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CONSTANTINOPLE, IMPERIAL CAPITAL OF THE FIFTH AND SIXTH CENTURIES

BRYAN WARD-PERKINS

At the same time as the early barbarian *sedes regiae* were being established in the West, Constantinople became the preeminent and unchallenged imperial city of the East.¹ It had already been given special privileges during the fourth century, particularly under Constantius II, which raised it to a position parallel to that of Rome and differentiated it from other imperial residences.² But it was in the early fifth century, above all under the young and unwarlike emperors Arcadius (395-408) and Theodosius II (408-50), that it became the more-or-less constant residence of the emperors; in the fourth century the emperor with his *comitatus* had very often been on the move, or had been resident in another city, such as Antioch.³

1. I am very grateful to Kate Ward-Perkins for helping to tighten up the thinking and wording of this article.

2. DAGRON, 1974. Specifically, the city was given a Senate, a *praefectus urbi*, and (in 379) patriarchal status for its bishop. It also became, with Constantine, the usual burial-place for emperors (at the church of the Holy Apostles).

3. Even before Arcadius' accession, the Gothic crisis in the Balkans, following the disastrous battle of Adrianople in 378, had already drawn Theodosius I (379-95) to spend most of his reign in Constantinople. (I am grateful to Terry Brown for this point.)

For over two centuries, between the accession of Arcadius (395) and that of Heraclius (610-41), who again assumed the habit of campaigning in person, Constantinople had an emperor in residence almost without interruption; and even after the emperors returned to campaigning, it remained their sole stable base –seventh-century and later emperors did not revert to the fourth-century habit of moving between different cities.⁴ After 395, Constantinople became a fixed imperial capital for the East, of a type unknown in East or West during the fourth century; and from 476, with the deposition of the last western emperor, it assumed the nominal headship of the entire post-Roman Commonwealth. After Justinian's invasions of Africa, Italy and southern Spain, this nominal headship was of course converted into very real power over great swathes of western territory.

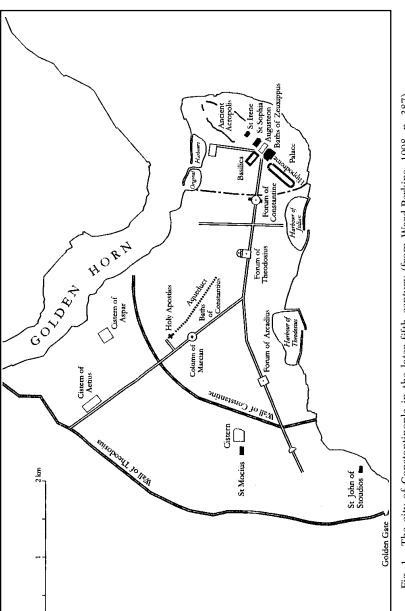
In these circumstances, it is hardly surprising that Constantinople was built up as an imperial city of extraordinary wealth and splendour during the fifth and sixth centuries –with an outstanding collection of buildings, both secular and ecclesiastical; a hugely expensive and complex water– and food-supply; and a unique system of defences able to guarantee the security of the city against the turmoil of the Balkans (fig. 1).⁵

Moreover, Constantinople's rise as a political capital and as the sole focus for imperial and court display came at a time when the economy of the eastern Mediterranean was booming. Rural surveys in the Aegean region and in the Near East, and urban excavation in cities like Corinth, Athens, Ephesus, Gerasa and Caesarea, all point to the fifth and at least the early sixth century as a time of considerable prosperity. Constantinople ruled over, taxed, and benefited from this wealth.⁶

4. There is one exception, Constans II (641-68), who at the end of his reign seems to have seriously contemplated shifting the imperial residence to Syracuse in Sicily (then much less troubled by the Arabs than Constantinople and the Aegean).

5. Here, and for much of what follows, I am heavily dependent on MANGO, 1985, and on the learned and evocative lectures on the city that Cyril Mango has given in Oxford. See also (for water, food and defences): MANGO, 1995; DURLIAT, 1990, p. 185-278; and CROW, 1995.

6. WARD-PERKINS (forthcoming) for a general survey, with further references.





Because it was a 'Second Rome' and imitated its predecessor in some of its buildings, we tend to think of Constantinople as a much smaller and less impressive imitation of the older city. However, a comparison of the outline plans of the two (fig. 2) shows that, while it was indeed smaller, Constantinople was by no means dwarfed by Rome. In terms of population, Rome in its heyday may have held close to a million inhabitants, but this number perhaps decreased during the third and fourth centuries, and certainly fell dramatically during the fifth and sixth, down to a probable figure of under 100,000 by AD 600.⁷ On the other hand, Constantinople in about 500 may have housed a population of around half a million.8 Exactly when Constantinople achieved demographic sorpasso over an ever-diminishing Rome cannot be known; but few, I think, would doubt that by the late fifth and throughout the sixth century, the eastern capital was the most populous city of the whole Roman world.

In the visual impact of its site –set on a ridge overlooking the Golden Horn and Bosphorus– Constantinople had a considerable advantage over the low-lying, valley-bottom city of Rome. Indeed it is possible that as a site chosen at will by Constantine, the location of Constantinople was in part selected precisely for its scenographic potential; by contrast, Rome had evolved as a centre of power over the centuries, with the result that each of its rulers had to make the best of an inherited and established site. The new capital however never quite matched Rome in the number and size of its buildings. Rome contained the largest building of the ancient world, the Colosseum, and an extraordinary array of huge imperial *fora* and *thermae*, such as those of Caracalla and Diocletian. Nevertheless the Theodosian land-walls of

7. DURLIAT, 1990, p. 112, argues for a first- to fourth-century population of Rome of '600,000 comme nombre minimum vraisemblable.' KRAUTHEIMER, 1980, p. 65, hazards a guess for the population of the city in *c*. 600 as 'perhaps 90,000' (DURLIAT, 1990, p. 160, while pointing out that this figure cannot be substantiated, agrees that it is a reasonable guess). This is still a very large city in medieval terms. The persistence of a substantial population (and of a relatively complex economy) during the seventh century and later, is confirmed by recent archaeological research: see the papers collected in PAROLI and DELOGU 1993.

8. MANGO, 1985, p. 51, estimates the size of Constantinople's population at its highest as 300 to 400,000. DURLIAT, 1990, p. 259-261 & 269, argues for a higher figure, of over 500,000 (perhaps 600 to 650,000).

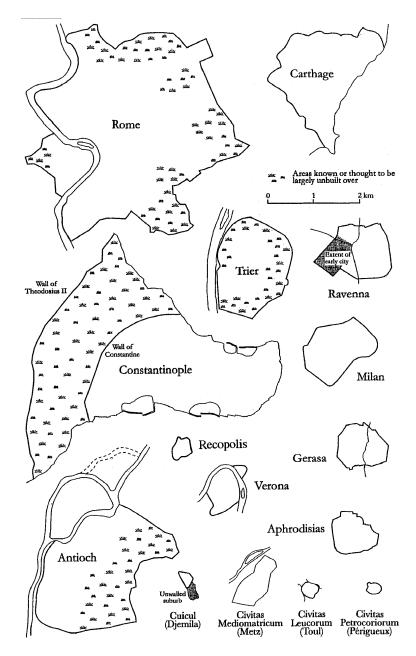


Fig. 2. Fifteen cities of the Late Empire and Early Middle Ages compared. (Based on Ward-Perkins, 1998, p. 374, with Recopolis added.)

Constantinople, though considerably shorter than those of Rome (some five-and-a-half kilometres in length, as opposed to *circa* twenty), are undoubtedly the most impressive (and successful) defences ever erected in the Roman period. They consisted of a wide water-filled ditch, engineered across the top of the ridge, a triple line of walls of increasing height, and huge closely-spaced towers dominating it all from above (fig. 3). Equally, Justinian's Hagia Sophia is considerably larger than any other church of the late antique world, even including the huge fourth-century imperial basilicas in Rome of St. Peter and St. Paul (fig. 7).⁹

With the exception of the Land Walls, Hagia Sophia, and a few other churches, the ancient monuments of Constantinople have generally fared much less well than those of Rome, and it is hard to recapture their original impressive size from the broken bits and partial drawings that survive. For example, I had always assumed, knowing it only from the recorded drawings and its surviving but badly-battered base, that the early-fifth-century column of Arcadius that stood in his forum in Constantinople until its demolition in 1715, was a smaller imitation of the columns of Trajan and Marcus Aurelius in Rome (fig. 4). However, in the sixteenth century it was measured with care by the admirable Pierre Gilles, who was unable to take a straight measurement by plumb-line on the outside (because of the suspicion of the Turks), but succeeded in measuring and recording the height of the massive individual blocks, as he ascended the internal spiral staircase. Because the exact length of the foot that Pierre Gilles was using is uncertain, the total height of the column of Arcadius can only be estimated. It is clear nevertheless that far from being a smaller imitation of the two columns in Rome, it was as large, or even larger than either of them.¹⁰ Arcadius' spiral column was also accompanied in Constantinople by a similar but earlier

^{9.} Hagia Sophia is shorter and a little narrower than Old St. Peter's and S. Paolo fuori-le-mura, but it is much taller and encloses a larger cubic space.

^{10.} GYLLIUS, 1561, p. 207-211. From this account KOLLWITZ, 1941, p. 25 calculates the height of Arcadius' column as c. 50 m; GIGLIOLI, 1952, p. 11-12 as 42.5 m. The heights of the columns of Trajan and Marcus Aurelius are 38.88 m and 41.15m respectively. Giglioli reproduces (in his fig. 1) a sixteenth-century drawing of Cons-

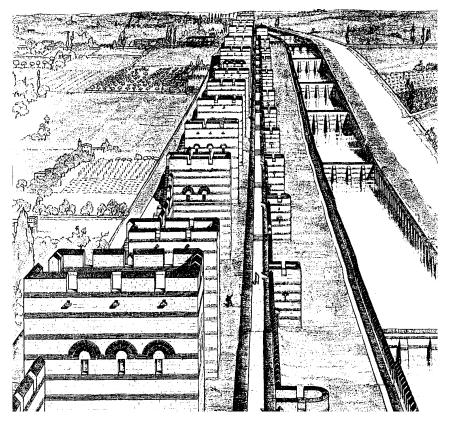


Fig. 3. The land-walls of Constantinople in their heyday, as reconstructed by Krischen 1938, Tafel 1.

column of Theodosius I. Sadly nothing of this monument survives except a few fragments of the spiral frieze, and it disappeared at the very beginning of the sixteenth century before any detailed descriptions or measurements of it were made; but there is every

tantinople, that shows the column of Arcadius dominating the skyline of the city to the west. Arcadius' column had 13 (broad) spirals to its narrative frieze, as opposed to the 23 and 21 narrower spirals of the columns of Trajan and Marcus Aurelius. The lesser number of bands probably make the Constantinopolitan column look smaller in reproduction than the columns in Rome.

reason to assume that it was on a scale similar to that of Arcadius, and therefore also similar to its predecessors in Rome.¹¹

As in imperial Rome, it is sometimes the size rather than the impeccable good taste of Constantinople's monuments that impresses us. The giant Gorgon heads which survive reused in Justinian's Basilica Cistern (fig. 5), and the huge Proconnesian columns of the Forum of Theodosius (393), each carved to look like a gigantic wooden club (fig. 6), both smack more of Cecil B. DeMille than of Phidias. The clubs come complete with loppedoff side-shoots and crudely-executed hands grasping them around the top (fig. 6).

More obviously than in Rome, the monuments of Constantinople were arranged in a linear fashion along a triumphal route into the city, culminating in a grandiose central square, the Augusteion (fig. 1). Sixth-century visitors coming by land from the West would enter the city through the great gilt doors of the 'Golden Gate', flanked by marble towers and surmounted by imperial statues; and then proceed some five or six kilometres down a monumental street, the Mese, much of it flanked by colonnaded marble porticoes. Along the way they would pass through a series of forum-squares, of which the most spectacular were the fora of Arcadius, of Theodosius and of Constantine -each built around a monumental column crowned with a bronze statue.¹² Finally they would arrive at the Augusteion, itself containing a gigantic bronze statue of the mounted Justinian, and flanked by the Basilica, the Senate-House, the Baths of Zeuxippus, the entrance to the Great Palace, and last but not least, by the Great Church (Hagia Sophia).¹³

Constantinople, then, was a city with individual monuments and a cityscape to match indeed occasionally even to surpass,

13. For an account of many of these squares and monuments, see BAUER, 1996, p. 143-268.

^{11.} The surviving fragments are visible in the partially-exposed foundations of a sixteenth-century bath-building, and it is likely that much more of the column lies broken-up, reused and hidden in the same place. If so, they could at some future date be extracted, and Theodosius' Column might even be reconstructable.

^{12.} Those entering by the Adrianople Gate joined the Mese halfway along and missed the Forum of Arcadius; but passed instead the Column of Marcian (which was probably set in its own forum-square) and Constantine's Holy Apostles, built on the highest point of the city.



Fig. 4. The column of Arcadius in Constantinople, as recorded in a drawing (now in the Bibliothèque Nationale of Paris), executed before the demolition of all but its base in 1715.



Fig. 5. Giant marble Gorgon-head, reused (upside-down) as the base for a column in the Basilica Cistern. The original location of these heads –of which two are reused in the cistern, and one is in the garden of the Archaeological Museum– is unknown; but their reuse in the Basilica Cistern might mean that they came from nearby, just possibly from Constantine's Forum.



Fig. 6. Top of one of the columns from the Forum of Theodosius, in the form of a huge wooden club, with lopped side-shoots, grasped by the fingers of a giant hand.

those of the old capital, although in terms of overall size and overall numbers of huge monuments, it was never the equal of Rome. However, in the fifth and into the sixth century Constantinople was a city that was expanding in both size and splendour, whereas in Rome the city's monuments were no longer being added to in any substantial way, while some of them seem to have been already in a serious state of decay.¹⁴ Moreover the size of buildings, which in Rome's case was often inherited from earlier days, was not the only thing to impress contemporaries. They were also interested in artistic and architectural innovation; and there is no doubt that by the later fifth century it was Constantinople, not any western centre, that was the style-leader. For example, the churches of Constantinople made the marble carving of nearby Proconnesos –whether simple chancel-screens or elaborate basket-work capitals for prestige projects- fashionable throughout the eastern Mediterranean, and even ensured that

^{14.} For limited new work and for decay in Rome: WARD-PERKINS, 1984, p. 38-48; MENEGHINI and SANTANGELI VALENZIANI, 1996, p. 78-80. The last known major secular building-project in Rome was the Honorian strengthening of the walls.

they were exported as far afield as Ravenna, Rome and North Africa.¹⁵

If we shift the focus of comparison away from imperial Rome and towards the capitals of the fifth- and sixth-century West, Constantinople is in a league all of its own, both in terms of size, and in terms of splendour. The most obvious comparison is with Ravenna, the residence of a western co-emperor through most of the fifth century and then the capital of the powerful Ostrogothic kingdom. Because of the excellent state of preservation of its late antique churches, and even more importantly of their wall-mosaics (whereas those of Constantinople were all destroyed by Iconoclasm), Ravenna now occupies a unique position in the study of fifth- and sixth-century art and architecture. But Ravenna, magnificent though it was in western terms, did not begin to match the splendours of Constantinople. By comparison it was a small town (fig. 2), and it had only a very low city-wall -its main defence being its unpreposessing site within the marshes and water-ways of the Po delta. Its churches are splendid. but even at their most magnificent, they are dwarfed by Justinian's Hagia Sophia (fig. 7). In the case of secular public monuments, we know that Constantinople possessed imperial *thermae*, fora, a massive circus, and other imposing buildings, and that these were being added to in the fifth and early sixth centuries. In Ravenna the documentary and (so far) the archaeological evidence for secular public buildings is far less impressive, and it is possible that this is because they never existed here on an imperial scale.¹⁶ Ravenna was established by Honorius as a western imperial residence at the very time that his brother Arcadius was building his forum and column in Constantinople (fig. 4);

15. Sodini, 1989.

16. It is of course tempting fate to argue from absences in the archaeological record. The most obvious secular building currently 'missing' in Ravenna are imperial *thermae* on a grand scale, comparable to the fourth-century examples known in Rome, Milan, Arles, Trier, and elsewhere. The archaeological deposits at Ravenna are buried particularly deep, but huge structures like *thermae* normally leave bits of themselves standing above ground. On the other hand, no remains of the circus at Ravenna (which is known for certain to have existed) have yet been identified –so perhaps massive *thermae* and other monuments still await discovery. For a summary of the late antique archaeology of Ravenna, see GELICHI, 1991.

but it is extremely unlikely that a monument on anything like this scale was ever erected by Honorius in Ravenna.¹⁷

Furthermore, in at least one aspect of its artistic production, marble carving, Ravenna was heavily dependent on Constantinople, from which chancel-screens, basket-work capitals and other fine pieces, all in the marble of Proconnesos, were imported. Moreover we do not find in the columns and marbles of Ravenna either the range of stones regularly deployed in Constantinople (where porphyry, Thessalian and Docimian marbles are all frequently used alongside Proconnesian), or the exceptional and innovative quality of carving, displayed for instance in the frieze, peacock-niches and inscription of Constantinople's St. Polyeuktos.¹⁸

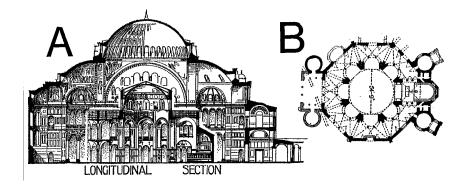
A fifth-century visitor to Ravenna who had previously seen Constantinople would have been in no doubt as to which imperial partner was the most powerful and wealthy ruler within the Roman world; and, similarly, an observer of both cities in the early sixth century would have rapidly formed the correct impression that Ravenna was an impressive but scaled-down version of an imperial capital, that often imitated the style of what was by then *the* great city of the Mediterranean.

Unsurprisingly, the western barbarians in their *sedes regiae* were well aware of the splendours of Constantinople, and sought to emulate them. In Paris, Clovis built a church of the Holy Apostles, in which he was subsequently buried, in clear imitation of the identically-named imperial burial-church of Constantinople; and later Chilperic built circuses at both Paris and Soissons.¹⁹ This was an act that provoked the scorn of Gregory of Tours, and only makes sense in the context of wishing to emulate Constantinopolitan practice. The broad topic of post-Roman ceremonial has been very effectively explored by Michael McCormick,

17. The lack of evidence (so far) for traditional secular monuments in Ravenna might be explained by particular circumstances. It is possible that such buildings were going out of fashion faster in the troubled West than in the East; and it is also possible that the western emperors regarded Ravenna more as an emergency residence than as a imperial city, worthy of the emperor's munificence.

18. For St. Polyeuktos: Harrison, 1986, and Harrison, 1989.

19. Gregory of Tours, *Libri Historiarum* II. 43 (Holy Apostles, Paris), and V.17 (circuses at Paris and Soissons).



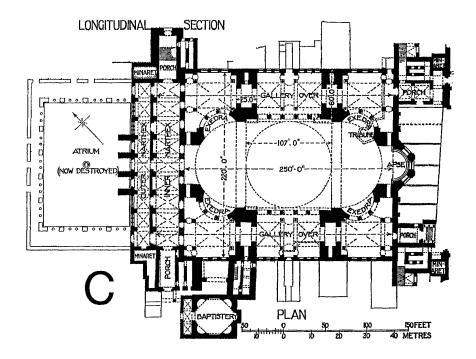


Fig. 7. Hagia Sophia (Constantinople) and S. Vitale (Ravenna), compared by being reproduced to the same scale. A = Section through S. Vitale superimposed on a section through Hagia Sophia. B = Plan of S. Vitale. C = Plan of Hagia Sophia. (Based on Fletcher, 1961, p. 281 and 285.)

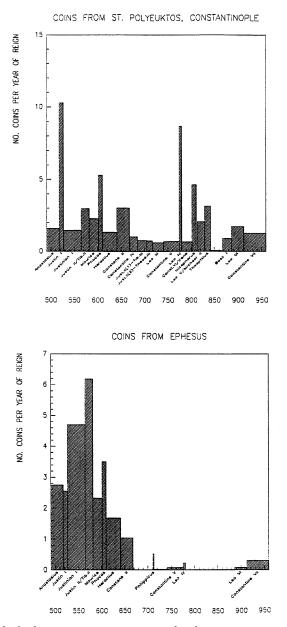


Fig. 8. Coin-finds from excavations at St. Polyeuktos, Constantinople, expressed as numbers of coins per year of reign. Figures from Ephesus are shown below for comparison. (Based for St. Polyeuktos on the figures given in Hendy 1986; and for Ephesus on those in Foss 1979, p. 197, and Vetters 1982, 1983 & 1986.)

and his research has shown that Germanic rulers in the West based their royal ceremonies more on contemporary practice in Constantinople than on any dim memories of what had once occurred in the Roman West.²⁰

When barbarian rulers in the Latin-speaking West named or renamed cities after themselves, they gave them names with the Greek suffix 'polis'. This is linguistically surprising, and must be because the imperial foundation *Constantinopolis* dominated even the western barbarian imagination. We know of a 'Hunericopolis' in Vandal Africa, a 'Theodericopolis' in the Ostrogothic kingdom, and, most famously, of 'Recopolis' in Visigothic Spain (for which, see fig. 2).²¹ From our perspective, knowing as we do that in the seventh centuries Byzantine power was to suffer a series of disastrous and irreversible blows, it is hard to appreciate quite how strong was the political and cultural influence of the Byzantine Empire within the sixth-century Mediterranean. But the evidence is quite sufficient to show that the *sedes regiae* of the West did indeed exist under the shadow of the great imperial city of Constantinople.

What happened to Constantinople after the sixth century is much less clear, and falls beyond the main scope of this article. As is well known, the Byzantine Empire suffered a series of military reversals at the end of the sixth and through the seventh centuries, leading to the loss of most of its Balkan territories to the Slavs, and (much more seriously) of Egypt and the Near East to the Arabs. Moreover the Arab onslaught in the seventh and eighth centuries brought war into Asia Minor and to the Aegean, indeed to the very gates of Constantinople. These troubles were accompanied by a dramatic fall in the prosperity of those territories that remained Byzantine.

Just as Constantinople had benefited from the expansion of eastern prosperity and power during the fifth and sixth

^{20.} МсСокміск, 1986, esp. chaps. 7-9.

^{21.} These are discussed by Musser, 1978, p. 27-28. Recopolis was a foundation *ex novo*; Hunericopolis was probably a renaming of Hadrumetum; and Theodericopolis, which was apparently located north of the Alps, is something of an enigma. It is never mentioned in the abundant contemporary sources for the Ostrogothic kingdom, and is only ever referred to once (in the early eighth-century Ravenna Cosmography).

centuries, so inevitably it suffered as a result of their decline during the seventh –the loss of the corn-supply from Egypt being a particularly devastating blow. The population unquestionably fell dramatically; and all record, whether literary or archaeological, of imperial building-projects in the city virtually ceases for almost two centuries. In debate amongst scholars is not whether Constantinople declined markedly in both population and splendour, but exactly how far it declined.²²

In the absence of good archaeological evidence from the city, it is currently impossible to resolve this uncertainty. Probably the truth is that, like Rome, the city declined dramatically from its antique heyday, but that in medieval terms (and in particular in seventh-century terms) it remained a great city. Excavations at St. Polyeuktos, for instance, have shown that unlike other cities of the Empire, Constantinople had an abundant copper coinage (fig. 8), and continuing trading contacts in both amphorae and fine tablewares.²³

It is widely accepted that in both the eastern and western Mediterranean, except in the areas conquered by the Arabs, the seventh century was a low point for urbanism. Within the Byzantine world almost all local cities declined so markedly that the relative importance and status of the imperial capital of Constantinople was in fact enhanced, despite its own undoubted decline.²⁴ Quite where Constantinople stood in the eyes of seventh-century westerners is less certain, but of course no city whose cathedral was Hagia Sophia could ever fade entirely from the western imagination.

Trinity College. Oxford

22. MANGO, 1985, p. 54, thinks that the population in the seventh and early eighth centuries did not exceed 40,000. DURLIAT, 1990, p. 273-275, does not hazard a figure, but thinks Mango is broadly correct. Others (e.g. MAGDALINO, 1996, p. 18) are less pessimistic.

23. HAYES, 1980, p. 379; HAYES, 1992. These features are reminiscent of the situation in Rome, revealed in the papers published in PAROLI and DELOGU, 1993. There is even less evidence of church-building in Constantinople than in Rome; but this may be because Constantinople has no *Liber Pontificalis* and because the iconoclasts destroyed all seventh-century mosaics in the city.

24. Wніттоw, 1998, р. 94-95.

Bibliography

- BAUER, F.A. (1996), Stadt, Platz und Denkmal in der Spätantike (Mainz).
- CROW, J.G. (1995), "The Long Walls of Thrace", in MANGO and DAGRON (ed.), p. 109-124.
- DAGRON, G. (1974), Naissance d'une capitale: Constantinople et ses institutions de 330 à 451 (Paris).
- DURLIAT, J. (1990), De la ville antique à la ville byzantine. Le problème de subsistance, Collection de l'École Française de Rome, 136 (Rome).
- FLETCHER, B. (1961), A History of Architecture on the Comparative Method, 17th edition (revised by R.A. Cordingley) (London).
- Foss, C. (1979), *Ephesus after Antiquity: A late antique, Byzantine and Turkish City* (Cambridge).
- GELICHI, S. (1991), "Il paesaggio urbano tra v e x secolo", in CARILE, A. (ed.) Storia di Ravenna, II.1 (Dall'età bizantina all'età ottoniana) (Ravenna), p. 153-165.
- GIGLIOLI, G.Q. (1952), La colonna di Arcadio a Costantinopoli, Memorie dell'Accademia di Archeologia, Lettere e Belle Arti di Napoli (Napoli).
- GYLLIUS, P. [= Pierre Gilles] (1561), De Topographia Constantinopoleos, et de illius Antiquitatibus (Lugdunum/Lyon).
- HARRISON, R.M. (1986), *Excavations at Saraçhane in Istanbul*, Vol. I (*The Excavations, Structures, etc.*) (Princeton and Washington).
- HARRISON, R.M. (1989), A Temple for Byzantium. The Discovery and Excavation of Anicia Juliana's Palace-Church in Istanbul (London).
- HAYES, J.W. (1980), "Problèmes de la céramique des vIIème-Ixème siècles à Salamine et à Chypre", in *Salamine de Chypre, histoire et archéologie: État des recherches*, Colloques internationaux du Centre National de la Recherche Scientifique, 578 (Paris), p. 375-387.
- HAYES, J.W. (1992), *Excavations at Saraçhane in Istanbul*, Vol. 2 (*The Pottery*) (Princeton and Washington).
- HENDY, M.F. (1986), "The coins", in HARRISON, p. 278-373.
- KOLLWITZ, J. (1941), Oströmische Plastik der theodosianischen Zeit (Berlin).
- KRAUTHEIMER, R. (1980), Rome, Profile of a City, 312-1308 (Princeton).
- KRISCHEN, F. (1938), Die Landmauern von Konstantinopel, I (Berlin).
- MAGDALINO, P. (1996), Constantinople médiévale. Études sur l'évolution des structures urbaines, Travaux et Mémoires du Centre de Recherche d'Histoire et Civilisation de Byzance, Monographies, 9 (Paris).
- MANGO, C. (1985), *Le Développement urbain de Constantinople (IV^e-VII^e siècles)*, Travaux et Mémoires du Centre de Recherche d'Histoire et Civilisation de Byzance, Monographies, 2 (Paris).
- MANGO, C. (1995), "The water supply of Constantinople", in MANGO and DAGRON, p. 9-18.

- MANGO, C. and DAGRON, G. (eds.) (1995), *Constantinople and its Hinterland* (Variorum).
- McCORMICK, M. (1986), Eternal Victory. Triumphal Rulership in Late Antiquity, Byzantium and the Early Medieval West (Cambridge).
- MENEGHINI, R. and SANTANGELI VALENZIANI, R. (1996), "Episodi di trasformazione del paesaggio urbano nella Roma altomedievale attraverso l'analisi di due contesti: un isolato in Piazza dei Cinquecento e l'area dei fori imperiali", Archeologia Medievale, 23, p. 53-99.
- MUSSET, L. (1978), "Les villes baptisées du nom d'un souverain au haut Moyen Age", *Revue du Moyen Age Latin*, XXV-XXXIV, p. 27-38.
- PAROLI, L. and DELOGU, P. (eds.) (1993), La storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici (Firenze).
- SODINI, J.-P. (1989), "Le commerce des marbres à l'époque protobyzantine", in *Hommes et richesses dans l'Empire byzantin*, (*Iv^e - VII^e siècle*) tome I (Paris), p. 163-86.
- VETTERS, H. 1982, 1983 & 1986, [Reports of coin-finds in] "Ephesos. Vorläufiger Grabungsbericht", Anzeiger der Österreichische Akademie der Wissenschaften, philosophisch-historische Klasse, vols. 119, 120 & 123.
- WARD-PERKINS, B. (1984), From Classical Antiquity to the Middle Ages. Urban Public Building in Northern and Central Italy AD 300-850 (Oxford).
- WARD-PERKINS, B. (1998), "The cities", in CAMERON, A. and GARNSEY, P. (ed.), *The Cambridge Ancient History*, Vol. XIII (*The Late Empire, A.D.* 337-425) (Cambridge), p. 371-410.
- WARD-PERKINS, B. (forthcoming), "Specialised production and exchange", in CAMERON, A., WARD-PERKINS, B. and WHITBY, M. (ed.), *The Cambridge Ancient History*, Vol. XIV (A.D. 425-600) (Cambridge).

WHITTOW, M. (1996), The Making of Orthodox Byzantium, 600-1025 (London).