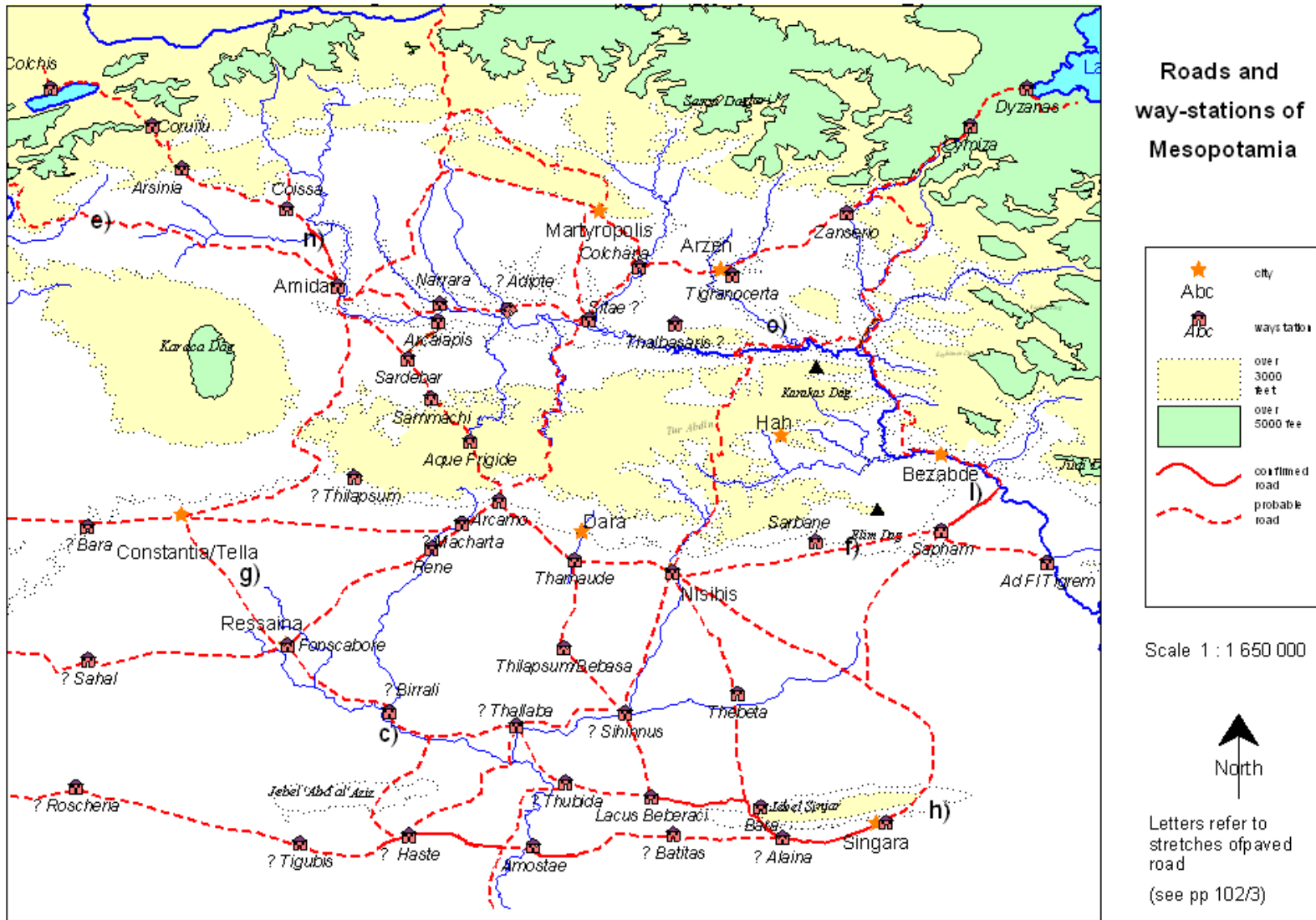


Figure 4

Identification of the places mentioned in the ancient sources depends mostly on the distances provided between the stopping places mentioned on the Peutinger Table. However, these are frequently unreliable because of the errors made by copyists. There are occasionally survivals of ancient names which can be found on old maps of the region or which may even be still in use. Sometimes there are archaeological remains which indicate a possible stopping place. Where there are competing identifications I indicate below which seems preferable to me, usually on the basis of my experience of the sites.

In regard to upper Mesopotamia and areas east of the Euphrates, Dillemann derives from the sources and the available remains, as well as from his direct experience of the area, the following main ancient routes, which include several which passed through the Tigris basin around *Amida* (Diyarbakır):

1) *North-west to south-east (or Melitene to Nisibis)*¹⁹⁵

For at least some parts of this route the ‘Persian Royal Road’ may have preceded that used in Roman times. The Achaemenids’ road from Sardis to Susa, reported by Herodotus, is a notorious source of disagreement between scholars and doubts have been expressed as to whether there was ever a single route. However, a recent investigation by French has concluded that Herodotus is a reliable guide and has identified much of the route across Asia Minor¹⁹⁶. For the section across the Taurus, Dillemann believed it passed from Melitene through Harput, Diyarbakir, Nisibis and Cizre to Arbela (now Irbil, capital of Iraqi Kurdistan). In this view he followed Kiepert¹⁹⁷, as have done many others, including David French¹⁹⁸. Dillemann makes good use of the Peutinger Table (PT) and notes the Persian influence evident in six of the place-names along and around this route; he also draws attention to the ‘*phylakterion*’ mentioned by Herodotus which he identifies with Eḡil¹⁹⁹. Two other Persian connections are mentioned: Lucullus had sacrificed to Persian Artemis at ‘Ad Aras’ (possibly, Tomisa); Arcamo is likely to be Tell Harzem where the river Ghars emerges from mountains – Zacharias Rhetor and Joshua the Stylite call this place *Apadna*, which means ‘satrapal residence’ in Old Persian²⁰⁰.

The interest for the Sassanian Persians of this area is indicated by Shapur's conquest of Amida in AD 359 which was preceded a few days previously by the capture of the fortress of Ziata, identified by Sinclair with Amini Kale, east of Eğil²⁰¹. However this town, the former Armenian city of Carcathiocerta, is not mentioned in the PT. Possibly the road north from Amida/Diyarbakır passed 12 km south of Eğil, via the village of Şerbetin/Kalkan where there is an old caravanserai and some late medieval tombs, and then north-west to Ergani. In this case the station of *Coissa* could be Şerbetin (new name: Kalkan). This section of the satellite photographs available on Google Earth is not in high resolution and no road is evident there from Ergani to Şerbetin, so the road may in fact have passed through Eğil.

For the Roman Empire this route was significant for strategic reasons since armies raised, for example, in the Balkans could most easily approach the main area of conflict with the Persians around Amida by the original road-head of the early Roman Empire in Anatolia at Melitene. (Supplies for the troops in Mesopotamia are, however, more likely to have come from Antioch – see below.)

Alternative routes for the Persian Royal Road and its Roman successor are dismissed by Dillemann as unconvincing: in particular, he rejects the proposals of Kiepert and Olmstead²⁰² for the road between Amida and Ctesiphon. These writers had argued for, respectively, routes via the south-west sides of the Tigris gorge (Kiepert) and via the north bank of the Tigris and a crossing of the Bohtan river (Olmstead). Dillemann also rejects Calder's route via the Cilician gates and Zeugma²⁰³. Olmstead's proposal is however supported by the finds of the expedition led by Guillermo Algaze in the late 1980s to survey those areas likely to be drowned by the Ilisu dam. In particular, he found a late Roman - or possibly, Sassanian - bridge at the confluence of the Garzan Su with the Tigris some 16km east of Hasankeyf (at Şeyhosel: see bridge 8 in chapter 3) and he noted traces of an ancient north-south route along the Tigris gorge north of Cizre in the form of a hollow way '*carved out of the limestone cliffs flanking the east bank of the river*',²⁰⁴. This is not however referred to by Layard in his account of his journey to Nineveh²⁰⁵ and I have not been able to find this hollow way in the gorge myself because of the poor security situation in the region.

There is evidence that the route along the Tigris may have been used in the Parthian period in the form of a rock-cut relief at Finik, mentioned by Layard and in the report of Algaze (see above), but so far there is little to indicate its use during the 5th and 6th centuries, other than a few bridges which could have been in use at this time: apart from Şeyhosel Köprüsü, already mentioned, there are the two bridges known as Nasreddin and Kırık on the Bitlis/Kezer Su and Bohtan Su, respectively (see chapter 3 above). The bridge in the south of the region across the Kızıl river, which joins the Tigris from the east near Cizre after passing through the Kazrik gorge (Bürüçek Köprüsü), must have carried a road to Finik which may well have continued up the Tigris. Other old bridges on Tigris tributaries entering the gorge on the east bank are only Ottoman pack-horse bridges, although these might have had more ancient predecessors.

A route south of the Tur Abdin, as posited by Dillemann, rather than down the Tigris gorge would explain the four river crossings mentioned by Herodotus as being: 1) the Tigris at Cizre, 2) the Great Zab, 3) the Little Zab and 4) the Diyala²⁰⁶. However, although the existence of a post service is confirmed by Herodotus, he has nothing to say about the nature of the route, which may in any case have had Assyrian antecedents for this section. There were Assyrian towns on route after Malatya, in particular Kerk (Charcha/Üctepe), Nisibis and Babil (near Cizre).

There is of course no requirement that routes important at one period of history will be important in another. For geographical reasons the route from Malatya to the Tigris via Amida and Mardin is indeed likely to have been in use during many periods, but it should be noted that the Assyrian road from Nineveh to their cities on the upper Tigris (especially Tushan, probably Ziyaret Tepe²⁰⁷) apparently took an entirely different route across the Tur Abdin. According to Kessler, it mounted the escarpment near Babil and continued north-west to Midiat and then Savur²⁰⁸ before descending to the Tigris.

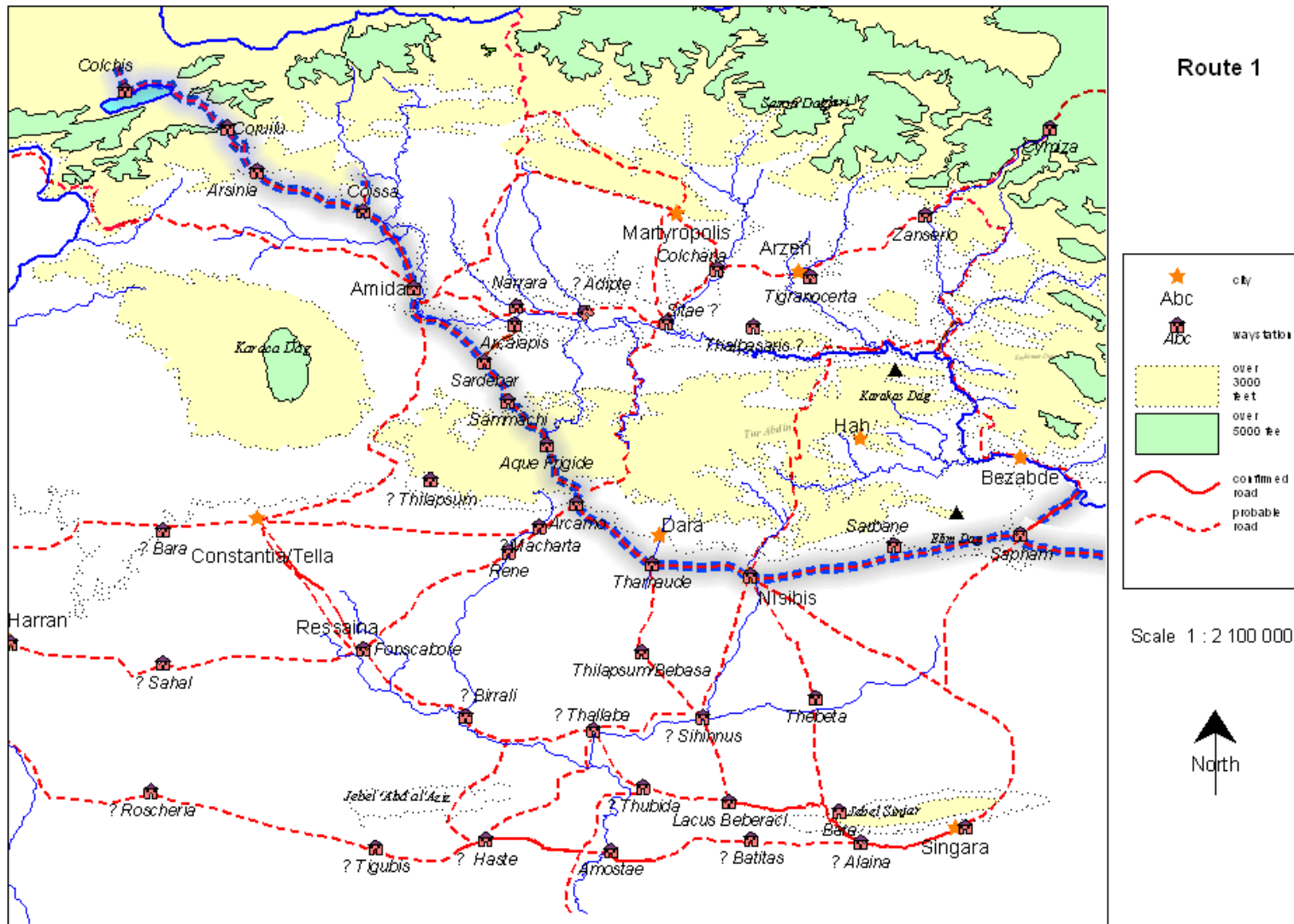


Figure 5

In regard to the places along the route, the PT has:

Melentenis ... Mazara xvi – Colchis –xiii – Coruili xiiii- Arsinia xiiii – Coissa xvi – (2-tower symbol) xxvii (?) ad Tygrem xiii – Sardebar x – Arcaiapis xiiii – Sammachi xvii – Aque frigide (?) – Arcamo xxx (?) – Thamaudi xvi - Nisibi x – Sarbaran xxviii – Sapham – Ad fl Tigris. (The extract from the PT concerned is reproduced under route 2 below.)

The stations mentioned in the Peutinger Table are difficult to identify securely: the road heading south-east from Malatya ('Melentenis') seems likely to have crossed a pass in the Taurus mountain above Lake Hazar (or 'Gölcük'), as does the modern road today. Miller, the first major writer on the Roman itineraries, placed stations of the Peutinger Table north of this lake (*Colchis*), east of it (*Coruilu*) and then at Ergani (*Arsinia*) and Şerbetin (*Coissa* - see discussion above)²⁰⁹. These identifications have not so far been contested, but there is a problem with the following unnamed stop indicated solely by the symbol of twin towers. Amida, not otherwise named, may be represented by this symbol, an identification which would permit a direct route from Ergani to the Tigris crossing below Amida. However, it seems more probable that Amida is 'Ad Tygrem' and the twin towers symbol refers to Eğil which lies 47km to the north (see gazetteer under Carcathiocerta)²¹⁰. Otherwise, there would be a serious confusion over distances south of Amida: the twin towers are shown 27 miles (40km) from 'Ad Tygrem', which is therefore more likely to be Amida itself, although there is no red line showing a road joining the two places if they are in fact different. (This may be an indication that the information for this part of the PT stems from a period preceding the fortification of Amida by Constantius in AD 354, when the nearby town of Carcathiocerta/Ingilene/Eğil is likely to have been eclipsed.)

If the twin towers represent Eğıl, which lies 12km north of the way-station proposed at Şerbetin and therefore not on the route proposed by Miller, then the route across the Taurus from Malatya to Amida is unlikely to have been so direct and alternative identifications need to be investigated for *Arsinia* and *Coissa*. I have not yet had the opportunity to look at routes heading north-west from Eğıl, but another route heading due north across the mountains to Palu is also a possibility (see discussion of bridge 2 in Chapter 3) .

Dillemann, who treated only those stations south of Amida, believed *Arcaiapis* to be the Kerk (or 'Charcha' – now Üctepe near Bismil) investigated by Consul Taylor²¹¹ and

recently excavated by Sevin²¹² (see discussion under route 2 below). Sinclair, the other major expert on the subject, believed Kerk to have been *Sardebar*, but later accepts the identification as *Arcaiapis* (which requires an inversion of two stations shown on the PT), although not Dillemann's explanation of the routes in the PT in this area Chabot, J. B., (1896)²¹³. *Sammachi* may not have been the late Roman fort of Kale i-Zerzevan as shown on Kiepert's map ('Diyarbekir'), a settlement visible from the main road between Diyarbakir and Mardin, but rather to have been a on the stream between Zerzevan and Kerk, now the Göksu but in a 'pre-First World War English transcription' called the 'Shammerkh Chai'²¹⁴. This would leave the name *Sardebar* for Zerzevan. 'Aquaе Frigidae' is generally acknowledged to be *Meiacarire*, a word in Syriac with the same meaning, now Khan Cheikhan, at the side of the main road²¹⁵. The site lies at the intersection of this road from Mardin to Diyarbakır with the stream valley and is mentioned by Ammianus Marcellinus²¹⁶.

In regard to the section of route 1) south of the Tur Abdin and of the descent into the plain near Mardin, Dillemann identified *Arcamo* as 'Tell Harzem' and *Thamauda* as the existing Syrian town of Amouda. These have not been disputed. *Thamauda* is shown in the PT as 16 Roman miles from Nisibis (23.7km); the actual distance is 25km. Amouda was also known later as 'Ammodion', the place where Byzantine soldiers gathered before helping Khusrau II to regain his throne in 590. Poidebard reported in 1927 the find of a milestone at Amouda. The inscription was deciphered by Mouterde and attributed to Caracalla around 216/7 and is therefore important evidence for the early development of the Roman road system in this area. It is apparently now in the museum of Aleppo²¹⁷.

From Nisibis a route due east to the Tigris followed the plain below the escarpment of the Tur Abdin to the Tigris crossings at Cizre and, possibly, Fesh Khabour²¹⁸. The current border between Turkey and Syria makes inspection of this part of the route difficult, but Poidebard says²¹⁹ :

Au cours de ma reconnaissance d'automne 1927, des confirmations émanant de témoins oculaires, non indigènes, m'ont été apportés, constatant, entre Nisibis et Djezireh ibn Omar, les restes de la chaussée romaine en plusieurs points de la route nord serrant les pentes du Djebel Tour [Tur Abdin] : tronçons de voie romaine de 6 mètres de large retrouvée par endroits avec son dallage et ses bordures, traces de passage dans le rocher des falaises, ponts, etc.

The first part of this road is presumably that followed by Procopius to Rhabdion, which is discussed at the beginning of the second part this chapter. *Sarbane* of the Peutinger Table would be the Persian/Byzantine fortress near Rhabdion called Sisauranon, now by the hamlet of Sirvan – an apparent survival of the ancient name. Some of its walls are extant and the site was visited by me in May 2006. Unfortunately I did not see the paving mentioned by Poidebard.

Sapha is less certain. Dillemann suggests that this was Safan, a river on whose banks a village is known to have disappeared but which seems to have been visited by Maunsell²²⁰ and which lay 42 km to the east of *Sarbane* (not 38km, equivalent to the XXVIII Roman miles of the PT). Lehmann-Haupt reported that there were substantial ruins of an Assyrian city nearby at Babil²²¹. The remains of this city are at a village now called Kebeli, just north of the border with Syria and it was visited by me in May 2007. There are stones still visible at the local mosque which may indicate its importance in the Assyrian period, but nothing specifically shows that it was an important late Roman way-station. It seems nevertheless probable from a study of the high resolution photographs available on Google Earth that the road divided here with one route continuing east-north-east to Bezabde and a crossing of the Tigris near Cizre and another heading south-east to Fesh Khabour.

Poidebard briefly describes this area in his book '*La Trace de Rome dans le désert*'²²². In regard to Babil he has this to say:

« Babil, ancienne ville assyrienne, fut à l'époque romaine une place militaire importante dans cette région voisine du Tigre. Ses quatre portes indiquent qu'elle était un carrefour de routes.

Une chaussée devait réunir, pour la facilité de la défense et la protection de la route militaire, les trois points de Serwan, Izzedin Dag et Babil. Des éléments de chaussée apparaissent sur les deux pentes de l'Izzedin Dag. Cette route venant de Nisibis par Sarbane traversait Babil d'O. en E., comme l'indiquent les portes de l'enceinte. De là, elle se dirigeait, par la grande vallée du Sufan Dere, vers Feshabour. Feshabour est un passage du Tigre aussi important que Géziré ibn-Omar. C'est là, en effet, que conflue le Habour oriental, dont la large vallée fertile route est une route de pénétration centrale vers le plateau de Perse. La route Sarbane-Babil-Feshabour était donc une voie importante tout à fait différente de celle de Sapha. »

Ancient name	Modern location
[Melentenis ²²³	Melitene, now Eski Malatya
Ad Aras (station from Ravenna Cosmography – RA)	Border crossing from Cappadocia across Euphrates into Armenia.
Thirtonia	?
Mazara]	Near Harput (above Elazığ)
Colchis	Hafis (near Hazar/Gölcük lake – Miller)
Coruilu (RA has Gorbilon)	East of Gölcük lake
Arsinia	Ergani (according to Miller: ‘Arghani’)?
Coissa	Şerbetin/Kalkan?
(picture with 2 towers)	Eğil
Ad Tygrem	Amida
Sardebar	Kale i-Zerzevan or Charcha/Kerk/Üçtepe (Gazetteer)
Arcaiapis	Kale i-Zerzevan or Charcha/Kerk/Üçtepe (Gazetteer) – possible inversion of order.
Sammachi	Probably a settlement on the ‘Shamerkh’, but could also be Zerzevan. See Barrington Atlas, map 81.
Aque Frigide	Meiacarire/Khan Sheikhan
Arcamo	‘Tell Harzem’ – possibly in the vicinity of Kızıltepe (medieval Dunaysir)
Thamaudi	Amouda
Nisibi	Nisibis/Nusaybin
Sarbane	Sirvan (Sisauranon – Gazetteer)
Sapha	? Babil/Kebeli ²²⁴

One paved section of this first route was located by me in 2006; it stretches for 20 kms north of Diyarbakır towards Eğil and across a Roman bridge (*Karaköprü*) on the Devegeçidi river. It is discussed in part 2 of this chapter and the bridge is described in Chapter [3] above. The road is in pristine condition in the vicinity of the bridge; paving stones – not always in place – were visible over a long distance to the south back towards the city. This section of the road may have been constructed on an earlier alignment but it was not followed in the Middle Ages since another early bridge on the Devegeçidi (Halil Viran Köprüsü) lies closer to the Tigris and to the caravanserai of Hantepe. The Roman road may have been paved at the time the city of Amida was first fortified by Constantius II in AD 354. To the south of the bridge the paved road makes a zig-zag as it rises to the ridge to the south. It shows no ruts; there are occasional low steps as it climbs gently up the hill. The absence of ruts or other signs of wear is surprising.



Karaköprü Roman bridge



The paved road south



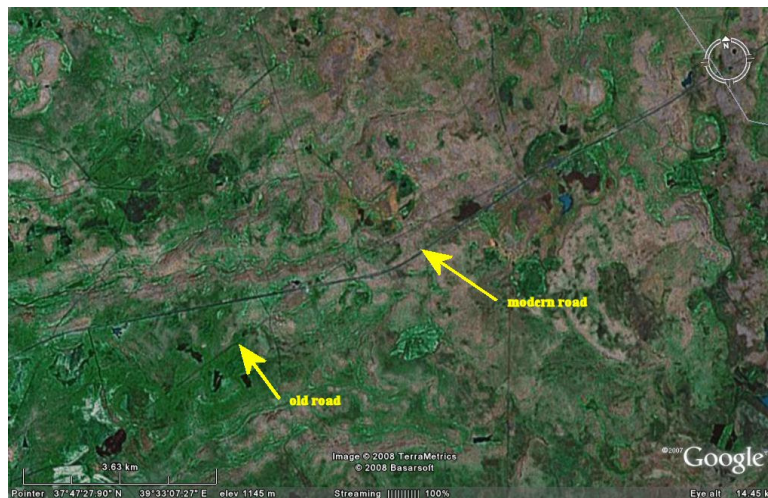
The road to the north of the bridge is unpaved. Possibly at the time of its paving to the south of the bridge the Devegeçidi river constituted the boundary of the Roman province of Mesopotamia and the territory to the north was still an Armenian autonomous principate, although under Roman suzerainty. The road divides with a track going NNE to the top of the ridge where there is an ancient cemetery with at least one tomb originally placed in a square of cut stone. It then continues to the village of Hantepe (or ‘Tilhan’) where there is an ancient caravanserai, in its current form medieval. The track going uphill to the NNW goes to the village of İlek, where there are ruins of many ancient houses and of a mill. There are also scattered potsherds, provisionally identified by me as mass-produced and of the Late Roman Period on the basis of their fabric and colour²²⁵. The road continues to the village of Şerbetin (new name: Kalkan) along a track across the plateau known as a caravan route to the fathers of the villagers who showed me. At Şerbetin, as mentioned above, there are two well-known free-standing tombs of the early 16th century and another ancient

caravanserai. From there the ancient road is likely to have continued to the next stop on the Peutinger Table near Ergani and then north-west to the Taurus pass, although a branch road must have gone to the ancient city of Eğıl. (The city was once called Carcathiocerta and was the capital of the Armenian principates of *Ingilene* and *Sophene*²²⁶).

Although there are no contemporary references it is possible that another Roman road crossed the Taurus through a pass due north of Eğıl. In 1907 a traveller up the gorge founded traces of paving indicating a road to Palu, known to be another Roman fort (see discussion of the Dibne bridge in Chapter 3 above). I have not been able to confirm this.

The purpose of the Roman paved road near Amida and the bridge crossing the Devegeçidi river, discussed below in section 3 of this chapter, must have been to improve communications with *Melitene* and with the rest of Anatolia and no doubt the primary intention was to facilitate movement of troops and supplies to the Roman eastern frontier with Persia from the north-west. The lack of wear is troubling. Possibly, the route along the Tigris via an Artukid bridge of Halil Viran some 6 km to the north-east and a medieval caravanserai at Hantepe was preferred locally by commercial caravans even in the late Roman period. Or perhaps the road was well-covered with gravel and sand and thus protected from the wheels of passing vehicles.

In AD 504/5 the emperor ensured that the Roman troops besieging Amida were well-supplied. According to Joshua the Stylite goods were furnished in plenty²²⁷. However, despite the word 'down' used by Joshua (as in "...sent *down* [to the besiegers]."), it cannot be certain that these supplies came to Amida over the Taurus mountains and along the road discussed here from Melitene. In fact troops and supply wagons may have approached Amida/Diyarbakır more often from Antioch and the west rather than from the north-west; although there are so far no confirmed traces of paved roads heading towards Diyarbakır from the west (that is, from Şanlıurfa - ancient *Edessa* - via Siverek), the Google Earth photograph below indicated the course of an old road running parallel to the modern road between Siverek and Diyarbakır. This latter route rises to about 1000m but the slope is gentle; it is thus possible that the modern road has a Roman predecessor²²⁸.



Following the recapture of Amida in 507 Anastasius ordered the filling of grain stores in the cities. Joshua the Stylite recounts that the majority of the Edessenes who took grain to the store in Amida in winter “...died on the journey, together with their baggage animals.”²²⁹ In this case wagons are not mentioned. As Trombley and Watt indicate (note 467), an alternative route for traffic from Edessa could have passed to Constantia/Tella and then headed north-east via a route between Mount Aisouma and the Tur Abdin, that is a route passing near the fortress of Rabat Kalesi (possible ancient *Siphron* – discussed below).

2) *The road to Armenia from the south-west*

Dillemann’s second route is that from Nisibis via Diyarbakır to Lake Van and Armenia. Both Nisibis and Artaxata (later Dvin) were important trading cities and recognised as places where exchanges (*synallagmata*) between merchants were permitted by the Codex Justinianus²³⁰. Although it seems very likely for this reason that the route described below, which passes up the Bitlis gorge and then past Lake Van, was important commercially also during this period, there are no references in ancient literature which can be used to support this suggestion. Sir Austen Layard came down the Bitlis gorge in 1849 at a time when commercial links were at a low ebb. He describes how about 5 miles south of Bitlis the road is carried through a tunnel

“...about twenty feet in length, through a mass of calcareous rock, projecting like a huge rib from the mountain’s side. The mineral stream, which in the lapse of ages

*has formed this deposit, is still at work, projecting great stalactites from its sides, and threatening to close ere long the tunnel itself. There is no inscription to record by whom and at what period this passage was cut. It is of course assigned to Sultan Murad, but is probably of a far earlier period. There are many such in the mountains and the remains of a causeway, evidently of great antiquity, in many places cut out of the solid rock, are traceable in the valley.*²³¹”

Regrettably, modern road construction has apparently erased much that was seen by Layard but there are still several ancient bridges still to be seen, at least one of which may be of the late Roman period (see preceding chapter). The tunnel mentioned is also described by Sheil who states that it was 15 feet high and wide. (Layard’s reference to other tunnels in the region is apparently a faulty memory of another passage in Sheil describing a tunnel much further south near the west bank of the Tigris at its junction with the Soğuk Su²³².)

It has been thought by most specialists highly unlikely that Roman builders would have been at work so far east, but a fort which may date from the time of Diocletian has been reported in the area of Eski Hizan, some 60km east of Bitlis²³³. Apparently this fort would have guarded an alternative route down to Siirt and Mesopotamia from Lake Van. However, its identification as Roman has been cast in doubt²³⁴. Not having yet had the opportunity to visit the site I am unable to express a view on its probable date of construction but if it were indeed Roman then the likely period would be between AD 297 and 363, like the bridge across the Batman river (see Harap köprüsü in Chapter 3).

The terrain makes alternative routes from Mesopotamia to Armenia difficult. A route north through Corduene via Bezabde/Finica and up the rift formed by the Kazrık gorge towards the modern city of Şırnak and then north-west via Eruh to Siirt may have existed during the confrontation between Rome and Persia in the sixth centuries, since this was the easiest way by which the Persians could have moved troops and supplies from Mesopotamia to their northern front in Armenia and Iberia without having to make a huge detour via Tabriz

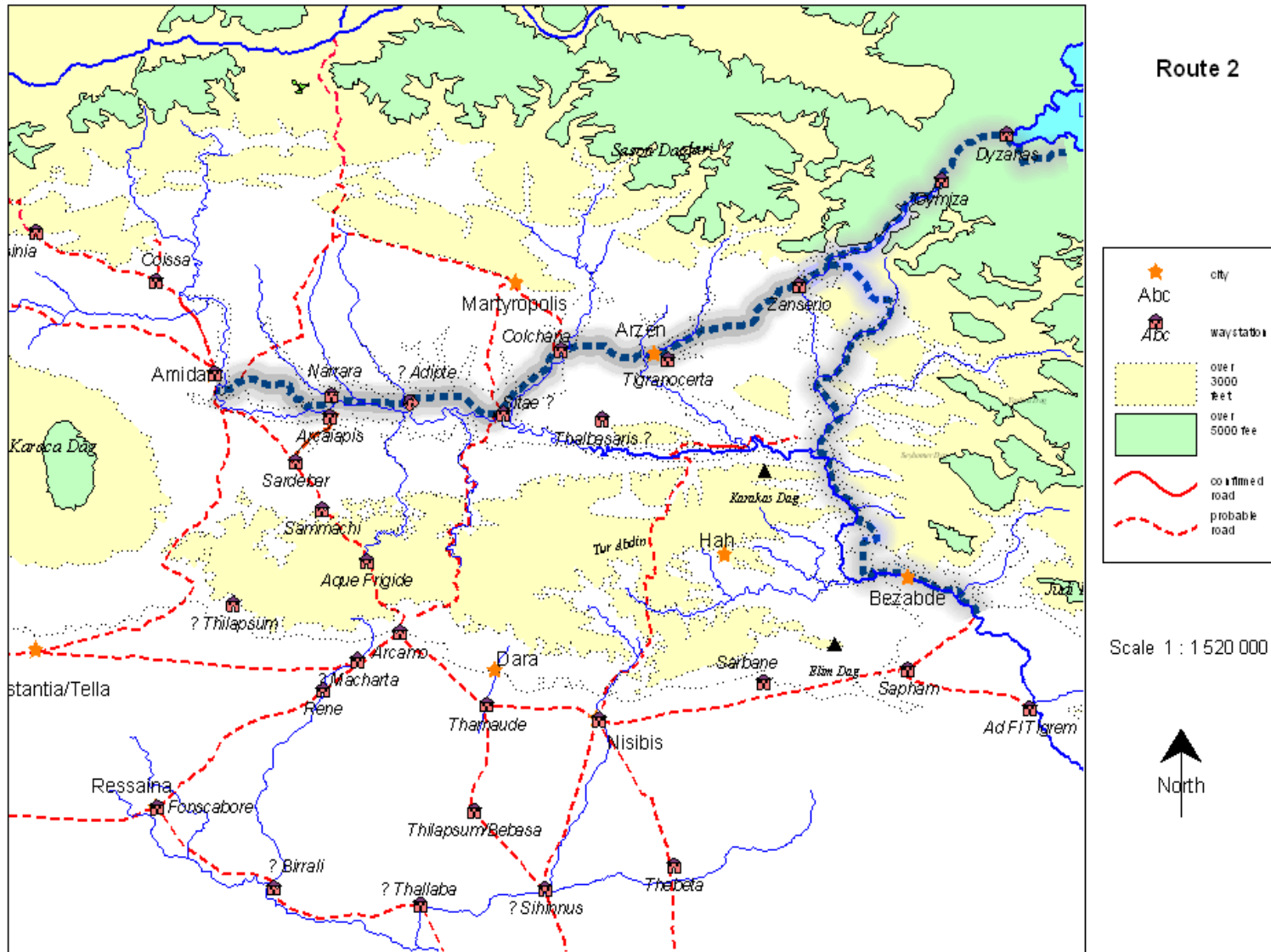


Figure 6

and Lake Urmia. Eski Erüh seems to have been an important city of the region and is identified by Tom Sinclair in the ‘Barrington Atlas of the Greek and Roman World’ with a city of Arzanene called *Arivacha* by George of Cyprus (map 89: Armenia). Ruins of a bridge which may originally have been Roman are visible below Siirt crossing the Bohtan Su (see ‘Kırık Köprü’ above in Chapter 3). This bridge could also have been used to cross the Bohtan by travellers proceeding directly up the Tigris gorge from Bezabde/Cizre. The route up the Tigris gorge, also mentioned in the previous section, may have existed during this period since Lukonin in the *Cambridge History of Iran* mentions a road from Corduene passing by Bezabde and Feshkhabur to the south²³⁵. Good evidence is so far lacking.

Some experts have taken other references in George of Cyprus²³⁶ and Sebeos to mean that during the reign of Maurice the whole area, also known as Moxoene, may have been annexed together with Arzanene by the Romans²³⁷. If so, the road network and bridges may also have been improved during his reign. However, his difficult financial situation renders this hypothesis unlikely (see above in regard to ‘Harap Köprü’ – the bridge over the Batman river - in Chapter 3).

There is disagreement about the route around Lake Van indicated in the Peutinger Table - outside our area. But this is not the case for the part of the route from Amida (Diyarbakır) to Bitlis, since the valley of the Bitlis Çay is generally agreed to be the only feasible route. (For Nisibis to Amida, see above.) For Dillemann the road from Amida went east from the Tigris bridge to Tigranocerta and then joined the Bitlis valley. The Peutinger Table provides valuable information for a route ending at *Isumbo*, variously identified with Van and Patnos (Sinclair)²³⁸, but its representation of the area is particularly distorted since it shows Tigranocerta as lying to the west of Amida and two different routes between these cities which must have been roughly parallel²³⁹.

The PT has *Ad Tygren xiii - Narrara xlv - Colchana xv - Triganocarten xxx - Zanserio xx - Cymiza*. The first three of these names (heading east from the Tigris crossing at Amida) are identified by Dillemann as follows:

Narrara: a station on the Ambar Çay near the confluence with the Tigris, possibly corresponding to Ptolemy’s *Sarrara*. The modern village of Ambar moved to its present position in 1936. We were shown in April 2007 the site of the

old village on the east bank, where there are remains of an old mill, together with an ancient oil lamp and some coins in poor condition which were probably late Roman. Local people confirmed that it has been an important caravan route until approximately 1950.

Colchana: a station at a crossing of the Hazro Su (NOT the Batman Su, according to Dillemann)

Tigranocerta: Silvan (in this Dillemann shares the view of several Armenia specialists including Lehmann-Haupt²⁴⁰ but it seems to be wrong).

He offers no identification for Cymiza (which he assumes to be the *Dimiza* of the Ravenna Cosmographer), but suggests that Dyzanas is *Dizanas* in the Ravenna and equivalent to Arzen,

Sinclair offers some additional and possibly more reliable identifications, which spring from his study of the site of Tigranocerta²⁴¹. His method is to draw a rough course of the road between known large centres and then to seek correspondences between names on the PT and placenames with a known location. The distances indicated on the PT may also be relevant but are known to be corrupt²⁴². He has concluded – convincingly - on the basis of other evidence, in particular from the Armenian historian Pawstos Buzandaran, that the capital founded by Tigranes was *Arzen*, a site now almost destroyed by agricultural works to the east of Batman (see Chapter 4) – and not Silvan. For Sinclair other identifications are as follows:

Narrara ('Nabarra' in the Ravenna Cosmography) was also a station by the Ambar Çay (here agreeing with Dillemann)

Colchana could have been 'Kelleha Tarlası', a site found by the expedition led by Guillermo Algaze in the late 1980s²⁴³, which lies about 2½ km west of the Batman Su, near the late Roman bridge (see Harap Köprüsü, no.6 in Ch.3).

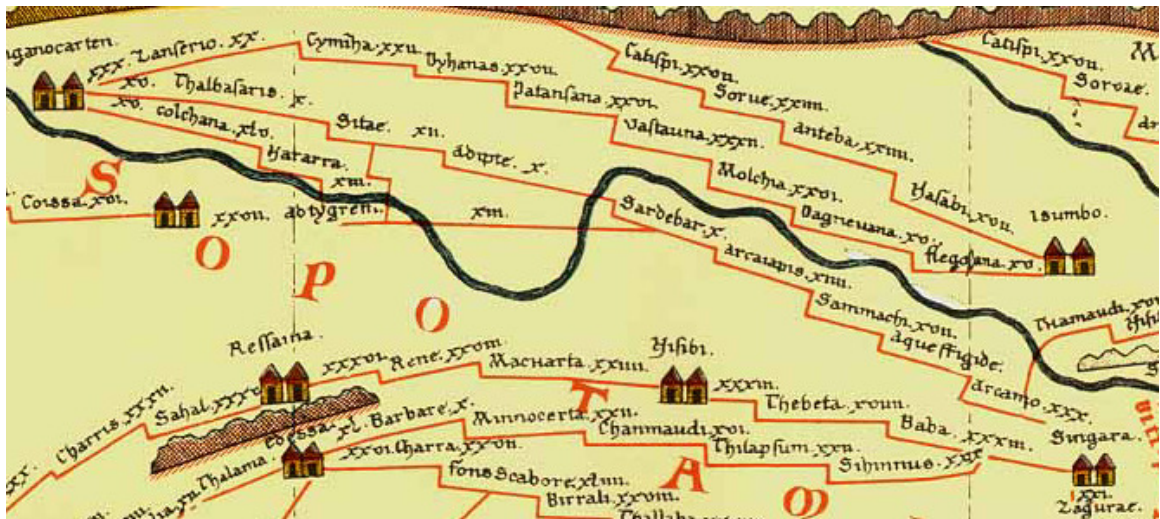
Zanserio was near Baykan at the foot of the Bitlis gorge; he notes (p76) a village 5km SE of Baykan called Derzin or Deyr Zin with a 16th century ruined castle above, possibly with ancient forebears; I believe that this is also likely to have been 'Ziyaret', a village 7km to the south-west of Baykan known to Maunsell (who does not mention Baykan).

Cymiza was Bitlis

Dyzanas was Ptolemy's *Daoudyana*, identified by him as an ancient site near

Tatvan and above the west end of Lake Van.

The question of the route heading east from Amida towards Lake Van may thus seem to have been more or less resolved, but there is a complication: the Peutinger Table shows two different routes for the initial stretch east of Diyarbakir. Apart from the one discussed above there is a separate line with the following stations: [Arcaiapis xiii] - Sardebar x - Adipte xii - Sitae xv - Thalbasaris xv - Tigranocerta.



When interpreting the extract from the Peutinger Table above, it needs to be remembered that the routes east of Amida (*ad Tygrem*) are in fact being shown to the left and not the right, although Sardebar and Arcaiapis are shown in roughly the 'correct' geographical locations.

Although no bridge is apparent on the satellite photos nor was any trace of one found by Algaze's team in the late 1980s, there is said by Sinclair to be a ford of the Tigris just north of Üctepe/Kerk/Charcha. (Local people were unaware of this ford in 2007 but one must have existed since it was used by travellers in the 19th century²⁴⁴.) The Peutinger Table is highly confusing here. The road from Amida cannot have crossed the Tigris to Charcha and then back again before proceeding to Tigranocerta. It must have stayed on the north bank with another route coming from the south to Charcha and then perhaps joining this road north of the ford. Algaze found a high density of settlements from the late Roman period along the river between Charcha and the confluence of the Tigris with the *Nymphius* (Batman Su) on both banks²⁴⁵. Charcha itself is mentioned in the *Notitia Dignitatum*²⁴⁶ (see also Gazetteer)

Adipte is identified by Sinclair with ‘Of’, a hamlet 6-8km east then north of the modern town of Bismil; this is not far from the crossing of another substantial Tigris tributary called the Pamuk Çay where no remains of any bridge have yet been noted. Ofköy is today tiny; it is possible that *Adipte* is indeed buried nearby but I can find no clear evidence of this on the high-resolution satellite photos for this area, which happen to be available via Google Earth. The ancient town is marked on the Ryborsch Roadmap of Turkey some 17kms west at Yasince on the small Tigris tributary called the Kuru Çay, but I found no evidence on the satellite photograph for this location either²⁴⁷.

Thalbasaris, Sinclair suggests, may have been preserved in the name of the district of Beşiri and may be either the village of Ilmis or else Barisil; *Sitae* he believes to be a mound west of the Batman Su²⁴⁸. The problem with this proposed route is its proximity to the former one which lies only a few kilometres to the north. This is the solution adopted by Sinclair also in map 89 (Armenia) of the Barrington Atlas of the Greek and Roman World where he shows two parallel routes both on the north bank. But duplication of an itinerary with routes so close together seems unlikely, if only because of the expense of maintaining the stations and the roads.

For this reason, I would prefer the idea of a route along the south bank where *Sardebar* (or *Arcaiapis* if the names are shown in the PT in the wrong order) is Charcha/Kerk/Üctepe, *Adipte* is Ziyaret Tepe (now being excavated by a team led by Tim Matney²⁴⁹, who – regrettably for this proposal – appears not yet to have encountered Late Roman levels), *Sitae* is Cepha/Hasankeyf and *Thalbasaris* is a site near the Garzan or Yanarsu and possibly in the area whose name is preserved in the modern name Beşiri, as proposed by Sinclair above (although Maunsell calls the plain on which Batman now stands ‘Bisheri’ – see below). This implies yet a further ancient name for Charcha, but in any case it seems that either ‘Arcaiapis’ or ‘Sardebar’ must have corresponded to Charcha and neither are especially close phonetically.

That Charcha was important in the Roman period is known from the excavations of Veli Sevin in 1990. Apparently an 8-metre deep layer of occupation was found full of “..fine quality Roman material ...”, together with a fragment of a Latin inscription of which only a

few letters with traces of red paint are left. The site is however known principally for its importance in the Assyrian period²⁵⁰. It was also known as Kurk or Kerh and is thought to be the same as the ‘Cartha’ mentioned in the *Notitia Dignitatum* (ND)²⁵¹.

‘Sitae’ was already identified by Hoffmann and Honigmann with the *καστρον Σιταων Κιφας* of George of Cyprus (n.933) and also with the *Σιας* of Ptolemy²⁵² - that is, with Hasankeyf. Honigmann noted its proximity to Tigranocerta in Ptolemy (V.12.10) and the comparable distance from Cephas to Arzen. Attractive as this hypothesis is, the distances given in the PT are difficult to reconcile with this proposal – even if Arcaiapis is Charcha and Sardebar is an intermediate station, the combined distance indicated on the PT of 32 Roman miles is much less than the actual 77km (52 Roman miles), even ‘as the crow flies’; also if Sitae were to be Hasankeyf, then there is duplication with the ‘Rescipha’, mentioned by Ptolemy under ‘Mesopotamia’ at V.17 at a different location.

‘Rescipha’ is normally also identified with Hasankeyf; such duplication is not unheard of, and *Rhipalthas* could provide an alternative (see Gazetteer); ‘Rhipalthas’ is a fort mentioned in the *Notitia Dignitatum* which I believe that I have identified on Google Earth at 37°43’11” N; 41°13’44” E (see example Eiii in Chapter 1), where there appears to have been another Tigris crossing. It is possible that the road crossed to the north bank at Ziyaret Tepe (*Adipte?*) since satellite photos on Google Earth, in high resolution for this area, show that a road could have passed here more easily than through the rugged terrain on the south bank, but there is no evident course of an ancient road close to either bank of the Tigris west of Hasankeyf. There is however trace of a road along the ridge east of the Hasankeyf (north bank – see discussion of Şeyhosel bridge in Chapter 3). More investigation is needed.

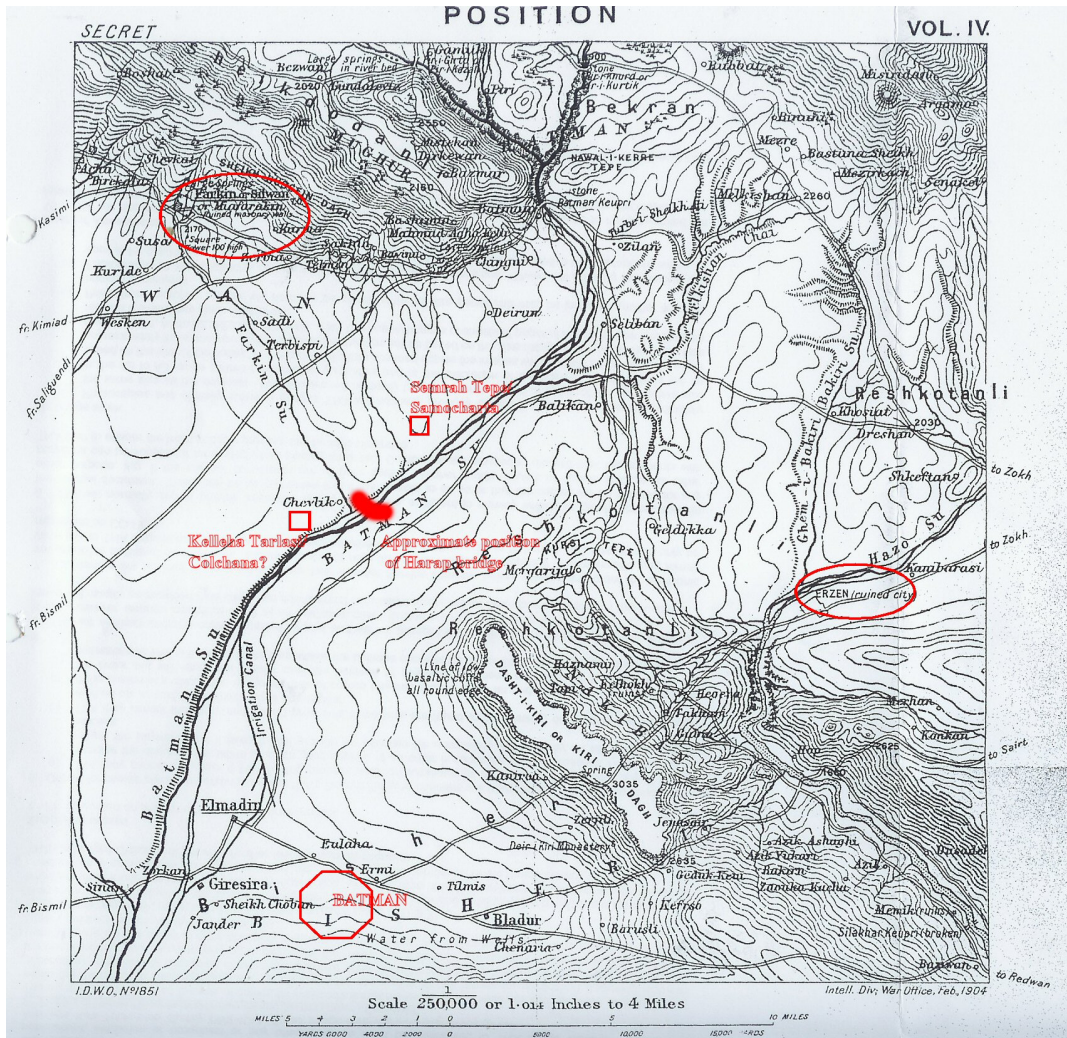
A further bridge (Harap köprü) found during a survey in 1989 on the Batman Su (ancient name, *Nymphius*) offers confirmation of the northern ancient route as it approaches Arzen/Tigranocerta. The masonry appears to be late Roman, an appreciation already made in Algaze’s report in which this bridge is first mentioned²⁵³, and the bridge is discussed in detail in chapter 3. It lies very close to the settlement at ‘Kelleha Tarlasi’ identified by Sinclair as the possible site of *Colchana* and 16km from the Roman fort of *Samocharta*, also identified by Algaze.

The location of the bridge mid-way between the extant medieval Malabadi bridge on the Batman Su, west of Silvan, and the confluence of the Batman Su with the Tigris indicates a road from Amida which passed some way north of the Tigris itself, which runs for a hundred kilometres west-east. From the available satellite photographs (Google Earth), which have for the most part a resolution of only about 15m in this area, it has not yet proved possible to trace the course of the road back to Amida in detail; but this seems likely to have followed the Tigris closely, crossing several other tributaries. On the Ambar river remains of an old wooden bridge were still visible in living memory and the road passing through used to be an important caravan route (according to villagers questioned on a visit in May 2007).

The section between the Batman Su and Arzen is uncertain. There is a high table mountain crossed by the existing road which rises to 850m and which used to be known as the 'Dasht-i-Kiri'. The route taken by the ancient road has not yet been found by me, but probably skirted the north side of the ridge (see Maunsell's map below). The Garzan or Yanarsu (also known formerly as the 'Hazo' river) would probably have been crossed by a stone bridge at the location of the existing road and rail bridges since this is forced by a sharp curve in the river and the natural topography. Remains of ancient stonework are visible beneath the modern road bridge at İkiköprü. Thereafter the road would have proceeded up the left (east) bank of the river to Golamasya where there are stumps of another ancient bridge, which probably provided access to the castle. Maunsell describes a route from Diyarbakır to Siirt and to Bitlis via Zok (new name: Yanarsu) as follows²⁵⁴:

"[The road] skirts the left bank of the Tigris and crosses the Batman by a deep ford at Sinan or by a boat-ferry when the river is high ..., runs up the Bisheri plain [on which the new city of Batman now stands], over the Dasht-i-Kiri and down to the ford of the Hazo opposite the ruins of Erzen, the country being open and easy throughout. Another route going direct to Sairt diverges in the Bisheri plain, crosses an easy col at the south end of the Dasht-i-Kiri, and fords the Hazo below Hop and then runs over easy routes to Sairt crossing the Keser and the Bitlis rivers by fords. From Bisheri a track also passable for all arms diverges further south, passes a ford above Redvan and goes down to Til at the junction of the Bohtan with the Tigris."

The ancient route seems likely to have proceeded either upstream from Arzen via Golamasya and a valley branching north-east from the Garzan Su to Ziyaret and the Bitlis valley or else to have continued direct from Arzen to Ziyaret via Yanarsu, which lies on a high ridge and has a Kurdish castle. The satellite photographs on Google Earth are not yet in high resolution for this region and it is not possible to trace its course on them.



From Maunsell's Military Report on Eastern Turkey in Asia, 1904²⁵⁵

Narrara	Ambar
Colchana	Kelleha Tarlası (near Harap köprüsü)
Tigranocerta	Arzen/Golamasya
Zanserio	Ziyaret (Baykan?)
Cymiza	Bitlis
Dyzanas	Tatvan
Sardebar	Üçtepe/Charcha/Kerk
Adipte	? Of, ? Ziyaret Tepe
Sitae	? Hasankeyf
Thalbasaris	Region of Beşiri

3) *From the Euphrates (Zeugma) east to Edessa, Batnae and Harran*

The Peutinger Table has *Zeugma xii – Thiar xxxii – Batnis xxx- Charris xxxii – Sahal xxxv- Ressaina xxxvi – Rene xxviii – Macharta xxiiii – Nisibi xxxiii – Thebeta xviii – Baba xxxiii – Singara*.

This route may have been more important in the earlier period when Zeugma was the main crossing point of the Euphrates but it had not gone out of use in the 5th and 6th centuries when the next route (no.4 below) is likely to have been used more frequently. There are several churches dating from the fifth and sixth centuries in north-west Osroene and the adjacent west bank of the Euphrates which indicated that the area continued to be intensely occupied in this period (see photos in discussion of route 12 below). Continued use of the more eastern section of the route is proved by the fact that Timostratus, *dux* of *Callinicum*, was sent from the camp of the Roman army at Ressaina in AD 503/4 to capture Persian army horses and flocks put out to pasture on the Jebel Singara²⁵⁶. He must have followed this road.

Apart from the route heading ESE to Batnae there was at least one other important road from Zeugma to Edessa which we know from the Antonine Itinerary. The AI in fact mentions two routes to Edessa from the west, both duplicated but with different distances indicated:

a) (184/5) *A Germanicia per Dolicum et Zeuma Aedissam usque...Zeuma XII, Bemmaris XX, Edissa XXV*

(see also 190 – *Zeugma XXII, Bemmaris Canna XL, Bathenas Meri VIII, Aedissa X*)

b) (189) *Dolica XV, Zeuma XIII, Cannaba XIII, In medio XII, Aedissa XV*

(see also 191 – ...*Zeuma XXIII, Cannaba XXV, In Medio XXII, Aedissa XVIII*).

Ptolemy also has two routes in the area which have been derived from his 'map': Samosata to Sapha via *Porsica, Edessa, Risina* and *Nisibis*; and Zeugma to Singara via *Olibera, Arxama, Baxara*²⁵⁷.) The placenames 'Porsica', 'Olibera', 'Arxama' and 'Baxara' are unknown elsewhere and have not been identified by me.

Chapot looked at these routes at the beginning of the 20th century²⁵⁸ but has little to say about them. He is doubtful about the late medieval caravanserai of Charmelik (now Büyükhan) being on the first route, but I have provisionally assigned it to ‘*In medio*’. I also found a large cistern between Zeugma and this ‘han’ as well as a mill in caves near the course of an old road at Haydarahmet²⁵⁹, a site which could have been ‘*Cannaba*’ and is still marked by a small ancient settlement mound or ‘hüyük’. The Roman road itself was seen at this point by Wagner in the 1970s and is still visible some kilometres to the west at Yuvacık, its course marked by large kerbstones. There are traces also some 30kms to the east of Charmelik across the Keşişlik Dağ, 2km NE of the village of Kızılburç, where Wagner found an important milestone²⁶⁰. This milestone commemorates construction of this road from the Euphrates to the then border of the kingdom of Commagene in AD 205. Kızılburç and several of the surrounding villages preserve remains of Roman towers with very large stone blocks²⁶¹. About 10kms NNE of Haydarahmet there are very large ancient quarries (near Kural), which may have provided the stone for these towers.



Interior of tower at Yoğunburç



Tower at Keciburç
(photo: Elif Keser-Kayaalp)

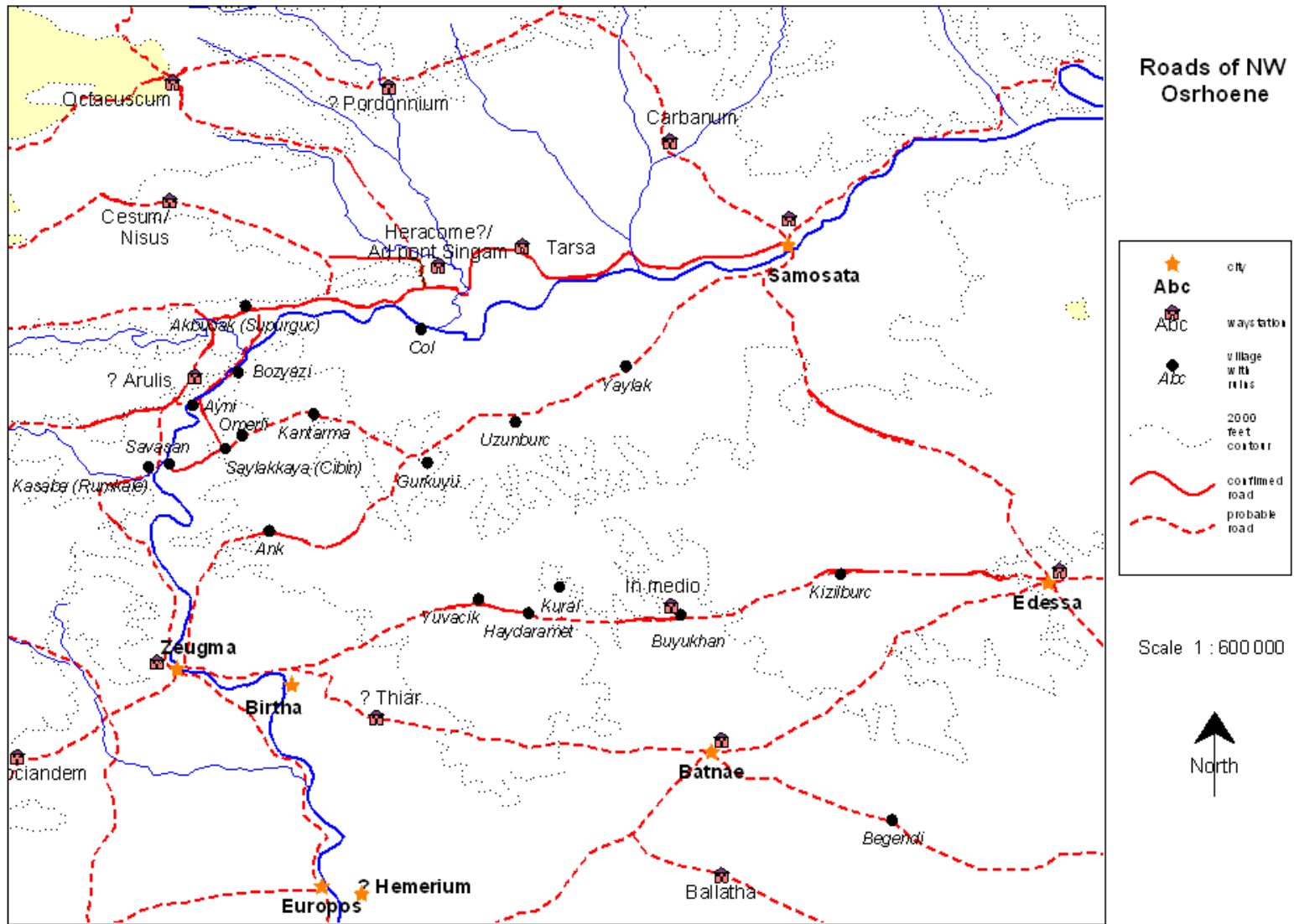


Figure 7

In the Middle Ages the main crossing point of the Euphrates (by ferry) was at Birecik but the route east to Urfa seems to have remained substantially the same. In the 1680s the early traveller de Thévenot came this way and commented on ruins of ‘great towns’ at Haydarahmet (*Aidar Ahmat*) and at *Yogoboul*, a settlement east of Charmelik²⁶². I have not found these ruins but it may be that the stone has just been re-used since the seventeenth century.

Early modern travellers agree that the route from the plateau descended to Edessa via an artificial cut in the rock of the escarpment. Sadly this must have been destroyed by modern road construction. The ancient road descends to the city of Edessa (now Urfa) in parallel to the modern road and was still paved in the 19th century. In the 1680s de Thévenot described the point at which it leaves the plateau as follows:

“...A lovely way made in the rock 2 fathoms deep, a fathom broad and eight fathoms long...”²⁶³

* * * *

The southern road from Zeugma to Batnae was also investigated by me in the late 1990s, but the identification of *Thiar* remains uncertain. Around Taşlıkuyu local people spoke of caravans passing within living memory and some ancient quarries and rock-cut cisterns were found at Pehlivankesmesi, which has been identified on some maps with ‘Bemmaris’. It lies on a rocky north-south ridge some 15km west of Suruç. Although the latter town is normally identified with Batnae, there is no physical evidence remaining. It lies in a famously fertile plain to which merchants came from far afield to an annual fair, according to Ammianus Marcellinus²⁶⁴ (see also ‘Batnae’ in the gazetteer).

I have not investigated this route on the ground beyond Suruç. On Google Earth its probable course can be traced ESE to Harran via Küçükziyaret, Beğendi and Boybeyı over rather rugged hills and then down into the plain of Harran (now irrigated by Euphrates water from the Atatürk dam).

A further route – not mentioned in the Itineraries – headed north-east from Zeugma to Samosata, cutting across north-east Osrhoene and a bend in the Euphrates. This route is

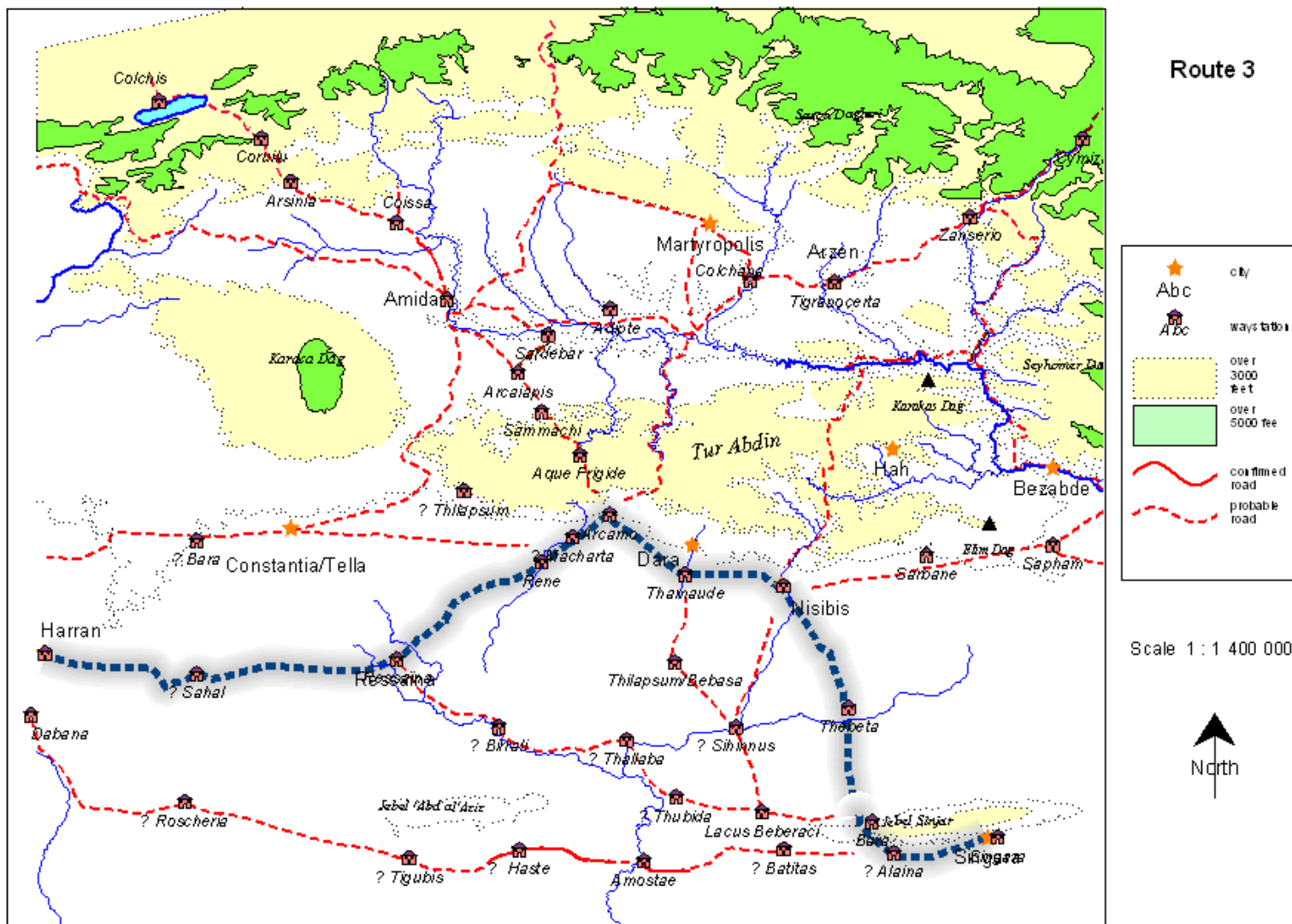


Figure 8

discussed by Wagner²⁶⁵ but seems to have been a rather narrow road built probably for pack animals soon after the province of Osrhoene was first acquired by Rome. There used to be Roman forts still visible in the modern period at Eski Hisar and Uzunburç²⁶⁶, but most regrettably the stone for these has been recycled. Many churches were also extant until recently but have often disappeared, sometimes recently: one remarkable example still extant is near Gurkuyu (old name: Nuhrut - see route 12). A large early Roman building which may be a granary can also be seen at Kantarma, a village east of Yukari Göklu²⁶⁷. This road appears to have been crossed by another otherwise unknown route linking the Euphrates crossings at Capersana (Ayni) and perhaps at Rumkale with Edessa (see also route 12 below for north-east Osrhoene).

The route beyond Harran cuts across the southern end of the chain of low mountains known as the Tektek Dağ. Very little water is available and local guides at Harran rejoice in telling of the ease with which unwary travellers can get lost. Several buildings of the Late Roman period are known in this area, but no-one appears to have studied the course of a Roman road here in any detail. A study of the route around *Ressaina*, just east of the Tektek Dağ, where Dillemann reported an ancient bridge, would have to cope with the minefields associated with the current border between Turkey and Syria (although plans have been announced by the Turkish government to remove these).

At *Carrhae* (Harran) the road divided: the route discussed here continued east around the southern part of the Tektek Dağ to *Nisibis* (Nusaybin), but another route is likely to have turned south along the Balikh and followed this river south to its confluence with the Euphrates at *Nikephorium/Callinicum*. *Sahal* is placed on Kiepert's map of Asia Minor²⁶⁸ at a village called Tell Sahal which he found on a Turkish map 45km west of *Ressaina* (Ras el-Ain). On the route to *Nisibis*, beyond the Tektek Dağ, there are – according to Dillemann – ancient bridges to the west of Ras el-Ain and two more on the road heading east between *Rene* and *Macharta* on the Durdjub and Arzamon rivers. Only the last of these have I been able to visit; no published photographs are available for the others. Although the route described here continued to *Nisibis*, a further route described in the *Parthian Stations* of Isidore of Charax (written around the first years of the present era) went east to the Khabur and then south to the junction of that river with the Euphrates at *Circesium*. This was the route followed by Julian in AD 363²⁶⁹. Since the lower Khabur (after its confluence with

the Djaghdjagh) is thought to have been the frontier with Persia, it is very likely that an important road followed its course and Poidebard believed that he had located several forts along it²⁷⁰. However, Dillemann discounts much of this evidence on the grounds that the places concerned are on the wrong (i.e. the eastern) bank of the river.

One of the Roman documents studied by Feissel and Gascou²⁷¹ concerns the sale of a female slave to a villager from the village of 'Abourene', placed by them on the Khabur near Thannourios and therefore close to the route studied here. However this document dates from the third century and little information is available concerning the area in the fifth and sixth centuries. Layard found remains of the Roman period at 'Arban' or Oraba, a tell on the road from Circesium north to Thannouris and Nisibis²⁷². Poidebard states that '*...des alignements de tours de guet régulièrement échelonnées*' were visible in this part of the valley from the air²⁷³.

Poidebard, who was one of the two founding fathers of aerial photography for archaeology in the Middle East (the other being Aurel Stein), studied the region in detail before the modern road network was constructed. Some of his conclusions were dismissed by Dillemann, who believed, as others have done, that he was too ready to ascribe physical remains to the Roman period when many of them are likely to be either earlier or later. But Poidebard states that he saw from the air certain stretches of road in this region and a large number of forts, especially around Tell Brak, many of which were indeed likely to have been Roman since they are shown along the course of the Roman roads described here. He carried out some excavation at Tell Brak of a Roman fort discovered from the air, which he claimed showed that it dated – at least in part - from the period of Justinian²⁷⁴. His excellent maps of the region may be misleading but his claims need to be further investigated. He mentions, for example, a road leading north from a fort at 'Muezzar' (probably the *Haste* of the PT) over the low range of mountains known as the Djebel al-Aziz which lies south of the river Khabur, shortly before its junction with the *Mygdonius*, now the Djaghdjagh, at the site of the modern city of Haseke; this road would have crossed the river Khabur at Tell Megde (now 'Tall Majdid'?), identified by him as the site of *Magdalathum*; on the north bank lay another Roman fort which he claimed as *Thallaba*. Since I have not been able to verify the places and routes shown by Poidebard, only those which seem the most evident are included in the maps which follow below.

Dillemann made the following specific identifications in this region²⁷⁵:

Rene: possibly ‘Buyuk Arade’, 39km east of Ras el Ain.

Macharta (*Minnocerta* or *Monocarton*²⁷⁶): possibly a site on the Zergan river. This would presumably have been near the crossing at Hocaköy where I found traces of the old bridge. There is also a large settlement mound and an ancient mill.

A further 25km takes the road to Tell Armen, now in Kızıltepe, via the bridge across the Arzamon river. (See bridge no.15 in Chapter 3 above.)

The stage in the Peutinger Table is indicated as 24 miles to Nisibis (after AD 363, in Persian hands). But there are 38 miles (or 57km) between *Macharta* and *Nisibis*. Dillemann offers no solution, but an omission in the Peutinger Table is assumed. The intermediate station could well have been *Amouda* – discussed in regard to route 1 above. This town lies today in Syria but between Kızıltepe and Nusaybin, being 32 km from the former and 25 from the latter.

Following the route of Dillemann, beyond Nisibis the Roman road – built, evidently, before AD 363 – turned south-east towards the Djebel Sindjar. *Thebeta* is placed by Dillemann on the river Radd where he mentions a Roman bridge on the ‘Djerrahi’ below Tell Gharan²⁷⁷ (not seen by me), which would lie half-way between Nisibis and Bara on a direct route.

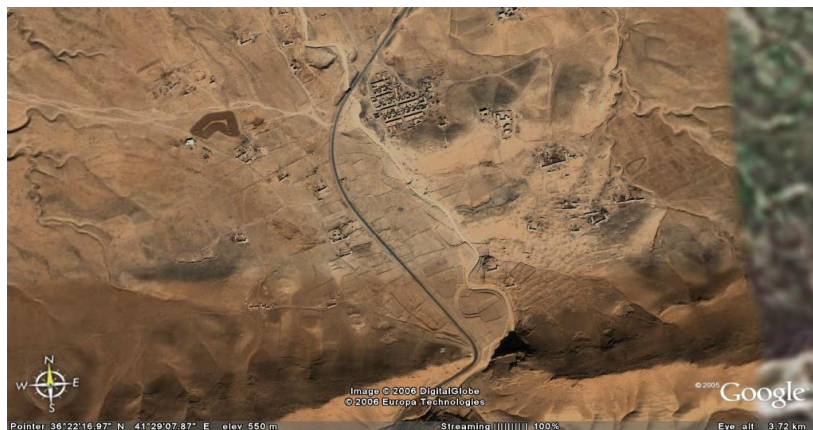
Jovian retreated from Babylonia after the death of Julian in AD363 by this route. Joshua the Stylite also records that this was how Kawad returned from the capture of Amida and it seems to have always been the main link between southern Mesopotamia and the north. Assyrian texts mention a ‘Tabite’ and several Assyrian kings seem to have advanced this way in their campaigns against Urartu and the northern tribes. During our period *Thebeta* was the objective of a disastrous Roman attack in AD 523 under the emperor Justin, after a failed attempt to take Nisibis²⁷⁸. Only the cavalry managed to return to Dara; most of the infantry died of thirst.

Pliny also mentions *Thebeta*²⁷⁹ as an important way-station, together with Caphrena or ‘Satraparum Regia’ and Oruros, said to be the most eastern point of Roman territory under

Pompey. (*Oruros* has been identified with the ‘Manuorra’ of Isidore of Charax, who describes it in the *Parthian Stations* as lying 480 stades (about 90km) from Zeugma. Dillemann believes that this must have been the source of the Balikh at Ain el-Arous, otherwise identified by him with *Dabana* (see route 6 below).

A little to the north ‘*Castra Maurorum*’ does not figure in accounts of the 5th and 6th centuries, nor is it mentioned in the Peutinger Table, but its site has now been provisionally identified by satellite photography with a fort some 15km east of Nisibis²⁸⁰. It was an important Roman military base of the third century, mentioned also by Ammianus Marcellinus in the fourth²⁸¹. It is placed in the context of the Roman frontier of the early empire by Oates²⁸².

Although no convincing photographic evidence is available for the other sites mentioned so far, there is now a high resolution satellite photograph easily available on Google Earth of the west end of Djebel Sinjar, showing an apparently ancient settlement which may correspond to ‘Baba’. This was already identified provisionally by Dillemann (p174) with Bara, the name of the modern village at the north entrance to the principal col across the mountain.



Singara and the approach to the Tigris beyond are treated in detail by Oates. The line of fortifications was fairly well-preserved in 1955 when he conducted his study, rather better so than the fortifications of Nisibis. However, Singara lies beyond the provinces which are the object of this thesis and was in Persian territory after AD363.

Bemmaris	Possibly Harmanalan (site nearby with quarries and cisterns, west of Sürüç)
Bathenas	Unknown
Cannaba	Possibly Haydarahmet, 25km NE of Bireçik
In Medio	Büyükhan; large caravanserai and mound 16km NNW of Sürüç
Thiar	Kiepert shows ‘Serudj Köprü’ just after Birecik and indicates Thiar at a location 10km ESE. I did not find it but was shown a cave at Hanhüyük said to have been on a caravan route and once a caravanserai ²⁸³ .
Batnis	Suruç. Thought to be the Seleucid foundation of Anthemusia/Batnae but no extant remains (see gazetteer).
Charris	Harran (see gazetteer)
Sahal	‘Tell Sahal’, according to Kiepert but on authority unknown.
Ressaina	Ras el’ Ain (see gazetteer)
Rene	Either Buyuk Arade, 39km east of Ras el Ain, or Zergan (Hocaköy)
Macarta	Also Minnocerta/Manacarta/Monocarton. The latter in Theophylact Simocatta who places it near to mount Aisouma (I,13). On the Zergan river, close to Tell Armen and modern Kızıltepe ²⁸⁴ , possibly also at the village of Hocaköy.
Nisibis	Nusaybin (see Chapter 2)
Thebeta	Either near the Djerrin bridge (Dillemann) or at Tell Brak (see Oates above).
Bara	Also Baba; Olibera of Ptolemy
Singara	Sinjar

4) From the Euphrates (Caeciliana) to Edessa and Nisibis

This itinerary seems likely to have been the principal east-west route for commercial and diplomatic caravans in the fifth and sixth centuries, given the probability that *Hierapolis* had surpassed *Zeugma* in importance²⁸⁵ and that the Euphrates crossing between *Hierapolis* and Edessa was at *Caeciliana*. The Peutinger Table is especially confused here and does

not even show the river being crossed at all. The Antonine Itinerary confirms the existence of a part of the route²⁸⁶, although it too is very muddled. Around Edessa the route overlaps and crosses route 3) above, which may possibly be the source of confusion in the creator of the PT, which wrongly shows Ressaina north of Edessa.

The PT route apparently begins on the east bank of the Euphrates after Caeciliana and shows the following stations: *Vicus XXX – Simitta XII – Sathena VIII – Halia/Italia XII – Thalama ? – Edessa XL – Barbare X – Minnocerta XXII – Chanmaudi XVI – Thilapsum XXII – Sihinnus XXII? – Nisibis.*

Identification of these stations has been made mainly by Dillemann. East of *Edessa* (Urfa), the road crossed the low and barren range of the Tektek Dağ. This area is largely abandoned today but has many ancient ruins, some of which are only now to be described in scholarly publications (Elif Keser-Kayaalp, Exeter College, Oxford – personal communication)²⁸⁷. Dillemann describes some of the ancient remains (p172) and the traveller Samuel Guyer found traces of a Roman road cut into the rock²⁸⁸ and a large cistern covered with slabs. Buckingham came this way in the 1820s and his caravan was forced to pay a heavy toll to the local Arab tribe at a place called ‘El Mazar’²⁸⁹. So far, I have only driven directly across it without stopping to investigate. Strangely, *Constantia* (Viranşehir) is not mentioned on the PT, although Dillemann suggested that it might be ‘Barbare’, which is there indicated as being 40 miles east of Edessa (although the distance is in fact 85km (or 57 Roman miles). The route turned south at *Amouda* (now in Syria) to *Thilapsum* which has been identified with Tell Chaker Bazar, excavated by Mallowan in the early 1930s, but ‘*Sihinnus*’ of the Peutinger Table has also been placed here²⁹⁰.

Since the old road from Edessa to Nisibis must have been an important commercial highway and follows much of this route along the southern slopes of Karacadağ it is perhaps surprising that so little is known of the places along its course.

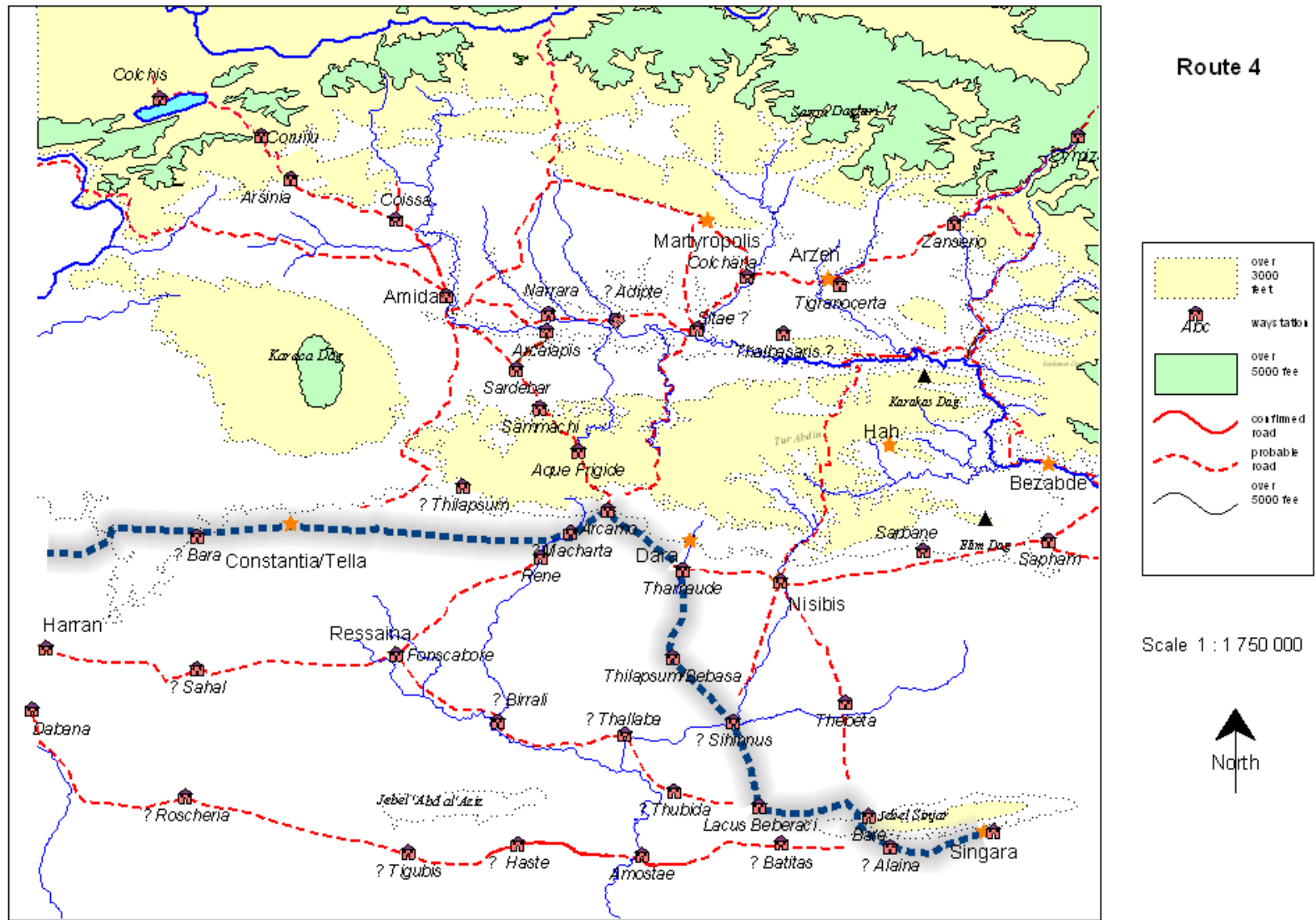


Figure 9



Sathena	Batnae – also known in Seleucid times as Amphipolis and now believed to be Suruç, a city SE of Şanlıurfa (Edessa); see Ch 4.
Barbare	possibly an error for Viranşehir (see Constantia above in Chapter 4).
Bara	‘la forteresse’, Mohammed Khan 57km from Edessa ²⁹¹ , evidently not the Bara of the Djebel Sinjar in the previous route.
Chanmaudi	Thamaude or Amouda (‘Amaude’ in Ravenna Cosmographer).
Thilapsum	Tell Chaker Bazar ²⁹²
Sihinnus	possibly Tell Brak, where Poidebard ²⁹³ found a small Byzantine fort 27km from Chaker Bazar, but see the identification with Thebeta discussed above.

5) From Edessa to Ressaina and Singara

According to Dillemann this route went from Edessa to Fons Scabore/Ressaina and then on to Singara by the valley of the upper Khabur river. Like other routes south of Edessa I have been unable to investigate this one in person so far. The stations on the PT are as follows: *Edessa xxvi – Tharrana xxvii – Fonscabore xliiii – Birrali (junction to Tigubis) xxviii – Thallaba xxviii – Thubida xviii – Lacus Beberaci (junction)*. The road continues via the col at Bara and Alaina to Singara.

Although clearly indicated as a route heading east-south-east from Edessa the stations shown on the Peutinger Table have again proved elusive, but Tharrana must be Harran and

Fonscabore is Ressaina, which was reported to have a large resurgence by various European travelers and must be the source of the Khabur (i.e. ‘Fons Chaboris’, of which Ressaina is the Arabic version); this river continues south-east and then south to a junction with the Euphrates at *Circesium*, now ‘Busayrah’. Dillemann concludes that *Thallaba* was probably near the bridge found at Soufeiyé, as Sarre and Herzfeld had already done²⁹⁴. *Lacus Beberaci* is believed to be Lake Khatouniye and from there the route east would have joined the col over the Djebel Sinjar at Bara. It is unclear why the important late Roman centre of *Thannourios* is not mentioned in the PT, even though it must have been close to this route. This town was fortified by Justinian as a ‘refuge in the desert’ on the Khabur river²⁹⁵. Some of the road network in this area is discussed by Oates²⁹⁶. Poidebard indicates on his map entitled ‘*Le Limes romain dans le désert de Syrie*’²⁹⁷ certain stretches of road which he described as ‘voie romaine visible au sol ou d’avion’: one such stretch is that between Thallaba and Thannourios. For Thallaba he also indicates (Pl CXXXVII and seq) a stretch of paved road with the remains of two camps near a town fortified by an oval wall and ditch.

Edessa	Şanlıurfa (see Chapter 2)
Tharra	Charrae/Harran but not Tharrana, which Dillemann seems correctly to identify with Dabana.
Fons Scabore	Another name for Ressaina (Ras el-Ain, source of the Khabur)
Biralli	Confluence Zergan/Khabur (Fischer, quoted in Sarre and Herzfeld, I, p191)
Thallaba	Oum Gargan, a tell 20km WNW of Haseke (Poidebard and Kiepert); Soufeiyé (Sarre and Herzfeld, Dillemann)
(Thannourios)	Near the turn south of the Khabur
Thubida	Cheikh Mansour; Oates indicates a site on the Khabur south of Thannourios but this would not be on the way to Lacus Beberaci.
Lacus Beberaci	Lake Khatuniye (see route 6 below). Road would have continued to Bara and Singara.

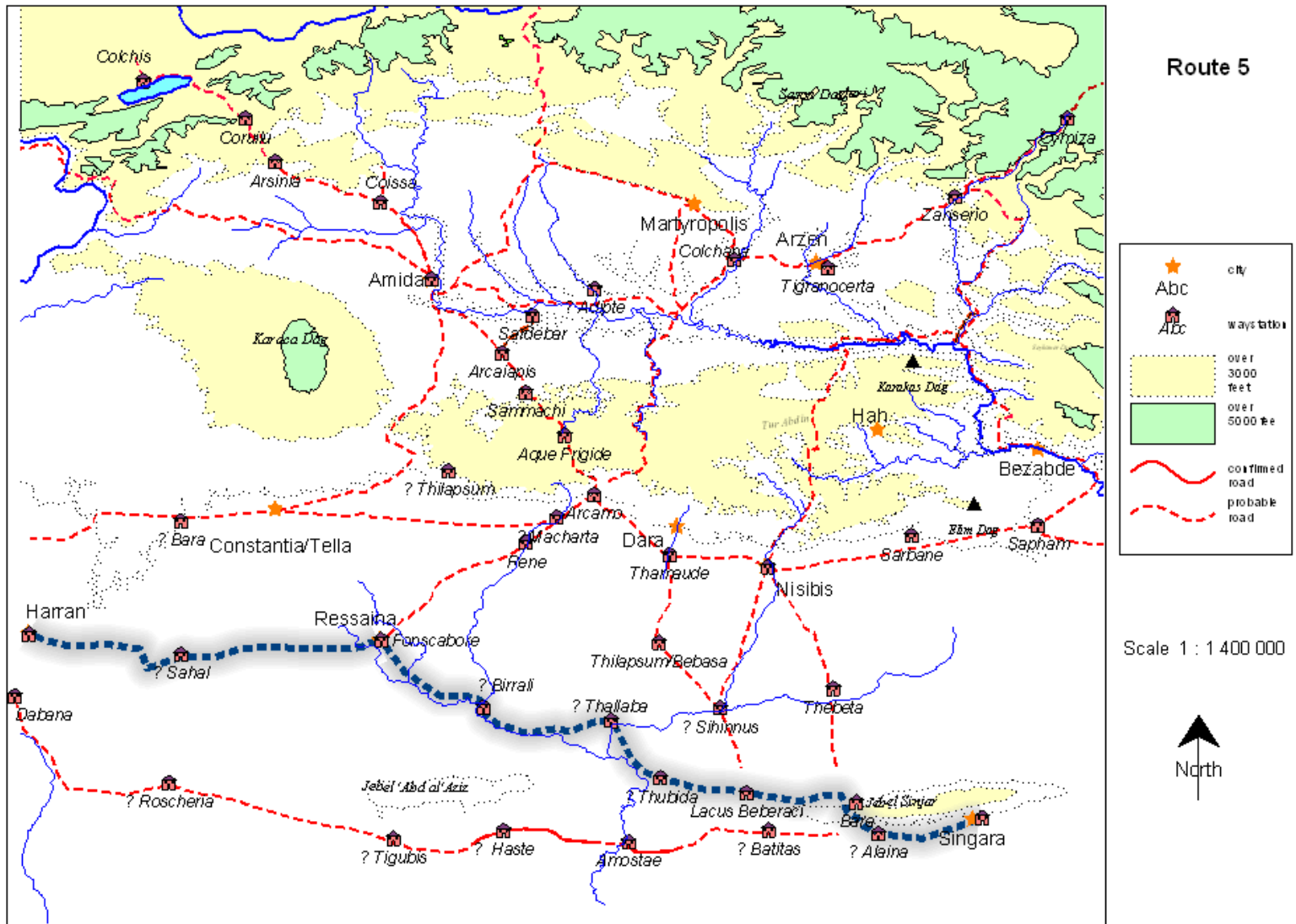


Figure 10

6) *East from Batnae*

This is the least clear of all the routes in the region which are derived from the PT. It passes through the desert and place names are therefore not possible to link convincingly to modern equivalents, there having been no continuous occupation. Dillemann nevertheless shows that Tharrana is likely to be Dabana (Ain el-Arous – at the source of the Balikh)²⁹⁸. The *Notitia Dignitatum* places units at Thannourios, Dabana and Thillacama (Thillaticomum). These units were probably intended to oppose raids by Arab tribes and their bases may have been linked by this road. Poidebard indicates that the road heading west-east was visible – probably from the air – around a place he identifies with the PT's 'Haste', south of the Jebel abd el-Aziz where he also indicated on his map a '*ville antique*' and either a 'castellum' or 'castrum'.

There is no evidence apart from the PT to indicate that this route was important for commercial transit during the fifth and sixth centuries. Dillemann (and Miller) thought that it corresponded to the 'Route of the Nomads' mentioned in Pliny, a route used by caravans at times when conditions along the Euphrates valley were insecure and excessive tolls were demanded by the local tribes²⁹⁹.

In view of the large number of uncertainties of identification it is noted here only together with its course as indicated by Dillemann and Poidebard. The PT shows the following:
Tharrana xviii – Roscheria xvi – Tigubis (with a turning left to *Fons Scabore* at 16 miles)
*xv – Habia xv – Themessata vii – Haste xx – Magras xi – Amostae xxiii – Batitas xii (?)*³⁰⁰
– Alaina xx (turning left to *Lacus Beberaci*) – *Sirgora [Zogorra* and other stations on to *Hatra*]. Information known about these place-names is as follows (after the map):



Figure 11

Tharrana	Dabana, now Ain al ‘Arous, source of the Balikh. Julian passed here in AD363. He advanced from Hierapolis, crossed the Euphrates (at Caeciliana?), continued west to Dabana and then turned south to the confluence of the Euphrates and the Chabur at Circesium. Continuing east from Dabana on this route would perhaps have been possible only for small groups because of the shortage of water.
Roscheria	The Ravenna Cosmography has ‘Vesceria’.
Tigubis	Thengoubis of Ptolemy. It has two towers in the PT and was a crossroads with a road to Ressaina as well as the route east to Singara. Possibly the ancient town indicated by Poidebard as ‘Haste’ ³⁰¹ but this place is 3 stations further east in the PT.
Fons Scabore	Another name for Ressaina (Ras el’Ayn; source of the Khabur).
Habia, Themessata	Unknown
Magrus	Placed by Oates at Tel Bezari on the Djaghdjagh, 10km before its junction with the Khabur at Hasake ³⁰² . But it is unclear why he believes that the PT shows this route going north of Ras el Ain when in fact it is far to the ‘south’ – or rather along the bottom of the TP. Thallaba seems a more appropriate choice for this location.
Amostae	Placed by Poidebard about 15kms south of Thannourios on the Khabur at ‘Oumtariye-Mesnaqa’ ³⁰³ . The road is still recorded by him as visible at this point, as well as two fortified towns, together with a third on the way east.
Batitas	Placed by Poidebard about 15kms south of Lake Khatuniye (see below); he indicates a fourth Roman or Byzantine fortified town here.
Alaina	Eleiia in Ptolemy; station otherwise unknown on way to Bara (see route 3) but also a crossroads with a fork to Lacus Beberaci.
Lacus Beberaci	Lake Khatuniye ³⁰⁴ .
Sigora	Probably Singara, the town south of Jebel Sinjar abandoned to the Persians in AD 363 together with Nisibis. Substantial Roman walls are still visible today. The subsequent place name of Zagorra renders this more likely because of the similarity with Zagurae, excavated by Oates.

* * * * *

Several other routes in the region are shown on Poidebard’s maps in ‘*La trace de Rome dans le désert*’ which he believed to be Roman and which he discovered by aerial survey. But these do not appear in the Peutinger Table and may therefore have been of mainly local

significance, if they are indeed of Roman date. One further route of some strategic importance seems likely to have been developed during the sixth century (and therefore also not shown on the PT) between the fortresses of Martyropolis and Citharizon. The latter is to the north of Diyarbakir and outside the area discussed in this thesis. The recent discovery of an ancient bridge at Antağ (see no. 8 in chapter 3 above) seems to indicate that a route was constructed through the mountains to the north-west of Martyropolis. This road probably also passed through Boshat where there is a small fortress and a Parthian relief³⁰⁵.



* * * * *

Apart from the six routes described above in Osrhoene and Mesopotamia, there were of course other routes across Euphratesia. The main routes concerned are:

- 7) *Antioch – Chalcis – Beroea – Hierapolis – Cecilia* (the Euphrates crossing)
- 8) *Antioch – Gindaros – Cyrrhus – Doliche – Samosata*
- 9) *Antioch – Gindaros – Zeugma* (another Euphrates crossing)
- 10) *Antioch – Nikopolis – Germaniceia*
- 11) *Germaniceia – Samosata*
- 12) *Soura – Samosata* (presumably a military road along the frontier with Persia, built during the period when the Euphrates fulfilled this role).

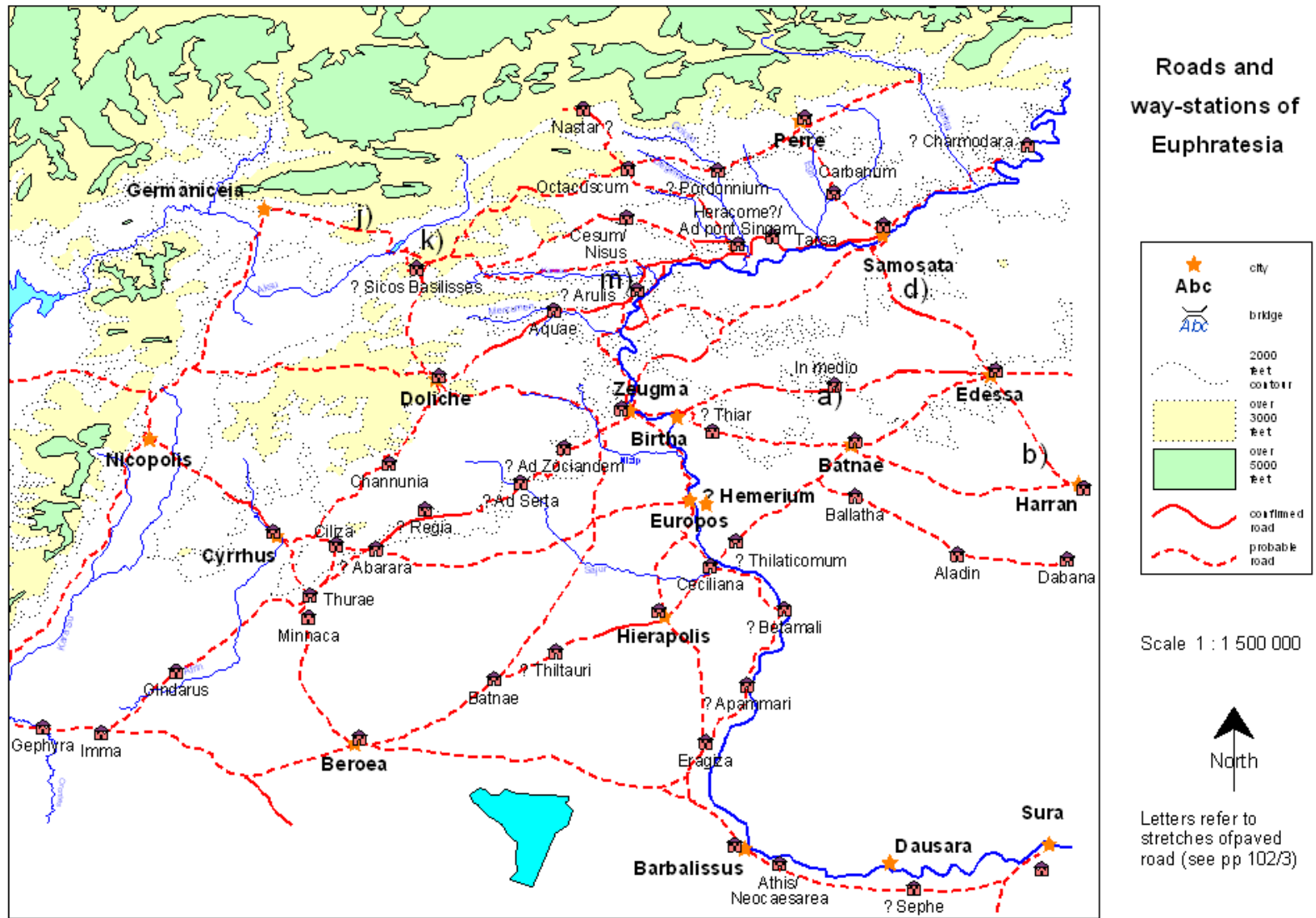


Figure 12

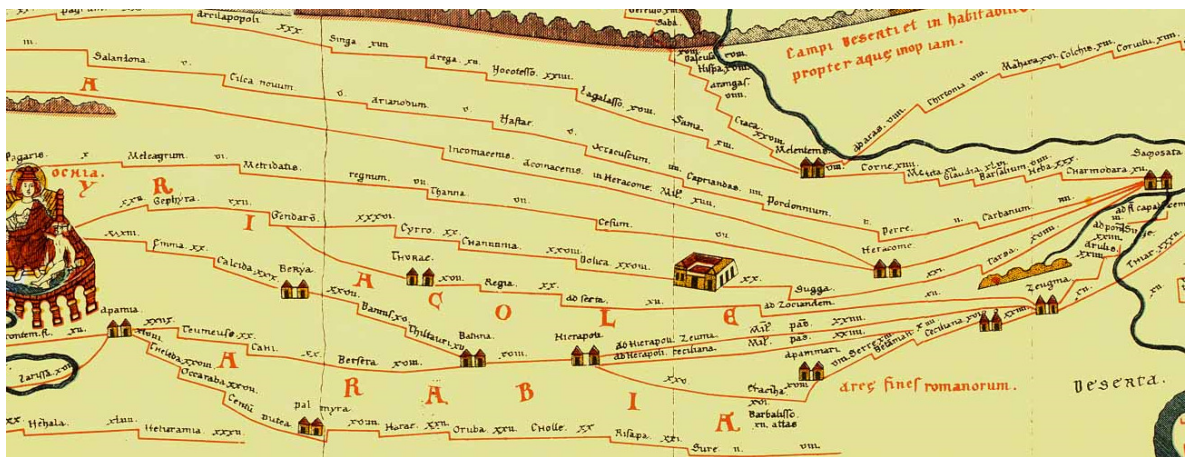
Roads north of Samosata and especially those associated with the Euphrates frontier of the first to third centuries AD are discussed especially in the writings of Timothy Mitford³⁰⁶. They are outside the three late Roman provinces concerned here.

In fact, routes 7 to 11 are also likely to have been developed in the early Roman period - or even before by the Seleucids. Evidence for their use from the fourth to the sixth centuries AD is sparse but such continued use may be inferred from the Peutinger Table and from accounts of military campaigns. Apart from the known course of the march of Julian to Babylonia via Hierapolis in 363, the presence of Constantius II in the region encouraged the development of Euphratesia; the campaigns of the fifth century against the Persians also involved a crossing of the Euphrates north of Zeugma at *Capersana*, as well as by the more usual route via Ceciliana. Route 12), a military road heading north along the Euphrates from *Barbalissus* to *Samosata* (and then on to *Satala*), was built early in the Roman period to serve the Euphrates frontier, but may therefore also have continued in use.

Once again the Peutinger Table (PT) is the principal ancient source and each route is described starting from the information provided there, where possible. The names, distances and routes are frequently unclear and confusing. Because accounts of the fighting between Rome and Persia concentrate for evident reasons on the regions further east, very few references can be found in ancient authors of the later Roman Empire to the place-names mentioned below. But this cannot be taken to mean that they were not important during the 5th and 6th centuries. Where possible their locations are indicated on the accompanying map, although frequently these locations are open to doubt.

Several writers have addressed the question of ancient roads in this area. In particular, Cumont³⁰⁷ and Dussaud³⁰⁸ examined the roads of northern Syria and Cyrrhestiche. Their conclusions have been partly superseded by Bauzou; his work concerns more particularly southern Syria and the *Strata Diocletiana* but he makes many remarks of interest for the road network in Euphratesia and also highlights the importance of signalling stations throughout³⁰⁹. The routes of the area are also discussed by Honigmann in his long article on Syria in PWRE³¹⁰.

David French has long proposed to produce a study of the Roman roads of Commagene and northern Syria. He has kindly provided me with a map based on the 1:500 000 Tactical Pilotage Chart (TPC G4-A) on which he has traced the course of the ancient roads. This has been of great value in the preparation of my own map of the area and as background for the discussion of the roads provided below. Other descriptions of the road network in this area are included in Archi³¹¹ and of course in the Barrington Atlas of the Classical World, map 67 – Antiochia. The author of this part of the Barrington Atlas, Tom Sinclair, has also produced a sketch-map of Roman roads in the northern part of Euphratesia on page 131 of the fourth volume of his study ‘*Eastern Turkey: an architectural and archaeological survey*’ (ETAAS)³¹².



The following routes are discussed in detail below only insofar as they are on the territory of the province of Euphratesia, i.e. places in Cilicia or Syria II are not described. Please see the map of Euphratesia and the individual maps included for each route.

7) Antioch to Hierapolis and the Euphrates

The PT has: *Antioch xxxviii – Emma xx – C(h)alcida xxx – Berya xxvii – Bannis xv – Thiltauri xii – Bathna xviii – Hierapolis*. Before ‘Bathna’ the stations are outside

Euphratesia. From Hierapolis the road split into three: 1) *Hierapolis xxv – Eragiza xvi – Barbalisso xii – Attis*; 2) *Hierapolis xxiii - Ceciliana* (Euphrates crossing); 3) *Hierapolis xxiii – Zeugma*.

There are the remains of a paved road near Emma or Imma (outside the area covered by this thesis). The emperor Julian seems to have found the route in poor condition in AD 363 but it must have been the crucial link for the province of Euphratesia whose capital was at Hierapolis (see Chapter 4 above). The pilgrim Egeria also took this route on her way to Edessa in the fourth century and it seems to have remained highly important. Ceciliana may well have been the most important Euphrates crossing during this period although there are no reports even of a pontoon bridge having been constructed and indeed the flood-plain of the Euphrates is very broad on the east bank at this point which would have made any fixed crossing very difficult.

Cumont travelled this route early in the 20th century and apparently saw two milestones which he shows on a sketchmap of the route from Aleppo to Hierapolis at points about 10 Roman miles from Aleppo and 13 before Hierapolis³¹³.

Later in the Middle Ages the main crossing points for trade with Aleppo from the east seems to have both reverted to Zeugma – or rather Birecik – and to have descended south towards another crossing at Kara Bembij , where there was apparently a pontoon bridge guarded by the famous 13th century castle of Qalat Najim³¹⁴, probably wrongly identified by Burns with Ceciliana. It seems apparent that the road continued on the east bank to Batnae and Edessa (see route 4) above).

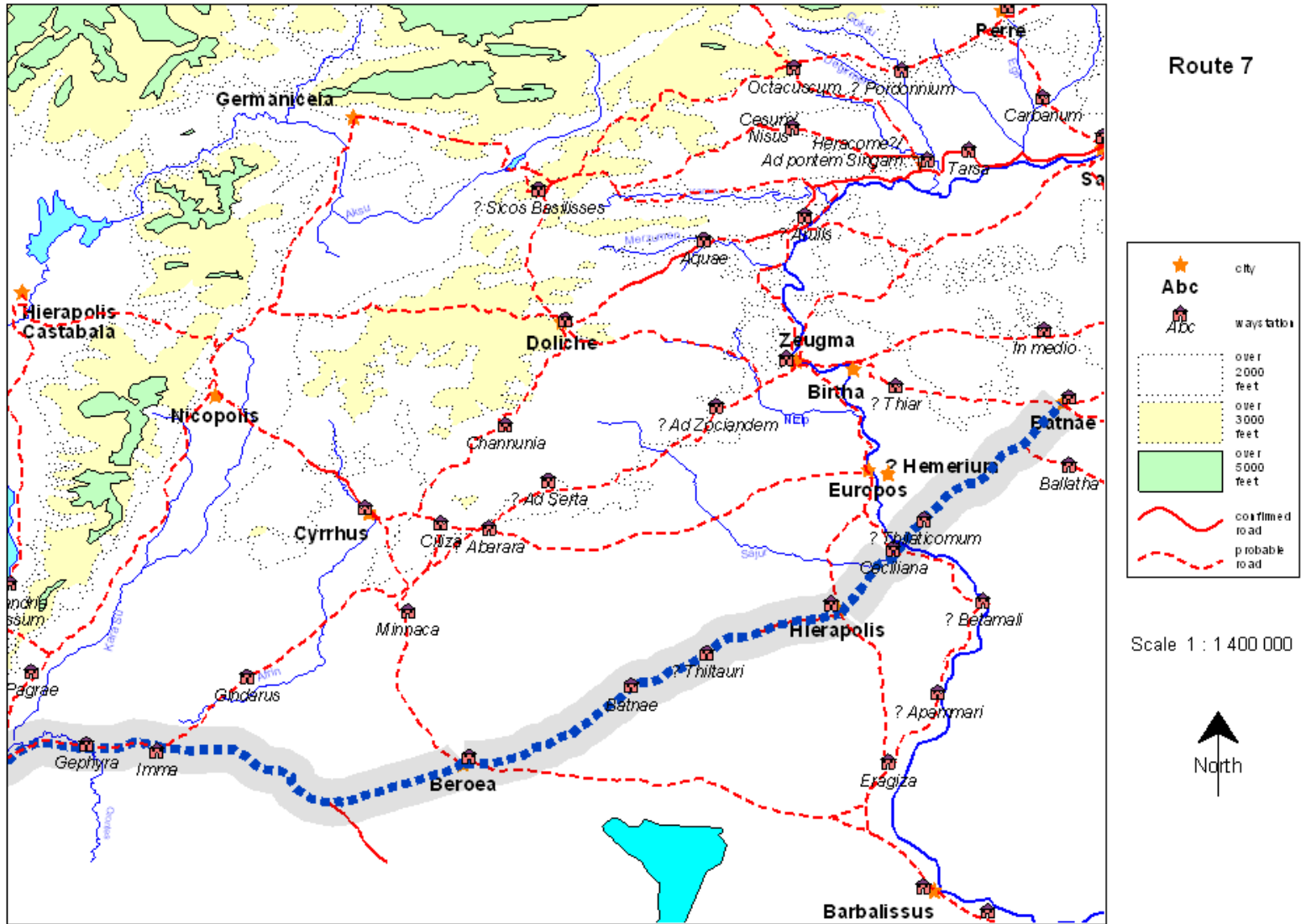


Figure 13

[Emma	Probably at Yenişehir and the junction for Reyhanlı; ruts are still visible at the side of the modern road.
Chalcida	Chalcis ad Belum, now the village of Qinnasrin – but south of the direct route to Beroea. There is an article by Benzinger in PWRE (col 2090).
Berya	Beroea, now Aleppo
Bannis	Batnae, but a different Batnae from that in Osrhoene (also called Anthemusia). Here ‘Tel Batnan’, near Al Bab. Cumont found traces of a Roman road over a long stretch of 20kms before Bab ³¹⁵
Thiltauri]	Uncertain. David French places it between Al Bab and Manbij, a total distance of 48 kilometers.
Bathna	Possibly another name for ‘Bannis’, but this is rejected by Miller (775).
Hierapolis	Now Manbij (see Chapter 2 and article by Honigmann in PWRE, 733)
Eragiza	Abu Hanaya has been suggested but Stucky thought that it was Tell el Hajj ³¹⁶ .
Barbalisso	Balis/Meskene – now for the most part beneath Lake Assad ³¹⁷ . See Gazetteer.
Attis	Neocaesarea, from the 4 th century. Now Dibse Faraj ³¹⁸ . The last point shown on this route in the PT although Sura (60kms east) is indicated as the terminus of a more southerly route and there must have been a road between the two via ‘Sephe’ mentioned in the Ravenna Cosmographer ³¹⁹ . See Gazetteer.
Ceciliana	The crossing point for the road to Batnae and Edessa from Hierapolis. Although it must lie close to the confluence of the Sajur with the Euphrates, probably on the west bank, it has still not been firmly identified. The villages of Sresat and Mekar Mazar, just north of the confluence have some cut stones.
Zeugma	The main crossing before the fifth century. East of Nizip and north-west of Birecik. Partly drowned by the Birecik dam (see Gazetteer).

8) Antioch to Samosata

The PT has: *Antioch xxii – Gephyra xxii – Gendaro xxxvi – Cyrrus xx – Channunia xxviii – Dolice xxviii – (Aqua) xx – Sugga xxi – Tarsa xviii – Samosata.*

There are still traces of a Roman road, including an extant watchtower between *Dolice* and the plain of the Merzumen river³²⁰, over which the main arch of the Roman bridge near Yarımca is also still standing (see example of satellite imagery in chapter 1 and bridge 20 in Annex A). The road was probably built in the Flavian period when legions were established at Samosata and Zeugma. It was a route also known to Ptolemy since his enumeration of places indicates a line of communications here.

To the south of Dolice traces of the Roman road were visible in the early 20th century. Renwick Metheny, born in Syria to missionary parents, travelled widely in the area and stated that the horse road from Killis to Aintab ran near a Roman road “...which can be traced part way from Alexandretta to a point three hours west of Elif.”³²¹ The section south-west of Gaziantep is also referred to by Cumont who must have visited the area shortly afterwards³²². The section north-east is mentioned in the Handbook of Asia Minor³²³

Both the latter writers also refer to the three large Roman monuments on the plateau above the Euphrates crossing at Ayni. This area has been investigated by me in detail and reports were published in *Anatolian Studies*³²⁴. The Roman road to the north-east passes near these monuments (at Elif, Hasanoğlu and Hisar), before descending to a river crossing on the Kara Su (see bridge 17, Süpürgüç, in Chapter 6). In the day of Renwick Metheny there were ruins of churches and monasteries both on this side of the Euphrates around these villages and on the east bank opposite around Cibin (now called Saylakkaya), where Pococke had already found many churches in the 18th century³²⁵. Most of these have disappeared, the stone having been re-used for modern buildings, but at Cibin, as well as the courtyard of the former church, there is a remarkable concentration of cisterns, which may indicate that this was an important way-station on a route from Edessa to Germaniceia otherwise unknown (see also the discussion of Rumkale under route 12) below).

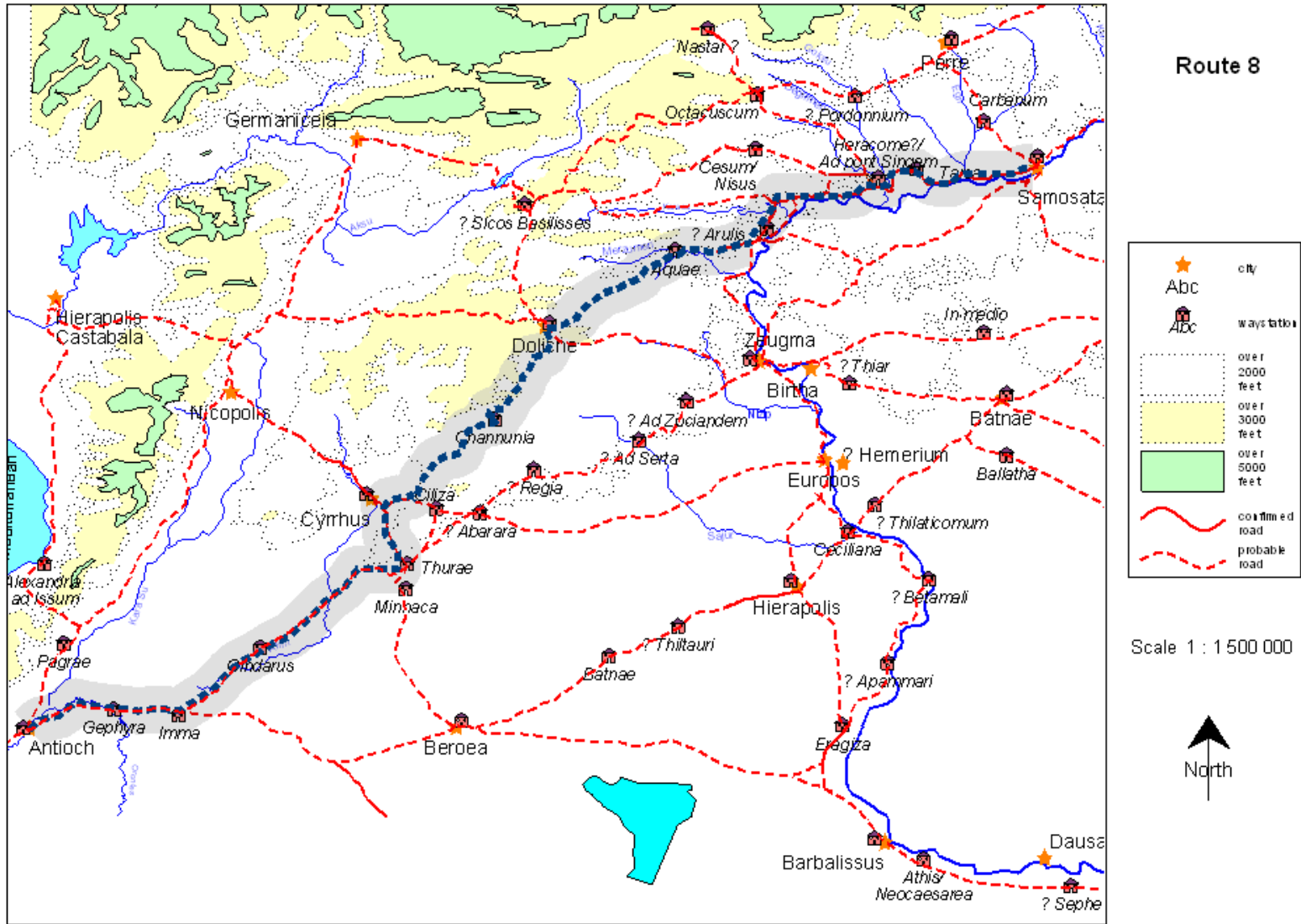


Figure 14

Below Elif a ford - and possibly a pontoon bridge - crossed the Euphrates at Ayni. There was a 'road' from the west which descends the steep cliffs by a zigzag footpath (probably the '*opus cochliae*' celebrated by a Vespasianic inscription opposite Ayni³²⁶), crossed the river and rose on the east bank to Cibir via a roadway cut into the cliff which was still in use in 2000³²⁷. A route from a point on the west bank opposite Ayni to the north also crossed the Kara Su by a bridge of which one pier remained in 1999 (now, like Ayni, under the waters of the Birecik dam), just 40m from the confluence with the Euphrates. Ayni was very probably *Capersana*, where Ammianus Marcellinus cut a pontoon bridge crossing the Euphrates to impede a Persian advance in AD 359 and from where troops of Constantius II launched an attack on the Persians during the same period. (See also map of north-west Osrhoene accompanying route 3 above).

The sections of this route both north and south of the Karasu bridge are described by French³²⁸, who identifies important features such as the narrow passage cut into the rock SE of Turuş (now destroyed by construction work for the Ataturk dam), the Roman bridge on the Göksu (number 17 in Annex A, Chapter 3) and the bridge on the Katasu (Süpürgüç, number 18).

Gephyra	Probably the crossing of the Orontes near Tell Atchana (the village to the north is Saçaklı; Miller refers to 'Jisr al-Hadid').
Gendaro	Jindaris ³²⁹
Cyrro	Cyrrhus. See Gazetteer.
Channunia	Χαονία in Ptolemy. Possibly the site later occupied by the castle of Ravanda ³³⁰ but more likely Kehriz, where Cumont found remains ³³¹ , now 'Muhaciosman', a village about 20km SW of Gaziantep ³³² - or possibly the nearby village of Omeroğlu. A recently found inscribed milestone found some 15km SW of Omeroğlu appears to relate more to the route from Kilis to Zeugma via Tilbeşar (see route 9 below).
Dolica	Dolice. See Gazetteer.
(Aquae)	No name is shown on the PT, just the symbol of baths. But baths with so large a symbol occur nowhere else on the PT east of Antioch. Probably Yarimca but Cumont thought that it was Yavuzeli Djindjifa), a town nearby ³³³ .

Sugga	Probably Hasanoğlu or Elif – substantial Roman monuments and other remains first noted by Renwick Metheny and Cumont. Ptolemy has a Σίγγα which Honigmann identifies with this place ³³⁴ so possibly the town was associated with the river nearby (Kara Su) referred to in the ‘ <i>Ad pont Singe</i> ’ of route 12 below.
Tarsa	Kuyulu, just north of the modern bridge crossing the Euphrates near the Ataturk dam.
Samosata	Samsat, now beneath the waters of the Ataturk dam. See Gazetteer.

9) Antioch to Zeugma

The PT has: (as above: Antioch xxii – Gephyra xxii – Gendaro) – *Thuræ xvii – Regia xx – Ad Serta xii - Ad Zociandem xii – Zeugma*. The AI has: [190] *Item a Cyro Edissa 92: Ciliza sive Urmagiganti 12, Abarara 10, Zeugma 22 (then Bemhari Canna 40, Bathnas Mari 8, Edissa 10)*.

These toponyms are for the most part not securely identified and the routes are therefore still uncertain, but a milestone has recently been found between Kilis and Gaziantep and the ancient road network needs to be re-assessed in consequence³³⁵. Proposals have been made most recently by Sinclair in the Barrington Atlas of the Classical World, map 67, but David French marks slightly different routes, giving different identifications of sites, on his map prepared for a publication on Roman roads of north Syria and Commagene which has not yet appeared). Chapot also travelled through the region, in part along the course of a paved ancient road. He has the following to say about this route 9:

“La voie principale de l’extreme-nord syrien était à peu près rectiligne d’Antioche à Zeugma. Entre Killis et Nisib j’en ai observé les vestiges sur un parcours de plusieurs kilomètres : elle était large de 4 à 5 mètres ; aucun pavage, mais une accumulation de gros cailloux, et sur chaque rebord des pierres plus volumineuses.»³³⁶

This route can now be seen in the satellite photos from Google Earth, now that the milestone of Kazıklı provides a fixed point (see example D in Chapter 1 and photograph below). In the 1990s I had sought this road on the ground in vain, even though it seems also to have been used by the bullock trains dragging the components for Chesney’s two iron

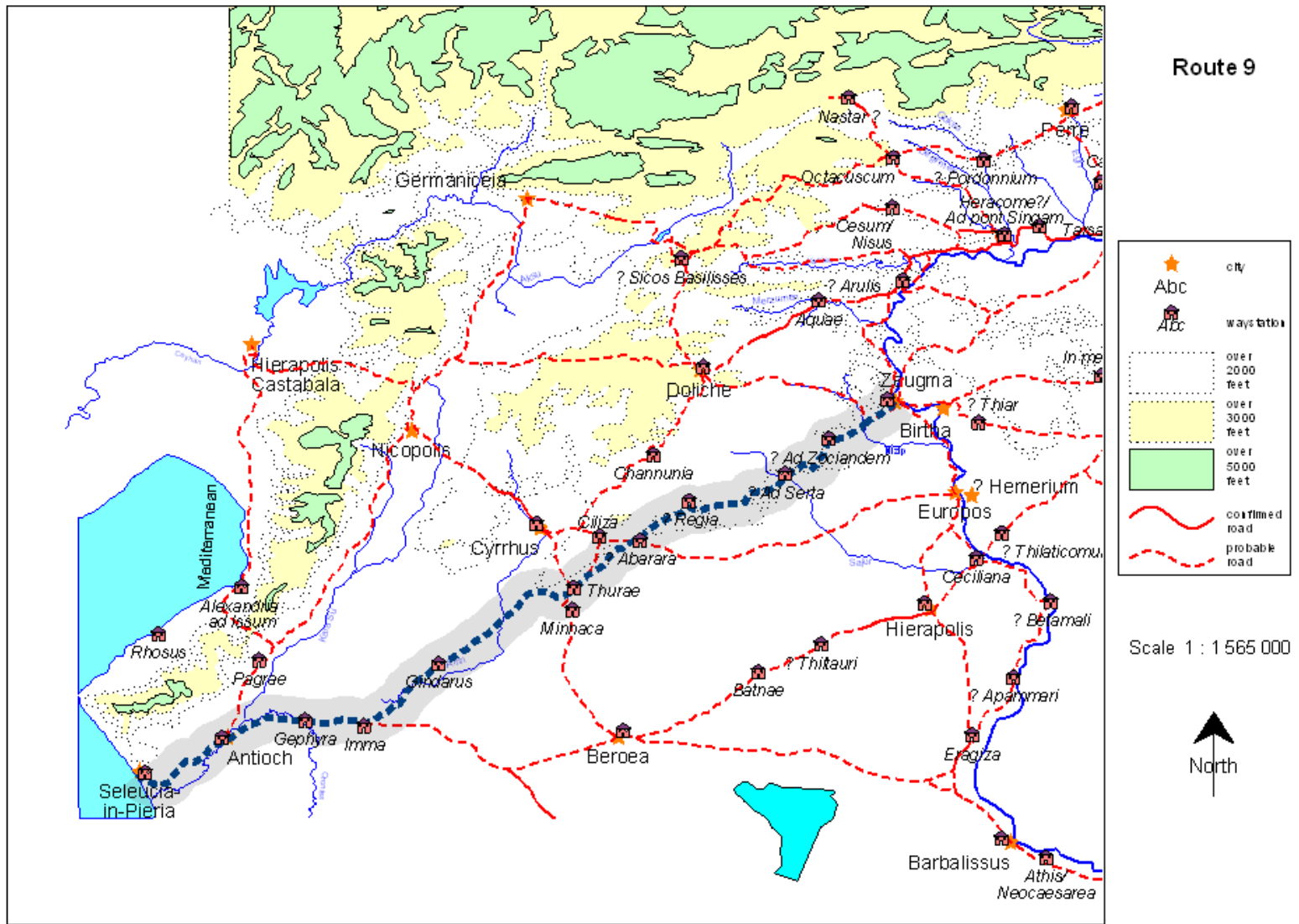


Figure 15

boats which descended the Euphrates in 1835 after being assembled at Birecik³³⁷. Chapot also mentions in connection with this road one of the bridges of Cyrrhus (see Chapter 3), but these seem to have served different roads, though connecting with this one from Kilis to Zeugma.

Honigmann mentions an alternative possibility for an additional route Beroea-Zeugma using the PT stations mentioned above, which he derives from Ptolemy³³⁸. The latter shows Βεροια XX, Νιαρα XXII, Ηρακλεια XX, Ρουβα XI, Ρηγια XVI, Αρισερια LI, Ζευγμα. In this case Ρουβα would be Thurae, Ρηγια Regia and Αρισερια Ad Serta. French shows another route from Ciliza to Europos, passing though Abarara (at a point which Sinclair assigns to Regia).

Sarıkoç, 12 kms south of Nizip, has an ancient mound with a well in which medieval coins were found. Local people say that a caravan route passed here, so this may also be considered a possible site for *Ad Zociandem*; more likely however it was a stopping point on a route from Aleppo to Zeugma that was important in the Bronze Age and the Middle Ages. The Roman archives found at Dura Europos contain a letter about purchase of camels for a caravan travelling between Beroea (Aleppo) and Zeugma at some time in the third century AD³³⁹, so possibly this direct route via Sarıkoç was also important in antiquity

Thurae	A'zaz (French). This may be compatible with Honigmann's route VII (Beroea-Zeugma) discussed below. The stage from Gindarus to Thurae seems too long (at least 40kms) unless there is a missing station.
Regia	Perhaps the same as Abarara, although Sinclair (Barrington Atlas, map 67) places it at Yananköy east of Kilis (not marked on my maps; there is a 'Yavuzlu' at the site he indicates). A milestone found recently near the main road from Kilis to Gaziantep at Kazıklı, 30km south of Gaziantep, may indicate its location at this point. Crowther indicates that it was found in 2003 ³⁴⁰ ; there are traces of a paved road as well as buildings and mosaic tesserae. The milestone is inscribed and indicates likely construction of the road between AD112 and 114 during the Trajanic period, when a road south to the Red Sea at Eilat from the province of Syria was also constructed. See photo of milestone below and example D in Chapter 1.
Ad Serta (or Secta)	Tilbeshar or possibly under the waters of the Kayacık dam. Honigmann says either Tilbeshar or 'Tell Hara' ³⁴¹ .

Ad Zociandem	Yarıntepe, near Uluyatir and south-west of Nizip; alternatively Sarıkoç (see above) or Nizip itself.
Ciliza/Urmagiganti	Kilis. Honigmann believed that the second name refers to a local tradition of battles between the giants in a region prone to earthquakes ³⁴² .
Abarara	Now possibly Kazıklı (see 'Regia' above) but French places it at Oylum, 6km east of Kilis, while Miller puts it at 'Göktash', a little further east. ³⁴³
Bemmari Canna	Possibly Hilmi or Taşlıkuyu, villages about 10km west of Sürüc. Ancient quarries, rock-cut tombs and a cistern are visible.
Bathnas Mari	Batnae/Sürüc. See Gazetteer. No remains at all from antiquity are visible. This is surprising since Justinian re fortified it. But no other sites on the surrounding plain seem suitable as an alternative location.



Kazikli milestone (Gaziantep museum)

10) Antioch to Germaniceia and Malatya

Neither the Peutinger Table nor the Antonine Itinerary shows such a north-south route.

Possibly, the east-west elongation of the PT made it difficult to show routes in this

direction, but the absence from the AI is surprising. Such a road is likely to have followed the easy route along the rift valley, following the river *Melas* north from Antioch via *Nicopolis* (known to be Islahiye). Chapot found a Roman fort along this route (whose stone may now have been recycled) at a point between ‘Checklié’ and ‘Kara-Moughara’, apparently on the east side of the river at the foot of mount ‘Meidan’³⁴⁴ – possibly at a point 17km south of Islahiye..

A ruined bridge whose core is likely to be Roman (No.21 in Chapter 3 above) is still visible further up on the Aksu river, but south of Kahramanmaraş (sometimes just ‘Maraş’ - ancient *Germaniceia*). Miller has a ‘route 109a’ heading north from Antioch, which corresponds to 11a) below for the most part, i.e. Antioch – Pagrae (the castle of Bagras) – (Meleagrum, Metridatis regnum, Thanna: all doubtful guesses) – Cesum: near Nicopolis – Heracome: the famous temple at Zincirli. The last is especially unlikely and the whole this seems too doubtful to me to be at all useful. The TP shows the route beginning at *Alexandria Cat Isson* (Alexandretta, now Iskenderun), not Antioch.

Several remains of paved roads have been found east of Maraş. These and others north-east of Pazarcik are likely to be those of Roman roads to Samosata and to Malatya³⁴⁵. Ruined bridges were also mentioned; I have investigated one at Harmanli (formerly Pervari) but in its current form it appears to be late medieval. A junction of ancient paved roads found at Ufacikli nearby is discussed under the following route.

11) Cilicia to Samosata and Edessa

Although *Germaniceia*³⁴⁶ is not mentioned in the PT as such, three other routes must have passed close by:

a) *Alexandria Catisson* – *Pagaris x* – *Meleagrum vi* – *Metridatis regnum vii* – *Thanne vii* - *Cesum vii* – *Heracome* - *Samosata* (the route believed by Miller to start from Antioch – see preceding section.

b) *Mompsistea xxvii* – *Incomacenus/Acomacenus xiiii* – *Heracome* (- *Samosata*)

c) [*Comana capadocia xxi – Catari iii – Salandona v – Cilca novum v – Arianodum v*]
Nastar v – Octacuscum iiii – Capriandas – iiii – Pordonnium ii – Perre ii – Carbanum iiii
– *Samosata*.

The last is of particular interest for our study since it concerns place-names in Euphratesia otherwise unknown but likely to have been important. French believes that there was a route leaving the Samosata-Zeugma highway at Heracome³⁴⁷ and passing west through old Besni to Adatha (Bozlar) and then to Elbistan, which must be the same as c) for some part of its trajectory. Adatha was visited in April 2008 and walls of a large ancient fortress are visible in the village square.

There are three possible routes for the more eastern section of the road between *Germaniceia* and *Samosata* (see map for routes 10 and 11 below). All of these are likely to have been in use but not necessarily at the same time. The existence of the most southerly variant has recently been confirmed by the find of a milestone of the Severan period from a point west of Araban. The ancient road north of the Kara Su bridge also seems to divide near Süpürgüç (new name: Akbudak), with one branch heading west to Araban, Pazarcik and Kahraman Maraş (*Germaniceia*) and the other heading east to the Göksu bridge and *Samosata*.

The ruins at Ufacıklı and Turunçlu (see second table below for ‘*Sicos Basilisses*’) are mentioned in a Turkish geographical encyclopedia³⁴⁸ which describes tombs, chapels and a ruined settlement with cisterns. Von der Osten explored this area in 1929 and reported that “...*Closer investigation around Ufacıklı showed that here was a junction of three ancient roads, each of which could be followed for a considerable distance.*”³⁴⁹ The three roads concerned went, respectively to Pazarçık and Maraş (*Germaniceia*), Gaziantep (*Doliche*) and Malatya (*Melitene*). The Handbook of Asia Minor, published by British Naval Intelligence in 1919, mentions ancient roads in this area which may correspond to these³⁵⁰. A brief visit to the area in April 2008 confirmed the existence of a paved road running north at Ufacıklı, as well as of a late Roman necropolis and of several fine tombs some 2km from the village, but there was insufficient time to study the road network in detail. The ancient route heading east-west from Araban and Rumkale towards Marash is known

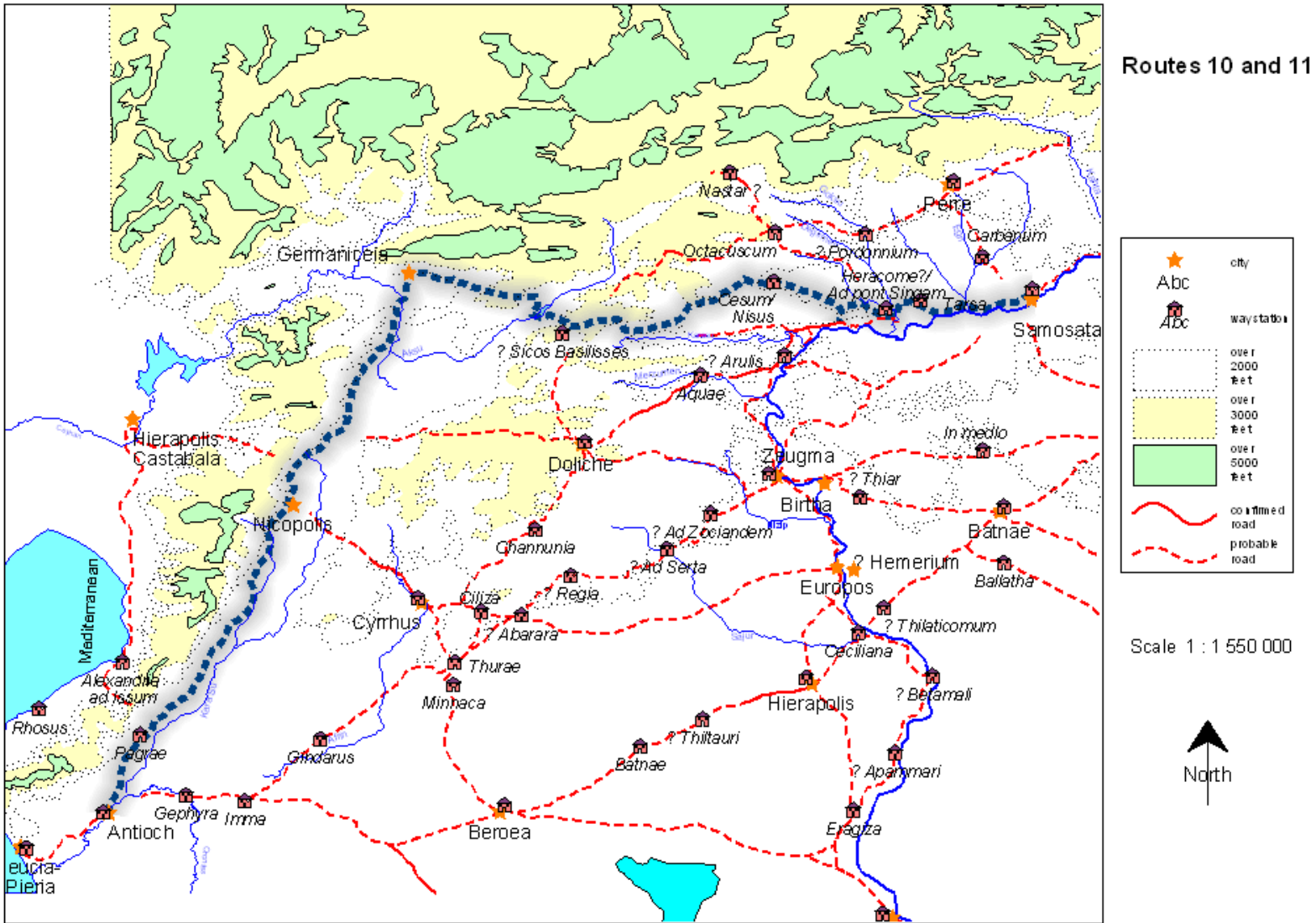


Figure 16

locally as a caravan road and may have originally been Roman. It crosses a col about 3km east of the village.

Pagaris	Bagras Kalesi, north of Antioch and before the Belen pass.
Metridatis regnum	As French says ³⁵¹ , a reference to the boundary of Commagene (and therefore also of Euphratesia) at the time of Mithradates I Callinicus. Similarly 'Incomacenus' ('In Commagenis') of route b) above from Mopsuestia to Samosata via Heracome.
Cesum	Perhaps also Nisus. Çakırhüyük, old name Keysun (see below).
Comana	North of Kozan (outside the region). At Sar.
Nastar (or Nastae)	Honigmann (RE Syria 1671-2) places at Nağar. This is apparently an old name for Harmanlı, formerly Pavreli or Pervari, a village NE of Besni and near Gölbası by the modern main road from Gaziantep to Malatya. Cf Barrington Atlas Map 67. A bridge remains (apparently medieval).
Octacuscum	Probably Eski Besni where there are ancient hilltop fortifications and Seljuk mosques, but this identification is not accepted by French ³⁵² . Wagner found a paved Roman road here ³⁵³ .
Capriandas	Placed by Miller on the left bank of the Göksü at 'Mairam Ushak' but shown on modern Turkish maps as the old name for Şambayat. Honigmann (RE Syria col 1672) draws attention to the mention by Pliny (NH V,127) of a tribal group in this area called the 'Capreatae'.
Pordonnium	Placed by Miller in the ruins of 'Mursal Kashy' at 'Sheretli'; possibly now Yavaş? But Sinclair considers its location to have been Adiyaman (Barrington Atlas, map 67).
Perre	Rock necropolis and other remains 5km northeast of Adiyaman. See Gazetteer.
Carbanum	Tom Sinclair in map 67 – Antiochia – of the Barrington Atlas shows Carbanum as being at a river crossing mid-way between Perre and Samosata. Honigmann says either 'Eski Samsun' or 'Qarahüyük' ³⁵⁴
Heracome	French places this at or near 'Kızılkaya', a village not marked on my maps but apparently 3.5km WNW of the monument of the Commagene dynasty at Sesönk ³⁵⁵ (and therefore north-west of the Goksu bridge and west of Kuyulu/Tarsa) ³⁵⁶ . Possibly now 'Hacıhalil'. Not <i>Hieracome</i> . I have not been able to investigate but the site is mentioned twice in the TP and must have been important. Starr found a paved road running west from here to Çakırhuyuk (see Nisus below).

The AI has:

- a) [184] *A Germanicia per Dolicham et Zeugma Edissam usque 87*: Sicos Basilisses 20, Dolicha 10, [185] Zeugma, Bemmaris 20, Edissa 25³⁵⁷;
- b) [186] *Item a Germanicia per Samosatam Edissa 70*: In Catabana 15, Nisus 16, Tharse 14, Samosata leg VII 13; [187] Edissa 12; c) [190] *Item a Nicopoli Edissa 138*, Aliaria 13, Gerbedisso 15, Dolicha 20, Zeuma 23 [Canaba 25, In medio 22, Aedissa 18].

French notes that a road is shown on Kiepert's map (sheet Malatja) running east-west near Bağdin, now Pazarcik³⁵⁸. I did not find this in April 2008, although there is a stretch of paved road heading north from Ufacıklı. Honigmann uses it for his discussion of a route from Nicopolis to Zeugma but the locations are uncertain. Sinclair shows the route on map 67 of the Barrington Atlas as starting in Hierapolis Castabala (eastern Cilicia) but Nicopolis (Islahiye) lies some 20km to the south of this route.

Sicos Basilisses	Ufacıklı near Pazarcik? There are ruins both here and 13km north-east at Turunçlu. Probably a misreading of οἰκος βασιλισσης ³⁵⁹ . A milestone has recently been discovered from the Severan period near Araban (not yet published but now in Gaziantep museum) but its findspot was not located during a visit in April 2008.
Dolicha	Dülük, northwest of Gaziantep. See Gazetteer and Cumont 173-196.
Bemmaris	West of Suruç – quarry and cisterns at Pehlivankeşmesi?
In Catabana	Presumably a day's march west of Nisus/Cesum; but French identifies it as the plain around Çakırhüyük ³⁶⁰
Nisus	Probably identical to Cesum, see above – Çakırhüyük, old name Keysun ³⁶¹ but French places at Fıstıklıdağ, formerly Zekderiş ³⁶²
Tharse	Kuyulu, old name Turuş ³⁶³ ; article by Honigmann in PWRE (2409)
Aliaria	'Albistan hüyük' is proposed by Honigmann (PWRE Syria 1675). Sinclair places it possibly at Kömurler, a village near Nurdağı after the Amanus pass.
Gerbedisso	'Arslan qal'esy' or 'Qartal' according to Honigmann (ibid). But Sinclair – presumably because of the closeness of the names - places it at 'Keferdiz' (Barrington Atlas, Map 67) on a route in a direct line heading east from Hierapolis Castabala to Doliche, at the foot of the hills on the east side of the rift valley. I have not found it on a map but it must be close to the Neolithic site of Sakçagöz.

12) Sura – Samosata

This must originally have been a military road along the Euphrates, which constituted the frontier with Parthia during the early empire. It is discussed by me in an article of 2001³⁶⁴. Going north, the PT has: *Soura - Attis xii – Barbalisso xviii – Apammaria viii – Serre xiii – Betamali xiiii – Ceciliana xiv* (double house symbol = ? Europus) *xiiii – Zeugma xxiii – Arulis xxiii – Ad pont Singe iii – Ad fl Capadocem – Samosata*.

The land south of Sura is shown on the PT as *Areae Fines Romanorum, fines exercitus syriaticae et commercium barbarorum* or ‘regions beyond Roman territory and the control of the army in Syria where commerce belongs to the barbarians’. In fact, Roman control did continue down-river some distance. Justinian was to fortify Zenobia which is nearly 100km ESE from Soura and Circesium, which was the southern-most point on the left bank of the Euphrates for several centuries, lies about 170kms SE of Sura.

The course of the road north-west of Sura is fairly clear since it usually followed the banks of the Euphrates, with a few detours inland to avoid obstacles such as deep gorges of tributary rivers. Parts of it around Zeugma remained in use by caravans until the 1960s (in particular the bridge at Habeş – see chapter 5). However, those travelling downstream from Samosata to Zeugma usually went by raft as did bishop Eusebius of Samosata when he was ordered into exile by Valens (i.e. between AD364 and 378)³⁶⁵. In view of the importance for down-stream traffic represented by the river Euphrates itself, the road must have been especially important for upstream traffic.

For the remarkable site of Rumkale see the discussions in chapter 5 (bridge 21) and the fortresses section of the gazetteer (Euphratesia). The ancient road passed over the mountain to the south-west of the fortress (discussed in Chapter 1), but an earlier version – possibly abandoned because of flooding – passed underneath the fortress along the Euphrates river bank. There was an important crossing point here in later periods which may also have been used in Roman times³⁶⁶. From the village opposite Rumkale at Savaşan the route would have continued via Cibin and Kantarma towards Edessa. (See discussion and map of routes of NE Osrhoene under route 3 above).

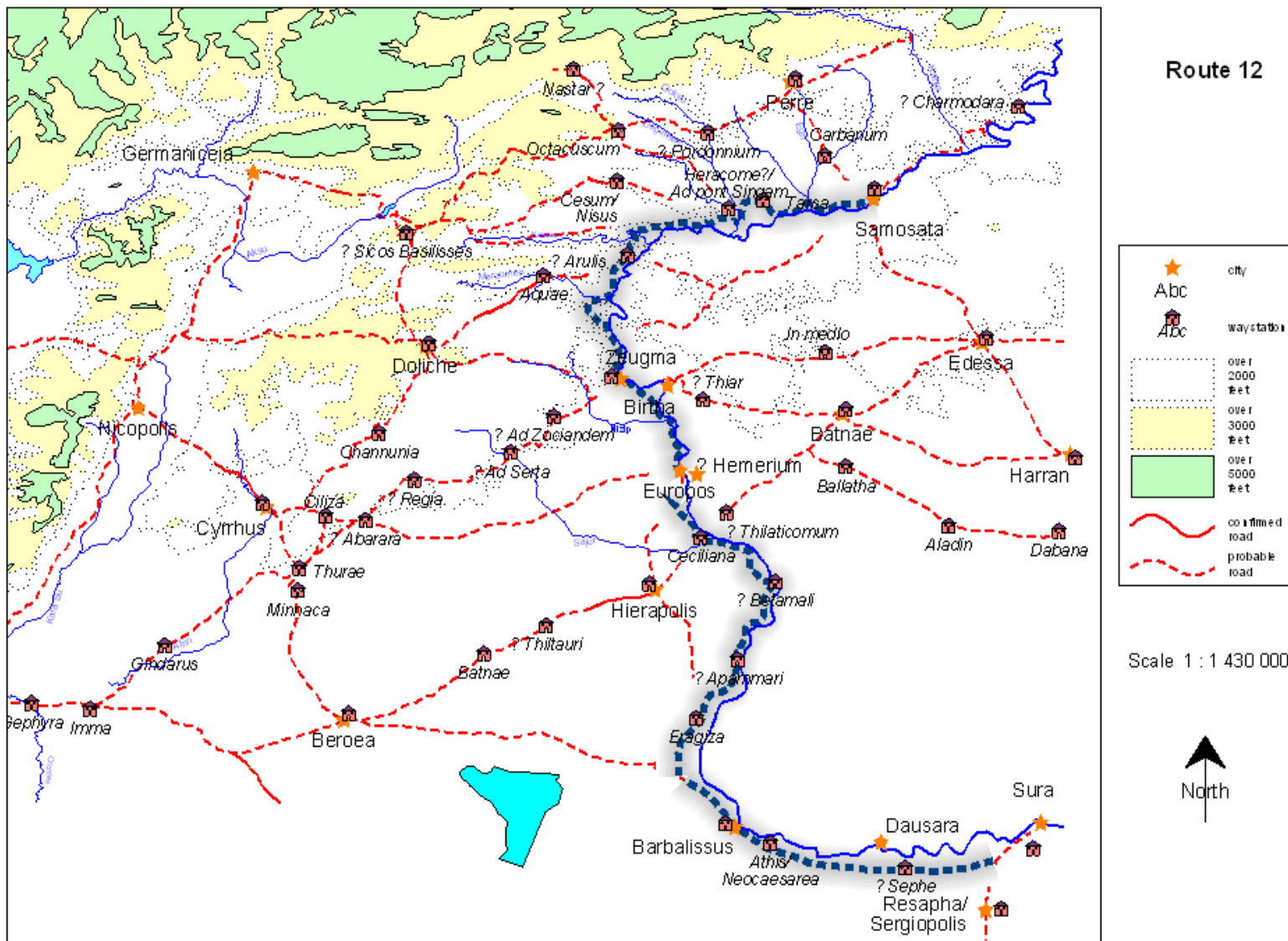


Figure 17



Ancient road south-west of Rumkale (see discussion in Ch.1)



Roadway cut into rock below Rumkale

Although Elif has been identified with Arulis, it seems more probable to me that this station mentioned in the PT was to the south at Rumkale; Elif, where there is a large monument already reported by Cumont in 1917³⁶⁷, seems more likely to have been Sugga, a station also mentioned in the PT (see route 8 above).

On the east bank in Osrhoene the whole area appears to have been densely settled in the late Roman period and another road is thought to have existed from Zeugma to Samosata cutting across this north-west corner of Osrhoene, via the Roman forts at Eskihsar (37°16'07" N; 38°07'30" E) and Uzunburç³⁶⁸. Wagner identified stretches of Roman road near Ank (now Yeşilözen) and at Eski Hisar. Both the forts mentioned have been recently destroyed and their stones removed, the latter to provide stones for a mosque. Uzunburç (37°18'46" N; 38°13'49" E) is a village 10km ENE of Nuhrut still with many ancient cut stones, particularly around well-heads, and with some fragments of floral decoration, apparently from a substantial Roman building. It seems probable from the satellite photographs that the Roman road passed from Ank to Nuhrut and Uzunburç and then either to the small town of Yaylak, where there is a large ancient mound, now covered by modern buildings, and on to a point opposite Samosata or else to the Euphrates crossings at Nehriseid or Adilpazar, before proceeding along the north bank of the Euphrates via Turuş.

Although most churches have also vanished, there are remarkable remains of a substantial church at Nuhrut³⁶⁹ and of a monastery nearby at Kelösk/Der Şenek (37°14'58" N; 38°13'44" E)³⁷⁰. Bits of the Roman road were found by Wagner around Ank Köy (now Yeşilözen) and Eski Hisar (Nuhrut)³⁷¹; the roadway now visible is not paved and, although its original width is uncertain, it seems to have been too narrow for wheeled vehicles³⁷².



The church at Nuhrut



The villa rustica or monastery of Kelosk Kale/Der Şenek – 5th century AD?

Sura	See Gazetteer; article by Honigmann in PWRE (953). Also ‘Resafa V’ ³⁷³ .
Athis	Neocaesarea after the fourth century - Dibse Faraj ³⁷⁴
Barbalisso	Balis/Meskene
Apammaria	The apparent importance of this station (two towers) indicates a city, or at least a junction of routes. Only Jebel Khaled seems possible but Gawlikoski proposes this site for the Hellenistic foundation of Amphipolis/Turmeda ³⁷⁵ .
Serre	Kara Manbij/Bambosch? Not found by me.
Betamali	Maybe Qalat an-Najm. The castle is medieval but possibly there was a Roman settlement nearby. The Chesney expedition down the Euphrates found a “paved Roman road” leading down to a ford or pontoon bridge on the west bank ³⁷⁶ , while on the east bank they discovered a causeway from the neighbouring hills to the river with sloping buttresses down to the water for landing places at different heights above the river and recesses for storage of goods.
Ceciliana	Near the Sajur/Euphrates confluence; precise site still not found ³⁷⁷ .
Europus	Carchemish/Jerablus. Roman layers were not recorded by the British Museum excavations ³⁷⁸ .
Zeugma	Near Nizip/Birecik. Partly destroyed by the Birecik dam. See Gazetteer.
Arulis	Variously identified with Rumkale, Ehnes and Elif/Hasanoglu. I opt for the Rumkale ³⁷⁹ ; Elif seems more likely to have been Sugga (see route 8).
Ad pontem Singae	The Singa river could be the Kara Su although it is more often identified with the Goksu (especially Honigmann in PWRE, Σιγγας ποταμος). There are ruined Roman bridges on both rivers. On the Kara Su, apart from the bridge, there are substantial remains in three villages nearby including large

	funerary monuments (Elif, Hasanoglu and Hisar) ³⁸⁰ . The Goksu river has a large and famous bridge (see Chapter 3, bridge 17). There is a village nearby called Burç which has a large square building which may be the base of another huge monument or a temple ³⁸¹ .
Ad flumen Capadocem	Possibly the Goksu or else the next tributary to the east where at the village of Hayaz there may have been another Roman bridge (reports of villagers to David French in 1981 ³⁸²). Now destroyed by the Ataturk dam.
Samosata	Samsat – destroyed by the Ataturk dam. Never properly excavated. See Gazetteer.

13) Doliche – Chalcis

The AI has [195] *Item a Dolicha Seriane 138: Hanunea 25, Cyrru, Minnica, Beroa 20, Calcida 15, Androna 27, Seriane 18*. South of Cyrrhus the road leaves the (later) province of Euphratesia and stations are therefore treated summarily. The section between Doliche and Cyrrhus has already been described under route 8 above. It seems probable that the route from Beroea (Aleppo) to Zeugma was more important than this one but it is not attested in the itineraries nor in the PT, despite a mention in the papyri found at Dura Europos of a trip involving camels on this journey³⁸³.

Doliche	Dülük, 11km north of Gaziantep. Now being investigated by the university of Muenster under Engelbert Winter ³⁸⁴ .
Hanunea	The same as the Channunea of route 8.
Cyrru	Cyrrhus. It was partly excavated by Frezouls in the 1950s ³⁸⁵ .
Minnica	Minnakh just east of the main road from Aleppo to Azaz at a point about 44km north of Aleppo ³⁸⁶ . Ptolemy mentions a Niara, placed by Sinclair in the Barrington Atlas some 20kms SSE of Minnica.
[Beroa	Beroea, now Aleppo
Calcida	Chalcis
Androna	Andarin. In the desert 60kms SE of Chalcis. Currently being excavated by a Syrian/British team ³⁸⁷ .
Seriane]	Isriye. In the desert 90kms WSW of Resafa.
Resafa	Mentioned here because it was in Euphratesia. However, it was situated on the road north from Palmyra to Sura which lay almost entirely outside the province of Euphratesia.

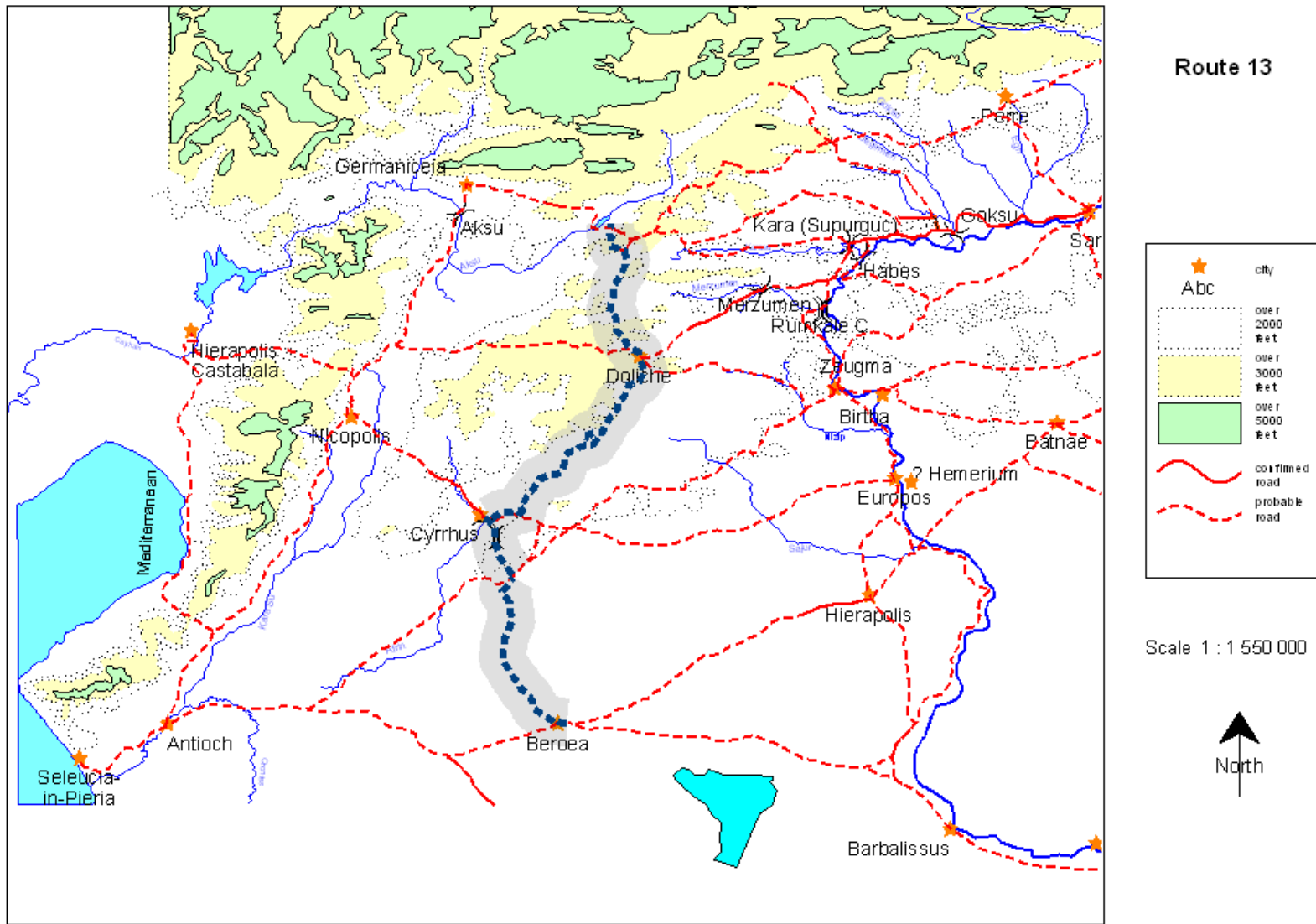


Figure 18

Annex B

Place-names in the Ravenna Cosmographer³⁸⁸

13 Mesopotamia

Item ad partem meridianam confinalis supra scripte Perside-Asiriorum Etesipontis Peloriarce est patria que dicitur Mesopotamia, quam circumdant flumina maxima, id est Tygris et Euphraten, quapropter et Mesopotamia appellatur, in qua Mesopotamia plurimas legimus fuisse civitates inter Orientis philosophos, ut ait Castorius ; ex quibus aliquantas designare volumus, id est

8 **Edesa** (Edessa)
10 **Bara** (? Barbare)
12 **Nisibi**
14 **Reche** (Rene)
16 **Salar** (Sahal)
18 **Batnis**
2 **Bicum** (Vicus)
4 **Thatama** (Thalama, ? Thebeta)
6 **Fonscavore** (Fons scabore)
8 **Thelmisa** (Thilapsum)
10 Zagure
12 **Artamus** (Arcamo)
14 **Thamuri** (?Thamaudi)
16 **Sapha** (Sapham)
18 Arsamosatim
1 **Gorbilon** (Coruilu)
3 **Mazara**

6 **Tarana** (Tharrana, ? Carris)
8 **Thegubris** (Tigubis)
10 **Chasta** (Haste)
12 **Amosta** (Amostae)
14 **Bara** (missing from PT³⁹⁰)
16 **Sigura** (Sirgora = Singara)
18 Aris (Hatra)
20 **Amaude** (Chanmaudi=Amouda)
2 Thelia
4 Babia
6 Seleutia

9 **Minicerta** (Minnocerta)
11 Beta
13 **Manacarta** (Macharta or 9 above?)
15 **Resama** (Ressaina)
17 **Carris** (Charris, Tharrana)
1 **Thiar**
3 **Barna** (Sathena/Batnis)
5 Chara
7 **Thumida** (Thubida=Bebase³⁸⁹)
9 **Sichinus** (Sihinnus)
11 **Digeren** (repetition of Singara ?)
13 **Singara** (also Sigora)
15 Nesibi (? As 12 above)
17 Tygrinopolis
19 **Arsinia**
2 **Cholcis** (Colchis)
4 Thertonion

7 **Vesceria** (Roscheria)
9 **Chadia** (Hadia)
11 **Magrus**
13 **Ibatitas** (Batitas)
15 **Alaina**
17 **Dagala** (? Dicat)
19 Saviri (Sabbini)
1 **Artazates** (Arcaiapis)
3 Selinus
5 Nazara (Naharra)
7 Dura Nicanoris

[14 Judea/Palestine]

15 Syria Coele/ Commagene

Iterum iuxta Hebreorum regionem ponitur patria que dicitur Syria Cilensin. Comagenis, in qua Syria plurimas fuisse civitates legimus inter supra scripteos phylosophos, ut ait Castorius; ex quibus aliquantas designare volumus, id est

21 **Antiochia**

famosissima

2 **Mileagrum** (Meleagrum)

4 **Tanna** (Thanna)

6 **Iaracopama** (Heracome)

8 Since

10 **Zeugma**

12 **Bathnis** (Batna)

14 **Chacida** (Calcida)

18 **Daphnis**

1 Ronte

3 Gabala

5 **Apamea**

7 Calhi

9 Bata

11 **Europa** (Europos is left off the PT)

13 **Pamanari** (Apamari)

15 Malmiora

17 Thesida

19 Tamira

2 Balaneis

4 Ortozea

6 Arethusia

8 **Laoditia**

10 Tavila

12 **Eraiza** (Eraciza)

14 **Anthis** (Attas)

16 Adiazene

1 **Risapha** (Risapa)

3 **Orissa** (Oresa)

5 **Damascius**

22 **Padas** (Pagaris)

1 Empsa

3 Multridis (? Metridatis regnum)

5 **Nisson** (Nisus)

7 **Samosata**

9 **Araris** (Arulis)

11 **Phaltauri** (Thiltauri)

13 **Beria** (Berya=Beroea)

15 Achia (Antiochia)

19 Baccatamus

2 **Laoditia**

4 Raphanus

6 Temeuso

8 Byrsa

10 **Zaronavus** (? Arulis)

12 **Celciliana** (Ceciliana)

14 **Ierapolis** (Hierapolis)

16 Orarabon

18 Larissa

1 Palthon

3 Anthalarada

5 Epiphania

7 Emetia

9 Hepolis

11 Marara

13 **Barbalisson** (Barbalisso)

15 **Sephe** (not in PT)

17 **Suri** (Sura)

2 Cholle

4 Adatis

6 Praedim

Other place-names in the Ravenna Cosmographer of relevance to this thesis are in
- chapter 4 (Parthia):

2 Tigranocerta (Triganocarten)	1 Dizanas (Dyzanas)
4 Ondacara	3 Caspi
6 Colcana (Colchana)	5 Gebbin
8 Etagigarda	7 Colphiana
10 Adipte	9 Sipte (? Sitae)
12 Arsania (Arsinia)	11 Nabarra (Nararra)
	13 Sardera

- in chapter 5 ('patria Persarum')

2 Suretala	5 Sepe (Sephe above)
4 Diothaze	7 Barspsis
6 Ati (Attas, Anthis above)	9 Cubicumbilo (Kommisimbela of Parthian Stations of Isidore of Charax)
8 Barbalissum	

- in chapter 10 ('Media Minor')

10 Dizanas	11 Dimiza (Cymiza)
12 Zancerion (Zanserio)	13 Tygranocertam
14 Colchanam	15 Nauaram
16 Tygrium (Ad tygrem)	

[Dizanas, Colcana (Colchanam), Nabarra (Nauaram) and Tigranocerta appear both in chapters 4 and 10.]

- and in chapter 16 ('Cilicia' and 'Cappadotia')

15 Samma castorum	16 Pacosanda (Capriandas)
18 Adaras	17 Thertonion
20 Metita	19 Lerisus
2 Melitini (Melentenis)	1 Corte
4 Nastar (Nastae)	3 Germanitia (not in PT)
6 Salondona	5 Pacosanda (Capriandas)
8 Comacenin (Incomacenis=Commagene)	7 Amanon
10 Pordonion (Pordonnium)	9 Scasuson
12 Caranon (Carbanum)	11 There (? Perre)
14 Cizistra	13 Ratsalium
16 Tiana	15 Arabavallis

Chapter 4 : The roads (part 2)

Users of the roads

At Antioch the inns for travellers outside the city gate constituted ‘a complete quarter of the town’³⁹¹. Physical remains of inns from late antiquity are however rare in this region, as the discussion in the last part of this chapter shows. The more copious evidence for roads and bridges provides a new means of approaching the issue of travel in this part of the ancient world. Thus, as is discussed in chapter 3, wide bridges must mean wheeled vehicles and therefore at least potentially high volumes of traffic and trade. The very existence of the Peutinger Table, a route-map which shows roads well beyond the eastern frontier with Persia itself constitutes important evidence for an interest in travelling between Rome and Persia. Many of these travellers are likely to have been merchants.

The written sources for the period do confirm to some extent the importance of trade and travel along these roads. Thus, a law of AD 408/9 required Roman governors of the provinces concerned to restrict trade between Roman and Persian merchants to three places: Nisibis, Callinicum and Artaxata³⁹². The earlier treaty of AD 298 which followed the victory of Galerius over Narses had specified that trade should be limited to Nisibis only³⁹³. This implies that Sassanian merchants had to bring all their goods to Nisibis where they were handed on to Roman traders. But it is uncertain to what extent merchants trading between the Roman and Persian empires were really confined to specific named points of exchange. As Lee points out³⁹⁴, there is reason to doubt whether it was possible to stop merchants from crossing the border (see chapter 6). If these were frequently of Jewish or Aramaic ethnic origin, it must also have been easy for traders to pass themselves off as citizens of the ‘other side’. The fair at Batnae mentioned by Ammianus Marcellinus during the reign of Constantius II was also frequented by merchants from the east (see ‘Batnae’ in gazetteer).

Nevertheless, the treaty concluding the war of 561-2 confirmed that

“...(2) With regard to Roman and Persian merchants of all kinds of goods, they and tradesmen of this kind shall conduct their business according to established practice through the specified customs posts...”³⁹⁵.

By that time it is likely that *Dvin*³⁹⁶ had replaced *Artaxata* as the commercial centre of Armenia (for reasons unknown), the other places being *Nisibis/Dara* and *Callinicum* (or

Nicephorion), but the customs posts are not in fact specified in this text. Probably a little earlier than this treaty Petrus Patricius had already recorded that the place of exchange was to be Nisibis³⁹⁷ so the evidence of the desire to restrict movement is rather damning but perhaps once again repetition is a sign of inability to enforce this law.

Whether the restrictions were intended to maximise revenue or reduce espionage, they are also a sign of the state's interest in controlling merchants and presumably therefore of the numbers and importance of these merchants. The *anonymous Byzantine treatise on strategy* considers merchants (το εμπορικο) to constitute the most important profession after writers, public speakers, physicians, farmers, priests and lawyers. He states that they provide for necessities – “*No-one has everything he needs. But commercial activity enables each person to provide himself with the things he lacks.*”³⁹⁸

Although these restrictions seem likely to have impeded trade, they did not prevent the various cities of the region from growing rich; cross-border trade must always have been an important, if not the most important, source of their wealth. The *Expositio Totius Mundi et Gentium* indicates that for these provinces in particular, but also for the entire eastern Mediterranean basin, trade was an essential element of the wealth of cities during the fourth century AD, a situation confirmed by Cosmas Indicopleustes in the sixth century. The ‘Expositio’ also states clearly that Edessa and Amida were buying goods in Persia and selling them in the Roman Empire:

« ..accipientes enim a Persis ipsi in omnem terram Romanorum vendentes et ementes tradunt. ³⁹⁹»

Pigulevskaja studied the available evidence⁴⁰⁰; she also referred to the Syriac documents mentioned below and concluded that there was

“...a developed state of trading activities, with a traditional technique built up during years of practice, with well recognised decisions by custom. It may be seen that trade was often carried on credit. The merchant used to settle his debt after having sold the consignment...”

Although evidence for credit in the late Roman empire is sparse, it certainly existed. John Moschos, writing in the sixth century, describes letters of credit in two of his salutary tales⁴⁰¹.

Sassanian merchants are known to have been active as far as India. Archaeological remains indicate their presence also in Russia and even in Malaya⁴⁰². Amongst neighbouring

regions, Armenia appears to have been especially important as a centre for trade. Procopius refers to Dvin, which succeeded Artaxata as the most important administrative centre of Armenia, possibly around AD 450⁴⁰³:

“Many densely inhabited villages are situated close to one another there and many merchants undertake their business in them. For they gather there with one another, bringing their goods from India, from neighbouring Iberia, from nearly all the peoples of Persia, and some from the Roman empire”.

Raschke refers to many Roman and Sassanian coins being discovered there and to storerooms with clay seals (*‘bullae’*) from all over Persia which identified the origin of the goods⁴⁰⁴.

Although individual merchants remain largely invisible in the sources, this must be a matter of convention to a great degree. There are some mentions in hagiographies but the few references elsewhere, such as the seizing by the Persians of the wares of Roman merchants at the beginning of the war of 421-2⁴⁰⁵, shed no light at all on how the activities of merchants were organised and little on the social importance of trade. The most important description is that by John of Ephesus of two brothers who were apprenticed to Persian traders⁴⁰⁶. They travelled widely on business throughout Persian lands and their wages rose from 5 to 30 denarii – which as AHM Jones points out⁴⁰⁷ – was equivalent to the income of a soldier.

“...They were resolved to abstain entirely from the evil practices which traders of the world are wont to follow, i.e. from oaths of all kinds and from lying and from extortion and from diverse weights and measures. They told everything to the man who was buying from them or selling to them fairly and without contention.”

Their goods were stored in ‘very large storehouses’ (*αποθηκαι*). But then they decided to move with their sisters to Melitene and established themselves independently “...and thus in a short time attained to great wealth”. They were addicted to good works and turned their house into a *ξενοδοχειον* for strangers and others in need. Elijah would go out on charitable work round the whole of Syria and as far as ‘Arab’ (the plain of northern Mesopotamia and Osroene) and to Callinicus and the desert. His wife and daughter ended their lives in a convent near Mabbug (Hierapolis/Membij) and the sisters were still alive in 567 in Anzitene, the region around Palu.

During the Sassanian period Mesopotamia, both north and south, continued to be an important transit country for silk and spices travelling westwards and for western

manufactures travelling east, as attested by Chinese documents⁴⁰⁸. The Annals of the later Han dynasty concerning the period up to AD220 had already stated that caravans crossing Mesopotamia had to be protected against wild beasts⁴⁰⁹. (Innes Miller also draws attention to the account of the Abbé Carré travelling from Aleppo to Baghdad in 1672 whose party had to hide from lions at the crossing of the Euphrates⁴¹⁰.) The role of the public authorities in protecting travellers, in particular by the provision of inns, seems to have been perennial since it was still recognised in the Ottoman period.

The carrying trade across Mesopotamia had been largely in the hands of Palmyrene merchants until the destruction of Palmyra by Aurelian in AD 272, but its grip had been diminishing since the arrival of the Sassanians, who appear to have had a good understanding of the importance of trade⁴¹¹. By the time of Justinian, Persian merchants were in control of trade with India; Roman attempts to circumvent their control of eastern markets at the important entrepôt in Ceylon by using Ethiopian traders as intermediaries failed, although Justinian was successful in obtaining silk-worms and establishing a silk-weaving industry inside the Roman empire, thus reducing dependence on silk imported through Persia⁴¹². Although passage to India for Roman citizens may have become difficult after the destruction of the great trading cities of Palmyra and Hatra, Syrians - or speakers of Aramaic and Syriac - certainly continued to trade widely as individuals. The existence of trading companies is not confirmed for the Roman Empire but it is for the Sassanian⁴¹³. The sources are the *Matikan*, a code in Pehlevi created in the Sassanian kingdom during the sixth century, which was edited and published in Bombay in 1937⁴¹⁴, and a Syriac collection of legal decisions of the eighth century compiled by the Christian priest Ishoboht and published by Sachau in the “*Syrische Rechtsbucher*” in 1914⁴¹⁵. These are hard to interpret and rarely referred to but the basic principle of a company is outlined in Ishoboht⁴¹⁶ as follows:

“If several men, whatever be their number, acquire a property, and enter into an agreement amongst themselves to the effect that: ‘whatever we have, or gain, will be truly our property in common’, then all that they acquire or what they possess shall belong to all of them in an equal measure.”

According to Pigulevskaja, the idea of companionship is translated in Syriac by the term *shautafuta* and members of a company are called *shautafe*. Special formalities must be carried out for a person to be adopted as a member of such a company; the law specifies the

right of ownership and the company possessed jointly that property for which it was constituted, with everything divided equally between the members.

Chapter 2 of Book V of Ishoboht concerns buying and selling while elsewhere much attention is given to delivery on time. Ishoboht also refers to a distinction between goods traded that were “reliable” or “unreliable” with different provisions applying to these categories. Factors listed which could make a good “unreliable” are dangers including shipwreck, fire, authorities, enemies, ‘unprofitability’ and excessive taxes. The Syriac word for ‘authorities’ – *shultana* - apparently covers kings, princes, headmen and anyone exercising authority. Other provisions concern credit and debt⁴¹⁷.

It is presumably a matter of chance that such documents have survived for the Sassanian but not for the Roman Empire. Harris discusses the role of ‘*negotiatores*’ under the High Empire, but there is little to say⁴¹⁸. Trading activities in the west and in the Mediterranean basin were surely at least as highly developed as those in Mesopotamia and Iran. But most regrettably we know nothing of how trade was organised in the west during this period.

Nevertheless, Syrian merchants are known from Gregory of Tours to have been well-established as traders with the western Mediterranean and several of their tombstones have been found in France⁴¹⁹. It must be assumed that they were also active in trade with the countries to the east of their homeland, even though firm evidence concerning the identity of the merchants, for example, those passing through Nisibis, is lacking. One day excavation of the cemeteries of Nisibis may provide such evidence, for Nisibis had been named as the single city at which exchanges between the Roman and Persian empires could be conducted in the treaty of 298 between Diocletian and Narses and on several subsequent occasions.

Within the Mediterranean basin, the reputation of Syrian merchants was notorious: Jerome stated that they “have an innate fervour for trading, seeing that they hurry over the entire earth”⁴²⁰. But not only Syrians were involved in trading; Ammianus describes in 384 the annual fair at *Batnai* (Suruç) to which goods came in quantities from China and India⁴²¹ while Procopius Rhetor (also known as Procopius of Gaza) in his eulogy of the emperor Anastasius speaks of large numbers coming to Hierapolis from India, Persia and

elsewhere⁴²². Many of these will have been pilgrims but doubtless some also were there to trade.

The career of Antoninus, an *opulentus mercator* who later turned to espionage⁴²³, seems to indicate that merchants travelled rather freely and that traders could pass between the two empires despite the restraints recorded in the Codex Justinianus. Somewhere on the borders along the Tigris between Rome and Persia Antoninus bought an estate where he installed his family in order to be able to cross undetected as an informer to the Persians⁴²⁴. This fascinating episode is of importance for several reasons but it is notable in this context that Antoninus is said to have been widely known throughout 'that country', i.e. Mesopotamia, and apparently to have acquired Persian contacts at an official level during his career as a merchant. He defected to the Persians with valuable intelligence in AD 359.

Beyond the other end of our period, Fiey reports that 900 Jacobite merchants accompanied the victorious armies of Heraclius into Persia in AD 627⁴²⁵. Apart from the remarkable evidence of 'trade following the flag' this detail must lead one to suspect that traditional historiography (i.e. the classicisers and the chroniclers) has intentionally excluded information dealing with commercial matters as inappropriate for serious reporting of the past. Despite the lack of other evidence, the possibility must exist that the merchants were sufficiently numerous to constitute a whole class of Roman citizens and a group with customs and institutions that we have simply failed to hear about.

* * * *

A vivid impression of life along an important highway towards the end of the sixth century is provided by the 'Life of *Theodore of Sykeon*'⁴²⁶. Although Theodore lived in Galatia, far to the west, the preoccupations of people and the nature of the travellers must have been similar. In this 'life', written by a certain Eleusius, a wide range of characters appear including innkeepers and prostitutes; patriarchs, priests, monks and nuns; masons and lime-makers (for mortar), carpenters, a blacksmith, a silversmith; a schoolmaster, a sorcerer, a porter, a doorkeeper, a tax collector, a merchant, a sea captain, a wrestler, soldiers, slaves; and the emperor Phocas himself⁴²⁷.

Apart from the merchants discussed above there is evidence for a wide range of other travellers also in the eastern provinces. These consisted of many disparate groups. A survey is included in A.D. Lee's *'Information and frontiers: Roman foreign relations in late Antiquity'*⁴²⁸, where he mentions firstly religious communities, in the fourth and fifth centuries especially Christians travelling as pilgrims to visit holy places or ascetics such as Simeon the Stylite. But Jewish rabbis also travelled frequently to and fro, while until 429 the Jewish patriarchate in Palestine sent out legates to inspect Jewish communities, even to Persia at times of hostility between Rome and the Sassanians. Scholars and students attending colleges like the School of the Persians in Edessa or the well-known Jewish academies in Babylonia were another large group of travellers. Some Persian Jews even returned after death to be buried in Palestine⁴²⁹. The pilgrim Egeria left a record of her visit to the Holy Land and in particular Edessa, which she visited in AD 383/4. She enquired of the bishop there about continuing to 'Ur of the Chaldees'. But it seems that she at any rate was dissuaded from crossing the frontier; the bishop replied that

'...The place, daughter, of which you ask, is at the tenth station hence, as you go into Persia. There are five stations from here to Nisibis, and five stations thence to Hur, which was a city of the Chaldees, but there is now no access for Romans, for the Persians hold the whole country.'

On the other hand the bishop clearly knew in some detail how to get there.

Missionaries, such as the Manichaeans from Persia, were active in Mesopotamia, Palestine, Syria and Egypt in the 3rd and 4th centuries⁴³⁰; later, Monophysites from the West seeking adherents in Persia were another group accustomed to crossing the frontier. Thus John, bishop of Tella, was apprehended by the Persian *marzban* (commander) at Nisibis in the 530s following a message from the Romans, while he was wandering around the Jebel Sinjar, a mountain well inside Persian territory. He stated that this was his third such 'unauthorised' visit⁴³¹. Lee also draws attention to the voluminous correspondence between bishops on both sides of the frontier which would have required letter-carriers, presumably often priests.

Other categories of travellers mentioned by Lee are soldiers, in particular mercenaries and deserters. A substantial number of these were however less likely to be travelling to and fro than diplomats, doctors, academics, artists, musicians and entertainers. Embassies are of course frequently referred to in the sources and they played an essential role in creating an

understanding of the differing needs and cultures amongst the people on opposite sides of the frontier, but especially in the respective capital cities of Constantinople and Ctesiphon. The *De cerimoniis* of Constantine Porphyrogenitus preserves accounts of court ritual from the latter part of the reign of Justinian. The commanders of Dara should meet the Persian ambassador at the frontier and expenses were then provided for a journey of 103 days to Constantinople. Five post-horses and thirty mules were assigned to the ambassador for this trip through Roman territory⁴³², which – interestingly – was expected to be via Antioch and not through the Taurus passes to Melitene and Caesarea⁴³³. But such journeys could be much more rapid. In 576 Khusro allowed only thirty days for a Roman ambassador to travel from Erzurum to Constantinople and back⁴³⁴.

Other groups of people that might be met on the roads could have included the engineers for the bath-houses which Shapur and other Sassanian kings introduced to Persian cities, although some bridges and structures requiring a knowledge of civil engineering seem to have been built by captured Roman soldiers - if they did in fact require imported expertise at all⁴³⁵. All sorts of technical specialists such as the gold miners whom the Persians refused to return around 420AD (see note 3 above) must also have travelled across the frontier; Justinian is said by Theophylact Simocatta to have sent artisans to work on the palace of Khusro I in Ctesiphon⁴³⁶. (There are apparently also Greek masons' marks at Shapur I's palace of Bishapur⁴³⁷.) Many artisans associated with silk-weaving in Tyre and Beirut were also forced to leave for Persian territory when Justinian imposed maximum prices below the cost of production⁴³⁸. Medical knowledge amongst Christians seems to have been particularly highly prized amongst the Persians and it was as a reward for his medical efforts as well as his miracles that Marutha, the first bishop of Mayperqat/Martyropolis, was allowed to collect the bones of Christian martyrs in Persia⁴³⁹. Philosophers are also known to have travelled to and fro: following the closure of the academy in Athens, Agathias reports that a group received asylum at the Persian court and but were unable to adapt to their new circumstances and later returned⁴⁴⁰. For musicians and performers there is little evidence, but there must have been some exchange at this level. Khusro I brought charioteers and musicians from Antioch and other Roman cities to entertain the inhabitants of his 'New Antioch' constructed near Ctesiphon, who had been taken there forcibly following the sack of the old Antioch in 540⁴⁴¹.

Perhaps more followed when Justinian closed the theatres, hippodromes and circuses of Constantinople; in this case too he must have caused mass unemployment amongst the associated professions⁴⁴². In the second century the emperor Verus had brought back from Syria to Rome, 'like a trophy from Parthia', minstrels and musicians, actors, jesters, pantomime artists and jugglers⁴⁴³. There is no reason to suppose that a narrower range of such professionals existed in the fifth century and in fact the *Expositio Totius Mundi* specifically mentions entertainments at the circuses of Antioch, Laodicea, Tyre Beirut and Caesarea, as well as the reputation of Laodicea for charioteers, of Tyre and Beirut for mime artists, of Heliopolis for singers, of Caesarea for dancers, of Ascalon for wrestlers and of Castabala for acrobats⁴⁴⁴.

To return in conclusion to merchants, there appear to have been three main routes used for east-west trade in the period concerned here. Georges Tate, who has written widely on the economic life of the eastern provinces, believed that Syria regained its role as a centre for international trade during the fourth century as a result of the relatively peaceful conditions⁴⁴⁵. He saw this trade as being conducted: a) across the Iranian plateau to Nisibis, Edessa, Aleppo and Antioch; b) from the Persian Gulf, up the Euphrates valley to Hierapolis and then also to Antioch; and c) by a maritime route up the Red Sea to the island of Iotabe, then to Palestine or to Klyasma (a port near Suez) and on to Alexandria. It is the first two routes mentioned by Tate which particularly concern this thesis.

If Tate is correct, much of the trade in spices, silk and other textiles imported from the Far East (and from the Sassanian empire) would thus have passed through Mesopotamia, Osrhoene and Euphratesia. The evidence for trade along this 'northern route' is investigated for the early Roman empire by Young⁴⁴⁶, who emphasises the role of Greek, Syrian and Jewish merchants, i.e. Roman citizens, but downplays the idea of an interest in promoting trade on the part of the state. For the period 31BC to AD305, Young's evidence is poor but sufficient to confirm its importance; for the fourth to the sixth centuries it seems clear from the evidence for merchants cited above that trade was indeed an essential part of the economy even if we are still not able to estimate its importance with any degree of accuracy.

Chapter 4 : Roads (part 3)

The date and purpose of the roads

i) Preliminary considerations

Max Weber suggested that poor land transport facilities were one of the main reasons that the Roman Empire failed to develop a capitalist system reliant on markets⁴⁴⁷. But we know that population and density of settlement in the eastern empire reached a peak in the fifth and sixth centuries⁴⁴⁸. It seems probable that the construction and improvement of the roads discussed above and, in general, the facilitation of land transport during the first centuries of the Roman Empire's presence in the East had a major influence on economic and demographic growth and on settlement patterns in Euphratesia, Osrhoene and Mesopotamia during Late Antiquity. It has been argued that the 'Stadiasmos' of Lycia and the introduction of a good road network in that province brought wealth and development to that region⁴⁴⁹; a similar process seems likely in these eastern provinces whereby greater ease of land transport, together with the more stable conditions of the fifth century, made possible an intensification of economic activity.

Irrespective of the use made of the roads, it is no simple matter to date an ancient road: the existence of trade routes through this region for at least two millennia before the 5th and 6th centuries, together with the certainty that medieval trade also often flourished often makes such dating extremely difficult. Although many roads and bridges, some paved, are likely to have been constructed in the Roman period, the Seljuks and Artukids are also known to have built roads and bridges in the early Middle Ages. In the region of the upper Tigris there are at least three Artukid bridges apart from the famous Malabadi bridge near Silvan (Hasankeyf, Memijkan, Haburman – see chapter 3). Earlier periods also are sometimes indicated as probable periods of construction. For example, Veli Sevin, who has excavated the Assyrian levels of the mound at Üctepe (Charcha, near Bismil), has also written an article in *Antiquity* concerning a road which he believes to be Urartian, i.e. of the 9th-8th centuries BC⁴⁵⁰. This road lies to the north of the area discussed here but not far beyond it, since it links the region of Lake Van with Harput (near modern Elazığ), passing close by

Bingöl and therefore also rather close to the later Byzantine fortress at Citharizon. This fortress became under Justinian the main base of the ‘Dux Armeniae’ and one might expect therefore to find roads also of the sixth century AD in this region.

Procopius does not in fact refer in the ‘*Buildings*’ to roads constructed by Justinian in the area, although he does mention many fortresses. It can be assumed that such fortresses were often supplied by pack-animals rather than carts requiring paved roads, but the distinction between mule tracks and roads for wheeled vehicles is particularly interesting and problematic in these provinces. For at least one such castle discussed below (Rabat/Sifrios), there are still vestiges to be seen of an ancient approach road which could have been used for wheeled vehicles and which may have been linked to the highway between Edessa and Nisibis or possibly to another route between Constantia (Viranşehir) and Amida (Diyarbakır).

Procopius mentions roads on several occasions (see below) but the most important for this argument is his reference to the means of access in the 540s to the fortress of Rhabdion, one of the principal Byzantine strongpoints of the region and probably originally founded by Constantius II (see Gazetteer), which he states was by wagon road through Persian territory⁴⁵¹:

“As one goes from Daras into the Persian country there lies on the left a territory which cannot be traversed at all by wagons or even by horses (αναμαξευτος και αφιππος ολως), extending to a distance of about two days' journey for an unencumbered traveller and ending in a steep and precipitous bluff which is called Rhabdios. And on both sides of this road leading to Rhabdios the Persian territory stretches out to a very great distance. At first I was amazed at this, and I made enquiry of the natives how it came about that a road and district which belonged to the Romans had land of the enemy on either side of it; and some of them explained that the place had belonged to the Persians at one time, but that at the petition of the Persian King one of the Roman Emperors had handed over a certain vine-producing village near Martyropolis and had received this place in exchange for it. Rhabdios stands on precipitous and wholly wild rocks, which rise there to an astonishing height and beneath it is a place which they call the Field of the Romans, I suppose because they marvelled, at first, that though this lies in the midst of Persian territory, it belongs to the Romans. This Field of the Romans lies on flat ground, and is very productive of the crops which grow on corn-lands. One might conjecture this also from the circumstance that Persian territory surrounds the place on every side.”

The passage has been variously interpreted. According to this writer, the road heading east along the plain below the escarpment of the Tur Abdin left Roman territory between Dara and Nisibis and continued below the Nestorian monasteries, principally Mor Augen, which

during our period depended on the metropolitan in Persian Nisibis, until it reached an area below the escarpment which was, exceptionally, Roman territory. Although some would claim that this implies a Byzantine ‘exclave’, it need not have been the case. The fortress at Rhabdion could have been linked by footpaths and mule-tracks to Byzantine territory to the north and in particular to the monastery of Qartmin, still the largest in the region, which is known to have received financial assistance from the empress Theodora. According to Palmer⁴⁵², Qartmin also used the fertile plain below Rhabdion, around the Persian fortress of Sirvan (Sisauranon), for its farming, planting a daughter-monastery there to supervise food-production and transport. The fields would presumably have constituted the ‘campus Romanus’ mentioned by Procopius in the extract quoted above, while the fortress was that captured by Belisarius in 541⁴⁵³.

Apart from shedding light on the issue of where the border actually ran in this region of the Tur Abdin, the passage of Procopius shows that – in peace-time – Romans were accustomed to travel along the road beneath the escarpment which leads from Nisibis via the plain below Rhabdion to the Tigris crossings at Bezabde (at or near Cizre) and Feshkabour, whence the routes continued to Ctesiphon to the south and to the Iranian plateau to the east, via Arbela. In view of the fact that access through the mountains to Rhabdion was not possible for wagons or horses it must also be assumed that Romans did indeed use wagons along the road through the plain. Procopius also states that the road was Roman and it may be inferred that Roman authorities were responsible for its construction and maintenance.

The eastern provinces of the Roman Empire were linked by a network of trade routes to Armenia and Sassanian Persia, as well as to the Mediterranean at Seleuceia-in-Pieria (the port of Antioch) and to Anatolia. The extent to which these trade routes corresponded to actual roads is the essence of the preceding section of this chapter, but there are certain important general issues which arise in regard to the long-distance roads discussed above. These are the questions of the *disappearance of wheeled transport*; of the *purpose of road construction* and maintenance; and of the *public post*.

ii) The *cursus publicus* and *mansiones* (‘public post’ and ‘way-stations’)

From the early Sumerian period messenger services had functioned in the Near East⁴⁵⁴. The Achaemenids had established a postal service between Sardis and Susa (which is likely to have followed that section of the ‘Persian Royal Road’ treated under route 1 above); the stations were about 24 km apart. In the Roman period the state also provided facilities for changing horses along the main roads; major stations provided accommodation and are thought to have been normally established at a distance of one day’s journey or about 37km, although Procopius states that there were between 5 and 8 stations before Justinian’s day for each day’s journey ‘for an unencumbered traveller’⁴⁵⁵. Such a large number of stations was presumably only a feature of the very busiest routes. It certainly does not correspond to the frequencies indicated in the Peutinger Table, but presumably Procopius was including the posts at which horses could be changed (‘*mutationes*’) while the PT shows only overnight stopping places (‘*mansiones*’).

The post was certainly a very expensive burden on the Roman state. It was composed of two sections: the *cursus velox* and the *cursus clabularis*⁴⁵⁶. The former included the provision for official travellers of light carts and it is possible that weight restrictions applied only to this service and not to the heavy wagons of the *cursus clabularis*. Amongst frequent efforts to curtail its cost before the reign of Justinian, Jones mentions the closure of the *cursus velox* in Sardinia by Julian and the abolition of the *cursus clabularis* throughout the diocese of Oriens during the reign of Leo (457-474). Official requirements for heavy transport in the east, including for the passage of diplomats, thereafter had to be fulfilled apparently by hiring from professional carters or renters of animals (“...*animalium dominis, qui ea solent accepta mercede locare*”) ⁴⁵⁷.

On the other hand, a slightly earlier ‘Novella’ of Theodosius⁴⁵⁸ of 441 refers to former imperial properties on the Armenian frontier which had apparently been sold to new owners, who were not providing supplies for the army as had been done previously. The new owners were allowed to keep the properties provided that they fulfilled the former requirements, including supply of post-horses and wagons. It would appear that services to the public post were in this region an important part of obligations of landowners towards the state, which may in some cases have been provided in lieu of tax in cash or kind.

In the fourth century we know from the life of Egeria and from John Chrysostom that there were road stations in use in Sinai and on the road to Babylon⁴⁵⁹. Specific references to use of the *cursus publicus* in the fifth and sixth centuries are few. We know however from Ammianus Marcellinus⁴⁶⁰ that in the 4th century Ursicinus was accorded substantial official transport for his journey from Nisibis to Milan: “...*copia rei vehiculariae data*”. According to Menander Protector the treaty of 562 laid down rules for the treatment of foreign messengers, so the *cursus publicus* and the stations providing changes of horses must have survived in this region well beyond the days of Justinian.

The *cursus publicus* is the main focus of a recent major study of Roman transport and postal services⁴⁶¹. Anne Kolb’s work is based principally on legal sources and inscriptions. She shows that the main users officially permitted to make use of it in the fourth to sixth centuries were officials, soldiers (including their families and the sick), tax collectors, senators and churchmen. The types of goods carried were gold and silver, luggage of officials, weapons and clothing for the army, clothing and other materials for the court and wild animals for royal shows. Much of the cost was borne by local communities as ‘munera’ or λειτουργία.

Since the *cursus publicus* and the maintenance of roads were largely financed by the towns and cities along the roads, it is difficult to see how this was possible except in a situation where such liturgies were carried out in lieu of other taxes. The presence of the road and the postal service must have brought some additional wealth but there must also have been a risk of abandonment of roadside communities forced to provide expensive services unless there were compensations. That the role of the state in financing the *cursus publicus* was very considerable is shown by what happened in the reign of Justinian. In the Secret History Procopius lambasts the emperor for closing down the *cursus publicus* although he acknowledges that the part using the main highway across Anatolia to the eastern frontier was maintained:

“...*But this Emperor first of all abolished the post from Chalcedon ... And, in the second place, while on the route leading into Persia he did allow the previous arrangement to stand, yet for all the rest of the East as far as Egypt he allowed one station only for each day's journey, using not horses, however, but mules and only a few of them.*”⁴⁶²

At the same point Procopius observes that landowners had been major beneficiaries of the public post and suffered severely as a result of the Justinian's reforms. Inland areas close to routes covered by the *cursus publicus* were thus frequently dependent on the land transport and other facilities provided by it for the export of their produce. The public post was responsible for official communications, but also required much ancillary support such as imperial stud farms, so the decision will have had major implications for other parts of the government establishment as well as for private landowners and merchants.

Unsurprisingly, the abandonment by Justinian of the public post over certain routes and its curtailment in others caused hardship and presumably complaints from powerful people for whom Procopius may here be speaking; but the reforms do seem to indicate the great cost of the system and provide evidence of an appreciation on the part of the government in Constantinople that this cost to the public purse outweighed the benefits⁴⁶³. Land transport for agricultural produce may not have been commercially viable without public subsidies for the upkeep of the roads and the associated infrastructure, but this decision by Justinian seems to indicate a desire to limit government expenditure despite the consequences for local economies.

* * * *

The routes described above are principally those of the Peutinger Table, which shows a large number of roads passing through the region with stopping points that may have been in many cases '*mansiones*' or inns. Even from the point of view of non-official travellers along these routes and those not requiring wheeled transport, the importance of the roads is still likely to have been very great; for if their animals walked alongside the road rather than on top of it, the maintenance of security from bandits and the provision of inns would have made all types of travel much easier.

Late Roman inns are hard to find in the three provinces examined here, but they are known to have existed elsewhere: a particularly fine example is still standing at the foot of the gorge descending to the Pamphylian plain from Pisidia (Döşemeboğazı, near the village of Kovanlık, about 50km north of Antalya⁴⁶⁴). On the long-distance routes discussed below,

they have disappeared; the old stone used in their construction must have been recycled, a process which is still continuing in the villages of the area.

In the region under consideration here there are in fact many ‘caravanserais’ still standing, but these seem to be all of later periods. One such station (*Charmelik*, now ‘Büyükhan’) on the road from Zeugma to Edessa, at a point on the Peutinger Table probably known as ‘*In medio*’, was important still in the Ottoman period and is referred to by early modern travellers such as Badger⁴⁶⁵. There are substantial ruins still extant which may repeat the outline of a Roman predecessor, as may the group of old ‘hans’ near Bitlis. An inscription 20km ESE from Charmelik, above a cave by the main road from Birecik to Urfa, refers to the construction of a πανδοκειον (in Latin – ‘mansio’; inn or caravanserai) in about AD 260⁴⁶⁶. The main buildings are no longer extant but seem to have stood in front of the caves above which the inscription is situated. The caves are currently occupied by a family of Kurdish nomads despite the absence of water. An ancient covered cistern is nearby, on the other side of the busy modern road, but is no longer in use.

As Badger indicates, the caravan routes of the area are also frequently accompanied by such cisterns or reservoirs, whose construction and maintenance must have been an expensive undertaking, perhaps also under the control of the authorities responsible for the *cursus publicus*. He noted a large example at Charmelik “...measuring eighty feet in depth”. This is no longer visible but is perhaps an indication of a Roman predecessor to the extant caravanserai there. I have seen other cisterns, in particular one near Ekenek⁴⁶⁷ (route 3), some 20kms to the west (a large oblong pit 13m50 by 3m40 with a visible depth of 2m, possibly with a further 2m hidden) and another at Kizilburç, where a milestone has been found⁴⁶⁸ (also route 3 - about 20km east-north-east of Charmelik). The latter has steps leading to a covered chamber underground. There are many similar cisterns in this region: in particular, there is one on the Roman road from Doliche to Samosata (route 8), at a point some 6km SW south of Elif⁴⁶⁹.



Ekenek



Kizilburc

iii) The disappearance of wheeled transport and the purpose of road construction

‘The need to transport goods and materials from region to region influenced, more than any other single factor, the development of an intricate system of roads and highways spanning the Fertile Crescent⁴⁷⁰.’

The argument that land transport was so slow and expensive in relation to transport using pack animals that intra-regional trade was almost impossible in land-locked provinces depends partly on the evidence of Diocletian’s edict on maximum prices⁴⁷¹. Although the existence of the edict constitutes evidence for the limited role of markets in setting prices, it seems that the fixing of prices by the state caused serious hardship and was largely ignored in practice⁴⁷². Wood for vehicles and the wagons themselves have an important place in the edict, but the figures for transport indicate a maximum charge per mile of 20 denarii for a 1200 pound wagon-load but only 8 denarii for a 600 pound camel-load⁴⁷³. It has been inferred that wagons were ruinously expensive, although the substantial evidence for their importance elsewhere in the edict works against this conclusion. Wagons were in use for long-distance transport as the evidence for the *cursus publicus* shows (see below) and it is evident that they were used throughout antiquity when necessary⁴⁷⁴. A calculation of the ‘ruinous cost’ of such heavy land transport is itself invalidated by the rejection of market forces as the principle governing economic activity implicit in the Edict and in the interpretations of Jones and Finley (see chapter 6-2 on trade). It is more prudent just to say that the balance of trade volumes between transport by wheeled vehicles on the one hand and by pack animals on the other is unknown in late antiquity rather than to dismiss heavy land transport by wagon as irrelevant.

Bulliett has examined the relationship of wagons and camel transport in detail⁴⁷⁵ and has concluded that in the Middle East the use of wheeled transport was replaced by camel caravans around AD500. More recently, others have denied this and there are indeed several references to wagons in Procopius (see Graf⁴⁷⁶ and discussion below). In the Ottoman period it appears that roads and bridges were constructed in these regions south of the Taurus only for pack animals, but the date at which the change took place remains unclear. Factors which may have contributed to the disappearance of wagons could include the shortage of suitable wood for their construction and repair and the disappearance of wheelwrights needed to maintain them.

Certainly, wheeled vehicles did almost totally disappear in the Middle Ages and Maunsell stated in 1904 that they were then in use only on the plains of Adana, Marash and Aleppo⁴⁷⁷, although he does describe a few '*chaussées*' or metalled roads which had recently been completed or were under construction. Despite the traces of paved ancient roads suitable for wheeled vehicles which have been discovered between Marash and Adiyaman (see, for example, route 11 above), Cuinet indicates that earlier in the nineteenth century there were almost no roads around Marash and that all transport was by pack animal⁴⁷⁸. It therefore seems probable that throughout the provinces concerned here wheeled transport only returned at the beginning of the 20th century,

For the long period from the sixth to the nineteenth century very little is known about wheeled transport. In the sixteenth century the widow of a senior Ottoman official who had been governor of Erzurum travelled by wagon to Damascus; gun carriages were ordered to be transported from Diyarbakır to Lake Van "...by a rescript from the middle of the seventeenth century". Although these are isolated references there is no indication that special roads had to be created for these journeys⁴⁷⁹, but they do not seem to have been at all frequent. Von Moltke's exploration of the use of rafts along the Euphrates gorge, apparently for the possible transport of guns and heavy equipment⁴⁸⁰ may indicate that in the 1830s no appropriate roads were available for the journey from Malatya to the region of Gaziantep⁴⁸¹, even though still today the course of the Roman road from Doliche to Samosata (route 8) is known locally as 'Top Yolu' (or *Sultan Murad Caddesi*), a fact which apparently indicates its refurbishment for military purposes either by the Ottoman Sultan Murad I (reigned 1360-1389) or Murad II (reigned 1421-1451). 'Top' is Turkish for ball

but the word may also mean ‘cannon’. Around 1600 the goods traded by the English Company of the Levant were transported between Alexandretta (Iskenderun) and Aleppo by camel⁴⁸² and no later references to wheeled vehicles have been found by me, not even in the context of Ottoman armies; the accounts of travellers in the 19th century such as Von Moltke, Taylor and Ainsworth do not refer to carts or wagons⁴⁸³. Possibly therefore between 1650 and 1900 transport was indeed exclusively by pack animal in Anatolia and the Middle East, even if carts were common in the Balkans.

The continuation of wheeled transport in the later Roman Empire is examined in particular by David Graf⁴⁸⁴. The physical evidence of the bridges reviewed in Chapter 3 above strongly supports the contention that carts continued in use, possibly right through until the late Byzantine period. However, it is very difficult in present conditions to judge the extent to which such wheeled vehicles were being replaced by pack-animals over the fifth and sixth centuries AD. More evidence is needed, but one important factor is the nature of those roads then in use. A pedestrian or pack-animal requires less infrastructure in terms of road surface and river-crossings than does a cart.

The type of roads available for transport in this region is now being revealed. David French has discussed certain examples of Roman roads where repairs indicate a change in the type of use and in particular from ‘...*vehicular to non-vehicular*...’ roads⁴⁸⁵. He estimates that his examples of the latter type of road date from AD 500 to 625. The concept of ‘non-vehicular roads’ is however a difficult one, especially in countries with a dry climate. Paved roads facilitate passage of pedestrians and animals in rough country, but much of Syria and Mesopotamia provides fairly level, smooth surfaces on hard ground. The advantage of built roads for pedestrians and pack animals is doubtful in such conditions. In many areas it seems probable that Roman engineers contented themselves with small improvements and the provision of culverts and bridges, but did not pave large stretches of road.

But this was not always the case: north of Diyarbakır the Roman road to Eğil, Harput and Malatya has been located for a stretch of 25 kilometres by the writer and this is fully paved to a remarkably high standard, with large sections still in a state of almost perfect preservation (see discussion of route 1 above). It may in fact date from the fourth century, when the nearby city of Amida was fortified, but the existence of slight steps on rising

ground and the absence of ruts indicate that it too conforms to French's pattern of 'non-vehicular' roads. A shallow step would not be an insuperable obstacle for a light cart but there are no signs of wear by wheels.

The course of the road north from Diyarbakır to the Devegeçidi river is flat and paving would be of little assistance to pedestrians or pack animals. Nevertheless, even if some wheeled vehicles, in particular those of the public post, were using these later paved roads it might seem clear from the presence of low steps unmarked by the passage of wheels that they were indeed intended principally for people on foot and their pack animals. The existence of the steps along this road, in addition to the examples quoted by French, does tend to confirm the hypothesis that wheeled vehicles were disappearing from the fourth century onwards, even if they continued in use for short local journeys and on some long-distance routes used by the army and public post. The fact that the paving of the road does not continue to the north of the bridge might also indicate that road-users were not using carts.

But, on the other hand, the large bridge across the Devegeçidi river which carries this road leading north from Diyarbakır must surely have been constructed with wheeled vehicles in mind. Chapter 3 above has discussed this and the other bridges of the region, many of which are much larger than the pack-horse bridges common in the Ottoman period.

For long-distance transport by land of high-value goods such as silk, spices and embroidered textiles, camels and donkeys were the main means of transport from the Assyrian period through to the 20th century. This was principally for reasons of cost: a slow-moving wagon, or convoy of wagons, drawn by horses or oxen requires large quantities of animal feed, a firm road surface and an infrastructure for the maintenance of the roads, of the harness and of the wagons themselves - which may have been increasingly difficult to keep up in the disturbed conditions of the 6th, if not already the 5th century.

Wheelwrights and wagon-manufacturers need the right wood as well as access to metal fittings; these too may have become increasingly difficult to obtain in the eastern part of the empire, in particular as a result of deforestation⁴⁸⁶. Nevertheless, large wagons for transporting goods certainly existed in the later Roman Empire - several reconstructions of

sophisticated late Roman wagons ('*plaustra*') of third century Gaul, based on and using metal fittings found in the Rhine, were displayed at a recent exhibition in Speier⁴⁸⁷.

Although there is no similar evidence for the eastern provinces; there are occasional references to wagons in the sources, although almost never to roads. Procopius mentions wagons on several occasions. The best known is the description of those built specially to transport the huge blocks of stone used in the construction of the Nea Ecclesia in Jerusalem⁴⁸⁸; he also describes how individual stones, each equivalent to the load for a wagon, were used in a wall to divert the river Scyrtus at Edessa⁴⁸⁹. Over a boggy piece of ground near the source of the Tigris, large numbers of wagons (*αμαξαι*) are also stated by him to have passed every day⁴⁹⁰; but of most importance for this discussion is his description of how Belisarius put sick soldiers into carts (*υποζυγιοι*) following the capture of Sisauranon⁴⁹¹. This implies that the army had available – either from its own baggage train or else easily requisitioned - a large number of carts. The road from Nisibis to the Tigris is mentioned by Procopius elsewhere⁴⁹² and forms a part of route 1 discussed in the first part of this chapter. Sisauranon lay close to this road and the reference to the wounded being transported by cart confirms the nature of the road running beneath the escarpment of the Tur Abdin as one used by wheeled vehicles.

The wide range of wagons for passengers and goods known from the early Roman empire is not widely attested in contemporary writers of later periods, but *De Cursu Publico*, Article 8.5.8 of the Theodosian Code from the reign of Constantius II⁴⁹³, does specify upper weight limits for a variety of carts. This and other articles of this long section of the Code indicate maximum amounts as follows:

Angaria – 1,500 Roman lbs.(492 kg)
Raeda – 1,000 Roman lbs. (330 kg)
Currus – 600 Roman lbs. (198 kg)
Vereda – 300 Roman lbs. (99 kg)
Birota – 200 Roman lbs. (66 kg)

This 'law' provides evidence of the existence of these carts, but the upper weight limits have been widely considered as very low in relation to what modern teams of horses or oxen could pull recently. As Judith Weller reveals in her analysis of Roman traction systems published on the internet⁴⁹⁴, these are by no means the maximum possible weights.

They were set probably to avoid damage to the roads but may regularly have been exceeded. Controversy over maximum weights for lorries on European motorways provides an interesting parallel; it is well-known that until fairly recently maximum axle weights were frequently not respected in modern Europe either.

A pronouncement of Valentinian and Valens in the Theodosian Code specifies⁴⁹⁵

“We shall allow nothing beyond a thousand pounds of weight to be placed on vehicles, and thus the couriers shall be satisfied that We grant them the right to transport thirty pounds on their horses. Therefore, if it should be established that any load exceeds this measure, the excess must be confiscated to the fisc at the expense of the person who committed the offense against the law. I. We also decree that it shall be sanctioned that the use of enormous vehicles shall entirely cease, so that if any workman should suppose that he might make a vehicle beyond the norm that We have prescribed, he shall not doubt that if he is free, he must undergo the punishment of exile; if a slave, perpetual punishment by labor in the mines.”

In fact, an experiment in 1977 showed that loads exceeding 1500 Roman pounds could indeed be transported⁴⁹⁶. The appreciation that Roman haulage was primitive and very much inferior to that of the Middle Ages has now been conclusively shown to be wrong. The principal factor is the harnessing of the animals and archaeological discoveries have now revealed this to be the same in all essential particulars as that used in the Middle Ages and indeed very similar to that of modern times. Horses and oxen were not handicapped by throat straps, which caused slow strangulation and seriously diminished their capacity to drag heavy loads, as had been outlandishly claimed by Lefebvre des Noëttes⁴⁹⁷.

Given the apparent discrepancy between what Roman wagons were capable of and the limits laid down by law, the nature and purpose of the many late Roman roads in these eastern provinces of the empire must remain uncertain. Pack-animals often prefer to walk off or alongside the hard surface of a paved, stone road, although it is also true that the road surfaces during the late Roman period may have been smoothed with gravel. Where paved roads are known to have existed and to have been broad enough for wheeled traffic rather than just a line of pack animals, it has therefore been assumed that they were in fact intended for carts⁴⁹⁸.

French's concept of 'non-vehicular roads' is incompatible with this view. If no wheeled vehicles were being used then it is necessary to explain why anyone would have spent large

sums on building a road which was not needed. To this observer, an intermediate explanation is appropriate: heavy ox-drawn carts were rarely used on the roads of the eastern provinces but lighter vehicles, such as those discussed below in the context of the *cursus velox*, were still common and have left little trace in the form of ruts either because of their lightness or else because the road surfaces were protected by gravel or rushes.

In conclusion, the evidence for the disappearance of wheeled vehicles in this region is mixed. They were definitely in use during the sixth century but it seems probable that they were becoming rarer and that, even if roads and bridges constructed after AD 400 were intended also for carts, they rapidly lost this function for long-distance travel over the two succeeding centuries.

* * * *

Whatever the volume of wheeled traffic on the roads, the original reason for the construction of roads in these provinces and the types of traffic for which they were intended still remains unclear. Roman roads are generally assumed to have been constructed primarily for military purposes: the supply of armies on the frontiers, rapid communications by official couriers and the transport of heavy equipment such as siege trains. But commercial needs may also have played an important role in the decisions on where to build roads and bridges since we know that trade and the taxes on trade were a concern of Roman emperors. The evidence and arguments are weighed by Isaac, who draws attention to the roads and protective forts constructed under Trajan and Hadrian in the eastern desert of Egypt, to the road built by Trajan to Aela and the Red Sea from Bostra and to the canal linking Suez (Clysma) to the Nile⁴⁹⁹. In all these cases commercial criteria seem to have predominated. Isaac's conclusion is necessarily tentative:

“The evidence of Roman road-construction and, in some periods, active political or military intervention, shows that Rome did attach a certain importance to the security of trade routes. However, the inadequacy of the evidence precludes a proper evaluation of the volume of trade along the various routes through the centuries and hence its importance to Rome. Thus, it is very difficult to say whether considerations of trade normally influenced major policy decisions taken by Rome.”

For the early Roman empire, it is clear that road construction was an important part of the first organisation of a province through which the Romans asserted their control⁵⁰⁰; in

regard to the users of the road system during the early empire some information is also available from inscriptions on the users of the public post and on the 'transport liturgies' to which cities and other communities were bound⁵⁰¹, but the situation is more obscure for the later empire. If good, wide roads were in fact built in part to facilitate trade, just as the inns (*mansiones*) may have been constructed in part for commercial or private travellers⁵⁰², then transport by privately-owned wheeled vehicles of goods for commerce could also have been a common practice and this seems to be confirmed by the terms of Leo's abolition of the *cursus clabularis*, which provided for embassies and other official bodies requiring heavy transport to rent from private carters (see beginning of section ii) above on 'Mansiones' and note *). In the eastern provinces the evidence discussed elsewhere in this chapter indicates that many such 'commercial' roads existed, i.e. roads which served both commercial and strategic purposes.

This tentative conclusion is strongly opposed by others who have considered the matter in detail, in particular by Schneider⁵⁰³. The latter concluded that even for short journeys land transport was too slow, the capacity of wagons too low and the costs too high. Pack animals were sufficient for most transport needs. For inland regions, however, it is also clear that some heavy items could not have been carried by pack animals and yet were definitely transported, sometimes for long distances. What were the goods that must necessarily have been transported by cart?

It is known that the stone quarried at inland quarries in Anatolia, such as those at Dokimion on the borders of Asia and Galatia, was transported in wagons. Some quarries in our region are sited on rivers (such as those at Ehneş, north of Zeugma) precisely because of the greater ease of water transport than of carting, but stone from others, such as those located by the writer in eastern Osrhoene near Kural⁵⁰⁴, must have been taken by cart to their final destination in churches or other large buildings. There are also ruts for wagon wheels and transverse breaking lines cut into the rock road descending from the quarries at Kalazan Dağ, in Osrhoene a few kilometres north-east of Zeugma⁵⁰⁵. But these may be considerably earlier than the 5th and 6th centuries.

There are however mentions of stone being exported to Sassanian Persia which must have travelled by carts along roads for a large portion of their journey. Following the capture of

Antioch in 541, Procopius reports that Khusro took booty from the main church of great value which included many wonderful marbles and ‘ordered them to be deposited outside the fortifications in order that they might convey these too to the land of Persia’⁵⁰⁶. When Justinian sent workmen to assist in the construction of Khusro’s palace (as mentioned in section 2 of this chapter), he also – according to Theophylact Simocatta - sent ‘Greek marble’, together with the craftsmen⁵⁰⁷.

Wood also seems likely to have travelled by road in some instances. Insofar as large baulks of timber were available for construction or for siege engines, such as the rams used by Kavad in the siege of Amida in 502, these must have been transported at least in part using carts because of their weight. Agricultural produce could of course be taken to market in limited quantities by pack animals, but there are evident advantages in using a cart for heavier items such as amphorae for oil and wine and for large quantities of grain or even of fruit such as melons – at least over short distances. Similarly, because of their weight, ore and metals produced from mines must often have needed wheeled transport even if refining was done wherever possible close to the point of extraction. In particular, the taxes raised in cash were often transported as bullion or coins from the provinces to Constantinople by heavy wagons. The large amounts of gold dispensed to barbarian tribes and to the Persians, will also often have travelled by cart, although sometimes a train of mules might provide a better and more mobile alternative⁵⁰⁸.

Agricultural produce may have occasionally travelled between countryside and cities by cart at the expense of individual farmers and traders, for this is implied by Procopius in regard to the tax responsibilities of landowners supplying the army⁵⁰⁹, but the other items mentioned are likely to have been transported using the *cursus publicus* at public expense (see below). This may have been primarily for military purposes but major construction projects financed by the state are also likely to have benefited. We also know from the ‘*Novellae*’ of Theodosius that in his reign wild beasts were still being transported to Constantinople in cages – presumably for games – from Hierapolis⁵¹⁰. Lions roamed the Euphrates valley even in the nineteenth century. But lions in cages must also have required wheeled transport. Since the people transporting were assigned to the task by the office of the Dux of Euphratensis once again the *cursus publicus* is likely to have been involved rather than private entrepreneurs.

The enormous expense of road construction and road maintenance is likely to have been borne largely by local communities under the system of *corvée* labour⁵¹¹. But it is surprising to see that the road near Diyarbakır described above shows very little sign of wear, despite its excellent finish and careful construction. The necessarily vast burden on public finances represented by the cost of road construction and maintenance in any pre-modern society – and indeed in those of today – would lead one to assume that roads would only have been built and maintained if they were going to be heavily used. In the early empire it is known that local communities were obliged to provide for animals, wagons and upkeep of roads for the *cursus publicus* insofar as the roads crossed their territory⁵¹². How the balance of taxation for such communities near important roads was distributed between liturgies and direct taxes on land is unclear, but quite apart from construction and maintenance the burden of providing transport services to the state was heavy, as the complaints of misuse from such communities in the early empire indicates. There would need to be evident advantages to local people as well as to the state for such roads to continue in use.

Although the probable main user of this and other long-distance Roman roads was the *cursus publicus*, this seems likely to have been in decline (see previous section). Economic considerations about making the best possible use of public money are perhaps wholly out of place for this period (although Justinian's suppression of the public post must surely have been a decision taken on economic criteria). Explanations of late Roman road construction and maintenance other than the purely utilitarian one may therefore possibly be more appropriate.

To this writer the argument that roads were intended to facilitate travel and commerce, as well as for the military and administrative needs of the state, seems convincing. However, although no evidence in ancient authors supports this, an alternative view might hold that road and bridge construction projects involving large numbers of local people under supervision of Roman military engineers were undertaken soon after the administrative organisation of new provinces with a view to tying such provinces into the empire both physically and emotionally. Thus major construction projects could have been undertaken

to provide a new 'Roman' identity for local populations with, for example, an Aramaic culture that had remained hitherto largely impervious to Mediterranean influences.

In this context, not only the roads but also the way-stations would then have afforded both a means of linking landowners to an economically-united Roman state and also, through their construction and maintenance, visible and lasting symbols that strengthened the bond between the central government, firstly in Rome and then in Constantinople, and the outlying provinces.

Such an explanation could be behind the road north of Diyarbakır. It stops at what was then the northern border of the province of Mesopotamia and both bridge and road may have served a more symbolic than practical function, despite the importance of the route to Malatya across the mountains – which remained apparently unpaved beyond the river Devegeçidi. The utilitarian view would require the road to be paved throughout its course and especially over the passes across the Taurus to the north of the river.

Nevertheless, to this writer the idea that roads, including that north from Diyarbakır, had no utilitarian purpose is absurd. While paving a road may have had, beyond its practical meaning, an additional and symbolic one is perfectly acceptable. But the expense of road-construction and especially of paving must in my view have had as a primary objective the facilitation of traffic and communications. A more acceptable explanation for the lack of paving to the north of the Devegeçidi river would be that funds were only available for the first stage of the road to Melitene and that the paving was never completed for financial reasons.

Volume 2 of 2

Roads on the frontier between Rome and Persia

Anthony Comfort

Chapter 5: Settlement, fortification and the economy

Although this thesis is concerned more with the roads and bridges of the region than with its cities some discussion of the role of the settlements is important for an understanding of the roads which linked them. For the most part the large cities of the region were founded long before the arrival of the Romans and some antedate the Seleucid period, although their early history is sometimes impossible to elucidate and archaeological investigation has been minimal.

The gazetteer at the end of the thesis provides information for the period concerned on the many individual known cities and fortresses. The settlement pattern reflected the trade routes and the availability of water, since for the most part the cities appear to have been primarily mercantile in character, even though the great caravan centres of Palmyra and Hatra had largely disappeared during the third century. The role of cities as markets for local produce and as administrative centres or military strongholds was doubtless also of major importance, but the principal economic activity in terms of wealth creation (but not of employment) is likely to have been long-distance trade, even though there is often more information available concerning this commercial role for earlier⁵¹³ or for later periods⁵¹⁴.

However, in several cities and especially Harran, Doliche and Hierapolis their function as religious centres, drawing pilgrims from great distances, seems to have provided one of the main economic activities (see gazetteer). This may have been combined with a commercial role but it is the religious one which is better known. In Edessa and Nisibis there also seem to have been large communities of students attending university⁵¹⁵.

Zeugma is likely to have declined in importance following the sack by Shapur in 256, since there are few references to the city after this date in the sources, while Hierapolis to the south is known to have been visited by Constantius II on several occasions and became capital and metropolitan of the new province of Euphratesia (see Gazetteer). The latter city was situated near to what is likely to have become the main crossing point of the Euphrates

at Ceciliana (see route 4 in chapter 4-1). Other evidence is lacking to show how some cities may have expanded at the expense of others, apart from the abandonment of Nisibis by a part of its population following the treaty of AD 363⁵¹⁶. There may have been however one policy-induced change of major significance: the strengthening and enlargement of Amida. Like Edessa, Amida was a beneficiary of the exodus from Nisibis, presumably because of the strong walls built by Constantius II in the 350s, which are still extant though repaired on many occasions. These walls were enlarged to include the new settlements, although the siege in AD 502 and subsequent sack may have later substantially reduced the population.

During the sixth century Procopius recounts in the *Buildings* how the province of Mesopotamia underwent an extraordinary process of public investment in fortifications⁵¹⁷. To some extent this is also true of Euphratesia and Osrhoene, but in these cases Procopius describes how the walls of cities were strengthened without an accompanying construction or reinforcement of fortresses (unless Zenobia were to be defined more as a fortress than a city - see below and gazetteer). Neither the Persians nor the Romans seem however to have contemplated construction of a long wall along this frontier. The reasons are examined in chapter 6-1 but it is noteworthy that the Sassanians do seem to have constructed other such long walls during the sixth century to protect their empire from attacks from the north and north-east⁵¹⁸.

The cost of the fortifications in the Rome-Persia border area is unknown but must have been enormous; on the Roman side, it may have been borne largely by the central government but it is unclear to what extent local communities were involved⁵¹⁹. At Dara a local bishop was put in charge of the process by Anastasius, but in view of the clear strategic benefits for the empire it is evident that the impulse for construction and money for its funding came from the emperor⁵²⁰. It is possible that individual cities in Justinian's reign were themselves contributing to the strengthening of their defences, but Procopius makes it appear that here too the instigation came from the emperor since in all cases he mentions that the work was done by the emperor and does not mention the involvement of the local authorities.

As Zacharias Scholasticus indicates for the case of Dara⁵²¹, the process of construction must have contributed a major boost to local economies through payments to masons, carters and quarrymen, but the economic consequences are not evident from the sources. In any case warfare, ravaging of the countryside, sieges and payoffs to the Persians may have consumed much of the wealth of the region during the sixth century⁵²² and must also have adversely affected long-distance commerce, even if some caravans continued to cross the frontier.

On balance, it would seem from the evidence at Kurban Höyük that the wars with the Persians did not in themselves cause a net decline in the rural population or in agricultural wealth⁵²³. Cities may have suffered more and by the end of the century the wholesale deportation of populations, such as occurred during the sixth century at Antioch and Apamea, following on the natural catastrophes of plague, famine and earthquakes, must have had a negative impact on the region as a whole. The big transfers of population from captured cities towards the end of the period were part of a tradition going back to the Assyrians⁵²⁴, but had been largely avoided in the Roman Near East during the two centuries preceding the wars under Anastasius and Justinian. Until then, the consequences of the militarization of the region may have been greater in the social field than in the economic or demographic, since the presence of the army, together with the growth of the Christian church and the over-riding necessity of defending the region against the Persians, may have accelerated the decline of urban elites attested elsewhere⁵²⁵. Settlement patterns are not known to have changed substantially during this period and there is nothing to show a major change in the long-term balance of population between cities and countryside. Regrettably, it is not yet possible to show how the economic and demographic growth of the region, which may have been linked to the greater ease of transport, related to those changes in culture and society recently examined by Liebeschuetz⁵²⁶.

Joshua the Stylite is the major source of information on the region in the early sixth century, but it cannot be said that he leaves an impression of wholesale destabilisation of society as a result of war. The balance between town and country seems to have been affected more by disastrously poor harvests than by fighting. The damage caused by Persian raiders and by siege warfare may actually have contributed to the cohesion of late Roman rule and of society as a whole in the provinces discussed here, although he reports

clashes between soldiers and townsfolk, especially over billeting. The loyalty to the emperor of these provinces must have been further severely tested by the Monophysite controversy, but these factors do not seem to have resulted in wholesale disaffection.

It is frequently difficult to differentiate on the ground between small, fortified towns, such as Eḡil, and fortresses, such as Mardin. Jones noted the tendencies for fortresses to develop into cities and for populations to take refuge in points of defence⁵²⁷. He cited as examples *Callinicum*, *Circesium* and *Birtha* on the Euphrates. Some places in the Tigris area, including *Cepha* (Hasankeyf) and *Charcha* (a site with many names – also known as Kurk, but now ‘Üctepe’), are considered by me as likely to have been small towns in the late Roman period and have therefore been included in ‘Cities’ section of the Gazetteer, even though the former is cited by George of Cyprus as a *καστρον*. (Charcha is not so mentioned, unless it hides under yet another name – possibly *Χουδδων*, a *καστρον* otherwise unidentified.) A bishop represented the ‘castellum’ of Cepha at the Council of Chalcedon in AD 451⁵²⁸ and it had been made the capital of Arzanene already by Constantius II when he fortified it in the 350s. No bishop is known for Charcha but the mound is large (diameter: 330m) and substantial Roman occupation has been reported (see Gazetteer).

Judgments on the nature of the settlement sometimes have to be made on the basis of known past history and the available references of contemporaries. Thus, Eḡil was the capital of the Armenian principate of Ingilene in the second to first centuries BC (see also discussion in regard to Chapter 4-1, route 1)⁵²⁹, while Charcha/Kurk/Üctepe has its large artificial mound and was apparently a considerable settlement in the Assyrian period⁵³⁰, as well as being a fortress mentioned in the *Notitia Dignitatum*. But many sites are simply not well enough known to be precise about the likely size of the population. The formal role of cities as centres of Roman administration is not apparent from the information available for any of the cities of Mesopotamia, although the governors of late antique Edessa and, presumably therefore, of the province of Osrhoene do appear on occasion in the sources (especially Joshua the Stylite⁵³¹). The distinction between city and fortress in the Gazetteer is therefore sometimes artificial and would have to be revised in the light of archaeological information revealing the size of settlements associated with fortresses during the late

Roman period. To date, such information is available for a possible city – at least, in west European languages - only for Hasankeyf (Roman *Cepha*)⁵³² and there only in very limited form⁵³³. (Some smaller fortresses have however been investigated by archaeologists, in particular Rabat, Hisarkaya and Zerzevan⁵³⁴.)

Cities

For the later Roman period the literary convention of not referring to economic matters and the almost total absence of administrative records makes any detailed analysis of the cities' role a perilous undertaking. A few scattered references do however confirm the existence of a commercial function in some cases. Thus Ammianus in the fourth century refers to Callinicum/Nicephorium on the Euphrates as '*munimentum robustum et commercandi opimitate gratissimum*'⁵³⁵, while he also mentions the annual fairs at Batnae (now Sürüc), which used to draw people from as far afield as India and China⁵³⁶.

Although fairs in rural areas near Antioch are also attested in Libanius⁵³⁷, the dominance of cities over their surrounding regions can hardly be doubted. As AHM Jones points out⁵³⁸, Theodoret of Cyrrhus indicates in his accounts of the hermits that by the early fifth century the whole territory of northern Syria (i.e. most of Euphratesia) was divided between cities. This is less likely to have been true of Osrhoene and Mesopotamia where nomadic tribes were (and continued to be until recently) an important component of the population⁵³⁹. In this period, the tribal confederations of the Ghassanids and Lakhmids played an essential role in the territorial defence of the respective Roman and Sassanian empires⁵⁴⁰, but cities such as Resafa (see Gazetteer) contained substantial populations even in desert regions.

The relative importance of the commercial role of the cities, vis-à-vis that of their roles as educational, religious or administrative centres, must remain a matter for speculation. That this role included an important commercial component in the later Roman Empire can hardly be doubted given the long-distance trading traditions attested for these centuries as well as for both earlier and later periods, but the cities were also important as focuses for controlling the surrounding countryside, both economically and administratively. In the

later Roman Empire it was the capital cities of provinces which provided the basis of local government; other cities seem often to have declined, losing even their capacity to maintain public buildings. Liebeschuetz shows how provincial assemblies gained in importance and were even granted the right to appoint provincial governors⁵⁴¹, but he also shows how ‘notables’ continued to be responsible for city government. Landowners appear to have resided in the cities rather than in country villas, which are largely unknown in this area (at least until recently⁵⁴²), but the class of ‘notables’ included many former imperial officials.

An essential defining feature of the city in the fifth and sixth centuries was its bishop. Lists of cities with bishops (*Notitiae*, especially the ‘Notitia Antiochena’ of which excerpts are attached at Annex C below) and of participants at church councils provide a handy guide to the places important enough to have a bishop and the lists are analysed by Jones in his ‘*Cities of the Eastern Roman Empire*’, where he distinguishes the provincial ‘*metropoleis*’ and forts (‘*castra*’) from the other main settlements. His appendix IV compares the lists provided by Hierocles, George of Cyprus (see annex D) and various councils.

For Osrhoene, the metropolis was Edessa; twenty cities are mentioned in total and places referred to in the ‘Notitia’ in addition to those in the lists of George of Cyprus were *Marathas* and *Dausara*. (Only the second of these is otherwise known and is briefly discussed in the Gazetteer⁵⁴³.) For Mesopotamia only three cities are known: Amida, Dara and Martyropolis. According to George, Amida was a metropolis, as was Dadima for the new province created by Justinian⁵⁴⁴, but Dara is also indicated as a secondary metropolis in the Notitia cited by Jones. Cephass is listed by George as a fortress, but is also in the Notitia and had a bishop who participated at Chalcedon. ‘Turabdium’, which is mentioned in both George as a fortress and in the Notitia, was probably Hah (*Khakh* – see gazetteer), but might also have been a settlement associated with the fortress of Rhabdion or the monastery of Qartmin. (The name ‘Tur Abdin’ apparently means ‘mountain of the servants (of God)’ in Syriac, but may also be related to the Greek phrase ‘*του Παβδιου*’ i.e. the region controlled by the castle of Rhabdion.) Exceptionally, George mentions for Armenia four regions or ‘*climata*’ who also appear to have had bishops; these were *Sophene*, *Anzitanene*, *Balabitanene* and *Asthanianene*, but they lay outside the province of Mesopotamia and

indeed beyond ‘Sophanene’, the region whose capital was Martyropolis and which is often associated with the province.

For the province of ‘Euphratensis’ or Euphratesia fourteen cities are mentioned by Hierocles and George; these are described below in the Gazetteer, except for *Nicopolis* and *Scenarchia*, neither of which seem to have had bishops. (This ‘Nicopolis’ may correspond to the modern town of Islahiye and ‘Scenarchia’ may be the ‘Atthis’ of the Peutinger Table.) According to the Notitia the metropolitans were at Hierapolis, Cyrrhus and Resapha/Sergiopolis. Other places mentioned in the Notitia but not in George or Hierocles include *Sura*, *Barbalissus*, *Agrippias*, *Zenobia*, *Orisa*, *Erigene* and *Orthalea*. Of these ‘Agrippias’, ‘Erigene’ and ‘Orthalea’ are otherwise unknown; three others (‘Sura’, ‘Barbalissus’ and ‘Zenobia’) are discussed in the Gazetteer but ‘Orisa’, which must correspond to the *Oresa* of the *Notitia Dignitatum* and which was the base of Legio IV Scythica in the later Roman Empire, is considered in the latter document to lie outside Euphratesia on the road from Palmyra to Sura.

Despite the existence of names which are still unidentified, for all the three provinces under consideration cities generally had a long history preceding the arrival of Alexander. A remarkable resurgence of pre-Greek names occurred after the arrival of the Arabs in the seventh century: for example, Membij (= *Bambyke/Hierapolis*), Alep (= *Beroea*) and Urfa (= *Orhay/Edessa*)⁵⁴⁵. Although a Hellenistic planned layout was imposed on some pre-existing cities further west (as at Beroea, whose grid pattern is still visible from the air) and some elements of Greco-Roman culture were certainly added during the Roman period to all cities of the region, these often seem to have left little material trace in our provinces. Palmyra to the south acquired a theatre, colonnades and public buildings in this tradition but that city seems to have been largely abandoned after the sack by Aurelian’s troops in AD273, just as Hatra was following its capture by Shapur I in AD240. Of the cities of Euphratesia only Cyrrhus had a theatre which is still visible today but further south, and in particular at Emesa, theatrical performances seem to have continued right up until the end of the sixth century⁵⁴⁶. Cities such as Doliche and Zeugma probably also did have theatres (indeed an odeon or small theatre is currently under excavation at Zeugma). Hierapolis is

believed to have had both a stadium and theatre⁵⁴⁷ although nothing can now be seen. Certainly Zeugma also possessed a sophisticated waste water system as well as remarkable 3rd century mosaics, now on show in the museum of Gaziantep.

Beyond the Euphrates the larger cities such as Nisibis, Amida and Edessa may also have been transformed into the classical model of *poleis* with a full panoply of public buildings on the classical model, as well as baths, but this is uncertain. Segal believed that Edessa did receive a Hellenistic city layout (see Gazetteer), but in the absence of large-scale excavation the presence of traditional features of Roman cities of the East remains uncertain here as elsewhere. A theatre is mentioned at Edessa in the life of St. Euphemia⁵⁴⁸; a senate house is also referred to by Joshua the Stylite⁵⁴⁹. In 502 the emperor Anastasius abolished the spring celebrations in the theatre of Edessa possibly in response to the criticisms of Christian writers such as Jacob of Sarug⁵⁵⁰. Amida is also known to have had an amphitheatre⁵⁵¹. If other public buildings are mentioned infrequently this may be because the territories concerned became a part of the Roman Empire relatively late, when the major types of public buildings being constructed were already churches. Churches frequently had hospices and infirmaries attached to them⁵⁵² and were often of great size.

It should be noted that, while Zeugma has undergone fairly intensive archaeological investigation in some low-lying quarters near the river Euphrates, since these were the quarters to be drowned by the Birecik dam, other areas remain largely untouched. The late Roman periods of Edessa, Amida and Nisibis are known only superficially, with little excavation having yet been attempted. Baths are one type of structure which is likely to have been widely constructed during the late Roman period and public baths, housed often in buildings of medieval origin, or perhaps in some cases even earlier, remain an important feature of old cities from Cyprus to the Caucasus even today. Justinian reconstructed the baths of Circesium⁵⁵³. The Sassanian king Balash got into trouble in the 480s with the Zoroastrian 'magi' when he sought to introduce municipal baths in Persia⁵⁵⁴. Dara is one city where baths are known to have been constructed⁵⁵⁵ but they must have been fairly small and are not currently visible; the major public buildings encountered there visible today – apart from the walls - are cisterns and granaries.

The walls of the cities are an essential feature, unsurprisingly given the troubled history of this period when many cities were besieged by the Persians. We are told by Procopius' *Buildings* that many cities were refortified by Justinian (see Chapter 2 and Gazetteer) and we also know that on occasion they were garrisoned by troops, to the considerable disturbance of the local citizens⁵⁵⁶. But on the whole the cities were defended during sieges by their own citizens. It does not appear that the fortresses described below were successful in preventing the Persians from attacking the rich cities of the plains, but this may not have been their purpose. Cities are the focus of the history of the Persian Wars as described by Procopius, but they are captured infrequently and never, except in the case of Nisibis in 363, are they occupied on a permanent basis.

The lack of archaeological excavations concerning levels of the late Roman period throughout the area is highly regrettable. Excavations at Hasankeyf (Cephas) of areas which will be drowned by the Ilisu dam are revealing Roman levels – according to press reports, shops of the Roman period were found in spring 2008 in the area between the citadel and the bridge and a wall mosaic of this period is also reported⁵⁵⁷. It is possible that this situation will change also at some point in regard to Nisibis, of which much of the ancient town lies in a 'no-man's land' on the Turkish-Syrian border, but other cities such as Hierapolis, Tella, Amida and of course Edessa (now Şanlıurfa) are mostly inaccessible because of later construction and current occupation. The whole of Samosata and, more recently, a large part of Zeugma have been destroyed by dams. Nothing dating from the period of concern here is visible at Diyarbakır (Amida) apart from the walls. Although these have been reconstructed on several occasions, their late Roman origin is attested by a few inscriptions, especially at the Harput gate⁵⁵⁸. But at least these walls indicate the likely size of the ancient city (1.6 x 1.1 km).

In addition to the Roman cities in the three provinces, three cities on the Persian side of the frontier are of relevance here because of their proximity and close involvement in the wars of the 5th and 6th centuries. These were: Nisibis, Bezabde and Arzen. Each of these is discussed in the gazetteer. There are a large number of other place-names on both sides of

the frontier mentioned by Ptolemy which seem already to have vanished by the time of the period under review⁵⁵⁹. Although some place-names have had an amazing longevity, originally appearing in the Bronze Age, small places mentioned in the sources are sometimes very difficult to track down on the ground. This is because there have been multiple changes of the population in many areas and also because of the current policy, in particular of the Turkish government, of replacing old names without a Turkish ring by artificial constructs which may have nothing to do with the old name. Since old place-names still have an important role in helping to track down some of the sites mentioned in the ancient sources (especially the PT and the Ravenna Cosmographer), this is highly regrettable and obliges the researcher to seek out old place-names from early modern maps as well as from villagers, who frequently continue to use the old name and not that known to the public authorities.

In any case, during the seventh century and later many of the cities mentioned in the gazetteer ceased to exist, partly but not only as a result of the Arab conquests. The widespread decline of cities of the Byzantine Empire following the reign of Justinian is discussed by Liebeschuetz and also charted by Mango and Kennedy⁵⁶⁰. A few cities in or close to the area discussed here, such as Damascus, became important centres of the Umayyad and Abbasid empires but in general it seems that population declined precipitously from the seventh century onwards, unlike the cities of the southern Levant where continuity has been found into the eighth century and beyond⁵⁶¹.

Fortifications

Constantius had decided already in the mid-fourth century on a process of strengthening the defences of northern Mesopotamia. Julian in his panegyric addressed to his predecessor mentions the fortresses constructed by Constantius along the Tigris⁵⁶². In addition to the walled cities and fortresses, various emperors made grants to monasteries in the area of the Tur Abdin, presumably with a view to strengthening the Christian – and Roman – identity of the area. Several churches and monasteries were also fortified at this time (for example,

Mar Gabriel, Mor Malke and possibly Aynwardo and Bashak, whose interior includes some late Roman brickwork⁵⁶³).



Bashak – May 2007

This section concentrates on those known fortresses in the Tigris region since this is the location of greatest militarisation of the region during the wars between Rome and Persia, as recounted by Procopius in particular. The Romans relied on city walls in the first instance to protect the rich urban areas of the region and of Syria to the west, since the *comitatus* or standing army was frequently either too weak or not in the right position to combat invasions by the Sassanian Persians⁵⁶⁴. They also served as a defence against raids by nomadic Arab tribes. During the reign of Constantius II (AD 337-361) a first concerted effort to fortify the province of Mesopotamia as a whole was undertaken with major fortifications at Amida, Cepha and – probably – Rhabdion⁵⁶⁵. Bezabde also seems to have been a strong fortress city, but it was lost to the Persians in 360.

Following the relative quiet of the fifth century on the frontier with Persia, the beginning of the sixth century brought a major invasion under Kavad and the capture by the Persians of Amida in early AD 503. The effort to strengthen Roman defences then began in earnest under Anastasius with the fortification of Dara. Many of the forts discussed below and in the Gazetteer may have been constructed or re-fortified during the same period at the beginning of the sixth century although the panegyric *Buildings* of Procopius ascribes such work to the reign of Justinian (see discussion in Chapter 2).

The terminology used in the sources, especially by Procopius, is one way of approaching the nature of the fortresses, but there are few means of checking to what extent Procopius was consistent. In the *Buildings* he refers occasionally to οχυρώματα – strongholds, or perhaps just ‘fortifications’ – but most often to the φρουρία – forts – which are discussed below⁵⁶⁶. Larger places in Procopius are πολεις but there are also intermediate towns (?) called χωρια or πολιγνια or πολισματα. Thus Citharizon and the fortresses around Amida and on the Chabur are called φρουρια, but Martyropolis, Dara and Amida are πολεις, while Pheison and Melitene are χωρια. Sisauranon (Sirvan) on the ground today is a rather small fort but is called by Procopius a πολισμα, so possibly it had a settlement attached; similarly, Zeugma and Neocaesarea are called πολιγνια, while Sura is called both a πολισμα and a πολιγνιον. This is perhaps surprising because Zeugma had been an important city in the third century and the remains of Sura are substantial (see gazetteer). Apparently equivalent to Procopius’ ‘φρουρια’ are the ‘καστρα’ listed by George of Cyprus (see annex to this chapter).

Small forts along roads, such as those described by Isaac in *The Limits of Empire*⁵⁶⁷, also occur in Euphratesia. The road from Doliche to Samosata is in particular lined by small forts at 1-mile intervals. These were apparently established at the time of construction of the road in the first or second century AD. I have not yet found traces of a similar system east of the Euphrates, although there is a group of such forts west of Edessa which were apparently constructed at a time when the Roman eastern frontier included most of Osrhoene but not Edessa itself⁵⁶⁸.

There was a remarkable concentration of late Roman fortresses in the province of Mesopotamia, presumably built to defend the area against Persian attacks⁵⁶⁹. Many of the names are recorded by Procopius in his history of the Persian wars and in the *Buildings*. The significance of at least some of the fortresses and fortified cities is borne out by the efforts of the Persians to prevent their construction. Thus, the decision to fortify Dara was strongly opposed by the Persians as being contrary to the terms of the treaty of AD 422 and efforts in the 520s to fortify Mindouos and Thannourios were successfully impeded by the

Persians, at least for a while. As Belisarius is made to say to his men before his capture of the Persian fortress of Sisauranon in 541,

“...You understand therefore how great a mistake it is for an army to proceed into a hostile land, when many strongholds (οχυρωματα) and many fighting men in them have been left in the rear...and if by any chance a second army confronts us and opens battle, it will be necessary for us to array ourselves against both, and we should suffer irreparable harm at their hands.”⁵⁷⁰

But there were far more fortresses in Roman hands than Persian ones. In Book II.4.14 of the *Buildings* Procopius says:

“...And all the other forts which lie in the mountains, forming a line from there and from the city of Daras all the way to Amida, namely Ciphaz and Sauras and Margdis and Lournês and Idriphthon and Atachas and Siphrius and Rhipalthas and Banasymeôn, and also Sinas and Rhasios and Dabanas, and all the others which have been there from ancient times, and which had previously been fenced about in most ridiculous fashion, he rebuilt and made safe, transforming them to their present aspect as to both beauty and strength, and making them impregnable, so that actually they are thrown out as a mighty bulwark to shield the land of the Romans.”

The role of the fortresses as opposed to the cities is contentious. The density and locations of these fortresses in northern Mesopotamia is here argued to be the result of attempts to defend territory and infrastructure, since they are frequently located close to roads. However, analysis of the purpose of the fortresses needs a further examination and comparative study. The argument that fortresses defended roads risked becoming a circular one since roads may also have been built sometimes to link the fortresses. The anonymous Byzantine treatise on strategy, thought to date from the reign of Justinian, gives great importance to such matters and provides advice on how to counter attacks on fortifications by sappers. It implies that forts (or φρουρια) were placed to guard against incursions by the enemy along the main routes of entry into Roman territory⁵⁷¹.

In many cases the fortresses have still not yet been identified on the ground: those whose sites are known are listed below. One of the sites unknown until now is *Rhipalthas*, listed above but mentioned also in the *Notitia Dignitatum*, which was thought by Dillemann to lie on the south bank of the Euphrates west of *Cepha* (Hasankeyf). A suitable site is visible on

the high resolution satellite photograph visible on Google Earth and details are enclosed in the Gazetteer. *Dabanas* may be different from the site ‘Tharrana’ mentioned in the Peutinger Table (on route 6 in chapter 4-2), which is usually also identified with another Dabana⁵⁷². Dillemann places it about 12km ENE of Midyat at ‘Deben’⁵⁷³, possibly the same as a fortress discovered in this area by Wiessner at Edikli⁵⁷⁴; *Rhasios* is otherwise unknown but a site is proposed by Dillemann 5km SE of Hasankeyf. *Banasymeon* is identified by Dillemann with the monastery of Qartmin/Mar Gabriel, but this is denied by Honigmann (p13 n4) and by Palmer⁵⁷⁵.

Apart from these names given by Procopius, a long list of names of other fortresses or ‘καστρα’ is provided by George of Cyprus⁵⁷⁶, while many military units are mentioned in the *Notitia Dignitatum* which must also have been based in fortified camps. The question arises of the garrisons of these fortresses. For Rhipalthas we know from the *Notitia Dignitatum* that the *Ala octava Flavia Francorum* occupied the fortress (see annex B at the end of this chapter), but there is a possibility that some of the fortresses mentioned here served only a local function and were maintained and garrisoned by local communities. Lightfoot in his doctoral thesis draws attention to the number of forts mentioned in the *Notitia Dignitatum* with a garrison composed of ‘*equites indigenae*’. He goes on to say that ‘...Whereas in the fourth century fortresses were manned by regular troops, some of foreign, others of native origin, it later became the common, necessary, practice for the local inhabitants to provide for their own safety’⁵⁷⁷. Ammianus Marcellinus mentions a squadron of native cavalry at Amida, as well as native troops defending Singara and Bezabde against Shapur⁵⁷⁸. Constantius II, as Lightfoot points out, was however particularly short of soldiers, following the civil wars with other contenders for the throne.

This issue is addressed for the frontier in Syria by Liebeschuetz who concludes⁵⁷⁹ that the fortresses restored by Justinian in Syria around Chalcis were

“...put up independently of each other mainly by local inhabitants in response to circumstances which we cannot know. The main function of most of them will have been not strategic but simply to protect the local population.”

Liebeschuetz also argues that the only way of protecting Roman Syria was through a strong field army and that this army was progressively reduced in the centuries after the early

empire with relatively greater importance being accorded to Roman forces in Armenia. However, reading Procopius gives the impression to me rather of a concentration of state-sponsored fortifications and military resources in Mesopotamia under Justinian with the implied objective of halting Persian forces as near to the border as possible. This objective was met in part by a reliance on fortified cities and individual fortresses presumably because the field army was indeed reduced in order to permit the sending of forces west for the recovery of Africa, Italy and Spain. Garrisons seem to have been inadequate when Khusro I attacked these provinces in AD 539, so possibly the policy of reliance on fortifications failed because too many troops were withdrawn.

A balanced conclusion on this question is unlikely to be reached until a detailed comparative study of the fortresses has been conducted⁵⁸⁰. But the names of fortresses in Mesopotamia listed by Procopius and George of Cyprus are both far more numerous than for other regions, such as Syria, and imply, in my view, a coordinated response to the Persian threat with a view to control of the main routes across the region, rather than protection of local communities. Following the disaster of 363 and the loss of Nisibis there appears to have been a long-lasting Roman policy of strengthening fortifications to permit more effective resistance to Persian invasion. It is true that the fortresses are not mentioned for the most part in the history of the military campaigns of Justinian's reign and earlier. But this does not preclude an important role in the control of territory and communications, even if the garrisons of most of the fortresses mentioned in the Gazetteer were present only irregularly. The anonymous military treatise on strategy, thought to date from the reign of Justinian, also gives prominence to forts and advice on how to defend them⁵⁸¹. In the reign of Maurice the fortresses are mentioned more frequently by Theophylact Simocatta and seem frequently to have been important military bases.

On the other side of the frontier the Persians also maintained fortresses which were important factors in the fighting in the latter part of the reign of Justinian and that of Maurice. Apart from *Akbas* (Başka Kalesi) and *Aphoumon* (Anushirvan Kalesi), the names of two others are known – *Phathacon* and *Alaleisus* – placed by Whitby, respectively, near the Kulp pass and at 'Balaleisus', near Bitlis⁵⁸². 'Chlomaron', a town and fortress north-east

of Arzen on the river Garzan, played a particularly important role during Maurice's reign and seems to have guarded a bridge of which a few remains are still visible. Its name may correspond to the 'Florianon' mentioned in the list of George of Cyprus (see annex D after this chapter).

Several Roman fortresses mentioned by Procopius elsewhere in the *Buildings* in the region of *Amida* have not been found⁵⁸³; while in the vicinity of the Khabur Justinian – according to Procopius⁵⁸⁴ - rebuilt forts at *Annoucas*, *Magdalathôn* and two named *Thannourios*, one large and one small, but several others are also mentioned. These include *Vimisdeôn*, *Themeres*, *Vidamas*, *Dausarôn*, *Thiolla*, *Phichas* and *Zamarthas*. Of these names, only the sites at 'Annoucas' (Khanoukas⁵⁸⁵), 'Thannourios' (Tell Tuneinir) and 'Dausaron', or *Dausara*, are known. Thannourios is the only one to have been investigated archaeologically and is discussed below.

Those fortresses whose position can be located with some degree of confidence are described in the Gazetteer. cursory visits to many of them have however shown a wide variety of building techniques, presumably because they were rarely constructed in a single period and times of construction or repair of different fortresses overlap. The mention of a fortress in Procopius' *Buildings* or in George of Cyprus may well indicate construction work in the reign of Justinian but in some cases, such as *Beioudaes* (Fafi), this work is dwarfed by the original fortress which may be much older⁵⁸⁶. One remarkable characteristic is the existence in several cases (e.g. Cepha, Rhabdion, Rabat and Rumkale⁵⁸⁷ – the latter a fortress west of the Euphrates discussed below) of deep ditches dug into the neck of rock separating a fortress from the mountain spur behind. So far no dating of this feature has been attempted, although the huge scale of the works involved might suggest a period earlier than the fourth century, since no military activity requiring such fortifications is known after that period for regions west of the Euphrates. On the other hand, the great scale of the work involved in the building of the fortress at Zenobia, known to have been constructed under Justinian, indicates that an early date, for example the reign of Diocletian, should not be assumed even for such enormous projects.

Fortresses are known along the Euphrates further north than the concentration around Sura (see gazetteer), both on west and east banks of the river. Some of these may date from the Roman period but they are not listed by Procopius nor by George of Cyprus and may therefore have been constructed in earlier periods and have been abandoned by the fifth century when the confrontation with Persia was centred on the Tigris and the north Mesopotamian plain. I have myself found ruined fortifications near Elif (west bank) at *Kaleboyu* and north-east of Ayni at *Bozyazi* (east bank). I was not able to find much evidence to date these, although what are apparently late Roman settlements and churches are near each fort. Given the existence of piers of a Roman bridge (see bridge 21 in Annex A, Chapter 3) and of an aqueduct passing through the tongue of rock on which the existing castle is built, Rumkale may also once have been a Roman fortress⁵⁸⁸. There is insufficient information on these to merit a discussion here of late Roman fortresses in Euphratesia. The important fortresses on the Euphrates further south were for the most part also cities and are considered in that section of the Gazetteer (e.g. *Birtha*, *Nicephorion*, *Barbalissus*, *Sura* and *Zenobia*).

Far to the east of the frontier along the Batman river there is a particularly remarkable example of a Roman fortress as Eski Hizan, which lies 25km south of lake Van and about 27 ESE of Bitlis. I have not visited this fortress which was published by Tim Mitford in 1986⁵⁸⁹. It apparently guards a route south from Lake Van and Armenia to Siirt. If it is indeed of Roman origin then it was probably constructed in the fourth century and handed over to the Persians as one of the fortresses surrendered by Jovian in AD 363. I have been unable to identify Roman roads in the area using the satellite photographs on Google Earth (which were not - in 2007/8 - in high resolution). But its existence may indicate a much more intensive Roman presence East of the Batman river than has been suspected and reinforces the idea that the Harap bridge across the Batman river (see Chapter 3) represents an important late Roman route between Amida and Armenia.

On the Khabur, the river which flows south from Resaina into the Euphrates, there was an important fortress at Thannourios, but the nature of the threat was different south of Nisibis. Some excavations have taken place there⁵⁹⁰. Although invasions in both directions took

place along the Euphrates valley, the region between the Euphrates at Circesium and the Nisibis was either arid or marshy. Insufficient water or supplies were available for armies passing from east to west. For the most part raids by Arab tribesmen were a more important threat than full-scale invasions; both here and in Euphratesia the principal defence of Roman cities lay in the alliance with the Ghassanid tribes who were for the most part able to counter successfully raids by their Lakhmid rivals. This Roman alliance with the Ghassanids was abandoned by Maurice at the end of the sixth century with disastrous results. Even though Thannourios is not mentioned in the PT the discussion of route 5 in Chapter 4-1 above indicates that the fortress is also likely to have played an important role in guarding a main road from Edessa to Nisibis and perhaps to have played a role as a frontier post, even though it was not recognised as such for trading purposes.

According to Sinclair (p376/7) other late Roman fortresses are likely to have lain in the ‘Tektek dağ’, a chain of arid hills on the road between *Edessa* and *Constantia* (Urfa and Viranşehir). Such fortresses would have constituted an additional barrier for Sassanian armies approaching Edessa and the road to Antioch via Zeugma. This area was also thickly strewn with monasteries in this period. It has not yet been visited by me nor is any detailed description available. There is as yet no reason to identify fortresses mentioned by Procopius or George of Cyprus with this region; the relevant sections of Hierokles’ *Synekdemos* and George of Cyprus, together with extracts from the *Notitia Dignitatum*, are appended to this chapter (Annexes D and E). They reveal a large number of named fortresses whose location is simply unknown. For the areas close to the three provinces addressed by this thesis but not formally inside them, George of Cyprus also mentions the following *castra* in Arzanene and neighbouring districts⁵⁹¹:

- *Samocharta* (near Maryropolis, see discussion in Gazetteer)
- *Aphoumon* (identified by Honigmann with ‘Fum bei Iliğe’⁵⁹² but more probably Anushirvan Kalesi);
- *Aribachon* (possibly Eski Eruh, NE of Cizre⁵⁹³ but this may be too far east);
- *Florianon* (an identification with Zercel Kale, opposite Golamasya on the Yanarsu, has been proposed also in this case, but is doubtful);
- *Dafnoudis* (unknown);
- *Balouos* (probably Palu, north of the Taurus pass via the Dibne river, whose site has not been investigated archaeologically);
- *Dadima* (Tadem, a bishopric in Armenia⁵⁹⁴); and
- *Citharizon* (near Bingöl, seat of the ‘Dux Armeniae’ under Justinian)⁵⁹⁵.

Some of these were involved in the fighting in the later part of the sixth century. For much of the two centuries examined here they were – apart from Samocharta, Balouos and Citharizon – probably on Persian territory. In some cases Malalas mentions forts which were captured by the Romans but without specifying their names. Thus in AD 529 the general Dorotheos captured several fortresses, presumably in Arzanene, one of which was used by Persian merchants to store their goods, since it was on a mountain top and accessible only by a single narrow pathway⁵⁹⁶. In a treaty negotiated with the successor of Kavad as Persian king in 531 by Hermogenes and Rufinus, ‘Pharangion’ was returned to the Persians in exchange for several unnamed Roman forts. The name is otherwise unknown but it may be one of the unidentified forts listed by George of Cyprus.

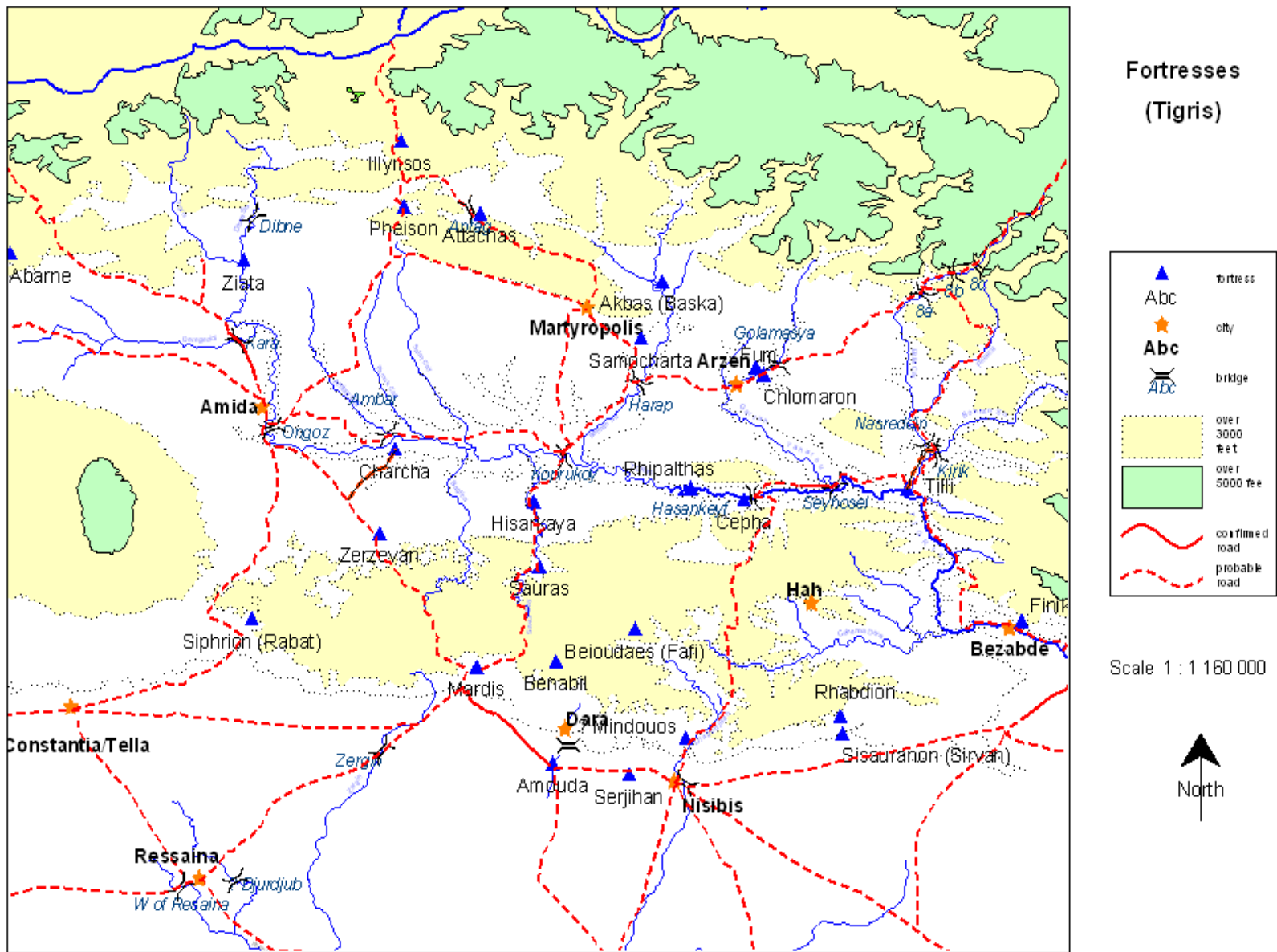


Figure 19

The economy

As stated above in this chapter, the evidence available - whether written or material - is so far insufficient to draw firm conclusions about any transformation of society and the economy which may have occurred in late antiquity in the provinces concerned. But it is clear from archaeological evidence for neighbouring regions (see below) that the economic situation of the region must have been relatively prosperous until the middle of the sixth century.

It seems probable that in the late third century there had indeed been a decline; in the second and third centuries AD the eastern Roman Empire had seen a flourishing of classical culture and the construction of remarkable public buildings, such as the still extant theatres of Aspendos and Bostra, but this did not continue into the fourth. In the vicinity of the area under examination here, the mosaics of Antioch and Zeugma, as well as the physical remains of nearby cities such as Apamea and Palmyra, also attest to a full participation in the classical culture of the early empire, but this level of opulence was remarkable by the standards of later periods.

In late antiquity cities in Asia Minor do seem initially to have been in decline. But by the fifth century it is widely acknowledged that city life in much of the eastern empire had recovered and that levels of public and private wealth were again substantial, especially in the cities of Syria⁵⁹⁷. The provinces concerned here provide some evidence of this in terms of physical remains, although much has been destroyed (see discussion below). The large amounts of gold recorded by Procopius in the sixth century, both that paid by the emperors to the Sassanian kings and directly by the cities concerned as an alternative to a siege, also show that the eastern Roman empire, and in particular the areas of Syria, Osrhoene and northern Mesopotamia, had achieved levels of wealth that were probably higher than many others in the later Roman empire⁵⁹⁸.

The bridges and roads - and especially the users of the roads – which are described in chapters 3 and 4, are further evidence of an advanced urban culture which was flourishing in the fifth century and was very likely more complex than anything which preceded or succeeded it, at least until the mid-19th century.

For rural areas, this picture is confirmed by studies, inter alia, of the northern limestone massif west of Aleppo, of southern Israel and indeed, for the neighbouring Sassanian empire, of the Diyala plains near Baghdad, where settlements were denser and agricultural land more intensively cultivated in the sixth century than ever before⁵⁹⁹. Although little archaeological work has been done in the regions studied here (for a review see Annex G), the Chicago Euphrates Archaeological Survey around Kurban Höyük, near Samosata, conducted in connection with the construction of the Ataturk dam, also confirms this picture of a rise in density of settlement during these two centuries, followed by a ‘precipitous decline’ in the seventh and eighth centuries⁶⁰⁰.

Wilkinson in fact speaks of this decline as being preceded by “...a massive increase in settlement numbers, aggregate settlement area, and land use intensity” in the later Roman Empire, which appears to have reached a peak around the reign of Justinian. He suggests that this increase was associated with the granting of provincial status to Osrhoene, with increased agricultural investment and production and with the strengthening of settlement defences under Justinian and the build-up of troops in the war with Persia.

Although some public buildings fell into disuse in the region’s cities during the fifth century and only baths amongst the traditional types of such building continued to be constructed, many churches and monasteries were built from the fourth to the sixth centuries, some of which were very large. Apart from Antioch, major churches are known to have existed at Edessa and Amida. There are still a few impressive remains of an octagonal church at Constantia (Viranşehir) and many villages on both sides of the Euphrates contain ruins of large churches. While the extant churches of the Tur Abdin, some partly from the sixth century and still functioning, are fairly well-known⁶⁰¹, in

north-west Osrhoene one such large church was seen by me at Nuhrut in 2002⁶⁰² while another building which may be either a *villa rustica* or a monastery has been discovered recently in a very different style nearby at Kelosk Kale/Derşenek⁶⁰³; on the opposite bank at Ehneş are the ruins of a church of St Sergius whose inscriptions have been studied by Palmer⁶⁰⁴. But the stone from many others in this region has been recycled, in some cases only recently. The remains of the cathedral of *Martyropolis* (Silvan) have disappeared since they were photographed by Gertrude Bell in 1911 (see gazetteer). Often only ancient quarries, for example at Kural, about 20 kms north-east of Birecik, attest to the large scale of building works during the centuries reviewed here.

The role of trade in creating the levels of wealth necessary to support such building works is a vexed question. The existence of important trade routes passing through the region is clear; the relative importance of commerce and industry as opposed to agriculture is however very difficult to define. The question is discussed in the second part of chapter 6 below.

Ease of transport seems in any case to have been an important factor in the economic and demographic development of the region. The roads between the cities and the fortresses were needed for various purposes. These will have included the need to supply the population and the garrisons; the need for communications, whether private, military, ecclesiastical or administrative; and the need to facilitate commerce, whether local, inter-regional or 'international'. The road links between cities will have usually pre-dated the arrival of the Seleucids, let alone the Romans; but it is likely that the demographic and economic growth associated with the *pax romana* and in particular the settled conditions of the fifth century, when armed conflict was exceptional in this region, led to a more intense use of the roads than ever before. In particular, the large number of bridges discussed in chapter 3 provide further evidence of both wealth and technical capacity; the fact that so many bridges survive from the Severan period through to the sixth century is surely one more sign of an intensification of trade and economic activity.

Annex C

Notitia Antiochena (NA)



Figure 20

Those bishoprics in the three provinces studied here were (metropolitans in italics):

<i>Edessa</i>	Gazetteer
Birtha	Now Birecik – gazetteer
Marathas	Unknown
Carrhae	Harran – gazetteer
Constantina	Also Constantia, now Viranşehir – gazetteer
Markopolis	Unknown
Batnae	Batnae/Anthemusia, now Sürüç – gazetteer
Telmahre	A town south of Batnae, possibly at or close to Dabana ('Tharrana' in the Peutinger Table, see route 6 in chapter on roads)
Himeria	Location unknown, but see gazetteer
Circesium	Gazetteer
Dausara	Gazetteer
Callinicum	Gazetteer - near Raqqa
Nea Valentia	Unknown

<i>Hierapolis</i>	See gazetteer ; now Membij
Zeugma	Gazetteer
Sura	Gazetteer
Barbalissus	Gazetteer
Neocaesarea	Gazetteer - also known as Athis
Perre	Gazetteer
Urima	Possibly Horum Hüyük, a site 15km north of Zeugma whose mound was excavated by a French team in connection with the Birecik dam. A stone quay was found adjacent to the mound under water.
Doliche	Gazetteer
Germaniceia	Gazetteer; now Karamanmaraş
Europus	Gazetteer (formerly Carchemish)
Oragiza	Eragiza in the Peutinger Table; either Abu Hanaja or Tell el Hajj – see route 6 in chapter 4-1 on 'Roads'
Samosata	Gazetteer

<i>Amida</i>	See gazetteer; now Diyarbakır
Martyropolis	Gazetteer; now Silvan
Ingilene or Ingila	Ingila/Angh/Eğil – gazetteer
Belabitene	Palu, north of the Taurus ridge beyond Eğil/Ingila
Arsamosata	Placed by Honigmann between ‘Haraba’ and ‘Nağaran’, apparently also between Eğil and Palu.
Sophene	Previously a satrapy; Honigmann places it near Harput.
Citharizon	Near Bingöl ⁶⁰⁵ , 50 km N of Diyarbekir
Cephas	Gazetteer
Zeugma	Unknown, if not repetition in error of the ‘Zeugma’ under Hierapolis

<i>Sergiopolis</i>	Gazetteer; now Resafa
Agrippiada	Unknown
Zenobia	Gazetteer; now Halebbiyeh
Orisa	According to Honigmann now ‘et-Taijibe’. On the road to Palmyra and outside Euphratesia (?). According to Notitia Dignitatum headquarters of Legio IV Scythica (Annex C).
Erigena	Unknown
Ortalea	Unknown

<i>Dara</i>	Gazetteer
Theodosiopolis	Resaina – gazetteer
Tourabdion	Possibly Hah or ‘Khakh’ – gazetteer
Mnsubion	Honigmann read ο Μναςυβιον ο [και] τουβανα Συμεον and identified with the ‘Banasyneon’ of Procopius <i>Buildings</i> II, 4; he made no identification but it was perhaps the extant fortified monastery of Qartmin/Mor Gabriel

Annex D

Hierocles' Synekdemosis and George of Cyprus

Names in italics appear only in George of Cyprus. Other names appear in both.

<i>Place</i>	<i>Modern name where known</i>
<i>Euphratesia</i>	
Ierapolis	Membij
Kyrrhos	Cyrrhus
Samosata	Samsat (now under water)
Doliche	Duluk (near Gaziantep)
Germaniceia	Marash
Zeugma	Belkis (now partly under water)
Perre	near Adıyaman
Europos	Karkamish/Jerablus
Nikopolis	Islahiye
Scenarchia	(possibly Barbalissos)
<i>(Neo)Caesarea</i>	Dibse Faraj
<i>Sergioupolis</i>	Resafa
Urima	Horum hüyük or possibly Rumkale
Salton Eragizanon	Abu Hanaya? near Meskene
<i>Osrhoene</i>	
Edessa	Şanlıurfa
Carrai	Harran
Constantia	Viranşehir
Theodosiupolis	Ras-el-Ain
Batnai	Suruç
Callinicum/Leontopolis	near Raqqa
Nea Valentia	?
Birtha	Birecik
<i>Monithilla</i>	? =Thillaamana of the ND (Jones, CERP 223)
<i>Thilimachro/Therimachonn</i>	? Tell Mahré/Tilmahriz, S of Harran
<i>Moniauura/Moniauga</i>	?
<i>Macarta</i>	? Monocarton, possibly a camp near Constantia/Tella
<i>Markoupolis</i>	? near Batnai/Suruc
<i>Anastasia</i>	? Dausara
<i>Himerion</i>	? opposite Karkamis or Amphipolis
<i>Circesium</i>	junction of Euphrates with Khabur
<i>Mesopotamia</i>	
Amida	Diyarbakır
<i>Martyropolis</i>	Silvan
<i>Daras</i>	Oğuz

Castra

<i>Riscephas</i>	Hasankeyf
<i>Tourabdion</i>	Hatem Tai
<i>Mardis</i>	Mardin
<i>Lorne</i>	? Ortaköy, south of Mardin
<i>Idriphthon</i>	Possibly Hisarkaya/Bozresa, N of Savur
<i>Isfrios/Sifrios</i>	? Rabat
<i>Tzauras</i>	Savur
<i>Audasson</i>	?
<i>Inzieta</i>	? Ziata, nr. Eğil
<i>Banabele</i>	Benabil
<i>Huddi</i>	?
<i>Douos/Aisoudouos</i>	?
<i>Aisouma Sfranas</i>	on Karaca Dag?
<i>Basilicon</i>	? Carcathiocerta/Eğil
<i>Spelaion</i>	?
<i>Beioudaithas</i>	? Fafi/Beşikkaya; ‘Sinās’ in Procopius (<i>Buildings</i> II.4,14)
<i>Massaron</i>	Maserte/Ömerli, cf ‘Assara’ under Dux Mesopotamiae in <i>Notitia Dignitatum</i> below
<i>Birththachabrais</i>	? Possibly ‘Kafer Hawar’, 9km west of Midyat ⁶⁰⁶
<i>Siteon Chiphas</i>	Sitas of the TP ⁶⁰⁷ ; possibly another name of Hasankeyf (<i>Riscephas</i> above) but this is uncertain
<i>Kalonos</i>	?
<i>Bibasaron</i>	?
<i>Tzauras</i>	(<i>appearing second time?</i>)
<i>Birthas</i>	? Honigmann equates with Mirdon
<i>Attachas</i>	Antağ, near Lice

Other ‘castra’ mentioned in the ‘klima’ of Arzanene are:

<i>Aphoumon</i>	Identified by Honigmann with Fum ⁶⁰⁸ ; but possibly Zercel Kale near Golamasya.
<i>Aribachon</i>	Possibly Eski Eruh, about 60kms N of Cizre (Barrington Atlas, Map 89)
<i>Florianon</i>	Identification with Chlomaron/Zercel Kale opposite Golamasya on the Yanarsu has been proposed also here but this is doubtful.
<i>Dafnoudis</i>	?
<i>Balouos</i>	Palu, north of the Taurus pass at Dibne
<i>Samocharta</i>	SE of Silvan

Dadima (Tadem) later seat of the metropolitan bishop of Armenia IV and *Citharizon*, near Bingöl, seat of the ‘Dux Armeniae’ under Justinian are also mentioned in Arzanene although they are clearly outside it. Mentions follow of the ‘klimata’ of Sophene, Anzitene, Belabitene and Astianike (Asthanene).

Annex E

Notitia Dignitatum

(extracts – names of known places within or near the three provinces of Euphratesia, Osrhoene and Mesopotamia in bold; names of unknown places underlined)

XXXIII. Dux Syriae.

Sub dispositiones viri spectabilis ducis Syriae et **Eufkratensis Syriae**:

[Equites scutarii Illyriciani, Serianae.
Equites promoti Illyriciani, Occariba.
Equites sagittarii indigenae, Matthana.
Equites promoti indigenae, Adada.
Equites sagittarii indigenae, Anatha.
Equites sagittarii, Acadama.
Equites sagittarii, Acauatha.
Praefectus legionis quartae Scythicae, **Oresa.**]

In Augusta Eufkratensi:

Equites Dalmatae Illyriciani, **Barbalisso.**
Equites Mauri Illyriciani, **Neocaesereae.**
Equites promoti indigenae, **Rosafa.**
Praefectus legionis sextaedecimae Flaviae firmae, **Sura.**

Et quae de minor laterculo emittuntur:

Ala prima nova Herculia, **Ammuda.**
Ala prima Iuthungorum, Salutaria.
Cohors prima Gotthorum, **Helela.**
Cohors prima Ulpia Dacorum, Claudiana.
Cohors tertia Valeria, Marmantharum.
Cohors prima victorum, Ammattha.

Officium autem habet ita:

Principem.
Numerarios et adiutores eorum.
Commentariensem.
Adiutorem.
A libellis siue subscribendarium.
Exceptores et ceteros officiales.

Dux Syriae V.

XXXV. Dux Osrhoenae.

Sub dispositione viri spectabilis ducis Osrhoenae:

Equites Dalmatae Illyriciani, Ganaba.
Equites promoti Illyriciani, **Callinico.**
Equites Mauri Illyriciani, **Dabana.**
Equites promoti indigenae, Banasam⁶⁰⁹

Equites promoti indigenae, **Sina Iudaeorum**⁶¹⁰
Equites sagittarii indigenae, Oraba.
Equites sagittarii indigenae, Thillazamana.
Equites sagittarii indigenae Medianenses, Mediana.
Equites primi Osrhoeni, Rasin⁶¹¹.
Praefectus legionis quartae Parthicae, **Circesio**.
....., **Apatna**.

Et quae de minore laterculo emittuntur:

Ala septima Valeria praelectorum, Thillacama.
Ala prima Victoriae, Touia -contra **Bintha** (?)
Ala secunda Paflagonum, Thillafica.
Ala prima Parthorum, **Resaia**.
Ala prima nova Diocletiana, inter **Thannurin et Horobam**.
Cohors prima Gaetulorum, Thillaamana.
Cohors prima Eufraatensis, Maratha.
Ala prima salutaria, Duodecimo constituta.

Officium autem habet ita:

Principem de scola agentum in rebus.
Numerarios et adiutores eorum.
Commentariensem.
Adiutorem.
A libellis siue subscribendarium.
Exceptores et ceteros officiales.

Dux Osrhoenae V.

XXXVI. Dux Mesopotamiae.

Sub dispositione viri spectibilis ducis Mesopotamiae:

Equites scutarii Illyriciani, **Amidae**.
Equites promoti Illyriciani, **Resain - Theodosiopoli**.
Equites ducatores Illyriciani, **Amidae**.
Equites felices Honoriani Illyriciani, **Constantia**.
Equites promoti indigenae, **Apadna**. (?)
Equites promoti indigenae, **Constantina**.
Equites sagittarii indigenae Arabanenses, Mefana - **Cartha**.
Equites scutarii indigenae Pafenses, **Assara**. (? Massara/Maserte)
Equites sagittarii indigenae Thibithenses, Thilbisme.
Equites sagittarii indigenae, **Thannuri**.

Praefectus legionis primae Parthicae Nisibenae, **Constantina**.

Praefectus legionis secundae Parthicae, **Cefae**.

Et quae de minore laterculo emittuntur:

Ala secunda nova Aegyptiorum, **Cartha**.
Ala octava Flavia Francorum, **Ripaltha** (?).
Ala quintadecima Flavia Carduenorum, Caini.
Cohors quinquagenaria Arabum, Bethallaha.
Cohors quartadecima Valeria Zabdenorum, **Maiocariri** (?).

Chapter 6: Issues arising

The information provided above in regard to roads, bridges and cities raises issues of various types. Three are examined in this chapter. Firstly, there is the question of the purpose of the roads: this is discussed within chapter 4 above, but it leads on to the issue of their strategic significance given the heavily militarised nature of the region in the fourth to sixth centuries and their role in defence of the frontier (part i below).

Secondly, there is the issue of the significance of the roads for trade, whether intra-regional or international, and the importance of such trade for the economy (part ii).

Lastly, there is the issue of the importance of cross-frontier traffic for relations generally between the late Roman Empire and Sassanian Persia (part iii).

i) Frontiers and defence

In regard to the roads in the context of military communications and frontier defence, it is evident that rapid communications in a region of conflict between the two major 'great powers' of Europe and Western Asia during Late Antiquity must have been a major concern for the states concerned and a major incentive for the construction and maintenance, not only of the roads themselves, but also of the public post and of the way-stations and lodging facilities. Little is known of signalling systems in this period⁶¹², which seems to have relied principally on signal fires⁶¹³; but messengers using the roads themselves and the frequent way-stations were the normal method of transmitting urgent information. Embassies also travelled frequently to and fro as described in part 2 of Chapter 4 above.

Road networks would have existed in this period not only to facilitate transmission of messages. Other military purposes are likely to have included the transport of supplies and heavy equipment, whether using pack animals or carts. The state of war between Rome and Persia which reigned especially during the sixth century, will have made communications

especially important for the planning of attacks on the enemy and for the assembly of troops to counter attacks.

The existence of fixed infrastructure of strategic importance such as fortresses, roads and bridges would also have created strong incentives for their preservation and control. The need to maintain a grip on territory and infrastructure in a contested area is one argument for the existence of lines rather than zones as constituting the border between the empires, since a zone implies a broad strip of no-man's-land in which taxes could not be raised nor infrastructure maintained. In sparsely settled areas such as the districts of Armenia to the north of Euphratesia and Mesopotamia it is clear from a passage in Procopius discussed below that there was no demarcation of a fixed border, but in more densely-settled areas dominated by cities, such as northern Mesopotamia, both existing public investment in infrastructure and the need to raise land taxes seem likely to have created strong incentives to demarcate the frontier clearly (see below).

It seems that before 363 on their eastern frontier the Romans never advanced to a line which permitted the easiest and most cost-effective defence of 'their' territory. It is true that Hadrian withdrew from the areas of Mesopotamia and across the Tigris which had been conquered by Trajan apparently because of the difficulty of defending these areas, but there is general agreement that right up to Julian's time the Romans simply advanced where they could because of what they perceived to be weakness on the other side and a lust for booty and glory⁶¹⁴. But later on and throughout the period considered here, as Isaac insists⁶¹⁵, warfare was largely a matter of the struggle to control fortified cities.

Nevertheless, the defensive value of fortresses as opposed to fortified cities, seems incontestable; otherwise Persian kings would hardly have bothered to attack them, which they did especially after 602. Their positioning indicates that they were not intended to defend a line but rather to protect territory and perhaps to entrap invaders in a net. Isaac argues that there was no strategic thinking behind Rome's defence of its eastern frontier and that the Roman state and the mentality of the court was geared more to offence than to defence of outlying provinces; he even goes so far as to argue that there was no '*limes*' in the sense of a defended frontier region⁶¹⁶. But the heavy investment in fortresses in northern Mesopotamia undermines the view that the conflict of the sixth century in

particular was one of a struggle only for fortified cities and not defence of territory. The fortresses described in chapter 5 may have defended in some cases the approach to cities but it seems unlikely to this writer that most would have been built unless it were to defend and control territory and infrastructure. It may be deduced that – beyond the fortified cities - the roads and bridges were also valuable to the Roman state, both because of their military significance and, probably, because of their economic importance as well.

The roads and bridges would thus have played a crucial role in the warfare between Rome and Persia: they were valuable in themselves, because they acted to facilitate trade and to bring wealth and tax revenue, but they were also the means by which armies and raiders could progress speedily to attack villages and cities. It is therefore not surprising to find that in northern Mesopotamia and the Tur Abdin many fortresses are well-placed to guard roads, as the anonymous treatise on strategy implies⁶¹⁷.

The border

In the provinces concerned here the frontier between the early Roman Empire and Parthia had been established for a long period before the third century along the river Euphrates. A road following the west bank of this river is described above (route 12 in Chapter 4, part 1). No such frontier road is known further east, possibly because of fluctuations in the frontier itself. The frontier between Rome and Persia after AD 363 again followed, where possible and in general terms, natural features such as river courses. In the absence of precise topographic maps only such natural features could provide a reliable and generally accepted demarcation. From Circesium at the junction of the Euphrates and the Khabur it ran north up the latter river to Thannouris through a desert landscape without water except for the marshy valley of the Khabur itself. It is then believed by me to have continued up the Djaghdjagh to a point near Nisibis. However, both this section and the next – the line across the escarpment of the Tur Abdin - have given rise to different interpretations discussed below. Ownership of the steppe between Nisibis and Thannourios is unlikely to have been as contentious as that of settled areas which produced regular tax revenues. The part of the frontier between Nisibis and the Batman river which was so settled is the most difficult to define. North of the ‘Tur Abdin’ and the Tigris the frontier is generally agreed

to have followed the river Batman (*Nymphius*) into the Taurus and then down to a point near Muş.

Linear features such as roads and walls are normally clearly visible on satellite photographs, even in low resolution. A long wall has not been found and seems never to have been considered by the Romans in this area (nor by the Persians), possibly because it was not believed to be feasible to garrison such a wall⁶¹⁸. Procopius even states that the *limitanei* were disbanded by Justinian, presumably as an economy measure⁶¹⁹ (although he also states – as Isaac points out⁶²⁰ – that on the Armenian frontier, especially at the fortress of *Artaleson* – not yet identified, Justinian stationed detachments of regular troops under a *Dux*⁶²¹). However, recent investigations of the ‘Red Snake’ or Gorgan Wall, a long wall defending the Sassanian empire’s north-east frontier and apparently constructed during the sixth century, have shown both a well-constructed wall and a canal stretching from the south-east corner of the Caspian Sea for at least 195km east into highlands and on a much larger scale than Hadrian’s Wall in northern England⁶²². Over 30 forts line this wall, with larger ones in its hinterland⁶²³. Many forts seem to have included barrack blocks, implying substantial permanent garrisons. Although investigations are still at a fairly early stage it seems probable that the wall and the forts were intended to keep out armed horsemen, as well as controlling the flow of people into and out of Persian territory.

Other long walls are known to have existed between the Caucasus and the Caspian at Derbent⁶²⁴, in the Daghestan province of the Russian Federation, and also from the south-east corner of the Caspian south into the Elburz mountains (the ‘wall of Tammishe’). But neither the Persians nor the Romans constructed a wall along vulnerable parts of their joint frontier. For Syria, Palestine and Arabia, Hodgson has argued that in the desert the Roman army reached a ‘natural stopping point’, unlike on the Rhine or in Britain and that, in any case, the pattern of military occupation reflected economic geography and the degree of urbanisation more than considerations of defence⁶²⁵. But he is concerned primarily with the early empire and his explanations do not suit the province of Mesopotamia. Here, two explanations seem possible for the absence of a linear defence: either a wall was considered to be a line of value for deterring nomadic tribes but not well-organised armies with siege equipment⁶²⁶; or else, neither Romans nor Persians were willing to acknowledge the long-term nature of the frontier north and south of Nisibis and to abandon irredentist claims on

territory beyond the border line agreed in AD363. Construction of a long wall would have been tantamount to acceptance of the status quo. In view of the events following the death of Maurice in the early seventh century, the latter argument may be particularly cogent for the Persian side which may always have hoped to recover land to the west of the frontier of AD 363. In the Roman case, shortage of manpower available to patrol and garrison a long wall may have been a more important argument against such walls.

Nevertheless, it is surprising that the Romans did not apparently even consider a defensive wall at two points: the area between Dara and Nisibis and that between Rhabdion and Bezabde. In the former maybe it was thought that a wall could be too easily circumvented, while in the eastern part of the Tur Abdin the rough country and absence of roads may have been considered a sufficient obstacle, although in fact the route to Cephas from Bezabde is not difficult. But these two areas are highly vulnerable to Persian attack and without any river valley or mountain escarpment to define the frontier closely. The vain efforts of Belisarius to construct a fortress for Justinian at 'Mindouos', which were thwarted by the Persians in AD 530⁶²⁷, may indicate that construction of a long wall in this area, which was closely watched by armies on both sides during the sixth century, came to be considered even less feasible than construction of a new fortress. The village of Kalecik, ten kilometres north of Nisibis and high above the west bank of the Djaghdjagh, is a likely location for 'Mindouos' (*Mygdonius?*) since substantial blocks are still visible there⁶²⁸. It is not known whether the Romans succeeded later in finishing the fortress.

Zones or lines

The frontier in Mesopotamia was not a straight 'line on a map' which ignored topographical features nor did it always follow the shortest route. Whittaker has rightly emphasised the inadequate information available to emperors and their administrations when seeking to arrive at agreed boundaries⁶²⁹. This was especially true for desert regions and for those which were largely uninhabited, like much of the area between the Taurus and the Black Sea, which even today is extraordinarily empty of villages despite apparently fertile soil.

But in between, south of the Taurus and north of the steppe lay a rich region which had been settled for thousands of years before the Romans and the Persians appeared on the scene. This was a region which was highly productive agriculturally, often even without irrigation, which included resources in minerals⁶³⁰ and – perhaps – timber⁶³¹ and which was crossed by many important trade routes. It shared a common language, Aramaic, and from the third century also a common religion in Christianity, although Zoroastrianism and the Magi maintained their position amongst the landed elite.

Whittaker agreed with another major specialist of this region, Isaac⁶³², that

“...it simply did not matter much to the Romans where the boundary ran, since they did not see the border in terms of military defence. In the East it is particularly difficult to spot any kind of ‘system’ or rational, scientific, cost-effective thinking behind what were basically ad hoc decisions.”

Whittaker goes on to say ‘the very idea of a frontier as a line on a map is modern’. He cites Procopius who describes the region just to the north of the Roman province of Mesopotamia, Chorzene – a part of Armenia – where the inhabitants on both sides of the frontier held common markets, intermarried and even worked in each others’ fields⁶³³. Although Procopius goes on to mention populous towns, in fact this area today is very sparsely populated and seems never likely to have been urbanised.

For the followers of this sort of frontier theory the frontiers were *zones* and not *lines* and even where walls existed for great empires such as Hadrian’s Wall in the north of England or the Great Wall of China these created illusions of linear boundaries that bore little relation to reality. The investigations of the Gorgan wall, on the north-east frontier of the Sassanian empire and discussed above, may lead some to revise positions on this point but in any case it seems probable such linear defences were usually created to defend settled empires against nomadic raiders.

In the region of northern Mesopotamia warfare between Rome and Persia, both organised empires based on urban settlement, was also characterised by raiding of countryside and villages, but it was punctuated by major sieges of the cities and invasions by large armies. Whittaker noted the impossibility of defending a frontier line in this region and says ‘...At

no time did this [the boundary] look like a defensive frontier, or a frontier in depth, or an agreed limit of Roman power'. Liebeschütz also believed that in the sixth century there was

“...no way in which the Persians could be prevented from penetrating the empire. The only way to check an advance was by means of a field army strong enough to defeat or at least to threaten the invading force...⁶³⁴”.

And yet he notes barely a few lines later that “...*Looking at the century as a whole, nomads and Persians were kept out.*” Diplomacy and bribes no doubt played a part in protecting the cities, but the fortresses described in Chapter 5 are likely also to have had a deterrent effect on raiding and invasion.

* * *

Until the time of Trajan it had been accepted that the frontier between Rome and Persia lay along the Euphrates, sometimes as far down-river as Dura-Europos⁶³⁵. But after the victories of Septimius Severus and the establishment of Roman provinces on a permanent basis beyond the Euphrates there was no longer any generally accepted frontier line – at least not until after the disastrous expedition of Julian in AD363. This invasion was one of the last of many such Roman aggressions against what had seemed to them to be an inferior enemy. Thereafter it was more difficult to ignore the reality of a balance of power and of a common interest in preserving stable frontiers. As a matter of fact the line established in the treaty of AD363 did not change for many generations, despite short-term raids on each other's territory by both sides.

I have not visited the area in modern Syria south of Nisibis. It seems nevertheless probable that the line of the river *Mygdonius* (today, the ‘Djaghdjagh’) was followed north from the junction with the Khabur to a point near the city of Nisibis and that there was then a slight westward bulge as far as the Persian-controlled fort of *Sargathon* (now ‘Serjihan’ – see Gazetteer under ‘fortresses’). The area north and east of Nisibis is more complex and, exceptionally for the frontier between Rome and Persia after AD 363, there cannot have been a frontier line running south-north for reasons outlined below.

The specific case of the Tur Abdin

Even today this region to the north of Nisibis and south of the Tigris is known for its Syrian Orthodox monasteries, now lonely outposts of Aramaic-speaking Christianity which are

almost the only remnants of what used to be the dominant faith and language of the region. In the fifth and sixth centuries many of the monasteries were recently founded and were for the most part Melkite (also called Orthodox or Chalcedonian), but some along the southern flanks of the escarpment of the Tur Abdin were Nestorian. The oldest monastery of all is called Mar Augen (18km NE of Nisibis); during this period it was Nestorian and depended on a metropolitan bishop in Nisibis, whose see extended across the Tigris to other Christian areas of what was then known as Corduene⁶³⁶.

The frontier between Rome and Persia was assumed by Ernst Honigmann, perhaps the greatest expert on Rome's eastern frontiers, to cross the Tur Abdin in a line extending almost due north from Nisibis to the Byzantine fortress of Cepha, now Hasankeyf, and then following the Tigris west to a point opposite the junction with the Batman Su (the ancient river Nymphius). But this cannot be right, as Dillemann has already observed⁶³⁷. Several monasteries east of this line were beneficiaries of largesse from late Roman emperors. The largest, and even today the best-known, is called Qartmin or Mar Gabriel; its construction was completed in 512 under Anastasius⁶³⁸, but its origins go back to Arcadius⁶³⁹. Other sites such as Hah (or 'Khakh') seem to have continued as Chalcedonian bishoprics well into the seventh century. It seems probable that, on the one hand, the Nestorian monasteries dependent on Nisibis and, on the other, the Chalcedonian or Monophysite monasteries in the fifth and sixth centuries lay on Persian and Roman land respectively. It is also known that the fortress of Rhabdion (see Gazetteer under 'fortresses') south of Qartmin continued in Roman possession after AD363 when Nisibis was returned to the Persians and the idea of an 'exclave' propounded by Honigmann seems unrealistic. It remained under Roman control until 604/5, even though the neighbouring abbey of Qartmin was sacked by the Persians in 581⁶⁴⁰. Procopius in his story mentioned in Chapter 4-3i, talks of travelling to the fortress by a wagon road surrounded by Persian territory along the plain below the escarpment, but this did not preclude tracks across the rugged plateau behind which could have continued as Roman territory. Some land on the plain below Rhabdion is also known to have been cultivated by 'the Romans', apparently under the supervision of the monks of Qartmin. In exchange the Persians continued in possession of vineyards west of the Nymphius further north near the city of Martyropolis⁶⁴¹.

Below is an extract from a map of Honigmann from 1935⁶⁴². This shows the frontier passing west of monasteries such as Qartmin, known to have been in Roman territory. The following map reproduced from Dillemann⁶⁴³ (1962) shows the frontier further east, largely because he was aware of the importance of Qartmin (probably the fortress of Banasymeon mentioned by Procopius). For unexplained reasons he believed the Melabasus mountains to lie on the Persian side of the frontier⁶⁴⁴. The subsequent map from Palmer (1990) shows a more likely path for the frontier with the point of junction with the Tigris close to the present town of Idil (formerly ‘Azakh’ and claimed by local people and by the Turkish road atlas “Köy Köy Türkiye” as ‘Hazok’ in the Assyrian period). Both Dillemann’s and Palmer’s maps have the merit of showing Nestorian monasteries such as Mar Augen on the Persian side of the frontier – even though they lie right on the crest of the escarpment. Idil would lie on the Persian side of the frontier after 363 according to Palmer, but in my view the original church of Idil could have formed part of the same early group of buildings originating in the 5th century as Qartmin⁶⁴⁵ and it is more probable that the frontier lay just to the east, between Idil and Cizre, although the ground is level and there are no known material remains yet identified which might indicate such an important border in this area.

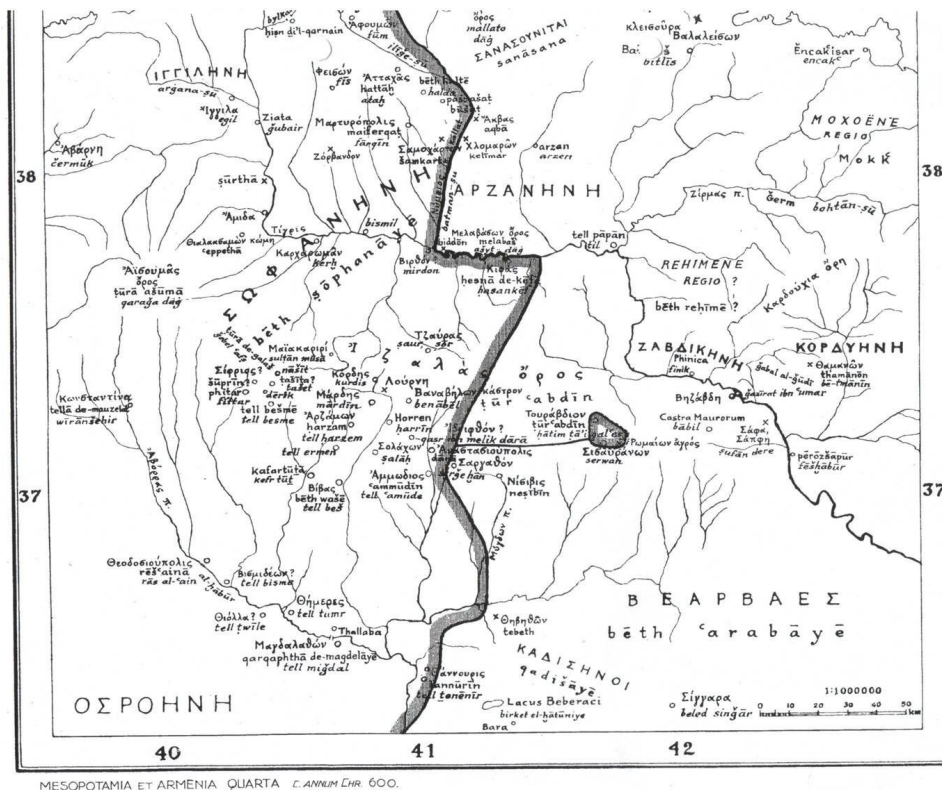
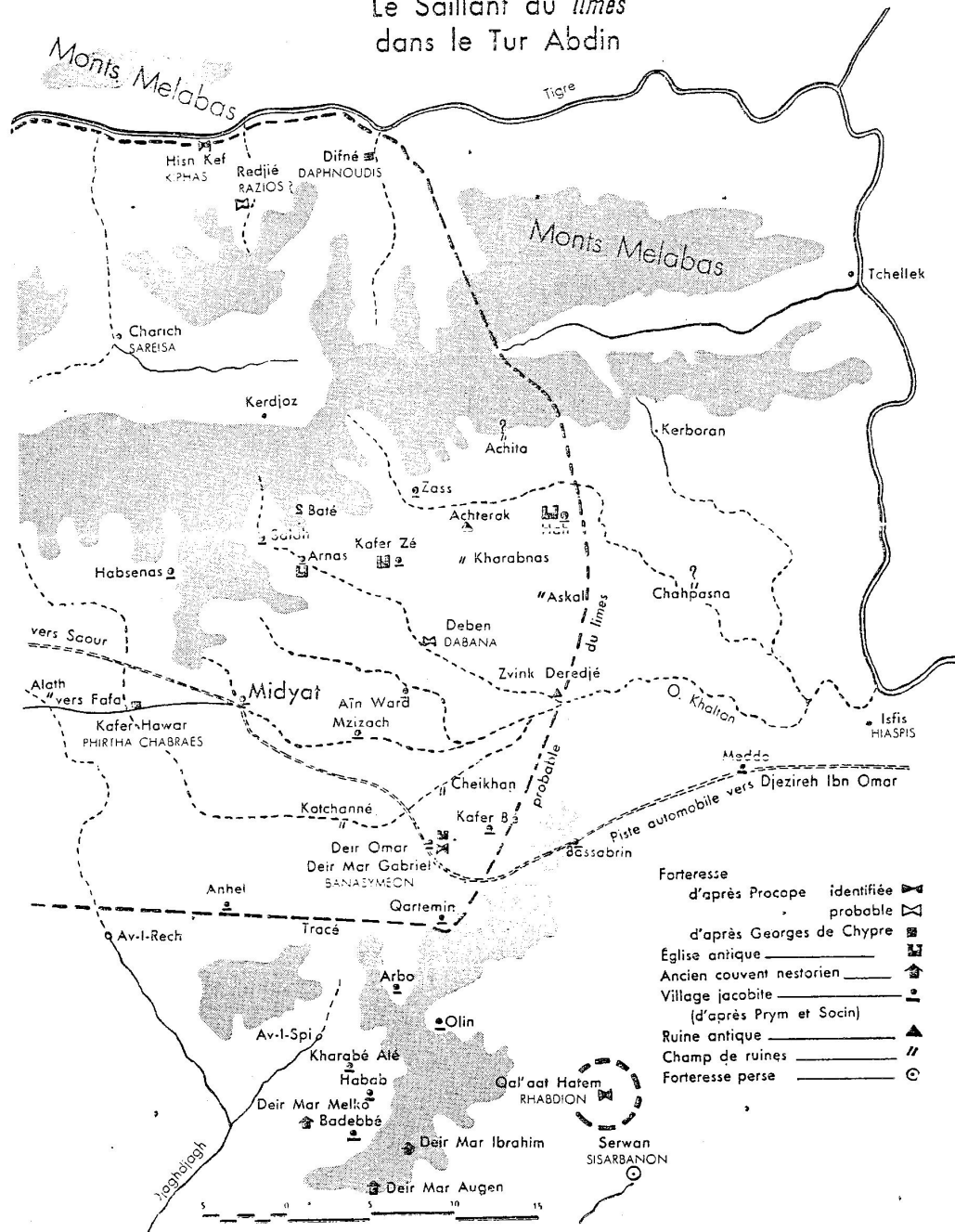


Fig. 21: Honigmann’s view of the frontier

Le Saillant du limes
dans le Tur Abdin



- Forteresse d'après Procope identifiée
- Forteresse d'après Procope probable
- Forteresse d'après Georges de Chypre
- Eglise antique
- Ancien couvent nestorien
- Village jacobite
- (d'après Prym et Socin)
- Ruine antique
- Champ de ruines
- Forteresse persa

Fig. XXXII.

Fig. 22: Dillemann's view of the frontier

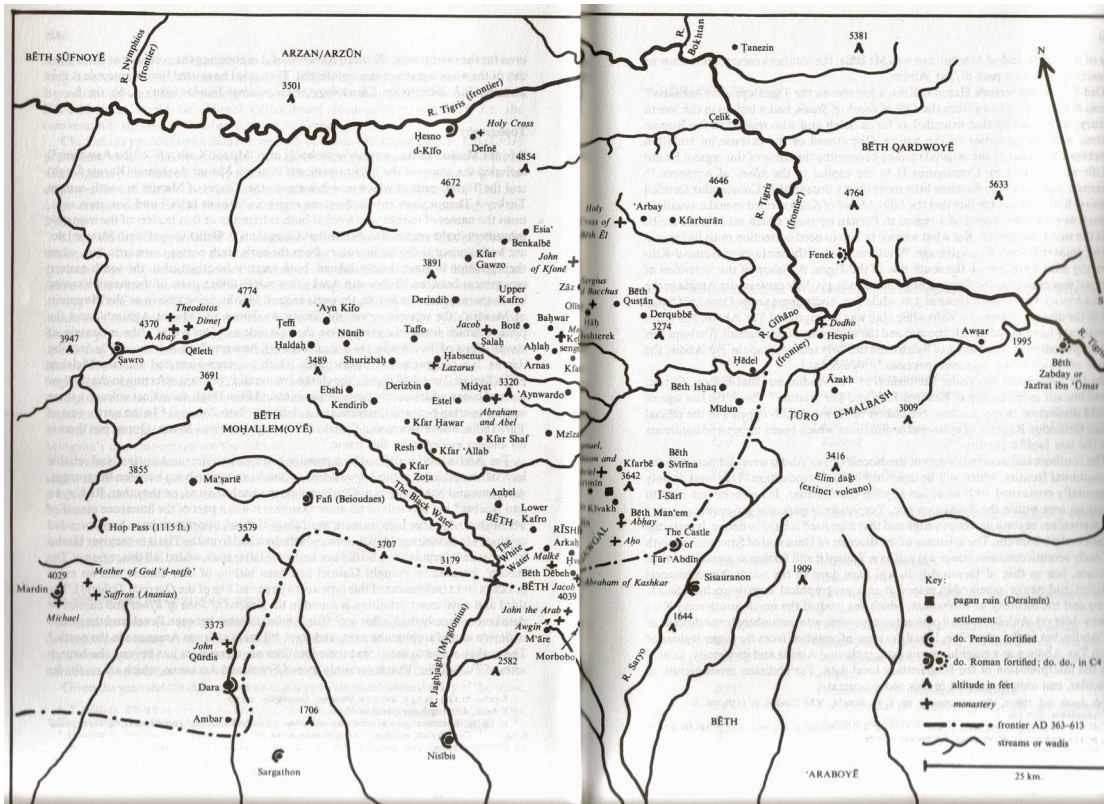


Fig.23: Palmer's view of the frontier

It can be deduced from the presence of Chalcedonian (or Monophysite) churches and monasteries that the border did indeed follow a line but that this line bore little relation to the topography nor to what was militarily defensible. North of Nisibis and west of the Roman fortress of Dara the frontier must have risen to the top of the escarpment to allow inclusion in Persian territory of Nestorian monasteries such as Mor Augen⁶⁴⁶. But further east along this escarpment both the top ridge and the land below must have been in Roman hands.

The most eastern point of territory controlled by the Romans probably lay north-east of Rhabdion where the enormously deep gorge of *Cehenna Dere* ('the Devil's Canyon') joins the Tigris and where there are still Christian churches, e.g. at Yarbaşı, formerly Isfis or Hespis and likely to have been the 'Hiaspis' mentioned by Ammianus Marcellinus as the

village on the frontier in AD 359⁶⁴⁷. After the loss of nearby Bezabde in 360 the junction of the two valleys may have marked the corner of the frontier as well. The presence nearby of fortified churches such as that at Bashak (see illustration in Chapter 5) may also indicate how exposed the situation was for villages on the Roman side of the border, although an early date before the seventh century is not certain for this church and it is not yet known whether these villages were Chalcedonian or Nestorian during the fifth and sixth centuries.

My own view of the frontier from AD 363 to AD 602 around the Tur Abdin is shown in the following map which shows the positions of contemporary monasteries as green circles and that of fortresses as blue triangles.

The valley of the Tigris north of Bezabde is for the most part in deep gorges and the banks may always have been sparsely populated. The frontier seems likely to have followed the river bank north to the point at which it is joined by an important tributary called the Bohtan Su, opposite the fourth century Roman fortress of Tilli (see Gazetteer), and then west along the main branch of the Tigris to Hasankeyf and the Batman Su. There is however, no known trace of a frontier road along the river on the Roman side, although such a road seems very probable on the Persian bank (see discussion of routes 1 and 2 in Chapter 4-1).

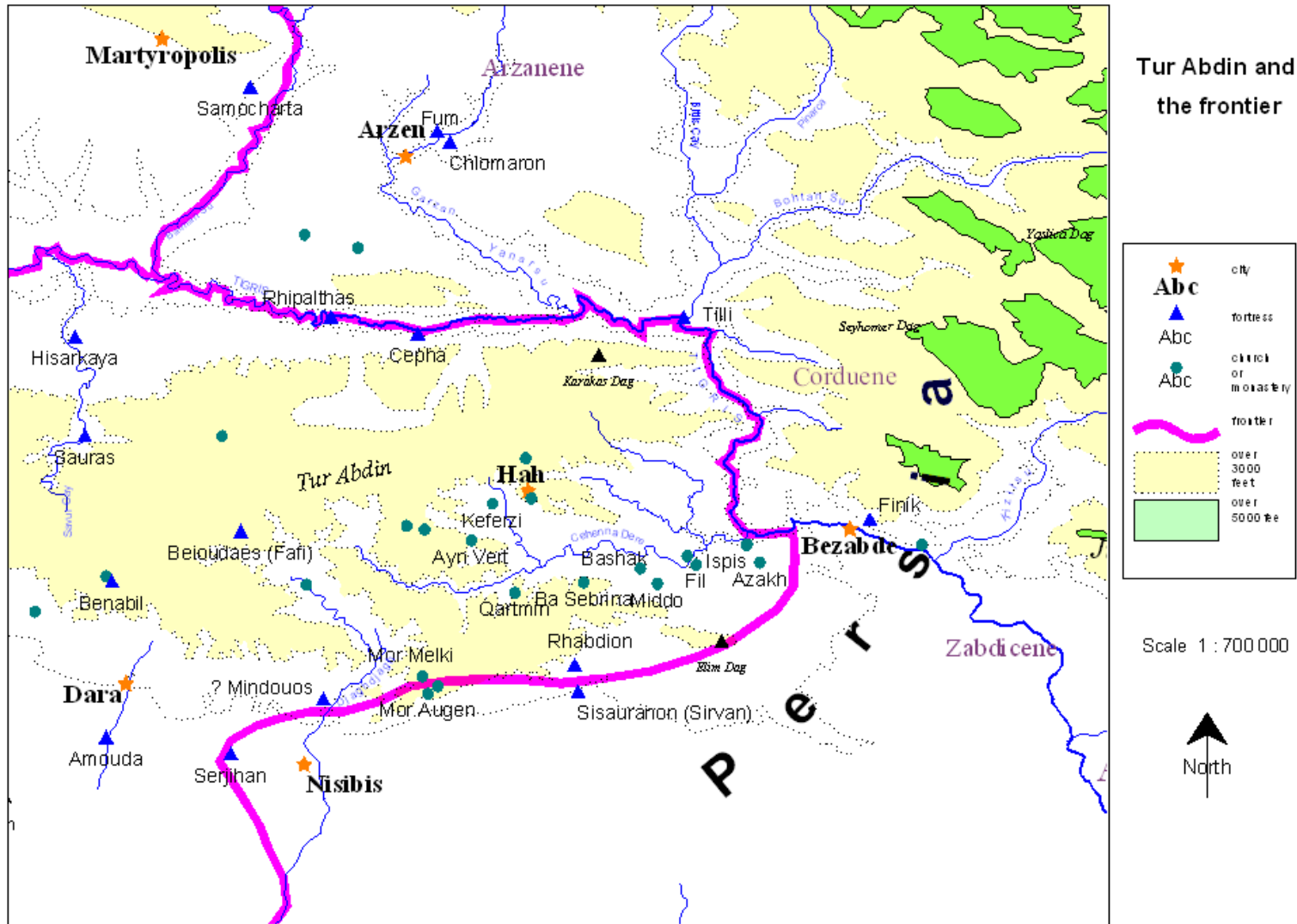


Figure 24

Establishing a boundary

The great density of forts and walled towns in the region (see Chapter 5) indicate that it was heavily militarised. This was probably true on the Persian side as well as the Roman one although less is known about it. But trade and exchanges are likely to have continued to some degree certainly in the peaceful times of the fifth century and probably throughout the sixth century as well; even in times of tension monks would cross the border' - for example, to and from the Djebel Sinjar, a range of hills 90km SE of Nisibis and occupied at least since the 18th century mostly by Yezidis, and between the schools and monasteries around Nisibis and Edessa. The land was cultivated very widely; raiding by nomads and by regular troops of each side in the sixth century must have severely affected agriculture, but a monk's tale from around 600 speaks of cultivation of barley by a community near Nisibis⁶⁴⁸. Both sides maintained standing armies and garrisons which were paid principally from the proceeds of a tax on land. Roman law codes make it clear that the maintenance of the peasants on their land was an important objective in order to preserve the flow of tax revenues⁶⁴⁹.

This meant that every village, and especially those near the frontier, had to be strongly aware of the particular city and imperial authority on which they depended and which sent out to them the tax officials. There can have been little room for doubt in highly-settled areas of where the boundary ran, even if it was not demarcated on the ground with signposts and barbed wire. As recounted in Chapter 4-3, Procopius tells us of his astonishment in finding that the main road to the important Roman castle of Rhabdion, on the southern crest of the Tur Abdin some 40km east of Nisibis, was surrounded on both sides by Persian territory and at the explanation which he was given for the fact that even the fertile ground below this castle was Roman territory, although apparently separated from the main body of the empire to the west⁶⁵⁰.

However, apart from the settled villages, nomadic tribes were also important users of the land. Transhumance involving such tribes is said to have led to the establishment of a frontier commission in 484 involving Barsauma, bishop of Nisibis, the Persian *Marzban*, the Roman *Dux* and the leaders of the Arab tribes⁶⁵¹. Presumably this body possessed the information and tools needed to lay down a boundary between the two empires. How they

set about it is regrettably unknown but the degree of collaboration in both delimiting the frontier and cracking down on the marauding activities of nomads owing theoretical allegiance to one or the other side is impressive.

Other factors which are likely to have led to a very clear sense of where the boundaries lay include '*portoria*' or customs duties. We know that the expenses, or possibly the salaries, of the *duces* or military leaders of the Roman provinces of Palestine and Mesopotamia were covered by the product of taxes on goods traded across the frontiers⁶⁵². Self-evidently, such duties must have been levied at customs posts (although not necessarily only on the external frontiers since there was also a customs officer – *τελωνης* - on the Euphrates crossing at Zeugma⁶⁵³). The collection of taxes, especially on imports of silk was the responsibility of particular government officials under the *comes commerciorum* for Egypt and 'Oriens' and the levies on caravans transporting high value articles such as silk are likely to have been very substantial, although – as discussed below in the following section - there is no information permitting a calculation, whether of the total revenues accruing or of the proportion of government income derived from such levies.

Customs posts need not always have been on international borders alone but the law quoted above of AD 408/9 which limited merchants to crossings at Nisibis, Artaxata and Nicephorium indicates both an official knowledge of where borders lay and, probably, a wish on the part of the government in Constantinople to maximise revenue from *portoria* (although the need to limit the activity of spies is also mentioned)⁶⁵⁴; similarly, legal jurisdiction and responsibility for the apprehension of law-breakers must have required detailed knowledge of the boundaries. We know of some cases where the Persian authorities arrested nomadic raiders who apparently belonged to tribes from within their own jurisdiction because they had conducted raids across the frontier which were against the terms of international treaties and of others where the Persian authorities arrested fugitives at the request of the Romans⁶⁵⁵. This also offers also an interesting light on the contacts between military commanders on either side of the borders which must have been close.

Dillemann identifies several buildings which he identifies as frontier posts, although I have seen none of them⁶⁵⁶. He mentions a small fort at 'Qasr Chouek'⁶⁵⁷, 4km west of the

Persian border fortress of Serjihan/Sargathon on the road to Amouda (see gazetteer); the fort at Tell Brak (possibly Thebeta) on the road from Dara to Thilapsum; and the fort at Thannouris on the road to Singara (see gazetteer). All of these are now in Syria. He believed that these forts may have been associated with a reform of customs controls introduced after the treaty of 562, when in this region trade was still officially limited to Nisibis. But such posts would in any case have been necessary on the roads to Persian territory in order to deter raids and control the passage of travellers. In the absence of further information it is not possible to draw conclusions on how the frontier was policed.

As part 2 of Chapter 4 on travel has made clear, there were many categories of people who were passing to and fro across the border. Such movement was facilitated by the roads discussed in Chapter 4-1 but also by the shared cultural and linguistic identity of most people living in the area on both sides of the border. Although Syriac, the written language developed in Edessa and Nisibis was only one branch of Aramaic, it seems very probable from the numbers and type of travellers that ordinary people from Antioch to Ctesiphon could communicate orally with relative ease. This cultural homogeneity was promoted by the growth of Christianity in the first four centuries AD. By the time of the emperor Theodosius the late Roman empire had been Christianised, at least on the formal level and with a few exceptions such as the moon-worshippers of Harran, but many areas on the Persian side of the frontier agreed in AD363 were also Christian and had indeed been amongst the first areas converted. Nestorian Christianity in Persia had grown rapidly since the first council there in 410 and this growth may itself have been associated with the need of Christian communities to dissociate themselves from the 'Chalcedonian' Christianity of Constantinople. Despite this division and the closure of the Nestorian School of the Persians in Edessa links continued, as the reports of Persians visiting Hierapolis indicate⁶⁵⁸.

ii) Trade

Trade and economic links across the border are however more difficult to assess. The Peutinger Table shows many routes crossing into Sassanian Persia, which are discussed in Chapter 4-1. We also know from the *Expositio Totius Mundi* that Edessa and Nisibis were cities wealthy in large part from trade and that a wide variety of goods was traded across

the frontier (but not metals, whose export was prevented by the Roman authorities apparently because of its military value to their opponents⁶⁵⁹). The ‘*Lives of Elijah and Theodore*’, the two merchants presented by John of Ephesus and discussed in Chapter 4-2, are also good evidence for the passage across the frontier of traders themselves⁶⁶⁰. Unfortunately, there is no means of assessing the value of this cross-border trade nor of its relative importance in the economy of either empire - nor therefore of its importance to the regions and cities through which it passed. We do however know that Roman emperors, in particular, Justinian, did make efforts to circumvent Persian control of the silk trade routes by contacts with Ethiopia and with the Turks of Central Asia⁶⁶¹. The later establishment of silk production inside the Roman Empire following the smuggling of silk worms out to the Roman Empire⁶⁶² may be an indication that the border constituted an obstacle to trade in high-value items, particularly in time of war.

By implication, however, trade in silk continued in times of tension between Rome and Persia and perhaps even in war-time. The desire to establish a local production indicates rather a wish to avoid the excessive cost, especially for silk and garments including brocade and silk, which may have resulted from heavy taxes imposed by the Sassanians and not from the existence of the border *per se*.

Apart from its military value, the road network described above was certainly a major factor in the economic development of the region; as discussed in Chapter 5, both cross-border and intra-regional trade will have benefited from improved communications and ease of transport. However, the basic material for a study of the trade and the economy of late antiquity in the region of the Middle East is poor, except in regard to Egypt, and is limited even there. Ancient authors were in general not interested in economic theory and the sources of wealth. Apart from the lack of specific information on trade relations and the economy, there was a general prejudice against personal wealth except when acquired through land ownership⁶⁶³. The historical sources available for the eastern Roman Empire in late antiquity also show an almost total disregard for practicalities such as wealth creation, redistribution and economic growth, as well as for trade, production and the analysis of class and social distinctions. To some extent, this apparent lack of interest may result from the eagerness of many authors, especially Procopius, to follow recognised

canons for the genre of literature selected⁶⁶⁴. There are, however, a few references in Procopius – discussed below – which do show an awareness of the economic consequences of state policy.

Archaeology and the physical remains from antiquity do in some cases compensate for this disregard by the historians and occasionally even permit a quantitative analysis based, for example, on numbers of amphorae found at specific locations⁶⁶⁵. However, in the region examined here archaeological evidence available at present can be used to supplement the written sources only to a very limited extent, although this is increasingly discussed⁶⁶⁶. Official documents on tax revenues and economic policy are almost wholly lacking, but there is one important partial exception to this: at Zeugma during the excavations conducted between 1998 and 2000 in connection with the construction of the Birecik dam, a very large number of seal impressions on clay or ‘bullae’ was found. Most of these came from a small building (4m30 by 3m30) called by the excavator the ‘Agora Archive’; this alone contained 65 000 seal impressions and more were found elsewhere⁶⁶⁷. The excavator believes that the documents originally attached to these seals would have included scrolls of censuses, records of cadastral surveys and various other official records; but there would also have been private documents of a commercial nature. Sadly, none of the original documents have survived.

The conditions of rescue archaeology under which even recent excavations of sites from the classical period and late antiquity in the three provinces concerned have been undertaken have made it difficult for conclusions to be drawn on economic issues, but Wickham has examined the archaeological evidence and concludes, for example, that - in regard to the eastern frontier, it is probable that some of the oil and wine produced in the limestone massif east of Antioch was transported to the soldiers on the Roman *limes*⁶⁶⁸. The long-distance transport required is likely to have involved wheeled vehicles (see discussion in Chapter 4-3) and has implications also for inter-regional trade, although there is as yet no clear evidence that trade in agricultural products took place across the frontier.

* * * *

Acquisition or loss of wealth was certainly as important to individuals then as it is now. Some Roman landowners were notorious in the late empire for their enormous wealth and very rich men certainly existed in Asia Minor and Syria. Opramoas of Lycia was rich enough to restore public buildings in many cities of Lycia as shown especially by the inscription of Rhodiapolis, but in his case at least evidence for the source of his wealth lacking⁶⁶⁹. In the eastern provinces examined here only literary evidence can be used for such wealth; no relevant inscriptions have been found outside Palmyra.

Segal reports on two leading men of Edessa at the end of the sixth century, Marinus and Iwannis Rospaya. The latter's palace was admired by Khusro II when he fled from Persia in AD 590 and Iwannis then invited the Persian king and all the nobles of the city to dinner.

“...In order to demonstrate that he was richer than Marinus, he displayed his treasure of gold and silver tables and trays and chargers, dessert dishes, spoons, and saucers. His cups and wine goblets, his pots and jugs and carafes and bowls and other vessels were all of silver. There was more that he did not show. When the Rospaya treasure was discovered nearly 300 years later, in the reign of Harun al-Rashid, there were other ‘princely articles’ – snakes and scorpions of silver filled with elixir, and plate and coins.^{670,}”

The emperor Heraclius is said by Segal to have resided in the house of Iwannis' rival Marinus on his stay in the city following its recapture in 618. These two rich men were not exceptional: in 262 and 500, the nobles of Edessa contributed large sums to establish hospices and infirmaries for the poor⁶⁷¹.

It is unknown how these private individuals acquired their wealth, but rents from land and sale of agricultural produce are usually considered to be the main origin of private fortunes. Segal notes that there are few references to merchants, whose activities were frequently considered dishonourable even in Edessa. Amongst the other occupations exercised in Edessa in the sixth century and mentioned in the sources were medicine, theology, public administration and a wide range of crafts, including baking, and shop-keeping. None seems likely to have been the source of a great fortune. The surrounding region was devoted to intensive agriculture⁶⁷², presumably for the most part on small plots of land; it is only recently that irrigation using water from the Ataturk dam on the Euphrates has made the plains east and south of Edessa fertile and suitable for large-scale agriculture.

Given the dearth of information on the economy, it is not possible to describe many people who achieved high social status in these provinces through trade during this period, even

though wealthy landowners may often have been commercially active through intermediaries. The information available on merchants is discussed above in Chapter 4-2. We may suspect that the international silk trade had some connection with the wealth of Marinus and the Rospaya family but do not know. Jones does mention ‘merchant princes of Alexandria’ with fortunes of up to 20 000 solidi (275 pounds of gold), but comments that even these could not compare with the income from land of some Roman senators, which might reach 1500 pounds of gold⁶⁷³. Possibly the land of the Nile delta was more fruitful than that around Edessa, but such wealth from land must also imply a market economy whereby agricultural produce is sold in cities and therefore a substantial degree of local trade.

One indication of the importance of international trade to the central government in Constantinople is the existence of the office of *comes commerciorum*. According to the ‘Notitia Dignitatum’, there were initially only three of these, of which one was responsible ‘*per Orientem et Aegyptum*’⁶⁷⁴. He appears to have been based at Antioch. Their role seems to have been both to supervise the collection of *portoria* and to control the trade in silk, an imperial monopoly⁶⁷⁵. According to the Codex of Justinian, Roman merchants trading with Persia were not only confined to exchange goods at the three specified posts of Nisibis, Artaxata and Callinicum but also to do so only in the presence of a *comes commerciorum*⁶⁷⁶. Later in the sixth century there were certainly more than three and the Greek term ‘*kommerkiarioi*’ is used. In the *Life of Moschos, the merchant of Tyre*, Moschos is falsely accused but his property is later restored to him by the emperor who re-appointed him to his former position and made him his representative⁶⁷⁷. He was very likely to have been serving the *comes commerciorum*.

Many different lead seals of these officials have been found, especially from the seventh and eighth centuries. The seals and the role of the *comites commerciorum* are discussed at length by Brandes⁶⁷⁸, who also comments on earlier studies. He notes that they depended from the department of the late Roman state called ‘*comitiva sacrarum largitionum*’. In the sixth century dealing directly with the ‘barbarians’ in order to purchase silk was still punished by the confiscation of the perpetrator’s property; the illegal silk might go to the ‘*kommerkiarios*’, who apparently had a role as a dealer and not just as an imperial official⁶⁷⁹. He is therefore likely to have bought his office out of the proceeds of the silk

trade, some of which he passed on to the imperial treasury. The revenues accruing from *portoria* and various other taxes are discussed below.

In regard to an interest in general economic and social phenomena, not all contemporary sources for the eastern empire are totally lacking in an awareness of the consequences of public policy. Procopius – exceptionally - does mention in the Secret History both that government restrictions on imports of raw silk imposed by Justinian had disastrous consequences for groups of people such as the artisans involved in silk production⁶⁸⁰ and that the reductions in the public post made life difficult for landowners⁶⁸¹. But no such observations occur in his histories either of the Gothic or of the Persian wars. For the mechanics of the economy and in particular for trade and finance in the late antique eastern Roman Empire we are almost completely without evidence.

The restrictive view of the ancient economy according to which the state played a dominant role in trade, which in turn was only a minor part of an economy that remained at all times centred on subsistence farming, is associated in particular with the writings of AHM Jones⁶⁸² and especially of Moses Finley⁶⁸³. Jones emphasised the paramount importance of agriculture (p769), especially in regard to state revenues; he also drew attention to the factors which restricted private commerce, in particular the exclusive use by the state of its own resources for manufacture and transport (p827). He then showed how long-distance trade in grain was profitable for private citizens only when transport by sea or river was available (p845). Finley rejected the idea of a world market for goods and emphasised the lack of commercial or capitalist exploitation of economic resources (p158); he draws attention to the fact that no wars in antiquity took place for commercial reasons and to the absence of economic justification for the state's investments in infrastructure such as ports, claiming that these aimed to satisfy material wants rather than to promote trade (p159).

The idea of a market economy based on the activities of many individual producers and traders exchanging goods for money and subject to the laws of supply and demand is difficult to reconcile with such views, which seem to deny any important role in the economy for merchants.

In particular, those who minimise the role of private commercial activity assume that tax revenue arising from trade (in particular from *'portoria'*) must have been only a small fraction of the total revenue of the state, which arose for the most part from taxes on land and people. In fact, it is entirely unclear how the revenue from tax on trade compared with that on land⁶⁸⁴. The rate of 25% levied on some imports from outside the empire during the Principate⁶⁸⁵ is likely to have been reduced in the later empire, possibly to 10% since the treaty of AD 561, whose terms are related by Menander Protector, or 'The Guardsman'⁶⁸⁶, refers to δεκαευτερια, apparently '10% places' or stations for collection of customs duties. (These 'specified customs posts' were probably at the three places nominated for the passage of merchants by earlier treaties: Nisibis, Artaxata and Callinicum - see discussion of travelers in Chapter 4-2 above). But there is no evidence for the amounts actually collected.

For Syria and the East in late antiquity, Libanius of Antioch is an important source for the fourth century but the information which he provides is still very limited. Liebeschuetz comments on the paucity of written evidence but also draws attention to other information such as that available for Edessa in Joshua the Stylite which permits a comparison of the value of land tax and 'traders' tax' (*χρυσσαργυρον*)⁶⁸⁷. But while he and Jones, who also looks at the same reference, conclude that the revenue from the latter was only about one twentieth of that accruing from land tax, they are unable to compare the revenues from *'portoria'* or customs duties which may have been much higher, as indicated above.

De Laet believed that taxes on imports at the external frontiers of the empire were higher than internal levies but drew attention to the variety of tax rates imposed and to the 'multiplicity of customs offices', which may have constituted a more important obstacle to trade under the early empire. He downplays the importance of customs revenues in the late empire (possibly because of an unjustified conviction that it was a period of economic stagnation), but indicates that in the fourth century the rate of duty need not necessarily have been 12½%, as the many references to the 'octava' in the Codes of Theodosius and Justinian imply⁶⁸⁸. The 'octava' may have been a sales tax rather than a customs duty on imports from outside the empire⁶⁸⁹. The tax must have been paid in cash, like the *χρυσσαργυρον* or *'collatio lustralis'*, a tax levied directly on artisans and small traders at

four or five-year intervals. (Joshua the Stylite informs us that this tax was abolished by Anastasius in AD 497⁶⁹⁰).

At least some of the products to which ‘vectigalia’ (a term which refers to *portoria*, but also includes sales and city taxes) were applied are mentioned in Justinian’s Digest⁶⁹¹. This list, which includes spices, furs and metals was apparently drawn up by Marcian, a jurist of the third century, and is referred to by AHM Jones⁶⁹². There was however a much wider range of items traded from Syria, including in particular textiles, glass, pottery, metalwork and slaves. The evidence from the whole period of the Roman Empire is discussed by West⁶⁹³ and for the early imperial period by Heichelheim⁶⁹⁴. The latter draws in particular on evidence from the Talmud which mentions trade in wine, corn, jewellery, exotic woods, fruit, meat and fish, in addition to the products listed above.

Jones believed that international trade was strictly controlled mainly for security reasons. It is doubtless true that channelling trade through a small number of centres, as discussed below, was intended partly to reduce espionage and prevent the export of forbidden products such as silk – but, at least on the Eastern frontier, controls on traders may have been just as much to maximise revenue and in particular to impose the lucrative state monopoly on purchase of silk⁶⁹⁵. The section on trade in the codex of Justinian (4.63: *De commerciis et mercatoribus*) is not especially long but its focus is on revenue and this must also imply an interest of the state in the promotion of trade.

The role of trade independent of the state continues to be minimised by some writers.

Maurice Sartre went so far as to say in 2000 that

*‘...It is absurd to envisage a constant flow of merchants and caravans criss-crossing the deserts of Arabia, Syria and Mesopotamia. These exchanges remained marginal, though they doubtless enriched their practitioners.’*⁶⁹⁶

The ruins of Palmyra and Petra, amongst many others, attest the opposite during the early empire. Where good agricultural land is in short supply, as must have been the case for many of the region’s cities, wealth is likely to have been accumulated from commerce rather than from land. The extraordinary range of colonnades and public buildings at cities surrounded by desert appears likely to this observer to have been financed largely from the

profits of private caravan-owners and not from either *portoria* or land taxes. Our knowledge of Aleppo in later periods⁶⁹⁷ also shows that caravans and merchants were a stable and constant feature of economic life of the region over millennia, to the extent that it seems far from excessive to claim that commerce was for many cities in these provinces the most important form of economic activity, even if the bulk of the population was engaged in agriculture rather than commerce.

In conclusion, despite the poor quality of the evidence, it seems probable, firstly, that revenues from taxes on trade were substantial and constituted a major incentive for the state to promote trade and protect merchants; and secondly, that commerce was the leading source of private wealth in these provinces.

* * * *

The difficulties of transport which had already been seen by Weber as restricting growth and the development of capitalism⁶⁹⁸ are again considered important by Jones and Finley. The former drew attention to the tariff of Diocletian and the apparent evidence it represents for the much higher cost of wagon transport over camels, which in turn was far higher than maritime transport⁶⁹⁹. In his chapter on '*Town and Country*' Finley also emphasises the great difficulties of land transport. He mentions the famine at Antioch in 362-3 which caused great suffering despite the ready availability of grain fifty miles away along a Roman road⁷⁰⁰. In regard to these roads he states that:

'Roman armies could march long distances along the roads; they could neither be fed nor clothed nor armed from long distances by those routes'.

However, the arms factories mentioned in the *Notitia Dignitatum* are not many. The factory of Edessa, for example, must have distributed its arms rather widely to army units throughout the eastern provinces. Although land transport of grain to relieve famine in the cities may have presented insuperable difficulties in some cases, the army must have used the roads to transport its needs in terms of food, clothing and weapons, and usually by wagon. The issue of wheeled transport was addressed in Chapter 4-3. To this observer, it seems evident that the roads of the region were constructed and maintained in part precisely for the purpose of supplying the army.

Some transport of corn to Antioch from Euphratesia and Mesopotamia was also 'normal' in peacetime. Liebeschuetz quotes Libanius⁷⁰¹ in regard to corn transport duties; these had reduced members of the Council of Antioch to penury in earlier times but the need to feed the armies on the frontier continued. Taxation in kind and as transport obligations provided the means, even if the taxes were frequently paid in gold from the reign of Constantine.

Finley also goes on to dismiss the potential of manufactures as a means by which a city might pay for its imports. But this argument must be of doubtful validity in the Middle East when it is clear from the *'Expositio totius mundi et gentium'* that several cities were well-known for such manufactures⁷⁰². Although Edessa and Nisibis are the only two cities mentioned by name in the region discussed here (Amida may have been omitted by mistake), it is also apparent that trade between Rome and Persia was an important source of their wealth. The author of the *Expositio* describes them as *'...ferventes negotiis et transigentes cum omni provincia bene'*, a phrase which I translate as "bubbling with commercial activity and dealing profitably with every province"⁷⁰³. It may well be that the author of the *Expositio* was a merchant himself and inclined to exaggerate the importance of trade but, even if the cities which he describes were reliant for the most part on staple agricultural products produced locally, it is clear that for many cities in regions with poor soil or climatic conditions unsuitable for agriculture inter-regional or international trade in a wide range of products is likely to have been a more important source of income than rents from land.

As mentioned above for Edessa, in late antiquity there was a wide range of specialised occupations in cities. These are investigated by Patlagean⁷⁰⁴ with especial reference to those mentioned on the grave-stones of Korykos, a small city of Cilicia⁷⁰⁵. Such a number of specialised occupations implies a high level of exchange within the society and, probably also, between cities. But merchants and transporters, such as carters, are notably absent from the professions mentioned and indeed from the list of professions drawn up by Heichelheim⁷⁰⁶. For Palmyra this situation is of course untrue: many inscriptions attest to the importance of merchants and caravans. But Palmyra is often claimed to be a special case and Young's study concludes that even Hatra was more important as a religious than a trading centre⁷⁰⁷.

The main difficulty lies in the lack of evidence outside Palmyra for the origins of personal wealth - in the ancient world in general but in the late Roman Empire in the east in particular. Nevertheless, while the study of the acquisition of wealth at the individual level may be almost impossible, analysis of economic activity in the ancient world at a general level permits some further conclusions.

For the Roman imperial period, Hopkins⁷⁰⁸, for example, divides Roman provinces into three tiers i.e. 1) an outer ring of frontier provinces in which armies were stationed; 2) an inner ring of relatively rich tax-exporting provinces; and 3) Rome and Italy which, like the frontier provinces with armies, consumed a large amount of taxes. In the fifth and sixth centuries Mesopotamia and Osroene (but not Euphratesia) would have been part of the outer ring where armies were stationed and which therefore were net consumers of taxes. He draws attention to the stimulus to internal trade which this situation provoked. These provinces were of course not only beneficiaries of the trade provoked by the presence of large numbers of soldiers; they were also situated on important routes for international trade.

Hopkins emphasises that money taxes would always have been only a small part of the total output of a subsistence farmer but, together with rents and trade, the requirement to pay taxes in money added a veneer of sophistication which allowed much higher levels of consumption for some than if the economy had been tied solely to subsistence agriculture. He also draws a distinction between the urbanised economies of the eastern empire, which had been paying tax long before the arrival of the Romans, and new provinces imposed on a previously tribal society. He acknowledges that the requirement introduced by Diocletian to pay taxes partly in kind would have had a depressive effect on trade and the market economy since the agricultural produce concerned would have been delivered direct to the point of consumption with no commerce involved (although the transport would presumably have been provided in some cases by private contractors). But by the fifth century it seems that tax payments were again usually in money⁷⁰⁹.

Hopkins notes the relatively low level of taxation (corresponding to a very basic level of public services) and the extremely small numbers of bureaucrats in relation, for example, to

the contemporary Chinese empire. Of course, the numbers of officials increased substantially in late antiquity, but nevertheless the argument holds in relative terms and the conclusion to be drawn seems to be that tax payments, public expenditure and therefore trade between the inner and outer rings of provinces may have been small in relation to the total economy.

Hopkin's argument that public expenditure was generally low in relation to the size of the economy as a whole may not, however, apply to the heavily militarised area of northern Mesopotamia where both troops and fortifications must have required large volumes of expenditure and therefore large imports during the sixth century. Although archaeological evidence such as amphorae for transport of wine and oil is so far lacking, it seems clear that, irrespective of salaries paid to soldiers, constructing the fortifications, roads and bridges discussed above resulted in substantial net transfer of resources to the provinces discussed here. This expenditure would have necessarily resulted in flows of goods to the region from other parts of the empire, quite apart from items such as silk being traded across the frontier.

Overland trade and the eastern provinces

Recent publications on the importance of trade and land transport in late antiquity have tended to accept a more important role than Finley would allow⁷¹⁰. Great weight has also been laid on the role of the army. Thus Pollard, who investigates the applicability of Hopkins' model to Syria, concludes once again in regard to taxation that it is not possible to assess the importance of *portoria* in regard to direct taxation on land and persons but that the revenue concerned for Syria must have been very considerable⁷¹¹. The East Mediterranean economy in late antiquity as a whole is the subject of a chapter by the editors of the proceedings of a conference in 1999⁷¹². Kingsley and Decker discuss in particular the economic roles of the army and the church but also comment on various phenomena which contradict the established view of trade as predominantly a state-run affair. They emphasise the potential of pottery analysis for providing hard evidence of trade flows. Apart from the enormous exports in amphorae from the eastern Mediterranean to the

west there were substantial flows of food products exported from the same areas to north Africa and to Egypt.

It is evident from the subsequent chapters of these proceedings that Palestine and north Syria were major sources of food exports, in particular oil and wine. Decker, in his chapter on north Syria discusses the evidence represented by oil and/or wine presses and the probable destination of much of this production (which he assumes to be Constantinople). He believes that the level of agricultural activity revealed by the presses east of Aleppo is rivalled by other north Syrian centres such as Cyrrhus, Laodicea and Beroea itself (Aleppo). The author of this document can confirm from his own researches around Zeugma on the Euphrates the very widespread existence of presses (and cisterns) between Doliche and Edessa, and in the Tur Abdin⁷¹³.

For areas to the east of Edessa, olives are an unlikely crop but vineyards are still common in the Tur Abdin even today, with wine being produced especially by the Syrian Orthodox community. Exports of agricultural production to the Mediterranean or Anatolia from the three provinces concerned here (Euphratesia, Osroene and Mesopotamia) would of course have involved long journeys by land, but at least the possibility of such intra-regional trade in agricultural products needs to be borne in mind. Oil in amphorae as well as wine must have been consumed in large quantities by Roman garrisons and armies in the east, as well as by the Greek-speaking cities. Such exports because of their weight would often have involved wheeled vehicles and therefore have required well-made roads and bridges.

Sassanian Persia is also known to have consumed large quantities of wine; according to Heichelheim much was produced even in Babylonia⁷¹⁴, but cross-frontier exports are also a possibility for the wine produced, for example, in the Tur Abdin. Unfortunately the evidence for such trade is at present non-existent but we know from Procopius that an area surrounded by Roman territory near Martyropolis which produced wine was held by the Persians after AD 363 in exchange for the agricultural land in the plain between the Roman castle of Rhabdion on the southern edge of the Tur Abdin and the Persian-held castle of Sisauranon⁷¹⁵. Presumably the production of wine from this vineyard at least was sent to Ctesiphon.

Other products which may have been involved in overland trade between provinces would have included timber, stone, other building materials, metal ores and ingots, finished metal products, clothing and textiles, glass, papyrus and books, medicines and spices – and, of course, silk. The metals, textiles and spices were also the object of international trade, but there were restrictions on the export of iron and bronze, apparently for military reasons. In regard to such long-distance commerce, Mundell Mango discusses non-ceramic evidence for late antique industry and trade in chapter five of the above-mentioned proceedings.

In their introductory chapter Kingsley and Decker discuss trade between the east and west Mediterranean in late antiquity; they gained

“...the distinct impression that the Mediterranean market was saturated with a broad array of differently spiced and classed oils, wines, sauces and honey, which were sold as semi-luxury produce for their ‘exotic’ value.”

Such trade would of course have been conducted for the most part by sea. Mundell Mango’s products are more specifically luxury items traded over long distances, often by land. It seems probable that the international trade by land routes was conducted normally by caravans using pack animals, because of the slowness of carts drawn by oxen. However, there must be some doubt in regard to long-distance transport of heavier items such as amphorae and the question of the replacement of wheeled vehicles by camels throughout the Middle East, which was examined above in chapter 4-3.

The place of production of many of the Byzantine metal items known to have been exported to a wide range of destinations examined remains unknown. In many cases Alexandria and coastal cities of Syria and Palestine are likely to have been the location of production, but it is evident that the metal ores from which these items were produced must also have been transported - and usually by land. An alternative solution would be for the places of production, at least for metal ingots, to have been located near the mines, but in this case too the heavy refined metals would also probably have had to be carried by ox-carts and not camels. Possibly an intermediate location for smelting, close to supplies of charcoal but not too far from markets is indicated.

The area of Ergani, north of *Amida* (Diyarbakır) is a source of rich metal ores⁷¹⁶.

Regrettably, there is as yet no strong evidence that it was mined in antiquity, but ancient copper mines at least seem to have been destroyed by modern workings⁷¹⁷. Gold mines are

also known to have functioned in the sixth century somewhere to the east of Malatya. Processed or not, ores would have been exported from such regions by road probably to Antioch and the cities of western Syria, as well as down the Tigris to Ctesiphon and Seleuceia⁷¹⁸.

It seems probable that most long-distance trade was always conducted using camels in this region (although the early Assyrians in their commerce with Anatolia used donkeys). However, heavy items such as stone and metal ingots must sometimes have been taken in wheeled vehicles, at least as far as the nearest substantial river. For intra-regional trade it seems not credible to state that all trade in agricultural produce was carried on camels or donkeys. Cities needed grain, but also a wide range of agricultural products that could not easily be carried by pack-animals. Although most such produce came from the countryside near the city, some was traded over long distances, for we know that certain regions were famous for their oil, wine, fruits and so on⁷¹⁹.

The archaeological evidence for trade in agricultural products is discussed, for example, by Ward-Perkins⁷²⁰; it is usually limited to amphorae, heavy items that may also have been usually transported by cart although not necessarily so. No study has yet been carried out in the provinces concerned here of amphorae in the later Roman empire, despite the large-scale presence of the Roman army in the eastern provinces. As Wickham observes (see above), it is likely that some of the olive oil produced in the limestone massif between Antioch and Aleppo was sent east rather than west, as taxation in kind and supplies for the army units on the Persian frontier. It would be a matter of great interest for this thesis if it could be shown that olive oil – or, indeed, grain – was so exported on carts to Edessa and other cities of the region, as well as to army garrisons. But so far there is almost no evidence at all. Sadly, archaeology can be of little assistance in identifying trade in textiles or spices and in any case an archaeological investigation of late Roman sites beyond the Euphrates has hardly begun⁷²¹.

However, even though it is certainly impossible to quantify the volume of trade or to gauge its importance in relation to the total volume of economic activity, there can now be little doubt that long-distance commerce by land was an essential feature of the economy in late Roman times. Apart from the obvious role of trade in earlier centuries in bringing riches to

caravan cities such as Palmyra, Emesa and Petra, many of the cities of Euphratesia, Osroene and Mesopotamia were also situated on important trade routes. In general terms, it seems evident that the eastern provinces retained a high level of wealth and civilisation right up until the Arab invasions, and even beyond. If the cities of northern Syria and Mesopotamia were still rich enough to pay large bribes to Persian raiders and invaders in the sixth century, then profits from inter-regional and international trade are likely to have been the origin of much of this wealth.

iii) Relations between Rome and Persia

The extent to which the high degree of interchange represented by the travellers and the road network discussed in the preceding chapters affected relations between the two great powers of antiquity is contentious. Evidence of exchanges of people, goods and ideas does exist but the elites of the two societies continued to maintain high levels of animosity, despite the apparent acceptance by some on the Roman side during the reign of Justinian of the benefits of coexistence. Mutual influence in terms of architecture, court ritual and other cultural areas has been examined but with very limited results⁷²².

Knowledge of the Persian Empire during the Sassanian period is still very limited in comparison to that of the Roman Empire because of the dearth of source material. The question of the extent to which trade and cultural exchanges along the frontier brought greater mutual comprehension is beyond the scope of this thesis, but some points emerge from the preceding chapters as having potentially an important bearing on the issue.

Firstly: the road network. The Peutinger Table itself implies both a high level of geographic knowledge in the Roman empire of its eastern neighbour at the end of the fourth century and, in addition, the existence of a community of potential users of this route-map (or at least of the itineraries on which it is based), with an interest in travelling to the east. The circumstances in which the PT was drawn up are unclear (see Chapter 2) but its huge volume of information implies both geographical knowledge - including that of regions well to the east of the Roman Empire - and also a wish to transmit this knowledge. The lists of cities of the Ravenna Cosmographer also include many areas east of the Roman-Persian

border indicating that the PT is not exceptional in its knowledge and interest in Sassanian Persia.

Secondly: the intensity of exchanges between the two powers. No good data is available concerning trade but it is evident from the preceding section that high levels of trade in goods were taking place for a wide range of products for most if not all of the period. Exchanges of people and ideas through the religious communities, but also through the many other different types of people ranging from soldiers to diplomats to doctors and students, made available a depth of mutual knowledge which it must have been difficult for the courts at the two capitals to ignore, even if their common frontier was, particularly in the fifth century, often not their principal concern.

Thirdly: the wealth of the cities. Edessa, Amida and perhaps of many of those other cities discussed in Chapter 5 above was, as the *Expositio Totius Orbis et Gentium* shows, dependent on international trade. The network of roads and bridges discussed in Chapters 3 and 4 above contributed substantially to the facilitation of such trade and in particular to the flow of goods between Rome and Persia. Given the need of both governments for tax revenue, it is difficult to imagine that the preservation of this wealth and the trade associated with it were not of concern to the courts in both Constantinople and Ctesiphon.

Rome and Persia were the two most highly developed powers of the time, leaving aside China. Peter the Patrician referred to them as the twin eyes or lights of the world as early as his report on the negotiations of AD 297⁷²³. But the differences were very great. Sources are for the most part from the territory of the Roman empire and may therefore present a distorted picture, but the impression is of a stark contrast: Sassanid Iran as a quasi-feudal autocracy looking for military glory and booty and the later Roman Empire in the East as an urban civilization with a developed bureaucratic culture capable of recognizing its own limits and the coolly assessing the advantages of collaborating with Persia. However, this picture exaggerates the clear-headedness of the Roman side and possibly understates the sophistication of Sassanian Persia⁷²⁴.

On the Persian side there are several questions concerning both the capacity of the state to reach an agreed policy in its relations with Rome and indeed the very nature of its

society⁷²⁵. It seems evident from the history of their conflict that on many occasions during the sixth century the Sassanian kings were quite simply ‘strapped for cash’ and willing to risk military defeat in an attempt to extract from their neighbours in the west large sums of gold by force. This may imply a society run by the large landowning families, which was essentially rural in nature and less capable than the eastern Roman empire of successfully raising taxes to maintain the army and a large bureaucracy in Ctesiphon⁷²⁶. But this is not certain. Trade seems to have played at least as important a role in the Sassanian kingdom as in the Roman Empire and law codes seem to have also been highly developed, although many fewer written sources are preserved. In any case it is evident that some aspects of society were very different from the urban culture of east Rome; reliance on heavily armed cavalry financed from land holdings – a situation prevalent at least until the reforms of Khusrau I - seems to imply an elite which was less dependent on central government and perhaps impervious to cultural influences from the Christian west, even though we know of some converts to Christianity amongst this elite⁷²⁷. After the sixth century reforms in Sassanian Persia the existence of a standing army paid from central funds may have implied important changes in society but there is little information to support this.

The large Christian community in Persia from the early fifth century existed largely outside the elite of land-owners. Its links with fellow-Christians in the West may have led to a better understanding of the Roman empire amongst the Persians, but the Christians were often seen as a threat to the state, especially by representatives of the ‘official’ Zoroastrian religion, at least until the Nestorians gained the upper hand and the split from the ‘Chalcedonian orthodoxy’ of Constantinople was evident during the fifth century. The Syriac or Aramaic-speaking communities and indeed the Jews who were settled on both sides of the frontier maintained close relations with each other⁷²⁸, but the impact on the governing elites of the exchanges of goods, people and ideas is not certain.

It is clear that the Aramaic-speaking communities on each side of the frontier maintained links and shared both religion and other cultural values, as correspondence between Christian bishops attests. John of Ephesus, born in Amida around 506 and later a favourite of Justinian in Constantinople, recounts in his *Lives* the fate of several Persian martyrs⁷²⁹. Garsoian also draws attention to the exchanges of prisoners organized by bishops and to the resettlement of Syrians on lower Mesopotamia⁷³⁰. But, as she states later, these frequent

contacts between the Christian communities cannot be taken to imply understanding at the level of the imperial courts:

“The acceptance by both sides of the general premise that Byzantium and Iran were destined to share the rule of the world made of them rivals as much as partners. Behind the bland courtesy of diplomatic clichés ran a deep vein of enmity, and, what was perhaps still more damaging, mutual contempt,...Both world cultures, proud of their great historical past, firmly wrapped in the assurance of their own superiority, could not willingly accept the lessons of the enemy, nor would such lessons suit their characteristic societies. Persia evinced a certain interest in the ancient learning of Greece, which she helped to preserve and transmit to the Islamic world, but a contemptuous disregard for foreign achievements remained to the end the hall-mark and the Achilles’ heel of Byzantium.”⁷³¹

Possibly the degree of hostility between Roman and Persian elites is here exaggerated. But in any case, each side ultimately sought security and national fulfillment through military conflict with the other and through reinforcing ‘ancestral claims’ to control of territory. In Persian eyes this meant ultimately reconstructing the Achaemenid Empire destroyed by Alexander and therefore control of Egypt, Syria and Asia Minor - as was in fact achieved by them briefly in the early seventh century⁷³². Roman claims also went back very far. Although it would not be true to argue that Alexander’s conquests in any way were used to justify Roman control of the Near East, the Roman emperors were seen as his successors by the Sassanians and sometimes by the emperors themselves. Julian seems to have been a particularly glaring example of this⁷³³. Roman *de facto* preponderance had been maintained since the time of Augustus with frequent advances that had brought the frontier to the Tigris, although Dio Cassius had seen the risks involved in such a policy⁷³⁴.

The local population, when given the chance to express a preference, opted for Rome, as the reactions of the town people of Nisibis to Jovian’s decision to return that town to the Persians in AD 363 showed. Despite the region’s distinctive culture on neither side of the frontier did any movement for independence from either Rome or Persia develop; the arrival of Arab armies in the seventh century was not strongly resisted by the cities and provinces recently recovered for the Roman Empire by Heraclius but neither was there any attempt by local generals or aristocrats during the first decades of the seventh century to exploit the situation and rebel against central authority – unlike in Italy where Heraclius did face a rebellion⁷³⁵.

In conclusion, the evidence for trade and travel along the roads discussed in this thesis supports the idea of strong links at least between the local, Aramaic- or Hebrew-speaking populations on each side of the frontier. It also seems certain that international trade across the border in silk and other products, such as spices, created wealth and revenue for the states concerned through taxes on this trade. It does not however show that this mutual interest was in any way sufficient to overcome the military ambitions of successive Roman and Persian rulers, who frequently preferred conflict to co-existence.

Annex F

The Roman provinces of Euphratesia, Osroene and Mesopotamia

The three late Roman provinces considered in this thesis were the most eastern of the empire and covered an area roughly 500x350 kilometres or about 175 000 square kilometres, compared to c.2.7 million square kilometres for the Empire as a whole, following the re-conquest of some western provinces by Justinian.. Part of the area concerned lies in the southern foothills of the long Taurus mountain range where it is pierced by the main streams and tributaries of the rivers Euphrates and Tigris. However, southern Osroene in particular contains a large area of low-lying steppe and semi-desert that is uninhabited except along a few river courses. The physical and human geography of upper Mesopotamia, especially in relation to the classical and late Roman/early Byzantine periods, is described fully by Louis Dillemann⁷³⁶ and is therefore not discussed here in detail. More recently, Tony Wilkinson has used the area as an example of semi-arid steppe in his book on archaeological landscapes⁷³⁷. His map of the area is reproduced at Figure 1, where area 2 corresponds to that examined here. The archaeological investigations of the cities and other sites along the Euphrates have been described in a new doctoral thesis by Justine Gaborit⁷³⁸.

The best survey in English of the geography of the region in the pre-modern period is included in Lieutenant-Colonel F.R. Maunsell's *Military Report on Eastern Turkey in Asia*, of which the second edition was compiled for the British War Office in 1904. Maunsell had been military attaché at the British Embassy to the court of the Sultan in Constantinople. Most regrettably this document is not available at any public library in the UK, apart for volume 3 on the Tigris valley from the Persian Gulf towards Erzerum and Van which is in the British Library. Volume 4, the key volume for the purpose of this thesis (*Middle Euphrates Valley: country from the Gulf of Alexandretta towards Erzerum and Bitlis*) is however available for consultation in the National Archives in Kew. Apart from a general introduction to the geography of the regions concerned each volume contains detailed itineraries for the routes then known to exist which occasionally also refer to Roman roads.

Fortunately, much of Maunsell's material was reproduced in the volume on Mesopotamia in the series of geographical handbooks produced by the Naval Intelligence Department of the British War Office. That for Mesopotamia was issued originally issued in 1916-17 but the second edition is of 1918⁷³⁹. It is more easily available than Maunsell's report but the crucial volumes are still rare.

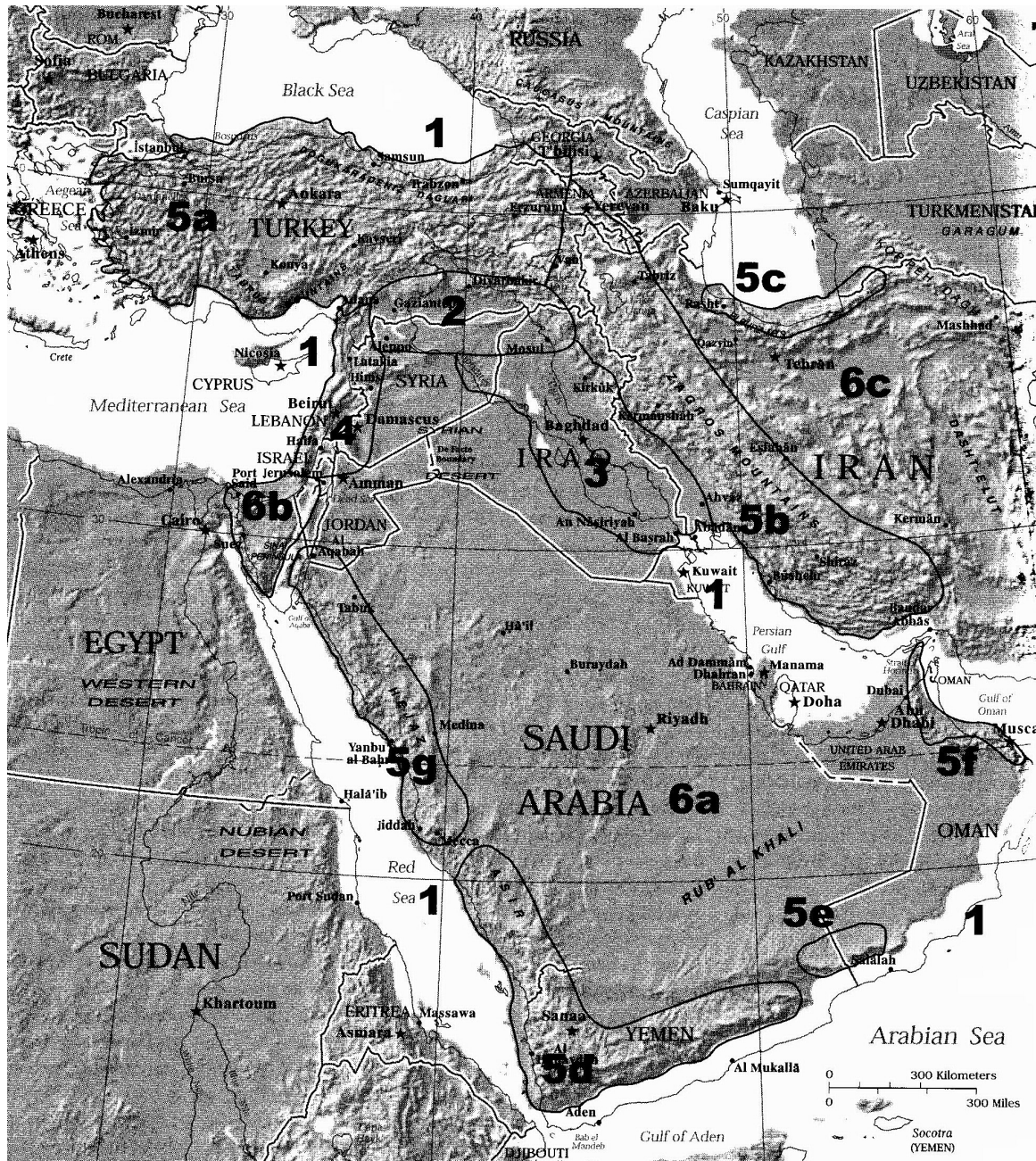
The whole area comprises the central section of the 'Fertile Crescent'; to the south of this zone rainfall is too sparse for rain-fed agriculture, although much of the region examined was heavily settled in various periods. In the fifth and sixth centuries AD settlement was concentrated in the western part of the area; other zones such as that between Nisibis and Singara (known in Syriac as 'Beth Arabaye') seem to have been comparatively empty despite a large number of Bronze Age mounds indicating earlier occupation.

The Euphrates flows south through the area, forming the boundary between the late Roman provinces of Euphratesia and Osrhoene (and previously, until the 2nd century AD, the frontier between Rome and Parthia). It leaves its gorge through the foothills of the Taurus at Zeugma and thereafter flows more slowly with meanders through the Mesopotamian plain. Circesium, a fortified city at the point where the tributary river the Chaboras joins the Euphrates, constituted the southern-most point of the region and a border-crossing into Sassanian Iran, used by Julian in AD363.

Further east, for a hundred kilometres the Tigris flows west-east from Amida (Diyarbakır); to the north of the river lie the foothills of the Taurus; below the river to the south lies the area known still as the 'Tur Abdin' (but rather as *Mount Masius* or *Izala* in the Roman period). This low mountain range forms a part of the 'Anti-Taurus' chain of mountains, lower than the Taurus proper and mostly of limestone; it has a long southern crest or escarpment which drops rapidly to the Mesopotamian plain below Mardin. The Tigris turns south and passes through a gorge between the Tur Abdin and the Kurdish mountains to the east, from which it emerges at Cizre and then after a short stretch, where it currently serves as the border between Turkey and Syria, it passes into Iraq.

Rain-fed agriculture is practised throughout the northern areas, especially around Diyarbakır, and the earth is fertile even to the south in places where irrigation is possible. The climate in antiquity is generally believed to have been similar to that prevailing today, although there was much more woodland. Disappearance of tree cover is associated with a rather dense population dependent exclusively on wood and animal dung for fuel. In the mining area around Maden, in the mountains north-west of Diyarbakır, tree cover survived until the 19th century when it was largely cut down for charcoal and smelting of the ore⁷⁴⁰. Even today most villages are still reliant on firewood and the result of a rather dense population is an ever-decreasing tree cover at higher and higher altitudes.

Figure 25
Geography of the Middle East



reproduced from TJ Wilkinson, *Archaeological Landscapes of the Near East*, Tucson 2003, page 12

The area considered in this document corresponds to 2 above.

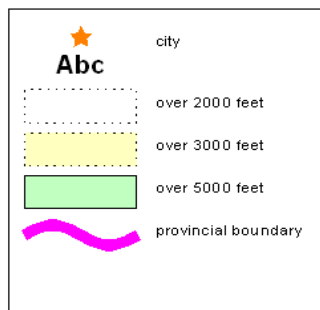
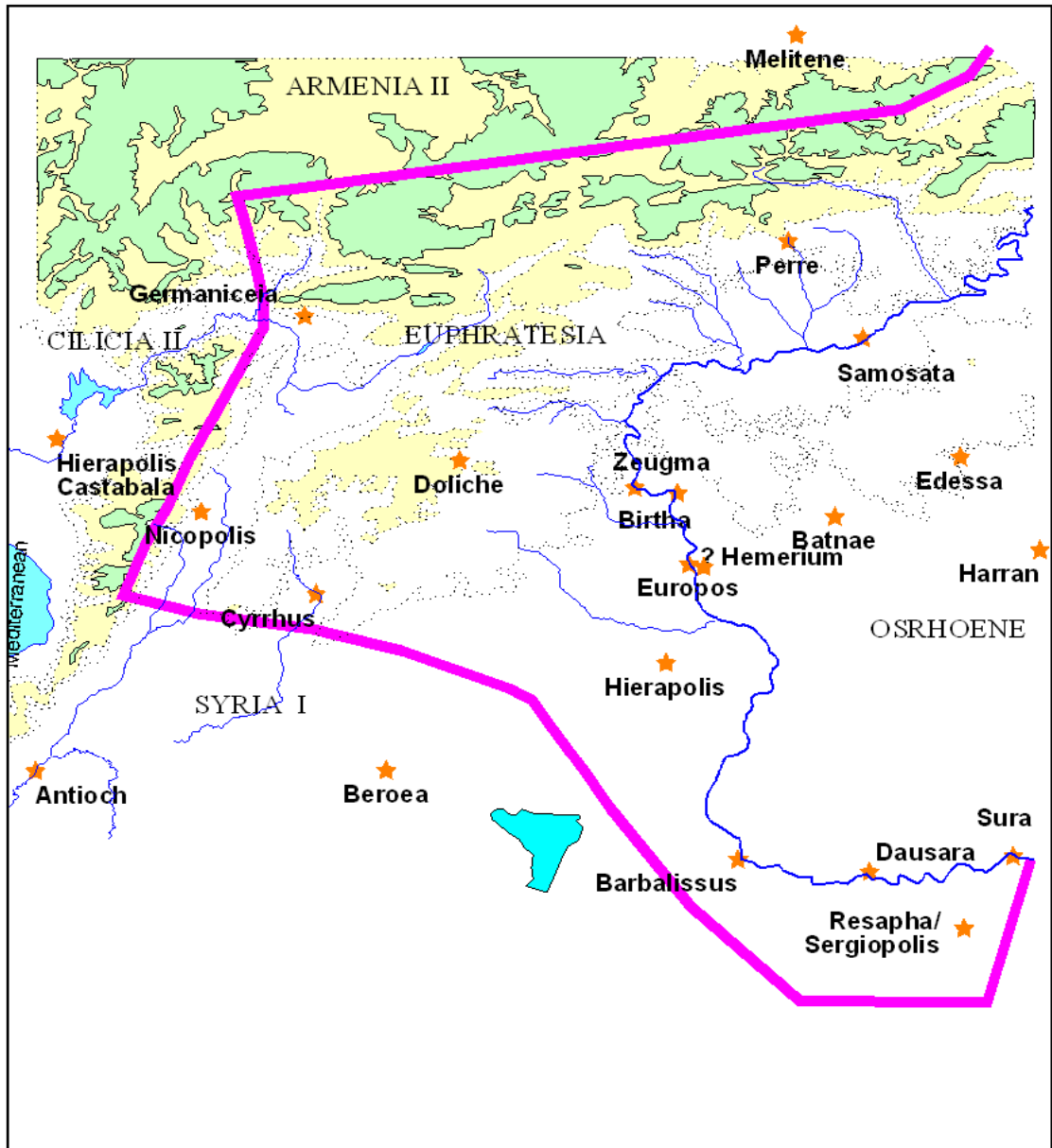
Insofar as these most eastern provinces of the Roman Empire possessed a regional capital, it was the large city of Antioch. The Seleucids had established an axis between Antioch, on the one hand, constituting with its north Syrian sister cities of Seleuceia-in-Pieria, Apamea and Laodiceia, the so-called 'Tetrapolis', and, on the other, the great cities of southern Mesopotamia (in particular Seleuceia-on-the-Tigris, not far from the later Parthian and Sassanian capital of Ctesiphon). This axis passed through Zeugma, Edessa and Nisibis; it remained a crucial trading route and channel for cultural influence throughout the fourth and fifth centuries AD and beyond, although Aleppo/Beroea (also a Seleucid city) was to become the major regional entrepôt of the Middle Ages⁷⁴¹.

Apart from Dillemann and Maunsell (see above), the main modern sources for the area used for the discussion in Chapter 5, for this annex and for the gazetteer are the articles on individual provinces and cities in Pauly-Wissowa's *Realenzyklopedie* (PWRE), A.H.M. Jones⁷⁴² (CERP), T.A. Sinclair⁷⁴³ (ETAAS) and the *Barrington Atlas of the Classical World*, maps 67 (Antioch), 68 (Syria), 89 (Armenia) and 91 (Ctesiphon). Honigmann's *Historische Topographie von Nordsyrien im Altertum*⁷⁴⁴ provides a valuable synthesis and gazetteer of place-names for areas west of the Euphrates.

At present the southern parts of both Euphratesia and Osrhoene lie in Syria. In that country, of the places relevant to this document only Aleppo, Palmyra, Cyrrhus, Membij and the course of the Euphrates for a hundred kilometres south of the Turkish border and east of Aleppo have been visited by the writer. Most of the Turkish area has however been visited by me in the course of several seasons' survey work as an archaeologist around Zeugma and four more recent visits to the area of Diyarbakir and Mardin.

Provinces

The three provinces concerned all formed part of the 'Diocese of Oriens' in the later Roman Empire. They are considered here as a group because of their linked role in the conflicts with the Persians and because all three lie just beyond the better-known provinces around the eastern Mediterranean, while continuing to have close administrative, religious and economic links with Antioch. The *Notitia Dignitatum* lists civil and military officers in the Diocese of Oriens and is thought to date for the eastern part of the empire from c.AD 400. It indicates that each of these provinces was controlled by a civilian *praeses* (translated by William Fairley in the on-line Medieval Sourcebook



Euphratesia, AD 363 - 600



Scale 1 : 1 500 000

Figure 26a

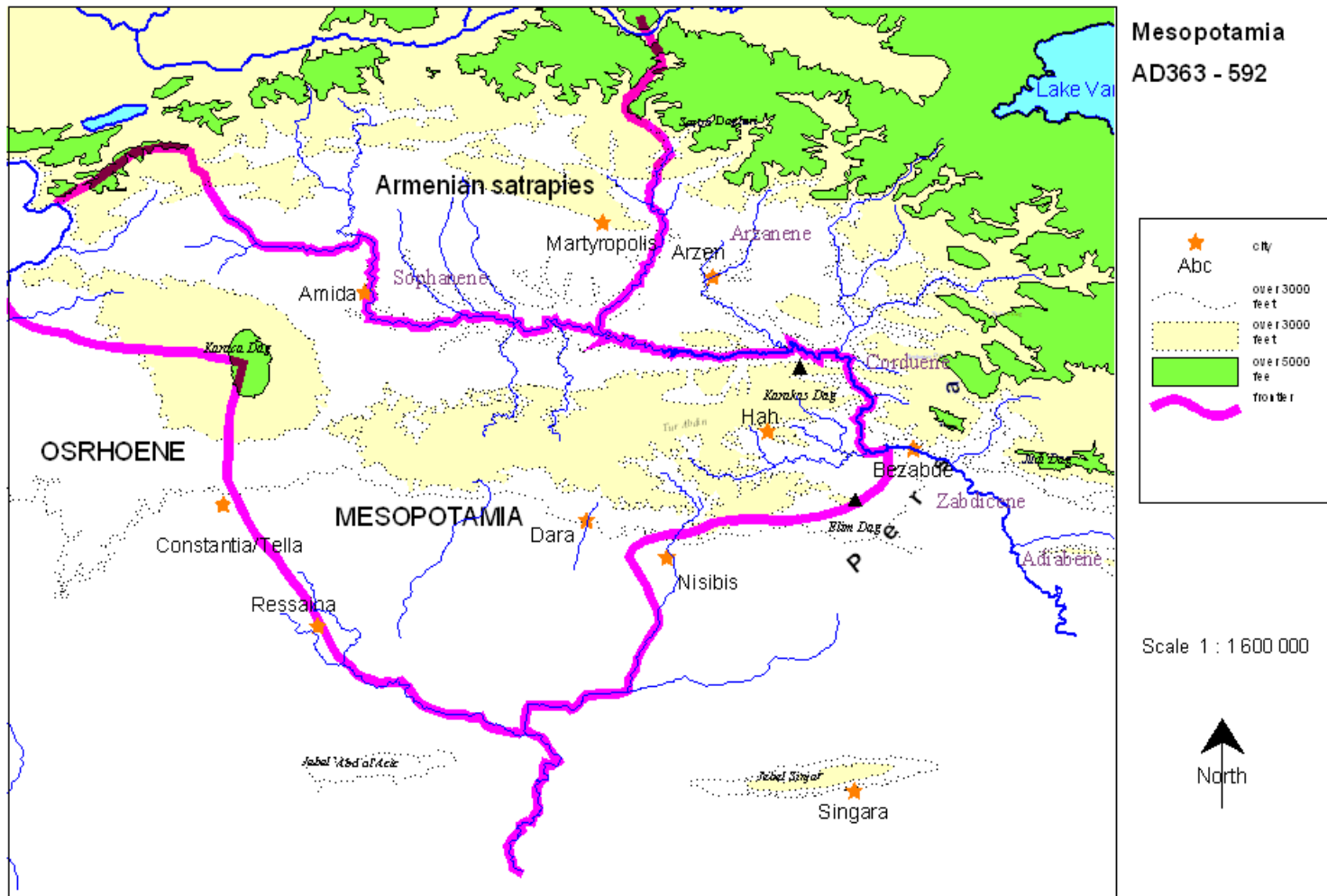


Figure 26b

as ‘president’⁷⁴⁵, although ‘governor’ might be more appropriate) and by a military *dux*. The *dux*, or duke, for Euphratensis was also responsible for Syria. The civilian posts were under the authority of the praetorian prefect for the East (‘Oriens’) who had a large number of officials working for him⁷⁴⁶.

However, there was also a *Magister militum per orientem* in charge of military matters and therefore the superior of the three ‘dukes’. Under his control there were ten squadrons of horse of the line, two palatine *auxilia*, nine legions ‘of the line’ and eleven legions ‘of the secondary line’⁷⁴⁷.

Euphratesia

Euphratesia had been a province only since the reign of Constantius II (AD 337-361) but its components – originally the Hellenistic satrapies of Commagene and Cyrrhestike, later much of ‘Syria Coele’ – had been the object of much Greek settlement long before. As part of Syria it had of course been incorporated into a Roman province since the earliest period of Roman conquest in the East. Even in cities the population continued to speak Aramaic dialects (Syriac constitutes the written version of the dialect spoken especially in Edessa), but Greek and Roman influence was omnipresent⁷⁴⁸.

Constantius II visited the city of *Hierapolis* in AD 343, 347 and 360⁷⁴⁹. While present in the east he decided on a provincial re-organisation and split off from Syria Coele a new province known initially as “*Augusta Euphratensis*” and stretching from *Germaniceia* in the north-west to *Sura* in the south-east. Hierapolis was made the capital of the new province, since it was an important focal point for mustering armies in the wars against Persia and lay near the Euphrates crossing at *Caeciliana*. From there roads coming from Antioch and *Beroea/Aleppo* led on to *Edessa* (via *Batnai*) and to *Harran*, both cities of Osrhoene. Other roads crossing the province of Euphratesia were the ancient east-west trade route through Zeugma to Antioch from Edessa and Nisibis; the original Euphrates military frontier road along the west bank of the river from Samosata past *Zeugma*, *Europos* and *Barbalissus* as far as *Zenobia*; and the highway to Samosata from Antioch via *Cyrrhus* and *Doliche* (see Chapter 4-2). Although the latter had been extremely important when legions were based on the Euphrates itself and indeed during the later medieval period⁷⁵⁰, in the 5th and 6th centuries its role is less clear.

Bishops were appointed from Antioch, with which the province maintained close links⁷⁵¹. Although the patriarchate at Antioch retained a formal control of church organisation (see annex to this chapter), there were frequent conflicts within the church between the orthodox or ‘Chalcedonians’ (also known as ‘Melkites’) and the Nestorians and Monophysites. A church hierarchy was also well-developed over the border in the neighbouring provinces of Sassanian Iran; for the most part these areas depended from an archbishop in *Nisibis*.

As indicated above, a list of military units based in Syria and Euphratesia under the command of the ‘Dux Syriae’ is given in the *Notitia Dignitatum*, whose relevant sections are reproduced in the annex to the following chapter. The bases of military units in ‘*Augusta Euphratensis*’ were *Barbalissus*, *Neocaesarea*, *Sura*, *Ammuda*, *Salutaria*,

Helela, *Claudiana*, *Marmantharum* and *Ammattha*. The first three of these places are known. ‘Ammuda’ is unlikely to be modern Amouda (which figures in the Peutinger Table probably as *Chanmaudi*) which would have been in the territory of the Dux Mesopotamiae. *Salutaria*, *Claudiana*, *Marmantharum* and *Ammattha* are not known, as far as I am aware, but *Helela* is usually identified with a fort on the ‘Strata Diocletiana’ at Hlehleh⁷⁵², just outside Euphratesia.

Osrhoene

For the ancient geographers such as Eratosthenes, Osrhoene and the territory of *Edessa* were not known as areas distinct from Mesopotamia. The formal distinction only arises with the creation of Roman provinces, although Osrhoene and Adiabene (the area south-east of Nisibis stretching across the Tigris to the Kurdish mountains) do seem to have had some form of distinct identity within both the Parthian and Sassanian empires. Shortly before the arrival of the Romans, Tigranes, Armenia’s greatest king, had conquered these parts of the Seleucid Empire in 83BC and created a new capital at ‘*Tigranocerta*’. This is now thought to have been located at *Arzen*, north-east of the modern city of Batman⁷⁵³, probably the capital of the Armenian/Sassanian province of Arzanene and closer to the Roman province of Mesopotamia than to Osrhoene. Although there is little trace of Armenian influence today, these regions were a major centre for Armenian settlement which was of course much reinforced in the Middle Ages when Armenian princes again controlled much of the region; the great fortress of *Rumkale* (‘Hromgla’ in Armenian) on the Euphrates was the seat of the Armenian patriarchate during the 13th century.

However, the capital of Osrhoene was *Edessa*, now Şanlıurfa (or, commonly, Urfa); this city was the seat of the Abgarid dynasty which had reigned here, partly independently and partly as suzerains of the Parthian, Sassanian and Roman empires, from the first century BC to the early third century AD. The dynasty itself and most of the population were of Semitic origin and spoke the northern version of Aramaic whose written form is known as Syriac. There was also a large Jewish community in both Edessa and Nisibis and the neighbouring kingdom of Adiabene was controlled by a Jewish dynasty. Together Adiabene and Osrhoene were amongst the very first kingdoms formally to accept conversion to Christianity. In the case of Adiabene the history of its conversion during the reign of Trajan has been rejected with incredulity by some scholars but the validity of this tradition is accepted by Neusner⁷⁵⁴. Some places in the Tur Abdin such as the modern town of Idil (whose Assyrian name is believed locally to have been *Hazok*) claim to have been converted to Christianity before the end of the first century⁷⁵⁵.

The Euphrates had been recognised since before the Imperial period as the boundary between Rome and Parthia. The struggle for control of Armenia and weakness on the Parthian side led to Roman aggression on several occasions, most notably by Trajan. But, as is well-known, his successor Hadrian decided to return most of the eastern territory and it was only at the time of Septimius Severus that permanent advances were made by the Romans across the Euphrates.

Even before the time of Trajan, the areas around *Batnai/Anthemusia* and *Edessa* (Osrhoene) – together with others such as *Nisibis* (Adiabene) and *Hatra* - had gained virtual

independence from Parthia and they acted as buffer states between the two great powers. Although the kingdom of the Abgarid dynasty was absorbed into the Roman empire as a semi-autonomous vassal state, it only became a province in AD195; the city itself seems to have been incorporated into the empire rather later than the land between Edessa and the Euphrates⁷⁵⁶.

The last Abgar (XI) was deposed in 244⁷⁵⁷. Following the reforms of Diocletian around 300 it became part of the diocese of Oriens. In the 5th and 6th centuries Edessa in particular was renowned as a strong fortress and wealthy city with a thriving literary culture (see below), but both it and the surrounding province of Osrhoene were fully integrated into the Roman Empire. It seems that there was some confusion in the minds of contemporaries about its status as an independent province. The pilgrim Egeria, when she crossed the Euphrates possibly in AD 383 on her way to Edessa, spoke of entering “ad Mesopotamiam Syriae” and never mentions Osrhoene⁷⁵⁸.

Osrhoene was crossed by the long-distance trade routes from Antioch to the east via *Zeugma/Edessa/Tella/Nisibis* and also via *Caeciliana/Batnai/Harran/Resaina*. A north-south route from Samosata to Edessa was also important and there are traces of Euphrates crossings at several points between Zeugma and Samosata⁷⁵⁹. There are many places in the province not yet identified. For example, as well as those at the known towns of Callinicum, Dabana, Circesium and Resaina, the Notitia Dignitatum places military units at *Ganaba, Banasam, Sina Iudaeorum*⁷⁶⁰, *Oraba. Thillazamana. Mediana. Rasin, Apatna*⁷⁶¹, *Thillacama, Touia - contra Bintha* (perhaps Birecik), *Thillafica, inter Thannurin* (Thannourios) *et Horobam. Thillaamana, Maratha and Duodecimo*⁷⁶². A firm identification for none of these except *Thannurin* (Thannourios) has yet been achieved.

Mesopotamia

Trajan had foreseen provinces of Mesopotamia and Assyria, but in fact Mesopotamia as a Roman province was first organised under Septimius Severus after Osrhoene's distinct identity was established. *Nisibis* was historically not part of the Osrhoene of the Abgar dynasty and with this city also under Roman control a separate province for northern Mesopotamia was seen as necessary, even if the two were closely linked⁷⁶³. Schachermeyer, the author of the article on Mesopotamia in PWRE, believed that both provinces were founded in AD195⁷⁶⁴.

Initially the province of Mesopotamia stretched south to include *Singara*, but *Hatra* was never a formal part of Roman territory. After AD363 and Jovian's withdrawal, the eastern part of the province was surrendered to the Persians – including *Nisibis*; the Roman provincial capital then became Amida (now Diyarbakır) and the balance shifted northwards. However, the precise line of the frontier across the Tur Abdin (south of the river Tigris) has been disputed because at least one major fortress east of *Nisibis*, *Rhabdion*, remained in Roman hands⁷⁶⁵. The frontier is discussed in chapter 6 below.

The cession to the Persians of *Nisibis* in AD363 had been accompanied by that of the so-called “Trans-Tigritane” provinces. However, the Romans continued to control two of these

districts known as Ingilene and Sophene (areas north and north-east of *Amida*). It should be noted that the course of the Tigris itself was a matter of some confusion in the ancient world, possibly because several of the major tributaries joining the main river from the north are similar in size to, if not larger than, this main stream. The main tributaries from east to west are today called the Bohtan Su, the Bitlis Su, the Garzan Su, the Batman Su and the Ambar Cay. After AD 363 the Batman Su (formerly '*Nymphius*') became the new frontier between the two empires and from the confluence of the Nymphius with the Tigris it followed a line roughly due north to the Black Sea.

The northern boundary of the province of Mesopotamia divided the province not from Persian territory nor from that of another Roman province but from a series of Armenian principalities – the 'Trans-Tigritane provinces' mentioned above - which, until they were reorganised by Justinian in the sixth century, retained a high degree of autonomy, although under Roman suzerainty. The river Nymphius in fact had been the boundary between two groups of these principalities: the Syrian march ('bdeaksh' in Armenian) composed of Ingilene, Anzitene, Lesser and Greater Sophene, which remained under Roman suzerainty and the Arabian march composed of territories of the former kingdom of Corduene and some of the territory of Mygdonia i.e. mainly the principalities of Arzanene, Moxoene, Corduene and Zabdicene. After the reign of Tiridates III (AD286-330), Bakur, the prince of Arzanene, who controlled also the rest of the Arabian march, had tried to take his territories directly under the king of Persia. The Romans assisted the Armenians in suppressing this revolt and built fortresses in the region (possibly including Till and Hizan – see below in chapter 3)⁷⁶⁶.

In the 5th and 6th centuries the most important trade routes across Roman Mesopotamia were those heading west from Nisibis towards Edessa and north-west to Amida - and then on to *Melitene* (Malatya) and Cappadocia (see Chapter 4-2). There may also have been an important route from *Amida* up to Lake Van and then to the Armenian capital of *Artaxata* (later *Dvin*). Although not discussed in detail until chapter 5, the late Roman bridge on the Batman Su, some 20km north of its confluence with the Tigris, indicates an important route for wheeled vehicles (see below), possibly linking Amida and Nisibis with Armenia, whose capital at Dvin (formerly at Artaxata) was known to be an important trading city⁷⁶⁷.

Although the place-names mentioned as bases of most units mentioned in the *Notitia Dignitatum* are known for Mesopotamia⁷⁶⁸, there are many other places mentioned by Procopius and George of Cyprus which have not yet been identified.

Annex G

Archaeology

The *Oxford Encyclopedia of Archaeology of the Near East* (Meyers, EM 1997) makes little mention of sites in this area, apart from brief references to Carchemish, the Khabur, Manbij, Raqqa/Nicephorion, Samosata, Tel Brak and Tel Fakhariyah (Resaina). These do not treat the late Roman period in any detail. Roaf's *Cultural Atlas of Mesopotamia* stops at 330 BC and the Times *History of Archaeology* does not refer to the area during this period.

Most archaeology in eastern Turkey and on the Euphrates in Syria is connected with dam construction. The surveys conducted by Guillermo Algaze in the late 1980s and in connection with dams on the Euphrates and Tigris have been especially useful for this thesis.

Works dealing specifically with roads and bridges are covered separately under Chapters 5 and 6.

Turkey

Excavation

In the last century very little excavation of Roman sites in the three provinces has been conducted outside the rescue projects associated with dam construction. The British Museum excavations of Carchemish on the Euphrates brought to light almost no information about the role of Europos, whose remains seem to have been largely swept aside during the first excavations carried out in 19th century by Henderson, British consul in Aleppo. The long history of excavation at Dura-Europos, does not concern this period (5th and 6th centuries AD) since the city was then no longer under Roman control.

Although some mosaics were found at Edessa (Sanliurfa), especially by Segal, no archaeological excavation as such has been conducted either there or at the other two large cities of Amida (Diyarbakir) or Nisibis.

Zeugma

Between 1996 and 2002 excavations were conducted by a Franco-Turkish team. The discovery of mosaics shortly before the Birecik dam was completed brought about an intensification of archaeological work funded by the Packard Foundation and led by Oxford Archaeology Unit. Most of the areas investigated dated to the third century and the role of the city in the fifth and sixth centuries was not the focus of interest. Ongoing work may include investigation of the city's churches and of its history in the late Roman period. Archaeological reports have been regularly published in *Anatolia Antiqua*. Two

special supplements of the *Journal of Roman Studies* have also been published: (Kennedy, D., (1998), Early, R., et al., (2003)

Samosata

Despite its importance, especially for the first centuries of Roman occupation of Syria, the city was only superficially investigated before its destruction by the Atatürk dam. See especially Teresa Goell (Goell, T., (1974)).

Hasankeyf

Excavations are ongoing; part of the ancient city and in particular its famous bridge will be destroyed by the Ilisu dam. The current director is Abdüsselam ULUÇAM. In 2007 the base of a Roman gateway to the upper city and a row of shops from the late Roman period were discovered.

Ziyaret Tepe

Timothy Matney is leading excavations also in connection with the forthcoming construction of the Ilisu dam. This city was Assyrian and is not important for its Roman or Byzantine levels.

Harran

Although the city was important in the late Roman period current investigations have not concerned these levels.

Cyrrhus

The city and in particular its theatre were investigated by Frézouls, E., (1955)

Doliche

Current excavations are led by Engelbert Winther of Münster University.

In addition some studies of an archaeological nature have been made of particular sites such as *Hisarkaya* and *Rabat Kalesi* (Wiessner, G., (1980)), and *Zerzevan* (Deichmann, F. W. and Peschlow, U., (1977))

Survey

Poidebard, Poidebard, A., (1934)

Aurel Stein, Gregory, S. and Kennedy, D., (1985)

Commagene: Hellenkemper, H.-G., (1977)

Birecik and Carchemish dams (Euphrates): Algaze, G., (1989, Algaze, G., Breuninger, R. and Knudstad, J., (1994, Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M., (1991); for NE Osrhoene see also Durukan, A., et al, (1999) and Wagner, J., (1983)

Ilisu and Cizre dams (Tigris) – see Algaze 1989 and 1991 above

Kurban: Wilkinson, T. J., (1990)

Zeugma: Comfort, A., Abadie-Reynal, C. and Ergeç, R., (2000, Comfort, A. and Ergeç, R., (2001)

Adiyaman: Blaylock, S. R., French, D. H. and Summers, G. D., (1990)
Amuq: <http://oi.uchicago.edu/research/projects/amu/>
Tur Abdin: Bell, G. L., (1982, Wiessner, G., (1981-1993)

For those sites visited by him, Gabriel provides a fine overview : Gabriel, A., (1940)

Current projects: The list of speakers invited to give a report on their *survey* work at the 29th 'international symposium of excavations, surveys and archaeometry' (Turkey) in 2007 includes the following:

Kahramanmaras	Erkan Konyar
Upper Euphrates	Ertuğrul Danik
Bitlis	Gülsen Baş
Besni	Turgut Zeyrek
Siirt/Ilisu documentation	Ali Boran
Mardin	Eyyup Ay
Şirnak	Gülriiz Kozbe

Syria

Apart from the ongoing work at Dura-Europos (outside the area of this thesis) few excavations concerning the late Roman period have been undertaken in eastern Syria. One example is Harper's work at Dibsî Faraj (Harper, R. P., (1975)). Currently, a major project is under way at Androna. This is slightly outside the province of Euphratesia but is of great interest for the history of the region. That part of the project run by the University of Oxford (Marlia Mango) has concentrated on the baths and water management, and on a landscape study of the surrounding area:
http://www.arch.ox.ac.uk/research/research_projects/Andarin.

There are a number of recent surveys, which are however for the most part of only limited interest for this period:

Upper Syrian Euphrates : Del Olmo Lete, G. and Montero Fenollos, J.-L., (eds), (1999)
Northeastern Syria : Meijer, D. W. J., (1986)
North Jezira : Wilkinson, T. J., Tucker, D.J., (1995)
Quoueiq valley : Matthers, J. e., (1981)
Afrin valley : Sürenhagen, D., (1999)
Western Jezira and upper Mesopotamia : <http://oi.uchicago.edu/research/projects/jaz/>
Balikh valley: <http://oi.uchicago.edu/research/pubs/ar/95-96/jazira.html>
Tuneinir : <http://www.stlcc.edu/fv/tuneinir/> and
<http://www.jaas.org/edocs/v12n2/fullers.pdf>
Chalcis (Qinnasrin):
http://www.diplomatie.gouv.fr/en/france-priorities_1/archaeology_2200/archaeology-notebooks_2202
Ras el-Ain : McEwan, C., et al, (1958)
http://www.orientgesellschaft.de/ausgrabungen/tell_fecheriye.shtml

Annex H

Modern (and medieval) travellers

A list of travellers to the Near East was compiled by S.H.Weber in 1952⁷⁶⁹, but it is not complete.

The travellers' accounts listed below have been consulted in drawing up this thesis. Starred names indicate those whose accounts proved especially useful. For the references please see bibliography immediately below.

- * Ainsworth, W. F., (1840a, Ainsworth, W. F., (1840b, Ainsworth, W. F., (1842, Ainsworth, W. F., (1888)
- * Badger, G., (1852) Vol 1
- Bell, G. L., (1910, Bell, G. L., (1924, Bell, G. L., (1982)
- Benjamin of Tudela, (1848)
- Bryce, J. V., (1878)
- * Buckingham, J. S., (1827) (Aleppo, Birecik, Urfa, Mardin, Diyarbakır, Nisibis, Mosul)
- Burnaby, F., (1877 (1985))
- * Chapot, V., (1907 (reprinted 1967))
- Chesney, F. R., (1837, Chesney, F. R., (1850)⁷⁷⁰
- * Cumont, F., (1917)
- Czernick, J., (1875-76)
- Dalrymple, W., (1997)
- Ellis, T., (1881) (N. Syria, Kurdistan, Mosul)
- Evliya Celebi : Bruinessen, M., van and Boeschoten, H., (1988, Dankoff, R., (1990)
- Egeria : Wilkinson, J., (1981 (rev.)); Etherie, trad H. Petre, Paris De Cerf 1948
- Gabriel, A., (1940)
- Guyer, S., (1916,{Guyer, 1925 (original 1923) #89), Guyer, S., (1939)
- Hamilton, W. J., (1842)
- Hogarth, D., (1925)
- Hommaire de Hell, (1854)
- Humann, K. and Puchstein, O., (1890)
- Kinneir, J., (1818)
- Kinross :Kinross, J., Baron, (1954) (Bitlis, Kurtalan, Diarbakir, Urfa, Gaziantep)
- Ibn-Batuta, (1929 (pb 1983)) (Mosul, Cizre, Nisibis, Mardin, Singara)
- *Layard, A., (1853)
- Lawrence, T. E., (1939)
- Leake, W. M., (1824)
- Lehmann-Haupt, K.-F., (1910 (Vol 1) and 1926 (Vol 2))
- * Le Strange, G., (1905)
- Lynch, H. F. B., (1844, Lynch, H. F. B., (1901)Vol 2 – The Turkish provinces
- Maundrell, (1699)A journey from Aleppo 1697, 4th ed ,1800
- * Maunsell, F., (1904, Maunsell, F. R., (1894)
- Muller-Simonis, P., (1892)
- Niebuhr, C., (1778 (and c.1992))(Reisebeschreibung nach Arabien und umgehenden Ländern, 2 vols, Copenhagen 1774-1778)
- * Olivier, G., (1801-1807)

Otter, J., (1748)
 * Parry, O., (1895 (and 2004))(Aleppo/Birecik/Siverek, Diyarbekir, Mardin, Dara, Nisibis, Hah)
 Petermann, J., (1860/61) 2 vols (Aleppo, Siverek, Mardin, Cizre, Mosul)
 Pococke, R., (1745)
 Poujoulat, B., (1840/41)(Malatya, Samosata, Urfa, Birecik, Tel Bashar, Aintab)
 * Preusser, C., (1911) (Cizre, Mar Gabriel, Midyat, Nisibis, Dara, Deir es Zaferan, Kalat Zarzawa, Diyarbekir, Viranshehir, Harran, Orfa, Birecik, Carchemish, Membij)
 * Renwick Metheny, J., (1907)
 Rey, E., (1866) (Hierapolis – marble altar sent to Paris)
 * Sachau, E., (1883) Am Euphrat und Tigris, Reise notizen aus dem 1897-8 Leipzig 1900
 Sandreczki, C., (1857)(Harput, Arsamosata, Ergani, Diyarbekir, Mosul – by boat)
 Shiel, J., (1838)
 Soane, E. B., (1926 (repr.1979))
 Socin, A., (1881)
 Southgate, H., (1814 (and 2003), Southgate, H., (1840 - and 2005) (Mosul, Nisibis, Mardin, Diyarbekir)
 Stark, F., (1959)
 * Sykes, M., (1904, Sykes, M., (1915)
 * Tavernier, J.-B., (1687)(Aleppo, Birecik, Urfa, Nisibis, Mosul)
 * Taylor, J. G., (1865, Taylor, J. G., (1868)
 Tozer, H., (1881) (Harput Mus Bitlis Van)
 Ussher, J., (1865) (Echmiazin-Van-Bitlis-Diyarbekir-Dara-Nisibis-Nineveh) 2vols
 Moltke, H., von, (1911)
 * Von der Osten, H., (1927-1930)- especially No. 8 for 1929 (110, Hani, Silvan 111, Arzan 112, Tell Fafan (?) 113, Tigris navigable 113, Siirt 114, Nisibis 94, Edessa 103, Mardin 96)
 Von Oppenheim : Oppenheim, M. F., Von, (1901)

In addition the following were consulted:

- Volume 3 of Vital Cuinet's « *La Turquie d'Asie : géographie administrative, statistique, descriptive et raisonnée de chaque province de l'Asie-Mineure* » (Paris, 1892-4)
- Volume 7 of Karl Ritter's *Erdkunde* (Berlin 1843-4), in particular

Mardin	2 37 and 379
Dunaysir	2 373
Hisn Kayf	2 81
Diyarbakir	2 20 45
Mayafarquin	2 67
Bitlis	1 1004 and 2 92
Akhlat	1 324
Kharput	1 809
Urfa	2 315
Malatya	1 849

In Humann and Puchstein (see above) there is an annex by the mapmaker Heinrich Kiepert entitled '*Zu den Karten*' in which he discusses his sources. These included:

Chesney 1932 (Marasch to Samsat)

Lejean G 1867 (Marasch to Aintab)
Sachau 1879
Moritz, B 1885 (Aleppo-Islahiye-Aintab to Birecik)
Blanckenhorn 1888
Haussknecht 1865 (Aintab-Edessa)
Truilhier 1808 (Birecik-Yallak-Samsat)
Von Moltke 1839 (Samsat-Halfeti)
Lynch 1836
Sterrett 1884 (Birecik, Suruc, Urfa)
Winter 1888

Chesney, Von Moltke and Sachau are mentioned above. Lejean and Truilhier made maps and notes which were consulted by Kiepert in the archives of the Ministry of Foreign Affairs in Paris, but are apparently no longer publicly available (for Truilhier see below). Moritz provided Kiepert with notebooks which were apparently never published. Blanckenhorn made a geological survey and created a map used by Kiepert but which was not apparently ever published either. Winter participated in the excavations at Sendjirli and investigated the region. His notes and sketchmaps were used by Kiepert but I have not found them. Sterrett's published accounts of his journeys to record inscriptions in western Asia Minor include no reference to the region of Urfa.

Richard Kiepert compiled a similar annex (*Begleitungen zur Karte 'Syrien und Mesopotamien' von Dr R. Kiepert*) as an annex to Von Oppenheim's description of his travels (see 1899, 1900 below). The sources for which I have been able to find references are: Von Moltke (see 1911 below); Haussknecht, C, *Routen in Orient*, H. Kiepert, Berlin, 1882 (not seen); Rey, *Carte du nord de la Syrie*, Paris 1885 (not seen); Blanckenheim, *Grundzüge der Geologie von Nordsyrien* (not seen); Ainsworth (see 1842 below); Buckingham (see 1827 below); Moritz (1885? Not found); Truilhier, *Reconnaissance militaire d'une grande communication d'Alep à Tehran* 1808 – manuscript in archives of Ministry of Foreign Affairs, Paris (not seen); Oswald Parry (see 1885 below); Maunsell FR (see 1894 below); Garovaglio, A, *Viaggio nella Siria centrale e nella Mesopotamia*, Milan 1896 in (?) 'L'esplorazione commerciale', X fasc.4 (not seen); Niebuhr, C (see 1778 below); Forbes, F., (1839).

Annex J

Maps

The maps mainly used in the preparation of this thesis were the following:

- * Tactical Pilotage Charts, available from Omnimap; 1: 500 000, also in digital format - TPC G-4 A, B and D (used as base maps for those included in this thesis and also for the maps in the Barrington Atlas of the Greek and Roman World). These maps show some topographical information including rivers and contour lines at intervals of 500 feet – not meters. Place-names and road information are provided sporadically and are sometimes out of date.
(<http://www.omnimap.com/catalog/int/tpc-list.htm>)
- * Road maps:
 - * Ryborsch (2000/2001), 1: 500 000.
These maps are the best available at this scale but the information offered, especially that on archaeological sites, is frequently incorrect.
 - * Euromap (GeoCenter/Mair Dumont - undated), Turkey, 1: 750 000
 - * IGN France (1994), Turquie, 1: 750 000
- * ‘Village atlas’ :
 - * *Köy köy Türkiye Yol Atlası*, MapMedya, 2003/2004, 1: 400 000
This was an important tool for modern village names and for the rough indications provided on road access, but it is poorly produced, topographic details and the course of roads are indicated only schematically, while cultural information is often inexact.
- * Richard Kiepert, *Karte von Kleinasien*, 1911, 1: 400 000 – only available for consultation in library of British Institute at Ankara
C V Malatja, C VI Diyarbekir, D V Haleb, D VI Nsebin.
These maps show much interesting detail taken from the accounts of early nineteenth century travelers, including on occasion the course of Roman roads and the sites of bridges. Some of the routes of travelers shown on the maps are taken from written accounts which I have not been able to obtain.
- * Richard Kiepert, *Karte von Syrien und Mesopotamien*, 1893, 1: 850 000
2 sheets (westliches und östliches Blätter) included at end of volumes 1 and 2 respectively of Von Oppenheim’s book published in 1900 *Vom Mittelmeer zum Persischen Golf*. Again routes of travelers are shown for which published accounts are no longer always available.
- * Maps of the British General Staff published in 1911 at 1:200 000 and copied from various sources (available for consultation in the library of the BIA); e.g. Birecik, sheet G12, based on a map by the South African Survey Company copied from an undated Turkish original.

* Maps of the US Army Map Service at 1:250 000, “compiled in 1950 from the latest available medium-scale Turkish source maps” (available for consultation in the library of the BIA); e.g. Urfa, sheet NJ37-10.

* Sundry maps of the *Tübingen Atlas des Vorderen Orients* (TAVO), especially
 B V 13 Die Ostgrenze des Römischen Reiches (1.-5.Jh, n. Chr.)
 B VI 3 Das Sasanidenreich
 B VI 4 Östlicher Mittelraum und Mesopotamien - Spätromische Zeit (337-527 n.Chr)
 B VI 5-7 Östlicher Mittelmeerraum – Das Frühbyzantinische Reich 527-563 n.Chr);
 Kaukasus und Mesopotamien – Byzantiner und Perser 581-628 n.Chr.); Der Vordere Orient zur Zeit des Byzantinisch-Persischen Konflikts (6.-7.Jh. n.Chr.)

* Russian topographic maps of eastern Turkey, 1: 100 000 (Tigris area only)
<http://www.cartographic.com/data/topographic/maps/catalog.asp?AreaID=6&RegionID=259>)

Lice	J-37-58	1967
Kulp	J-37-59	1967
Egil	J-37-69	1964/1976
Hazro	J-37-70	1964
Silvan	J-37-71	1968
Diyarbakir	J-37-81	1968
Bismil	J-37-82	1967
Batman	J-37-83	1964
Siirt	J-37-84	1968
Savur	J-37-94	1967
Idil	J-37-96	1967
Midyat	J-37-95	1967

These are the only topographic maps available to the general public for eastern Turkey at a scale of 100 000 or below. Good Turkish military maps exist at scales of 1:100 000 and 1:25 000 but are rarely available to archaeologists. (Those at 1:100 000 can be very useful if available, because they show old as well as new village names.) The Russian maps are very out of date and include no information on archaeological sites but are useful for studying the topography of smaller areas. For this study only the maps of the Tigris basin were obtained.

Colour photocopies were also obtained from the Map Room of the Bodleian Library of the German series on Turkey at 1:200 000 dating from 1918 and 1941 (Tigris basin only).

1918 sheets G11 and 12 and H12
 1941 sheets F14 and 15; G 12 to 15; H11 to 15

* * * *

Maps prepared especially for the thesis and listed on page 5 were produced using the programme ‘MapMaker Pro’ on the basis of digital versions of the Tactical Pilotage Charts mentioned above. Altitude data is available only in feet.

The itineraries in travellers' report listed in Annex H are sometimes shown by Kiepert (see discussion in Chapter 1). There are difficulties in tracing the course, for example, of Taylor's journeys around the Tigris. These stem in particular from the changes of place-names mentioned above. It is a laborious task – sometimes unsuccessful - to trace the current position of old names, especially for those places for which names have been changed intentionally by the Turkish authorities and are shown on modern maps without the ancient name appended. In some cases, the British military maps of 1911 available in the library of the BIA permit identification.

Gazetteer of cities and fortresses

Cities

Amida (37°54'41'' N; 40°14'10'' E; elevation 671m)

Now known as 'Diyarbakır'. Situated on the upper Tigris close to a bend in the river, surrounded by good agricultural land and not far from Eğil, a small town some 40kms to the north that had been the seat of the Armenian dynasty of Ingilene/Sophene (see Carthiocerta below). Its original importance was probably linked to its position on the road from Nisibis to the Euphrates crossing near Malatya. This route may in fact be the same as that used by the Assyrian merchants trading with the Hittites and with the later Persian Royal Road from Susa to Sardis (see route 1 in chapter 4-1). The medieval bridge SE of the city had a Roman predecessor (bridge 2 in Annex A to chapter 3).



First strongly fortified by emperor Constantius II in 354⁷⁷¹ but captured by Shapur in 359 when its population was still small, following a siege. Ammianus Marcellinus states that there were then only 20 000 people in the town, including soldiers and refugees⁷⁷². But after this siege, which he graphically describes, the town soon recovered and was greatly expanded to cope with new refugees coming from Nisibis in 363.

According to the ND two units of cavalry were based here - the *Equites scutarii Illyriciani* and the *Equites ducatores Illyriciani*. It was captured again by the Persians in 502; after his experience of the city baths, Kavād decided to build baths in all the cities of his kingdom⁷⁷³.

Diyarbakır is famous today for its ring of dark basalt walls, originally constructed by Constantius but many times repaired. The ring is currently 5½ kilometres long and stretches 1.1km from north to south, 1.5km from east to west; it had to be substantially enlarged after AD363 to encompass the new quarter settled by refugees from Nisibis. One ancient church remains within these walls as well as a citadel in the north-east corner currently being

opened to visitors. There are still small numbers of three different groups of Christians resident.

An amphitheatre must have existed in the sixth century because in AD 504 during a siege by the Romans when the city was temporarily in the hands of the Persians, ten thousand of the inhabitants (according to Zacharias) were herded by the Persian garrison into the amphitheatre without food⁷⁷⁴. The Persian garrison withdrew in the winter of 504/5 after payment of a large amount of gold and in the following year the fortress of Dara was constructed and other city fortifications were strengthened.

Gabriel published a study of the city and in particular of its walls in 1940⁷⁷⁵. A monograph on Amida was also published in 1910⁷⁷⁶. The Encyclopedia Iranica contains an article by Sellwood ('Amida')⁷⁷⁷. In the period concerned here, Amida became a crucial fortified settlement which, because of its strategic position on international trade routes, came to dominate the region between Taurus and Anti-Taurus. It has remained the principal city of this region ever since.

Arzen/Tigranocerta (37°58'26" N; 41°23'05" E; elevation 562m)



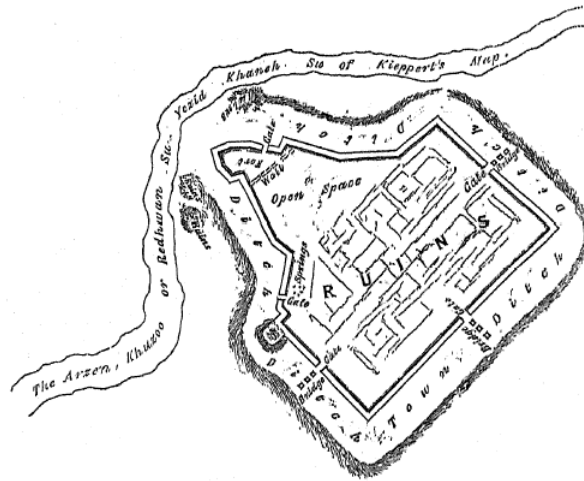
Founded by Tigranes (95 to 54BC), the greatest of the Armenian kings; the site of Tigranocerta was identified by several scholars with Martyropolis⁷⁷⁸ (others said Tell Armen, south of Mardin and now Kızıltepe⁷⁷⁹). Convincingly demonstrated by Sinclair⁷⁸⁰ as Arzen, the ancient town lies east of Batman on the Garzan Su – in antiquity, the river 'Nicephorius' - and eponymous capital of Arzanene ('Aghdznik' in Armenian).

First captured by Lucullus in 69BC, the city was destroyed by Shapur II in 364. It seems to have recovered, although at some point, perhaps in the sixth century the population moved north to *Chlomarón* (now 'Golamasya' – see *Fortresses* below). It lay on the route from Amida via Bitlis and Lake Van to Artaxata, the capital of Armenia, later replaced by Dvin.

During the hostilities of the 5th and 6th centuries Arzanene was in Persian territory and was regularly ravaged by the Romans under Maurice. There was a bishop of 'Arzun' under the Nestorian metropolis at Nisibis in the 6th century. It was the centre of Persian defence of the province but in AD578 10 000 people are said to have been transported by the Romans to Cyprus⁷⁸¹.

Today little remains of ancient Arzen or of Golamasya, 14km to the north-east. The circuit of the walls can be made out in part but the plan of the internal layout drawn up by Consul

Taylor⁷⁸² (see below) is no longer apparent because of ploughing and agricultural activity. The site and its surroundings are described by Sinclair⁷⁸³.



No. 1. Plan of the Ruins of Arzen (Emporium Arzanenorum).
(On a scale of 800 paces to one inch.)

Barbalissus (approx. 36°03'28" N; 38°02'02" E; elevation 332m)

Possibly more a military post than a city, but also a bishopric. It appears in Ptolemy (Coele Syria, 17) and in the ND *Oriens* (XXXIII, 25) as the base of the *Equites Dalmatae Illyricani*. It was refortified by Justinian⁷⁸⁴. Although not mentioned as such by Hierocles, it may correspond to his '*Scenarchia*'. It is thought to lie under Balis, south of Meskene⁷⁸⁵, now mostly under the water of Lake Assad. Ainsworth came here with the Chesney expedition in 1835 and reported that a square Roman tower was still standing, "with a wall twelve feet thick, but gradually falling to pieces"⁷⁸⁶.

A Roman officer called Bacchus was martyred here early in the 4th century and became the patron saint, just as his comrade Sergius became the patron of Resafa to the east. A plan was published by Sarre and Herzfeld⁷⁸⁷ and the site is examined by Ulbert⁷⁸⁸. Some excavation was undertaken before it was inundated⁷⁸⁹. The surviving remains have been illustrated and discussed in an article in *Antike Welt*⁷⁹⁰.

Batnae/Anthemusia (36°58'32" N; 38°25'36" E; elevation 493m)

Also known as Charax Sidou in the ancient world, it is now believed to lie under modern Sürüç, although nothing ancient at all is to be seen in the modern town, which lies 38 km SW of Urfa. The town today is largely Arabic-speaking, being only 16km from a border crossing into Syria. It is not mentioned by Ptolemy (unless it be under the name 'Βιθιας') but appears as Batnai in Hierokles.

The Gallic pilgrim Egeria visited the town in around AD 384 and described it as a place of many 'martyria'; it apparently had then a large population and a garrison commanded by a tribune⁷⁹¹. According to Joshua the Stylite the wall of the *kastron*, which had fallen into ruin, was restored by governor Eulogius of Edessa in 504/5⁷⁹².

Ammianus Marcellinus speaks of a fair held here annually which attracted rich merchants and goods from China and India⁷⁹³. On the TP, Batnae lies on the road from Zeugma 32 Roman miles from Thiar (see route 3 in Chapter 4-1) and 30 from Harran. But the road

from the Euphrates crossing at Caeciliana heading towards Urfa was likely to have been the most important route passing through Batnae from the fourth century.

It was re-fortified by Justinian apparently with a smaller circuit of walls⁷⁹⁴. There was a bishop. (Another small town also called Batnae lay between Aleppo/Beroea and Membij/Hierapolis west of the Euphrates, now 'Al-Bab',⁷⁹⁵).

Bezabde (37°24'07" N; 42°04'04" E; elevation 419m)



The regional capital of the former Seleucid district of Zabdicene, a province which was on both banks of the river; but Bezabde itself lay on the right (west) bank of the Tigris. It had previously formed part of the province of Mesopotamia established by Diocletian but was captured by Shapur after a siege in 359⁷⁹⁶. Although it was later recovered by Constantius II, Jovian gave it up together with Nisibis and some of the 'trans-Tigritane' provinces in 363. It is mentioned neither by Ptolemy nor Hierokles.

The region of Bezabde seems to have been an early and fervent centre of Christianity. Following Shapur's capture of the city in 359, there were massacres of Christians who refused conversion to Zoroastrianism and the martyr Bassus, to whom a church was dedicated at Apamea in Syria, was killed in the nearby town of Idil/Azakh⁷⁹⁷. The fortified town of Bezabde lay opposite the former Parthian fortress of Phaenica or Finike (now known as Fenek – see under 'fortresses' below), some of whose remains are still visible on the east bank⁷⁹⁸. Bezabde's remains appear from the satellite photo above to have been partly eroded by the river but the foundations of several buildings can still be distinguished.

Bezabde was long thought to lie under Cizre, where there was a crossing of the Tigris which carried a route to Arbela and then on to Ctesiphon. In addition to a Roman bridge on the east bank of the Tigris at Kazrik, there is a medieval castle here and – to the south - remains of an important medieval bridge across the Tigris (see Buruçek and Cizre bridges in Chapter 3); a Roman bridge also used to be visible in the town itself which seems to have been established on what was originally an island in the Tigris, closer to the left than the right bank⁷⁹⁹. However, crossing the river Tigris itself is likely to have been by pontoon bridge or ferry in the Roman period.

During the surveys of Algaze prior to the planned construction of the Ilisu and Cizre dams, the remains of Finik were re-discovered on the east bank and the impressive Roman fort at Hendek found opposite. Chris Lightfoot, Algaze's Roman expert, concluded that Hendek must be Bezabde and not the hill above Cizre, as had been thought previously.

There used to be another major Tigris crossing point some 50km south at Feshkabur, which may have been used because of its proximity to Arbela and the route to the Iranian plateau; Bezabde was important not only for its Tigris crossing but also for its position at the point where the Tigris emerges from its gorge and for the ancient road system to the east. There was an ancient road up the Kazrik gorge some 5km NE of the modern town at Cizre, as well as a route up the Tigris gorge along the east bank. The group of ancient bridges at Kazrik indicates the likely existence of major trade routes both to the north up the gorge and north-east into the mountains of Kurdistan and Lake Van via Şirnak, Eruh and Siirt.

Birtha (37°01'52" N; 37°58'47" E; elevation 357m)

A former Parthian city according to Jones, it may have replaced Apamea, the twin city of Seleuceia, later Zeugma, during our period as the site of an important ferry crossing of the Euphrates, as it remained into modern times. (Perhaps the wooden bridge at Zeugma itself was not repaired after its destruction by Ammianus Marcellinus in AD 359, which he recounts at XVIII.8.1.) Now Birecik, on the road from Gaziantep to Urfa, it has a castle and town walls apparently from the Crusader period. The modern bridge was of major strategic importance since until very recently it was the only road bridge across the Euphrates for a more than a hundred and fifty kilometers north of the border with Syria.

The city is mentioned by Ptolemy (Mesopotamia, 9) and by Hierokles (see annex to ch. 5).

Callinicum/Nikephorion (35°56'37" N; 39°00'54" E; elevation 247m) not visited

Near the modern city of Raqqa and an important crossing point of the Euphrates, close to its junction with the Balikh, Nikephorion was until recently also thought to be Hellenistic *Thapsacus* (but this crossing is now believed by some to be identical with Zeugma)⁸⁰⁰.

Called Nikephorion by Ptolemy (Mesopotamia 6) and probably founded by Seleucus Nicator, its name was changed to Callinicum by Gallienus, and then – briefly – to Leontopolis by Leo II. It is mentioned by Hierokles. The town was captured by Khusro I in 540 and its population enslaved. It was rebuilt with new walls by Justinian⁸⁰¹.

Apparently nothing is left of the old city, Raqqa being a medieval Arab foundation. But Herzfeld identified a field of ruins some 500m east of the medieval ruins which he thought could be the site of the ancient city⁸⁰². The town is also discussed by Ulbert⁸⁰³

Callinicum is also mentioned in the Notitia Dignitatum as the base of the *Equites promoti Illyriciani* under the command of the 'Dux Osrhoenae' but it does not figure in the Peutinger Table, possible because of a scribal error (the PT is particularly confused in this area). Ammianus Marcellinus refers to the city as *commercandi optimate gratissimum*⁸⁰⁴. It was once of the three main customs point for trade between Rome and Persia in accordance with the terms of the treaty of 562 (the others being Artaxata and Nisibis). Little can be said about the consequences of this treaty in practice but the city was possibly therefore more important than its neighbours and there was significant trade along the Euphrates.

Fortification of so many cities during the fifth and sixth centuries in this area may indicate the direct economic importance of the middle Euphrates as well as its strategic importance as an entry point to Syria from the east.

In 531 – the year after Belisarius’ victory at Dara - a Persian army crossed into Roman territory at Circesium and penetrated as far as the small town of Gabboulon, on a salt lake south-east of Beroea/Aleppo. Belisarius prevented them from advancing further and during their withdrawal was obliged by his army to risk a battle at Callinicum which turned out badly for the Romans. One consequence was the negotiation of the ‘Eternal Peace’ of 532, which lasted only 8 years.

Carchathiocerta (Anghh/Eğil) (38°15’18” N; 40°35’41” E; elevation 744m)



This may originally have been an Assyrian fortress since there is said to be a relief of this period⁸⁰⁵ (not seen by me). It was the seat of the Armenian prince and governor of Sophene and was known in Greek as το βασιλειον φρουριον. It lay either on or near the route leading from Amida across the Taurus (probably via the mines at Ergani) to Harput and Malatya. This was also very probably the course of the Persian Royal Road (see route 1 in Chapter 4-1). There may have been another Roman road heading due north to the Dibne bridge and on across the Taurus to Palu, known to have been the Roman fortress of *Balouos* (see bridge 2 in Annex A). Thereafter it would probably have turned west to Harput and Malatya. Much of the Roman road south to Amida can be traced on satellite photos (see also Chapter 3, Annex A, bridge 1: Karaköprü).

There are still interesting free-standing tombs of the early Armenian dynasty to be seen, although some have apparently disappeared beneath the waters of the nearby Dibne dam. In the 5th and 6th centuries ‘Anghh’ was the seat of the bishop of Ingilene⁸⁰⁶, or perhaps that of ‘Sophene’ mentioned in Jones⁸⁰⁷, who, like the bishop of Martyropolis, depended on Amida. This indicates continuation of Eğil as the leading town of the old Armenian satrapies of Ingilene/Sophene. The fortress was strengthened, possibly by Justinian, by the digging of a tunnel with steps from the citadel down to the Tigris. The entrance to this tunnel and the lower steps are visible still.

Lying just north of the province of Mesopotamia, at least until the reign of Justinian, it is mentioned neither by Ptolemy nor by Hierokles. Amida may originally have been fortified by the Romans in the reign of Constantius II (or even earlier) as an alternative to Eğil, better sited for its closeness to the Tigris, which is navigable below that city but not near Eğil.

Cepha (Hasankeyf) (37°42'40"N, 41°24'43"E; elevation 540m)



View from North

The fortress existed already in the Assyrian period but it is known from the ND to have been the base for a legion and it remained in Roman hands after AD 363. (The prefect of the *legio secunda Parthica* was assigned here, one of only two legions depending from the 'Dux Mesopotamiae', the other being at Constantia - Viranşehir). The frontier between Rome and Persia after that time must therefore have run south-north from Nisibis but on a line to the east of Hasankeyf, probably along the Tigris itself, although there seems to be no Roman road along the west bank of the river. Cepha was extremely important in the Middle Ages as the principal seat of the Artukid dynasty; the citadel appears to be a jumble of constructions from very early periods right up to the present-day. Some houses are still occupied.

It is mentioned by Ptolemy as Ρεσκιφα (Mesopotamia 7) and by Hierokles as the *καστρον* of Riscephas.

The ancient bridge across the Tigris is the main attraction of Hasankeyf today but its ruined piers, partly of natural rock, in their current state are of the Artukid period. This bridge is known to have been (re-)built in AD 1117 (see Chapter 3, Annex A, bridge 5). Given the known existence of the legionary base and the ruins of much earlier bridges near Batman and 16km to the east at Şeyhosef (bridge 8), there is a strong possibility that there was already a Roman bridge also here, perhaps subsequently swept away by floods of the Tigris, just as there was near Diyarbakır.

In the Middle Ages Hasankeyf was important because of its strategic position on a route from Amida to Baghdad via Cizre. In the fifth and sixth centuries it would also have had great strategic importance because of its position on the frontier; there was perhaps an important road from Nisibis and Dara across the Tur Abdin and on to the north and Lake Van.

The upper town of Hasankeyf shows some slight indication of late Roman fortification at the far end of the plateau (southern tip of the citadel), which is cut off from the rest of the town by a deep artificial ditch⁸⁰⁸. In 2007, according to a report carried by the Anatolia

Agency on 11 August, the current excavator (Professor Abdusselam Ulucam) found five levels in the area between the bridge and the citadel, including Roman ruins assessed by him as being from the fourth century, along with the first fort gate. In particular, there were six Roman shops “scattered around the site”. Discovery of a Roman wall-mosaic has also been reported recently. The lower part of the town will be destroyed by the Ilisu dam.

Honigmann believed that the *Sitae* of the Tabula Peutingeriana (TP) and the *Siai* of Ptolemy should be identified with this town and fortress on the Tigris⁸⁰⁹. If this is correct, then the TP indicates a distance of 25 miles Tigranocerta (Arzen), which lay to the north; the actual distance as the crow flies is rather less (28km) but the road was presumably not direct. There is an intermediate stop shown on the PT at Thalbasaris (10 miles from Sitae and 15 miles from Tigranocerta). This site is not yet identified but may lie on the Beşiri plain under Batman. The other sites on this route from Amida to Tigranocerta (via *Sardebar* and *Adipte*) fit less well

Charcha/Kurkh (37°49'32" N; 40°32'03" E; elevation 561m)



Possibly the *Καρθαρα* of Ptolemy (Mesopotamia 9), it surprisingly does not appear amongst the *καστρα* of George of Cyprus, unless it hides under the names of Audasson (*Αθηδασσων*) or Hiddi (*Χουδδων*), otherwise unknown.

The ND mentions a detachment of Equites here (*sagittarii indigenae Arabanenses, Mefana*), as well as the ‘*Ala secunda nova Aegyptiorum*’. According to Ammianus Marcellinus Shapur’s forces stopped here before attacking Amida in AD359⁸¹⁰. The settlement lay on some very large artificial mounds (330m across, as measured on Google Earth); these may be principally the remains of an Assyrian town of the late Bronze Age/early Iron Age⁸¹¹. (Another Assyrian settlement (Tushan) is currently under excavation at Ziyaret Tepe, 23km to the east⁸¹².) In the 19th century it was still known as Kherkh or Kurkh⁸¹³. The current name of Charcha is Üctepe and it is just south of the Tigris opposite Ambar and about 10m west of the modern bridge at Bismil. It has itself been partially excavated⁸¹⁴ and substantial Roman levels have been reported⁸¹⁵.

Sinclair believes that the site corresponds to either the station of Arcaiapis or Sardebar on the Peutinger Table is Charcha⁸¹⁶; there are no remains of any bridge crossing the Tigris at this point but there is likely to have been a ford.

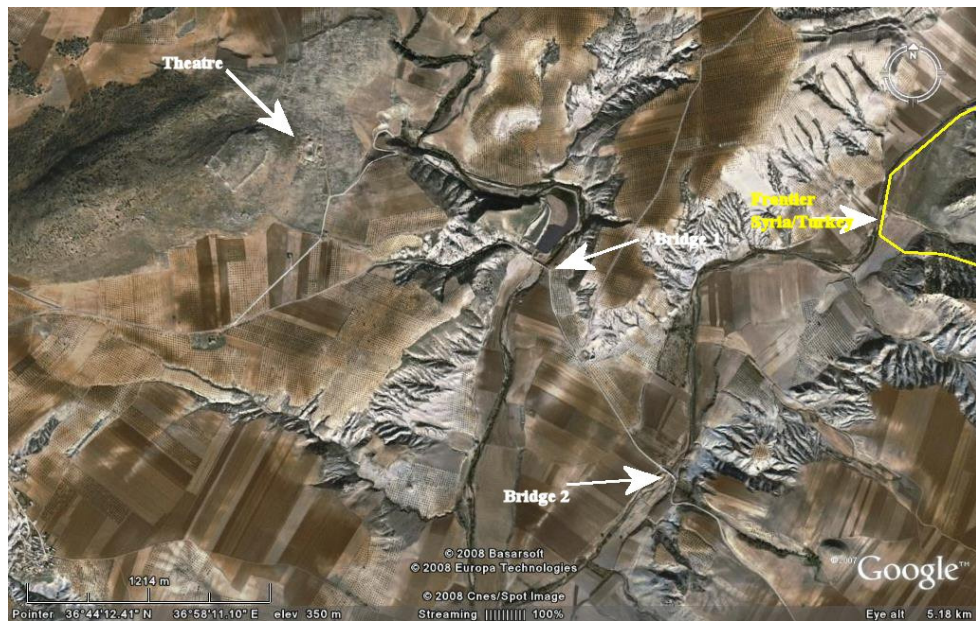
Circesium (35°11'26" N; 40°26'42" E; elevation 198m) not visited

Ptolemy mentions a city called Χαβωρα (Mesopotamia 6) at the junction of the eponymous river with the Euphrates (Khabur). This site was fortified by Diocletian and became an important fortress at the most southern point of the Roman Empire on the left (east) bank of the Euphrates. It was from here that Julian's expedition against Persia set off across the border river.

According to the ND Circesium was the station of *Legio IV Parthica*. However, the main point for permitted trade between Rome and Persia was in fact higher up the river at Nikephorion/Callinicum (see above). It is mentioned by George of Cyprus amongst the cities of Osrhoene but not by Hierokles.

The town was strongly fortified by Justinian, who also restored the baths⁸¹⁷. It has not been excavated and is now known as Buseyra. The remains were described by Herzfeld⁸¹⁸, who mentions in particular a rectangular fort on the south-west side of the mound which he ascribed to the Byzantine period. Monchambert conducted survey work in this region in connection with the construction of the Assad dam⁸¹⁹; he found Byzantine installations also south of the Khabur and investigated part of the nearby 'canal of Semiramis' which seems to have been in use during the late Roman period since Julian's fleet sailed down it in AD 363 rather than down the main stream of the Euphrates. Circesium was the most southerly point of the three eastern provinces and from here the frontier is thought to have followed the Khabur (Chabora) river north to Thannouris and then Resaina and Dara/Nisibis. The river Khabur flows south into the Euphrates from a point near the Roman fortress of Thannouris but the frontier seems to have needed little defending; it was not possible for an army to march east-west or west-east at this point because of a complete absence of water on each side of the river, which flowed in a wide valley with salt marshes. These meant that the valley was also difficult to cross except by small raiding parties.

Cyrrhus (36°44'42" N; 36°57'32" E; elevation 451m)



Possibly there was a city here before Alexander at an important crossroads between Antioch, Zeugma, Samosata and Beroea. The capital of the eponymous region of Kyrrhestike is known from the earliest days of Seleucid rule. It is mentioned by Ptolemy as Κυροϋς (Syria Coele 13) and by Hierokles with the alternative name of ‘Hagioupolis’.

The site is still known as ‘Kuros’ but there is no modern settlement; it lies in Syria but only a couple of kilometers from the border with Turkey. Much of the ancient city is still visible including walls, a theatre and a tower tomb. The site was visited by Chapot⁸²⁰ and Cumont⁸²¹, and later studied by Frézouls⁸²². In the 420s Theodoret was bishop and contributed very actively to the development of Christian doctrine. Saints Cosmas and Damian were buried there and the cathedral was consecrated to them. There are two ancient bridges still in use (see Chapter 3 - 23 and 24)

Despite its distance from the main scene of warfare between Rome and Persia in the sixth century it was refortified by Justinian, who also built a secret channel to ensure its water supply⁸²³. According to a letter from its bishop Theodoret to the praetorian prefect (quoted by Jones, p272) its territory was 40 miles long and 40 wide.



Dara (37°10'41" N; 40°56'15" E; elevation 562m)



Dara was built by Anastasius between AD505 and 507, at a time of serious tension with Sassanian Persia⁸²⁴ and is mentioned by George of Cyprus. The construction was carried out under the supervision of the clergy of Amida⁸²⁵. Following the surrender by Jovian of Nisibis to the Persians in AD363, the Romans seem to have believed it necessary to control the plain and the route west from Nisibis as well as the approaches to Amida, which had been in Persian hands between 503 and 505. The Roman fortress at Mardin lay on the escarpment of the Tur Abdin, 23km to the north-west, but was apparently considered too far from Nisibis.

There is a village on the site of Dara known as Oğuz but much of the original walls are preserved, together with a series of remarkable cisterns. The walls are about 20m high with many semi-circular towers and water-gates over the river at two points. There are also two bridges, one inside and one just to the south of the walls, as well as substantial quarries to the west and a series of tombs in the quarry closest to the city.

The city's foundation was against the terms of an agreement with the Persians according to which the border should not be fortified. Although peace prevailed until AD 525, the conflict with the Persians was renewed thereafter and Dara was regularly attacked; efforts under Belisarius to build a further fortress east of Dara at Mindos in 528 failed. He nevertheless achieved a great victory over by the Persians under Peroz in front of the city in 530. Dara itself resisted successfully several attempts to seize it until Khusro II finally captured it in 573, much to the dismay of the Romans. It was returned to Roman control under the emperor Maurice. Dara was the metropolitan after 514 for the bishoprics of Tur Abdin and 'Mnasubion'⁸²⁶ (possibly Hah – see below).

Because its remains are comparatively well-preserved Dara has attracted much scholarly attention⁸²⁷. Ainsworth reported after a visit in 1830 that the remains were then substantially greater than what is visible now, with a reservoir by the south gate, a necropolis to the east, a large building above the granaries "...which appeared to have been a palace" and a ruined temple on the hill above "...with domed vault on its eastern side, another rock-hewn temple, and a circular bastion on the hill side"⁸²⁸. None of these seem to be visible today.

Doliche (37°09'15" N; 37°21'37" E; elevation 900m)

The site of Doliche (modern Dülük) is located about 10 km north-west of Gaziantep and was an important religious centre of the kingdom of Commagene and the early Roman period. It is mentioned by Ptolemy (Syria Coele 10) and Hierokles and must also have been an important crossroads; several routes in the *Itinerarium Antonini* pass through here as well as the route from Antioch to Samosata shown on the *Peutinger Table*. It is currently being excavated by the University of Münster⁸²⁹.

There is a large number of late Roman tombs, some of which are highly decorated. Two Mithraea have been investigated, as well as the hilltop sanctuary of the god Jupiter Dolichenus. Roman and late antique buildings have been excavated, but most finds so far have been from the Iron Age. Sacrificial activity is now attested from the early first millennium BC to the destruction of the sanctuary by Shapur I in AD 235/36.

Edessa (37°09'12" N; 38°47'05" E; elevation 540m)



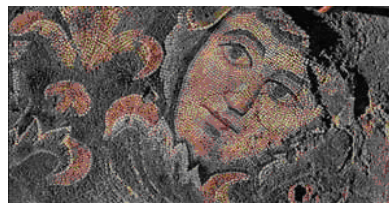
Little is known of *Orhay*, as the city was called before it was named Edessa by the Seleucids. Seleucus Nicator re-founded it in 303BC and also called it *Antioch Kallirhoe* ('...of the beautiful flowing waters'). It was the most important city of the region in terms of its cultural and economic weight throughout the 240 years concerned here. Today, the city's name has reverted to "Urfa" but for patriotic reasons this ancient name acquired a prefix and it is formally known as *Şanlıurfa*.

There are, according to Segal, vestiges of a planned Hellenistic city⁸³⁰ but very little of the early Hellenistic and Roman periods is visible today. The two columns on the citadel are apparently late Roman; although the famous late Roman cathedral no longer exists⁸³¹, it is still possible to visit the sites of the former churches of St. John (now Selahattin Eyubi Cami) and St. Sergius (now Circis Peygamber Cami), both erected in the fifth century⁸³², but little remains of the ancient masonry. Justinian refortified the city, altering the course of the river *Scyrtus*, and provided a covered colonnade⁸³³.

For a long period the Abgarid dynasty had controlled the city as a buffer state between Rome and the Parthians. The city lost its independence only under Septimius Severus although it remains uncertain whether it also continued to control the province of Osrhoene

during the early part of the Roman period⁸³⁴. After the ruler joined Adiabene in an attack on Nisibis in 194AD he was swiftly defeated but continued to rule with Roman oversight. In 213-4 the city was declared a Roman *colonia* and then from 242 a *metropolis*. It ceased to be controlled by the Abgarid dynasty about 243 after a long innings of about 375 years. The kings were apparently of Nabataean origin, thus Arabs, and speaking with the majority of the population a version of Aramaic close to Nabataean in structure and vocabulary⁸³⁵. Jews however were an important element of the population and Greek and Latin names were popular even if the families concerned were of Aramaic stock.

There was a tradition at Edessa of chronicle-writing and the public archives were considered reliable. Some at least of the documents stored there are likely to have been in Greek since the elite educated its sons in Greek-speaking countries and the coinage certainly bore legends in Greek. Even Bardaisan, a second-century writer and philosopher of Parthian origin but educated at Hierapolis (Membij – see below), seems to have been strongly influenced by Greek philosophy and Edessa itself was apparently well-known as a centre of Greek as well as Syriac learning. Nevertheless, Edessa was seen from Rome as being part of the Parthian cultural domain in the second and third centuries and its mosaics of the third century display close affinity with Iranian art, although others recently discovered and so far undated display strong links with the Mediterranean world.



Mosaics recently reported from Edessa

It is as the centre of writing in Syriac that the city is especially well-known. The oldest known dated Syriac manuscripts (AD 411 and 462), containing Greek patristic texts, come from here. Ephraim gained a reputation throughout the Christian world for his hymns and commentaries in the fourth century; Theophilus the Maronite, an astronomer, translated Homer's Iliad and Odyssey into Syriac verse. In 488, the emperor Zeno closed the famous university, the 'School of the Persians' because of its association with the 'heresy' of Nestorius and its teachers and students of moved to Nisibis⁸³⁶. But the city continued to be an important centre of teaching.

Both in legend and reality Edessa played an important role in the development of Christianity and in the surrounding area are remains of many Christian tombs, churches and monasteries. It had for centuries been a centre of theism and gnosticism. (The neighbouring cities of Doliche, Hierapolis and Harran also had strong religious traditions.) Christians at Edessa had their own church by the beginning of the third century and were the dominant faith from the fourth. Edessa attracted pilgrims from as far away as Aquitania (Egeria is thought to have visited in around 384). As she recounts, the attraction of Edessa for pilgrims was associated with the legend concerning the correspondence of a king Abgar with Jesus⁸³⁷. In the sixth century AD this legend was embellished by the story recounted by Evagrius in 593⁸³⁸ concerning a sacred image of Jesus (similar to the Turin shroud) which was said to have accompanied his letter to Abgar. This icon was supposed to have been made by God on a piece of cloth without human intervention (*αχειροποίητος*).

In the fifth century Christians at Edessa were divided between communities of Nestorians, Monophysites and Diophysites (or 'Chalcedonians'). By the end of the century

Monophysites seem to have been preponderant but this caused serious difficulties in relations with Chalcedonian (or ‘Melkite’) Constantinople. The closure of the famous Nestorian ‘School of the Persians’ may have been welcomed by the Monophysite local population but it also reaffirmed a serious rift between Edessa and Nisibis, which at least until 363 and Julian’s defeat in Persia had been twin poles of Syriac and Jewish culture in northern Mesopotamia. The antagonism between Monophysites and Chalcedonians at Edessa in any case remained bitter right through until the Arab conquest.

After 363 and the loss of Nisibis Edessa was the principal city in the eastern provinces and a vital military stronghold for the Romans. The proximity of the Persians and reliance on the army for protection – also against Arab raiders – would have enabled the civil and military authorities appointed by the Emperor to enforce obedience and collaboration, but this may often have been made difficult by religious differences as well as the resentment against Goths and other soldiers billeted with the citizens⁸³⁹. The Persians failed to take the city on several occasions. This presumably indicates that the fortifications were strong and that the Monophysite community preferred rule by Constantinople to that of the Sassanians, whose Christian communities were in any case largely Nestorian. Justinian strengthened the walls further, as well as channelling the river Scirtus around the city to avoid disastrous flooding⁸⁴⁰. But, like other cities of the region, the inhabitants had very substantial financial resources with which to buy off Persian armies if necessary. The source of the city’s wealth was to a great extent derived from commerce, rather than agriculture⁸⁴¹. But the artisan community was also numerous and no information is yet available which might allow an assessment of the relative importance of agriculture, industry and commerce in the local economy.

Europos (36°41’20” N; 38°01’00” E; elevation 341m)



Frontier follows railway line

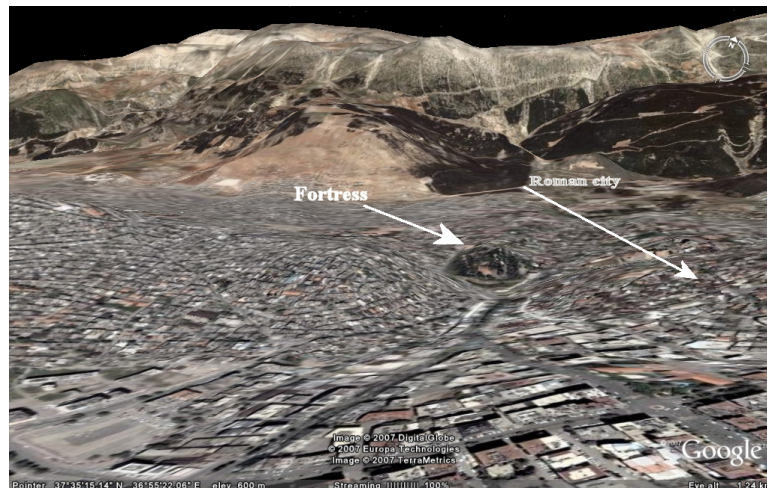
The Seleucids are known to have founded a city here on the ruins of the Bronze Age city of Carchemish. It is mentioned by Ptolemy (Syria Coele 14) and by Hierokles. The site cannot

be viewed at present because it lies just north of the border between Turkey and Syria and the mound is occupied by a military base.

Carchemish was excavated by the British Museum in several stages over a long period (with interruptions) starting in the 1860s under the supervision of Patrick Henderson, British Consul in Aleppo and at the instigation of Layard then ambassador in Istanbul. These early excavations seem to have destroyed much of the Roman layers in an effort to reach the Bronze Age layers beneath. The excavations before and after the First World War were undertaken principally by Hogarth and Woolley. TE Lawrence was also involved.

Hogarth has written an article stating the Carchemish cannot be identified with Europos⁸⁴², but the identification seems fairly secure although very little is known of the Roman city which already lay in ruins when the emperor Julian passed in AD 363. It was represented by a bishop at several church councils and Procopius also states that it was refortified by Justinian⁸⁴³. Jones discusses documents of the 1st and 2nd centuries found at Europos which show that men's names were normally Greek but those of their womenfolk Aramaic or Iranian with marriage between brothers and sisters common. Incestuous marriages were repeatedly banned, apparently to no avail, by Justinian and Justin II⁸⁴⁴.

Germaniceia (37°35'51" N; 36°56'08" E; elevation 637m)



A city of Euphratesia, whose current name of Maraş (now, properly, Karamanmaraş) is that already used in the Hittite period. Originally one of the four main cities of Commagene, it was probably named *Antioch-in-the-Taurus* by the Seleucids, gaining the title of *Germaniceia* in the early Roman period. It is mentioned as Γερμανικεῖα by Ptolemy (Syria Coele 10) and by Hierokles. It lies at the foot of passes leading across the Taurus to Cappadocia and the north. An important road led south to Antioch.

Although Germaniceia is known to have been the place of origin of Nestorius, bishop of Constantinople from 428 to 431, it played little role in the frontier wars with Persia and is not mentioned by Procopius. Theodoret of Cyrrhus confirms that it formed a part of Euphratesia⁸⁴⁵. Given the considerable importance of the city today and its likely role in ancient times as an important staging point for the passes across the Taurus it is surprising that so little is known about it. Some very fine late Roman mosaics have recently been discovered but the building concerned has not been excavated nor is there any publication.

Hah/Khakh (37°28'32" N; 41°36'34" E; elevation 950m)



There are remains of several churches of the sixth and seventh centuries. In the early 6th century the town may have been the seat of the bishop of 'Tur Abdin' under a metropolitan at Dara⁸⁴⁶. Given the large number of early churches in the vicinity it seems most unlikely that this area was surrendered to the Persians in AD363, although Hah itself does not appear to have a defensive wall. More probably the frontier lay along the Tigris gorge to the east (see Chapter 6). There are 5 unidentified names in section 6 of Ptolemy's list of the cities of Mesopotamia but none seem to correspond directly: possibly Ζηθα or Βεθαυνα was the name of this town in the second century. It is mentioned neither by Procopius nor by Hierokles nor by George of Cyprus.

Today there is only a small village, dominated by the well-preserved monastery and church of the Virgin ('El Adra'), which dates originally from the 7th century. This was described originally by Gertude Bell⁸⁴⁷ There are other villages nearby which also have fine early churches, in particular Arnas, Salah and Keferzi. The current town of the region is Midyat where there are also early churches, but this town is also omitted from the early lists of cities of the eastern Roman Empire.

20km from Midyat heading south-east towards Cizre lies the monastery of Mar Gabriel (originally 'Qartmin'). This is currently the largest monastery of the area and its buildings include churches of the fifth century funded by the emperors Arcadius, Honorius and Theodosius II. The buildings have been studied recently by Palmer⁸⁴⁸.

Harran/Carrhae (36°51'50" N; 39°01'55" E; elevation 371m)



Still referred to as Carrhae by Procopius, its walls were restored by Justinian⁸⁴⁹ but the city is infrequently mentioned in accounts of events of the fifth and sixth centuries. It lies today only 39 km SE of Urfa and less than 17km from the border with Syria. The city is mentioned by Ptolemy (Mesopotamia, 12) and by Hierokles.

Ammianus Marcellinus already referred to it as an ancient city⁸⁵⁰. It was associated with worship of a moon goddess even in the Assyrian period and was renowned in classical antiquity for her temple. In 54BC Crassus was defeated at a battle near Carrhae, in which Abgar and the army of Edessa reportedly deserted to the Persians.

Created a colony by Marcus Aurelius, it supported the Romans in a war against Parthia in AD165. Julian visited the city and its temple. In 502 Kavad enslaved its inhabitants during the war against Anastasius. Chosroes was paid off in 549 and left the city unharmed. But in 609 it was captured by Sahrwaraz. According to Segal⁸⁵¹, paganism survived in Harran until after the Arab conquest. It was quite exceptional in this respect since no other late Roman city maintained such a tradition for so long.

The ancient remains now visible are for the most part medieval. More was visible in 1909 when Preusser visited Harran⁸⁵².

Hemerium (location unknown)

A former Parthian city, mentioned by George of Cyprus but not by Ptolemy nor by Hierokles. According to Jones (220), it replaced the Seleucid foundation of Amphipolis, opposite Carchemish/Europos and now on the Syrian side of the border. However, its location is uncertain and was not found during my visit in 2000 nor is it visible on high-resolution satellite photographs recently made available for this area on Google Earth.. Zadok states that it was known to the Assyrians as 'Imminina'; it already appears in an inscription of Shalmaneser III (858-824 BC)⁸⁵³.

Ausonios of 'Himeria' spoke at the first Council of Ephesus in 431 in Greek in favour of the 'diophysite' tendency. But one of his successors as bishop of Himeria, Ouranios, was almost the only participant at the second Council of Ephesus in 449 to speak in Syriac. Eulogios, a presbyter from Edessa, and Libanios, a deacon of Samosata, interpreted his speeches into Greek⁸⁵⁴.

According to Procopius, Justinian rebuilt the city walls in stone (they had formerly been in mud-brick)⁸⁵⁵. He also assured the water supply by building cisterns and installed a strong garrison.

Hierapolis/Bambyce/Mabbug (36°30'52" N; 37°56'07" E; elevation 464m)



Once an important religious centre, where the god Atargatis was worshipped, today Membij lies in Syria some 30km from the Euphrates and has only a few fragments of ancient sculpture in a local park to show for its famous past. The original name of *Bambyce* is linguistically related to the modern ‘Membij’. The subject of a monograph by G. Goossens⁸⁵⁶, it was also visited by the Chesney expedition in 1830 and by Hogarth en route to Carchemish in the beginning of the 20th century⁸⁵⁷. Ainsworth recounts that the Chesney team found the base of the temple of Atargatis, as well as the city walls, “...clearly traceable for several miles”, and “a series of round arches which appeared to have belonged to an aqueduct”⁸⁵⁸.

Previously a major Assyrian centre it became during the Roman period an important centre of pilgrimage for the entire Aramaic-speaking world. One of its cult rituals involved the pouring of seawater into a holy pool to stifle demons⁸⁵⁹. It may have been the site of a fair attracting merchants from India and China, as well as the Black Sea and the Mediterranean since Procopius of Gaza, a teacher of rhetoric in the early fifth century, says in his *Panegyric of Anastasius* that it had become a sort of international centre for people from these regions as well as Greeks and ‘Poeni’: *καὶ ὡσπερ τοῦ τῶν ἀνθρώπων γενοῦς κοινῆς ἀν εἰποὶ πατριδα*⁸⁶⁰. The city was visited on three occasions by the emperor Constantius and Julian passed through in 363. It became the capital of the new province of Euphratesia, formed out of the former Seleucid satrapies of Cyrrhestike and Commagene. It paid 2000 pounds of silver to Chosroes in 540 to avoid a sack and destruction of its countryside. Either Anastasius (Procopius of Gaza) or Justinian (Procopius of Caesarea) re-fortified the city and cleaned out the lake in the city centre, which provided an assured water-supply in times of siege⁸⁶¹.

Hierapolis lies 18km SW of the Euphrates crossing near the mouth of the Sajur at Caeciliana. (The precise location of this place remains uncertain.) There was an important road (route 4 in chapter 4-1) leading to Harran and Edessa from Antioch and Beroea (Aleppo) which passed through and during the later Roman period this crossing may have been preferred to that to the north at Zeugma. In later periods a crossing due east of Hierapolis at Kara Bambuch was preferred and this may also have been used in antiquity⁸⁶² but proof is so far lacking.

Martyropolis (38°08'06" N; 40°59'06" E; elevation 819m)



Today known as Silvan, the city lies in a region known in the ancient world as Sophanene, one of the ‘Trans-Tigritane provinces’ to the north of Roman Mesopotamia.. It is situated east of the main branch of the Tigris and therefore in an area which since Hellenistic times had been traditionally Armenian and Aramaic by culture and which had also been in the Persian sphere of influence following the rise of the Parthians. This situation continued until the victory in AD 297 over the Sassanian king Narses of the Roman emperor Galerius. Although nominally ruled by Armenian princes until the administrative reforms of Justinian, the province remained in Roman hands in accordance with the terms imposed on the Romans following Julian’s expedition in AD 363; it was not one of those provinces returned to Persia under the terms of this treaty, which was concluded by the emperor Jovian in order to extract the Roman army from lower Mesopotamia after Julian’s death.

The city is not referred to by Ptolemy nor by Hierokles but appears in George of Cyprus (writing after AD 600) as a city of Mesopotamia. Although the city was to become an important centre in the early Middle Ages, it was not of especially ancient origin and is thought to have been founded under the Greek name Martyropolis by the bishop of Sophanene, called Marutha, around AD 400⁸⁶³. ‘Marutha’ may in fact have been the title of the leader of the local princely family, the former ‘satraps’ of Sophanene. Another Marutha, probably the grandfather of the founder of the city, had been converted to Christianity through the intervention of James (or Jacob), bishop of Nisibis at the end of the third century⁸⁶⁴. That Marutha is likely to have accompanied James/Jacob to the church Council of Nicaea in AD 325. His grandson was later successful in receiving the support of both the Roman emperor and the Sassanians. He visited the Sassanian capital at Ctesiphon on

several occasions as a Roman ambassador and obtained the trust and support of the Persian king, Yazdegerd I, possibly through his prowess as a medical doctor. Socrates recounts how Marutha was able to cure the king of a chronic headache⁸⁶⁵.

Despite the opposition of the Magi at the Persian court, he was allowed by Yazdegerd to collect the bones of Christian martyrs in Persian territory, which he then brought back to the city together with stories of their martyrdom which became extremely popular in the eastern Roman Empire. He may thus have made his newly-founded city at Silvan, then called 'Martyropolis' in Greek and 'Mayperkat' in Syriac, an early destination for pilgrimage and established an important link between official Christianity and popular culture.

The city lies about 16km from the Batman Su, formerly the river *Nymphius* and the frontier after AD 363 between Rome and Persia. Martyropolis was attacked by the Persian king Kavad in 502 and, according to the Arab historian Yakut, its population was transferred to a specially-built city called Abaz-Kabadh⁸⁶⁶, somewhere in Persia. On the other hand, Procopius reports that Kavad took Martyropolis on his way to besiege *Amida* (Diyarbakır) without its capture being contested by the inhabitants⁸⁶⁷.

Anastasius is likely to have begun the rebuilding of the city walls soon after he regained possession of the city almost immediately afterwards, but this reconstruction was completed by Justinian and it survived a siege in 530/1. Justinian renamed the city after himself, according to Malalas, and made it the chief city of both the former satrapies of Ingilene and Sophanene, when he formally incorporated the region into the empire as the province of 'Armenia IV'. Martyropolis figured prominently in the fighting between Rome and Persia, especially towards the end of the sixth century. Although briefly occupied by the Persians following a betrayal by a local Roman commander, it was returned by Khusro II to the emperor Maurice in AD 591 at the time of his re-instatement by the Romans as the Sassanian king and was still in Roman possession at the time of Heraclius.

Contrary to the views of some writers of the 19th and early 20th centuries, Martyropolis is unlikely to have been the site of the Armenian king Tigranes' capital at Tigranocerta, now convincingly identified with Arzen, whose ruins lie some 36km to the SE (see *Arzen* above).

Some of the walls of Martyropolis appear to date back to the period of its foundation, or at least to the strengthening of the walls carried out in the reign of Justinian, but the ancient cathedral, probably built in the early fifth century⁸⁶⁸, was ruined when it was visited by Gertrude Bell in 1911 and has now entirely disappeared. Much survives of the city walls, built of very large cut blocks and of several ancient buildings⁸⁶⁹.



Basilica, View of E end (Bell, S_168)



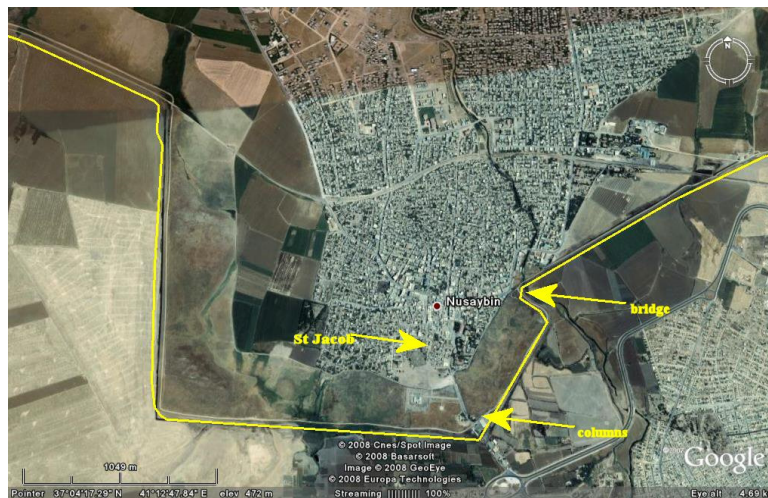
El-Adra, general view of exterior from E (Bell, S_178)

A large square minaret of the Ayyubid period (c.1200) survives to the south of the town. To the east of the city lies the medieval bridge crossing the Nymphius/Batman Su (the *Malabadi bridge*, now at the foot of a small dam called the ‘Batman dam’). Remains of the important late Roman fort – possibly Samocharta (see below) - are a few kilometres south-south-west of this bridge. In the fourth and fifth centuries AD, the route from Amida to Artaxata/Dvin via the Bitlis pass and Lake Van is likely to have crossed some 15km further to the south by the late Roman bridge whose remains are still visible (Harap Köprü – Ch.3). However, Silvan/Martyropolis itself is situated to the north of the main trade route and the reason for its foundation at this location is unclear. Possibly it guarded a route descending through a ravine to the north coming from Citharizon via Boşat (see discussion of Antağ bridge in Annex A).

Neocaesarea/Atthis

A military post on the Euphrates but also the seat of a bishop who attended the council of Nicaea in the fourth century. Formerly Athis, a station mentioned in Ptolemy (Syria Coele, 17) and in the Peutinger Table, it is referred to by George of Cyprus as ‘Caesarea’. Like those of Zeugma and Barbalissus, its walls were rebuilt by Justinian⁸⁷⁰. Procopius also mentions reconstruction of the walls of Gabboulon, situated on a salt lake SE of Aleppo and west of tthis. Nothing is known of this site which according to the ND was the post for a detachment of ‘Equites’, like Barbalissus and Resafa.

Nisibis (37°03’51” N; 41°13’03” E; elevation 455m)



Turkey-Syria border in yellow

The lynchpin of Roman defences in the East since the time of Trajan, the city was lost to the Persians after the death of Julian as a result of the need of his successor, Jovian, to extract the army from lower Mesopotamia. The agreement of 363 also resulted in the cession of the ‘Trans-Tigritane’ provinces, but it was the loss of Nisibis which really hurt and was considered by many contemporaries a major humiliation for Rome⁸⁷¹. Although for the 240 years here under review the city did not belong to the Roman Empire, it continued to be of major importance for upper Mesopotamia; it is included here as one of the three major cities of the region (the others being Edessa and Amida).

For at least two centuries from 1700 to 1900 the ruins of the ancient city seem to have been abandoned. Olivier passed here around 1800 and saw only a ruined triumphal arch and a small square temple, then rather well-preserved, “...dont l’architecture parait romaine”. Apart from the baptistery dedicated to St James or Jacob, the first bishop of Nisibis (308/338), which is still extant and had already been reported by Carsten Niebuhr, Olivier also saw a group of 5 columns, of which 3 were then surmounted by capitals and, a little further on, a block of white marble with a Latin inscription, badly eroded, of which he could decipher only the words “...cuius...victoriam...stadi...”⁸⁷². Olivier crossed the ancient bridge over the Djaghdjagh river to the east of the town, which then had 12 small arches (see Chapter 3). Although few remains of the ancient city were visible in the 19th century, Ainsworth, on his return from the Chesney expedition down the Euphrates, saw ruins of houses for at least a mile or more around the centre⁸⁷³. The one major surviving monument which may be visited today is the church or baptistery, dated to 359. The columns and remains of the ancient bridge may be seen through the barbed wire in the ‘no-man’s-land’ of the frontier zone.

Although now a thriving town on the border with Syria, most of the ancient city lies between the Turkish ‘Nusaybin’ and the Syrian ‘Al-Qamishly’. Both have populations which are largely Kurdish today. In AD 363 the population was however Syriac-speaking and mostly Christian. Even after the surrender to the Persians and the installation of a large group of Persian colonists the city continued as a major focus for Nestorian Christianity and the metropolis for a wide region covering the territory up to and beyond the Tigris to the east and to Djebel Sinjar to the south-east.

The city was another Seleucid re-foundation of a much earlier town and it lay on important trade routes crossing from Hatra and lower Mesopotamia to Edessa and then to the

Mediterranean near Antioch. Its Christian history has been described most exhaustively by Fiey⁸⁷⁴; no monograph in English yet exists, but Russell has reviewed what is known of its early history, especially from the cultural and religious viewpoint⁸⁷⁵. The 53 columns by Sturm in PWRE are possibly the best survey available. Some recent work has been done on clearing the ground around its most famous extant monument, the Baptistery of St. Jacob/James, but no detailed or published archaeological investigations have yet taken place⁸⁷⁶. It must be assumed that the 'no-man's land', under which most of the old city lies, is currently mined, but there are apparently proposals to create a joint archaeological area involving both Turkish and Syrian authorities. For the bridge, see chapter 3 (Annex A).

Trajan's conquests had included Nisibis, which was placed within a new province of Mesopotamia. But these conquests were surrendered by his successor and it was only integrated into the empire by Lucius Verus, in whose reign the frontier with Persia was established near Singara, some 200km to the south-east. Together with Osroene, Nisibis and its surrounding area to the east of Adiabene supported the wrong side in the civil war between Septimius Severus and Pescennius Niger, but apparently suffered no ill effects. Since the Sassanian Persians sought to recover their lost territories soon after, Nisibis gained great importance in the ensuing campaigns. Its walls were strong and it successfully resisted sieges in particular by Ardashir, although it fell twice to Shapur I and was only recovered by Odenathus of Palmyra in AD 262-3. The victories of Galerius over the Persians under Narses, after initial defeats and the loss of Mesopotamia, brought a settlement in 298 famously favourable to the Romans which confirmed Nisibis as part of Roman territory; Shapur failed to dislodge the Romans despite a further 2-month siege in AD 338 and again in 346 and 350.

The city was much assisted in its time of need by the great hero of the church, its bishop James (or Jacob), who had attended the council of Nicaea in AD325 and whose body was buried in its walls. It was he who had converted at least some of Armenia and perhaps indirectly the family of Marutha, the princes of Sophanene. Its population then was largely Aramaic and Armenian with a large Jewish community but negligible Greco-Roman presence.

Julian's Persian campaign began with a feint through northern Mesopotamia which was to hide his advance along the Euphrates. This was apparently successful in its purpose since the Persian forces concentrated around Nisibis; the return of this city then became the key demand from the Persian side in order to permit the withdrawal of the Roman army after Julian's death. Jovian agreed to surrender the city and much adjacent territory, but he obtained the right for its citizens to decamp to Roman territory and the populations of Edessa and Amida were in consequence substantially increased. Despite this disaster Nisibis continued as an important trading city and military base, although under Persian control.

On various occasions the Romans sought to regain the city, but unsuccessfully. In consequence of these failures Anastasius decided to fortify Dara as a means of controlling the frontier zone. Nisibis continued to figure prominently in the Persian wars of Justinian and his successors but the Sassanians maintained their control and the city functioned also as a crucial centre – together with Seleucia-on-the-Euphrates - for the organisation of Christianity throughout Persian Mesopotamia and beyond. In particular, bishops in the provinces to the north-east of Arzanene, Moxoene, Zabdicene, Rehimene and Corduene depended from Persian Nisibis. The Nestorian monasteries on the south slopes of the Tur Abdin were also founded from the city and maintained close links with it. In addition to its

famous theological schools, a medical school was founded by its archbishop Barsaumas, possibly in 471⁸⁷⁷.



Perre (37°47'22" N; 38°18'43" E; elevation 631m)



Perre was one of the four cities known from this period in Euphratesia which belonged originally to Commagene (the others being Samosata, Doliche and Germaniceia). Today it lies not far from the provincial capital, Adiyaman. It was not referred to (at least not under this name) by Ptolemy but appears in Hierokles.

A large necropolis is spread over a rocky hillside. In the neighbouring village to the north is a Roman fountain, but I found little else. During the period under consideration it may have been known as *Persa*, mentioned by Stephanus of Byzantium; to the Syriac-speakers it was known as *Pirin*. Its bishop depended from Hierapolis, thus confirming its position within Euphratesia.

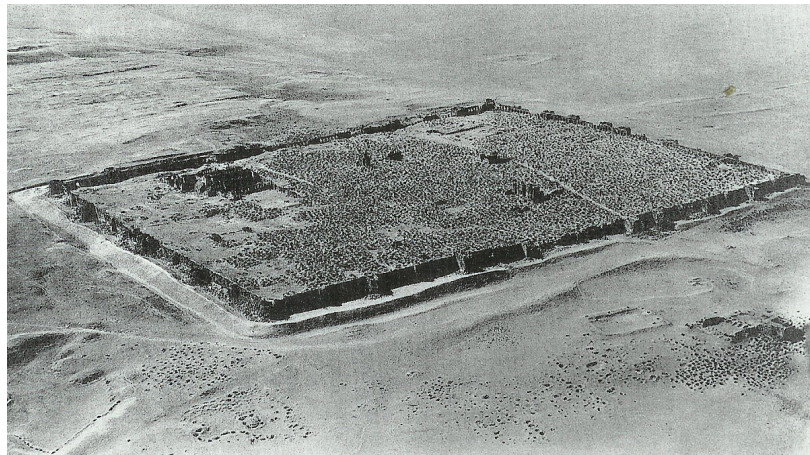
It was visited by Humann and Puchstein⁸⁷⁸ on their way to Nemrud Dag and also by Yorke at the end of the 19th century⁸⁷⁹. The many magnificent tombs of the necropolis have recently been cleaned but the site of the ancient town centre is unclear.

Resafa (35°37'40"N; 38°48'30"E; elevation 296m) – not visited

The city is referred to by Ptolemy as belonging to the Palmyrene district of Syria Coele (24) and appears in Hierokles as 'Sergioupolis' or 'Anastasioupolis'. It has been the object of recent detailed studies⁸⁸⁰, one of which also discusses Sura and associated forts. It is located near Sura in the desert to the south and the anchorite Sergius made it famous. Sergius had

been previously a senior officer in the Roman army of the 4th century; it was known thereafter in the ancient world as Sergiopolis, an important base for the Ghassanid tribes allied to Rome who constituted its main line of defence against raids from other Arabic-speaking nomadic tribes allied to the Persians – especially the Lakhmid confederation based at Hira, west of Ctesiphon⁸⁸¹. The cult of Sergius spread widely throughout the region and on both sides of the frontier with Persia⁸⁸².

Although originally Resafa was probably just one of several forts on Diocletian's fortified line from Palmyra to the Euphrates, according to the Notitia Dignitatum it was the base of a unit of 'equites' (*Equites Promoti Indigenae*) and Procopius states that its walls were strengthened by Justinian⁸⁸³. These still stand to a height of 15m and there are 50 towers. There are still ruins of a large church and underground cisterns. Le Strange reports that the physician Ibn Butlan, writing in AD 1051, describes this church as built by the emperor Constantine and covered in gold mosaics on the outside and with a large crypt supported on marble columns⁸⁸⁴.



Poidebard, A., (1934) Pl. LXXV

Resaina/Theodosiopolis (36°48'44" N; 40°02'16" E; elevation 365m) - not visited



The city appears in Ptolemy (Mesopotamia,13) but not, surprisingly, in Hierokles (unless the otherwise unknown 'Nea Valentia' is another name for Resaina) . It must have been re-founded firstly by Septimius Severus, but Malalas says that Theodosius the Great renamed the village of Rhesaina *Theodosiopolis*⁸⁸⁵. The early Sassanian king Shapur was defeated here by the Romans in 263 after capturing Nisibis. A cavalry unit was later stationed here according to the Notitia Dignitatum: the *Equites promoti Illyriciani*. The city was located on the road from Carrhae to Nisibis and played an important role as part of the Roman frontier defences after 363. There was apparently a cult centre for Atargatis⁸⁸⁶.

Today it is a border town called Ras el-Ain opposite the Turkish 'Ceylanpinar'. No remains of the Roman period have been reported recently, but Consul Taylor found in the 1860s ruins of the old town in a semi-circle above sulphurous springs where two rivers emerged, subsequently uniting and then flowing into the Khabur. On the NE branch, masonry, sluices and gates belonging to old mills were visible but the old town was completely covered. On the citadel mound he saw fine-cut slabs, ornamented cornices, column fragments, tesserae – and a fissure with a deep subterranean basin full of enormous fish. There was a 'qanat' or underground aqueduct beneath the ruins and the stumps of fruit trees for miles around⁸⁸⁷.

The 'tell' was visited by Max Freiherr von Oppenheim before the First World War and in 1929 when he was excavating at Tell Halaf. In 1940 an American team excavated a part of the artificial mound and revealed inter alia a fortification wall overlooking the Khabur river and remains of seven towers, seen by them as typical of late Roman fortifications⁸⁸⁸. A German team started excavating at the mound of Tell-Fecheriye in 2006⁸⁸⁹. It is possible that Resaina was Washukanni, capital of the Hurrian kingdom of Mitanni from around 1500 BC⁸⁹⁰.

Resaina was captured by Arabs in 638 and was later occupied by briefly by Jocelyn de Courtenay of Edessa. It was visited by Benjamin of Tudela around 1163. Taylor mentions that a Turkish staff officer had investigated routes to Nisibis, Harran and Urfa and had found ruins at regular distances, presumably of way-stations or *mansiones*.

Samosata (approx. 37°29'13" N; 38°27'49" E; under waters of Ataturk dam)

Since the former summer capital of the Commagenian kings was not fortified by Justinian (or at least is not mentioned in Chapter 3 of Procopius' Buildings) it is unlikely to have been of military importance in the fifth and sixth centuries, even if the formerly important Euphrates crossing here was maintained. It is mentioned by Ptolemy (Syria Coele, 11) and by Hierokles.

It was the birthplace of the poet Lucian and did play an important role in the wars against Shapur in the fourth century. Julian floated down ships from Samosata for his campaign in AD363 so the region at that time is likely to have possessed good stands of timber. It also possessed a "Hellenic" school in the fourth century (as opposed to the "Syrian" school of Edessa), which may have been the school that educated Paul of Samosata⁸⁹¹, the bishop of Antioch. It is also possible that this Paul was the eponymous hero of the Paulicians of later Byzantine history.

The region of northern Osrhoene on the bank of the Euphrates opposite Samosata was laid waste by an Arab raid in AD531⁸⁹². No traces have been found of a bridge but probably there was at some point a pontoon bridge here, as is likely to have been the case also at Zeugma.

The area has been inundated by the Ataturk dam. No detailed excavation work at Samosata was attempted before the waters rose, even though it is known to have been the camp of Legio III Gallica at the time of Vespasian⁸⁹³.

Sura (35°53'51"N, 38°48'12"E; elevation 276m) – not visited



Of uncertain origins, but first named by Pliny⁸⁹⁴, Sura lay on the south bank near the bend of the Euphrates where the river turns east. The city is mentioned by Ptolemy (Syria Coele, 25) but not by Hierokles⁸⁹⁵. It was an important fortress in the time of Diocletian and was the terminus of the route in the Peutinger Table which approaches the Euphrates from the south and Palmyra. This road was fortified with several strongpoints and constituted the south-eastern stretch of the 'Limes' for many centuries, known as the 'Strata'.

According to the ND Sura was the base of the Legio XVI Flavia Firma. In the fourth and fifth centuries Sura was an important city of Euphratesia and a bishopric in the sixth century⁸⁹⁶. It was the site of the defeat of the Lakhmid leader al-Mundir in 421/422 during the brief war between Theodosius II and Vahram Gor. The traitor Constantius escaped back from the Persians to Sura in 504 and according to Joshua Stylites was sent on from here to Edessa⁸⁹⁷. Khusro I sacked Sura in 540 on his way to Antioch, having captured it by the ruse of a stone left in a gateway, which prevented the defenders from closing the gate. It was rebuilt by Justinian⁸⁹⁸. The new walls failed to stop a further Persian invasion of Syria under Adarmahan in 572.

Sura was visited by Chapot and Herzfeld, as well as by Balbi in 1590 and by Chesney in 1830⁸⁹⁹. No thorough study of the ruins has yet been attempted, but they were substantial in 1830 and known locally as 'Suriyeh'. The surface remains were investigated by the Reverend Poidebard. Thilo Ulbert has published a plan of the city in late antiquity and discusses its history in detail⁹⁰⁰.

Tella/Constantia (37°13'41" N; 39°46'49" E; elevation 556m)

Tella is a pre-Greek name but nothing is known of its early history. There is no obviously corresponding name in Ptolemy; the city is mentioned as 'Constantina' in Hierokles. The Hellenistic city may have originally been founded as a military base on the route between Edessa and Nisibis. It was renamed *Antoninopolis* by Caracalla or Elagabalus and then

Constantia by Constantius II, who – according to the Chronicle of Edessa (section 20) – rebuilt the city in about 350. Now it is called Viranşehir. It lies to the south of the volcano of Karaca Dağ route and there appears to have been a route to Amida (Diyarbakır) from here, which passed through the gap between this mountain and the main body of Mount Izala and the Tur Abdin, as well as the important west-east corridor along the foothills of the mountains and the route to Ressaina to the south.

During the fifth century *Constantia* was the principal Roman military base following the loss of Nisibis. They suffered an important defeat near the town in 502 which allowed the Persians to attack Carrhae and Edessa (unsuccessfully). According to the ND the prefect of the ‘*legionis primae Parthicae Nisibenaе*’ was based here as well as two units of cavalry – the *Equites felices Honoriani Illyriciani* and the *Equites promoti indigenae*. Justinian⁹⁰¹ repaired the walls and built towers and an aqueduct. There are a few vestiges of these ancient walls on the west side of the city, but nothing was visible around the city centre on my visit (Preusser published a photograph in 1911⁹⁰²). One corner pillar of the originally fine octagonal church is still standing in a suburb to the SW; Gertrude Bell photographed this building in May 1911 when slightly more was visible⁹⁰³.



Remains of a large Roman building survive a few kilometers north of the town at Burçkoy. They appear to be more military than ecclesiastical.

Zenobia/Halebiyeh (35°41’20” N; 39°49’21” E; elevation 226m)



Plate LXXXII from Poidebard, A., (1934)

Beyond Soura along the Euphrates but to the east is the remarkable site of Zenobia-Halebiyya, published by Lauffray⁹⁰⁴. The site was occupied from the second to the seventh centuries but strangely it does not figure in the PT nor in Ptolemy nor Hierocles/George of Cyprus, despite the fact that an important road is thought to have passed along the south bank of the Euphrates past this city. It is not even clear whether or not it formed part of the province of Euphratesia, which is normally considered to have ended at Soura.

The site is currently threatened by another dam which is planned for this part of the Euphrates⁹⁰⁵. Study of the site and some excavation is under way⁹⁰⁶.

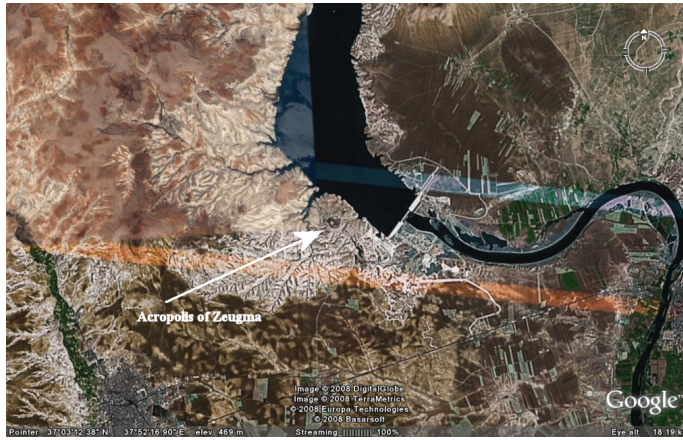
The city is known to have been refortified by Justinian⁹⁰⁷, from whose reign most of the highly impressive walls which are still visible date. It became then a great fortress city with baths and colonnades. But during both the 5th and 6th centuries the site must have been very exposed to Persian attack. No ancient authors other than Procopius discuss the city. In his *Buildings* – and on the ground - the substantial nature of Justinian's fortifications is apparent, but on the occasion of Khusro I's failed attempt in 540 to capture the city it is described as unimportant (ουτε αξιολογον), with the surrounding land untenanted (αικητον) and destitute of all good things (παντων αγαθων ερημον)⁹⁰⁸. It was eventually sacked by Khusro II in 610 but its ruined walls remain as a vivid reminder of the remarkably large and powerful military constructions of which the later Roman Empire was still capable during the time of Justinian.



Plan of Hallabiya/Zenobia by Jean Lauffray (1991)

Zeugma (37°03'21" N; 37°52'17" E; elevation 425m)

The city is mentioned by Ptolemy (Syria Coele 14) and by Hierokles and was a key Seleucid foundation (as Seleuceia on the west bank and Apamea on the east bank) guarding the main route of that period between Antioch and Seleucia-on-the-Tigris.



After



Before

(KVR-1000 image of 1992)

The site of Zeugma was unfortunately badly affected by the construction of the Birecik dam, finished in 2000. Excavations are continuing on the higher levels and many fine mosaics were discovered in the months leading up to the completion of the dam (now in Gaziantep museum). In addition to the wealthy riverside villas, a paved area was uncovered, thought to have been the Hellenistic agora, together with a system of beautifully constructed sewers and over 100 000 clay seal impressions or 'bullae'⁹⁰⁹. The firm identification of the village of Belkis with the ancient city of Zeugma was made by Jörg Wagner only in the 1970s⁹¹⁰ although it had previously been proposed by Cumont⁹¹¹. It is also the subject of a study edited by David Kennedy which brings together recent research⁹¹² and of a more recent volume in the same series of the *Journal of Roman Studies*.

Despite its evident wealth in the third century (when it was sacked by Shapur) and its apparently continuing role as a toll-station, little is heard about it during the fifth and sixth centuries. The legionary base that had flourished here in the first centuries of Roman occupation of Syria had closed⁹¹³, although the town walls were rebuilt by Justinian⁹¹⁴. It seems likely that with greater security in the steppes south of Zeugma a more direct route from Antioch to Nisibis came into use which crossed the Euphrates at Caeciliana, near Hierapolis/Membij (60kms south of Zeugma). However, Ammianus speaks of cutting two bridges at Capersana and Zeugma (presumably pontoon bridges) in AD 365 to impede an advance across the Euphrates by the Persians⁹¹⁵ and he also mentions that an army of Constantius II crossed the Euphrates at Capersana in 361 on the way to Edessa⁹¹⁶. This poses a strange conundrum because Constantius himself was at Hierapolis, some ninety kilometers from the site identified as Capersana⁹¹⁷.

The city of Zeugma had originally been formed from two twin cities: Seleuceia-on-the-Euphrates on the west bank and Apamea on the east bank. However, when the river became the frontier between Rome and Parthia, the Hellenistic city of Apamea seems to have been abandoned. (It has now been entirely covered by the waters of the dam.)

Zeugma was the starting point for many itineraries to the east including the 'Parthian Stations' of Isidore of Charax. Some specialists believe it to have been the ancient Thapsacus and even the Euphrates crossing point of the Persian Royal Road⁹¹⁸. During the 5th and 6th centuries the crossing at Zeugma did continue in use but its magnificent mosaics and sculptures date from earlier centuries and the city seems not to have recovered its former magnificence after the sack by Shapur in 256. Joshua the Stylite has a charming story of an inscribed egg found in a village near Zeugma but there are few other contemporary references in the literature of our period.

Fortresses

Mesopotamia and Osrhoene

Abarne (38°12'5225"N; 39°18'05"E; elevation 1000m)



Thought by Honigmann to be Çermik, now a small town 70km north-west of Diyarbakır, and formerly situated on a Roman road to a ferry-crossing of the Euphrates below Çungus which lies some 16km further to the north-west. There are medieval bridges which may have had Roman predecessors both here and at Çungus ('Haburman Köprüsü' in Çermik) – see Chapter 7. Little is left of the fort in Çermik, which is situated on a hill near the bridge.

Akbaş⁹¹⁹ (38°10'56"N, 41°12'11"E)

There are remains of a fortress at Başka Kalesi, thought to be built on the foundations of a Persian castle originally called Akbaş, on the east bank of the Kulp Su (one of the northern extensions of the Batman Su) about 15.5km north-east of Silvan. It is described by Sinclair in Volume 3 of his '*Eastern Turkey: an architectural and archaeological survey*'⁹²⁰. The surviving remains date from the Middle Ages, but Whitby suggests that it was originally constructed in 579, after the Emperor Maurice's successes in Arzanene in 578⁹²¹. It is believed to have been intended to keep watch on Roman movements from Martyropolis and was eventually captured by the Romans after a siege in 583. It was levelled to the ground only a few years after its construction. However, it may have been subsequently rebuilt by the Persians.

Amuda (37°06'11"N, 40°55'55"E; elevation 468m)

Amouda; now in Syria, 8.5km south of Dara on the flat plain. There is a high resolution satellite photograph available on Google Earth but no remains of antiquity are visible. The stone has presumably been recycled.

This Amuda is presumably the same place as the one mentioned in the ND (where it seems misplaced under the Dux Syriae); the *Ala prima nova Herculia* was based here. It also figures as a way-station in the Peutinger Table where it is known as Chanmaudi/Thamaude (but as 'Amaude' in Ravenna Cosmographer). A milestone was found here by Poidebard

and Mouterde during the aerial reconnaissance of the region (in 1921?) and dated by Mouterde to 216 or 217⁹²².

Aphoumon (38°04'28"N, 41°29'09"E)

This fortress is probably Anoshirvan Kale, above Golamasya, although Sinclair who visited the site in 1978 believed that the surviving remains are of a Kurdish castle of the 16th century⁹²³. It lies on top of a steep hill near the river Garzan (also known as 'Yanarsu') and may originally have been constructed by the Romans around 335 during the suppression of the revolt of Bakur; thus it may also have been one of the fifteen fortresses known to have been handed over to the Persians in 363. It was possibly originally intended to guard the important trading route down the river Garzan from Bitlis to Tigranocerta. Although 15km distant from Tigranocerta/Arzen, it could also have been a place of refuge for the inhabitants of this city. It was linked to the opposite bank of the river by a bridge and the walled town of Chlomaron on the east bank was clearly associated with the castle (if these identifications are correct).

Attachas/Antağ (38°21'21"N, 40°43'23"E; elevation 900m)

The fortress lies on a ridge above the former town of Antağ, about 15km east of Dakyanus Kale⁹²⁴. The modern name of the village is Kabakaya and it may be approached with difficulty from the south (Yalaza, rather than Mişrif/Bağlan, recommended by Sinclair) or perhaps more easily from Lice to the north. The fortress is mentioned by Procopius⁹²⁵, as a place one hundred stades (18.5km) distant from Martyropolis (and also by George of Cyprus as a 'καστρον'). But Antağ is about 35km NW of Martyropolis/Silvan.

Whitby seems to identify Attachas with 'Phathacon', a Persian fortress captured and fortified by the generals of the emperor Maurice following the retreat from Chlomaron in 584 and placed by him near the confluence of the Lice and Qulp rivers at the start of a pass over the Taurus (towards present-day Muş)⁹²⁶. The location at Antağ seems more probable to me since the confluence referred to is close to the known Persian fortress of Akbaş (Başka Kalesi).

There are ruins of two churches near Antağ, as well as an ancient bridge which probably took the late Roman road from Martyropolis to Citharizon. (See bridge number 7 in the annex to chapter 5.)



Benabil (37°18'45"N, 40°50'42"E; elevation 908m)



This was the fort of Banabele mentioned by George of Cyprus. The village only was visited in 2007. The fort and monastery were pointed out to us. According to Sinclair⁹²⁷, Benabil was later the Armenian royal fortress of 'Bnabegh' and is now known as Numan Bey Kalesi.

Bozresa/Hisarkaya (approx. 37°38'24"N, 40°53'29"E - not visited)

With the fort at Savur, this fortress defended one of the possible approaches to Amida. It lies at the end of a long narrow valley 14km north of Savur just before the river emerges into the plains of the Tigris valley. Access is difficult and I was unable to visit the fortress in 2006 because of a poor security situation in Savur. It is possibly the *Idriphthon*

mentioned by Procopius⁹²⁸ and George of Cyprus, but Dillemann places this 8km west of Dara for reasons unclear to me⁹²⁹.

The site has been investigated by Wiessner and is described by him in great detail. He confirms its likely construction in the time of Justinian but does not hazard a proposal for its identification⁹³⁰.

Dausara (not visited)

This was an important fortress on the Euphrates west of Callinicum and a bishopric in the sixth century, maybe also known as ‘Anastasia’⁹³¹. It has not been visited by me, but was in any case probably drowned, at least in part, by the Assad dam (on that part of the Euphrates in Syria). It may have been linked by road to Callinicum but this is not recorded in the TP. Examination of the satellite photographs indicates a possible site on an island in the reservoir at 35°54’39”N, 38°27’02”E; elevation 302m.

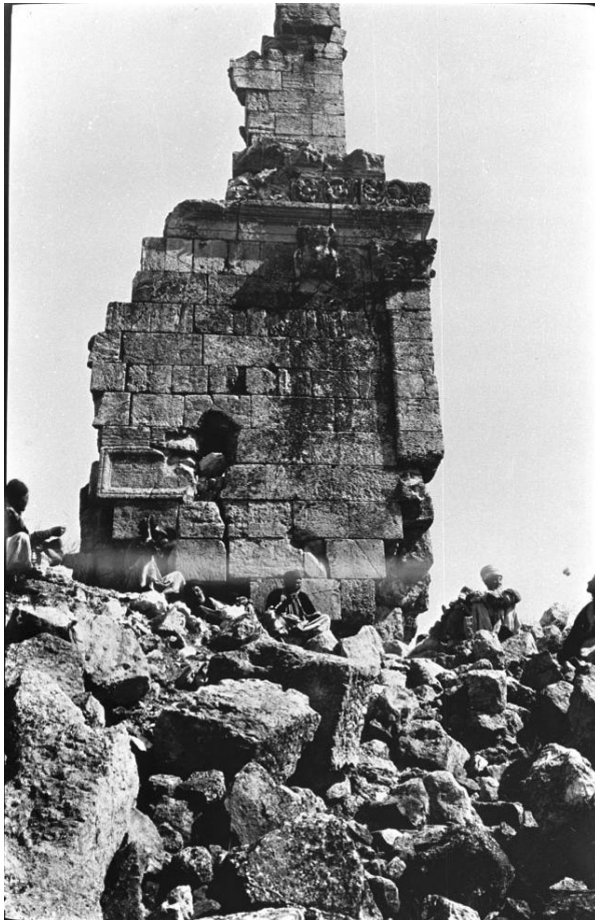
Fafi (37°22’10”N, 41°05’29”E; elevation 973m)



The new name is Beşikkaya and the village lies 12km ESE of the small town of Ömerli (formerly Maserte), which may also have been a late Roman fort, although nothing is now visible there⁹³². Fafi was probably once known as *Beioudaithas* or the ‘Beioudaes’ of George of Cyprus⁹³³.

There were remains of a large tower tomb here when Gertrude Bell visited it in 1911 but this has now disappeared (see photos below). The tomb may have been from the 2nd century AD⁹³⁴, although Bell added “possibly 3rd century” to the photos. The extant walls, towers and necropolis are remarkably large and impressive but not self-evidently late Roman. Although Justinian is said to have repaired these walls, the stones visible are uncut and often of enormous size. A coin was seen by me in the village in 2007, apparently dating from the time of Justinian, but the fortifications seem probably of much earlier origins and to have been built originally to guard a route up the Djaghdjagh and the ‘Blackwater’ river towards Amida. Since the Assyrians are not known to have constructed large fortifications

of this type it is here suggested that the original settlement dates back to the time of Hittite/Mitanni rivalry in this area.



Photos of Gertrude Bell, 1911
http://www.gerty.ncl.ac.uk/R_174,176,177,179

Illyrisos/Birkleyn (38°31'45"N, 40°32'53"E; elevation 964m)



Site of fort and caves

Close to a remarkable resurgence which brings forth one of the sources of the Tigris (Dibne Su), this fort together with those at Phison and Ceper Han (where the existing castle of the Ottoman period may have had a late Roman predecessor) defended the road north to the

major defensive strongpoint of Citharizon, seat under Justinian of the *Dux Armeniae*. The citadel is very small but there are traces of a larger fortified area below.

In the caves of the resurgence there are well-known Assyrian reliefs, presumably indicating also the importance of this road in that period of the early Iron Age.

Lorne

Its position uncertain; it is mentioned by Procopius and placed by some experts at Jurelom, east of Mardin⁹³⁵.

Mardis (37°18'55" N; 40°44'25" E; elevation 1120m)



The town below the citadel is the regional capital of Mardin, which has fine views over the Mesopotamian plain. The castle above cannot be visited because it is a military base. According to the ND there were two military units stationed nearby: *Equites promoti indigenae* at *Apadna* (probably near modern Kizilsu) and the *Cohors quartadecima Valeria Zabdenorum* based at *Meiacarire* on the road to Amida.

The existing town dates for the most part from the Middle Ages; it lies just to the east of the main road crossing the crest of the Tur Abdin as it passes from Nisibis to Diyarbakir (Amida). After 363 and until the construction of Dara in 505, 'Mardis' is thought to have been the principal Roman military base of the area before that date but it was presumably considered to be too far from the plain and from the east-west route from Nisibis to Edessa.

Nevertheless the site was refortified by Justinian. After the capture of Dara in 573 by the Persians it regained its importance briefly until Dara was returned under the emperor Maurice.

Pheison/Dakyanus kale (38°21'45"N, 40°33'21"E; elevation 1057m)



Little remains of the fortress or settlement mentioned by Sinclair (Vol 3, p272) other than a cistern and basin. But the area was investigated by Consul Taylor (see Annex H on travellers)⁹³⁶ in the early 1860s. At that time he saw

“...remains of the most solid construction, consisting of a series of arched rooms, and a little higher up of a temple, with several fragments of columns scattered about it....Our descent to the small plain beyond was through a mass of ruins that covered the slopes of the hill for a space of one mile, fragments of thick walls and neatly-cut blocks of stone were strewn over the road and impeded our progress, the remains of the old City of Fees (Phison of Procopius).”

Possibly much of this still remains to be rediscovered under thick scrub.

Phaenica/Fenek (37°24'07"N, 42°04'47"E; elevation 407m)



This has originally been an Armenian fortress and was probably capital of the district of Corduene. It lies opposite Bezabde, if indeed Hendek has now been correctly identified as

Bezabde (see in 'Cities' above). Ammianus Marcellinus, who visited an old friend then prince of Corduene in about AD 360 while on a reconnaissance mission must have passed here. There was a route up the gorge to Tilli, where there was a Roman fort before AD363.

This area is currently difficult to visit because of fighting between the Turkish army and Kurdish rebels. The gorge will for the most part be drowned by the Ilisu dam but Fenek and Bezabde should be preserved unless another dam is also constructed above Cizre.

Rabat (37°24' 18"N, 40°12' 02"E)



Sinclair believes that this very large fortress may have been constructed in the late Roman period to guard a route between Constantia and Amida⁹³⁷. There are remains of a late Roman church; some features such as cisterns indicate an earlier date. Rabat may have been the seat of the bishop of 'Mnasubion', under the authority of the metropolitan at Dara (Sinclair p370 and 377), but possibly the ancient name was *Sifrios/Isfrios*, a *καστρον* mentioned by George of Cyprus.

During Kavadh's war against the Romans in the time of Anastasius, the Roman forces were divided between the general Areobindus who commanded an army which was supposed to link up with forces under the *magistri militum* Hypatius and Patricius, who had together been besieging Amida (following its capture by the Persians in 502). The army abandoned the siege of Amida and intended to join Areobindus at Apadna/Arzamon (near the modern town of Kızıltepe, south of Mardin). But it went first to Siphrios, some 30kms to the east and the junction did not take place – with disastrous consequences for the Romans⁹³⁸.

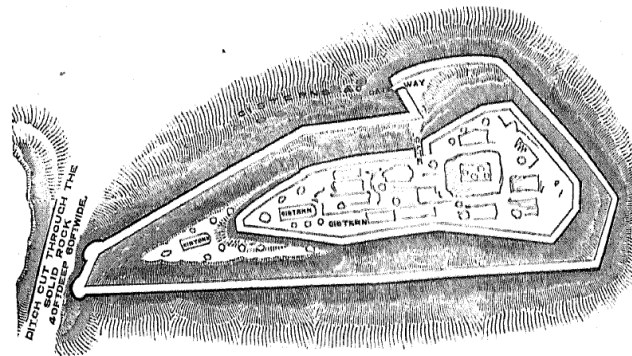
Like Rumkale and Hatem Tai Kalesi (Rhabdion) the fortress is separated from the ridge linking the fortress to the mountain behind by a deep artificial ditch cut into the rock. The site is described in detail by Wiessner⁹³⁹ in the same publication as his description of Hisarkaya. There are remains of a paved road linking the fortress to the village.

Rhabdion (37°12'39"N, 41°36'46"E - not yet visited)



The site is described by Procopius⁹⁴⁰. It was very likely ‘Hatem Tai Kalesi’, a site visited by Gertrude Bell in 1911⁹⁴¹ and previously by Consul Taylor between 1861 and 1863 (see his plan below), who thought – probably wrongly - that this was Sisauranon (Sirvan), a fortress whose remains are discussed below⁹⁴². It is now difficult to reach since the road is impassable to vehicles and in an area of frequent confrontations with Kurdish separatists. It lies just inside the escarpment in a ravine and is thus not easily visible from a distance. More detailed photographs made available recently on Google Earth have permitted its location to be identified with a fair degree of certainty.

It can be visited on foot from Sirvan or the nearby village of Özbek but in 2007 was considered too dangerous by local people to let foreigners go there. No modern study exists, although this is likely to be the most interesting and important of all the late Roman fortresses of the area. The approach appears to be by a narrow valley from the south-east; no road is visible so access was probably made intentionally difficult.



No. 3. Plan of Hatem Tai Castle (ancient Sisauranon).
N.B.—All the circular marks are cisterns excavated out of the solid rock.

Rhabdion was probably one of the three fortresses built in the area by Constantius II, the others being Amida and Cepha⁹⁴³: it was the most eastern Roman fortress after the 360s when Bezabde and ‘Tilli’ (or Tell Fafan) were lost definitively⁹⁴⁴. Procopius states that road access to Rhabdion was via the plain in Persian territory, going east from Daras (and presumably passing north of Nisibis)⁹⁴⁵. On the plain immediately below the fortress there was however a region under Roman control, in accordance with an agreement which accorded the Persians a similar area near Martyropolis (the ‘Romanus Campus’). Procopius implies that the ground to the north of the fortress was impassable to carts and some have

concluded⁹⁴⁶ that Rhabdion was an ‘exclave’, without direct access to the rest of Roman territory (see discussion in chapter 6).

Cepha remained in Roman hands after AD 363 as did – probably - the local town of Hah (see Gazetteer), 30kms to the south-east, which appears to have been in this period the seat of the bishop for the area of the Tur Abdin east of Mardin. Rhabdion must also have been under Roman control despite its position because it is mentioned by both Procopius and George of Cyprus. It lies fairly close to the ancient monastery of *Qartmin* (Mar Gabriel) whose monks were apparently responsible for the cultivation of the land below Rhabdion on the plain, although this plain must have been dominated by the following fortress at Sirvan.

Rhipalthas? (37°43’11” N; 41°13’44” E; elevation 590m – not yet visited)



This site was located exclusively from a high-resolution satellite photograph on Google Earth at a point close to where Dillemann assumed it to be⁹⁴⁷. There is no clear road apparent along the south bank of the Tigris so it may have been linked to Cepha along the north bank, by boat or by a long circuitous route through mountains to the south. The position of the fortress is perhaps explained as guarding another north-south crossing point since there seems to be a ford on the satellite photos. According to the *Notitia Dignitatum*, ‘Ripaltha’ was defended by the *Ala octava Flavia Francorum*. No other Frankish unit is known in this region.

Samocharta/Semrah Tepe (38°05’14” N; 41°08’54” E; elevation 655m)



Little remains of this fortress, but traces of a substantial abandoned settlement within the walls are visible on the satellite photograph available from Google Earth. It was identified as a late Roman fort in the report of a team lead by Guillermo Algaze who conducted a survey in the valleys of the Euphrates and Tigris in 1989 (Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M., (1991), 192 and 212, Fig2a, site 123 and Fig 17). The fortress lies close to the village of Akceltik

There are two *tumuli* close by which indicate much earlier occupation. A spring on the south side has an underground chamber which could not be investigated on the occasion of a visit in 2006 because it had partly fallen in. The site overlooks the Batman Su, approximately one kilometer away and may have guarded a ford crossing this river or else a route leading north-west up to Silvan/Martyropolis. We were informed that an ancient aqueduct had been located shortly before our visit which brought water from the mountains to the north-west. The Batman Su was crossed by a late Roman bridge (Harap Köprü – see below in Chapter 6) which lies nearly 13km to the south and may therefore be too far away to be associated with this fortress.

One of the Roman *castra* mentioned by George of Cyprus⁹⁴⁸ in the region of Arzanene was *Samocharta*. Despite the location being on the west bank opposite Arzanene, this is likely to be the same as the castle at Semrah Tepe; Honigmann suggested a location for that ‘*castrum*’ precisely in this area⁹⁴⁹.

As Honigmann explains⁹⁵⁰, John of Ephesus in his *Ecclesiastical History* (part 3, VI, 35) tells us that in the year AD 582, the Count Maurice (who became emperor in the same year) built a castle called ‘*Semokhart*’ (or ‘*Samokart*’) on a hill of that name⁹⁵¹; the later writer of the 12th century Michael the Syrian refers to this castle as being in the land of ‘*Sophanaye*’ [the Syriac name for the province of Sophanene]⁹⁵². The castle is stated by John of Ephesus to be ‘in the country of the Romans’, unlike the nearby castle of ‘*Aqba*’ (Akbaş) which was indicated as being in ‘the country of the Persians’. Whitby argues that the Syriac words imply a location of *Semokhart* on the east bank of the Batman Su⁹⁵³. I do not find this convincing and am inclined to follow Honigmann on this point, especially because of the now confirmed existence of the fort at Semrah Tepe. Unfortunately the English translation from Syriac of John of Ephesus is defective (Payne-Smith, 1860).

Sauras/Savur (37°33’00’’N, 40°52’49’’E; elevation 935m)

The fortress, mentioned by Procopius and by George of Cyprus, lies on a hill-top above the town of Savur, but visible from the road. It cannot be visited because it is a modern military installation. 6.5km WNW of the town is the former Syrian Orthodox village of Killith (now Dereçi), which has three early Christian churches.



Serjihhan/Sargathon (37°06'21"N, 41°04'21"E; elevation 503m)



Although known to have been in Persian hands in the sixth century this fort may have been built originally in the time of Diocletian by the Romans. It must have been right on the north-south border between Dara and Nisibis after AD363 and is constructed inside an ancient settlement mound, probably of the Bronze Age. One tower is still standing but there were apparently 12⁹⁵⁴. Today the village of ‘Sercehan’ or Durak Başı is close to the east-west line of the border with Syria (top of picture). Because it is also close to the main road to Nisibis several early European travellers noted its existence. When de Thévenot came past in the 17th century several panels of fortification walls were still standing⁹⁵⁵.

The fort was investigated in detail by an Italian team in 1985 which concluded that the identification with Sargathon accepted by Dillemann⁹⁵⁶ was wrong and that it was in fact the unfinished fort of Mindouos which Belisarius was ordered to build on the frontier by Justinian⁹⁵⁷. De’ Maffei also draws attention to the stylistic links between this fort and Dara. However, these seem to me unconvincing and the name ‘Mindouos’ or Mindon – as Dillemann pointed out – is likely to have been related to ‘Mygdonius’, the ancient name for the river Djaghdjagh on whose west bank the city of Nisibis itself stands. I therefore prefer

to identify Mindouos with Kalecik, a village ten kilometres north of Nisibis and situated above this river, where there are also large blocks of a fortress to be seen.

The identification with Sargathon, a place near Dara mentioned by Theophylact Simocatta in the context of the campaign of Maurice in AD573, was first made by Honigmann⁹⁵⁸, who noted the connection with Sergius and with the Περσικόν χωριόν west of Nisibis captured by Mihran, the Persian commander, from Markianos, nephew of Justin II. The Georgian *'Life of Saint Golinducht'* (or Gulanducht) also refers to a chapel of St. Sergius between Nisibis and Dara⁹⁵⁹ (the saint apparently died here in AD591), while later Arab authors and Michael the Syrian⁹⁶⁰ are mentioned by Honigmann as confirming the name 'Sarga' in this location.. These identifications are important for tracing the course of the frontier around Nisibis (see Chapter 6).

Sirvan/Sarbane/Sisauranon (37°09'03"N, 41°38'17"E; elevation 545m)

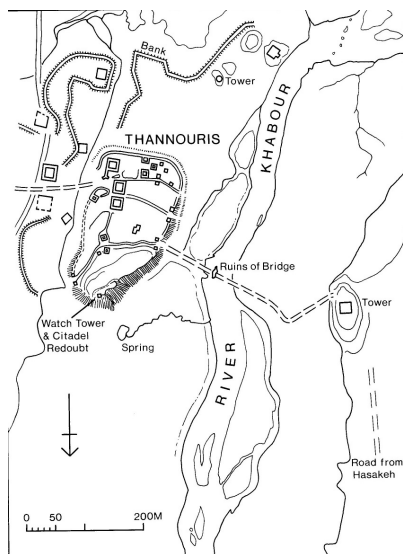


After 363 this fortress was in Persian hands, facing Rhabdion. Its site lies some 4km south of the escarpment and 8km from Rhabdion; it is nearly 40km east of Nisibis. It is unclear where the 'Roman fields' lay but probably between the two fortresses. Sisauranon was captured by Belisarius in an otherwise fruitless campaign in 541 and was also the site of a battle won by the Romans in 591.

Mentioned by Sachau⁹⁶¹, it was visited by the writer in May 2006. It is on a prominent artificial mound, possibly of Bronze Age origin, some 2km north of the road from Nisibis to Cizre and about 4km west of the junction to Oyalı. Poidebard reports substantial traces of Roman roads in the area running parallel to the escarpment but these were not seen by me.

Thannouris (36°25'19"N, 40°51'59"E; elevation 290m)

Now Tunainir. Photographed from the air by Poidebard⁹⁶² and object of a sketchmap redrawn by Kennedy⁹⁶³. Base of a unit called the *Equites sagittarii indigenae*. The fortress was strengthened by Justinian, but only after a vain attempt to do so during the reign of Justin when a Roman army was defeated there in the 520s⁹⁶⁴. The fortress was captured by the Persians in 587, when it was apparently undefended⁹⁶⁵. The bridge seen by Poidebard apparently no longer exists.



Tilli/Tell Fafan (37°43'50"N, 41°46'54"E) – attempt to visit in 2007 failed

In view of its strategic location at the confluence of the Tigris with the Bohtan, Tilli is likely to have been of great importance in the fourth century but to have been transferred to the Persians as one of the 15 fortresses handed over in 363. Its current name is Çattepe. A road linked it to Cepha: see discussion of route 2 in Chapter 4 and of the bridge at Şeyhosel in Chapter 7. It would not only have controlled river traffic; it also lay on a route from *Cephas* (Hasankeyf) to the crossing of the Bitlis Su at Nasreddin Köprüsü, to the road along the Tigris gorge and to the Bohtan valley.

The site was identified as an ancient fortress by Lehmann-Haupt in 1899⁹⁶⁶. The Ashmolean museum contains a bronze helmet of the Hellenistic period, found in the river next to the village by a British traveller in the middle of the 19th century. Possibly this was left by one of the 10 000 who probably marched this way in 501BC. The site is described in some detail by Lightfoot⁹⁶⁷, but has only recently been surveyed⁹⁶⁸; it will be destroyed by the Ilisu dam. Lightfoot argues that its Arabic name of 'Tell Fafan' indicates that it was the original base of the cavalry unit called in the *Notitia Dignitatum* the 'equites Pafenses', who would have been transferred to Beioudaes/Fafi near Midyat after AD 363 and the surrender of this fortress to the Persians⁹⁶⁹. He does not propose its ancient name. It is noteworthy that the *Notitia Dignitatum* has no less than five units assigned to forts beginning with 'Thil...'. This one may be the *Thilbisme* assigned to the 'Dux Mesopotamiae', or possibly - in error - one of the four others under the 'Dux Osrhoenae'.

Tilli is likely to have been constructed by the Romans at some point following the treaty of AD298 between Galerius and Narses, which gave Arzanene to the Romans, and possibly abandoned 65 years later. Corduene, the principality on the east bank of the Tigris and south of the Bohtan, fell to the Persians in AD 359 and Bezabde soon afterwards⁹⁷⁰, so for a while the position of Tilli must have been right on the frontier and of crucial significance to both sides.

The only confirmed inscription relating to a Roman soldier found on the Tigris comes from this fortress. It is from an altar dedicated to Olympian Zeus by a certain 'Antonios

Domitianos⁹⁷¹ and is thought to date most probably from the early third century and not the fourth. This could imply that the fortress itself may be of the same period, i.e. before the treaty of AD 298.

Both Lightfoot and the authors of the recent survey note the existence of a masonry stub in the river which may be the pillar of a bridge across the Tigris. However, it is not at all apparent what route the road leading from the south to this bridge would have taken and the existence of a bridge at this point is otherwise unattested. Possibly this was the breakwater of a river harbour. Closer investigation is required on both banks of the Tigris before the Ilisu dam is completed, but is difficult because of the security situation.

Kale-i-Zerzevan (37°36'25"N; 40°30'08"E; elevation 905m)



The ancient name is uncertain but it may be the ‘Samachi’ mentioned on the road from Amida to Nisibis in the Peutinger Table. It lies on a high hill above the river valley descending towards Diyarbakir from Mardin. According to Deichmann and Peschlow, the settlement is of military character, from the time of Justinian and probably served as a fortress protecting the road and as a signal station linking Dara with Amida⁹⁷². The site was also visited by Preusser in 1909⁹⁷³. A unit is placed by the Notitia Dignitatum nearby at Meiacarire.

Ziata (38°14'26"N, 40°10'45"E; elevation 811m) - not visited



Possibly Amini Kale, but Howard-Johnston and others have placed it in later centuries at Harput near Elazig⁹⁷⁴. The extant remains at Amini Kale are medieval but it is thought by Sinclair to have been an important fortress also in antiquity⁹⁷⁵. The site lies on a rocky plateau slightly over 1km long at the confluence between the Dibni Su and the upper Tigris, about 7.5km east of Egil. It is currently surrounded by the two arms of the reservoir created by the Dibni dam and very difficult to reach.

The fortress is likely to have been known as 'Ziata Castellum' in antiquity, although this name is also given by a tourist information board at the great castle of Harput as the ancient name of that city. A Persian attack on this region in 359 caused the inhabitants to flee to Ziata for refuge just before the siege of Amida.

Pseudo-Dinoyesus also describes an invasion of the Huns in 394/5 AD which seriously affected Arzanene and Martyropolis⁹⁷⁶. Many people fled to Ziata -

'...by the river Tigris and by the Deba; and they are called the fortress of Ziatha the great and the fortress of Ziatha the lesser, and the fortress of Eghil of Sennacherib the king of Assyria. That great fortress of Ziatha was situated between the Tigris and the Deba. The Deba flows past the wall from the west and the Tigris from the east, and they mix together to the south of the wall. (The place) is very rugged and inaccessible because it lies at a great height and has only one gate. But the Huns seized the gate of the wall and also the aqueducts which go down to the Tigris and the Deba; they stood on these and held them until the men who lay on the Cahja (mountain) perished; and at last those who were left handed over the fort. But the Huns, who are men without pity, slaughtered the whole populace with the edge of the sword and made the rest captive; and they set fire to the whole fort and it was never again inhabited.'

It seems probable that Sinclair's identification is correct and that the Deba river is the Dibni. In this case the fortress of the lesser Ziatha would be a little further south at Jubeyr. I have not managed to reach this castle either but it was visited by Consul Taylor in the 1860s who left this description of the two castles⁹⁷⁷:

"...Three and a half hours from Eggil, and on the right bank of the Tigris, some way below the junction of the Maaden and Dibeneh branches, are the ruins of Jubeyr Castle, situated on the top of a mass of perpendicular rock that crops out of the summit of a high hill, a spur of the mountain-range there. The southern portion, on which the Kalla is built, has been separated, as at Eggil, by a deep and broad cutting, 120 feet long, 60 deep, and 30 wide at its weakest point from the main range, so as to have ensured it against any sudden capture by escalade, This point was further fortified by a huge mass of solid brickwork, rising to a height of many feet, which, subsequently in the shape of a wall, follows the irregularity of the whole summit of the mound, enclosing an area of 400 yards long, with a breadth varying from 20 to 40, Higher up the stream, at the angle formed by the junction of the Arganeh Maaden and Dibeneh Sus, which form the western Tigris, are the ruins of Ammaneh Castle [i.e. Amini Kale], occupying as at Jubeyr, the top of an isolated mountain, but, its position is incomparably stronger, from its greater height find comparative inaccessibility. It can be approached only at one side by a single path, hardly practicable for mules, the other two sides being high perpendicular rocks, washed respectively by the Dibeneh and Maaden rivers, the weakest portion deriving additional strength from walls of amazing thickness. The area of the summit is about 1½ mile long, and 1 broad, and the whole, with the exception of a small portion of the southern end, is choked by the débris of old houses and reservoirs of black stone. On the north-eastern side of the mountain a covered stair cut out of the solid rock, as at Eggil, 280 feet high and 8 feet broad, leads down to the Dibeneh Su. The site, its impregnability, and extensive remains coincide, more

than any other position or ruin I have seen, with that of Carcathiocerta, which has been placed alternately at Miafarkeyn and Diarbekr.” [Today Egil itself is considered to have been Carcathiocerta.]

Euphratesia

Bozyazi (38°21'54"N, 37°45'50"E; elevation 442m)



On the opposite (east) bank of the Euphrates from Kaleboyu (next) and a few kilometres further north is the village of Bozyazi, which had an ancient church until recently. Below the village towards the river the ground has given way in a remarkable series of three parallel ridges. The closest of these to the river was fortified with a long thin fortress overlooking a mule-track leading down to the river. There are again no written records to indicate the date nor the circumstances of its construction. There is a finely-cut underground room with a gently arching roof hidden on the river side and traces of a circular room on the summit. A large rectangular opening in a cliff face below the village may indicate a tomb⁹⁷⁸.

Kaleboyu (Elif) (33°20'29"N, 37°52'15"E; elevation 490)



This castle is seemingly unrecorded in the written sources. It lies close to the village of Elif to the north-west and is situated on a corner of high plateau above the Euphrates, apparently guarding a ford (and perhaps a pontoon bridge) at Ayni. Ammianus Marcellinus says that to impede a Persian advance in AD 359 he cut a bridge (i.e. presumably a pontoon bridge) at Capersana, which is probably to be identified with this name, as well as the bridge at Zeugma some 30kms to the south⁹⁷⁹. Constantius II is also said to have sent an army across the Euphrates at this point.

There are square projecting towers from the main wall and the seating for some very large blocks cut into the natural rock at what must have been the main gateway. Remains of a settlement are close by⁹⁸⁰.

Rumkale (37°16'13"N, 37°50'17"E; elevation 396m)

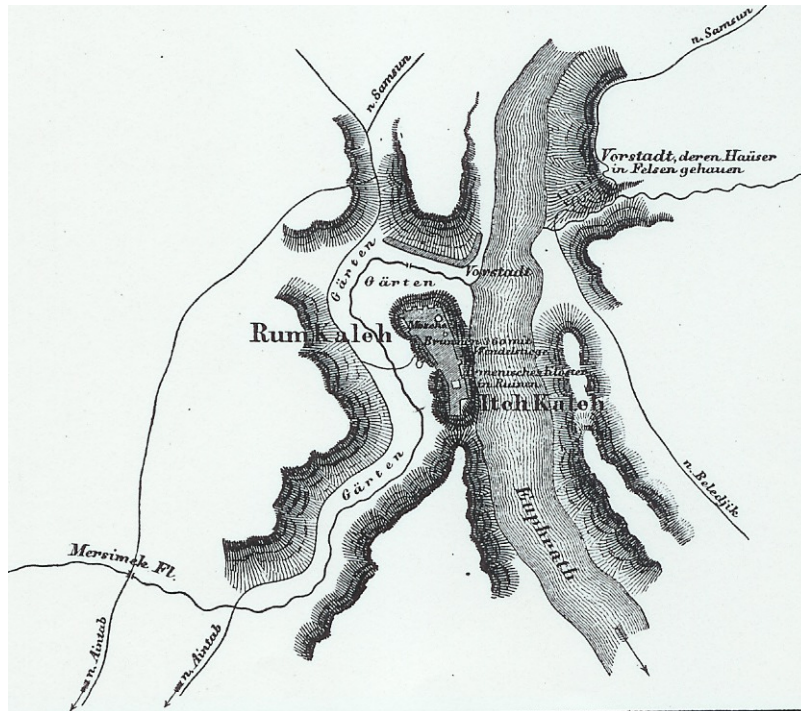


Rumkale is a particularly remarkable site, in its current form a Mamluk fortification but with a very ancient history. In the 12th century it had been the home of the Armenian patriarchate. It seems quite possible that it was fortified in the late Roman period and the large defensive ditches cut in the neck of the peninsula on which the castle was built have late Roman counterparts (e.g. Raban Kalesi in Chapter 4 above). There is unfortunately nothing to prove the identification with Arulis suggested above (Chapter 4-1, route 12).

There was however very probably also an ancient river crossing of the Euphrates at Rumkale. Before the Birecik dam changed the topography, a bank of gravel used to cross the river bed diagonally in front of the castle and it was a well-known crossing right up to the twentieth century. Although there are traces of a road mounting the east bank there is no indication that this was of Roman origin. Renwick Metheny reports that the road east from Rumkale (presumably to Edessa/Urfa) started in 1905 at a village called *Beli-sar* (wrongly spelled in his day 'Belasir') and notes that this may have been named after Belisarius⁹⁸¹. Possibly the village concerned is the small town known today as Halfeti, 4km downstream and south-east from Rumkale, but it could also be Savaşan (37°14'41" N, 37°51'18" E – a village more directly opposite Rumkale but a little to the north), which had remarkable cave ruins and a paved way zig-zagging up to the top of the cliffs. Much of this village and of Halfeti was destroyed by the Birecik dam (see satellite photograph).

Apart from the footings of a Roman bridge found by Wagner and discussed in Chapter 5, there are several aqueducts which may be of Roman origin. One used to pass from the

Merzumen valley through a tunnel in the neck of the peninsula and then south to a mill opposite Halfeti⁹⁸². There is unfortunately nothing to prove an identification with the 'Arulis' of the PT.



Plan drawn up by H. Von Moltke and reproduced in Humann, K. and Puchstein, O., (1890), p175

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Endnotes

- ¹ Comfort, A. (2008) 'Commagene from Space' in Winter, E (ed.), *ΠΑΤΡΙΣ ΠΑΝΤΡΟΦΟΣ ΚΟΜΜΑΓΗΝΗ: Neue Funde und Forschungen zwischen Taurus und Euphrat* 241-256; Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126; Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50
- ² Greatrex, G. (2005) 'Byzantium and the East in the Sixth Century' in Maas, M (ed.), *The Cambridge Companion to the Age of Justinian* 477-509
- ³ See in particular Kennedy, H. (1985) 'The last century of Byzantine Syria: a reinterpretation', *Byzantinische Forschungen* 10, 141-183 and Kennedy, H. (2004) *The prophet and the age of the Caliphates: the Islamic Near East from the sixth to the eleventh century* Harlow
- ⁴ xvii. 5. 10
- ⁵ i.89,90, based on Peter the Patrician
- ⁶ Thus Egeria speaks of crossing the Euphrates in AD 383 from 'Augustophratensis' (Euphratesia) into 'Syrian Mesopotamia' (Wilkinson J. *Egeria's travels to the Holy Land* Warminster 1981, p115)
- ⁷ The respective capitals of these provinces are thought to have been Tigranocerta (Arzen) for Arzanene, Bezabde for Zabdicene and, possibly, Finike for Corduene. The capital of Sophene was (Amida) and of Ingilene was Egil.
- ⁸ The emperor Anastasius - as reported by Joshua the Stylite - was in fact to claim that the city had been ceded only for 120 years but this is doubtful and the many efforts undertaken to recover the city were all in vain.
- ⁹ Beirut's law school became the best-known in the eastern Mediterranean from around AD 250; Justinian's 'Pandects' were derived largely from the work of jurists from this school and he left it open in 533 when he closed several other such schools in favour of Constantinople.
- ¹⁰ The major source for such inscriptions is the collection known as IGLS ("Inscriptions grecques et romaines de la Syrie"); for an introduction see <http://www.ifporient.org/spip.php?rubrique91> and http://www.hisoma.mom.fr/Programme_epigraphie/JB_YON/IGLS_intro.html. A few inscriptions from Diyarbakir were reported in Oppenheim, M. F., Von and Lucas, H. (1905) 'Griechische und Lateinische Inschriften aus Syrien, Mesopotamien und Kleinasien', *Byzantinische Zeitschrift* 14, 1-72
- ¹¹ Mango, C. and M. 1991. 'Inscriptions de la Mésopotamie du nord', *TM* 11: 465-71
- ¹² Although these are in Greek, Gabriel reported an inscription in Latin at the Harput gate mentioning Valentinian, Valens and Gratian, which seems to refer to an unspecified construction, possibly the gate itself, as well as another in Greek from AD 449 concerning the building of an inn by the deacon Apius. Gabriel, A. (1940) *Voyages archéologiques dans la Turquie orientale* Paris, p135. The names of the emperors imply a date between AD 367 and 375.
- ¹³ This expression in Greek appears to mean 'suffer no pain and farewell'. A catalogue of sculptures from the museums of Gaziantep, Kahramanmarash and Urfa is currently in preparation (authors: Laflı, E and Comfort, A).
- ¹⁴ Comfort, A. (2008) 'Commagene from Space' in Winter, E (ed.), *ΠΑΤΡΙΣ ΠΑΝΤΡΟΦΟΣ ΚΟΜΜΑΓΗΝΗ: Neue Funde und Forschungen zwischen Taurus und Euphrat* 241-256; Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126; Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50
- ¹⁵ Many of the photos available on Google Earth are supplied by SPOT or 'DigitalGlobe' and come from satellites such as WorldView-1 and QuickBird. The latter satellite collects panchromatic (black & white) imagery at 60-70 centimeter resolution and multispectral imagery at 2.4- and 2.8-meter resolutions.
- ¹⁶ Bell, G. L. (1924) *From Amurath to Amurath: a journey along the banks of the Euphrates* London
- ¹⁷ See above and Route 1 in Chapter [4].
- ¹⁸ See Route 2 in Chapter [4] and discussion of bridge at Şeyhosei – no.8 in Chapter [3].
- ¹⁹ See especially Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris
- ²⁰ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome
- ²¹ Von der Osten, H. (1927-1930) *Explorations in Hittite Asia Minor* Chicago
- ²² Sykes, M. (1904) *Dar ul-Islam* London
- ²³ Bell, G. L. (1982) *The churches and monasteries of the Tur 'Abdin* London edited and revised by M. Marlia Mango
- ²⁴ Wiessner, G. (1981-1993) *Christliche Kultbauten im Tur Abdin* Wiesbaden

- ²⁵ The very large amount of data in the base files rendered inoperative an automatic creation of scale-bars by the software programme MapMaker Pro,
- ²⁶ Dillemann, L. (1997) *La cosmographie du Ravennate* Brussels
- ²⁷ The map is believed by Andreas Fingernagel, Director of the Department of Manuscripts, Autographs and Closed Collections at the Austrian National Library, to date from the fifth century (see interview reported on the BBC at <http://news.bbc.co.uk/2/hi/europe/7113810.stm>).
- ²⁸ Salway, B. (2005) 'The Nature and Genesis of the Peutinger Map', *Imago Mundi* 57, 119-135
- ²⁹ In a lecture to the Late Antiquity seminar in April 2008 in Oxford by Richard Talbert, who will shortly publish a book on this subject.
- ³⁰ These were lists of local place-names showing distances between them and put up in public places. They were apparently established at central positions in Roman provinces to assist travellers. Although the most detailed such 'tabellarium' was found recently at Patara in Lycia (see text), others are known from Autun and Tongres. For the Tabellarium Augustodunense, see Corpus Inscriptionum Latinarum XVII. Miliaria Imperii Romani, 2. Miliaria provinciarum Narbonensis Galliarum Germaniarum, ed. Gerold Walser (Berlin, W. de Gruyter, 1986), 490a-c. For the Tabellarium Tungricanum, see *ibid.*, 675. Discussed in Salway (2005), p130.
- ³¹ The equivalence of these two terms in Latin and Greek is however uncertain. They may or may not be identical.
- ³² The 'stadiasmos' of Patara has been published in Isik, F., Iskan, H. and Çevik, N. (2001 (1998/1999)) 'Miliarium Lyciae: Patara yol kilavuz anıtı / Das Wegweisermonument von Patara', *Lykia: anadolu-akdeniz kültürleri* 4,
- ³³ There are also known to have been posts at more frequent intervals for changing horses called *mutationes*. I believe the names indicated on the PT are at intervals which correspond, where possible, to a day's ride and therefore to *mansiones* where it was possible to spend the night. The *mutationes* would have been at more frequent intervals (according to Procopius, between 5 and 8 stations before Justinian's day for each day's journey – see Chapter 4, part 3).
- ³⁴ Miller, K. (1916 and 1929 (reprinted 1962)) *Die Peutingersche Tafel* Stuttgart, p2
- ³⁵ The distances indicated for the Zeugma-Edessa route are fairly large in both sources and I can find no plausible explanation for the apparent change of route in this case. The AI may in other regions show *mutationes* as well as *mansiones* but that does not seem to be true in these provinces.
- ³⁶ For example, by Konrad Miller.
- ³⁷ Volume 25, pp60-88
- ³⁸ A review of this edition (Browning, R. (1968) 'Review of 'Expositio totius mundi et gentium' ed. by J. Rougé', *Classical Review* 18, New Series, 112-113) is doubtful on this date but does not contest the general period.
- ³⁹ An interesting discussion of this document is included with an edited text and translation into English in an MA thesis by JE Woodman available online at http://www.ohiolink.edu/etd/send-pdf.cgi/Woodman%20Jesse%20Earle.pdf?acc_num=osu1166462501.
- ⁴⁰ Kirsch, Johann Peter. "Notitia Dignitatum." The Catholic Encyclopedia. Vol. 11. New York. AHM Jones included an annex on the ND in his *Later Roman Empire*, pp1417-1428, where he concluded that the eastern section of the document was revised before transmission to the west in AD 395 or 408, but still contained many anomalies.
- ⁴¹ Jones, A. H. M. (1964) *The later Roman Empire* Oxford, Vol 2, pp1417-1450
- ⁴² By Peter Brennan for the Liverpool series of texts for ancient historians and by Robert Ireland for the international series of British Archaeological Reports.
- ⁴³ Seeck, O. (1875) 'Notitia Dignitatum', *Hermes* IX, 228-242
- ⁴⁴ Brennan, P. (1996) 'Notitia Dignitatum' in Nicolet, C (ed.), *Les littératures techniques dans l'antiquité romaine* 42, 147-178; Brennan, P. (1998) 'The User's Guide to the *Notitia Dignitatum*: the Case of the *Dux Armeniae* (N.D. Or. 38)', *Antichthon* 32, 34-49
- ⁴⁵ See especially Cameron, A. (1985) *Procopius and the Sixth Century* London. Volume 8 (2000) of the periodical *Antiquité Tardive* is devoted to the 'Buildings'; it contains a number of papers relevant to the discussion here and in particular Ulbert, T. 'Procopius, *De Aedificiis*. Einige Überlegungen zu Buch II, Syrien', pp137-47.
- ⁴⁶ But it should be noted that Procopius provides even longer lists of forts when he describes the fortification of the Balkans in Book IV.
- ⁴⁷ Croke, B. and Crow, J. (1983) 'Procopius and Dara', *Journal of Roman Studies* 73, 143-159. See also Palmer, A. (2000) 'Procopius and Edessa', *Antiquité Tardive* 8, 127-136. The latter states (p135) that the

description of Justinian's restoration of the walls at Edessa as following the flood of 525, when in fact it took place after 540, is "intentionally misleading" and undermines the credibility of the whole work.

⁴⁸ Whitby, M. (1986a) 'Procopius' description of Dara' in Kennedy, Fa (ed.), *The defence of the Roman and Byzantine East 737-782* Whitby, M. (1984) 'Procopius' description of Martyropolis', *Byzantinoslavica* 45, 177-182; Blétry, S. (2008) 'Reprise des recherches archéologiques à Zénobia-Halabiyé', *Archéologia* 457, 31-33

⁴⁹ *Buildings* 1.1.11

⁵⁰ Whitby, M. (1986b) 'Procopius and the development of Roman defences in upper Mesopotamia' in Freeman, P and Kennedy, D (ed.), *The defence of the Roman and Byzantine East 717-735*, p721

⁵¹ The major loss of a fortified position during this Persian invasion (other than Antioch) was Sura – see gazetteer. Justinian's work of fortification in regard to this city took place after 540.

⁵² Ammianus Marcellius 18.8.1

⁵³ Theodoret, Epistle 81: *The Ecclesiastical History, Dialogues and letters of Theodoret*, translated by B Jackson, New York, 1892

⁵⁴ Chronicle of Edessa, section 68: "An. 769 [AD358], Nonnus came into his place [as bishop] and built the house of Mar Johanan the Baptist, and (he constructed) a place for poor invalids...; and in the place for the poor he built the house of martyrs to Mar Cosma and Mar Damian. Now he built also convents and towers, and made **bridges, and levelled the roads.**"

⁵⁵ Liebeschütz, J. (2001) *The Decline and Fall of the Roman City* Oxford, pp148-9; Mitchell, S. (2007) *A history of the Later Roman Empire, AD284-641. The transformation of the ancient world* Oxford, p276

⁵⁶ Comfort, A. (2002) 'Legio IIII Scythica', *Zeitschrift für Papyrologie und Epigraphik* 138, 275-276

⁵⁷ There are two such in the Tigris gorge north of Cizre on small tributary rivers on the east bank.

⁵⁸ See Ilter, Çulpan and Tunç cited below and notes 18 and 19. The Çobandede bridge near Erzerum constructed under the Ilhan dynasty towards the end of the 13th century is a particularly fine example from the region north of that treated here.

⁵⁹ Whitby, M. (1985) 'Justinian's bridge over the Sangarius and the date of Procopius' *De Aedificiis*', *Journal of Hellenic Studies* 105, 129-148

⁶⁰ Sahin, S. (1997) 'Wasserbauten Justinians am unteren Sangarios in Bithynien' in XI Congresso Internazionale di Epigrafia Greca e Latina Rome

⁶¹ See Chapter 6 on timber bridges in O'Connor, C. (1993) *Roman bridges* Cambridge

⁶² Thus the first bridge at Diyarbakir seems to have been destroyed by a logjam of walnut trees brought down by floods. See 'Ongözköprü below.

⁶³ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris

⁶⁴ Foss, C. (1985) *Survey of medieval castles of Anatolia I: Kutahya* Oxford; Foss, C. (1996) *Nicomedia* London

⁶⁵ There are good descriptions of this procedure by Gertrude Bell in 'Amurath to Amurath' who crossed the Tigris at Hasankeyf in 1911 and by Soane who crossed the Euphrates near Membij.

⁶⁶ According to Palmer p83, this was built by Bishop Saoro of Diyarbakir – and formerly abbot of Mar Gabriel - between 483 and 504. See also Hans Hollerweger, 'Tur Abdin' (p337) and below.

⁶⁷ But Julian (Or.I.22 A-B) states that Roman raiders across the Tigris in AD343 (?) required bridges of rafts "...at many points..." and Libanius implies in Epistle 49 to Modestus that Shapur II built a wooden bridge across the Tigris to allow his forces to invade the Roman empire in AD 359 (?) – Dodgeon and Lieu REFPW pp179 and 222.

⁶⁸ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126

⁶⁹ Philostratus, *Life of Apollonius of Tyana*, 1, XX

⁷⁰ Mitchell, S. (2007) *A history of the Later Roman Empire, AD284-641. The transformation of the ancient world* Oxford p80

⁷¹ Heather and Matthews (1991) *The Goths in the Fourth Century*, p81

⁷² Heather, P. and Matthews, J. (1991) *The Goths in the Fourth Century* Liverpool Ibid, p40: Themistius in Oration 10 (206/136) refers to the enjoyment of the profits from trade by both Romans and Goths but the litigation to only two cities along the Danube as trading posts.

⁷³ The foundation inscription of the bridge 'of Roman type' at Firuzabad, built by the grand vizier of the emperors Yazdegerd I (399-420), Bahram Gor (420-438) and Yazdegerd II (438-457). See

<http://www.iranica.com/newsite/articles/v4f5/v4f5a001.html>, page 2

⁷⁴ <http://www.iranica.com/newsite/home/index.isc>

⁷⁵ A website on Iranian empires hosted at Exeter's 'Latis centre' includes a description and photographs of several of these bridges which were of course associated with roads:

<http://latis.ex.ac.uk/classics/visualexamples/iran/roadsbridgescomms.htm>. Information provided by Stephen Mitchell.

⁷⁶ Tabari (trans. Bosworth, C. E. (1999) *The History, Volume 5 The Sasanids, the Byzantines, the Lakmids and Yemen* New York, p130 and 157

⁷⁷ Gazzola mentions the following bridges in this region: 252 Kakho (in Iraq – the present bridge appears from photos to be medieval; 254 Kahta (Chabinas) - Roman; 255 Goksu (Turuş) – Roman, discussed below; 258 Afrin (Cyrrhus) - Roman; 259 Sabun-Suyu I (Cyrrhus) - Roman; 260 Sabun-Suyu II - Roman.

⁷⁸ Çulpan has: 4 Kahta; 5 Adapazari (Roman - Justinian); 6 Ağır (Kahramağara -Keban dam); 9 Dizful (Iran – Sassanian) and Shustar - Sassanian; 11 Kaflan/Kub (Azerbaijan) – date?; 12 Nahcivan – Kazancı – date?; 13 Kızılırmak – Çeşniğir – date?; 14 Silifke – Göksu; 16 Adana – Şeyhan - Roman; 17 Adana - Misis (Şeyhan) - Roman 18 Diyarbakır – Dicle – Roman/medieval

⁷⁹ Tunç has: p47 Cizre (AD1164); pp66/7 Devegeçidi - 7 arches, 119.7m long, 6.4m wide, 13,7m highest arch - Ottoman; p68/71 Dicle (Diyarbakır) – present version 11th century, see below; p73 Dunaysir/Kiziltepe – Artukid 12th century (see below); p87 Göksu (see below); p89 Haburman (Çermik) - medieval; pp91/2 Halilviran – on Devegeçidi, Artukid; p98 Hazro – 11th century; p107 Karaköprü – S of Diyarbakır – 17th century; p117 Keşiş (Değirmen) 15th/16th century; p108 Hasankeyf, Artukid; p130 Malabadi, Artukid AD1147; p149 Nuh han (Kalealtı, Bitlis river) AD 1147; p151 Pasha Hamamı, Bitlis – date?; p167 Siğnek, near Çermik, Ottoman; also NB p20 Ambar Cay, 21 km from Diyarbakır towards Silvan AD 1223; p113 Kemhük, 25 km from Diyarbakır towards Silvan 13th century; p155 Pileken, near Silvan 13th century.

⁸⁰ Ilter has: 1 Dicle (Diyarbakır); 2 Malabadi (Batman Su); 3 Hasankeyf; 4 Ceziret Ibn Omar (Cizre); 5 Cizre küçük köprü (Telkabir); 6 Haburman köprüsü (Cernik); 7 Sinek çay; 8 Kasr köprü; 14 Halil Vıran; (Devegeçidi); 23 Nasreddin köprüsü

⁸¹ O'Connor has: (all Roman) E31 Ası (Antakya), E32 Afrin (Cyrrhus), E33 Sabun-suyu 1; E34 Sabun-suyu 2 (Cyrrhus); E35 Goksu – see below; E36 Cendere (also known as Kahta); E37 Arabkir Çay, Korpanik; E38 Karamağara Arabkir Çay (Tunc 208 m126); E39 Sabrina/Karabudak/Zimora; E40 Zakho; E41 Eski Mosul; and in Iran, E42 Band-I Kaisar, Karun river (Shushtar)

⁸² Galliazzo mentions: 823 Elbistan (Göksü); 824 Kahta; 825 Maraş (Aksu); 827 Comana (Kemer bridge on the Göksü); 829 Kuruçay, Cappadocia (bridge of Decius on the Karabudak or Sabrina river); 830 Malatya (Kırkgöz köprü on the Tokma Su or Melas); 835 Turuş (Göksü – discussed below) ; 844 Hısar (Karasu – discussed below); 845 Kasaba (Merzumen below Rumkale – discussed below); Yarımca (Merzumen-discussed below) – on the evidence of Wagner who wrongly believed only foundations were visible.

⁸³ Dillemann, p130

⁸⁴ Kissel, T. and Stoll, O. (2000) 'Die Brücke bei Nimreh', *Antike Welt* 109-125

⁸⁵ Stein, A. (1940) 'Surveys on the Roman Frontier in Iraq and Trans-Jordan', *Geographical Journal* 95, 428-438

⁸⁶ Ibid. p429; Dillemann 1962 p72

⁸⁷ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126 p118 figure 19

⁸⁸ Stein, A. (1935) 'An Archaeological Tour in the Ancient Persis', *Geographical Journal* 86, 489-497

⁸⁹ Cernik, J. (1876) *Technische Studien-expedition durch die Gebiete des Euphrat und Tigris* Gotha

⁹⁰ All bridges have been visited by me unless I indicate the contrary. Photographs are my own except for the satellite photos reproduced from Google Earth and the pictures by Gertrude Bell of the bridge at Nisibis and by Poidebard of that at Cizre..

⁹¹ Ancient name unknown, but apparently the border between the Roman province of Mesopotamia and the Armenian principality of Ingilene until the reforms of Justinian (see TAVO BVI 4, *Eastern Mediterranean and Mesopotamia – Late Roman period 337-529 AD*).

⁹² These two other bridges, but not the Roman bridge, are described on page 285 of Tom Sinclair's "*Eastern Turkey: an architectural and archaeological survey*", Volume 3, but there is an unfortunate confusion over the names).

⁹³ Strabo mentions Carthiocerta "as the royal city of Sophene" (XI.14.2); Carthiocerta is sometimes identified with Harput, the citadel town above Elazığ..

⁹⁴ For the historical background see Blockley, R. C. (1992) *East Roman foreign policy: formation and conduct from Diocletian to Anastasius* Leeds p14 and Lightfoot, C. S. (1982) *The eastern frontier of the Roman Empire with special reference to the reign of Constantius II*, thesis, Oxford

⁹⁵ Sinclair ETAAS Vol 3, p283

⁹⁶ Sykes, M. (1915) *The Caliph's Last Heritage* London p364

⁹⁷ Journal of the Royal Geographical Society 35 (1867) p37. I reproduce here the whole text of this section of his account: "...Three and a half hours from Eggil, and on the right bank of the Tigris, some way below the junction of the Maaden and Dibeneh branches, are the ruins of Jubeyr Castle, situated on the top of a mass of perpendicular rock that crops out of the summit of a high hill, a spur of the mountain-range there. The southern portion, on which the Kalla is built, has been separated, as at Eggil, by a deep and broad cutting, 120 feet long, 60 deep, and 30 wide at its weakest point from the main range, so as to have ensured it against any sudden capture by escalade. This point was further fortified by a huge mass of solid brickwork, rising to a height of many feet, which, subsequently in the shape of a wall, follows the irregularity of the whole summit of the mound, enclosing an area of 400 yards long, with a breadth varying from 20 to 40. Higher up the stream, at the angle formed by the junction of the Arganeh Maaden and Dibeneh Sus, which form the western Tigris, are the ruins of Ammaneh Castle, occupying as at Jubeyr, the top of an isolated mountain, but, its position is incomparably stronger, from its greater height and comparative inaccessibility. It can be approached only at one side by a single path, hardly practicable for mules, the other two sides being high perpendicular rocks, washed respectively by the Dibeneh and Maaden rivers, the weakest portion deriving additional strength from walls of amazing thickness. The area of the summit is about 1½ mile long, and 1 broad, and the whole, with the exception of a small portion of the southern end, is choked by the débris of old houses and reservoirs of black stone. On the north-eastern side of the mountain a covered stair cut out of the solid rock, as at Eggil, 280 feet high and 8 feet broad, leads down to the Dibeneh Su. The site, its impregnability, and extensive remains coincide, more than any other position or ruin I have seen, with that of Carcathiocerta, which has been placed alternately at Miafarkeyn and Diarbekr. First following the Dibeneh Su, and then ascending the upland, whose base it washes, I crossed to Heyni, visiting on my way the curious grot church, close to the fine Armenian Village of Dibeneh, which is scooped out of a mass of isolated rock on the left bank of the river of the same name. This place, from the numerous small crypts round its interior, is called by the Moslems Elakhoor or Stable; but whatever it may be now, its original use cannot be mistaken, and it is in consequence venerated by all Armenians as the earliest temple of their faith. The church is entered by two wide, low doorways, and is capable of containing a congregation of 200 people with ease. The place where the altar stood is a commodious arched recess approached by three steps, and communicating on the left with a small room, for the convenience of the priest and others connected with the church. In its immediate neighbourhood there are several other grotts cut out of the rock, which, from the stone benches in them, and other marks and remains, appear to have formed dwelling-places for the inferior church officials. The natives told me that human remains were in such abundance all round the precincts of the church, that, for fear of desecrating them, they had forbore to till the ground about it, lest they should unwittingly exhume the relics of those they regard as their ancestors. For the same reason they have turned the course of a small stream, that formerly washed the rock into the plain."

⁹⁸ The 'Chronicle of 819' from Qartmin states – according to Palmer in *Monk and Mason*, 1990, p.116, that in AD483 John Sa'oro was made bishop of Amida and that he built a large church dedicated to the Forty Martyrs of Sebaste as well as a bridge over the Tigris. Palmer refers to an unpublished inscription in the base of one of the piers, visible only when the water of the river is low, which describes its destruction in AD 742 when floods brought down trunks of walnut trees from Ingilene causing a large jam whose pressure eventually brought down the bridge.

⁹⁹ Greatrex, G. (1998) *Rome and Persia at War, 502-532* Leeds p83

¹⁰⁰ Berchem, M., van, and Strzygowski, J. (1910) *Amida. Matériaux pour l'épigraphie et l'histoire musulmanes du Diyar-Bekr* Heidelberg, pp31f.

¹⁰¹ See discussion of route 1 in Chapter 4-1; also <http://www3.uakron.edu/ziyaret/geographical.html> and Kessler, K. (1980) *Untersuchungen zur historischen Topographie Nordmesopotamiens: nach keilschriftlichen Quellen* Wiesbaden Map III, p78.

¹⁰² ETAAS Vol 3 p238

¹⁰³ Legio II Parthica; ND Or. XVIII 30

¹⁰⁴ Lightfoot, C. S. (1986) 'Tilli - a late Roman Equites fort on the Tigris' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East 509-529*, p514; Velibeyoğlu, J., Schachner, A. and Schachner, Ş. (2002) 'Erste Ergebnisse eines Surveys im Botan-tal und in Çattepe (Tilli)' in Tuna, N and Velibeyoğlu, J (ed.), *Salvage project of the archaeological heritage of the Ilisu and Carchemish dam reservoirs: activities in 2000 (Ilisu ve Karkamis Baraj Gölleri altında kalacak arkeolojik kültür varlıklarını kurtarma projesi: 2000 yılı çalışmaları)* 783-857

¹⁰⁵ Sykes, M. (1915) *The Caliph's Last Heritage* London p353

¹⁰⁶ *ibid* p245

¹⁰⁷ Joshua Stylites para 66, who calls the Nymphius by its Syriac name of 'Kallath'. See also Greatrex, G. (1998) *Rome and Persia at War, 502-532* Leeds, p109. It is unclear whether the ensuing battle won by the Romans took place on the east or west bank of the Nymphius. The Romans may have been intercepting Persian convoys in Arzanene i.e. on the east bank.

¹⁰⁸ Ch 18.65 (trans. Jeffreys, p273)

- ¹⁰⁹ But Maurice notoriously inherited an empty treasury and financial difficulties may well have precluded major engineering works. For a discussion of his financial situation and construction programme see Whitby, M. (1988) *The emperor Maurice and his historian* Oxford p18-20
- ¹¹⁰ Whitby, M. (1983) 'Arzanene in the late sixth century' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 205-217; Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels, p27
- ¹¹¹ Ibid, p209
- ¹¹² According to the Syriac chronicle of Zachariah of Mitylene, the villages of Arzun were the property of the Persian king and provided him with a considerable tax revenue; translation by EW Brooks and FJ Hamilton London, 1899 IX.6.
- ¹¹³ Burucek Köprü ; see Algaze, G. (1989) 'A new frontier: first results of the Tigris-Euphrates archaeological reconnaissance project, 1988', *Journal of Near Eastern Studies* 48, 241-281, p261 Site 1 Fig 5
- ¹¹⁴ Kelleha Tarlasi; Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M. (1991) 'The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons', *Anatolica* XVII, 175-235, p213 Sites 104-106, Fig 2a
- ¹¹⁵ Professor Algaze has informed me that – despite repeated requests - he was never authorised to study the surface finds collected along the Tigris (which had been stored in the Mardin and then the Diyarbakir museums) and that for this reason no final report was possible.
- ¹¹⁶ Sinclair, T. A. (1997) 'The site of Tigranocerta, II', *Revue des Études Arméniennes* 26, 51-118 p59
- ¹¹⁷ Rosenberg, M. and Togul, H. (1991) 'The Batman river archaeological site survey, 1990', *Anatolica* XVII, 241-249 The authors describe the bridges as being of the Ottoman period and still in use but give no further details.
- ¹¹⁸ ETAAS Vol 3, pp279/280
- ¹¹⁹ Pliny, *Natural History*, 6.129
- ¹²⁰ Algaze G., et al 1991 *Anatolica* XVII, p219 Site 1 Fig 10 – Algaze refers to it as Seyh Hosel, but it is called Şeyhosel on the Turkish 1:100 000 map which he used - and which is reproduced on the TACDAM website at <http://www.tacdram.metu.edu.tr/tacdram2002/index2.html#>
- ¹²¹ Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels p18; but Dillemann places Mount Melabason on the right bank of the Tigris behind Hasankeyf - (1962) p310-311
- ¹²² Algaze G., et al 1991 *Anatolica* XVII, p219 Site 19 Fig 10
- ¹²³ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58
- ¹²⁴ Adnan Cevik, personal communication, April 2008.
- ¹²⁵ The name 'Kentrites' is mentioned by Pliny, *Natural History* 6.127-8; see also Honigmann's article in PWRE, Κεντριτης.
- ¹²⁶ Sinclair ETAAS Vol 3 p306
- ¹²⁷ Algaze, G. (1989) 'A new frontier: first results of the Tigris-Euphrates archaeological reconnaissance project, 1988', *Journal of Near Eastern Studies* 48, 241-281, p268 Fig 12
- ¹²⁸ Lightfoot, C. S. (1986) 'Tilli - a late Roman Equites fort on the Tigris' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East* 509-529
- ¹²⁹ ND Or. XXXVI, 26
- ¹³⁰ Mitford, T. B. (1986) 'A late Roman fortress south of Lake Van?' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East* 2, 565-573
- ¹³¹ Algaze (1989), op.cit., Site 1 Fig 5
- ¹³² Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M. (1991) 'The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons', *Anatolica* XVII, 175-235 p190
- ¹³³ Fiey, J.-M. (1977) *Nisibe: métropole syriaque orientale et ses suffragants des origines à nos jours* Louvain
- ¹³⁴ Ammianus Marcellinus 18.6.17
- ¹³⁵ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris Plate XI c) facing page 130.
- ¹³⁶ ETAAS, Vol 3 p356
- ¹³⁷ 'Hazor' is the ancient name claimed by local people of the town of Idil, formerly *Azakh*. Hazor is apparently an Assyrian name known from a Syriac chronicle; it appears on the 'Köy Köy Türkiye' road atlas. The town has an ancient Christian church and cistern.
- ¹³⁸ Preusser, C. (1911) *Nordmesopotamische Baudenkmaler altchristliches und islamisches Zeit* Leipzig p26 and T37: "Auf dem Weg nach der unterhalb der Stadt liegenden Trümmen einer persischen Brücke mussten wir einen Bach durchreiten, den früher eine kleine massive Brücke überspannt hat, deren Pfeilerköpfer interessante, heute noch wohl erhaltene Tierreliefs und arabische Inschrifttafeln tragen...Sie war infolge des seitlichen Einsinkens eines Pfeilers zusammengebrochen, doch hatte man in späteren Zeiten durch neue,

immer primitiver werdende Konstruktionen versucht, dem Verkehrsbedürfnis Rechnung zu tragen. Diese leichten und recht verständnislos aufgeführten hölzernen Überbrückungen waren wie von langem Bestand, und so gewöhnte man davon, auf sie zu verzichten und bei jeder Überschreitung des fließens mitgedrungen ein Bad zu nehmen, was ja im Interesse der Volkshygiene nur von Vorteil sein kann.“

¹³⁹ Ibid. p26, T38 and 39

¹⁴⁰ Lehmann-Haupt, C.F., *Armenien Einst und Jetzt* Berlin 1910

¹⁴¹ Whitby, M. (1986b) 'Procopius and the development of Roman defences in upper Mesopotamia' in Freeman, P and Kennedy, D (ed.), *The defence of the Roman and Byzantine East 717-735*

¹⁴² *Buildings*, II.2

¹⁴³ Sachau, E. (1883) *Reise in Syrien und Mesopotamien* Leipzig

¹⁴⁴ Gabriel, A. (1940) *Voyages archéologiques dans la Turquie orientale* Paris

¹⁴⁵ Poidebard 1934 *La trace de Rome* p142/3 and plates CXVIII, CXIX ; Oppenheim II p27; Sarre and Herzfeld p189

¹⁴⁶ Von Oppenheim, *Tell Halaf*, map on p15

¹⁴⁷ Poidebard 1934 *La trace de Rome* p141/2 and plates CXVI, CXVII; bridge and road between 6m50 and 7m wide.

¹⁴⁸ Hellenkemper, H.-G. (1977) 'Der Limes am Nordsyrischen Euphrat. Bericht zu einer archäologischen Landesaufnahme.' in Fitz, J (ed.), *Studien zu der Militärgrenzen Roms II* 461-471, p465

¹⁴⁹ For a discussion of the inscriptions see Humann and Puchstein (Berlin 1890) 395ff Tab 43 (CIL III 6709-6714, IGLSyr 38-44)

¹⁵⁰ It has been published inter alios by Dörner, F. and Naumann, R. (1939) 'Forschungen in Kommagene', *Istanbuler Forschungen* 16-29, 86-91, p6 and pl.7; Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704, 679 and fig5.

¹⁵¹ Blaylock, S. R., French, D. H. and Summers, G. D. (1990) 'The Adiyaman survey: an interim report', *Anatolian Studies* 40, 82-135 p122-125

¹⁵² Humann and Puchstein (1890) *Reise in Kleinasien und Nordsyrien*; Dörner, F. (1967) *Kommagene: ein wiederentdecktes Königreich* Böblingen p47-9; Blömer, M. (2008) 'Der Tumulus von Sesönk - ein Monument des Kommagenischen Ahnenkults?' in Winter, E (ed.), *Von Euphrat bis zum Bosphorus: Kleinasien in der Antike* 65, 109-110

¹⁵³ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 4, p173

¹⁵⁴ Le Strange, G. (1905) *Lands of the Eastern Caliphate: Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur* Cambridge p123-4.

¹⁵⁵ Dörner FK and Nauman R *Forschungen in Kommagene* (Berlin 1939) *Istanbuler Forschungen* vol.10, 62-6, Ta7,21f; Hellenkemper HH *Der Limes am Nordsyrischen Euphrat: Bericht zu einer archäologischen Landesaufnahme*, SMR Cologne 1977, 466.

¹⁵⁶ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p271

¹⁵⁷ Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704 and Wagner, J. (1985) 'Die Römer am Euphrat und Tigris' in Dörner, F (ed.), *Kommagene (Antike Welt Sondernummer)* 68-82

¹⁵⁸ Wagner, J. (1977a) 'Legio III Scythica in Zeugma am Euphrat' in (ed.), *Studien zu den Militärgrenzen Roms, Vorträge des 10. internationalen Limeskongresses in der Germania inferior* 517-539

¹⁵⁹ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome , p272 n2 "Journal: On me dit dans ce village [Elif] que le même *Abach-Sou* [now Kara Su], tout près de l'Euphrate, est franchi par un autre pont antique, intact celui-là et sur lequel on passe encore aujourd'hui. Mais il n'y a pour y aller que des chemins affreux, et du reste le renseignement semble très suspect. »

¹⁶⁰ Fg15

¹⁶¹ Comfort, A. (2002) 'Legio III Scythica', *Zeitschrift für Papyrologie und Epigraphik* 138, 275-276

¹⁶² Cumont, F. (1917) *Etudes Syriennes* Paris, pp203-212

¹⁶³ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126, p118 Fig 15

¹⁶⁴ Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704 p684

¹⁶⁵ Comfort et al, *ibid*, p118 fig18 and Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50 p47 fig31

- ¹⁶⁶ Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704 p681-2
- ¹⁶⁷ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 4, p86}:
 "...The Roman masonry can only be seen in one or two places. The medieval masonry is of field stones with little difference between interior and face. The bridge was in use until perhaps a few years after the First World War. Those who used it reported that the first and last arches survived (in other words the arches in their positions rebuilt in the Middle Ages had survived In place of the remaining arches were wooden planks." See also Çulpan C. (1975) *Türk taş köprüleri: ortaçağdan Osmanlı devri sonuna kadar* Ankara152; Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London 1, 435
- ¹⁶⁸ Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704 p684
- ¹⁶⁹ Cumont, F. (1917) *Etudes Syriennes* Paris, pp237, 309
- ¹⁷⁰ Renwick Metheny, J. (1907) 'Road notes from Cilicia and North Syria', *Journal of the American Oriental Society* 28, 155-163
- ¹⁷¹ Wagner, J. (1977b) 'Vorarbeiten zur Karte "Ostgrenze des römischen Reiches" im Tübinger Atlas des Vorderen Orients ' in Fitz, J (ed.), *Limes: Akten des XI. Internationalen Limeskongresses* 669-704 plates 10 and 11.
- ¹⁷² Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome , p340.
- ¹⁷³ Although the first edition is thought to have been carried out for the emperor Augustus that which has come down to us is believed to date from the reign of Diocletian.
- ¹⁷⁴ Admiralty War Staff, I. D. (1917) *A handbook of Mesopotamia; Northern Mesopotamia and Central Kurdistan* London, Admiralty War Staff, I. D. (1918-1919) *A handbook of Asia Minor; Cilicia, Antitaurus and north Syria* London
- ¹⁷⁵ The maps covering the region covered here are: 67, Antiochia; 68, Syria; 89, Armenia; and 91, Ctesiphon. In regard to 67, the road from Antioch to Doliche is missing; on 89 the roads shown heading east from Amida are unlikely to have existed except for that along the north bank of the Tigris. In regard to places, I am doubtful for map 67 about the locations shown for Regia, Bithias, Seleukeia epi tou Zeugmatos, Capersana (should be Ayni), Amphipolis/Tourmeda, Arulis and Epiphaneia ad Euphratem; for map 89 about Mambre, Mindon, Birthon/Virta and I am surprised that Sinclair shows the position of Siphrios, Idriphthon and Sammachi with such assurance.
- ¹⁷⁶ "Il est intéressant de savoir que le réseau routier de haute Mésopotamie était dans son ensemble construit en dur à l'époque romaine."
- ¹⁷⁷ Bauzou, T. (1989b) 'Les routes romaines de Syrie' in Dentzer, J-M, Orthmann W. (ed.), *Archéologie et Histoire de la Syrie: La Syrie de l'époque achéménide à l'avènement de l'Islam* 2, 205-221 plus map p214
- ¹⁷⁸ Soane, E. B. (1926 (repr.1979)) *To Mesopotamia and Kurdistan in disguise* London/Amsterdam, p45
- ¹⁷⁹ Sachau, E. (1883) *Reise in Syrien und Mesopotamien* Leipzig, p217
- ¹⁸⁰ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris, p152 and plate CXXXVIII;
- ¹⁸¹ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p308 n9: route Edesse-Samosate - « J'en ai relevé les traces sur de longues étendues, surtout à 2 ou 3 heures d'Orfa ; par endroits, la vieille chaussée est même presque intacte : de droite et de gauche, une rangée rectiligne de grosses pierres la délimite très nettement ; la largeur varie de 3 à 4 mètres. Pas de dallage proprement dit : ce sont des cailloux de basalte juxtaposés sans mortier. En dehors de la voie, pas le moindre reste de construction antique. »
- ¹⁸² Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London, vol IV, route 199
- ¹⁸³ XIX, 8, 6-12
- ¹⁸⁴ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris, pp159 and 162, plate CLXI – 2;Poidebard, A. (1930) 'Mission archéologique en haute Djezire (1928)', *Syria* XI, 33-42
- ¹⁸⁵ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p304; also «...Du carrefour signalé par un tour imposant, mentionnée par Czernick, il déduit (p308) l'existence d'une route Édesse-Severek et d'une autre, Samosate-Constantia se coupant à Utchkeuy.... » (Czernick, J. (1875-76) 'Technische Studien-expedition durch die Gebiete des Euphrates und Tigris ', *Petermanns Geographische Mitteilungen, Ergänzungsheft* 44-45,
- ¹⁸⁶ Poidebard, A. (1930) 'Mission archéologique en haute Djezire (1928)', *Syria* XI, 33-42

¹⁸⁷ See especially Von der Osten, H. (1927-1930) *Explorations in Hittite Asia Minor* Chicago: Ufacikli in No.8 p92; there are also stretches of Roman road shown on Kiepert's map (Malatja sheet) near Bağdin/Ufacikli discussed by French, D. H. (1983) 'New research on the Euphrates frontier, supplementary notes 1 and 2' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 71-101, p90.

¹⁸⁸ Poidebard, A. (1928) 'Mission archéologique en haute Djezireh', *Syria* IX, 216-223

¹⁸⁹ French, D. (1993) 'A road problem: Roman or Byzantine?' *Istanbul Mitteilungen* 43, 445-454 + Tafel 49

¹⁹⁰ Several milestones seen by Cumont at the beginning of the 20th century have disappeared: in particular, in his *Etudes Syriennes* he shows on a sketchmap on p.15 two milestones on the road from Aleppo to Hierapolis (route 7) at points about 10MP from Aleppo at 'Sheikh Nedjar' and 13 or 14 MP before Hierapolis. Several others were found together nearby by Chapot in 1901 on a trip south along the Euphrates from Samosata. He reported as follows: "Après le pont [of Süpürgüç, on the Kara Su north of Rumkale], à l'ouest, commence aussitôt une voie antique piquant droit vers le sud. Je trouve dans mon carnet : Au bout d'une demi-heure, un groupe de milliaires. Ce sont les seuls que j'ai rencontré durant mon voyage de 1901 dans la Syrie du nord. Il y en avait au moins deux, très grands, à base carrée, de 2 mètres 35 de long. Un mille plus loin, au moins cinq colonnes, de même type, et à côté je crois voir les substructions d'un petit édifice rond, de 2 mètres de diamètre environ ; puis nous perdons le mille suivant ; au quatrième, un grand nombre de bornes, cassées ; elles semblent placées à un croisement de routes. Les milliaires sont anépigraphes. Ou bien les lettres sont devenues illisibles, par suite de la très mauvaise qualité de la pierre, creusée sur toute sa surface de trous où le doigt entier disparaît. Avec beaucoup de peine j'ai pu retourner une de ces bornes ; j'ai cru déchiffrer simplement MP... Ce groupe est à 10 minutes du village d'Alif... ». Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquête arabe Rome* p271. These milestones were unknown to local villagers when I asked in 1997, although the road itself may be traced (route 9 below) and there are ruins of several watchtowers along it.

¹⁹¹ Egeria, trans. McClure, M. and Felto, C. (1919) *The Pilgrimage of Etheria* London, New York 18: "Then starting from Ierapolis, I came, in the Name of God, at the fifteenth milestone [*miliario*] to the river Euphrates, of which it is very well written that it is *the great river Euphrates*."

¹⁹² Apart from the Amouda milestone discussed below in relation to route 1, one was found by me next to a watchtower on the Roman road from Doliche to Samosata (Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126 p117 and fig 18).

¹⁹³ See example D in chapter 1 above and discussion of route 9 in this chapter.

¹⁹⁴ See Kennedy's essay 'An analysis of Poidebard's air survey over Syria' in Kennedy, D. (1989) *Into the Sun: essays in air photography in archaeology in honour of Derrick Riley* Sheffield, p48-50

¹⁹⁵ Dillemann 1962 p147ff

¹⁹⁶ French, D. (1998) 'Pre-and early Roman roads of Asia Minor: the Persian Royal Road', *Iran: Journal of Persian Studies* 36, 15-43

¹⁹⁷ Kiepert, H. (1857) 'Über die persische Königstrasse durch Vorderasien nach Herodotus', *Monatsberichte Königlich Akademie Berlin, Sitzungen phil. hist. Klasse*, 123-140 and map

¹⁹⁸ p18

¹⁹⁹ V, 52; The 'Persian' place names are: Bara, Arcaiapis, Sardeba, Apadna and Dausaron.

²⁰⁰ Dillemann p159; see reference to Apadna, ND Or. 36 (in Annex E) ; also Procopius Buildings II, 4, 20. In regard to Persian influence, Dillemann also quotes Herodotus who states that there were 56 parasangs and 16 stations in Armenia, a distance which may correspond to that given in the Peutinger Table for the route from Ad Aras to Nisibis if four Roman miles equal one parasang (226 miles) and including ten miles for the unmarked distances from Aquae Frigidae to Arcamo and 22 miles from Ad Tygrem (=Amida) to Arcaiapis.

²⁰¹ Ammianus Marcellinus XIX, 6.1; Sinclair, *ETAAS*, Volume 3, p269. A rival candidate for Ziata is the citadel of Harput, near Elazig.

²⁰² Kiepert, H *Monatsberichte der königliche Akademie zu Berline* 1857; Olmstead, *AT History of the Persian Empire*, 1948/1959

²⁰³ Calder's route is also discussed by me in Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126.

²⁰⁴ Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M. (1991) 'The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons', *Anatolica* XVII, 175-235 p190

²⁰⁵ Layard, A. (1853) *Discoveries in the ruins of Nineveh and Babylon, with travels in Armenia, Kurdistan and the desert* London

²⁰⁶ *Histories* V, 52

²⁰⁷ <http://www3.uakron.edu/ziyaret/>

²⁰⁸ Kessler, K. (1980) *Untersuchungen zur historischen Topographie Nordmesopotamiens: nach keilschriftlichen Quellen* Wiesbaden Map III, p78

²⁰⁹ Miller, K. (1916) *Itineraria Romana* Stuttgart, col 739, map 238

²¹⁰ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris, p121

²¹¹ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58, pp22-3

²¹² ibid 22; see also Fossey, Manuel d'archéologie I,42. A monolith of Shalmaneser, found here by Taylor, is now in the British Museum. Its Assyrian name was probably Tushan. Forrer 21.cf Ammianus Marcellinus XVIII, 10.1; Sevin, V. (1989) *Excavations At Üçtepe / Üçtepe Kazıları* Istanbul.

²¹³ Sinclair, T. A. (1997) 'The site of Tigranocerta, II', *Revue des Études Arméniennes* 26, 51-118 If Charcha was indeed Sardebar this would strengthen the argument for the variant of the route to Tigranocerta along the south bank – see route 2. Sinclair believes that the route south-east from Diyarbakır crossed the Tigris immediately below the city (by the Ongözköprü) and then again a few kilometres further on. This would seem inherently unlikely since the route remaining on the right (west) bank of the river is more direct and there is an early 19th century bridge on the way at another 'Karaköprü' (37°49'17" N, 40°18'08" E); but Badger also states that he crossed two stone bridges across the Tigris on his way to Mardin and shows this on his map, while Bell shortened the way from Kurkh (Charcha/Üçtepe) to Diyarbakır by fording the Tigris in front of the mound (*Amurath to Amurath*, p323). There is no trace however of such a second stone bridge across the Tigris (which Badger marks near the Kara köprü at 'Shookodi', possibly modern Bozdemir - Badger, G. (1852) *The Nestorians and their rituals* London, vol 1, p46). By chance, most of the course of the Tigris between Diyarbakır and Bismil is available on Google Earth in high resolution. There is no sign of any crossing, let alone a stone bridge, below the Ongözköprü until the piers of the bridge near the Batman confluence (Köprüköy) and then Hasankeyf (see Chapter 6).

²¹⁴ Sinclair, op.cit, p62

²¹⁵ Dillemann, op.cit. p49.

²¹⁶ XVIII, 6.16

²¹⁷ It is mentioned by Poidebard as having been from Amouda but was acquired in Hassetché – now Al-Hasakah - for the museum at Aleppo (Poidebard, A. (1928) 'Mission archéologique en haute Djézireh', *Syria* IX, 216-223, p 222; the text of the milestone was published by him from p110 to 113 of the same issue of *Syria*. It reads in his interpretation:
 [Imp(eratori)Caes(ari)] MARCO
 (Aurelio Ant] ONINO
 [P(io)F(elici)Aug (usto)Parthi(ico)Bri]TANICO (sic)
 [Germanico Max]IMO
 [P(ontifici)M(aximo)]Trib(uniciae)Pote]STATIS
 (imp(eratori) ..cons(uli)..]PROC[o(n)s(uli)].

²¹⁸ Apart from the known medieval bridge at Cizre, Czernick reported ruins of a bridge on the Tigris some 30kms to the south-east, Czernick, J. (1875-76) 'Technische Studien-expedition durch die Gebiete des Euphrates und Tigris ', *Petermanns Geographische Mitteilungen, Ergänzungsheft* 44-45, p16. In CHI Chapter 20, p761, in his discussion of the 'Quadrant of the West' of the Sasanian empire, Brunner states that the Nisibis to Hulwan road (near Qasr-I Shirin at the entrance to the Iranian plateau) crossed the Tigris at Faishapur or Peroz-Shapur which seems to have been the same as that of Feshkhabur, the modern name, at which point it was joined by a road through Gordyene (Corduene) from the Bezabde crossing..

²¹⁹ p223

²²⁰ Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London Vol2 part IV. Dillemann cites route 93A of the edition of 1904, available only from National Archives.

²²¹ Lehmann-Haupt, K.-F. (1910 (Vol 1) and 1926 (Vol 2)) *Armenien Einst und Jetzt* Berlin, Vol 1,14 p442

²²² 1935, p159: « ...Dans la tradition locale, les indigènes appellent Darb al-Antik la route employée de temps immémorial entre Nisibin et Gezire ibn-'Omar pour les relations commerciales. Elle suit les premières pentes du Gebel Tour, en se serrant contre la chaîne principale. Dans cette position élevée, elle évite, en hiver, les marécages de la plaine, et, en été, les miasmes et la chaleur torride de cette région insalubre. Cette «ancienne route», la seule utilisée jusqu'en 1918, passe par Serwan, Tell Ibel et Sirigor, puis Bazeft et Géziré. Des traces de la route ancienne y ont été retrouvées en plusieurs points; en certains endroits, un peu plus au N. que l'itinéraire indiqué. A Serwan, ruines d'un castellum (pi. CLVIII, 3). Des restes de chaussée subsistent, plus à l'E., sur les pentes du Gebel Tour, a 'Ayn Ser, Danire et Bazeft, puis pendant 6 kilomètres en arrivant a Géziré ibn-'Omar(pl. CLVIII, 2). Aux approches de la ville, trois ponts d'origine romaine (pi. CLVIII, 1). A Bazeft, la voie mesure 6 mètres de large. Au milieu, un alignement de pierres un peu plus grosses que celles du pavage (environ 22 cm. x 30 cm.) forme épine dorsale. Des deux côtés, le pavage est encadré d'une on

deux bordures de blocs de même dimension que la rangée médiane. D'autres rangées, de même dimension, semblent avoir été disposées entre l'épine dorsale et les bordures.

Au point de vue militaire, la route était bien protégée. Serrant de près la chaîne du Gebel Tour, elle était à proximité des forteresses défendant les passes du Masius. Convois commerciaux et colonnes militaires pouvaient trouver refuge et secours en cas d'attaques, dans ces postes accrochés aux rochers escarpés. Les deux principales forteresses dans le Gebel Tour (Masius) entre Nisibin et Serwan étaient Kal'at Geddid et Hatim Tay, Rabdion de Procope.

Au S., la route était protégée, du côté de la plaine, par la ville forte de Babil (pi. CLIX), le poste-observatoire de l'Izzeddin Dag, le castellum de 'Abra (pl. CLIX) et le camp de Lelan (pl. CLX, 1).

Dans ce secteur, plusieurs autres camps ont été retrouvés, gardant le cours des wadis menant à la route. Aucun document ne nous indique lequel de ces points fortifiés était le Castra Maurorum, signalé par Ammien Marcellin entre Nisibis et le Tigre (Amm. Marc., XVIII, vi, 8, p. 144). Babil, ancienne ville assyrienne, fut à l'époque romaine une place militaire importante dans cette région voisine du Tigre. Ses quatre portes indiquent qu'elle était un carrefour de routes.

Une chaussée devait réunir, pour la facilité de la défense et la protection de la route militaire, les trois points de Serwan, Izzeddin Dag et Babil. Des éléments de chaussée apparaissent sur les deux pentes de l'Izzeddin Dag. Cette route venant de Nisibis par Sarbane traversait Babil d'O. en E., comme l'indiquent les portes de l'enceinte. De là, elle se dirigeait, par la grande vallée du Sufan Dere, vers Feshabour. Feshabour est un passage du Tigre aussi important que Géziré ibn-Omar. C'est là, en effet, que conflue le Habour oriental, dont la large vallée fertile route est une route de pénétration centrale vers le plateau de Perse. La route Sarbane-Babil-Feshabour était donc une voie importante tout à fait différente de celle de Sapha.

Le trace de la voie Nisibis-Sapha, établi par un routier officiel et par les vestiges retrouvés au sol, est conforme aux principes stratégiques de l'armée romaine dans ses guerres contre les Parthes. »

²²³ This and the following two stations are outside the area covered by this thesis.

²²⁴ According to Plutarch's *Life of Lucullus*, the Athenian orator Amphicrates was buried here by order of the wife of Tigranes (Cleopatra, daughter of Mithridates).

²²⁵ In the absence of a permit I did not collect surface sherds for later analysis and identification.

²²⁶ According to Dillemann (op.cit., p121) Markwart's identification of Eğıl with Carthiocrata (Markwart, J. (1930) *Südarmerien und die Tigrisquellen nach griechischen und arabischen Geographen* Vienna, pp38 and 138) rests on previous work of Droysen, Blau and Kiepert. Markwart was able to identify this town as the former capital of Sophene but also with Artagarda of Ptolemy (V,2,10), Ettagarda of the Ravenna Cosmography, Artaxarta/ Epiphaneia of Stephanus of Byzantium, as well as the unnamed place with two towers on the PT. Faustus of Byzantium calls it a royal residence and mentions the royal tombs still visible there (V,xxiv; V, vii). Hence also the name 'Basileion Phourion'.

²²⁷ Chronicle of Pseudo-Joshua 77 (Trombley and Watt p95) "...everything was sent down (to them) with great care. There were more things for sale in their camps than could be found in the cities, whether food, drink, shoes or clothing."

²²⁸ In Badger, G. (1852) *The Nestorians and their rituals* London there is a report on page 312 of Vol.1 of a journey from Diyarbakır to Siverek made over the northern extremity of the Karaca Dağ via a bridge of three arches over the 'Tcaroukia Soo', one and a half hours' ride from the city. I have not found this bridge and am therefore not able to propose a date. A bridge north of Siverek at Eskihan (37°54'14" N, 039° 26'32" E), on the road to Cermik, has replaced an ancient predecessor which might be Roman but there are no other traces of Roman roads in the vicinity which I have been able to find.

²²⁹ Chronicle of Joshua the Stylite 82 (Trombley and Watt p100)

²³⁰ CJ iv.63-4; for a discussion see Dignas, B. and Winter, E. (2007) *Rome and Persia in Late Antiquity: neighbours and rivals ('Rom und das Perserreich: Zwei Weltmächte zwischen Konfrontation und Koexistenz')* Cambridge, p205

²³¹ Layard, A. (1853) *Discoveries in the ruins of Nineveh and Babylon, with travels in Armenia, Kurdistan and the desert* London p38

²³² Shiel, J. (1838) 'Notes on a Journey from Tabríz, Through Kurdistan, via Ván, Bitlis, Se'ert and Erbil, to Suleimányeh, in July and August, 1836', *Journal of the Royal Geographical Society of London* 8, 54-101 pp73 and 81

²³³ Mitford, T. B. (1986) 'A late Roman fortress south of Lake Van?' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East* 2, 565-573

²³⁴ Chris Lightfoot, personal communication.

²³⁵ See report of Poidebard on the route from Nisibis to Cizre quoted in the notes above.

²³⁶ Gelzer, *Georgius Cyprius* pLVI, 939-944

- ²³⁷ Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels page 30, citing Markwart, *Südarmenien* p423
- ²³⁸ The stations indicated are Ad Tigrem XIII – Narrara XIV – Colchana XV – Triganocertam XXX – Zanserio XX – Cymiha XXII – Dyhanas XXVII – Patansara XXVI – Vastauna XXXII – Molchia XXVI – Dagneuana XV – Flegolana XV – Isumbo.
- ²³⁹ The alternative route shown is Ad Tigrem XIII – Sardebar (on the way to Nisibis) X – Adipte XII – Sita X – Thalbasaris XV – Triganocertam.
- ²⁴⁰ Lehmann-Haupt, K.-F. (1910 (Vol 1) and 1926 (Vol 2)) *Armenien Einst und Jetzt* Berlin
- ²⁴¹ Sinclair, T. A. (1995). The site of Tigranocerta, I, *REArm*, 183-254
- ²⁴² Sinclair, T. A. (1997) 'The site of Tigranocerta, II', *Revue des Études Arméniennes* 26, 51-118, especially p52.
- ²⁴³ Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M. (1991) 'The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons', *Anatolica* XVII, 175-235 sites 104-6 on fig 2a, p212 and list p213. But this was only an interim report; no final document was produced because of a refusal to grant access to study the material stored in Diyarbakır museum.
- ²⁴⁴ Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London Vol 4, p16 states that after the middle of July the Tigris and Batman are fordable. Badger forded the river near Charcha on his way from Diyarbakır to the Tur Abdin in the 1850 Badger, G. (1852) *The Nestorians and their rituals* London Vol 1, p53 and map at end.
- ²⁴⁵ Algaze, G., Breuninger, R., Lightfoot, C. and Rosenberg, M. (1991) 'The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons', *Anatolica* XVII, 175-235 p184
- ²⁴⁶ ND Or. 36: 'Dux Mesopotamiae - ... Ala secunda nova Aegyptiorum, Cartha.'
- ²⁴⁷ Turkey Roadmap 7, 1:500 000 Verlag R. Ryborsch, Obertshausen.
- ²⁴⁸ I have identified a possible mound near the railway line and 1km north of an ancient bridge at Köprüköy: 37°49'40" N; 40°57'59" E.
- ²⁴⁹ <http://www3.uakron.edu/ziyaret/>
- ²⁵⁰ Lightfoot, C. S. and Healey, J. F. (1991) 'A Roman veteran on the Tigris', *Epigraphica Anatolica* 17, 1-7, plate 1, p2; Sevin's short booklet on his excavations there makes no mention of the Roman levels and no information is available on the inscription (Sevin, V. (1989) *Excavations At Üçtepe / Üçtepe Kazıları* Istanbul).
- ²⁵¹ ND Or. 36: 'Dux Mesopotamiae - ... Ala secunda nova Aegyptiorum, Cartha.' Dillemann (op.cit. p238) discusses Charcha and identifies it also with a Cartha mentioned by Ammianus Marcellinus and Theophylact Simocatta (meaning 'oppidum' in Syriac); he explains its apparent exclusion from Procopius and George of Cyprus by suggesting that these writers knew it as Birthon/Birtha (which means 'castellum' in Syriac).
- ²⁵² Ptolemy V.13, 22 in Gorduene, a part of Armenia Maior. Not V.12.10 as indicated by Honigmann in his article on Σιας in PWRE, column 2066. Ptolemy mentions the following other places in this section on Gorduene: Φερενδις, Τηρανοκερτα, Σαρδηνοα, Κολσα, Τηρανοαμα, Αρταγγαρτα.
- ²⁵³ Algaze, G. (1989) 'A new frontier: first results of the Tigris-Euphrates archaeological reconnaissance project, 1988', *Journal of Near Eastern Studies* 48, 241-281 p245
- ²⁵⁴ Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London Vol 4, p16
- ²⁵⁵ Batman is a large new city developed as a result of an oil boom in the area during the 1960s. It is shown on other old maps as the small town of Iluh
- ²⁵⁶ Chronicle of Pseudo-Joshua 69 (Trombley and Watt, p87)
- ²⁵⁷ Ptolemy V, 14.8 and V, 17.5-7
- ²⁵⁸ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p308ff
- ²⁵⁹ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126 p112
- ²⁶⁰ Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123. This ancient road may be the same as that seen by Soane (Soane, E. B. (1926 (repr.1979)) *To Mesopotamia and Kurdistan in disguise* London/Amsterdam, p45), but no precise details are provided in either case.
- ²⁶¹ Other villages nearby with such towers are Yoğunburç and Sayaburç. A tower is also reported from Keciurç, a nearby hamlet (see photo).
- ²⁶² Thévenot de (1687) *The travels of Monsieur de Thevenot into the Levant* London Part II, Book 1 pp39-49
- ²⁶³ Ibid - entry for 6 July.

²⁶⁴ XIV.3.3

²⁶⁵ Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123

²⁶⁶ Guyer, S. (1939) 'Eski Hissar, ein römisches Lagerkastell im Gebiet von Edessa' in (ed.), *Mélanges syriens offerts à René Dussaud* 1, 183-190 and Wagner, *ibid.*

²⁶⁷ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126 p115

²⁶⁸ Kiepert, R. (1913/1914) 'Kleinasien in 12 Karte', Berlin Kiepert, R. (1913/1914) 'Kleinasien in 12 Karte', Berlin Kiepert, R. *Kleinasien in 12 Karten*, Berlin, Nsebin sheet Kiepert, R. (1913/1914) 'Kleinasien in 12 Karte', Berlin

²⁶⁹ Müller, C. *Geographi Graeci Minores* (1861) 244ff; Jacoby, FGrH, no. 781; and Schoff, W. (1914) *Parthian Stations of Isidore of Charax: an account of overland trade between the Levant and India in the first century BC* Philadelphia, Chaumont, M.-L. (1984) 'La route royale des Parthes de Zeugma à Séleucie du Tigre d'après l'itinéraire d'Isidore de Charax', *Syria* 61, 65-107 and Gawlikowski, M. (1988) 'La route de l'Euphrate d'Isidore à Julien' in Gatier, P, Helly, B and Rey-Coquais, J-P (ed.), *Géographie historique au Proche-Orient, Table Ronde de Valbonne* 77-98

²⁷⁰ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris and Poidebard, A. (1928) 'Mission archéologique en haute Djezireh', *Syria* IX, 216-223

²⁷¹ Feissel, D. and Gascou, J. (1989) 'Documents d'Archives romains inédits du Moyen Euphrate (III^e siècle après J.-C.)', *Comptes Rendus, Académie des Inscriptions et Belles-Lettres* 535-560

²⁷² Layard, A. (1853) *Discoveries in the ruins of Nineveh and Babylon, with travels in Armenia, Kurdistan and the desert* London: chapter XI et seq – 'Journey to the Khabur'.

²⁷³ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris, pp136-7

²⁷⁴ Poidebard, *ibid.*, p146. He also thought that on grounds of similarity of names he had found the location of *Bisimideon* at 'Tell Bismé', of *Thiolla* at 'Tell Twilé' or 'Tawil', of *Themeres* at 'Tell Toumr' or 'Thamar' and of *Dausaron* at 'Tell Dibbis' or 'Dibbs' (there was frequently more than one name for each mound), p152. See especially his map 'Coude du Habour; défense du Limes', figure CXL. Oates, D. (1956) 'The Roman frontier in northern Iraq', *Geographical Journal* 122, 190-199, p194 confirmed the Roman castellum at Tell Brak but found no evidence of fortifications from the time of Justinian, as had been claimed by Poidebard; he also was able to confirm the existence of a road and ford, probably Roman, crossing the Djaghjagh.

²⁷⁵ Dillemann p165-7

²⁷⁶ Theophylact Simocatta, I, 13, where it is stated that Monocarton was near the river Aisouma, with good pasturage and camping spots). See also Menander Protector II, 20.

²⁷⁷ Dillemann pp130, 166; but another possibility would be Tell Brak, some 50km WSW. Oates confirmed Poidebard's *castellum* at Tell Brak as being of the Roman period (see above); but Poidebard himself shows Thebeta on a site further east on his large map of the limes published in '*La trace de Rome dans le désert*' (whose north-east corner concerns the area considered here)

²⁷⁸ Zacharias of Mitylene (or Zacarias Scolasticus/Rhetor), 9.1,

²⁷⁹ NH VI,30.119-120

²⁸⁰ Wood, G. A. (2004) 'The Roman fort at Qubur al Bid, Mesopotamia', *Journal of Roman Archaeology* 17, 397-404

²⁸¹ XVIII.6.9 and XXV.7.9

²⁸² Oates, D. (1956) 'The Roman frontier in northern Iraq', *Geographical Journal* 122, 190-199

²⁸³ Kiepert, R. (1913/1914) 'Kleinasien in 12 Karte', Berlin, Halab sheet; Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126 p112

²⁸⁴ Dillemann p165

²⁸⁵ Zeugma is little mentioned after its sack by Shapur in the third century (see Gazzeteer). Hierapolis was visited on several occasions in the fourth century by Constantius II and seems to have been the base for Roman campaigns across the Euphrates during his reign.

²⁸⁶ Antonine Itinerary section 191: Item a Callecoma Edissa LXXXV, Bathnas XXVIII, Hierapoli XXI and section 192 Thilaticomum X, Bathanas, XV, Edissa XV, Item a Carris Hierapoli LXXXIII, Bathnas XXX Thilaticomum XXII, (Hierapoli XXXI)

- ²⁸⁷ However, the area has been visited in particular by Pognon, who report on several inscriptions which he found there: Pognon, H. (1907) *Inscriptions sémitiques de la Syrie, de la Mésopotamie et de la région de Mossoul* Paris. I have not yet had the opportunity to visit the Tektek Dağ.
- ²⁸⁸ Guyer, S. (1916) 'Reisen in Mesopotamien', *Petermann's Mitteilungen* 62, 168-178, 204-210, 254-259, 292-301 + photos and maps p204ff
- ²⁸⁹ Buckingham, J. S. (1827) *Travels in Mesopotamia including a journey from Aleppo, across the Euphrates, to Orfah* London
- ²⁹⁰ Mallowan Iraq III 1936
- ²⁹¹ See also Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London Vol 4, p345
- ²⁹² Mallowan (1936) *Iraq* III, 6 et seq
- ²⁹³ La Trace de Rome dans le desert, p144. Recent publications concerning Tell Brak do not treat the Roman period, although it is known that the lower town was occupied in both Roman and early Islamic periods.
- ²⁹⁴ Sarre, F. and Herzfeld, E. (1911-1920) *Archäologische Reise in Euphrat und Tigris gebiet* Berlin, p190
- ²⁹⁵ Syriac chronicle of Zachariah of Mitylene trans. by Hamilton and Brooks, London 1899, 9.2
- ²⁹⁶ Oates, D. and Oates, J. (1990) 'Aspects of Hellenistic and Roman settlement in the Khabur basin' in Mattiae, Van Loon and Weiss (ed.), *Resurrecting the past* 227-248
- ²⁹⁷ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris
- ²⁹⁸ Dillemann 1962, op.cit. p177
- ²⁹⁹ XVI, 1.27
- ³⁰⁰ The Ravenna Cosmographer places Bara after Batita. See discussion in Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris p141
- ³⁰¹ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris: map at end
- ³⁰² Oates, D. and Oates, J. (1990) 'Aspects of Hellenistic and Roman settlement in the Khabur basin' in Mattiae, Van Loon and Weiss (ed.), *Resurrecting the past* 227-248
- ³⁰³ Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Paris p138
- ³⁰⁴ Dussaud, R. (1927) *Topographie historique de la Syrie antique et médiévale* Paris p488, 492; Kennedy, D. and Riley, D. (1990) *Rome's Desert Frontier from the air* Austin p226, who publishes an aerial photo from the Stein archive but remarks that no Roman material has yet been reported.
- ³⁰⁵ Nogaret, M. (1983) 'A propos du relief 'Sassanide' de Bosat en Turquie orientale', *Iranica Antiqua* 18, 221-232
- ³⁰⁶ Mitford, T. B. (1974) 'Some inscriptions from the Cappadocian Limes', *Journal of Roman Studies* 64, 160-175, Mitford, T. B. (1977) 'The Euphrates frontier in Cappadocia' in (ed.), *Studien zu den Militärgrenzen Roms II* 501-510, Mitford, T. B. (1980) 'Cappadocia and Armenia Minor: Historical setting of the Limes' in Temporini, H (ed.), *Aufstieg und Niedergang der Römischen Welt* 7.2, 1169-1228
- ³⁰⁷ Cumont, F. (1917) *Etudes Syriennes* Paris
- ³⁰⁸ Dussaud, R. (1927) *Topographie historique de la Syrie antique et médiévale* Paris
- ³⁰⁹ Bauzou, T. (1989b) 'Les routes romaines de Syrie' in Dentzer, J-M, Orthmann W. (ed.), *Archéologie et Histoire de la Syrie: La Syrie de l'époque achéménide à l'avènement de l'Islam* 2, 205-221 plus map
- ³¹⁰ Honigsmann, E. (1931) 'Syria' RE7, 1549-1727
- ³¹¹ Archi, A., Pecorella, P. E. and Salvini, M. (1971) *Gaziantep e sua regione* Rome p31-35
- ³¹² London, 1990
- ³¹³ Cumont, F. (1917) *Etudes Syriennes* Paris, p15
- ³¹⁴ Burns, T. S. (1992) *Monuments of Syria* London p188
- ³¹⁵ Cumont, F. (1917) *Etudes Syriennes* Paris carte V, p278
- ³¹⁶ Stucky, R. A. (1972) 'Schweizerische archäologische Ausgrabungen auf Tell el Hajj (Syrien)', *Museum Helveticum* 29, 228-231 p231
- ³¹⁷ Syria 10 (1929) 370 – no author; also Dussaud R, Syria 13 (1932) 112
- ³¹⁸ Harper, R. P. (1975) 'Excavations at Dibsī Faraj, northern Syria, 1972-1974: a preliminary note on the site and monuments', *Dumbarton Oaks Papers* 29, 319-338
- ³¹⁹ Identified by Harper with Siffin/Abu Hreira, Ibid. p321
- ³²⁰ The watchtower is 4m48 square and there are seven courses of large squared blocks visible (generally, 59x93x120cms). A doorway 112cm tall and 150cm wide is preserved and there is a slot for a metal bar to lock the door. Although one side has been destroyed, it constitutes one of the only free-standing buildings of antiquity in the whole region. A damaged milestone - again one of the only still visible in this region - lies

alongside and is 45cm long with a diameter of 60cm. No inscription was clearly visible but the letter P may be discerned with difficulty.

³²¹ Renwick Metheny, J. (1907) 'Road notes from Cilicia and North Syria', *Journal of the American Oriental Society* 28, 155-163 p157

³²² Cumont, F. (1917) *Etudes Syriennes* Paris Carte IX p302. See also Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50 p46

³²³ Vol 4, part 2, 1919, p606: Route 137, Aintab to Rumkale. At Tell Duluk (Doliche) it states: [mile 16] "An abandoned road apparently ancient breaks off to north, crossing a small depression and ascending gently to E. ... beyond the ancient road ruined walls. Karakuyu 2 miles distant."

³²⁴ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126, Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50; many photos are available on the website published in association with this work at www.zeugma.lu, 'Image Gallery'.

³²⁵ Renwick Metheny, J. (1907) 'Road notes from Cilicia and North Syria', *Journal of the American Oriental Society* 28, 155-163; Pococke, R. (1745) *Description of the East and some other countries* London Vol 2 p158

³²⁶ French, D. (1994) 'Legio III Gallica' in Dabrowa, E. (ed.), *The Roman and Byzantine Army in the East* 29-46. The inscription has been taken to refer to construction of an Archimedes pump. But the high cliffs behind render this improbable. The 'cochlia' concerned was probably the corkscrew path which takes the ancient road up the cliff past the inscription and a relief sculpture of a river god, of which some remnants survive.

³²⁷ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126

³²⁸ French, D. H. (1983) 'New research on the Euphrates frontier, supplementary notes 1 and 2' in Mitchell, S. (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 71-101, road numbers 14 and 15.

³²⁹ Tchalenko, G. (1953) *Villages antiques de la Syrie du nord* Paris II, 95

³³⁰ Ravanda was proposed by Dussaud, Syria XI 1930 p106

³³¹ Cumont, F. (1917) *Etudes Syriennes* Paris pp238 and 302

³³² Archi, A., Pecorella, P. E. and Salvini, M. (1971) *Gaziantep e sua regione* Rome p32

³³³ Cumont, F. (1917) *Etudes Syriennes* Paris p241

³³⁴ PWRE Syria col 1656

³³⁵ Beyazlar, A. and Crowther, C. (2008) 'A new Trajanic milestone from Kilis' in Winter, E. (ed.), *ΠΑΤΡΙΣ ΠΑΝΤΡΟΦΟΣ ΚΟΜΜΑΓΗΝΗ: Neue Funde und Forschungen zwischen Taurus und Euphrat, Asia Minor Studien* 60, 257-62

³³⁶ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p339

³³⁷ Guest, J. S. (1992) *The Euphrates Expedition* London, Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London

³³⁸ PWRE Syria Col 1668

³³⁹ Feissel, D. and Gascou, J. (1989) 'Documents d'Archives romains inédits du Moyen Euphrate (IIIe siècle après J.-C.)', *Comptes Rendus, Académie des Inscriptions et Belles-Lettres* 535-560 document 16.

³⁴⁰ See Beyazlar and Crowther above.

³⁴¹ PWRE Syria col 1669; Von der Osten, H. (1927-1930) *Explorations in Hittite Asia Minor* Chicago No.8 p75 mentions an old paved road entering the city enclosure at Til Beshar.

³⁴² PWRE Syria col 1675

³⁴³ Miller, K. (1916) *Itineraria Romana* Stuttgart col 764.

³⁴⁴ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p345-6

³⁴⁵ Von der Osten, H. (1927-1930) *Explorations in Hittite Asia Minor* Chicago No.8; p96: "On entering the Kapu Deresi [seemingly the long valley descending from Pazarcik to Malatya], I noticed the remains of an ancient road with two old bridges. It must have been the only connection in ancient times between Marsh and Malatya. At the north end, near the village of Meidan, it is joined by a road from Elbistan [i.e. from the west]. Still following the course of the Gök Su, the road runs eastward and, slowly ascending, reaches a large plateau blanketed with meadows. We passed three still-inhabited ancient settlements very near to one another. The first two, Harabe Shehir and Viranshehir, show the remains of city walls and gates of late classical or Byzantine times, whereas the third is a huyuk."

³⁴⁶ See Chapter 4 above and articles in PWRE (70) and Encyclopedia of Islam (Maras).

- ³⁴⁷ French, D. H. (1983) 'New research on the Euphrates frontier, supplementary notes 1 and 2' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 71-101(road 13)
- ³⁴⁸ Yurt Ansiklopedisi Vol 8 point 8738
- ³⁴⁹ Von der Osten, H. (1927-1930) *Explorations in Hittite Asia Minor* Chicago No.8; p92
- ³⁵⁰ Handbook of Asia Minor, vol 4, part 2, p631 ff: a route is described heading east from Marash to Besni, which passes through Baghdin (mile 28 - new name: Ufacıklı); the route bears due E up a valley which gradually narrows between low hills. An ancient road is followed, still fit for wheels, and with an easy gradient of 3°. [mile] 35½ A road, apparently an ancient paved way, branches SSW to join the route to Kary Bel at mile 34. 37: pass Harmanjyk 2m to east down valley. Follow valley to SE and join Araban valley. 39 Cross small stream-bed from NW and ascend a valley by easy gradient along ancient road. 50 Belveren. Proceed E. Kucuk Nazarly. 52½ The ancient road bends SE. Present route follows a stony road over the Gedikli Gagh which trends S. 62 Zingerli. 64 Mamadikly. 68 Reach bottom of valley and enter a gorge. A Roman road leads up to it. Magnificent paving in perfect repair. 69 Fine fountain with ancient troughs cut into solid rock at altitude 3650 feet. 72 Behisni. 3500 feet." 12 miles beyond Besni there is another mention of an ancient paved road at Fal (route 143) and at 24 miles the road reaches Zakhdayrsh or Zekterij, from where an ancient road continues east towards Samsat past the Euphrates ferry at Killik.
- ³⁵¹ French, *ibid* p90
- ³⁵² French, *ibid*, p88
- ³⁵³ Wagner, J. (1985) 'Die Römer am Euphrat und Tigris' in Dörner, F (ed.), *Kommagene (Antike Welt Sondernummer)* 68-82, p78 and fig.101
- ³⁵⁴ PWRE Syria col 1672
- ³⁵⁵ Puchstein, O 'Die in Honigmann *Kommagenischer Denkmaler*' in Humann, K. and Puchstein, O. (1890) *Reisen in Kleinasien und Nordsyrien* Berlin p212-217; also Blömer, M. (2008) 'Der Tumulus von Sesönk - ein Monument des Kommagenischen Ahnenkults?' in Winter, E (ed.), *Von Euphrat bis zum Bosphorus: Kleinasien in der Antike* 65, 109-110
- ³⁵⁶ French, *ibid*, p89
- ³⁵⁷ Repeated at [189] but with a different route and different distances: Item a Germanicia Edissa 84 Sicos Basilisses 15, Dolicha 15, Zeugma 14, Cannaba 13, In medio 12, Edissa 15. 'In medio' is likely to have been known much later as *Charmelik*, in a village now known as Büyükhana which still contains ruins of a large Ottoman caravanserai.
- ³⁵⁸ French, *ibid*, p90
- ³⁵⁹ See entry by Honigmann in PWRE, col 2203 for Sicos Basilisses
- ³⁶⁰ French, *ibid*, p92
- ³⁶¹ Hellenkemper, H. (1976) *Burgen der Kreuzritterzeit in der Grafschaft Edessa und im Königreich Kleinarmenien* Bonn p67
- ³⁶² French, *ibid*, p92
- ³⁶³ French, *idem*. There are two necropoleis and a large Roman building nearby at Burc (Blaylock, S. R., French, D. H. and Summers, G. D. (1990) 'The Adiyaman survey: an interim report', *Anatolian Studies* 40, 82-135)
- ³⁶⁴ Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Ibid.* 51, 19-50 pp33-37.
- ³⁶⁵ Theodoret of Cyrhus. *Historia Ecclesiastica*. 4.14.3.
- ³⁶⁶ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126, p113-115
- ³⁶⁷ Cumont, F. (1917) *Etudes Syriennes* Paris, p206
- ³⁶⁸ Wagner, J. (1983) 'Provincia Osrohoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123
- ³⁶⁹ Zäh, A. (2001) 'Eine spätantike Kirche in Nuchrud (heute: Gürkuyu) im nördlichen Mesopotamien', *Jahrbuch der österreichischen Byzantinistik* 51, 365-71
- ³⁷⁰ Baumeister, P., Roos, D. and Saner, T. (2007) 'Die Keloşk Kale. Ein spätantiker Gebäudekomplex im türkischen Euphratbogen. Studien zu Osrohoene in der Spätantike I', *Istanbul Mitteilungen* 57,
- ³⁷¹ Wagner, *ibid*, p103
- ³⁷² Mitchell, S. (1993) *Anatolia: land, men and gods in Asia Minor - Vol 1 The Celts and the impact of Roman rule; Vol 2 The Rise of the Church* Oxford; Vol 1, Map 9, 'The Euphrates frontier' p131, which shows this as a road designed for pack animals. The route is also discussed by me in Comfort, A. and Ergeç, R. (2001)

- Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50 p41. More photos are available from the Image Gallery at www.zeugma.lu.
- ³⁷³ Konrad, M. (2001) *Der spätrömische Limes in Syrien* Mainz
- ³⁷⁴ Harper, R. P. (1975) 'Excavations at Dibsi Faraj, northern Syria, 1972-1974: a preliminary note on the site and monuments', *Dumbarton Oaks Papers* 29, 319-338
- ³⁷⁵ Gawlikowski, M. (1996) 'Thapsacus and Zeugma: the crossing of the Euphrates in antiquity', *Iraq* 58, 123-133 p128
- ³⁷⁶ Chesney, F. R. (1868) *Narrative of the Euphrates expedition* London p230: "Captain Lynch found the abutments of the bridge when passing at a later period up this river during the season of low water."
- ³⁷⁷ Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50 pp42-3
- ³⁷⁸ Hogarth, D. (1914) *Carchemish. Report on the excavations at Djerabis on behalf of the British Museum, Volume 1: Introductory* London
- ³⁷⁹ Rumkale is 26km from Zeugma as the crow flies; after taking into account necessary bends in the river and detours this is rather closer to the 24 MP (35.5km) indicated in the PT than Ehnes, too near, and Elif, too far.
- ³⁸⁰ Cumont, F. (1917) *Etudes Syriennes* Paris, pp206ff. Cumont also found ruins of churches at Elif and Hisar which seem no longer to be extant (photos p210).
- ³⁸¹ Blaylock, S. R., French, D. H. and Summers, G. D. (1990) 'The Adiyaman survey: an interim report', *Anatolian Studies* 40, 82-135
- ³⁸² French, D. H. (1983) 'New research on the Euphrates frontier, supplementary notes 1 and 2' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 71-101 p92
- ³⁸³ Feissel, D. and Gascou, J. (1989) 'Documents d'Archives romains inédits du Moyen Euphrate (IIIe siècle après J.-C.)', *Comptes Rendus, Académie des Inscriptions et Belles-Lettres* 535-560, p540 and document 16
- ³⁸⁴ The most recent report is Winter, E. (2008) 'Doliche, das Heiligtum des Iupiter Dolichenus und die Grabung auf dem Dülük Baba Tepesi' in Winter, E (ed.), *PATRIS PANTROPHOS KOMMAGENE. Neue Funde und Forschungen zwischen Taurus und Euphrat* 53-68.
- ³⁸⁵ Frézouls, E. (1955) 'Recherches historiques et archéologiques sur la ville de Cyrhus', *Annales archéologiques de Syrie* IV and V, 90-128; Frézouls, E. (1977) 'Cyrhus et la Cyrrestique jusqu'à la fin du Haut-Empire' in Temporini, H and Haase, W (ed.), *Aufstieg und Niedergang der Römischen Welt II, Principat* 8, 164-197
- ³⁸⁶ Dussaud, R. (1927) *Topographie historique de la Syrie antique et médiévale* Paris p479 n2
- ³⁸⁷ The most recent publications from this international project are M. Mundell Mango, 'Baths, reservoirs and water use at Androna in late antiquity and the early Islamic period' in K. Bartl, ed., *Residences, castles, settlements. Transformation processes from late antiquity to early Islam in Bilad al Sham* (German Archaeological Institute, Damascus, 2008) and M. Mundell Mango, 'Landscape Study at Andarin, Syria', *Bulletin of the Council for British Research in the Levant* (2007), 78-82. See also http://www.arch.ox.ac.uk/research/research_projects/Andarin
- ³⁸⁸ *Itineraria Romana* Vol 2 ed Schnetz, J, 1939
- ³⁸⁹ Bebase is mentioned by Ammianus Marcellinus XVIII, 7.9 and 10.1
- ³⁹⁰ 'Fortress' in Farsi; station north of western col of Djebel Sinjar (same name today)
- ³⁹¹ Libanius, *Orations* xi.231
- ³⁹² CJ iv.63.4.1 "Nullus igitur posthac imperio nostro subiectus ultra Nisibin Callinicum et Artaxata emendi sive vendendi species causa proficisci audeat nec praeter memoratas civitates cum persa merces existimet commutandas: sciente utroque qui contrahit et species, quae praeter haec loca fuerint venumdatae vel comparatae, sacro aerario nostro vindicandas et praeter earum ac pretii amissionem, quod fuerit numeratum vel commutatum, exilii se poenae sempiternae subdendum."
- ³⁹³ The section on 'Economy and trade' of Dignas, B. and Winter, E. (2007) *Rome and Persia in Late Antiquity: neighbours and rivals* ('*Rom und das Perserreich: Zwei Weltmächte zwischen Konfrontation und Koexistenz*') Cambridge (pp195 to 209) provides a useful review of the arrangements agreed between the two powers and discusses the role of Nisibis in particular.
- ³⁹⁴ Lee, A. D. (1993) *Information and frontiers: Roman foreign relations in late antiquity* Cambridge, p63
- ³⁹⁵ Menander, *The history of Menander the guardsman*, ed. and tr. R.C. Blockley. Liverpool 1985, frg.6.1.314-97; cf Greatrex and Lieu REFPW p132
- ³⁹⁶ See article by E.Kettenhofen in online Encyclopedia Iranica.
- ³⁹⁷ Fr 14 in FHG iv.189.
- ³⁹⁸ Anonymous (1985) 'Strategy' in Dennis, GT (ed.), *Three Byzantine Military Treatises*, section 2.
- ³⁹⁹ Rougé, J., (ed./trans.) (1966) *Expositio Totius Mundi et Gentium* Paris37 above.

- ⁴⁰⁰ Pigulevskaya, N. (1956) 'Economic relations in Iran during the IV-VI centuries AD', *Journal of the KR Cama Oriental Institute* 38, 60-81, Pigulevskaya, N. (1969) *Byzanz auf den Wegen nach Indien* Amsterdam/Berlin
- ⁴⁰¹ John Moschos (1992) *The spiritual meadow ('Pratum Spirituale')* Kalamazoo, numbers 193 and 195. In the second case the credit was to be repaid in heaven.
- ⁴⁰² Whitehouse D. and Williamson, A., 1973, 'Sasanian maritime trade', *Iran* II, 29-49; Colless, B.E., 1969, 'Persian merchants and missionaries in medieval Malaya' *Journal of the Malayan Branch of the Royal Asiatic Society* 452, 10-47; Frye, R.N., 1972, 'Byzantine and Sasanian trade relations with northeastern Russia' *DOP* 26, 265-9; Pigulevskaya, N. (1956) 'Economic relations in Iran during the IV-VI centuries AD', *Journal of the KR Cama Oriental Institute* 38, 60-81
- ⁴⁰³ *Wars*, ii.25.2-3
- ⁴⁰⁴ Raschke, M. (1978) 'New studies in Roman commerce with the East' in Temporini (ed.), *Aufstieg und Niedergang des Römischen Welts* II, 9.2, 604-1361. A large collection of 'bullae' has also been discovered at Zeugma: Önal, M. (2007) *Clay seal impressions of Zeugma / Kil Mühür Baskıları* Gaziantep
- ⁴⁰⁵ Socrates HE VII.18; see Greatrex and Lieu REFPW, p38. At the same time the Persians refused to return gold-diggers whom they had borrowed from Roman territory, possibly for mines in Armenia.
- ⁴⁰⁶ John of Ephesus (1923-25) *Lives of the Eastern Saints* Paris; no. XXXI, *Lives of Elijah and Theodore*
- ⁴⁰⁷ Jones, A. H. M. (1970) 'Asian trade in antiquity' in Richards, D (ed.), *Islam and the trade of Asia* 1-10, p10
- ⁴⁰⁸ Ghirshman, R., 1954 *Iran* pp 283, 336, 342
- ⁴⁰⁹ Hirth, F, *China and the Roman Orient Shanghai*, 1885, repr. 1939, includes translations of the relevant dynastic annals. Those concerned here are Sui-shu, 83; Hou-han-shu, 88; and Wei-shu, 102.
- ⁴¹⁰ Miller, J. I. (1969) *The spice trade of the Roman empire: 29 B.C. to A.D. 641* Oxford
- ⁴¹¹ See for example the articles concerning trade in the code of Ishobokht, discussed below.
- ⁴¹² Procopius VIII.17.1-8
- ⁴¹³ Pigulevskaya, N. (1956) 'Economic relations in Iran during the IV-VI centuries AD', *Journal of the KR Cama Oriental Institute* 38, 60-81 p67/8. In the Roman Republic the 'negotiatores' were a well-established group with the function of bankers but little is known about them in the imperial period.
- ⁴¹⁴ Bulsara, (ed) (1937) *Matikan-i hazar datastan* Bombay
- ⁴¹⁵ Ishobokht (1914) 'Code' in Sachau, E (ed.), *Syrische Rechtsbücher* Vol III
- ⁴¹⁶ V 4, para 1, p142
- ⁴¹⁷ See discussion especially in Pigulevskaya, N. (1963 (original 1956)) *Les villes de l'Etat iranien aux époques parthe et sassanide* Paris pp176ff.
- ⁴¹⁸ Harris, W. (2000) 'Trade and transport' in Bowman, A, Garnsey, P and Rathbone, D (ed.), *Cambridge Ancient History*, ed.2 XI, Ch. 24, 735-
- ⁴¹⁹ West, L. (1924) 'Commercial Syria under the Roman Empire', *Transactions and Proceedings of the American Philological Association* 55, 159-189. 95 Syrians are recorded as residing abroad (pp182-7) but only 19 foreigners (mostly Jews) as residing in Syria. Most of these were merchants.
- ⁴²⁰ Jerome, Commentary on Ezekiel 8, xxvii.15f, as reported by Lee p61
- ⁴²¹ Ammianus Marcellinus, xiv.3.3
- ⁴²² Procopius of Gaza, Migne, *Patrologia graeca* 87, col.2817: ...οθεν [i.e. as a result of its sacred nature] εις ταυην [Ιεραπολις] φοιτωσιν Ινδοι και Περσαι και Φοινικες και Σκυθων γενη και τα σεμνα της Ελλαδος, Ιωνια τε πασα...
- ⁴²³ Ammianus Marcellinus, 18.5.1-3
- ⁴²⁴ xviii, 5.3
- ⁴²⁵ Fiey, J. M. (1959) *Mossoul chrétienne* Beyrouth, quoting Bar Hebraeus. *Chronicon Ecclesiasticum*, ed JF Abbeloos Louvain, 1872, II.545 (the page number quoted appears to be wrong – a further reference is provided to Dauviller, MJ (1956) 'L'expansion de l'église syrienne en Asie centrale et en l'extreme orient', *Orient syrien*, 1, Paris, p79, but I have been unable to find this periodical)
- ⁴²⁶ Festugière, A.-J., (ed. and trans.), (1970) *Vie de Théodore de Sykéon* Brussels ; also *Three Byzantine Saints: Contemporary Biographies of St. Daniel the Stylite, St. Theodore of Sykeon and St. John the Almsgiver*, trans. Elizabeth Dawes, (London: 1948) of which a version is available on-line at <http://www.fordham.edu/halsall/basis/theodore-sykeon.html>.
- ⁴²⁷ A study of his importance for the society of Galatia is included in Mitchell, S. (1993) *Anatolia: land, men and gods in Asia Minor - Vol 1 The Celts and the impact of Roman rule; Vol 2 The Rise of the Church* Oxford Vol 2 pp122-126
- ⁴²⁸ Lee, A. D. (1993) *Information and frontiers: Roman foreign relations in late antiquity* Cambridge especially Chapter 2: 'At the interface: the frontier regions', pp56-66.

⁴²⁹ For all these groups see Lee, *ibid*, pp60-61.

⁴³⁰ Foltz, R. C. (1999) *Religions of the Silk Road: Overland Trade and Cultural Exchange from Antiquity to the Fifteenth Century* Basingstoke

⁴³¹ Elias, e. (1907) *Life of John of Tella* Paris p72/2; see Greatrex and Lieu REFPW p98 and 101 (cf Ch8, n6 above)

⁴³² De Cerimoniis, 89-90; cf Greatrex and Lieu REFPW p124-5

⁴³³ Greatrex and Lieu argue against Güterbock's suggestion that this was Antioch in Pisidia, n8.

⁴³⁴ Whitby, M. (1988) *The emperor Maurice and his historian* Oxford p261

⁴³⁵ There are many bridges of Sassanian origin in Iran (see chapter 3); also, the 'Great Wall of Gorgan' with its associated infrastructure of canals and forts cannot have been built by Roman engineers. See Rekevandi, H., Sauer, E., Wilkinson, T. and Nokandeh, J. (2008) 'The enigma of the 'Red Snake': revealing one of the world's greatest frontier walls', *Current world archaeology* 27, 12-22.

⁴³⁶ Theophylact Simocatta 5, vi.10: "It is said that the emperor Justinian provided Chosroes son of Kabades with Greek marble, building experts and craftsmen skilled in ceilings, and that a palace situated close to Ctesiphon was constructed for Chosroes with Roman expertise"; see also Ammianus Marcellinus xx.vi.7; Procopius, Wars II, 14.1 and Anecdota 25, 26.

⁴³⁷ Garsoian, N. G. (1983) 'Byzantium and the Sassanians' in (ed.), *Cambridge History of Iran, Chapter 15* 3.1, 568-592 (biblio 1316-1322), p579

⁴³⁸ Procopius, Anecdota, 25,26

⁴³⁹ Socrates, *Historia Ecclesiastica* VII.8.1-3, 18-20, ed Hansen, G.C., 1995 (Greatrex and Lieu REFPW p35)

⁴⁴⁰ Histories II, 31

⁴⁴¹ Procopius, Wars 2.xiv.1-2; for the location of the city see Simpson, S. J. (2000) 'Mesopotamia in the Sasanian period: settlement patterns, arts and crafts' in Curtis, J (ed.), *Mesopotamia and Iran in the Parthian and Sasanian periods: rejection and revival c.238BC - AD 642* 57-66 fig.13 on p60. For previous such abductions, see articles by Kettenhofen, E in *Encyclopaedia Iranica* VII (*Deportations ii*). in the *Parthian and Sasanian periods*, VII pp297-308, and Morony, M in the *Cambridge Ancient History*, Vol 3.2 pp161-179 (*Population transfers between Sasanian Iran and the Byzantine Empire*)

⁴⁴² Procopius, Anecdota 26.8/9; doubtless he exaggerates when claiming the spectacles were forced to close down. Justinian may have just stopped public subsidies for entertainers.

⁴⁴³ *Life of Verus*, 8, 11, *Historia Augusta*.

⁴⁴⁴ *Expositio Totius Mundi et Gentium*, 32

⁴⁴⁵ Tate, G. (1989a) 'La Syrie à l'époque byzantine: essai de synthèse' in Dentzer, JM and W., O (ed.), *Archéologie et histoire de la Syrie: vol.2 La Syrie de l'époque achéménide à l'avènement de l'Islam* 97-116 p98

⁴⁴⁶ Young, G. (2001) *Rome's eastern trade: international commerce and imperial policy, 31BC - AD305* London pp187-212

⁴⁴⁷ Weber, M. (1924 (EN 1976)) *Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte (The agrarian sociology of ancient civilizations)* Tübingen

⁴⁴⁸ Thus Tchalenko and Tate for the limestone massif (Tchalenko, G. (1953) *Villages antiques de la Syrie du nord* Paris Tate, G. (1989b) 'Les campagnes de la Syrie du nord à l'époque protobyzantine' in (ed.), *Hommes et richesses dans l'Empire byzantin* 1, 63-77); Adams for the Diyala plains (Adams, R. M. (1965) *Land behind Bagdad: a history of settlement on the Diyala plains* Chicago), but see also Paret for southern Syria and the routes to Arabia (Paret, R. (1960) 'Les villes de Syrie du sud et les routes commerciales d'Arabie à la fin du VIe siècle' in Dölger, F and Beck, H-G (ed.), *Akten des XI. internationalen Byzantinistenkongresses, München* 438-444). Curtis also reviews the state of Sassanian Mesopotamia and comments on the flourishing state of its industry (Curtis, J. (2000) *Mesopotamia and Iran in the Parthian and Sasanian periods: rejection and revival c.238BC-AD642* London). See also discussion at end of Chapter 5 below.

⁴⁴⁹ Isık, F., Iskan, H. and Çevik, N. (2001 (1998/1999)) 'Miliarium Lyciae: Patara yol kilavuz anıtı / Das Wegweisermonument von Patara', *Lykia: anadolu-akdeniz kültürleri* 4, The Stadiasmos of Patara was an inscription recording a road network constructed in Lycia after the creation of a Roman province in that region.

⁴⁵⁰ Sevin, V. (1988) 'The oldest highway: between the regions of Van and Elazığ in eastern Anatolia', *Antiquity* 62, 547-551, Sevin believed the road to be Urartian largely because of the presence of staging posts, one of which he excavated (at Zulümtepe), but there appears to have been little to distinguish the road itself from Roman equivalents.

⁴⁵¹ Procopius *Buildings* II 4.3; trans. Dewing, 1940, Loeb edition

- ⁴⁵² Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridgep5, quoting 13 L. Simeon of Olives, p.205
- ⁴⁵³ Procopius, *Wars* II. xix. 23, 24
- ⁴⁵⁴ Dorsey, D. (1997) 'Transportation' in Meyer, E (ed.), *The Oxford Encyclopedia of Archaeology in the Near East* 5, 243-244
- ⁴⁵⁵ Procopius, *Anekdotia*, 30
- ⁴⁵⁶ Discussed in Jones, A. H. M. (1964) *The later Roman Empire* Oxford vol 2, pp 830-834
- ⁴⁵⁷ *Ibid*, p833 and footnotes on vol 3, p279 quoting the CJ XII, 50.22. The extent to which the text supports the existence of a community of private contractors for carting seems doubtful to me: "cursum clavularem ab omni Orientali tractu nec non ab his civitatibus aliarum regionum, quarum instructio tui culminis meminit, tolli amputarique decernimus, ita tamen, ut in transitu fortissimorum militum (quando nostra serenitas disposuerit ex aliis ad alia eos loca deduci, evectionesque animalium secundum consuetudinem a nostra fuerint aeternitate consecuti,) et in armorum tam confectione quam translatione servate consuetudine, in profectioe quin etiam legatorum animalium dominis, qui ea solent accepta mercede locare, praebenda pensio arcae tui culminis imputetur."
- ⁴⁵⁸ 5.3; see Millar, F. (2006) *A Greek Roman Empire: power and belief under Theodosius II (408-450)* Berkeley p76
- ⁴⁵⁹ Egeria's travels in Sinai in 383: Itinerarium Egeriae Egeria, trans. McClure, M. and Felto, C. (1919) *The Pilgrimage of Etheria* London, New York; the road to Babylon: John Chrysostom (c.AD347-407), *Ad Stagirium* ii, 189f (PG xlvii 457)
- ⁴⁶⁰ XIV 9,5
- ⁴⁶¹ Kolb, A. (2000) *Transport und Nachrichtentransfer im Römischen Reich* Berlin
- ⁴⁶² Chapter 30. In view of its importance the rest of the text is included here: "...Within the distance included in each day's journey for an unencumbered traveller [the emperors] established stations, sometimes eight, sometimes less, but as a general thing not less than five. And horses to the number of forty stood ready at each station. And grooms in proportion to the number of horses were detailed to all stations. And always travelling with frequent changes of the horses, which were of the most approved breeds, those to whom this duty was assigned covered, on occasion, a ten-days' journey in a single day, and accomplished all those things which have just been mentioned; and furthermore, the owners of the land everywhere, and particularly if their lands happened to lie in the interior, were exceedingly prosperous because of this system. For every year they sold the surplus of their crops to the Government for the maintenance of horses and grooms, and thus earned much money. And the result of all this was that while the treasury regularly received the taxes assessed upon each man, yet those who paid the taxes received their money but also again immediately, and there was the further advantage that the State business has been accomplished. Now in earlier times this was the situation. But this Emperor first of all abolished the post from Chalcedon ... And, in the second place, while on the route leading into Persia he did allow the previous arrangement to stand, yet for all the rest of the East as far as Egypt he allowed one station only for each day's journey, using not horses, however, but mules and only a few of them. It is no wonder, consequently, that the things which take place in each country, being reported both with difficulty and too late to give opportunity for action and behind the course of events, cannot be dealt with at all, and the owners of the lands, with crops rotting on their hands and going to waste, continually lose all their profits."
- ⁴⁶³ Haldon points out that some reductions in the public post had already been introduced under Leo; Maas, M (ed) *The Age of Justinian* p51
- ⁴⁶⁴ French, D. (1993) 'A road problem: Roman or Byzantine?' *Istanbuler Mitteilungen* 43, 445-454 + Tafel 49 p451
- ⁴⁶⁵ 37°07'03'' N; 38°23'52''; E Badger, G. (1852) *The Nestorians and their rituals* London, p348
- ⁴⁶⁶ 37°05'29'' N; 38°37'24''; E Mango, C. (1986) 'A late Roman inn in Eastern Turkey', *Oxford Journal of Archaeology* 5, 223-231
- ⁴⁶⁷ 37°07'11'' N; 38°09'21'' E
- ⁴⁶⁸ 37°10'15'' N; 38°35'06'' E; Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123
- ⁴⁶⁹ 37°21'10'' N; 37°49'20'' E
- ⁴⁷⁰ Dorsey, DA, article on 'Transportation' in Meyers, E (ed) *The Oxford Encyclopedia of Archaeology in the Near East*, Vol5, p243
- ⁴⁷¹ Graser, E 1940

⁴⁷² Lactantius, *De Mortuis persecutorum*, ed. J.L. Creed, 1984, Oxford, p.13 Section 8.6/7: «...in the general alarm nothing appeared for sale and the rise in prices got much worse until sheer necessity led to the repeal of the law ».

⁴⁷³ Section 17, περι των μισθων της βεκτωρης. Tenney Frank, J. (1938) *An economic survey of ancient Rome* Baltimore, Vol5, Rome and Italy of the Empire, p367

⁴⁷⁴ Burford, A 1960, 'Heavy transport in classical antiquity', *Economic History Review* Vol XIII, No.1 p1-18

⁴⁷⁵ Bulliet, R. W. (1975) *The camel and the wheel* Cambridge and New York

⁴⁷⁶ Graf, D. F. (1997) 'Camels, roads and wheels in late Antiquity', *Electrum* 1, 43-49

⁴⁷⁷ Maunsell, F. (1904) *Military report on Eastern Turkey-in-Asia* London Vol 4 p 35.

⁴⁷⁸ Cuinet, V. (1892-4) *La Turquie d'Asie: géographie administrative, statistique, descriptive et raisonnée de chaque province de l'Asie-Mineure* Paris, vol 3, p232

⁴⁷⁹ Faroqhi, S. (1982) 'Camels, wagons, and the Ottoman state in the sixteenth and seventeenth centuries', *International Journal of Middle East Studies* 14, 523-539 p533/4

⁴⁸⁰ Moltke, H., von, (1911) *Briefe über Zustände und Begebenheiten in der Türkei aus den Jahren 1835 bis 1839* Berlin

⁴⁸¹ The battle of Nizip (37km east of Gaziantep and 9km west of the Euphrates at Zeugma) between the Ottoman Empire and its former vassal, Muhammad Ali of Egypt, took place in 1839. The Ottomans were defeated.

⁴⁸² Wood, A. (1935 and 1966) *History of the Levant Company* London, p76

⁴⁸³ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58; Taylor, J. G. (1868) 'Journal of a tour in Armenia, Kurdistan and upper Mesopotamia', *Journal of the Royal Geographical Society* 38, 281-361; Ainsworth, W. F. (1842) *Travels and Researches in Asia Minor, Mesopotamia, Chaldea and Armenia* London

⁴⁸⁴ Graf, *ibid*

⁴⁸⁵ French, D. (1993) 'A road problem: Roman or Byzantine?' *Istanbuler Mitteilungen* 43, 445-454 + Tafel 49

⁴⁸⁶ The issue of forest clearance is addressed by Wilkinson, T. J. (2003) *Archaeological landscapes of the Near East* Tucson but the point at which wood became unobtainable in this region is uncertain. Procopius speaks of forests into which bandits disappeared on the west bank of the Khabur near Thannourios. 'Mons Masius' (i.e. the Tur Abdin) has been proposed as the source of wood extracted by Trajan for bridge-building in the second century. It seems likely that a dense population reliant on wood for fuel would quickly consume all available trees as firewood, as has been happening recently in the area, but there is no good evidence available for this region. For the density of population which reached a peak along the Euphrates near Samosata in the fifth and sixth centuries see Wilkinson, T. J. (1990) *Town and country in Southeastern Anatolia. Volume 1: Settlement and Land Use at Kurban Höyük and other sites in the lower Karababa basin* Chicago.

⁴⁸⁷ „Der Barbarenschatz: Geraubt und im Rhein versunken"; catalogue for exhibition 20.05.2006 to 12.11.2006, published by the ‚Historischen Museum der Pfalz Speyer'. Large quantities of Roman metal pots and other household objects have been found since 1940 by gravel extractors, especially at Neupotz. This booty, resulting from raids by the Alemanni far into Gaul and transported back to the Rhine by carts during the middle of the third century AD, was then sunk in the river probably by Roman military galleys of the Rhine fleet. Chapters in this catalogue include: „Räder, Deichsel, Langfuhr – die Wagenteile“, „Pferde und Zugtiergeschirr“, „Wagen voll mit Beute – die Rekonstruktion der Transportwagen“ (all by B. Hanemann); and „Wagendarstellungen auf römischen Grabmonumenten in den gallischen und germanischen Provinzen (by S. Ditsch).

⁴⁸⁸ *Buildings* 5, 6, 12-13

⁴⁸⁹ *Buildings* 2.7.9

⁴⁹⁰ *Wars* I.17.9

⁴⁹¹ *Wars* II.19.46

⁴⁹² *Buildings* II.4.3; see extract quoted at the beginning of this third part of Chapter 4.

⁴⁹³ CTh 8.5.8: ad Taurum praefectum praetorio. ...“1. Statuimus raedae mille pondo tantummodo superponi, birotae ducenta, veredo triginta; non enim ampliora onera perpeti videntur. 2. Octo mulae iungantur ad raedam aestivo videlicet tempore, hiemali decem; birotis trinas sufficere iudicavimus. Adque haec cuncta regionibus praestitutos curare praecipimus poena eis proposita ». (357).

⁴⁹⁴ <http://www.humanist.de/rome/rts/geography.html>

⁴⁹⁵ 495 8.5.17 Impp. Valentinianus et Valens aa. ad Menandrum. pr. « Vehiculis nihil ultra mille librarum mensuram patiemur imponi, ita ut veredarii sat habeant, quod his triginta libras equis vehere concessimus. Quidquid igitur supra mensuram exsuperare constiterit, ad dispendium eius, qui in legem commiserit, fisco

conveniet adscribi. 1. Illud sane, ut penitus enormium vehiculorum usus intercidat, sancendum esse decernimus, ut, quisquis opificum ultra hanc quam perscripsimus normam vehiculum crediderit esse faciendum, non ambigat sibi, si liber sit, exilii poenam, si servus, metalli perpetua supplicia subeunda. » (364).

⁴⁹⁶ Spruytte, J. *Early Harness Systems*, London, 1983 (Trans. M. L. Littauer), p98-99

⁴⁹⁷ *Le cheval de selle à travers les âges: Contribution à l'histoire de l'esclavage*. Paris, 1931, p85-6

⁴⁹⁸ Bauzou, T. (1989a) *A finibus Syriae. Recherches sur les routes des frontières orientales de l'Empire romain*, thesis, Paris 1. Bauzou examines in particular the 'Via Nova' from Bostra to the Red Sea. On p83 he states that « Sans qu'on puisse l'affirmer avec certitude, l'absence de milliaires postérieurs au IV^e siècle laisse penser que la chaussée cessa progressivement d'être restaurée, sans doute parce qu'elle n'était plus adaptée aux nouvelles conditions de circulation dans la région. En effet, une route empierrée est surtout utile pour les chariots et véhicules à roues, encore employés en Orient aux II^e et III^e siècles (en tout cas par l'armée romaine), mais qui cessa d'être attestés dès le IV^e siècle. »

⁴⁹⁹ Isaac, B. (1993) 'An open frontier' in Brun, P, van der Leeuw, S and Whittaker, CR (ed.), *Frontières de l'Empire, nature et signification des frontières romaines (Actes de la Table Ronde Internationale de Nemours 1992)* 105-114

⁵⁰⁰ Mitchell, S. (1999) 'The administration of Roman Asia from 133 BC to AD 250' in Eck, W (ed.), *Lokale Autonomie und römische Ordnungsmacht in den kaiserzeitlichen Provinzen vom 1. bis 3. Jahrhundert* 18-46

⁵⁰¹ Mitchell, S. (1976) 'Requisitioned transport in the Roman empire: a new inscription from Pisidia', *Journal of Roman Studies* 66, 106-131

⁵⁰² Constable, O. (2003) *Housing the stranger in the Mediterranean world* Cambridge, especially Ch 1

⁵⁰³ Schneider, H.-C. (1982) 'Die Bedeutung des römischen Strassen für den Handel', *Münsterische Beiträge zum antiken Handelsgeschichte* I, . "...die auf der ersten Blick einen Handel begünstigende hervorragende Bandinfrastruktur des römischen Reiches dieser Rolle nicht gerecht werden konnte. Der Landtransport erwies sich schon über kleine Strecken als zu langsam, die Ladekapazität der Ochsenwagen war zu gering, die Kosten stiegen mit zunehmender Entfernung explosionsartig. Weitestgehend wurde die Nachfrage der lokalen Märkte von den umliegenden Bauern gedeckt, und sie transportierten ihre Waren in den Mittelmeerländern überwiegend mit den traditionellen Tragtieren der Antike, dem Esel und dem Maulesel, wenn sie nicht selber ihre Lasten trugen. Strassen wären dabei in vielen Fällen nicht notwendig gewesen, Pfade hätten wie im antiken Griechenland ausgereicht."

⁵⁰⁴ <http://20gp.ovh.net/~zeugma/zeugma/photos/kur1.gif>

⁵⁰⁵ Comfort et al (2001), 39 and 40.

⁵⁰⁶ Procopius, *Wars* II,ix.16

⁵⁰⁷ Procopius, *Anecdota* 25, 26. This story is repeated or perhaps embellished - in Theophylact Simocatta v.6.6, where the editors, Whitby, state (n.26) that there is no evidence to corroborate Theophylact's account and that both material and craftsmen may actually have been captured at Antioch by Khusro (Procopius, *Wars* 2.ix-9-15). In *Wars* 2.xiv.1 Procopius recounts how Khusro built a city near Ctesiphon called 'Antioch of Khusro' and settled there the captives from Antioch "...constructing for them a bath and hippodrome and providing that they should have free enjoyment of their other luxuries besides. For he brought with him charioteers and musicians both from Antioch and from the other Roman cities..." Presumably this wholesale transplantation required some heavy transport.

⁵⁰⁸ For a discussion of the quantities exported as 'tribute' see Iluk, J. (1985) 'The export of gold from the Roman empire to barbarian countries from the 4th to the 6th centuries', *Münsterische Beiträge zum antiken Handelsgeschichte* IV, 79-102.

⁵⁰⁹ Procopius, *Anecdota* 23, on transport of grain to the army: "The owners of property are compelled to provision the Roman army in proportion to the tax levied upon each owner, the deliveries being made, not where the season of the year at which the requisition is to be filled permits, but where the officials find it possible and have determined, and in making these requisitions no enquiry is made to see whether the farmers happen to have the required provisions on their land. Thus it comes about that these wretched men are compelled to import provisions for both soldiers and horses, buying them all at very much higher prices than they are to receive, and that, too, in a market which, if it so happens, may be at a great distance from their farms, and then to haul back these provisions to the place where the army chances to be, and they must measure out these supplies to the Quartermasters of the army, not in the way accepted by all the world, but just as the Quartermasters wish. And this is the thing which is called "buying on requisition," and the result of it has been that all the owners of farms have been bled to death. For by this process they are compelled to pay their annual tax not less than tenfold, seeing that it has often fallen to their lot, not only to furnish supplies

directly to the army, as stated, but also, on top of what they have suffered that way, to transport grain to Byzantium;...”.

⁵¹⁰ CTh XV.11.2 (CJ XI.45.1); see Millar, F. (2006) *A Greek Roman Empire: power and belief under Theodosius II (408-450)* Berkeley p72

⁵¹¹ Mitchell, S. (1987) 'Imperial Building in the Eastern Roman Provinces', *Harvard Studies in Classical Philology* 91, 333-365, esp. pp336-7

⁵¹² As evidenced by the Burdur inscription: Mitchell, S. (1976) 'Requisitioned transport in the Roman empire: a new inscription from Pisidia', *Journal of Roman Studies* 66, 106-131, esp. pp120-121.

⁵¹³ Astour, M. (1995) 'Overland trade routes in ancient western Asia' in Sasson, J (ed.), *Civilizations of the Ancient Near East* 3, 1401-1430

⁵¹⁴ Masters, B. (1999) 'Aleppo: the Ottoman Empire's Caravan City: Aleppo, Izmir and Istanbul' in Eldem, E, Goffmann, D and Masters B (ed.), *The Ottoman City between East and West* 17-78

⁵¹⁵ During the first Christian centuries the School of Nisibis was the spiritual centre of Syriac Christianity. It was founded around 350 AD by Mar Jacob after the model of the school of Diodorus of Tarsus in Antioch. Following the surrender of Nisibis to the Persians in 363 the school was moved to Edessa, where it was known as the 'school of the Persians'. There, under the leadership of Ephrem the Syrian, it gained a wide reputation. But given its association with Nestorianism the school was closed in 489 and returned under Barsaumas to Nisibis where it attracted students from all over southern Mesopotamia; its fame spread to Pope Agapetus I and Cassiodorus in Rome and Cassiodorus's monastery at Vivarium is believed to have been inspired by Nisibis. Labourt, J. (1904) *Le christianisme dans l'empire perse sous la dynastie sassanide, 224-632* Paris; 'Gli statuti della scuola di Nisibi', *Giornale della società asiatica italiana*, IV, pp165-195; Chabot, J. B. (1896) 'L'école de Nisibe, son histoire, ses status', *Journal de la société asiatique* 8 (series 9), 43ff; Labourt, J. (1904) *Le christianisme dans l'empire perse sous la dynastie sassanide, 224-632* Paris, Selms, A., van (1966.) *Nisibis: the oldest university* Cape Town; Fiey, J.-M. (1977) *Nisibe: métropole syriaque orientale et ses suffragants des origines à nos jours* Louvain.

Edessa had its own school which seems to have even earlier origins since it was apparently attended by Bardaisan (AD154 – 222), an early Syriac poet and teacher. Gutschmid, A., von (1887) *Untersuchungen über die Geschichte des Königreichs Osroëne* St. Petersburg

⁵¹⁶ Ammianus Marcellinus, 29.IX.4

⁵¹⁷ The *Buildings* is discussed in Chapter 2; many of the new fortifications described in this area (principally in Chapter II) may date from periods earlier than the reign of Justinian – see discussion later in this chapter. But the panegyric nature of the work does not invalidate the evidence that many cities and fortresses did receive strong walls during the sixth century.

⁵¹⁸ See references in discussion in Chapter 6i.

⁵¹⁹ Liebeschütz, J. (1977) 'The defences of Syria in the sixth century' in (ed.), *Studien zu den Militärgrenzen Roms II. 10th Limeskongress* 487-499

⁵²⁰ Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge p117. because of its importance for the issue of the construction of fortifications and their financing, an extract from Zacharias Scolasticus VII.6 is quoted in a footnote appended to the section on Dara in the gazetteer.

⁵²¹ *Syriac Chronicle of Zachariah of Mitylene (or Zacharias Rhetor)*, VII.6; because of its importance for the issue of the construction of fortifications and their financing, the extract is quoted in a footnote appended to the section on Dara in the gazetteer.

⁵²² Mitchell, S. (2007) *A history of the Later Roman Empire, AD284-641. The transformation of the ancient world* Oxford, pp 390-92

⁵²³ Wilkinson, T. J. (1990) *Town and country in Southeastern Anatolia. Volume 1: Settlement and Land Use at Kurban Höyük and other sites in the lower Karababa basin* Chicago; see discussion below, p298, in regard to the economy. Wilkinson relied on various types of archaeological evidence, in particular potsherds amongst which he found a large amount of Late Roman C fineware (p117).

⁵²⁴ See article on 'Deportations' by E. Kettenhofen in *Encyclopedia Iranica* (<http://www.iranica.com/newsite/>).

⁵²⁵ Liebeschütz, J. (2001) *The Decline and Fall of the Roman City* Oxford; especially chapter 3 ('Post-curial civic government').

⁵²⁶ Liebeschütz, *ibid*, esp. chapters 4 ('The rise of the bishop') and 7 ('Transformation of Greek literary culture under the influence of Christianity').

⁵²⁷ Jones, A. H. M. (1971) *The cities of the Eastern Roman Provinces* Oxford, p223

⁵²⁸ Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge pxxii. See also under Amida in the *Notitia Antiochena*, annex to chapter 1.

- ⁵²⁹ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London (ETAAS) vol 3, p196-200, who quotes as his principal sources: Hovhannesean, MV, *Hayastani Berderë*, Venice (St Lazzaro) 1970 ; Konyar, B. *Diyarbakır Tarihi*, Istanbul 1936, vol 3, p271-3; and Ünal, RH, *Les monuments islamiques anciens de la ville d'Erzurum et de sa région*, Paris 1968. None of these have been consulted by me. Dillemann states (p121) that the original identification of Eğil with Carcathiocerta was made by Markwart (Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris; Markwart, J. (1930) *Südarmerien und die Tigrisquellen nach griechischen und arabischen Geographen* Vienna, p38).
- ⁵³⁰ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58, 22-3; other names cited there for this place are 'Pornak' and 'Kerhidicle'.
- ⁵³¹ In Joshua Ch.29, referring to the year AD496, the governor or ἡγεμῶν Anastasius provides baths and markets and arranges for street lighting; in Ch.42 for the year 500, the governor Demosthenes informs the emperor of starvation in the city and obtains financial support from him.
- ⁵³² Press reports for the 2007 excavation season mention Roman shops and a wall mosaic.
- ⁵³³ There is however a short pamphlet in Turkish and English by Veli Sevin on Üçtepe: Sevin, V. (1989) *Excavations At Üçtepe / Üçtepe Kazıları* Istanbul. This deals mostly with the finds of the Assyrian period.
- ⁵³⁴ Wiessner, G. (1980) *Nordmesopotamische Ruinenstätten* Wiesbaden (Hisarkaya, Rabat); Deichmann, F. W. and Peschlow, U. (1977) *Zwei spätantike Ruinenstätten in Nordmesopotamien* München (Zerzevan)
- ⁵³⁵ XXIII, 3.7, referring to the year AD 363; translated in the new commentary on Ammianus by Den Boeft, Drijvers et al (p49), as "strong and very attractive on account of its well-stocked market.
- ⁵³⁶ XIV, 3.3 (see also Gazetteer)
- ⁵³⁷ Orations, I.32; discussed in Liebeschütz, J. (1972) *Antioch: city and imperial administration in the later Roman Empire* Oxford, p74
- ⁵³⁸ Jones 1st ed p270
- ⁵³⁹ Bell, G. L. (1924) *From Amurath to Amurath: a journey along the banks of the Euphrates* London
- ⁵⁴⁰ This role is discussed in particular by Shahid: Shahîd, I. (1984) *Byzantium and the Arabs in the fourth century* Washington, D.C.; Shahîd, I. (1989) *Byzantium and the Arabs in the fifth century* Washington, D.C.; Shahîd, I. (1995) *Byzantium and the Arabs in the sixth century* Washington D.C.
- ⁵⁴¹ Liebeschütz, J. (2001) *The Decline and Fall of the Roman City* Oxford; for the role of provincial capitals pp12-12; for provincial assemblies, also pp122-123.
- ⁵⁴² A remarkable building in north-west Osrhoene has now been provisionally classified as a *villa rustica*: Baumeister, P., Roos, D. and Saner, T. (2007) 'Die Keloşk Kale. Ein spätantiker Gebäudekomplex im türkischen Euphratbogen. Studien zu Osrhoene in der Spätantike I', *Istanbul Mitteilungen* 57,
- ⁵⁴³ A further place, *Macedonopolis* is mentioned as participating in the Council of Chalcedon on the unsupported testimony of Dionysius Exiguus see Jones, A. H. M. (1971) *The cities of the Eastern Roman Provinces* Oxford, p511
- ⁵⁴⁴ The latter place, now 'Tadem', is also mentioned as participating on the second council of Constantinople in 553 but lay outside the area concerned by this thesis.
- ⁵⁴⁵ For a discussion of the survival of old names see Jones, CERP, pp228/9.
- ⁵⁴⁶ The survival and continued use of theatres and other public buildings is discussed by Kennedy, H. (1985) 'From Polis to Madina: Urban Change in late antique and early Islamic Syria', *Past & Present* 106, 3-27, esp.p6.
- ⁵⁴⁷ Goossens, G. (1943) *Hierapolis de Syrie* Louvain, p106
- ⁵⁴⁸ *Eufemia and the Goth* edited by F.C.Burkitt, London 1913.
- ⁵⁴⁹ Xliiii, lxxxiii, cf Zacharias Rhetor viii.5
- ⁵⁵⁰ Segal, J. B. (1970) *Edessa: 'The Blessed City'* Oxford, pp163-4
- ⁵⁵¹ Joshua Stylites, para 76; see also Greatrex 1998, p110.
- ⁵⁵² For example, at Edessa infirmaries were set up by Ephraim the Syrian in the fourth century and later by Rabboula - see Segal, J. B. (1955) 'Mesopotamian Communities from Julian to the rise of Islam', *Proceedings of the British Academy* 109-139 page 117 .
- ⁵⁵³ Procopius, *Buildings*, 2.6.10
- ⁵⁵⁴ Joshua the Stylite 19
- ⁵⁵⁵ Malalas, Book 15, refers in addition to the fortifications to the construction at Dara under Anastasius of two baths, as well as churches, colonnades, warehouses for grain and cisterns. But no theatre is mentioned.
- ⁵⁵⁶ Joshua the Stylite reports several incidents involving clashes with Germanic soldiers billeted in Edessa during the early 500s.
- ⁵⁵⁷ Mosaics of the Roman period have also been found recently. See web edition of 'Today's Zaman' for 9 September 2008: <http://www.todayszaman.com/tz-web/detaylar.do?load=detay&link=120581>.

- ⁵⁵⁸ Gabriel, A. (1940) *Voyages archéologiques dans la Turquie orientale* Paris, part 2
- ⁵⁵⁹ There are 101 places mentioned by Ptolemy (*Claudii Ptolemaei Geographia*, ed CFA Nobbe, Hildesheim 1966) in this region, which is covered by sections 10, 11, 13, 14 and 25 for Syria Coele and sections 5-13 for Mesopotamia. Ptolemy composed his 'Geography' in the second century AD. Of these 101 places in the fifth century AD only 33 can be identified.
- ⁵⁶⁰ Liebeschütz, J. (2001) *The Decline and Fall of the Roman City* Oxford; Mango, C 1980 *Byzantium: the empire of the new Rome*, Chapter 3, London; Kennedy, H. (1985) 'From Polis to Madina: Urban Change in late antique and early Islamic Syria', *Past & Present* 106, 3-27.
- ⁵⁶¹ Mitchell, S. (2007) *A history of the Later Roman Empire, AD284-641. The transformation of the ancient world* Oxford, pp333-4
- ⁵⁶² Julian, *Orations*, I.22
- ⁵⁶³ The basic work is Wiessner, G. (1981-1993) *Christliche Kultbauten im Tur Abdin* Wiesbaden but neither he nor Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge nor Bell, G. L. (1982) *The churches and monasteries of the Tur 'Abdin* London, describe Aynwardo and Bashak in detail. Fine photographs are included in Hollerweger, H. (1999) *Tur Abdin: living cultural heritage* Linz.
- ⁵⁶⁴ Thus Procopius recounts how in 544 Chosroes was able to march directly to Edessa without meeting opposition (*Wars II*, 26.1-5).
- ⁵⁶⁵ Lightfoot, C. S. (1982) *The eastern frontier of the Roman Empire with special reference to the reign of Constantius II*, thesis, Oxford
- ⁵⁶⁶ At *Buildings II*, 5.9 Procopius states that *καστελλος* is the Latin for *φρουριον*.
- ⁵⁶⁷ Especially Chapter 4, 'The army of the fourth century', pp161-208
- ⁵⁶⁸ Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123; for the forts see discussion in regard to route 3 in Chapter 4-1.
- ⁵⁶⁹ This is clearly shown on the maps of the area during this period published in the TAVO series (Tübingen Atlas des Vorderen Orients) in particular B VI 3, *the Sasanid Empire*, and B VI 4, *Eastern Mediterranean and Mesopotamia: Late Roman Period (337-527 A.D.)*
- ⁵⁷⁰ Procopius *Wars II*, 19.8-9
- ⁵⁷¹ Anonymous (1985) 'Strategy' in Dennis, GT (ed.), *Three Byzantine Military Treatises*, section 9
- ⁵⁷² Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris; Julian passed through here in 363.
- ⁵⁷³ *Ibid*, fig.32, p233
- ⁵⁷⁴ Wiessner, G. (1981-1993) *Christliche Kultbauten im Tur Abdin* Wiesbaden; see discussion below in regard to Fafi.
- ⁵⁷⁵ Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge p145
- ⁵⁷⁶ Author of the *Descriptio Orbis Romani*, written between 600 and 610, ed H.Gelzer, 1890; see also Honigmann, E. (1930) *Le Synekdèmos d'Hiérokhlès et l'opuscule géographique de Georges de Chypre* Brussels
- ⁵⁷⁷ Lightfoot, C. S. (1982) *The eastern frontier of the Roman Empire with special reference to the reign of Constantius II*, thesis, Oxford p241
- ⁵⁷⁸ XVIII, 9.3, XX, 6.8 and 7.1
- ⁵⁷⁹ Liebeschütz, J. (1977) 'The defences of Syria in the sixth century' in (ed.), *Studien zu den Militärgrenzen Roms II. 10th Limeskongress 487-499* pp493 and 499
- ⁵⁸⁰ Such a study was proposed at a symposium in Batman in April 2008.
- ⁵⁸¹ Anonymous (1985) 'Strategy' in Dennis, GT (ed.), *Three Byzantine Military Treatises*
- ⁵⁸² Whitby, M. (1988) *The emperor Maurice and his historian* Oxford p283 (1890),
- ⁵⁸³ *Buildings II*.4.20: Apadnas and Birthon; II.4.22: Baras – identified by Honigmann (p14) with the 'βασιλειον φρουριον', probably Eğil.
- ⁵⁸⁴ *Buildings II*.6.14
- ⁵⁸⁵ Ulbert, T. (1989) 'Villes et fortifications de l'Euphrate à l'époque paléochrétienne (IVe-VIIe s.)' in Dentzer, J-M, Augé, C. (ed.), *Archéologie et histoire de la Syrie 2*, 283-296 293; opposite Zenobia, on the left bank of the Euphrates between Circesium and Callinicum.
- ⁵⁸⁶ Wiessner, G. (1981-1993) *Christliche Kultbauten im Tur Abdin* Wiesbaden; part III discusses a similar fortress at Edikli, east of Midyat and possibly 'Dabanas' (see above); there is no proper discussion published in regard to Fafi, although Gertrude Bell mentions the huge blocks of uncut stone (Bell, G. L. (1924) *From Amurath to Amurath: a journey along the banks of the Euphrates* London).
- ⁵⁸⁷ All of these are discussed in the second part of the gazetteer under 'Fortresses'.

⁵⁸⁸ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126, especially map on page 110

⁵⁸⁹ Mitford, T. B. (1986) 'A late Roman fortress south of Lake Van?' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East* 2, 565-573

⁵⁹⁰ See also discussion in Chapter 4-1, route 5. Of Thannourios Procopius states

“...the hostile Saracens, after crossing the Aborrhias River, had complete freedom to resort, and making that their headquarters they would scatter through the thick leafy forest and over the mountain which rises there, and then they would descend with impunity upon the Romans who lived in the places round about. But now the Emperor Justinian has built a very large tower of hard stone at this point, in which he has established a very considerable garrison, and thus has succeeded completely in checking the inroads of the enemy by devising this bulwark against them.” Apparently the Jebel Abd al'Aziz on the west bank of the Aborrhias or Khabur river was then forested. It is today bare of vegetation.

For information on the excavations by the St Louis Community College (Montana, USA) see

<http://www.stlcc.edu/fv/tuncinir/>

⁵⁹¹ Sophene, Anzitene, Belabite and Asthianene are mentioned.

⁵⁹² Ibid, p38. Also Whitby, M. (1983) 'Arzanene in the late sixth century' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 205-217 p210, who argues that this identification is wrong if a village near Lice is concerned, because this is too far west, although this does not seem to me to be a decisive factor. He concludes that Aphoum is further east and close to 'Chlomaron', as indicated in Theophylact Simocatta's account. The most likely location for Chlomaron would be at 'Golamasya' (new name: Yeşilyurt, part of the village of Oyuktaş and some 15km NE of Arzen) and that for Aphoum at 'Anishirvan Kale', on top of the mountain on the opposite side of the Garzan Su from Golamasya.

⁵⁹³ Barrington Atlas of the Greek and Roman World, map 89

⁵⁹⁴ This identification is made by Howard-Johnston, J. D. (1983) 'Byzantine Anzitene' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 239-290, p250

⁵⁹⁵ Howard-Johnston, J. D. (1989) 'Procopius, Roman defences north of the Taurus and the new fortress of Citharizon' in French, D, Lightfoot, CS (ed.), *The eastern frontier of the Roman empire* International Series 553, 203-229

⁵⁹⁶ Malalas, 18.66 (trans, Jeffrey, p273)

⁵⁹⁷ For example, Cameron, A. (1993) *The Mediterranean World in Late Antiquity* London, Kennedy, H. (1985) 'From Polis to Madina: Urban Change in late antique and early Islamic Syria', *Past & Present* 106, 3-27; see also Cameron (1993) *The Mediterranean World in Late Antiquity*, p157/8; and Liebeschütz, J. (2001) *The Decline and Fall of the Roman City* Oxford Both Cameron and Liebeschütz argue for a decline in the later sixth century.

⁵⁹⁸ Justinian paid 110 000 pounds of gold for the 'eternal peace' of 532, enormously more than the annual sum of 30 000 solidi or 416.3 pounds of gold which had been paid previously, ostensibly as a contribution for the garrisoning of the Caucasus passes. See discussion in Rubin, Z. (1986) 'The Mediterranean and the dilemma of the Roman Empire in Late Antiquity', *Mediterranean Historical Review* 13-62, p39ff. Large amounts were also paid by individual cities to avoid a sack e.g. by Resafa in 540.

⁵⁹⁹ Thus Tchalenko and Tate for the limestone massif (Tchalenko, G. (1953) *Villages antiques de la Syrie du nord* Paris Tate, G. (1989b) 'Les campagnes de la Syrie du nord à l'époque protobyzantine' in (ed.), *Hommes et richesses dans l'Empire byzantin* 1, 63-77); Adams for the Diyala plains (Adams, R. M. (1965) *Land behind Bagdad: a history of settlement on the Diyala plains* Chicago), but see also Paret for southern Syria and the routes to Arabia (Paret, R. (1960) 'Les villes de Syrie du sud et les routes commerciales d'Arabie à la fin du VIe siècle' in Dölger, F and Beck, H-G (ed.), *Akten des XI. internationalen Byzantinistenkongresses, München* 438-444). Curtis also reviews the state of Sassanian Mesopotamia and comments on the flourishing state of its industry (Curtis, J. (2000) *Mesopotamia and Iran in the Parthian and Sassanian periods: rejection and revival c.238BC-AD642* London).

⁶⁰⁰ Wilkinson, T. J. (1990) *Town and country in Southeastern Anatolia. Volume 1: Settlement and Land Use at Kurban Höyük and other sites in the lower Karababa basin* Chicago pp129-131

⁶⁰¹ Especially the monasteries of Qartmin (Mar Gabriel) and Deir Zafaran.

⁶⁰² www.zeugma.lu/. Navigate to photo gallery no.39. Now published: Zäh, A. (2001) 'Eine spätantike Kirche in Nuchrud (heute: Gürkuyu) im nördlichen Mesopotamien', *Jahrbuch der österreichischen Byzantinistik* 51, 365-71

⁶⁰³ Discussed in the context of route 12 in Chapter 4; Baumeister, P., Roos, D. and Saner, T. (2007) 'Die Keloşk Kale. Ein spätantiker Gebäudekomplex im türkischen Euphratbogen. Studien zu Osrhoene in der Spätantike I', *Istanbul Mitteilungen* 57,

- ⁶⁰⁴ Palmer, A. (1993) 'The Messiah and the Mardi: history presented as the writing on the wall' in Hokwerda, H, Smits, E.R. and Woesthuis, M.M. (ed.), *Polyphonia Byzantina: Studies in honour of Willem J. Aerts* 45-84
- ⁶⁰⁵ Howard-Johnston, J. D. (1989) 'Procopius, Roman defences north of the Taurus and the new fortress of Citharizon' in French, D, Lightfoot, CS (ed.), *The eastern frontier of the Roman empire* International Series 553, 203-229
- ⁶⁰⁶ This identification by Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Parisents, p232, is based on a doubtful link through Syriac.
- ⁶⁰⁷ Honigmann (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* p36 n6
- ⁶⁰⁸ Ibid, p33
- ⁶⁰⁹ Seeck, editor of the ND, considered this to be a line mislaid from Mesopotamia and to refer to Banasymeon, identified elsewhere as the monastery of Qartmin (Dillemann, p229, 232). Similarly he placed Rasin at 'Rasios', placed by Dillemann near Hasankeyf (232 and fig.xxxii).
- ⁶¹⁰ Dillemann (p230) believed that this name corresponds to the 'Sina' of Procopius, the 'Beioudaes' of Geotrg of Cyprus (see Annex D above) – and a Sina mentioned in Ptolemy (V.17,7) i.e. Fafi.
- ⁶¹¹ See preceding notes.
- ⁶¹² Woolliscroft, D. I. (2001) *Roman Military Signalling* Stroud; Pattenden, P. (1983) 'The Byzantine early warning system', *Byzantion* 53, 258-99
- ⁶¹³ Anonymous (1985) 'Strategy' in Dennis, GT (ed.), *Three Byzantine Military Treatises*, part 8 - Περι πυρσων και οπως οικονομητεον αυτους
- ⁶¹⁴ The application of frontier theory to the eastern frontier of the Roman empire is discussed in Isaac, B. (1993) 'An open frontier' in Brun, P, van der Leeuw, S and Whittaker, CR (ed.), *Frontières de l'Empire, nature et signification des frontieres romaines (Actes de la Table Ronde Internationale de Nemours 1992)* 105-114. He quotes the German writer Ratzel on territorial expansion at the expense of weaker neighbours (see especially Ratzel F, 1896 *Politische Geographie*, Munich & Leipzig, p97).
- ⁶¹⁵ Isaac, B. (1992) *The limits of empire: the Roman army in the East* Oxford, p267
- ⁶¹⁶ Isaac, ibid, pp409-418
- ⁶¹⁷ Anonymous (1985) 'Strategy' in Dennis, GT (ed.), *Three Byzantine Military Treatises*, section 9.
- ⁶¹⁸ Hodgson, N. (1989) 'The East as part of the wider Roman imperial frontier policy' in French, DH and Lightfoot, CS (ed.), *The Eastern Frontier of the Roman Empire 177-189*
- ⁶¹⁹ *Anecdota* 24.12-14
- ⁶²⁰ Isaac, op.cit. p210
- ⁶²¹ *Buildings* 3.3.14
- ⁶²² References to this topic include: Howard-Johnston, J. D. (1989) 'Procopius, Roman defences north of the Taurus and the new fortress of Citharizon' in French, D, Lightfoot, CS (ed.), *The eastern frontier of the Roman empire* International Series 553, 203-229, Liebeschütz, J. (1977) 'The defences of Syria in the sixth century' in (ed.), *Studien zu den Militärgrenzen Roms II. 10th Limeskongress* 487-499, Rekavandi, H., Sauer, E., Wilkinson, T. and Nokandeh, J. (2008) 'The enigma of the 'Red Snake': revealing one of the world's greatest frontier walls', *Current world archaeology* 27, 12-22. The Gorgan wall, has, however, been known for some time. Howard-Johnston describes it as a three-tier system designed as a deterrent to Turan i.e. Turkic-speaking peoples on Iran's north-east frontier who had constituted a real threat to the survival of the Sassanian dynasty. The Hephthalite Huns who defeated Peroz I may have spoken an Iranian language. See especially Howard-Johnston, J. D. (1995) 'The two great powers in Late Antiquity: a comparison' in Cameron, A (ed.), *The Byzantine and Early Islamic Near East* 3, 157-226, p192ff.
- ⁶²³ Rekavandi, H., Sauer, E., Wilkinson, T. and Nokandeh, J. (2008) 'The enigma of the 'Red Snake': revealing one of the world's greatest frontier walls', *Current world archaeology* 27, 12-22 and Nokandeh, J., Sauer, E., Rekavandi, H. and al, e. (2007) 'Linear barriers of northern Iran: the great wall of Gorgan and the wall of Tammishe', *Iran: Journal of Persian Studies*
- ⁶²⁴ See article on Darband in Encyclopedia Iranica, VII.1 by E. Kettenhofen; and Howard-Johnston, J. D. (1995) 'The two great powers in Late Antiquity: a comparison' in Cameron, A (ed.), *The Byzantine and Early Islamic Near East* 3, 157-226, p192. Howard-Johnston describes how these walls constituted an entire defensive system with five layers.
- ⁶²⁵ Hodgson, N. (1989) 'The East as part of the wider Roman imperial frontier policy' in French, DH and Lightfoot, CS (ed.), *The Eastern Frontier of the Roman Empire 177-189*
- ⁶²⁶ However, the Hephthalite Huns against whom the Gorgan Wall was apparently directed may have been a settled and not a nomadic kingdom.
- ⁶²⁷ Procopius, *Wars* I, XIII, 1-8

- ⁶²⁸ But Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge, p5 n7, states that the location may have been a 'tell' some miles east of Midun (or Middo), currently the village of Ögündük, 34km east of Midyat.
- ⁶²⁹ Whittaker, C. R. (1994) *Frontiers of the Roman Empire* Baltimore
- ⁶³⁰ Copper is likely to have been mined in antiquity north of Diyarbakir and in the Kurdish mountains ('Tiyani-Gebirge'). See Blümner, H. (1887 (1969)) *Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern* Leipzig (Hildesheim), 4 p59
- ⁶³¹ Cassius Dio (68, 26) says that Trajan took wood from forests around Nisibis to construct a bridge across the Tigris. Although these have now disappeared Procopius also reports wooded countryside much further south in the Jebel ab-Aziz where bandits crossing the frontier near Thannourios hid (*Buildings*, II, 6.15). Layard saw scanty dwarf oak woodland here in 1850 (*Discoveries in the ruins of Nineveh and Babylon*, 1853, p312), but this has now gone.
- ⁶³² Isaac, B. (1993) 'An open frontier' in Brun, P, van der Leeuw, S and Whittaker, CR (ed.), *Frontières de l'Empire, nature et signification des frontières romaines (Actes de la Table Ronde Internationale de Nemours 1992)* 105-114
- ⁶³³ Procopius *Buildings* III, 3.9-10: "9 As one goes from Citharizôn to Theodosiopolis and the other Armenia, the land is called Chorzanê; it extends for a distance of about three days' journey, not being marked off from the Persian territory by the water of any lake or by any river's stream or by a wall of mountains which pinch the road into a narrow pass, but the two frontiers are indistinct. 10 So the inhabitants of this region, whether subjects of the Romans or of the Persians, have no fear of each other, nor do they give one another any occasion to apprehend an attack, but they even intermarry and hold a common market for their produce and together share the labours of farming."
- ⁶³⁴ Liebeschütz, J. (1977) 'The defences of Syria in the sixth century' in (ed.), *Studien zu den Militärgrenzen Roms II. 10th Limeskongress 487-499*
- ⁶³⁵ TAVO BV13 *Die Ostgrenze des Römischen Reiches (1.-5.Jh, n. Chr.)*
- ⁶³⁶ Fiey, J.-M. (1977) *Nisibe: métropole syriaque orientale et ses suffragants des origines à nos jours* Louvain
- ⁶³⁷ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris, p229
- ⁶³⁸ Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge p118
- ⁶³⁹ Dillemann, *ibid*, p229, quoting Bar Hebraeus I, 120-122
- ⁶⁴⁰ Palmer, *ibid* p151
- ⁶⁴¹ Again Procopius *Buildings* II 4.3; trans. Dewing, 1940, Loeb edition
- ⁶⁴² Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels
- ⁶⁴³ Dillemann, *ibid*, 233
- ⁶⁴⁴ Dillemann, *ibid*, p234
- ⁶⁴⁵ There is an ancient fountain and tunnel in front of the church.
- ⁶⁴⁶ Labourt, J. (1904) *Le christianisme dans l'empire perse sous la dynastie sassanide, 224-632* Paris
- ⁶⁴⁷ Ammianus Marcellinus XVIII, 5.3; this is the story of the deserter Antoninus and the border referred to is actually on the Tigris.
- ⁶⁴⁸ 'Supplementary tale 232, trans. Mioni, in John Moschos (1992) *The spiritual meadow ('Pratum Spirituale')* Kalamazoo p216
- ⁶⁴⁹ Jones, A. (1958) 'The Roman Colonate', *Past and Present*, 13, 1-13
- ⁶⁵⁰ Procopius *Buildings* II 4.3; trans. Dewing, 1940, Loeb edition
- ⁶⁵¹ Labourt, J. (1904) *Le christianisme dans l'empire perse sous la dynastie sassanide, 224-632* Paris, p139 and Dillemann, *ibid*, p223. The episode is also discussed in Fiey, J.-M. (1977) *Nisibe: métropole syriaque orientale et ses suffragants des origines à nos jours* Louvain. The information comes originally from two letters from Barsaumas to his metropolitan Acacius published in the 'Recueil des actes synodaux de l'église de Perse', ed. J-B Chabot in 'Actes et extraits des manuscrits', vol 37, pp532, 536. Barsaumas mentions that in response to a serious drought the tribesmen had begun to cross the frontier to Roman territory on raids for animals, people and supplies. The marzban in Nisibis Qardag Nakoran took back the captives and arranged an exchange but negotiations with the Roman dux inside Nisibis, where the Romans were received with honour, failed because of a further such raid which took place while they were talking. Eventually a treaty (πρακτατον) was signed with the help of Barsaumas who, because of his special knowledge, was retained by the marzban for this purpose in Nisibis despite an order that he go to the royal court in Ctesiphon.
- ⁶⁵² From an inscription at Koser II-Hallabat in the southern Hauran. See Littman, E., Magie, D. and Stuart, D. (1907-1949.) 'Greek and Latin inscriptions' in (ed.), *Syria: publications of the Princeton University Archaeological Expeditions to Syria in 1904-1905 and 1909* 3, p24-30; also IGLS, xiii no.9046
- ⁶⁵³ Philostratos (1983) *Das Leben des Apollonios von Tyana* Munich

- ⁶⁵⁴ CJ 4.63.4. See also Blockley, R. C. (1992) *East Roman foreign policy: formation and conduct from Diocletian to Anastasius* Leeds, p148
- ⁶⁵⁵ The Life of John of Tella by Elias recounts (65.24-66.21) how he was arrested at the request of the Chalcedonian bishop of Antioch by the marzban of Nisibis on Mount Sinjar. See Greatrex, G. and Lieu, S. (2002) *The Roman eastern frontier and the Persian wars (AD363-630)* London p101.
- ⁶⁵⁶ Dillemann, *ibid*, p192
- ⁶⁵⁷ Now on the Syrian side of the border; there is a small village at this point visible on Google Earth in high resolution (37°06'30"N; 41°01'27"E), but no fort can be seen.
- ⁶⁵⁸ Procopius of Gaza, *Panegyricus in Anastasium*; Migne, PG LXXXVII col 2817
- ⁶⁵⁹ Rougé, J., (ed./trans.) (1966) *Expositio Totius Mundi et Gentium* Paris, XXII, p156
- ⁶⁶⁰ John of Ephesus (1923-25) *Lives of the Eastern Saints* Paris, no XXXI
- ⁶⁶¹ Erdemir, H. (2004) 'The nature of Turko-Byzantine relations in the sixth century AD', *Belleten - Türk Tarih Kurumu* 68, 423-430, 593-594
- ⁶⁶² Procopius, *Wars* 8.17.1-8; see also Lopez, R. S. (1945) 'Silk Industry in the Byzantine Empire', *Speculum* 20, 1-42
- ⁶⁶³ D'Arms, J. (1981) *Commerce and social standing in ancient Rome* Cambridge, Mass.
- ⁶⁶⁴ Cameron, A. (1985) *Procopius and the Sixth Century* London, *passim*
- ⁶⁶⁵ Pollard for example discussed the presence of amphorae at military sites in Syria and Mesopotamia and concludes from the few examples of the third century found at Dura-Europos and Ain Sinu (a late Roman site near Mosul excavated by Oates) that some long-distance trade to support the army was taking place, even if this was on a limited scale (Pollard, N. (2000) *Soldiers, cities and civilians in Roman Syria* Ann Arbor p189).
- ⁶⁶⁶ Kingsley, S. and Decker, M., (eds.) (2001) *Economy and exchange in the East Mediterranean during Late Antiquity* Oxford. In REFPW, Greatrex and Lieu note on page 34 the discovery of a hoard of jewellery, counterfeit Roman *solidi* of Arcadius and silver drachms of Yazdegerd I at Humayma in Jordan, reported by de Bruijn and Dudley 1995, *AJA* 99: 683-697. This was claimed by the excavators as providing archaeological confirmation of the literary evidence of political, commercial and ecclesiastical contacts between the Byzantine and Sassanian empires in the early fifth century. Sassanian objects found in the southern Levant are the object of another article by Maeir, A.M. 2000, *Iranica Antiqua* 35: 159-183 (especially pp172, 180-2).
- ⁶⁶⁷ Over 100 000 clay seal impressions or 'bullae' were found in total at Zeugma (and large numbers at Artaxata in Armenia). See Önal, M. (2007) *Clay seal impressions of Zeugma / Kil Mühür Baskıları* Gaziantep
- ⁶⁶⁸ Wickham, C. (2005) *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800* Oxford , pp446,449-50, 772
- ⁶⁶⁹ D'Hautcourt, A. (2003) 'Public finances and private generosity. The example of Opramoas in Roman Lycia.' *J Econ Bus Law* 5, 39-62, Kokkinia, C. (2000) *Die Opramoas-Inschrift von Rhodiapolis. Euergetismus und soziale Elite in Lykien* Bonn
- ⁶⁷⁰ Segal, J. B. (1970) *Edessa: 'The Blessed City'* Oxford, p146. His source was Chabot, J. B. (1953) *Anonymi auctoris Chronicon ad annum Christi 1234 pertinens, CSCO 81-2, Scr.syri 36-7* Louvain.
- ⁶⁷¹ *Ibid* p148
- ⁶⁷² *Ibid* p137. In his earlier work (Segal, J. B. (1955) 'Mesopotamian Communities from Julian to the rise of Islam', *Proceedings of the British Academy* 109-139), Segal also discusses professions and the life of the Syriac-speaking community but has little to say about trade and the economy.
- ⁶⁷³ Jones, A. H. M. (1970) 'Asian trade in antiquity' in Richards, D (ed.), *Islam and the trade of Asia* 1-10 p10
- ⁶⁷⁴ ND, section XIII (Insignia viri illustris comitis largitionum). They therefore depended from the public treasury; the other two were responsible for, respectively, Moesia, Scythia and Pontus; and Illyricum. The latter appears twice: in the lists for both Western and Eastern Empires.
- ⁶⁷⁵ CJ 4.40.2 (AD 383 to 392) For penalties for avoiding his oversight see CJ 4.63.6 (of AD 423)
- ⁶⁷⁶ CJ 4.63.6: "Imperatores Honorius, Theodosius . Si qui inditas nominatim vetustis legibus civitates transgredientes ipsi vel peregrinos negotiatores sine comite commerciorum suscipientes fuerint deprehensi, nec proscriptionem bonorum nec poenam perennis exilii ulterius evadent." 'Vetustes leges' apparently refers to the restriction to the three cities mentioned in CJ 4.63.4.1, of AD408/9.
- ⁶⁷⁷ John Moschos (1992) *The spiritual meadow ('Pratum Spirituale')* Kalamazoo, number 186
- ⁶⁷⁸ Brandes, W. (2002) *Finanzverwaltung in Krisenzeiten: Untersuchungen zur byzantinischen Administration im 6.-9. Jahrhundert* Frankfurt pp239-309
- ⁶⁷⁹ Oikonomides, N. (1986) 'Silk trade and production in Byzantium from the sixth to the ninth century: the seals of Kommerkiarioi', *Dumbarton Oaks Papers* 40, 33-53, p34
- ⁶⁸⁰ *Anecdota* 25,26

⁶⁸¹ Ibid, 30. See discussion on p185 and footnote.

⁶⁸² Jones, A. H. M. (1964) *The later Roman Empire* Oxford He emphasises (p827) that the imperial government, the greatest consumer in the empire made almost no use of private merchants.

⁶⁸³ Finley, M. I. (1992) *The ancient economy* London

⁶⁸⁴ The details of the operation of the main taxes on land since Diocletian are known for the later empire and their application in Syria is evident from the 'Syro-Roman law book' which shows that the unit of taxation, the 'iugum', was defined variously as specific areas of vineyard or arable land; numbers of olive trees; or pasture land defined by quality.

⁶⁸⁵ Young, G. (2001) *Rome's eastern trade: international commerce and imperial policy, 31BC - AD305* London p208-210. He discusses in particular the 'tetarte', or 25% duty, imposed on imports from outside the Empire at Alexandria.

⁶⁸⁶ REFPW , p132 (Menander frg.6.1.314-97)

⁶⁸⁷ His evidence is reviewed especially in Liebeschuetz (1972), *Antioch: city and imperial administration in the later Roman Empire*; see especially p31

⁶⁸⁸ Drexhage, H.-J. (1994) 'Einflüsse des Zollwesens auf den Warenverkehr im römischen Reich - handelshemmend oder handelsfördernd?' *Münsterische Beiträge zum antiken Handelsgeschichte* XIII, 1-15. He considered the impact of such taxation on trade flows and concluded that it was probably negligible

⁶⁸⁹ De Laet, S. J. (1949) *Portorium* Bruges, pp451, 455 and 463-7; Bibicou, who also studied this issue, concluded that on the eastern frontier the rate varied between only 2 and 5% - Antoniadis-Bibicou, H. (1963) *Recherches sur les douanes à Byzance: l'octava, le kommerktion et les commerciaires* Paris.

⁶⁹⁰ Young, G. (2001) *Rome's eastern trade: international commerce and imperial policy, 31BC - AD305* London p30

⁶⁹¹ XXXIX, iv.16.7: Species pertinentes ad vectigal: cinnamomum: piper longum: piper album: folium pentasphaerum: folium barbaricum: costum: costamomum: nardi stachys: cassia turiana: xylocassia: smurna: amomum: zingiberi: malabathrum: aroma indicum: chalbane: laser: alche: lucia: sargogalla: onyx arabicus: cardamomum: xylocinnamomum: opus byssicum: pelles babyloicae: pelles parthicae: ebur: ferrum indicum: carpasum: lapis universus: margarita: sardonix: ceraunium: hyacinthus: smaragdus: adamas: saffrinus: callainus: beryllus: chelyniae: opia indica vel adserta: metaxa: vestis serica vel subserica: vela tincta carbasa: nema sericum: spadones indici: leones, leaenae: pardi: leopardi: pantherae: purpura: item marocorum lana: fucus: capilli indici.

⁶⁹² Jones, A. H. M. (1970) 'Asian trade in antiquity' in Richards, D (ed.), *Islam and the trade of Asia* 1-10, p1

⁶⁹³ West, L. (1924) 'Commercial Syria under the Roman Empire', *Transactions and Proceedings of the American Philological Association* 55, 159-189

⁶⁹⁴ Heichelheim, F. M. (1933) 'Roman Syria' in Frank, T (ed.), *An economic survey of ancient Rome* 4, 121-257, especially pp189-227

⁶⁹⁵ Jones, A. H. M. (1964) *The later Roman Empire* Oxford vol 2 p826.

⁶⁹⁶ Chapter 21: 'Syria and Arabia' in Cambridge Ancient History, Volume XI: *High Empire AD 70-92*, Cambridge 2000, p656. Contra, for late antiquity: Garnsey, P and Whittaker, CR, Chapter 10, 'Trade, industry and the urban economy' in Cambridge Ancient History, Volume XIII: *The Late empire AD 337-425*, 1997; and Ward-Perkins, B Chapter 13. 'Specialised production and exchange' in Cambridge Ancient History Vol XIV: *Late Antiquity: Empire and Successors, AD 425-600*, 2001

⁶⁹⁷ For early Islamic trade see Abulafia, D, Chapter VI, 'Asia, Africa and the trade of medieval Europe', Cambridge Economic History of Europe 2nd edition, vol 2: *Trade and industry in the Middle Ages*, Cambridge 1987, especially pp411-420; also Masters, B 'Aleppo: the Ottoman empire's caravan city' in Eldem, E, Goffman, D, Masters, B. *The Ottoman city between East and West*, Cambridge, 1999, p17-78

⁶⁹⁸ Weber, M. (1924 (EN 1976)) *Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte (The agrarian sociology of ancient civilizations)* Tübingenpp65-66

⁶⁹⁹ Jones, A. H. M. (1964) *The later Roman Empire* Oxford vol 2 p841

⁷⁰⁰ Finley, M. I. (1992) *The ancient economy* London p127-8

⁷⁰¹ Liebeschuetz, J. (1961) 'Money economy and taxation in kind in Syria in the fourth century AD', *Rheinisches Museum für Philologie* NF104, 242-256, 252 n62, quoting *Orations* 33, cs 6-7 and 27.

⁷⁰² Expositio XXXI mentions for example the textiles of Palestine and Phoenicia. The work is dated by its editor, Rougé, to between AD355 and 360. The complete passage on Mesopotamia and Osrhoene (XXII) reads as follows: "... Mesopotamia quidem habet civitates multas et varias, quarum excellentes sunt quas volo dicere. Sunt ergo in Nisibis et Edessa [in error for Amida?], quae in omnibus viros habent optimos et in negotio valde acutos et bene venantes [one editor has 'vendentis']. Praecipue et divites et omnibus bonis ornati sunt: accipientes enim a Persis ipsi in omnem terram Romanorum vendentes et ementes tradunt, extra

aeramen et ferrum, quia non licet hostibus dare aeramen aut ferrum. Istaе autem civitates semper stantes deorum et imperatoris sapientia, habentes moenia inclita, bello semper virtutem Persarum dissoluunt; ferventes negotiis et transigentes cum omni provincia bene. Deinde Osdroenae Edessa et ipsa civitas splendida.’

⁷⁰³ But translated by the editor, Rougé, as ‘bouillonnantes d’affaires elles mènent une vie bonne ainsi que toute la province’. The singular form of *omni provincia* can mean ‘with every province’ and is also translated in this way in Jones, A. H. M. (1970) ‘Asian trade in antiquity’ in Richards, D (ed.), *Islam and the trade of Asia* 1-10 p6 .

⁷⁰⁴ Patlagean, E. (1977) *Pauvreté économique et pauvreté sociale à Byzance 4e-7e siècle* Paris pp 156-235. For a review of economic activities in early Byzantine cities see Claude, D. (1969) *Die byzantinische Stadt im 6. Jahrhundert* Munich, pp163-194.

⁷⁰⁵ See also Trombley, F. (1987) ‘Korykos in Cilicia: the economy of a small coastal city in late antiquity’, *Ancient history bulletin* 1, 16-93

⁷⁰⁶ Heichelheim, F. M. (1933) ‘Roman Syria’ in Frank, T (ed.), *An economic survey of ancient Rome* 4, 121-257

⁷⁰⁷ Young, G. (2001) *Rome's eastern trade: international commerce and imperial policy, 31BC - AD305* London, p192-3

⁷⁰⁸ Hopkins, K. (1980) ‘Taxes and trade in the Roman empire (200 BC to AD 400)’, *Journal of Roman Studies* 70, 101-125; in this article he develops ideas already present in Hopkins, K. (1978) ‘Economic growth and towns in Classical Antiquity’ in Abrams and Wrigley (ed.), *Towns in Societies* 35-77.

⁷⁰⁹ For example, see Codex Theodosianus 11.1.5: ad Uranium. Omnes omnino ad oblationem pecuniarum oportet argueri. lege enim nostra signatum est nec esse extraordinaria nec vocari, quae specialiter a provincialibus devotissimis conferenda sunt. Dat. III non. febr. Constantio a. II et Constante cons. (339 febr. 3). Jones confirms that tax collection had reverted to money following the introduction of a solid gold currency by Constantine - Jones, A. H. M. (1974) ‘Taxation in antiquity’ in Brunt (ed.), *The Roman Economy* 151-185 p169-70

⁷¹⁰ In particular, Laiou, A. and Morrisson, C. (2007) *The Byzantine Economy* Cambridge, pp33-38. Similarly, Harris and Mattingly have recently provided a nuanced picture of trade in the imperial economy which accepts its importance while continuing to deny private commerce a crucial role Mattingly, D. (2006) ‘The imperial economy’ in Potter, D (ed.), *A companion to the Roman Empire* 284-298; Harris, W. (2000) ‘Trade and transport’ in Bowman, A, Garnsey, P and Rathbone, D (ed.), *Cambridge Ancient History, ed.2 XI, Ch. 24, 735-*.

⁷¹¹ Pollard, N. (2000) *Soldiers, cities and civilians in Roman Syria* Ann Arbor, especially pp172-178

⁷¹² Kingsley, S. and Decker, M., (eds.) (2001) *Economy and exchange in the East Mediterranean during Late Antiquity* Oxford

⁷¹³ Comfort, A. and Ergeç, R. (2001) ‘Following the Euphrates in antiquity: north-south routes around Zeugma’, *Anatolian Studies* 51, 19-50

⁷¹⁴ Heichelheim, F. M. (1933) ‘Roman Syria’ in Frank, T (ed.), *An economic survey of ancient Rome* 4, 121-257

⁷¹⁵ Procopius Buildings II 4.3; the passage is quoted in full at the beginning of Chapter 5 in the context of roads.

⁷¹⁶ de Jesus, P. S. (1978) ‘Metal Resources in Ancient Anatolia’, *Anatolian Studies* 28, 97-102

⁷¹⁷ Özbal, H., Adriaen, A. and Earl, B. (2000) ‘Hacinebi metal production and exchange’, *Paléorient* 25, 57-65

⁷¹⁸ Libanius, *Orations* xi (the Antiochikos)

⁷¹⁹ Much evidence on this is contained in the Talmud and is discussed in Heichelheim, F. M. (1933) ‘Roman Syria’ in Frank, T (ed.), *An economic survey of ancient Rome* 4, 121-257.

⁷²⁰ Ward-Perkins, B. (2001) ‘Specialisation, trade and prosperity: an overview of the economy of the late antique eastern Mediterranean’ in Kingsley, SaD, M. (ed.), *Economy and exchange in the east Mediterranean during late antiquity* 167-178

⁷²¹ The scant evidence available is surveyed in Pollard’s study of Syria – see above; his note 52.

⁷²² Garsoian, N. G. (1983) ‘Byzantium and the Sassanians’ in (ed.), *Cambridge History of Iran, Chapter 15* 3.1, 568-592 (biblio 1316-1322)

⁷²³ Fragment 13. This simile was apparently common; it is also used by Khusro II in his letter to Maurice following his flight to Circesium, as reported in Theophylact Simocatta iv.11.2. A host of references to the parity of the two empires is given by Garth Fowden (1993) p18 n21 and the principle is also discussed by Garsoian, op.cit. p577/578. In their edition of Theophylact, the Whitbys also draw attention (p117, footnote

40) to a report in Malalas 449.19-20 of a letter from the Persian king., “the eastern sun”, saluting the Roman emperor, “the western moon”.

⁷²⁴ But the bureaucracy was also an important feature of Sassanian society: Ghirshman, R. (1954) *Iran, from the earliest times to the Islamic conquest* Harmondsworth, London, pp309-10. For a recent review of the relationship see Howard-Johnston, J. D. (1995) 'The two great powers in Late Antiquity: a comparison' in Cameron, A (ed.), *The Byzantine and Early Islamic Near East* 3, 157-226, who emphasizes the importance of the noble families and their partnership with the shah (pp221-3).

⁷²⁵ The reforms introduced by Khusro I (see Howard-Johnston, *ibid*, p225) strengthened bureaucratic control and may have allowed further development of infrastructure such as irrigation systems. But the military ethos of the regime was also strong (p169). There seems to this observer to be difficulty in reconciling the bureaucratic and ‘feudal’ aspects of the Sassanian state. The ‘prime minister’ (chief vizir or ‘hazarbadh’) played a very important role in the affairs of the state (Christensen, A. (1944) *L’Iran sous les sassanides* Copenhagen p113ff; for Khusro’s reforms see pp363ff), replacing the monarch when he was away and leading an apparently powerful bureaucracy.

⁷²⁶ Howard-Johnston points out (p168) that its economic development is likely to have lagged well behind that of the Roman Empire, if only because of a relative shortage of good agricultural land.

⁷²⁷ The story of Golinduch is particularly instructive in this regard. According to Theophylact Simocatta (v.11.9), she was born in Babylonia ‘to the race of the magi’ and her father was a distinguished satrap who levied Persian taxes. When she wished to become a Christian she was thrashed by her husband and threatened with death ‘as is customary for the Persians to do to those who reject the doctrines of the magi.’ She travelled to Nisibis where she was put in prison; she escaped and went to Jerusalem and Hierapolis where she died in 591. Golinduch was by no means alone: Maraba, a Christian bishop of Nisibis in the fifth century, had been a senior Persian official - Labourt, J. (1904) *Le christianisme dans l’empire perse sous la dynastie sassanide, 224-632* Paris, p174.

⁷²⁸ See discussion of travellers in Chapter 4-2

⁷²⁹ John of Ephesus (1923-25) *Lives of the Eastern Saints* Paris

⁷³⁰ *Op.cit.* p170

⁷³¹ *Op.cit.* p591

⁷³² Howard-Johnston (*ibid*, p160) mentions how the Sassanian viewed themselves as protagonists of Zoroastrianism and heirs to the Achaemenid dynasty.

⁷³³ Spencer, D. (2002) *The Roman Alexander. Reading a Cultural Myth* Exeter

⁷³⁴ 75.9 – following his discussion of Septimius Severus’ advances Dio states his view that the advantages did not compensate for the costs and risks involved.

⁷³⁵ Kaegi, W. E. (2003) *Heraclius, emperor of Byzantium* Cambridge, 93

⁷³⁶ Haute Mésopotamie orientale et pays adjacents, Paris 1962

⁷³⁷ Wilkinson, T. J. (2003) *Archaeological landscapes of the Near East* Tucson

⁷³⁸ Gaborit, J. (2007) *Géographie historique du Moyen-Euphrate de la conquête d’Alexandre à l’Islam . .*, thesis, 3ème cycle, Université Paris 1

⁷³⁹ Great Britain, N. I. D. (1918) *A handbook of Mesopotamia* London

⁷⁴⁰ Brant, J. and Glascot, A. (1840) 'Notes of a Journey Through a Part of Kurdistan, in the Summer of 1838', *Journal of the Royal Geographical Society of London* 10, 341-434, p364

⁷⁴¹ Marcus, A. (1992) *The Middle East on the eve of modernity: Aleppo in the eighteenth century* New York

⁷⁴² *Cities of the Eastern Roman Provinces*, Oxford, first edition 1937, second edition 1971.

⁷⁴³ *Eastern Turkey: an architectural and archaeological survey*, London 1989, Vol 3

⁷⁴⁴ *Zeitschrift des Deutschen Palaestina-Vereins* 46/47, 149-193 (1923) and 1-64 (1924)

⁷⁴⁵ <http://www.fordham.edu/halsall/source/notitiadignitatum.html>

⁷⁴⁶ The *Notitia Dignitatum* lists the following: Chief of staff (*princeps*), chief deputy (*cornicularius*), chief assistant (*adiutor*), custodian (*commentariensis*), keeper of the records (*ab actis*), receivers of taxes (*numerarii*), assistants (*subadiuuuae*), a curator of correspondence (*cura epistolarum*), a registrar (*regerendarius*), secretaries (*exceptores*), aides (*adiutores*), notaries (*singularii*).

⁷⁴⁷ The permanent staff of his office in the East included a chief of staff, two accountants, a custodian, a chief assistant, clerks, quartermasters (*mensores*), secretaries and other attendants.

⁷⁴⁸ For a discussion of language and cultural aspects see Millar, F. (1999) 'Ethnic identity in the Roman Near East, 325-450: Language, religion and culture' in Clarke, G (ed.), *Identities in the eastern Mediterranean in antiquity* 159-176 and Millar, F. (1993) *The Roman Near East: 31 BC - AD 337* Cambridge, Mass..

⁷⁴⁹ For the role of this emperor in the Near East, see Lightfoot, C. S. (1982) *The eastern frontier of the Roman Empire with special reference to the reign of Constantius II*, thesis, Oxford.

- ⁷⁵⁰ There are fortlets along this road at intervals of one Roman mile; it is still known as the Sultan Murad Caddesi, apparently because of its use in the early Ottoman period as a military highway.
- ⁷⁵¹ Routes 7, 8, 9 and 10, described in chapter 4 below, all leave from Antioch.
- ⁷⁵² Kennedy, D. and Riley, D. (1990) *Rome's Desert Frontier from the air* Austin p155
- ⁷⁵³ Sinclair, T. A. (1995) 'The site of Tigranocerta, I', *Revue des Études Arméniennes* 25, 183-254 and Sinclair, T. A. (1997) 'The site of Tigranocerta, II', *Revue des Études Arméniennes* 26, 51-118
- ⁷⁵⁴ Neusner, J. (1966) 'The conversion of Adiabene to Christianity', *Numen* 13, 144-150
- ⁷⁵⁵ Oral communication from Ibrahim Konutgan, the restorer of the local church, who bases his views on unnamed Syriac sources.
- ⁷⁵⁶ Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123 p111; his analysis is confirmed by the presence of at least three small Roman forts in villages about 14km west of Edessa.
- ⁷⁵⁷ The early history of Osrhoene and the Abgarid dynasty is the subject of a major study of 1887 -Gutschmid, A., von (1887) *Untersuchungen über die Geschichte des Königreichs Osroëne* St. Petersburg
- ⁷⁵⁸ Maravall, P. (1982) *Egérie: journal de voyage* Paris p200
- ⁷⁵⁹ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126, Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels p14, n.1.
- ⁷⁶⁰ Possibly 'Fafi' although this name belongs more properly to the area of the Dux Mesopotamiae.
- ⁷⁶¹ Possibly a place near Circesium, but 'Apadna' appears as the base for another unit depending from the Dux Mesopotamiae. See Gascou, J. (1999) 'Unités administratives locales et fonctionnaires romains: les données des nouveaux papyrus du Moyen Euphrate et d'Arabie' in Eck, W (ed.), *Lokale Autonomie und römische Ordnungsmacht in den kaiserzeitlichen Provinzen vom 1. bis 3. Jahrhundert* 61-73, where he proposes that Apadna was an administrative centre near Circesium, possibly on the Khabur river.
- ⁷⁶² The large number of places-names starting with 'Th...' is confusing. The Peutinger Table has in the region east of Carrhae/Harran the following unlocated place-names: Thallaba, Thilapsum and Thubida. At least one of these may be the same as the Thillacana, Thillafica and Thillaamana of the Notitia.
- ⁷⁶³ The organization of the province is described in Chapter II of Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris. That Nisibis remained the chief city of Mesopotamia until 363 is clear from the fact that the provincial *dux* Cassianus remained there during the attack of Shapur on Amida in 359 as recounted by Ammianus Marcellinus, XIX, 9.6
- ⁷⁶⁴ In his article Schachermeyer refers at col.1149 to Cassius Dio's account (LXXV, 1-3).
- ⁷⁶⁵ There are differing interpretations in Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels, Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge and Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London.
- ⁷⁶⁶ For a discussion see Lightfoot, C. S. (1982) *The eastern frontier of the Roman Empire with special reference to the reign of Constantius II*, thesis, Oxford, pp196 ff.
- ⁷⁶⁷ Procopius, *Wars* ii.25.2-3: «...In that region [of Doubios/Dvin] there are plains suitable for riding, and many very populous villages are situated in very close proximity to one another, and numerous merchants [εμφοροι] conduct their business in them. For from India and the neighbouring regions of Iberia and from practically all the nations of Persia and some of those under Roman sway they bring in merchandise and carry on their dealings with each other there [τα φορτια εσκομιζομενοι ενταυθα αλληλοις ζυμβαλλουσι]...»
- ⁷⁶⁸ Except *Thilbisme*, *Caini*, *Bethallaha* and possibly *Apadna*.
- ⁷⁶⁹ Weber, S. H. (1952-3) *Voyages and Travels in the Near East made during the XIXth century*: Princeton
- ⁷⁷⁰ See also Guest, J. S. (1992) *The Euphrates Expedition* London
- ⁷⁷¹ Ammianus Marcellinus, XVIII, 9.1, says: "This city had formerly been a very small one, till Constantius while Caesar, at the same time that he built another town called Antinopolis, surrounded Amida also with strong towers and stout walls, that the people in the neighbourhood might have a safe place of refuge. And he placed there a store of mural engines, making it formidable to the enemy, as he wished it to be called by his own name." The Chronicle of Edessa (section 19) says Constantius rebuilt the city in 349.
- ⁷⁷² xix.2.14
- ⁷⁷³ Joshua the Stylite, 75.
- ⁷⁷⁴ Joshua Stylites 76 and Zacharias VII.5 (162-3).
- ⁷⁷⁵ Gabriel, A. (1940) *Voyages archéologiques dans la Turquie orientale* Paris, part 2
- ⁷⁷⁶ Berchem, M., van, and Strzygowski, J. (1910) *Amida. Matériaux pour l'épigraphie et l'histoire musulmanes du Diyar-Bekr* Heidelberg

- ⁷⁷⁷ <http://www.iranica.com/newsite/>
- ⁷⁷⁸ Lehmann-Haupt, K.-F. (1910 (Vol 1) and 1926 (Vol 2)) *Armenien Einst und Jetzt* Berlin
- ⁷⁷⁹ Sachau, E. (1881) 'Über die Lage von Tigranokerta', *Philosophische und historische Abhandlungen der königlichen Akademie der Wissenschaften zu Berlin* 2, 3-92
- ⁷⁸⁰ Sinclair, T. A. (1995) 'The site of Tigranocerta, I', *Revue des Études Arméniennes* 25, 183-254 and 1997
- ⁷⁸¹ Theophylact Simocatta (ed./trans. Whitby, M., and M.) (1986) *History* Oxford, iii, 13-15; see also Whitby, M. (1988) *The emperor Maurice and his historian* Oxford, p269 and n.38
- ⁷⁸² Taylor, J. G. (1868) 'Journal of a tour in Armenia, Kurdistan and upper Mesopotamia', *Journal of the Royal Geographical Society* 38, 281-361
- ⁷⁸³ ETAAS, Vol 3, p297
- ⁷⁸⁴ Procopius, Buildings II, 9; also Persian War II,12.
- ⁷⁸⁵ Miller 1916, 759
- ⁷⁸⁶ Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London Vol 1, p259
- ⁷⁸⁷ Sarre, F. and Herzfeld, E. (1911-1920) *Archäologische Reise in Euphrat und Tigris gebiet* Berlin
- ⁷⁸⁸ Ulbert, T. (1989) 'Villes et fortifications de l'Euphrate à l'époque paléochrétienne (IVe-VIe s.)' in Dentzer, J.-M., Augé, C. (ed.), *Archéologie et histoire de la Syrie* 2, 283-296, p284-286
- ⁷⁸⁹ Raymond, A. and Paillet J.-L. (1995) *Balis II: histoire de Balis et fouilles des ilots I et II* Paris
- ⁷⁹⁰ Finkbeiner, B., & U. (2004) 'Barbalissos - Balis: eine weitgehend versunkene Festung und Handelstadt am Euphrat', *Antike Welt* 83-90
- ⁷⁹¹ Maravall, P. (1982) *Egérie: journal de voyage* Paris p202
- ⁷⁹² Joshua the Stylite (2000) *The Chronicle attributed to Pseudo-Joshua the Stylite* Liverpool, para 89
- ⁷⁹³ XIV, 3,3 "Batne municipium, in Anthemusia conditum Macedonum manu priscorum, ab Euphrate flumine brevi spatio disparatur, refertum mercatoribus opulentis, ubi annua sollemnitate, prope Septembriis initium mensis, ad nundinas magna promiscuae fortunae convenit multitudo, ad commercanda quae Indi mittunt et Seres, alique plurima vehi terra marique consueta." Budé edition.
- ⁷⁹⁴ Procopius, Buildings, II,7.
- ⁷⁹⁵ Sayce, A. H. (1911) 'Notes on an unexplored district of northern Syria', *Proceedings of the Society of Biblical Archaeology* 33, 171-179, p172
- ⁷⁹⁶ Ammianus Marcellinus XX.7; a report of the fate of the captives is mentioned in Duval, R. (1899) *Littérature syriaque* Paris p139/140: 9000 were taken into captivity but their bishop Heliodorus died on the way.
- ⁷⁹⁷ See Duval, preceding footnote, pp140/141. According to one story, the Christians were treated especially harshly because of the conversion at this time of Shapur's son, Gourbatlaha, and daughter, Kazo, to Christianity.
- ⁷⁹⁸ Algaze, G. (1989) 'A new frontier: first results of the Tigris-Euphrates archaeological reconnaissance project, 1988', *Journal of Near Eastern Studies* 48, 241-281. Figure 9, a plan on page 265, shows the relationship of the two fortresses.
- ⁷⁹⁹ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris
- ⁸⁰⁰ Gawlikowski, M. (1996) 'Thapsacus and Zeugma: the crossing of the Euphrates in antiquity', *Iraq* 58, 123-133
- ⁸⁰¹ Procopius, Buildings II, 7
- ⁸⁰² Sarre and Herzfeld, *Archäologische Reise in Euphrat und Tigris-Gebiet* I, 156-161
- ⁸⁰³ Ulbert, T. (1989) 'Villes et fortifications de l'Euphrate à l'époque paléochrétienne (IVe-VIe s.)' in Dentzer, J.-M., Augé, C. (ed.), *Archéologie et histoire de la Syrie* 2, 283-296 p291-2
- ⁸⁰⁴ XXIII 3,7
- ⁸⁰⁵ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, p196
- ⁸⁰⁶ *Ibid*, p368
- ⁸⁰⁷ Jones, A. H. M. (1971) *The cities of the Eastern Roman Provinces* Oxford, Appendix IV, Table XXXII
- ⁸⁰⁸ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, p 235
- ⁸⁰⁹ PWRE, Σια, col. 2067
- ⁸¹⁰ Ammianus Marcellinus 17, 10, 1
- ⁸¹¹ Sevin, V. (1989) *Excavations At Üçtepe / Üçtepe Kazıları* Istanbul
- ⁸¹² <http://www3.uakron.edu/ziyaret/>
- ⁸¹³ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58, pp24-5
- ⁸¹⁴ Sevin, V. (1989) *Excavations At Üçtepe / Üçtepe Kazıları* Istanbul; this booklet is very short and incomplete.

- ⁸¹⁵ Lightfoot, C. S. and Healey, J. F. (1991) 'A Roman veteran on the Tigris', *Epigraphica Anatolica* 17, 1-7, plate 1
- ⁸¹⁶ Sinclair, T. A. (1997) 'The site of Tigranocerta, II', *Revue des Études Arméniennes* 26, 51-118, pp64-5
- ⁸¹⁷ Procopius, Buildings 2.6; also Bell. Pers 2.5,1-4
- ⁸¹⁸ Sarre, F. and Herzfeld, E. (1911-1920) *Archäologische Reise in Euphrat und Tigris gebiet* Berlin pp172-4 and figs 78-9
- ⁸¹⁹ Geyer, B., Monchambert, J-Y (2003) *La basse vallée de l'Euphrate syrien du Néolithique à l'avènement de l'islam: géographie, archéologie et histoire* Beirut p277-279; see also Monchambert, J.-Y. (1984) 'Le futur lac du moyen Khabour', *Syria* LXI, 181-218
- ⁸²⁰ Chapot, V. (1907 (reprinted 1967)) *La frontière de l'Euphrate de Pompée à la Conquete arabe* Rome p340-342
- ⁸²¹ Cumont, F. (1917) *Etudes Syriennes* Paris p232-237
- ⁸²² Frézouls, E. (1955) 'Recherches historiques et archéologiques sur la ville de Cyrhus', *Annales archéologiques de Syrie* IV and V, 90-128
- ⁸²³ Procopius Buildings, II, 11
- ⁸²⁴ Procopius, Buildings, II, 1-3.
- ⁸²⁵ Zacharias Scholasticus VII.6: "...And they [the generals of Anastasius] begged of him that a city should be built by his command beside the mountain, as a refuge for the army in which they might rest, and for the preparation of weapons, and to guard the country of the Arabs from the inroads of the Persians and Saracens. And some of them spoke to him in favour of Dara, and some in favour of Ammodis (Amouda – see under 'fortresses' below). Then he sent a message to Thomas the bishop of Amida, and he despatched engineers who drew up a plan, and this holy Thomas brought it up with him to the king. And the king and the great men agreed that Dara should be built as a city..... And the king gave gold to Thomas the bishop as the price of the village which belonged to the Church; and he bought it for the treasury. And he liberated all the serfs who were in it, and granted to each of them his land and his house. And for the building of the church of the city he gave several hundred pounds of gold. And he promised with an oath that he would give with liberal hand whatever the bishop might expend, and that he would not disown the obligation. And at last he issued a royal decree, and in full detail, providing that the work of building the city should be carried out according to the direction of the bishop without delay, gain and profit thereby accruing to the craftsmen and slaves and peasants who were required for the collection of material there. And he sent a number of stonecutters and masons; and he commanded that no man should be deprived of the wages he earned, because he rightly perceived and cleverly understood that by that means a city could quickly be built upon the frontier. And when they began by the help of the Lord and commenced the work, there were there as overseers and commissaries over it ... the presbyters, and ... the deacons, and others from the clergy of Amida. And the bishop himself paid frequent personal visits to the place. And gold was given in abundance without any stint to the craftsmen and for work of every kind, at the following rate, the regular sum of four *keratin* a day for each workman, and if he had an ass with him, of eight. And consequently many grew rich and wealthy. And since the report was published abroad that the work was honest and that the wages were given, from the East to the West workmen and craftsmen flocked together. And the overseers who were over the work also received a liberal allowance, and their wallets were filled; And in two or three years the city was built, and, as we may say, suddenly sprang up on the frontier. And when Kawad heard of it, and sought to put a stop to the work, he was unable, for the wall was raised, and built high enough to be a protection for those who took refuge behind it. And a large public bath and a spacious storehouse were built. And a conduit was constructed which passed along the lower part of the mountain, and wonderful cisterns within the city to receive the water. And persons to hasten the work were frequently sent from the king to the bishop, and they all brought back excellent reports of his integrity and justice to the king; and he was greatly pleased with the man, and sent gold in answer to the man's requests, and fulfilled them without delay. And at last the number of hundred pounds which he sent was counted, and the bishop forwarded a written statement to the king, that, speaking in the presence of God, the money had been expended upon the work, and that no part of it remained in his hand or had been given to his Church. And he readily sent him a royal decree containing a receipt of the exchequer to the effect that all the gold which had been sent by him had been expended upon the building in the city. And Dara was completed, and it was named Anastasiopolis, after the name of the just king. And he swore by his crown that no statement of accounts should be required from Thomas or from his Church, either by himself or by any of his successors in the kingdom..."
- ⁸²⁶ Sinclair 377.
- ⁸²⁷ For a description of the surviving remains see Sinclair, Eastern Turkey Vol 3, p219ff. There is also a fine ruined church to the south of the town at Ambar. For Justinian and Dara see Croke, B. and Crow, J. (1983)

'Procopius and Dara', *Journal of Roman Studies* 73, 143-159, Crow, J. G. (1981) 'Dara, a late Roman fortress in Mesopotamia', *Yayla* 4, 11-20, Whitby, M. (1986a) 'Procopius' description of Dara' in Kennedy, Fa (ed.), *The defence of the Roman and Byzantine East 737-782*, Whitby, M. (1986b) 'Procopius and the development of Roman defences in upper Mesopotamia' in Freeman, P and Kennedy, D (ed.), *The defence of the Roman and Byzantine East 717-735*. Nicholson, O. (1985) 'Two notes on Dara', *American Journal of Archaeology* 89, 663-71.

⁸²⁸ Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London Vol2, p338

⁸²⁹ Schütte-Maischatz, A., Winter, E (2004) *Doliche - Eine Kommagenische Stadt und ihre Götter* Bonn, <http://www.kommagene.de/Doliche%20Literatur1.htm>

⁸³⁰ Edessa: the blessed city', p.7 Segal speaks of a Syriac chronicle (unidentified) which describes in idealised fashion the building of the city by Seleucus with four citadels in the corners of the city, palaces, temples and markets.

⁸³¹ Le Strange, G. (1905) *Lands of the Eastern Caliphate: Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur* Cambridge p103-4 where he recounts how Mukkadasi in the 10th century described the magnificent cathedral with mosaics on its vaults as one of the four wonders of the world. The Great Mosque of Al-Aqsa in Jerusalem apparently copies the plan of this church.

⁸³² <http://www.kultur.gov.tr/EN/BelgeGoster.aspx?17A16AE30572D3137A2395174CFB32E16863F99721CA420D>

⁸³³ Procopius, *Buildings* II, 7

⁸³⁴ Wagner, J. (1983) 'Provincia Osrhoenae: new archaeological finds illustrating the military organisation under the Severan dynasty' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 103-123

⁸³⁵ Segal, *ibid*, p.16

⁸³⁶ Labourt, J. (1904) *Le christianisme dans l'empire perse sous la dynastie sassanide, 224-632* Paris. For a brief history of the school see http://www.nestorian.org/the_school_of_edessa.html.

⁸³⁷ Recounted by Eusebius in his Church History written circa AD 330, apparently using the state archive of Edessa; the letter is now generally considered to be a forgery. A translation of the supposed correspondence is available online at <http://www.comparative-religion.com/christianity/apocrypha/new-testament-apocrypha/1/1.php>.

⁸³⁸ Evagrius 175 (Whitby, 2000 p226); Berchem, M., van, and Strzygowski, J. (1910) *Amida. Matériaux pour l'épigraphie et l'histoire musulmanes du Diyar-Bekr* Heidelberg

⁸³⁹ Joshua the Stylite, 86 (Trombley and Watt, p.103)

⁸⁴⁰ Procopius, *Buildings*, II, 7

⁸⁴¹ *Expositio Totius Mundi et Gentium*, XXII : «...Sunt ergo Nisibis et Edessa, quae in omnibus viros habent optimos et in negotio valde acutos et bene venantes. Praecipue et divites et omnibus bonis ornati sunt : accipientes enim a Persis ipsi in omnem terram Romanorum vendentes et ementes iterum tradunt... »

⁸⁴² * Hogarth, D. (1909) 'Carchemish and Europos', *Annals of Archaeology* II, 4

⁸⁴³ Procopius, *Buildings*, 2.9

⁸⁴⁴ Jones, A. H. M. (1971) *The cities of the Eastern Roman Provinces* Oxford 222/3 and note 14 p443

⁸⁴⁵ *Historia religiosa* I 1

⁸⁴⁶ Hah is "Khakhe" in Kurdish and now called Anthi. Bell, G. L. (1982) *The churches and monasteries of the Tur 'Abdin* London, p111-117, Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, p241 and 377

⁸⁴⁷ Bell, G. L. (1924) *From Amurath to Amurath: a journey along the banks of the Euphrates* London, pp319-322

⁸⁴⁸ Palmer, A. (1990) *Monk and mason on the Tigris frontier* Cambridge; see Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, 252-258.

⁸⁴⁹ Procopius, *Buildings*, II, 7

⁸⁵⁰ XXIII 3,1

⁸⁵¹ Segal, JB 1953 'Pagan Syriac monuments in the Vilayet of Urfa', *Anatolian Studies*, iii 107-112; Mango C, *1980 Byzantium: the empire of the new Rome*, 1980 (pb 1994 – p89)

⁸⁵² Preusser, C. (1911) *Nordmesopotamische Baudenkmaler altchristliches und islamisches Zeit* Leipzig p59-63

⁸⁵³ Zadok, R. (1989) 'Notes on the historical geography of Mesopotamia and northern Syria (1000-400 BC)', *Abr-Nahrain* 27, 154-169 p161-2

⁸⁵⁴ Millar, F. (2006) *A Greek Roman Empire: power and belief under Theodosius II (408-450)* Berkeley p110/111.

⁸⁵⁵ Procopius, *Buildings*, 2.9.10

- ⁸⁵⁶ *Hierapolis de Syrie*, Louvain, 1943
- ⁸⁵⁷ Hogarth, D. G. (1907/8) 'Hierapolis Syriae', *Annals of the British School at Athens* 14, 183-196,
- ⁸⁵⁸ Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London, Vol 1, pp238-243
- ⁸⁵⁹ Hammond, D. (1987) *Byzantine Northern Syria, AD 298-610: integration and disintegration*, thesis, UCLA p32
- ⁸⁶⁰ Procopius of Gaza, *Panegyricus in Anastasium*; Migne, *Patrologia Graeca* LXXXVII col 2817
- ⁸⁶¹ Procopius, *Buildings*, II, 9 and see preceding note.
- ⁸⁶² Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London p249
- ⁸⁶³ For Marutha's life see Marcus, R. (1932) 'The Armenian Life of Marutha of Maipherkat', *The Harvard Theological Review* 25, 47-71.
- ⁸⁶⁴ Hammond, D. (1987) *Byzantine Northern Syria, AD 298-610: integration and disintegration*, thesis, UCLA 242-264 Hammond, D. (1987) *Byzantine Northern Syria, AD 298-610: integration and disintegration*, thesis, UCLA
- ⁸⁶⁵ *Ecclesiastical History*, Book vii. 8; revised by A.C. Zenos, *A select library of the Nicene and Post-nicene Fathers'*, Grand Rapids, Michigan
- ⁸⁶⁶ Yakut iv.707, quoted in the *Encyclopedia of Islam* (Brill, 1991), article on 'Mayyafarkin'. Yakut was a Syrian geographer from Hamas who lived from AD 1179 to 1229.
- ⁸⁶⁷ Procopius, *Buildings*, III.2: "...For the inhabitants of the city, knowing well that they would not be able to hold out even for one short moment against the attacking force, when they learned that the army of the Medes [i.e. the Sassanian Persians] had arrived close by, immediately approached Cabades [Kavad] in company with Theodorus, who at that time was satrap of Sophanene, clothed in his robes of office, and placed themselves and Martyropolis at his disposal, bearing in their hands the public taxes of two years. And Cabades was pleased with this and withheld his hand from the city and he let the people go unharmed, neither inflicting any damage nor changing the form of government, but he appointed Theodorus himself their satrap, entrusting to him, since he had shown himself not indiscreet, the tokens of the office, with the intention that he watch over the land for the Persians. Then he led his army forward, captured Amida by siege and marched back into the land of the Persia.."
- ⁸⁶⁸ Sinclair (1989) *Eastern Turkey: an architectural and archaeological survey*, 377
- ⁸⁶⁹ Whitby, M. (1984) 'Procopius' description of Martyropolis', *Byzantinoslavica* 45, 177-182. The site was examined in detail by me in April 2008.
- ⁸⁷⁰ Procopius, *ibid*
- ⁸⁷¹ See, for example, Ammianus Marcellinus who refers to 'this ignoble treaty' at 25.7.13
- ⁸⁷² Olivier, G. (1801-1807) *Voyages dans l'empire ottoman, l'Egypte et la Perse* Paris Vol 4, p246
- ⁸⁷³ Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London Vol2 p335
- ⁸⁷⁴ Fiey, J.-M., *Nisibe: métropole syriaque orientale et ses suffragants des origines à nos jours*, Louvain, 1977.
- ⁸⁷⁵ Russell, P. S. (2005) 'Nisibis as the background to the life of Ephrem the Syrian', *Hugoye* 8,
- ⁸⁷⁶ However, a survey of the city's history is included in Russell, PS (2005) 'Nisibis as the background to the Life of Ephrem the Syrian' *Hugoye: journal of Syriac studies* (online), Vol. 8, No. 2
- ⁸⁷⁷ Fiey, p41
- ⁸⁷⁸ *Reisen in Kleinasien und Nordsyrien*, Berlin 1890, pp124, 193
- ⁸⁷⁹ *Inscriptions from Eastern Asia Minor*, JHS XVIII, 1898, 316, inscriptions 21 and 22.
- ⁸⁸⁰ Especially Konrad, M (2001) *Resafa V*, Mainz. A recent article provides a complete bibliography: Ulbert, T. (2008) 'Resafa - Pilgerort in der Wüste', *Antike Welt* 42-48
- ⁸⁸¹ Sauvaget, J. (1939) 'Les Ghassanides et Sergiopolis', *Byzantion* 14, 115-130
- ⁸⁸² Fowden, E., Key, (1999) *The Barbarian Plain: Saint Sergius between Rome and Iran* Berkeley
- ⁸⁸³ Procopius, *Buildings* II, 9, 3-7
- ⁸⁸⁴ Le Strange, G. (1905) *Lands of the Eastern Caliphate: Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur* Cambridge p106
- ⁸⁸⁵ 13.38; see Greatrex and Lieu, REFPW, p16, where a reference from the Chronicle of Edessa also shows that the city formed part of Osrhoene. According to this Chronicle (section 35) Theodosius rebuilt the city in 381.
- ⁸⁸⁶ Berg, P., van (1972) *Corpus Cultus Deae Syriae* Leiden p115-117
- ⁸⁸⁷ Taylor, J. G. (1868) 'Journal of a tour in Armenia, Kurdistan and upper Mesopotamia', *Journal of the Royal Geographical Society* 38, 281-361
- ⁸⁸⁸ McEwan, C., et al (1958) *Soundings at Tell Fakhariyah* Chicago
- ⁸⁸⁹ <http://www.fecheriye.de/>
- ⁸⁹⁰ http://en.wikipedia.org/wiki/Tell_el_Fakhariya

- ⁸⁹¹ Hammond, D. (1987) *Byzantine Northern Syria, AD 298-610: integration and disintegration*, thesis, UCLA, p13, n19 citing Koriun, 1927 "Beschreibung des Lebens und Todes des hl. Lehrers Mesrop", von Dr Simeon Weber in Bibliothek des Kirchenvater 57, Munich, p207
- ⁸⁹² Procopius, *Wars*, I, 17, 22.
- ⁸⁹³ The limited work done is discussed by Goell, T. (1974) 'Samosata Archeological Excavations, Turkey, 1967', *National Geographic Society Research Reports* 1967 projects, 83-109. Schütte-Maischatz, A., Winter, E (2004) *Doliche - Eine Kommagenische Stadt und ihre Götter* Bonn
- ⁸⁹⁴ NH V 87
- ⁸⁹⁵ However, a Σοῦμα appears under Mesopotamia 10 which is otherwise unknown and might be misspelt and misplaced.
- ⁸⁹⁶ Jones, A. H. M. (1971) *The cities of the Eastern Roman Provinces* Oxford p460 n54
- ⁸⁹⁷ Chronicle of Pseudo-Joshua 74 (Trombley and Watt, p90)
- ⁸⁹⁸ Procopius, *Buildings*, II, 9
- ⁸⁹⁹ Ainsworth, W. F. (1888) *A personal narrative of the Euphrates expedition* London pp275-6. He and Chesney found "...traces of an ancient paved causeway which led from the city to where was the ford, and was continued on the other side. We also found pieces of solid masonry in the bed of the river, so that there had evidently been a bridge of boats here in olden times. The Arabs call them *Rasasah*, because the fastenings of the bridge to the piers were clamped with lead. The causeway at *Thapsacus* [he was convinced that this was the site of the ancient Thapsacus mentioned by Ptolemy] is of great antiquity.... Out of the woods on the opposite side rose a castellated building, called *Arakla* by the Arabs, and apparently ancient Zenodotium, on the prolongation of the causeway northwards."
- ⁹⁰⁰ Ulbert, T. (1989) 'Villes et fortifications de l'Euphrate à l'époque paléochrétienne (IVe-VIIe s.)' in Dentzer, J-M, Augé, C. (ed.), *Archéologie et histoire de la Syrie* 2, 283-296 pp284-293
- ⁹⁰¹ Procopius, *Buildings*, II, 5.2.
- ⁹⁰² Preusser, C. (1911) *Nordmesopotamische Baudenkmaler altchristliches und islamisches Zeit* Leipzig p57
- ⁹⁰³ <http://www.gerty.ncl.ac.uk/> - photos T-135 to 139 (Viranşehir, the Octagon)
- ⁹⁰⁴ Lauffray, J. (1983-91) *Halabiyya-Zenobia: place forte du limes oriental et la haute-Mesopotamie au VIeme siecle* Paris
- ⁹⁰⁵ Leriche, P. (2008) 'Halebiyé-Zénobie menacé d'engloutissement', *Archéologia* 457, 24-30
- ⁹⁰⁶ Blétry, S. Ibid. 'Reprise des recherches archéologiques à Zénobia-Halabiyé', 457, 31-33
- ⁹⁰⁷ Procopius, *Buildings* II 8,8-25; see also Kennedy, D. and Riley, D. (1990) *Rome's Desert Frontier from the air* Austin pp117-119 and figs 65-67
- ⁹⁰⁸ *Wars* II, v.4-7
- ⁹⁰⁹ Önal, M. (2007) *Clay seal impressions of Zeugma / Kil Mühür Baskıları* Gaziantep
- ⁹¹⁰ Wagner, J. (1976) *Seleukeia am Euphrat/Zeugma* Wiesbaden
- ⁹¹¹ Cumont, F. (1917) *Etudes Syriennes* Paris
- ⁹¹² Kennedy, D. (1998) *The twin towns of Zeugma on the Euphrates: rescue work and historical studies* Ann Arbor
- ⁹¹³ According to the Notitia Dignitatum the headquarters of the Legio IV Scythica had moved to Oresa in Syria.
- ⁹¹⁴ Procopius, *Buildings* II, 9
- ⁹¹⁵ Ammianus Marcellinus XVIII, 8.1
- ⁹¹⁶ Ammianus Marcellinus XXI, 7.6
- ⁹¹⁷ Comfort et al 2000, p117.
- ⁹¹⁸ Comfort, A., Abadie-Reynal, C. and Ergeç, R. (2000) 'Crossing the Euphrates in antiquity: Zeugma seen from space', *Anatolian Studies* 50, 99-126
- ⁹¹⁹ Whitby, M. (1983) 'Arzanene in the late sixth century' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 205-217, p.208, n.22 citing John of Ephesus, *Ecclesiastical History*, VI.36 and Theophylact Simocatta, I.12.1 and IV.2.1
- ⁹²⁰ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London; p381 and addendum on p428
- ⁹²¹ Whitby, M. (1988) *The emperor Maurice and his historian* Oxford
- ⁹²² Poidebard, A. (1928) 'Mission archéologique en haute Djezireh', *Syria* IX, 216-223 p222; referring to Mouterde's article in *Syria*, 1928, p110.
- ⁹²³ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London 3, pp301-3. Lightfoot however observes that the brick gateway is reminiscent of other late Roman architecture in the

- region, especially Tilli and Neocaesarea on the Euphrates, Lightfoot, C. S. (1986) 'Tilli - a late Roman Equites fort on the Tigris' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East 509-529*, p.517
- ⁹²⁴ ETAAS p278
- ⁹²⁵ *Wars* I.21.9
- ⁹²⁶ Whitby, M. (1988) *The emperor Maurice and his historian* Oxford p283 n10
- ⁹²⁷ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, p371-2
- ⁹²⁸ *Buildings* II, 4.,14
- ⁹²⁹ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris, p59, fig vii.
- ⁹³⁰ Wiessner, G. (1980) *Nordmesopotamische Ruinenstätten* Wiesbaden
- ⁹³¹ Jones 1st ed 223; Dillemann 109; Lauffray 1983, p55
- ⁹³² According to the ND there was a cavalry unit called the *Equites scutarii indigenae Pafenses* based at 'Assara' which may be the same as 'Massara', a variant on Maserte.
- ⁹³³ Whitby, M. (1988) *The emperor Maurice and his historian* Oxford, p284; the fort was controlled by the Persians following the fall of Dara in 573 but recovered by the generals of Maurice in 587. Possibly also 'Sina Judaeorum', also the base of a military unit known from the ND (see Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels p13 n5): *Equites promoti indigenae*, but this second unit is supposed to have depended from the 'Dux Osrhoenae' while that at Assara depended from the 'Dux Mesopotamiae' so the identifications are uncertain. One of the otherwise unidentified fortresses mentioned by Procopius in the extract quoted at the beginning of this chapter was 'Sinās', which is likely to have been the same as the site mentioned in the ND and therefore placed by Honigmann in Osrhoene
- ⁹³⁴ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London Vol 3, p 324 and 376
- ⁹³⁵ E.g. Hoffmann, G; see note 4 on p12 of Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels
- ⁹³⁶ Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58
- ⁹³⁷ ETAAS Vol 3, p227
- ⁹³⁸ These events are recounted in Greatrex (1998) pp100/101.
- ⁹³⁹ Wiessner, G. (1980) *Nordmesopotamische Ruinenstätten* Wiesbaden
- ⁹⁴⁰ *Buildings*, 2.3.8: "...[Sisauranon] is separated from the city of Daras by a journey of two days for an unencumbered traveller, and is about three miles distant from Rhabdios. At first this region was unguarded and was of no consequence whatever to the Romans. For it had never been garrisoned nor had it been fortified, and it had not received any other care from them. Indeed it was to the Persians that those who farmed the "Field" which I just mentioned paid fifty staters annually, just as though they were paying ordinary taxes, on condition that they might possess their own lands free from fear and be able to profit by the crops which grew upon them. But the Emperor Justinian arranged to alter all this for their benefit. He encircled Rhabdios with a wall built along the crest of the rocks which rise there, thus making the place inaccessible for the enemy, that is, with the assistance of nature. Then, since those who dwelt there had a scanty supply of water — for no spring was to be found on the summit of the rocks — he constructed two cisterns and dug channels into the rock there in many directions, so that he made many reservoirs for water, in order that when the rain-water collected in these the inhabitants might be able to use them in security, and then they might not be captured easily when hard pressed for lack of water."
- ⁹⁴¹ Bell, G. L. (1924) *From Amurath to Amurath: a journey along the banks of the Euphrates* London, pp306-308
- ⁹⁴² Taylor, J. G. (1865) 'Travels in Kurdistan', *Journal of the Royal Geographical Society* 35, 21-58, pp51-2
- ⁹⁴³ Nau, F., (trans. and ed.) (1915-7) 'Histoire de Jacques le Reclus (Résumé de monographies syriaques, V)', *Revue de l'Orient Chrétien* 2nd series 10 (20), 3-12; Dodgeon, M. H. and Lieu, S. N. (1991) *The Roman eastern frontier and the Persian wars (AD226-363)* London, p191
- ⁹⁴⁴ See Tilli below.
- ⁹⁴⁵ *Buildings*, II.4.3: see Ch 4-1 above, p91.
- ⁹⁴⁶ Especially, Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels
- ⁹⁴⁷ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris p227
- ⁹⁴⁸ A late Roman/Byzantine geographer possibly of the 6th century; Georgii Cyprii *Descriptio Orbis Romani* (1890), editor Heinrich Gelzer
- ⁹⁴⁹ Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels, map entitled 'Mesopotamia and Armenia Quarta'.
- ⁹⁵⁰ Honigmann, *ibid* p24

- ⁹⁵¹ John of Ephesus was a Syriac historian who lived from about 507 to 586 and was born in Amida (Diyarbakır).
- ⁹⁵² Edition of J-B Chabot, Paris 1899-1910, p360
- ⁹⁵³ In this Whitby seems to rely in part on Stein, E. (1919) *Studien zur Geschichte des byzantinischen Reiches, vornehmlich unter den Kaisern Justinus II und Tiberius Constantinus* Stuttgart. On p97 Stein says "...so erbaute er [Mauricius] in Arzanene dem Sophenischen Gebiet gegenüber auf den Berge Samechart ein gleichnamiges Kastell, das Georg Cyprii [p48, 944 Gelzer] als καστρον Σαμοχαρτων verzeichnet und wahrscheinlich erhielt in Zusammenhang mit dieser Tätigkeit damals Monocarton dem Kaiser zu Ehren den Namen Tiberopoliis, den es 587 (Theophylact Simocatta I.14,6) führt."
- ⁹⁵⁴ Honigmann, E. (1935) *Die Ostgrenze des Byzantinischen Reiches von 363 bis 1071* Brussels p20; Sachau, E. (1883) *Reise in Syrien und Mesopotamien* Leipzig
- ⁹⁵⁵ Thévenot de (1687) *The travels of Monsieur de Thevenot into the Levant* London part 2, book 1 pages 39-49 (20 July)
- ⁹⁵⁶ Dillemann, L. (1962) *Haute Mésopotamie orientale et pays adjacents* Paris p228
- ⁹⁵⁷ De' Maffei, F. (1986) 'Fortificazioni di Giustiniano sul limes orientale: monumenti e fonti' in (ed.), *The 17th International Byzantine Congress - major papers 237-278*, p239
- ⁹⁵⁸ Honigmann, E. (1929) 'Note sur deux localités de la Syrie', *Syria* X, 283
- ⁹⁵⁹ Fowden, E., Key, (1999) *The Barbarian Plain: Saint Sergius between Rome and Iran* Berkeley, p119/120
- ⁹⁶⁰ Michael the Syrian (1899-1910) *Chronique de Michel le Syrien, patriarche Jacobite d'Antioche (1166-1199)* Paris, III, 240, 249 and 264
- ⁹⁶¹ Sachau, E. (1883) *Reise in Syrien und Mesopotamien* Leipzig, p388
- ⁹⁶² Poidebard, A. (1934) *La trace de Rome dans le désert de Syrie: le limes de Trajan à la conquête arabe* Parispl. CXVII.
- ⁹⁶³ Kennedy, D. and Riley, D. (1990) *Rome's Desert Frontier from the air* Austin p121
- ⁹⁶⁴ Zachariah of Mitylene 9.2; see discussion in Chapter 4-1, route 5.
- ⁹⁶⁵ Theophylact Simocatta iii, 15.11
- ⁹⁶⁶ Lehmann-Haupt, K.-F. (1910 (Vol 1) and 1926 (Vol 2)) *Armenien Einst und Jetzt* Berlin
- ⁹⁶⁷ Lightfoot, C. S. (1986) 'Tilli - a late Roman Equites fort on the Tigris' in Freeman and Kennedy (ed.), *The defence of the Roman and Byzantine East 509-529*, esp. p518; Le Strange (1905) *Lands of the Eastern Caliphate: Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur* p113.
- ⁹⁶⁸ Velibeyoğlu, J., Schachner, A. and Schachner, Ş. (2002) 'Erste Ergebnisse eines Surveys im Botan-tal und in Çattepe (Tilli)' in Tuna, N and Velibeyoğlu, J (ed.), *Salvage project of the archaeological heritage of the Ilisu and Carchemish dam reservoirs: activities in 2000 (Ilisu ve Karkamis Baraj Gölleri altında kalacak arkeolojik kültür varlıklarını kurtarma projesi: 2000 yılı çalışmaları)* 783-857
- ⁹⁶⁹ Lightfoot, op.cit.; Algaze, G. (1989) 'A new frontier: first results of the Tigris-Euphrates archaeological reconnaissance project, 1988', *Journal of Near Eastern Studies* 48, 241-281, 250-254.
- ⁹⁷⁰ Ammianus Marcellinus, 25.9.3; see also Lightfoot, C. S. (1983) 'The site of Roman Bezabde' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 189-204
- ⁹⁷¹ Lightfoot, C. S. and Healey, J. F. (1991) 'A Roman veteran on the Tigris', *Epigraphica Anatolica* 17, 1-7, plate 1
- ⁹⁷² Deichmann, F. W. and Peschlow, U. (1977) *Zwei spätantike Ruinenstätten in Nordmesopotamien* München p33
- ⁹⁷³ Preusser, C. (1911) *Nordmesopotamische Baudenkmaler altchristliches und islamisches Zeit* Leipzig p54 and T66
- ⁹⁷⁴ Howard-Johnston, J. D. (1983) 'Byzantine Anzitene' in Mitchell, S (ed.), *Armies and frontiers in Roman and Byzantine Anatolia* 156, 239-290p249
- ⁹⁷⁵ Sinclair, T. A. (1989) *Eastern Turkey: an architectural and archaeological survey* London
- ⁹⁷⁶ Greatrex and Lieu, REFPW, p18/19
- ⁹⁷⁷ *Journal of the Royal Geographical Society* 35 (1867) p37
- ⁹⁷⁸ Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50 p28
- ⁹⁷⁹ AM 18.1.1
- ⁹⁸⁰ Comfort and Ergeç, *ibid*, p27
- ⁹⁸¹ Renwick Metheny, J. (1907) 'Road notes from Cilicia and North Syria', *Journal of the American Oriental Society* 28, 155-163 p160
- ⁹⁸² Comfort, A. and Ergeç, R. (2001) 'Following the Euphrates in antiquity: north-south routes around Zeugma', *Anatolian Studies* 51, 19-50, p37