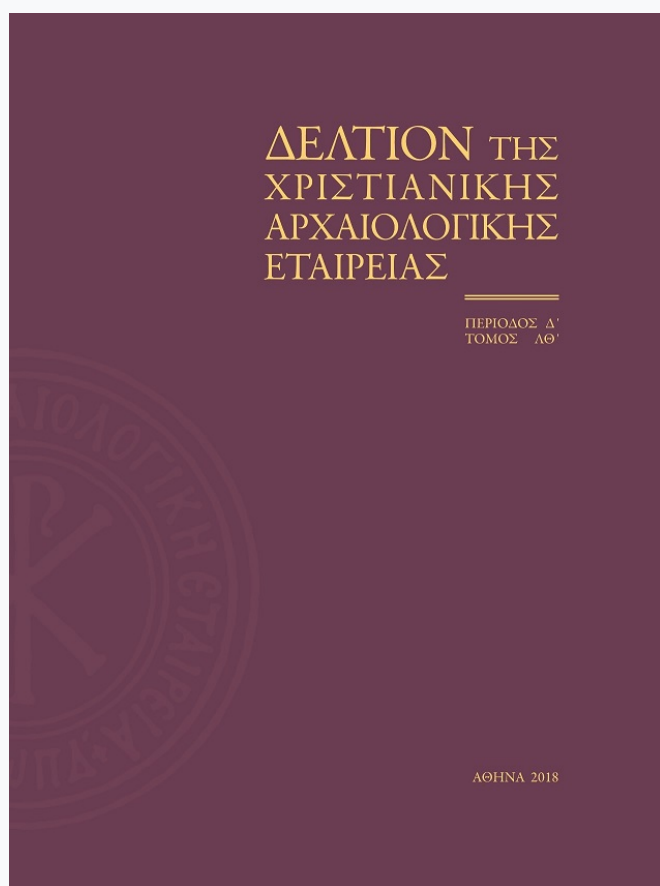


Δελτίον της Χριστιανικής Αρχαιολογικής Εταιρείας

Τόμ. 39 (2018)

Δελτίον ΧΑΕ 39 (2018), Περίοδος Δ'. Αφιέρωμα στη μνήμη Χαράλαμπου Μπούρα



**Ενα ανθεκτικό τοπίο: τα τείχη της
Κωνσταντινούπολης και τα περίχωρα τους**

Alessandra RICCI

doi: [10.12681/dchae.18479](https://doi.org/10.12681/dchae.18479)

Βιβλιογραφική αναφορά:

RICCI, A. (2018). Ενα ανθεκτικό τοπίο: τα τείχη της Κωνσταντινούπολης και τα περίχωρα τους. *Δελτίον της Χριστιανικής Αρχαιολογικής Εταιρείας*, 39, 125–138. <https://doi.org/10.12681/dchae.18479>

Alessandra Ricci

A RESILIENT LANDSCAPE: THE LAND WALLS OF CONSTANTINOPLE AND THEIR SURROUNDINGS

Τα χερσαία τείχη της Κωνσταντινούπολης, που ανεγέρθηκαν στις αρχές του 5ου αιώνα, ενίσχυσαν ουσιαστικά την άμυνα της πόλης, ενώ συνέβαλαν στη δημιουργία της αστικής της ταυτότητας. Αυτό το άρθρο εξετάζει ένα θέμα που θίγεται σπάνια, τη χρήση χώρων για αγροτικές καλλιέργειες εντός των τειχών και στα περίχωρά τους. Η παρουσία σήμερα κηπουρικών δραστηριοτήτων σε ορισμένα τμήματα του τείχους αντιπροσωπεύει την άυλη μνήμη προτύπων που μπορούν να ανιχνευθούν στην περίοδο της ύστερης αρχαιότητας.

Λέξεις κλειδιά

Ύστερη αρχαιότητα, αγροτικές καλλιέργειες, οχυρωματική αρχιτεκτονική, περιβαλλοντική αρχαιολογία, χερσαία τείχη, κήποι, Κωνσταντινούπολη.

Despite the multitude of surviving architectural artifacts¹, the vast majority of which is represented by fortifications spread across the diversified lands of the former Byzantine Empire, little is known about the “hand” of their architects, or the practices of the master builders

The land walls of Constantinople, built in the early years of the 5th century, substantially reinforced the city's defenses while contributing to the creation of the capital's urban identity. This paper considers a rarely touched-upon subject, that of the usage of agricultural spaces within the land walls and their immediate vicinity. The presence of horticultural activities noted along present-day sections of the land walls represents the intangible memory of patterns of usage now traceable to the Late Antique period.

Keywords

Late Antique period; Agriculture; defensive architecture; environmental archaeology; Land Walls; Gardens; Constantinople.

* Department of Archaeology and History of Art, Koç University (Istanbul), aricci@ku.edu.tr

** I would like to thank Zeynep Ahunbay for the information generously shared about work conducted at tower 4 on the land walls; Jim Crow for exchanges on the water supply system; Varlik İndere for help on the drawings; the library staff of the British School at Athens for their support offered during preparation of this text and for having made accessible the work by J. B. Lechevalier for publication. Lastly, my gratitude goes to the Alexander S. Onassis Foundation for the fellowship opportunity, which allowed me to spend research time in Athens (2016-2017).

¹ A preliminary note on some aspects of this research appeared in,

and masons². In his essay for the *Economic History of Byzantium*, Charalambos Bouras interpreted the absence of builders' names and master craftsmen as a feature of Byzantium, their contributions surpassed by the importance of donors' names and those involved at other levels of the architectural project³. This contribution touches upon one of Byzantine architecture's most iconic monuments, the land walls of Constantinople, whose architects,

A. Ricci, “Istanbul'da Manevi Kültürel Miras: Kara Surlarının Bizans Bahçeleri” (“Intangible Cultural Heritage in Istanbul: the Case of the Land Walls' Byzantine Orchards”), 3. *Uluslararası Tarihi Yarımada Sempozyumu. Tebliğler Kitabı*, Istanbul 2008, 66-67.

² R. Ousterhout, “The Mysterious Disappearing Architect and His Patron”, *Master Builders of Byzantium*, Princeton University Press, 1999, 39-57 where 34 individual names of architects only are attested from the 4th to the 15th centuries.

³ Ch. Bouras, “Master Craftsmen, Craftsmen, and Building Activities in Byzantium”, A. E. Laiou (ed.), *The Economic History*

master builders and masons, as with other buildings, are unknown to us. This paper seeks to represent a humble tribute to Charalambos Bouras' contribution to our better understanding of Byzantine architecture.

The land walls of Constantinople displayed an architectural and functional resilience throughout Byzantine and Ottoman times⁴. With their monumentality, substantially they contributed to the city's prevailing mode of representation as a suspended urban 'container', both in the Byzantine and Ottoman periods⁵. Nestled in an ostensibly strategic position, surrounded by an exceptional geographical setting, the city is typically rendered as tightly enclosed to the West by its monumental land walls, the sea walls encircling its shores and with little consideration for anything outside its walls or those of the *Sycae* (Galata) district, across the city⁶. Whether observed from the waters of the Marmara Sea, from the Golden Horn, or from the Thracian countryside, until the more recent unregulated expansion of modern Istanbul the land walls of Constantinople visually and physically conveyed the limits of the urban space and its mighty defenses⁷. As a powerful monumental

and symbolic landmark, it can be imagined that construction of the land walls in the 5th century must have not only changed the perception of the urban space now extended to the west by 1.5 km from the Constantinian walls, but that it must have also contributed to a radical alteration of the cityscape.

Following are some considerations on the interplay between the land walls and their surrounding landscape, and on some of the contemporary communities' modes of adaptation to their construction. The main focus will be on the usage of space within and around the land walls since their construction, a subject rarely considered when examining the monument. Although the land walls stand as a key monument for the study of diachronic architecture, and represent a powerful historical palimpsest spanning across rivaling empires and preserving tangible signs of relations rather than disconnections, their construction must have also been perceived as a large-scale manipulation of the environment. Hence, it appears reasonable to focus on the temporal arc of the 5th century, when the defensive system's project and construction took place and the monument was newly built.

of Byzantium. From the Seventh through the Fifteenth Century (DOS XXXIX), Washington, D.C. 2002, 2, 539-554, in part. 539.

⁴ A rare cross-historical survey of the monument in, W. Müller-Wiener, *Bildlexikon zur Topographie Istanbuls. Byzantion-Konstantinopolis-Istanbul bis zum Beginn des 17. Jahrhunderts*, Tübingen 1977, 286-300.

⁵ See, for example a passage in, Procopius, *Buildings*, H. B. Dewing trans. (The Loeb Classical Library, Procopius VIII), Harvard University Press, 1954, iv, 2-3, 57. Other cities in Late Antiquity are represented as encircled by strong walls in coinage issues see, L. Grig, "Competing Capitals, Competing Representations: Late Antique Cityscapes in Words and Pictures", L. Grig – G. Kelly (eds), *Two Romes. Rome and Constantinople in Late Antiquity* (Oxford Studies in Late Antiquity), Oxford 2012, 31-52.

⁶ A remarkable example is represented by the early 15th-century map of Constantinople by the Florentine cartographer Cristoforo Buondelmonti and its reception, C. Barsanti, "Costantinopoli e l'Egeo nei primi decenni del XV secolo: la testimonianza di Cristoforo Buondelmonti," *RIA*, ser. 3, 24 (2001), 83-253.

⁷ For example, the vast repertoire of images by N. V. Artamonoff taken in the mid-1930s: <http://images.doaks.org/artamonoff/collections/show/29> accessed, 5.02.2018. In 1985 the land walls were inscribed in the UNESCO world heritage list: <http://whc.unesco.org/en/list/356> (accessed, 5.02.2018). For a recent assessment of the land walls and its surrounding environment, F. Kivilcim – A. Aksoy – A. Ricci, *A Report of Concern on the Conservation Issues of the*

Landscape and the construction of the land walls

The land walls stretched for circa 6.5 km from the sea of Marmara to the Golden Horn, forming one of the most elaborate defensive systems of Antiquity while also defining the extension of the largest metropolis of Late Antiquity⁸. When observed from the countryside, the defensive

Istanbul Land Walls World Heritage Site. With a Special Focus on the Historic Yedikule Vegetable Gardens (Yedikule Bostanları). Report Presented to the United Nations Educational, Scientific and Cultural Organization (UNESCO), Istanbul, 2014, electronic document, https://oxfordbyzantinesociety.files.wordpress.com/2014/02/report_land_walls_whs.pdf, accessed, 5.02.2018.

⁸ The monument was the object of a systematic architectural survey in the 1930s, B. Meyer-Plath – A. M. Schneider, *Die Landmauer von Konstantinopel* (Denkmäler Antiker Architektur VI, VIII), 2 vols, Berlin 1943, with no subsequent comprehensive survey. For a recent study of the monument, N. Asutay-Effenberger, *Die Landmauer von Konstantinopel-Istanbul: historisch-topographische und baugeschichtliche Untersuchungen* (Millennium-Studien 18), Berlin 2007 with earlier bibliography. The Koç University-Stavros Niarchos Foundation for Late Antique and Byzantine



Fig. 1. Constantinople. The land walls seen from south-west with the ditch, outer wall and inner wall, tower 25 in the foreground.

system comprised, from west to east, three architectural elements and two earth structures (Figs 1, 2). A wide ditch with internally buttressed walls was crossed by stone bridges corresponding to most of the 12 documented gates that led to an outer earth terrace, whose exact inclination has not been determined. An outer wall equipped with towers and gates was linked to the outer terrace as well as to an inner, more compact earth terrace. Lastly, an inner defensive line was marked by two-story towers and gates. This elaborate defensive system formed a barrier of at least 60 m in width, with an estimated difference in height of ca. 30 m between the bottom of the ditch and the inner wall towers' parapets⁹. It is therefore

likely that, in order to accommodate these architectural and earth features on such a large scale, the general project was carefully planned and executed¹⁰. More specifically, the terrain had to be progressively prepared, with earth removed from the ditch likely used to create the two earth terraces that are placed in front of the outer and inner walls. Although this form of terrain preparation does not compare with the typology of land retention terraces built in the city, it provides a valuable parameter for the assessment and calculation of the scale at which a large-scale construction project such as the land walls required major landscape manipulation¹¹.

Studies has recently begun a photographic documentation of the city walls, including the land walls.

⁹ For an up-to-date description of the land walls and a discussion about the modalities of the construction of its features, J. Crow, "The Infrastructure of a Great City: Earth, Walls and Water in

Late Antique Constantinople", L. Luvan – E. Zanini (eds), *Technology in Transition. A.D. 360-650* (Late Antique Archaeology), Leiden – Boston 2007, 262-267.

¹⁰ Bouras, "Master Craftsmen, Craftsmen, and Building Activities in Byzantium", *op.cit.* (n. 3), 542.

¹¹ For a visual rendering of terraces in Constantinople, J. Crow – J.

Negotiating Space: Horticulture and the Land Walls

A law dating to 413 in the Theodosian Code (15.1.51) represents the first written mention of the existence of a new circuit of walls in Constantinople¹². Credit for the construction of the “*novi muri*” is given to the praetorian prefect Anthemius¹³. The edict also makes temporal references to the status of the construction project using the terms “*extractus est*” and “*complete opere*”, built and completed, respectively. These references allow us to define a historical space for the completion of the work. However, opinions have differed with regard to the beginning of the construction and the length of the

undertaking. J. Bardill recently addressed this issue and through a revision of the documentary evidence, as well as with a newly discovered inscription, concluded that “work must have started in 404 or 405, hence towards the end of the reign of Arcadius”¹⁴. Anthemius was appointed praetorian prefect in 405 and last documented in 414, therefore making it likely that the extensive construction site was active between 405 and 413, a span of eight years¹⁵. Bardill’s discussion was part of a larger study on the brickstamps from Byzantine Constantinople documented through archival research until 2001, with the land walls representing a site whose contemporary sampling of *in situ* material appeared complex in terms of the task; the results it may yield are promising but study has not been systematically conducted¹⁶. This is relevant also given the building technique of the land walls which, in its early phases, consisted of bands of brick courses spanning across the entire section of the wall and alternating regularly with bands of courses of ashlar stones with a rubble and mortar fill. Known sampling of brickstamps for the land walls is still rather unreliable and not corroborating. The absence of systematic surveys of the land walls, the scarce information published, and decades of debatable conservation interventions make it hard to define the contextualization of brickstamps within temporal actions, quantitative assessments, construction phases, repairs and modalities of reemployment¹⁷.

The law in the Theodosian code provides other valuable information about usage of the land walls and its surrounding space, information that has rarely been the

Bardill – R. Bayliss, *The Water Supply of Byzantine Constantinople* (Journal of Roman Studies Monograph 11), London 2008, fig. 2.2.

¹² The Latin text: Idem aa. anthemio praefecto praetorio. *Turres novi muri, qui ad munitionem splendidissimae urbis extractus est, completo opere praecipimus eorum usui deputari, per quorum terras idem murus studio ac provisione tuae magnitudinis ex nostrae serenitatis arbitrio celebratur, eadem lege in perpetuum et conditione servanda, ut annis singulis hi vel ad quorum iura terrulae demigraverint proprio sumptu earum instaurationem sibimet intellegant procurandam, earumque usu publico beneficio potientes curam reparationis ac sollicitudinem ad se non ambigant pertinere. ita enim et splendor operis et civitatis munitio cum privatorum usu et utilitate servabitur.* English translation, “*The Theodosian Code and Novels and the Sirmondian Constitutions*,” C. Pharr trans., Princeton 1952, 15.1.51, 429:

The same Augustuses to Anthemius, Praetorian Prefect: «We command that the towers of the New Wall, which has been constructed for the fortification of this most splendid City, shall, after completion of the work, be assigned to the use of those persons through whose lands this wall was duly erected by the zeal and foresight of Your Magnitude, pursuant to the decision of Our Serenity. This regulation and condition shall be observed in perpetuity, so that said landholders and those persons to whom the title to these lands may pass shall know that each year they must provide for the repair of the towers at their own expense, that they shall acquire the use of these towers as a special favor from the public, and they shall not doubt that the care of repair and the responsibility therefor belongs to them. Thus the splendor of the work and the fortifications of the City shall be preserved, as well as the use of such fortifications to the advantage of private citizens.» Given on the day before the nones of April in the year of the consulship of the Most Noble Lucius. – April, 4, 413.

¹³ On Anthemius and his documented *cursum publicum*, J. R. Martindale, *The Prosopography of the Later Roman Empire*, Cambridge University Press, 1980, II, 93-95.

¹⁴ J. Bardill, *Brickstamps of Constantinople*, Oxford University Press, 2004, 122-125; the inscription in question was found in 1993 and “indicates that the original construction lasted for nine years”, 122.

¹⁵ Bardill, *Brickstamps of Constantinople*, op.cit. (n. 14), 122.

¹⁶ The bulk of Bardill’s material is represented by Ernst Mamboury’s unpublished collection of brickstamps along with material from the Sarāḥane, Kalenderhane and other excavations, Bardill, *Brickstamps of Constantinople*, op.cit. (n. 14), vii-ix.

¹⁷ The absence of data for the land walls is now juxtaposed by newly processed data on the construction resources and manpower for the water supply system of Constantinople, largely using mortar analysis and brick sampling, R. Snyder, “Building the Longest Water Supply System: Large-scale Construction in Constantinople’s Hinterland”, *Annual of Istanbul Studies / Istanbul Araştırmaları Yıllığı* 5 (2016), 1-19.

object of discussion. In fact, the main regulatory order of the text focuses on the towers of “*turres novi muri*”, which are here assigned in perpetuity to those “through whose lands this wall was duly erected”. In return, the same individuals are asked to provide for repairs of the towers. The area of land used for the construction of the new walls was large, given the width and the length of the defensive system. Considering that the defensive system occupied a space whose width—that is, from the moat’s walls to the external access ramps to the inner wall’s towers—amounted to 60 m plus the inevitable buffer zone of at least 10 m on each side, the full width might be calculated at some 80 m (Fig. 2)¹⁸. This would have amounted to a total of circa 0.52 square kilometers.

It is not clear if and how modalities of land transfer took place, as the edict refers to the landholders as “*demi-graverint*”, removed or withdrawn. Is this an implicit acknowledgment of confiscation and/or displacement? Practices of confiscation and transfer are scarcely documented in Roman and Late Antique times, making it difficult to grasp them both in terms of dynamics and magnitude¹⁹. However, lands affected by construction of the new fortification must have also fallen within the sphere of works related to public interest and public welfare, the “*res publica*,” both during the planning process and for the later usage. The law of the Codex might be understood as a regulatory act within the context of widespread, large-scale and spatially extended infrastructural works undertaken for the city. In the 5th century Constantinople was the subject of large-scale public projects that surpassed by far all other urban centers of the period.

A wealth of new information on another large-scale infrastructural activity carried out within Constantinople and its hinterland is emerging through a survey

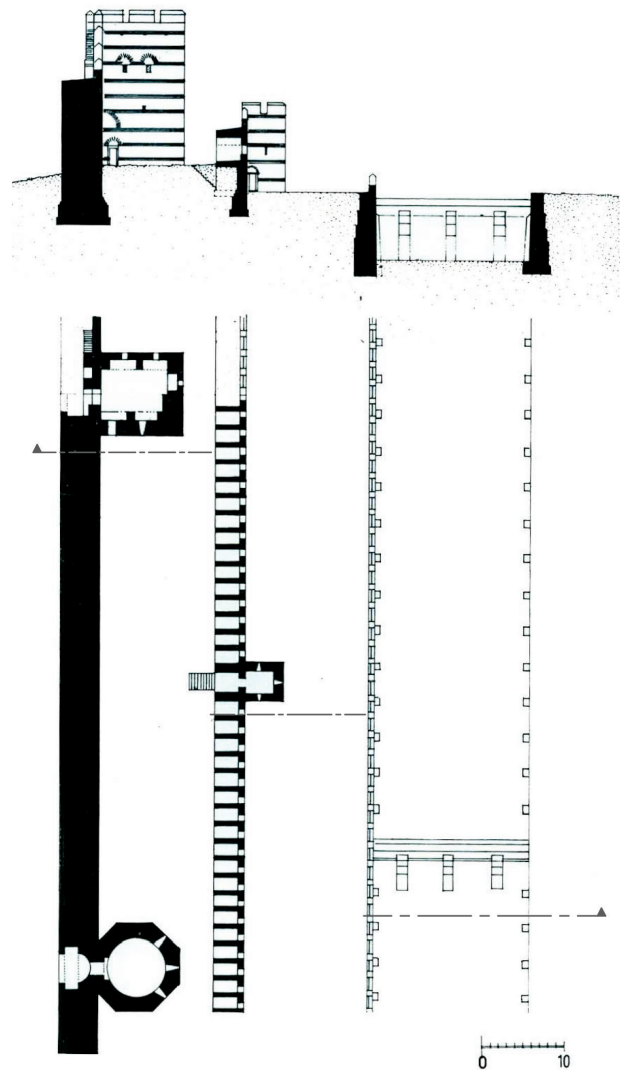


Fig. 2. Constantinople. Section and elevation drawing of the land walls.

¹⁸ I connect “buffer zone” to a space recognized in cultural heritage as a “zonal area that lies between two or more other areas” which in antiquity as well as in contemporary times recognizes the existence of a liminal space that enhances the function of a monument, UNESCO, *Operational Guides for the Implementation of the World Heritage Convention* (UNESCO World Heritage Centre), Paris 2008, 103-107.

¹⁹ The term “expropriatio” is not used in the edict. Some unclear data is available for Palestine, Z. E. Safrai, “*The Economy of Roman Palestine*”, London 1994, 185. Also, B. Stolte, “The social function of law”, *The Social History of Byzantium*, ed. J. Haldon Malden 2009, 76-91.

of the city’s water supply system. Data collected by J. Crow and his team over the course of extended field surveys have clarified that the main mechanism that carried the water supply for the Late Antique city consisted of a three-element system. This comprised two aqueducts, the second of which was organized in two distinct chronological phases along with a widespread network of open-air and underground cisterns²⁰. The

²⁰ J. Crow – J. Bardill – R. Bayliss, *The Water Supply of Byzantine Constantinople* (Journal of Roman Studies Monograph 11), London 2008, with the more recent, K. Ward – J. Crow – M. Crapper,



Fig. 3. Constantinople. Tower 4 in the inner circuit with postern opening to the south.

chronology of the aqueduct's first line, also known as the Valens line, is now attested to the mid-4th century and extended over a linear distance of circa 65 km²¹.

By the early-mid 5th century the second Valens line was constructed over a 120 km linear distance, now calculated in recent topographical surveys as a channel line running over the remarkable distance of 426 to 564 km²². Laws from the 4th to the 6th centuries make reference to aspects of the administration of the water supply, to the regulation of water pipes and to the responsibilities of the landholders through whose lands

the two aqueduct lines were built²³. A law dated to 440, when construction of the second Valens line was close to completion, and only a few decades after completion of the land walls, mentions the landholders' obligation to keep a distance of at least 10 feet from the aqueduct line free from trees²⁴. It is likely that some of the lands affected by the passage of the water supply system might have still seen the active presence of their landholders. Earlier, in a mid-4th century law for the city of Rome, landholders through whose properties aqueducts passed were deemed responsible for the maintenance of the channels²⁵. The practice of allowing users to retain a physical presence on lands crossed by public infrastructure, and in return to accept some form of participation in the maintenance works, appears therefore plausible.

Satellite imaging, field surveying and other techniques were used to document the features of the agricultural landscape affected by the presence of the Anastasian wall, built some 65 km west of the land walls and in close physical dialogue with the water supply system, in its southern segment²⁶. There, the characterization of the landscape allowed the identification of probable medieval strip fields along with a Roman settlement and more modern traces of landscape usage. Two Byzantine-period boundary markers from the same area represent valuable testimony of the existence of extended pastoral and agricultural landownership inside and outside the defensive line²⁷.

The law referring to Constantinople's land walls implicitly recognizes the fact that the monumental construction cutting through the peninsula must have crossed a conspicuous amount of privately owned lands, whose value was also due to their location in the immediate outskirts of the Constantinian walls. The same lands must have been removed, withdrawn (*demigrare*) from their legitimate users, who in return were given in

"Water-supply infrastructure of Byzantine Constantinople", *Journal of Roman Archaeology* 30 (2017), 175-195 with earlier bibliography.

²¹ Ward – Crow – Crapper, "Water-supply infrastructure of Byzantine Constantinople", op.cit. (n. 20), 175.

²² Ward – Crow – Crapper, "Water-supply infrastructure of Byzantine Constantinople", op.cit. (n. 20), 176.

²³ Crow – Bardill – Bayliss, *The Water Supply of Byzantine Constantinople*, op.cit. (n. 20), 211-213.

²⁴ *Corpus Iuris Civilis, Codex Justinianus*, S. P. Scott trans., Cincinnati 1932, II.42.6, vol. 15, 195-196.

²⁵ *Codex Theodosianus*, op.cit. (n. 12) 15.2.1, 430.

²⁶ J. Crow – S. Turner, "Silivri and the Thracian hinterland of Istanbul: an historic landscape", *Anatolian Studies* 59 (2009), 167-181 with reference to the Anastasian wall.

²⁷ Crow – Turner, "Silivri and the Thracian hinterland of Istanbul: an historic landscape", op.cit. (n. 26), 171 with earlier references.

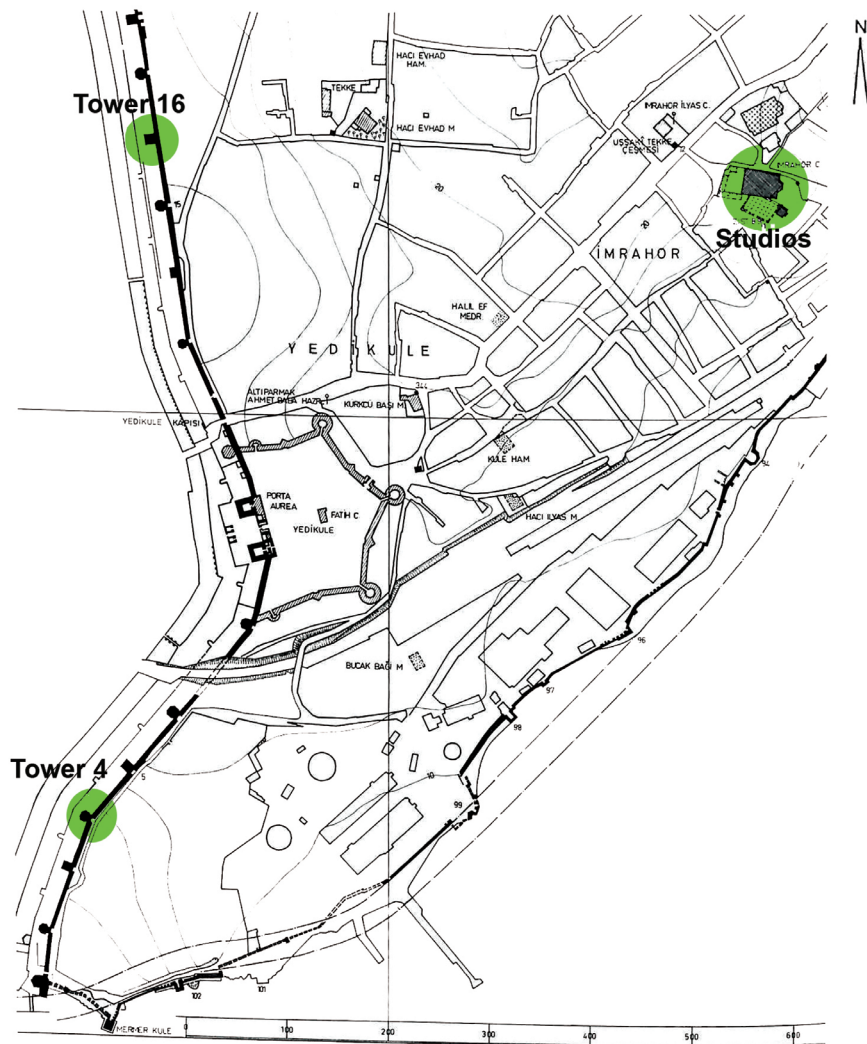


Fig. 4. Constantinople. Plan of the land walls and surroundings, towers 1-18 with indication of towers 4 and 16.

perpetuity the right to utilize floors of the towers. This usage, which must have represented a valuable asset for the landholders and a partial form of compensation, was countered with responsibility for maintenance of the towers²⁸. It is reasonable to assume that the towers of the inner circuit wall were more suitable for private usage. In fact, some of the inner-circuit two-story towers show

inner terrace-level chambers accessed from the city side by means of a single, large, brick-tiered archway. Overall these chambers did not communicate with the chambers above, and their lack of defensive qualities appears evident. Open-access staircases built on the inner face of the towers led to the towers' upper chambers, the platform level and to the wall walk, contributing to a further physical isolation of the lower-level chambers.

Furthermore, most of the inner terrace-level chambers display brick vaulted systems substantially higher than those of the upper chambers and several of them were not always accessible from the city side. Their access instead was through a relatively small side

²⁸ The extent of the involvement of landowners in repairs of the land walls is not clear, for documentation of repairs, A. Van Millingen, *Byzantine Constantinople. The Walls of the City and Adjoining Historical Sites*, London 1899, 95-108. Müller-Wiener, *Bildlexikon zur Topographie Istanbuls*, op.cit. (n. 4), 286-300.

entrance, a sort of postern opening into the inner terrace. A. Van Millingen was first to note and record this detail, concluding that “the lower portion of the tower had evidently little to do directly with the defense of the city, but served mainly as a store-room or guard-house”²⁹. Crow, too, suggested that these towers were meant to “remain in private usage as compensation for the land expropriated for the Land Walls”³⁰.

Conservation work carried out by the Istanbul Municipality over the last two decades of the past century focused on six different stretches of the land walls, with Metin and Zeynep Ahunbay responsible for work on towers 2 through 5³¹. Clearance of earth around the perimeter of tower 4 and from the inner wall allowed for a detailed architectural survey of the tower (Fig. 3, 4). The octagonal in plan tower had been usually dated to the reign of the emperor Romanos III (1028-1034), based on an inscription placed on its upper level that mentions its reconstruction following an earthquake³². On the other hand, Schneider already had noted that what emerged from the ground of tower 4 –that is, its lower level– was earlier in dating and most likely 5th-century³³. Excavation by Ahunbay exposed larger portions of the tower’s original building phase and brought to light in its entirety the lower chamber’s rectangular opening into the inner terrace. The postern, located to the south of the octagonal tower, measures 1.20 m in width, and is framed by molded marble lintels leading into a circular in plan chamber covered by a dome with concentric-brick courses³⁴.

The southern portion of the land walls reveals the

presence of other ground-floor posterns. This area has not been the subject of the attentive work directed toward tower 4, and hence information is based on Meyer-Plath and Schneider’s architectural survey. As in the case of tower 4, single openings from ground-floor chambers into the inner terrace are present. These ground-floor chambers display no other means of access, and do not communicate with the tower’s upper-story chamber. The towers in question are all square in plan. Number 16, between the Golden Gate and the Xylokerkos gate, is pierced by a southern postern measuring circa 1.20 m, with a triple brick relieving arch and marked by marble lintels (Fig. 4, 5). Further north is tower 19, with a northern entrance. Beyond the Xylokerkos gate to the north are tower 25 with a southern postern and tower 26 with a northern postern. Tower 33, before the Pege gate, is square in plan and also has a southern entrance leading into a circular in plan high-vaulted chamber³⁵. Through the inner terrace into which these posterns communicated, it was possible to gain access to the outer terrace, as some towers in the outer walls were also equipped with lateral posterns³⁶. This arrangement allowed for limited and controlled movement of individuals, and likely of goods and tools, factors that would have made the spaces suitable for the storage of agricultural tools as well as for temporary stocking of produce.

Little archaeological or textual information is known about how the landscape was affected by construction of the land walls, and which types of cultivation presumably thrived in this area. Archaeobotany and horticultural investigations represent rare occurrences in urban archaeology, for the Byzantine period in particular. However, chapter 12.1 of the *Geoponika*, a collection of texts on agriculture amply used by elite proprietors and dedicated to the emperor Constantine VII (913-949), was examined by J. Koder and provides valuable information³⁷. The chapter in question was, like several other

²⁹ Van Millingen, *Byzantine Constantinople. The Walls of the City and Adjoining Historical Sites*, op.cit. (n. 28), 52.

³⁰ J. Crow, “The Infrastructure of a Great City: Earth, Walls and Water in Late Antique Constantinople”, op.cit. (n. 9), 264 (42).

³¹ M. Ahunbay – Z. Ahunbay, “Recent Work on the Land Walls of Istanbul: Tower 2 to Tower 5”, *DOP* 54 (2000), 227-239.

³² Van Millingen, *Byzantine Constantinople. The Walls of the City and Adjoining Historical Sites*, op.cit. (n. 28), 102-103. Ahunbay – Ahunbay, “Recent Work on the Land Walls of Istanbul: Tower 2 to 5”, op.cit. (n. 31), 237, figs 25-28, 30-31 where it is possible to observe that this is the best-preserved tower among those that were the subject of the conservation project.

³³ Meyer-Plath – Schneider, *Die Landmauer von Konstantinopel*, op.cit. (n. 8), vol. 1, 72.

³⁴ Ahunbay, “Recent Work on the Land Walls of Istanbul: Tower 2 to 5”, op.cit. (n. 31), figs 28, 31.

³⁵ Meyer-Plath – Schneider, *Die Landmauer von Konstantinopel*, op.cit. (n. 8), 74-74, plan 1.

³⁶ Crow, “The Infrastructure of a Great City: Earth, Walls and Water in Late Antique Constantinople”, op.cit. (n. 9), 265.

³⁷ Recent and notable exceptions are represented by archaeobotanical studies carried out within the rescue excavation project of the Theodosian harbor (Yenikapı). E. Oybak, “İstanbul Marmaray ve Metro kazılarında yapılan arkeobotanik çalışmaları”

parts of the *Geoponika*, largely based on the writings of the Late Antique *scholasticos* Cassianos Bassos³⁸. It lists which vegetables are to be sown and what is to be planted on a month-by-month basis in the region of Constantinople. The chapter consists of a rather schematic yet detailed list of fresh produce with mention, for example, of a variety of greens as well as carrot, (white) cabbage, turnip, onion and many more³⁹. Some of these vegetables, such as cabbage (*krambe*), could easily be stored in cold, dark basement spaces without requiring much further attention like curing or drying (Figs 6, 7)⁴⁰. In his examination of the list, Koder questioned the absence of what at this time would have been common

(“Archaeobotanical studies at the Marmaray and Metro excavations in Istanbul”), *İstanbul Arkeoloji Müzeleri: 1. Marmaray-Metro Kurtarma Kazıları Sempozyumu Bildiriler Kitabı, 5-6 Mayıs 2008 (Istanbul Archaeological Museums: proceedings of the 1st Symposium on Marmaray-Metro Salvage Excavations: 5th-6th May 2008)*, eds U. Kocabaş – Z. S. Kızıltan, Istanbul 2010, 233-248. More recently, an archaeobotanical project within excavations of the Middle Byzantine monastery of Satyros on the city’s Asian side was initiated, B. Ulaş, *Atti dell’Ottava edizione del Convegno “Contributo italiano a scavi, ricerche e studi nelle missioni archeologiche in Turchia”*, A. Ricci (ed.), *Arkeoloji ve Sanat / Journal of Archaeology and Art* 154 (2017), 192-195. For new approaches in garden archaeology, A. A. Malek (ed.), *Sourcebook for Garden Archaeology. Methods, Techniques, Interpretation and Field Examples* (Parcs et Jardins 1), Bern 2013. For the *Geoponika*, J. Koder, “Fresh vegetables for the capital”, *Constantinople and its Hinterland. Papers from the Twenty-seventh Spring Symposium of Byzantine Studies, Oxford, April 1993* (Society for the Promotion of Byzantine Studies 3) eds C. Mango – G. Dagron, London 1995, 49-56 and J. Koder, *Gemüse in Byzanz. Die Frischgemüseversorgung Konstantinopels im Lichte der Geoponika* (Byzantinischer Geschichtsschreiber, Ergänzungsband 3), Vienna 1993, with earlier references and literature.

³⁸ An up-to-date discussion on the authorship of the *Geoponika* compilation in, M. Decker, *Tilling the Hateful Earth. Agricultural Production and Trade in the Late Antique East* (Oxford Studies in Byzantium), Oxford University Press, 2009, 263-271.

³⁹ Koder, “Fresh vegetables for the capital”, op.cit. (n. 37), 50; the chapter is titled: “Notice of what is sown and what is planted each month in the region of Constantinople”, Koder, “Fresh vegetables for the capital”, op.cit. (n. 37), 49. Also, C. Mango, *Le développement urbain de Constantinople (IV-VII siècles)* (Travaux et Mémoires du Centre de Recherche d’Histoire et Civilisation de Byzance, Monographies 2), Paris 1990, 49-50.

⁴⁰ J. Koder, “Everyday food in the Middle Byzantine Period”, I. Anagnostakis (ed.), *Flavors and Delights. Tastes and Pleasures of Ancient and Byzantine Cuisine*, Athens 2013, 149.



Fig. 5. Constantinople. Plan of the land walls and surroundings, towers 22-40 with indication of towers 25, 26 and 33.



Fig. 6. Constantinople. Towers 18-22 in the inner circuit, outer wall and ditch seen from south-west.

Mediterranean-climate vegetables such as olives, broad beans, millet, gourds and others. Rather than an omission, this absence confirms that the text was specifically composed for the geo-climatic region of Constantinople, which does not afford a full-fledged Mediterranean climate. Furthermore, the chapter in the *Geoponika* also focuses on a range of fresh vegetables, which do not travel well over long distances and are meant to be consumed relatively soon after their harvest⁴¹. Koder rightly hypothesized that lands used for agriculture and vegetable gardens to feed the inhabitants of the city were spread throughout the little urbanized area between the Constantinian walls and the new land walls, and to the west of the new defensive system. This suggestion finds further corroboration in textual and architectural evidence for the private usage of several chambers in the land walls towers. The presence of widespread horticultural spaces inside the land walls, particularly along

the southern section of the city walls, amply testifies to their usage through the Byzantine and Ottoman periods. Their contemporary survival makes this practice a resilient urban habit of the city.

In fact, for the Middle and Late Byzantine periods, accounts of the city's horticultural spaces abound and are associated with the long history of monastic establishments⁴². While gardens represented a metaphor as well as the reality of a monastic setting, urban or otherwise, descriptions and representations of monasteries in Constantinople also include the presence of gardens' perimetral walls as an important symbolic and spatial element⁴³. Beyond those walls, vegetable gardens, fruit

⁴¹ Koder, "Fresh vegetables for the capital", op.cit. (n. 37), 51.

⁴² For an ample discussion of textual evidence, A. M. Talbot, "Byzantine Monastic Horticulture: the Textual Evidence", A. Littlewood – H. Maguire – J. Wolschke-Bulmahan (eds), *Byzantine Garden Culture* (Dumbarton Oaks Research Library), Washington, D.C. 2002, 37-67.

⁴³ Monastic gardens are also seen as sacred enclosures, V. Della

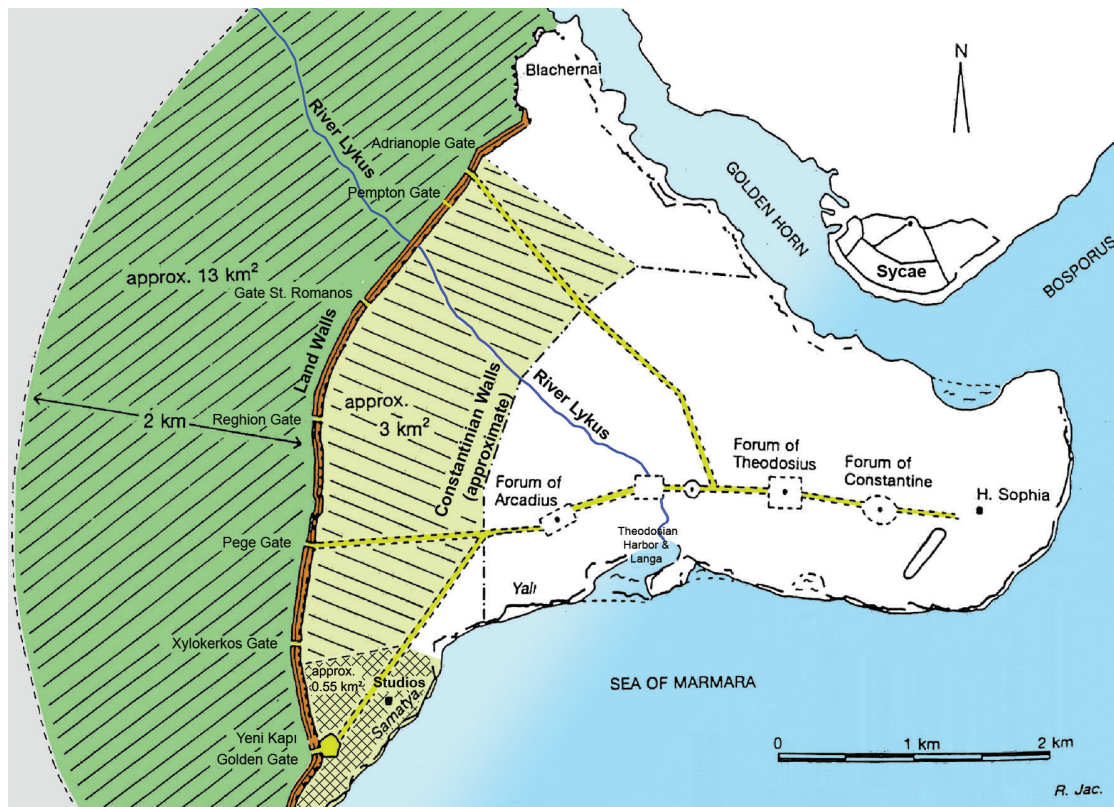


Fig. 7. Constantinople. Probable horticultural zones of the city in the 6th century.

trees and vineyards defined monastic life for dietary, healing and spiritual purposes. While this information is largely attested in Byzantine sources from these periods, travelers from the west also recognized the abundance of walled monastic gardens inside Constantinople. The Castilian Ruy González de Clavijo, in the early years of the 15th century, marveled at the mighty size of the city's land walls and noted the presence of vast enclosures with fruit gardens and cornfields⁴⁴. Not too far from the land walls, Clavijo described the monastery of St. John of Stoudios, whose still functioning monastic community had vast gardens, fountains and more⁴⁵. Earlier, in the mid-12th century, Odo of Deuil, another western

traveler, reported that vast cultivated lands by the land walls were producing for the inhabitants of the city⁴⁶.

Whereas monastic gardens prevail in the textual evidence of the Late Byzantine periods, horticultural spaces not necessarily part of monastic establishments might have existed in earlier periods along the land walls⁴⁷. This is also significant as it supports the suggestion that the city retained ample unbuilt areas between the former Constantinian walls and the new land walls. Together with the monastic gardens well documented for the later periods, the city must have afforded, particularly in its early days and in its immediate vicinity, agricultural estates –a form of structured land-tenure

Dora, *Landscape, Nature and the Sacred in Byzantium*, Cambridge University Press, 2016, 110-117.

⁴⁴ R. Gonzalez de Clavijo, *Narrative of the Embassy to the Court of Timour at Samarcand, A.D. 1403-1406*, K. H. Markham trans. (Hakluyt Society), London 1859, 46.

⁴⁵ Op.cit. (n. 44), 34.

⁴⁶ Odo of Deuil, *De profectione Ludovici VII in orientem: the Journey of Louis VII in the East*, V. G. Berry trans. (Columbia University Press), New York 1948, 64.

⁴⁷ Koder, "Fresh vegetables for the capital", op.cit. (n. 37), 53-54 with more textual evidence for horticulture in the area of Stoudios and the land walls in the Middle Byzantine period.



Fig. 8. Constantinople. Detail of the southern portion of the land walls with surrounding gardens.

organization linked to urban social classes and to economic management of the products⁴⁸. Landholders were also directly involved in selling the produce, which for economic reasons they were interested in offering at nearby markets, thereby cutting down on transportation costs, with urban centers like Constantinople representing a vital reference⁴⁹. The presence of agricultural

⁴⁸ Village wealth, owners, estate centers and their organization in regions of the Mediterranean, Decker, *Tilling the Heatful Earth*, op.cit. (n. 38), 28-79. On the oversimplification of the concept of elites, J. Matthews, "The Roman Empire and the Proliferation of Elites", M. R. Salzman – C. Rapp (eds), *Elites in Late Antiquity [Arethusa, 33/3 (Fall 2000)]*, The Johns Hopkins University Press, 2000, 429-446.

⁴⁹ C. Wickham, *Framing the Early Middle Ages. Europe and the Mediterranean, 400-800*, Oxford University Press, 2005, 271. For urban markets, M. Mundell Mango, "The Commercial Map of Constantinople," *DOP* 54 (2000), 189-208.

estates within and near urban centers during Late Antiquity is well attested and, for the city of Constantinople, the visibility of its elite landowners is documented for this period too in the region of Bithynia⁵⁰.

One of the few names we may associate with areas around the land walls for earlier periods is that of Studios, consul of the East in 454 and founder of the monastic complex whose construction took place soon before his consular appointment (Fig. 4)⁵¹. Despite the remarkable architectural resilience of the basilical in plan monastic church, the central role the community played in subsequent centuries in Constantinopolitan religious affairs, and the inevitable interest it exerted on travelers such as Clavijo, little is known about the archaeology of the monastery and the estate. Only limited archaeological soundings were carried out by the Russian Archaeological Institute of Constantinople in 1907 and 1909, and by the German Archaeological Institute of Istanbul with the Ayasofya Museum in 1979, all of which were accompanied by limited published reports⁵². In both instances, archaeological soundings that took place underneath the church –south and northern aisles, the former atrium and south of the narthex– revealed the presence of earlier architectural remains. A structure identified as a tower, spaces decorated with frescoes, and a water channel presumably feeding into the large-sized underground cistern led U. Peschlow to suggest the existence of a residential complex of the

⁵⁰ M. Moser "Landownership and Power in the Senate of Constantinople", *Journal of Late Antiquity* 9/2 (2016), 436-461. On Constantinopolitan aristocracies and their monastic estates in the 9th century in the region of Bithynia, see Wickham, *Framing the Early Middle Ages. Europe and the Mediterranean, 400-800*, op.cit. (n. 49), 232-240.

⁵¹ On Studios' *curtus honorum*, Martindale, *The Prosopography of the Later Roman Empire*, op.cit. (n. 13), 1037. For a summary of debates about the date of construction of the Stoudios monastery, Bardill, *Brickstamps of Byzantium*, op.cit. (n. 14), 60-62. An updated plan of the church and surrounding remains in, Müller-Wiener, *Bildlexikon der Topographie Istanbuls*, op.cit. (n. 4), 147-152, fig. 138.

⁵² The archaeological soundings conducted by the Russian Archaeological Institute of Constantinople are discussed in, Müller-Wiener, *Bildlexikon der Topographie Istanbuls*, op.cit. (n. 4), 150. The most extensive report on the 1979 archaeological soundings in, A. Peschlow, "Recent Archaeological Research in Turkey," *Anatolian Studies* 30 (1980), 218-219.

Imperial/Late Roman periods that was demolished in order to accommodate the monastic complex⁵³. As a detailed publication of the soundings will certainly shed more light on the archaeology of the site, a working hypothesis sees a well-structured suburban residential estate with annexed lands, which in the middle of the 5th century was replaced by a monastic complex. This might represent a rare Constantinopolitan example, supported by archaeological evidence, of the transformation of a residential estate into a monastic community⁵⁴.

The area around the Stoudios monastery and the southern section of the land walls continues to show the presence of extended horticultural activities well into the Ottoman times. Of the numerous testimonies, work by Lechevalier is of particular relevance as it is based on meticulous on-site surveys carried out with technical instruments (Fig. 8)⁵⁵. The measured plan of the city

shows the extension of gardens outside and inside the land walls between the Golden Gate and the Xylokerkos gate; within the walls are the vegetable gardens of “Is-mail Pacha” and “Horos” while homes for the gardeners are at the end of the land walls by the sea of Marmara. Horticulture, cemeteries and small sized-clusters of homes as well as monuments mark the landscape in this area of the land walls.

These days, a walk along the southern section of the land walls will reveal the presence of horticultural activities in the ditch, with landholders selling fresh produce on the outer and inner terraces in the shadows of one of the mightiest architectural achievements of Late Antiquity. We find a historically resilient dialog, which the rapidly shrinking orchards continue to maintain along the land walls, in what contributes to the survival and conservation of both tangible and intangible heritage.

⁵³ Peschlow, “Recent Archaeological Research in Turkey”, op.cit. (n. 52), 218-219.

⁵⁴ Examples of aristocratic *domus-oikoi* transformed in monastic communities, P. Magdalino, “Aristocratic *Oikoi* in the Tenth and Eleventh Regions of Constantinople”, N. Necipoğlu (ed.), *Byzantine Constantinople: Monuments, Topography and Everyday Life* (The Medieval Mediterranean 33), Leiden 2001, 53-69. Also, T. Kioussopoulou, «Η παρουσία των μοναστηριών μέσα στις πόλεις κατά την ύστερη βυζαντινή εποχή», *Χρήμα και αγορά στην εποχή των Παλαιολόγων*, ed. N. G. Moschonas, Athens 2003, 273-282. For a wide range of perspectives on Middle Byzantine cities, T. Kioussopoulou (ed.), *Οι βυζαντινές πόλεις, 8ος-15ος αι. Προοπτικές της έρευνας και νέες ερμηνευτικές προσεγγίσεις*, Rethymno 2012.

⁵⁵ J. B. Lechevalier, *Voyage de la Propontide et du Pont-Euxin*, vol. 1, Paris 1800, ix-xii; 102-104; the plan of the city is in vol. 2, Paris 1802, 168, drawn by F. Kauffer and J.B. Lechevalier in

1786. A general discussion of historical and visual evidence of horticulture in this area in Ottoman times from 1546 onwards, A. Shopov – A. Han, “Osmanlı İstanbul’unda Kent İçi Tarımsal Toprak Kullanımı ve Dönüşümleri Yedikule Bostanları” (“Yedikule Orchards: Use and Transformation of Urban Agricultural Land in Ottoman”), *Toplumsal Tarihi* 23 6 (2013), 34-38.

Illustration credits

Figs 1, 6: Al. Ricci. Fig. 2: Müller-Wiener, *Bildlexikon zur Topographie Istanbul*, op.cit. (n. 4), fig. 326 p. 287, redrawn by A. Ricci. Fig. 3: Personal Photographic Archive of Zeynep Ahunbay. Fig. 4: Müller-Wiener, *Bildlexikon zur Topographie Istanbul*, op.cit. (n. 4), fig. 333 p. 292; redrawn by V. İndere. Fig. 5: Müller-Wiener, *Bildlexikon zur Topographie Istanbul*, op.cit. (n. 4), fig. 332 p. 291; redrawn by V. İndere. Fig. 7: Koder, *Gemüse in Byzanz*, op.cit. (n. 37), 52; revised by author, redrawn by V. İndere. Fig. 8: Lechevalier, *Voyage de la Propontide*, op.cit. (n. 55), vol. 2, 168.

Alessandra Ricci

ΕΝΑ ΑΝΘΕΚΤΙΚΟ ΤΟΠΙΟ: ΤΑ ΤΕΙΧΗ ΤΗΣ ΚΩΝΣΤΑΝΤΙΝΟΥΠΟΛΗΣ ΚΑΙ ΤΑ ΠΕΡΙΧΩΡΑ ΤΟΥΣ

Τα χερσαία τείχη της Κωνσταντινούπολης, που ανεγέρθηκαν στις αρχές του 5ου αιώνα, αποτελούν ένα

από τα πιο αντιπροσωπευτικά μνημεία της αρχιτεκτονικής της ύστερης αρχαιότητας αλλά και της νέας

πρωτεύουσας. Ευρισκόμενα σε απόσταση περίπου ενάμισι χιλιομέτρων από τα τείχη της εποχής του Κωνσταντίνου έκλειναν τη χερσόνησο της πόλης κατά μήκος μιας γραμμής εξήμισι περίπου χιλιομέτρων. Αποτελούμενα από ένα τριμερές σύστημα, δηλαδή μία τάφρο, έναν πρώτο εξωτερικό περίβολο ακολουθούμενο από ένα δεύτερο περίβολο με αρκετά ψηλούς πύργους, και με τη χαρακτηριστική διχρωμία των εναλλασσόμενων ζωνών λίθων και πλίνθων, τα χερσαία τείχη συνέχισαν να αποτελούν το σύνορο της πόλης σε όλη τη βυζαντινή αλλά και κατά την οθωμανική περίοδο (Εικ. 1-3).

Από την άποψη της αρχιτεκτονικής τεκμηρίωσης, η εργασία που πραγματοποιήθηκε από τους Meyer-Plath και Schneider στη δεκαετία του 1930 παραμένει σημείο αναφοράς για όσους ασχολήθηκαν στη συνέχεια με το μνημείο. Αυτό ισχύει ακόμη και μετά τις πιο πρόσφατες μεταμορφώσεις που υπέστησαν τα τείχη, ως συνέπεια των γρήγορων αλλαγών του αστικού τοπίου και των προγραμματίων συντήρησης, αμφίβολης αξίας. Οι αλλαγές αυτές επέφεραν σημαντικές τροποποιήσεις σε κάποια σημεία τους και σε ορισμένες από τις πύλες της πόλης, όπως για παράδειγμα στην πύλη του Ξυλοκέρκου (Μπελγκράντ Καπί). Η ακεραιότητα των χερσαίων τειχών ως μνημείου συνδέεται βέβαια και με τη διατήρηση του τοπίου που τα προσδιόρισε επί αιώνες.

Πράγματι, όπως μαρτυρείται από πολλές πηγές της μέσης και ύστερης βυζαντινής περιόδου, το τοπίο της πόλης που βρίσκεται κοντά στην εσωτερική πλευρά των χερσαίων τειχών, δεν ήταν πυκνά οικοδομημένο. Επιπλέον, μαρτυρίες δυτικών περιηγητών στην Κωνσταντινούπολη, όπως του Odo de Deuil και του Ruy Gonzalez de Clavijo, κάνουν λόγο για μεγάλους καλλιεργημένους χώρους, πολλοί από τους οποίους περικλείονται από περιμετρικά τείχη μοναστηριών, όπως για παράδειγμα στην κοντινή στα τείχη μονή του Στουδίου (Εικ. 4).

Ένας νόμος που περιέχεται στον Θεοδοσιανό Κώδικα (15.1.51) και έχει χρονολογηθεί στο 413, κάνει συγκεκριμένη αναφορά στους πύργους των «νέων τειχών» και στον προορισμό τους για ιδιωτική χρήση. Επιπλέον, στα *Γεωπονικά*, ένα εγχειρίδιο αγρονομίας που αποτελείται από συλλογή κειμένων, ορισμένα από τα οποία χρονολογούνται στον 6ο αιώνα, περιλαμβάνεται ένα κεφάλαιο που αναφέρεται στο τι συγκεκριμένα πρέπει

να καλλιεργείται στην περιοχή της Κωνσταντινούπολης, στις διάφορες εποχές του έτους. Πρόκειται για έναν συνοπτικό κατάλογο που ταιριάζει με τις κλιματικές συνθήκες της βυζαντινής πρωτεύουσας, τον οποίο ο J. Koder συνέδεσε με τις αστικές καλλιεργείες που βρίσκονταν στα όρια της πόλης και σε περιοχές λίγο έξω από τα χερσαία τείχη (Εικ. 5-7).

Σε μια μελέτη για ορισμένους πύργους που βρίσκονται στην εσωτερική οχύρωση, σημειώνεται η απουσία αμυντικού χαρακτήρα στους κάτω ορόφους, που χρησίμευαν μάλλον ως αποθήκες ή για τη φρουρά. Στους πύργους αυτούς ορισμένες ενδείξεις φανερώουν ότι δεν υπήρχε δομική επικοινωνία με τον επάνω όροφο. Στον κάτω όροφο διαπιστώνεται η ύπαρξη μικρής θύρας, διαμορφωμένης στη φάση της αρχικής κατασκευής του πύργου, που άνοιγε στον χώρο μεταξύ της εσωτερικής και της εξωτερικής περιφέρειας της οχύρωσης. Συγκεκριμένα, στον πύργο 4 και στους πύργους 16, 19, 25, 26 και 33 του νοτίου τμήματος των χερσαίων τειχών υπάρχουν ενδείξεις αυτών των θυρών. Είναι πιθανόν αυτές οι κρυφές θύρες που ανοίγονταν στο εσωτερικό των κάτω ορόφων των πύργων, να αντιστοιχούσαν στους χώρους στους οποίους αναφέρεται ο Θεοδοσιανός Κώδικας και η λειτουργία τους να συνδέεται με τις γεωργικές εργασίες που γίνονταν κοντά στα τείχη.

Η επιτόπια έρευνα κατά μήκος των χερσαίων τειχών, ιδιαίτερα στον νότιο τομέα, φανερώνει ακόμη και σήμερα την ύπαρξη λαχανόκηπων στα πλατώματα των τειχών, στην τάφρο και στην πλευρά προς την πόλη. Η χαρτογραφία της ύστερης οθωμανικής περιόδου καταγράφει επίσης την ύπαρξη κήπων και οπωρώνων, και ο χάρτης του Lechevalier αποτελεί το πιο αντιπροσωπευτικό παράδειγμα (Εικ. 8).

Η σχέση των μνημειακών χερσαίων τειχών της Κωνσταντινούπολης με τους χώρους της αγροτικής παραγωγής αποτυπώνει μια ιστορική και τυπικά αστική ισορροπία ανάμεσα στην αρχιτεκτονική κληρονομιά και την άυλη κληρονομιά.

Μετάφραση από τα ιταλικά: Μαρία Καζανάκη-Λάππα

*Τμήμα Αρχαιολογίας και Ιστορίας της Τέχνης
Κος Üniuersitesi, Κωνσταντινούπολη
aricci@ku.edu.tr*