

Late Byzantine bridges as markers of imagined landscapes

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Bridges provide safe passage over natural obstacles, primarily over rivers. They form an integral part of hydraulic landscapes and define territories and boundaries. The physical appearance of bridges as structures overwhelming and even ‘humiliating’ the river has granted them symbolic meanings as triumphal monuments visualizing the conquest of a river and the expansion of state territory, or as a liminal space between opposed worlds. This paper investigates the significance of Late Byzantine bridges (1204–1453) as an architectural and cultural phenomenon. It examines built structures, as well as imagined representations in visual and written sources, in an interdisciplinary framework. The discussion of Byzantine bridges and their comparison to Seljuk and Ottoman monuments emphasizes the significance of this particular class of monument as an expression of power and as a defining element of hydraulic landscapes — both real and imagined.

Keywords bridge, Byzantine, landscape, hydraulic infrastructure, architecture

Bridges, landscape and Byzantium

Bridges, both real and imagined, form an integral part of waterscapes and are important markers ‘in the landscape of human history’ (Leontis 1999: 636). These man-made structures reshape riverine landscapes, demonstrate the dominion of humankind over nature and the political and economic power of their builders. While they create social, economic, military and cultural advantages in many areas of human life, disadvantages, too, may result from their construction: bridges may impede the navigation of a river; make the current run faster or even alter its course; they may grant access to enemies and perhaps endanger the safety of the state. As structures that overwhelm or even ‘humiliate’ the river, the physical appearance of bridges has afforded them symbolic meaning, ranging from triumphal monuments visualizing the overpowering of a river and expansion of state territory, to places of transition defining a space between contrasting worlds.¹

The present article, by focusing on this particular group of monuments, offers an art-historical and archaeological approach to the notion of landscape, with special emphasis on how the Byzantines understood it. Compared to studies of ancient, western medieval and modern landscapes, this topic has been surprisingly neglected. It gained scholarly attention² only recently, particularly through Veronica Della Dora’s seminal treatise on ‘Landscape, Nature, and the Sacred in Byzantium’ which has shown that the reason why historical geography remained disconnected from Byzantine art is that ‘the latter does not approach the world in the western naturalistic way’ (Della Dora 2016: xiii). Della Dora further specified that Byzantine art ‘rather privileged a revelatory, multi-perspectival approach, whereby space was viewed simultaneously from different angles and wrapped the viewer, rather than setting him or her at a distance’ (Della Dora 2016: 6).

Mindful of this observation, the present study will concentrate on the Late Byzantine period, which

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¹The literature on the significance of bridges is vast, see, e.g., Badescu (2007); Galliazzo (1995: xvii–xviii, 153, 517–20, 535–45, 591–95, 601); Hellenkemper and Maschke (1983); Maschke (1978); O’Connor (1993: 1–3); Ruddock 2000: (xiii–xxxv).

²On Byzantine landscape, see Gregory (2006) and, especially, Della Dora (2016); both also contain references to ancient, western medieval and modern landscapes in art history and archaeology. From among the vast literature, see especially the influential editions by Cosgrove and Daniels (1988) and Mitchell (1994).

began with the Crusaders' conquest of Constantinople in 1204 and ended when it fell to the Ottoman Empire in 1453. It is a period of particular significance because the Byzantines still claimed to be the sole heirs of the Roman emperors and the chosen rulers of the world, even though their political and economic situation had drastically changed. In the final years of its existence, the Empire, which had lost its main territories – the Balkans and Asia Minor – had shrunk to a 'micro-state' that only ruled over Constantinople, scattered areas in its vicinity and the Peloponnese. Despite this decline, the Byzantine Empire experienced a remarkable spiritual and artistic resurgence that influenced the culture of every state it came in contact with and that, through the Orthodox Church, survives to this day.³

While all of the bridges under consideration here stood in territories ruled by the Byzantines at the time in question, the visual sources depicting bridges include also, examples drawn from independent states, such as Serbia, that were culturally influenced by Byzantium. In order to evaluate the significance of bridges as a defining element of waterscapes, as well as an expression of power, earlier Byzantine monuments, as well as Seljuk (late 12th to 13th century) and early Ottoman (14th century to 1453) bridges on former Byzantine territories, were also considered.

The material discussed here was investigated and evaluated as part of my recent project, *Byzantine Stone Bridges: Material Evidence and Cultural Meanings*, which is the first comprehensive study of this long-neglected topic in the field of Byzantine architectural and cultural history. Based on extensive fieldwork on the Balkan Peninsula and in Asia Minor, which included the survey of c. 300 Roman, Late Antique, Medieval and modern bridges, as well as detailed research on textual and visual sources, and with the help of unambiguous dating criteria, c. 40 (re-)constructions could be attributed to the Byzantine period (4th to 15th centuries) (Fig. 1). The detailed analysis of the monuments provided clear insights into the particularity of the construction techniques of the Byzantine builders and the structural characteristics of the buildings, while the evaluation of the written and visual material revealed that the Byzantines formulated a unique, multi-layered understanding of the significance and meaning of bridges that coincided with their Christian worldview and self-confidence stemming from imperial superiority.⁴

³The most important study of the Late Byzantine period remains Nicol (1972); see Reinert (2002); Stathakopoulos (2014: 150–90); Talbot (1991).

⁴A comprehensive monographic study of this topic is in preparation, see the website of the project Bridging Byzantium (<https://bridges.univie.ac.at>).

The Milvian bridge in Rome as a symbolic and architectural marker

Symbolically speaking, a bridge was the birthplace of the Byzantine Empire. The Milvian bridge, which carries the vital Via Flaminia across the Tiber into Rome, was the most important access route to the city, and also the place at which Constantine the Great overwhelmed his rival Maxentius in 312, to become sole ruler of the Roman Empire.

The Battle of the Milvian Bridge is depicted on the south side of the relief frieze of the Arch of Constantine in Rome, which was dedicated on 25 July 315, shortly after the victory of Constantine over Maxentius (Fig. 2). The location of the event is clearly shown in the image, which shows a bridge made of a single, great, semi-circular arch that spans a mighty river. The victorious army of Constantine can be seen crossing the bridge, while the enemy is drowning in the Tiber. To the right of the arch, as if supporting the bridge and the warrior on it, the personification of the river is represented, visualizing its alliance with Constantine.⁵ Thus, in addition to being the actual location of the battle, the bridge gained meaning as a symbolic place of victory supported by the river itself.

Later Christian authors attributed Constantine's victory to the aid of the Christian God, who granted him a vision of a cross accompanied by the text 'In this sign, conquer' (Eusebius, *Vita Constantini* 1, 28, after Cameron and Hall 1999: 81). As a consequence, the Milvian Bridge came to signify the transformation of the Roman Empire into a Christian state under the perpetual protection of the Christian God. This perception is emphasized in a full-page miniature from the 9th century representing, in the middle register, Constantine's victory. It is framed at the top by his dream before the battle and by Helena's discovery of the True Cross in Jerusalem at the bottom (on fol. 440r of a copy of the Homilies of Gregory of Nazianzus, Cod. Gr. 510, Bibliothèque Nationale, Paris, see Brubaker 1999: especially 163–69, fig. 45). Here the personification of the Tiber is omitted, and the supporting role of the river is replaced by a golden cross in glory leading Constantine riding to victory. The volume of the stream has been diminished in favour of a huge arch, which dominates the centre of the middle register. Thus, the motif of the bridge is used not only to identify the actual location of the

⁵See the celebration of the Tiber by an anonymous panegyrist of Constantine who says: '... and you properly wanted to be part of Constantine's victory, so that he drove the enemy into you and you killed him', quoted in Campbell (2012: 383).



Figure 1 Map of bridges constructed or restored by the Byzantines between the 5th and 15th century (Google maps with entries by the author based on material evidence and written sources).



Figure 2 The Arch of Constantine, Rome, relief frieze, detail: the battle at the Milvian Bridge (photographer: Galina Fingarova).

battle, but also to signify the riverine landscape. Another modification of the middle Byzantine representation is the emphasis on the metaphorical dimension of the motif. On the one hand, in the middle register, the bridge is used to emphasize two opposites: the triumphant ruler on the left and the fleeing army of Maxentius on the right, with the usurper, lanced by Constantine, falling from his horse exactly in front of the bridge. On the other hand, the bridge plays an important role in the creation of a symbolic narrative in the assembled scenes as they show the ruler who ‘awoke’ to Christianity, with his transformation visualized through the bridge

and the manifestation of the true religion implying the triumph of the Christian Byzantine state.

These images emphasize two conceptions of bridges — a structure of strategic importance shaping actual landscape and a symbolic motif constructing metaphorical space. In both examples, the bridge is depicted as a single massive semi-circular arch. On the Arch of Constantine, the solid wall on the left shows the strong foundation of the bridge, while the masonry of large, well-dressed ashlar blocks is depicted in the miniature. A comparison with the still extant Milvian Bridge in Rome (Galliazzo 1994: 32–36; O’Connor 1993: 64–65), which, despite numerous

restorations, has preserved the original solid piers and two semi-circular arches executed in large, finely-dressed blocks without mortar (Fig. 3), shows that neither image faithfully represents the structure. Rather they emphasize the main characteristics of the Roman structure with its firm foundation and wide spanned, semi-circular arches constructed with building materials and techniques of outstanding quality. These characteristics were perfected by the Romans, gaining them the reputation of being the best bridge-builders in antiquity. They created many remarkable monuments which served as crucial functional elements of the extensive Roman road system and facilitated the expansion and management of their vast empire (Galliazzo 1994; 1995; O'Connor 1993).

The Byzantines as bridge-builders

The Byzantines inherited and continued to use and maintain the elaborate Roman road network and its bridges, and in the course of time, within the ever-shrinking frontiers of their realm, adapted them to their changing needs and circumstances (Belke 2008). The enormous political, military, economic and social significance of the road network remained unchanged and, along with it, the bridges, which, over the centuries, continued to help define and dominate territorial space.

Moreover, Roman bridges were considered a testament to the achievements of the past and an allusion to the glorious and prosperous history which the Byzantines claimed for themselves — in other words, symbols that connected the past to the present. At the same time, these structures were appreciated for their technical sophistication and admired for their artistic value,⁶ and they served as models for the construction of new bridges. At first sight Early Byzantine examples display such similarity with their Roman predecessors that dating them proves challenging, especially in the absence of secure evidence such as inscriptions, Christian symbols, or reference in written sources.

Early Byzantine period

A closer examination of the preserved structures, however, reveals deviations from the Roman bridge model that were developed by the Byzantines based on their own practical experiences and needs. First of all, the building materials and construction techniques used in Late Antique and Early Byzantine bridges, reflect changed characteristics, corresponding to the

⁶Procopius, for example, in *De bellis* V, xvii, 11, described the Augustan bridge at Narni as '... a very noteworthy sight; for its arches are the highest of any known to us', in Dewing (1961: 166–67).

building practices found in other contemporary monumental buildings of a particular period, or geographical region. Compared to their Roman antecedents, Byzantine bridges were built more practically, more quickly and less expensively. These developments should not be evaluated negatively, as they did not affect the stability of the structure; moreover, they demonstrate significant innovations, such as the use of two-centred and segmental arches long before they appeared in Islamic and western European bridges. By renovating and redefining the Roman bridge model, the Byzantines developed structures that initiated the transition to modern bridge constructions (Fingarova 2014: 241–44; Galliazzo 1995: 91–98). Thus, they carried on the Roman tradition of constructing durable monuments at important strategic points and shaping landscapes with political and economic significance.

New evidence of bridge-building activities during the Middle and Late Byzantine period

My research has shown that bridge-building activity decreased during the Middle, and even more so, during the Late Byzantine periods. This may reflect the changed political and economic situation of the Byzantine state after a period of strength, especially during the 6th century. However, it must also be attributed to the poor state of preservation of monuments, the shortage of records in contemporary written sources and the lack of modern scholarly research. Only two bridges from the Middle Byzantine period, none of them preserved, are well known from the written sources.⁷ Moreover, there is the Bridge of Karytaina which, as attested by a donor inscription (see below), was restored during the Late Byzantine period (see below). However, a systematic survey of surviving structures, in connection with older archaeological reports, adds to the scattered evidence of bridge building during the Middle and Late Byzantine periods.

Excellent examples are provided by two bridges in the province of Balıkesir in north-western Turkey: the Aesepus Bridge (Güvencin Köprüsü in Turkish, the Dove Bridge) over the river Gönen (ancient Aesepus) to the north of the town of Gönen (Fig. 1: no. 1), and the Macestus Bridge, or the Bridge of

⁷The monastic foundation charter of the monastery of Nea Gephyra (New Bridge) by the monk Nikodemus, dated 1027, emphasizes the erection of a bridge which crossed the Evrotas river just beyond the fortification walls of Sparta on the Peloponnese (Fig. 1: no. 6), see Reinert (2000). The monastic foundation charter of the monastery of the Mother of God Kosmosoteira by the Sebastokrator, Isaak Komnenos, near Feres in Greece, dated 1152, mentions the erection of a bridge by the founder (Fig. 1: no. 7), see Patterson Ševčenko (2000).



Figure 3 The Milvian Bridge, Rome, preserved Roman piers and arches, view from the west (photographer: Galina Fingarova).

Sultançayır, over the river Simav or Susurluk (ancient Macestus) located near Susurluk around 100 km from Gönen (Fig. 1: no. 2). Both structures were dated to Late Antique or Early Byzantine times by previous scholars, but these dates should be revised.⁸

With a total length of *c.*158 m and a maximum width of 5.6 m, the Aesepus Bridge comprised ten semi-circular arches, as well as one quarter-circle rampant arch (Galliazzo 1994: 417, no. 865; 1995: 97–98; Hasluck 1905–06). A closer investigation of the building materials and techniques used in its construction, reveals two different kinds of masonry, as well as a variation in the building of the supporting arches. This leads me to conclude that a substantial restoration must have taken place⁹, including the re-erection of the four piers in the main stream and their superstructure, which was endowed with five parallel walls that ran longitudinally to form slot-like hollow spaces between them (Fig. 4). This material-saving and load-reducing system was employed to elevate the deck. The restoration further included the

superstructure of both abutments together with most arches. The latter were constructed using alternating voussoir and brick courses, and both the initial and later putlog holes are still preserved on the western-most arch of the eastern abutment (Figs 5, 6).¹⁰ Over both piers supporting this arch, vaulted chambers were constructed that fit transversally into the interior of the spandrels (Fig. 5). They were blocked on either side in order to leave hollow spaces that, as in the system described above, saved building materials and relieved the load on the piers and arches.

A similar renovation of the superstructure may be seen in the Macestus Bridge (Figs 7, 8), which had a total length of *c.* 300 m, a width of 6.35 m, and which consisted of 15 segmental arches with a regular span of *c.*14.2 m (Galliazzo 1995: 97; Hasluck 1905–06: 187–88; Wiegand 1904: 300–01, pl. XXIV). When compared with Theodor Wiegand's records from the beginning of the 20th century, when the bridge stood nearly intact, a detailed investigation of its scant remains shows that during restoration new arches connecting the piers were constructed. The 3.6 m wide piers were reinforced on the western, upstream side by pointed cutwaters. Their triangular endings abutted the spandrels directly above the piers, closing the relieving arches of the initial structure. On the downstream side, these were blocked by a wall and appear as flat, blind niches,

⁸Frederick William Hasluck (1905–06: 189), overlooking the reconstructions of both structures, attributed their construction to the reign of Constantine I (r. 306–337). Vittorio Galliazzo (1994: 417; 1995: 97) noticed only the extensive restorations of the Aesepus Bridge, and, considering the hollow chamber system used and especially the arch construction with alternating voussoir and brick courses, dated the reconstruction of the Aesepus Bridge to between the second half of the 5th century and the time of Justinian (r. 527–565), and the erection of the Macestus Bridge to between the reign of Justinian and the first half of the 7th century. A welcome exception is the suggestion by Charles Brian Rose and Reyhan Körpe that the Aesepus Bridge was reconstructed in the first half of the 13th century (Rose and Körpe 2008: 108).

⁹Galliazzo (1994: 417), as well as the team of the Granicus River Survey Project (Rose and Körpe 2008: 108; Rose *et al.* 2007: 112), have also observed that the bridge must have been reconstructed.

¹⁰The former are of a rectangular shape and are placed in the ashlar springing, whereas the putlog holes of the reconstruction are round and laid higher into the brick masonry.



Figure 4 The Aesepus Bridge near Gönen, Turkey, piers over the main stream of the river, view from the south-west (photographer: Galina Fingarova).



Figure 5 The Aesepus Bridge near Gönen, Turkey, westernmost arch of the eastern abutment and vaulted chamber, view from the north (photographer: Galina Fingarova).

creating vaulted hollow chambers. In the upper part, on both sides of the spandrels, shorter flat niches, that have a decorative function, were integrated. Their facings, as well as the facings of all arches of the bridge, were constructed with alternating brick

and voussoir courses similar to those of the Aesepus Bridge.

This arch construction technique may be used as a criterion for dating, as it appeared in the 11th century and became widespread during the Late



Figure 6 The Aesepus Bridge near Gönen, Turkey, westernmost arch of the eastern abutment, east side (photographer: Galina Fingarova).

Byzantine period.¹¹ Consequently, the thorough reconstruction of both bridges took place after the 11th century. Additional evidence for the dating of the restoration of the Macestus Bridge is the decoration with flat niches similar to the ornamentation of other buildings from the Middle and Late Byzantine periods (Velenis 1984), as well as the fortress located on a hill about 300 m to the north-west of the bridge. It overlooked the crossing of the river and has been dated to the 12th century (Foss 1982: 191–92, fig. 26; Foss and Winfield 1986: 146).

The re-evaluation and redating of two further bridges in the region allows for these chronological limits to be confirmed. One is the Uluabat Bridge, across the Adırnas river (ancient Rhyndacus), just

east of the modern village of Uluabat (ancient Lopadium) (Fig. 1: no. 3) which has generally been dated to the reign of Constantine I (Hasluck 1905–06: 189; 1910: 78; Lefort 1995: 209; Tunç 1978: 155). With a length of more than 200 m and a width of *c.* 6 m, the remnants of this monumental structure clearly reveal that it, too, underwent substantial restoration.¹² It was mainly the superstructure that was reconstructed, as shown in the masonry of alternating ashlar and brick courses; in many parts, a considerable number of vertical bricks were inserted to form a cloisonné. As with the two bridges discussed above, the new arches were constructed with alternating voussoir and brick courses; a hollow chamber is still visible over one of the piers. Convincing dating criteria for the restoration, in my opinion, are provided by the fortress on the south bank of the river which was closely related to the bridge (Fig. 9). The fortress shows very similar masonry of alternating ashlar and brick courses and partial cloisonné; strikingly enough, the only preserved arch of this fortress was erected with alternating voussoir and brick courses (Foss 1982: 159–61; Hasluck 1910: 78–83). Written sources attest to the fortress having been erected by Emperor John II Comnenus (r. 1118–1143) in 1130, who used it as a base for his campaigns in Asia Minor (Joannes Cinnamus II, 5; Nicetas Choniates 24B). Therefore, given its strategic importance for the fortress, it is plausible to assume that the bridge was reconstructed during this building campaign.

The second bridge, the so-called Huge Bridge (Koca Köprü), stands *c.* 7 km north-west of the modern town of Iznik (ancient Nicaea) and formed part of an important road that connected Nicomedia to Nicaea (Fig 1: no. 4 and Fig. 10). It is *c.* 50 m long and slightly more than 5 m wide. The bridge has three arches which are constructed with alternating voussoir and brick courses; the voussoirs, and most of the stone used in the superstructure, are obvious spolia. Vaulted hollow chambers were constructed in both spandrels between the main arches. Unfortunately, the piers are completely buried, hence it is impossible to say whether the bridge was built *ex novo*, or whether, which seems more likely, an older structure had been repaired. Although the prevailing opinion is that the bridge was constructed during the Comnenian period (from 1081 to about 1185) (Bilici 2014: 2–3; Ermiş 2009: 246–47; Lefort 1995: 214–15; 2003: 465), I would suggest that it was (re-)built

¹¹I am grateful to Urs Peschlow for evidence that this kind of arch construction is found on the Nimphaion in Olympos, near Antalya, which dates to the 3rd century. He concedes, though, that it is an isolated case that must be regarded as a regional feature. Giorgos Velenis has shown that this arch construction technique is first attested in two churches in the province of Bursa, not far from the bridges being discussed: the eastern buildings of Hagia Sophia in Iznik and in Kemerli Kilise in Tirilye, both of which he dates to the 13th century (Velenis 1984: 100, n. 3). However, Sabine Möllers (1994: 51–56) has shown that the former dates back to the 11th century, which can be taken as a *terminus post quem* for the thorough restoration of both bridges.

¹²Maximilian Lau was the first to notice ‘signs of repair’ due to damage by an earthquake in 1327 or earlier; he dated the initial structure to between 258 and the early 9th century (Lau 2016: 436).

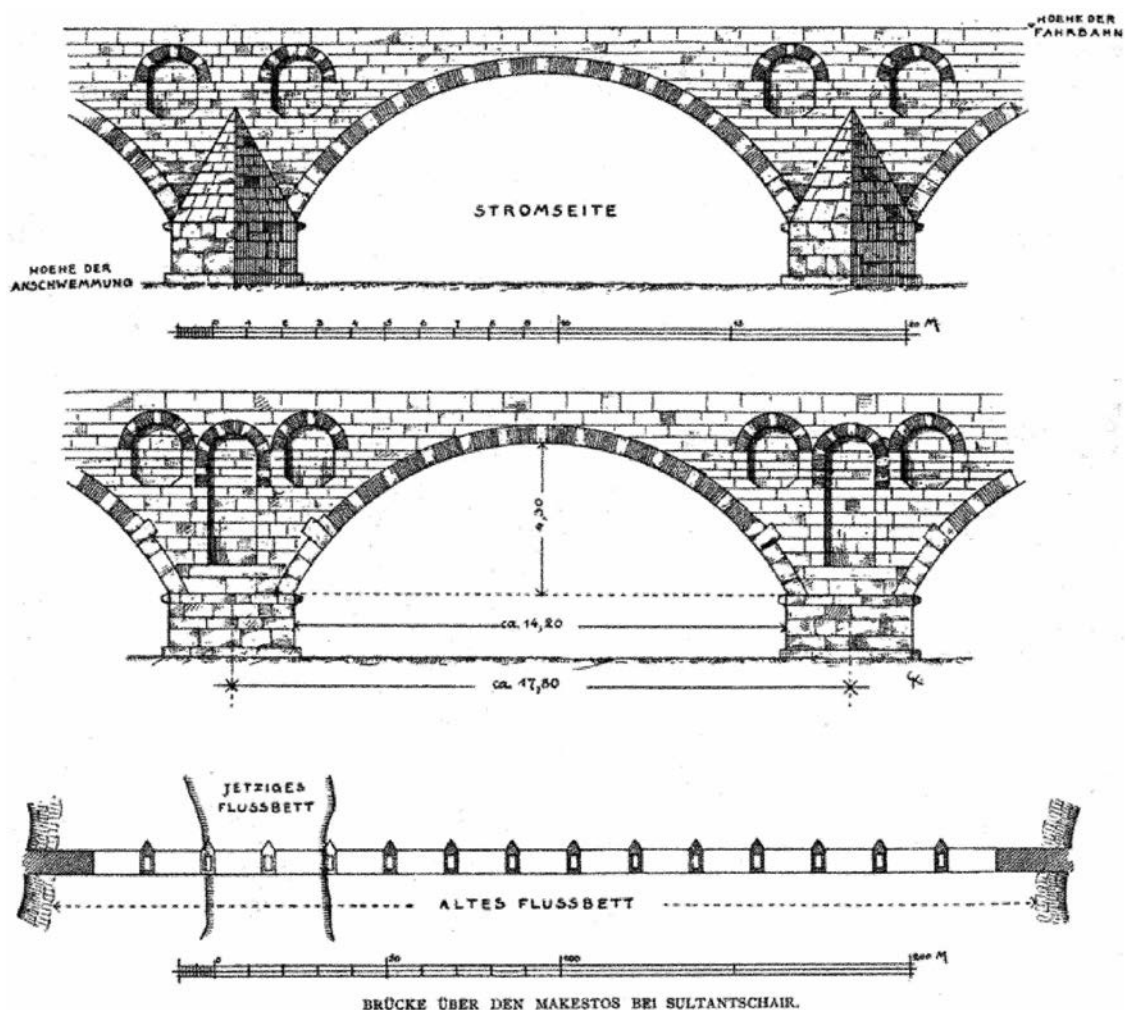


Figure 7 The Macestus Bridge near Susurluk, Turkey, drawings by Theodor Wiegand (Wiegand 1904).

during the reign of John Vatatzes (1222–1254), due to the striking similarity of its masonry and construction techniques with those used in the reconstruction of the fortification walls of Nicaea by that emperor. It seems likely that John Vatatzes not only carried out extensive renovation and construction work on the fortress and many churches in his capital city, but also repaired the infrastructure in its surroundings (Foss 1996: 93–122).

The Karytaina Bridge

To my knowledge, the bridge over the River Alphaios, near Karytaina in the Peloponnese (Fig. 1: no. 5), is the only bridge which provides firm evidence for any bridge-building activity during the Late Byzantine period. Based on a donor inscription, its renovation can be dated precisely.¹³ The inscription, in the form of an epigram, reads:

¹³For the bridge, see Moutsopoulos (1985–86: 183–93; 1997); for the inscription, see Moutsopoulos (1985–86: 185, figs 29, 30; 1997: 334, fig. 3); Rhoby (2014: 249–50).

As the new builder of the bridge, o stranger,
note Raoul Manouel Melikes.

Each pious man who wishes to pass across it
should pray for grace from above with all his soul
lest he not look as before into an abyss.

Year 6948 of the 3rd indiction (1439/40).

(English translation by the author, see the German translation by Andreas Rhoby (2014: 250)).

The unambiguous statement of the inscription — that in 1439/40 Raoul Manouel Melikes restored the remains of an older structure which was dangerous to pass — finds confirmation in the material evidence of the preserved monument (Fig. 11), which has undergone reconstruction to strengthen its structure and elevation similar to the examples discussed above. In its current state, the bridge is 52.8 m long, 3.7 m wide and once consisted of five arches of differing height and span (Moutsopoulos 1997: 334). As the springers of older arches and the putlog holes used for their construction are still discernible on the piers



Figure 8 The Macestus Bridge near Susurluk, Turkey, spandrel on the south side of the river, view from the east (photographer: Galina Fingarova).



Figure 9 The Uluabat Bridge, Turkey, with adjacent fortress, drawing by M. Philippe le Bas (Le Bas 1888: plate 44).

beneath the present arches (Figs 11, 12), it seems likely that in the course of restoration, the bridge was given new, higher arches constructed of alternating voussoir and brick courses. A safe crossing was ensured by the physical presence of a parapet, but also by a chapel, which was added on the west side of the second pier from the north, as a guarantee of divine protection for the edifice and those crossing it.¹⁴

The reconstruction of the bridge¹⁵ took place during Byzantine rule when Karytaina was part of the

Despotate of Morea. It was an important building project because of the proximity of Karytaina to Mystras, capital of the Despotate, and because of its strategic position controlling the main route between the Arcadian plateau and the coast of Elis. The undertaking was funded by a wealthy landowner and high-ranking person, Raoul Manouel Melikes, whose wife, Helene Asanina Palaiologina, was a member of the imperial house of the Palaiologoi (Rhoby 2014: 251).

The bridges discussed here give an improved understanding of the bridge-building activity at the end of the Middle and during the Late Byzantine period. Although limited to the reconstruction of older bridges, the quality of the restoration work shows

¹⁴The chapel, which continues to serve the Orthodox, is dedicated to the Nativity of the Mother of God; this dedication can only be traced back to 1830 when William Martin Leake (1830: 21) mentioned it. On sacred buildings on or near Byzantine bridges, see Fingarova (2014: 248–51); Millet (1949).

¹⁵There is no evidence of a donor for, or a firm dating of, the initial structure. It was probably built after the Crusader conquest, when Karytaina gained importance as a seat of one of the largest baronies in the Frankish Principality of Achaea. The construction of the bridge was probably contemporary with the erection of the Castle of Karytaina at the top of the

hill in the mid-13th century, although an earlier dating cannot be excluded, see Moutsopoulos (1985–86: 184–85; 1997: 334); Rhoby (2014: 251).



Figure 10 The Huge Bridge near Iznik, Turkey, view from the south-west (photographer: Galina Fingarova).



Figure 11 A bridge near Karytaina on the Peloponnese, Greece, north part, view from the west (photographer: Galina Fingarova).

that knowledge of bridge building had not been lost: Byzantine builders still knew how to construct firm arches; moreover, they developed elaborate hollow chamber systems to relieve the load and conserve building materials.

It is noteworthy that the renovated structures were protected by, or led to, fortifications. As Clive Foss

and David Winfield have shown, the rural landscape of Asia Minor was reshaped during the 11th to the 13th centuries by the erection and renovation of fortifications. They became essential to the survival of the Byzantine Empire after the first raids of the Seljuk Turks in the middle of the 11th century. ‘The first fortresses of this period were built as a response to the



Figure 12 A bridge near Karytaina on the Peloponnese, Greece, northern springer of the third arch (from north to south) (photographer: Galina Fingarova).

Turkish raids, the next as bases for the Byzantine reconquest of Asia Minor, and a long series constructed during the 12th century represents an effort to bring security to a country which was never free from Turkish attack' (Foss and Winfield 1986: 145; on fortification works by the Comnenoi: 145–50). The same effort — 'to increase the resources of the country, and to ensure its security' — led the emperors of Nicaea (1204–1261) to (re-)construct a widespread network of fortresses in the territories over which they ruled (Foss and Winfield 1986: 150–59). As shown above, the building activity in Byzantine territories in Asia Minor was not limited to fortifications, but also included bridges as an important part of the infrastructure and markers of strategic points in riverine landscapes. Similarly, the restoration of the bridge near the fortress of Karytaina on the Peloponnese, in the 15th century, occurred when the Despotate of Morea was one of the last strongholds of the Byzantine Empire.

Indeed, bridges, like fortresses, are a useful reflection of the political and economic realities of the Late Byzantine Empire. Consideration of contemporaneous Seljuk and early Ottoman bridges, especially those built in former Byzantine territory, reveals how the older monuments influenced the structures built by the newcomers, and how they changed the landscape.

Throughout Anatolia we encounter extensive Seljuk construction of caravanserais and bridges, which,

taken together, help to map an extensive network of travel and trade from the late-12th through the 13th centuries. In most cases, these impressive monuments were commissioned by the sultans themselves or their relatives, and, like the Byzantine examples, they bear witness to the projection of state power from urban centres into the Anatolian countryside. The same is true of the Ottoman sultans who, on their conquering march through Byzantine territory, built impressive monuments to display their power and presence. Like the Byzantine examples discussed above, the Seljuk and early Ottoman bridges are built of local materials — in most cases rather small, roughly-dressed stone blocks bonded together with mortar, or reused material from older structures. One may conclude that when the Seljuks, and later the Ottomans, assumed control of Byzantine territories, they not only used Roman and Byzantine constructions as prototypes to complement and expand their own expertise, but they also adopted long-established techniques and local materials to add to their own building traditions, most probably with the involvement of local craftsmen. While the Seljuks tended to prefer slightly pointed arches, the Ottomans made use of both two-centred and semi-circular arches, often on the same monument. Both rediscovered the structural advantages of the relieving arches that were typical of early Roman monuments. Last but not least, for reasons of economy, rationality and

practicability, the Seljuks produced irregular and angled bridges not found among Roman and Byzantine structures. This tendency was not adopted by the Ottomans, whose bridges returned to a regular form, running straight over the river. Moreover, the Ottomans were masters at building over wide spans, and they seemingly had little regard for economic concerns, which brings to mind the Roman and early Byzantine masterpieces driven by the politics of empire expansion (for Seljuk and early Ottoman bridges, see Çulpan 1975; Goodwin 1994; İltar 1974; 1978; 1993; Tunç 1978).

Bridges as symbolic landscape elements in visual sources

Building on the above — the study of the physical aspects of bridges — the second part of this article will turn to evidence from visual sources. These offer clues as to how the symbolic and metaphorical meanings of bridges were conceived and used by contemporaries according to their worldview.¹⁶

Admittedly, representations of bridges in Byzantine art are quite rare, but it is remarkable that the majority date from the Late Byzantine period.¹⁷ In keeping with the Byzantine perception of landscape, the images do not depict a particular, functional structure, but instead emphasize the symbolic and metaphorical meaning of bridges. The first two images to be discussed decorate the walls of sacred buildings and narrate biblical stories: they are, the Baptism of Christ in the old Metropolis in Veroia in northern Greece and the Return of the Magi in the Serbian Pantokrator church of Dečani, now in Kosovo. Both date to the 14th century and include the bridge motif to accompany the narrative and enhance its symbolic meaning. The last image, including four miniatures from the Greek Alexander romance (Cod. Gr. 5, today in the Hellenic Institute of Venice), is almost contemporaneous with the frescoes, but belongs to the secular realm. It depicts the construction of bridges as the responsibility of a victorious emperor and an important requirement for triumphing over the world. The captions of the miniatures allow us to contrast the Late Byzantine perception of bridge imagery with that of the Ottomans; and they make a clear statement regarding its political importance.

¹⁶For a symbolic interpretation of bridges, see Leontis (1999); for the bridge motif in western paintings, see Calabrese (2011); Sweetman (1999).

¹⁷To date, I have been able to find 17 representations from the Late Antique and Byzantine periods, of which approximately ten date to the Late Byzantine period. I do not expect these numbers to increase greatly.

The Baptism Fresco in the Old Metropolis of Veroia, Greece

As usual, the baptismal scene (Hennessy 2008: 73; Mouriki 1983: 461–62; Papazotos 1994: 258) takes place in a riverine landscape dominated by the holy waters of the River Jordan, which is bounded by rocky banks (Fig. 13). Remarkable in this context is the depiction in the upper left section, next to the Baptism of Christ, of a rather large, three-arched bridge, complete with a stone parapet, which does not span the river but a cliff. The presence of four young boys running over the bridge and, at its right end, a group of men facing John the Baptist, suggests that the scene represents the people of ‘Jerusalem and all Judea and the whole region of the Jordan’ who went out to John to be baptised (Matthew 3: 5–6).¹⁸ Underwood (1975: 276) and Mouriki (1983: 463) have interpreted the presence of children in baptismal scenes as an expression of the idea that ‘through “birth” by baptism one becomes a child’. I would link the bridge motif to this interpretation. It was added to the scene, not only as a decorative antique motif in accordance ‘with the general tendency towards the humanization of religious iconography that characterizes the Late Byzantine period’, as claimed by Mouriki (1983: 473), but also as a symbolic motif associating the baptism with the ‘transversal crossing of the river’ (Della Dora 2016: 215).

The return of the Magi fresco in the Pantokrator church of Dečani

A similar conception of the bridge motif can be seen in the scene of the Return of the Magi to Babylon (Fig. 14) in the Pantokrator church of Dečani. Again, its appearance surprises because such a structure is not mentioned in the illustrated text (Babić 1995; Pätzold 1989: 13, 24–25; Spatharakis 2005: 50–54; Todić and Čanak-Medić 2013: 326–35, 362–68) nor can it be attributed to the iconographic tradition. Unlike in the baptismal scene in Veroia, the water of the river plays an inferior role beneath the elaborate arches of the bridge which constitutes the main focus of the scenery. It serves as a platform for the Magi on horseback, leading them to Babylon, which is depicted as a medieval fortress. They are welcomed by its citizens who are dressed in contemporary eastern Mediterranean costume. The Magi symbolize the

¹⁸This scene, which precedes the Baptism of Christ, is depicted as an autonomous composition on fol. 145 in the 11th-century manuscript of the Homilies of Gregory of Nazianzus in the State Historical Museum in Moscow, Vlad. 146. It heads the homily (*Oratio XL*) on Holy Baptism, in which Gregory of Nazianzus associates baptism with birth and explains that there are three births for mankind: ‘the natural birth, that of Baptism, and that of Resurrection’, Hennessy (2008: 73); Mouriki (1983: 263–64, fig. 12); Underwood (1975: 276, fig. 12).



Figure 13 Old Metropolis of Veroia, Greece, Baptism of Christ (Papazotos 1994, detail of plate 14).



Figure 14 The Serbian Pantokrator church of the Dečani monastery, Kosovo, Return of the Magi to Babylon (photographer: Fani Gargova).

recognition of Christ and homage paid to him by foreign, eastern nations, and they are the heralds who carry the message of God to their homelands. The garb of the Magi is completely different from that of their fellow citizens: while the Magi are clad in historical Persian dress, the citizens wear costumes typical of 14th-century Muslims. Prompted by the confrontation with the Turks, the painting thus fuses characteristics of the time of the Gospel events with Serbian and Byzantine attire of the 14th century. In the painting, the Magi assume the role of heralds of the Christian message to the Muslims, who welcome it, and so it

reflects the wishes and demands of the contemporary Byzantine world for the conversion of Muslims (Babić 1995: 152–53; Pätzold 1989: 5, 46–47, 88, 90–91; Todić and Čanak-Medić 2013: 473). In this context, the bridge can be viewed as a symbol of the transitional act of conversion, as well as a structure transporting the Gospel events into reality.

Four miniatures in the Alexander Romance, Codex Gr. 5, in the Hellenic Institute in Venice

Four miniatures depicting bridges were included in the lavishly-decorated Greek Alexander Romance, which



Figure 15 The Alexander Romance, Codex Gr. 5, Hellenic Institute in Venice, fol. 101v (courtesy of the Hellenic Institute in Venice).

was probably commissioned by Alexios III Komnenos, emperor of Trebizond between 1349 and 1390 (Gallagher 1979; Trahoulia 1997a: 53–64; 1997b: 33–35; 2010: 145–47). In contrast to the biblical scenes discussed above, the appearance of bridges in the miniatures (folios 68r, 101v, 127v, 130r; Figs 15, 16) is not surprising as they are mentioned in the corresponding text passages of the Romance (II.9, II.30, II.37, II.41; Greek texts and translations into English and Italian, Stoneman 1991: 96–97, 175, 179–80; Stoneman and Gargiulo 2007: 146–49, 212–15, 280–85). The latter describe Alexander as a builder of bridges in places where the erection of such structures was considered almost impossible, for example over the Euphrates, one of the most important rivers of Western Asia; over a tremendous river in which water flowed for three days and sand for another three days; and over an enormously deep ravine at the end of the known world. The texts assert the structural stability of the constructions

which enabled the safe crossing of the vast army with its equipment and provisions. Their strength is emphasized further by the listing of the materials used — ‘iron arches and bands’ in the bridge over the Euphrates, and huge timbers over the River of Sand — as well as by detailed records of the construction of the latter within 63 days. The notion of a triumph over nature is proudly expressed in the inscription, in three languages, on the bridge leading to the end of the earth, ‘Passing by here, Alexander erected an arch and, after crossing it with the entire army, he took a rest’ (trans. P. Sykopetritou and Ch. Papavarnavas).

A comparison of the passages with the accompanying illustrations (Figs 15, 16) shows that although the miniatures aim to depict the narrative faithfully, they interpret it through the use of a visual vocabulary. Most notably, the construction process asserted by the passages is not depicted anywhere, but the illustration of the structures generally follows the



Figure 16 The Alexander Romance, Codex Gr. 5, Hellenic Institute in Venice, fol. 127v (courtesy of the Hellenic Institute in Venice).

description of their architectural form and building materials. In all four cases, the strength and stability of the bridges, as well as their load-bearing capacity, is visualized by a crowd — on foot or mounted — which is crossing them. At the same time, the mighty streams are meant to suggest danger and peril.

Three of the miniatures repeat the same composition and use the bridge as a platform on which to elevate the ‘Byzantine’ rider above the obstacle, thereby signifying his subjugation of nature (Fig. 16). The same idea is implied in the army’s crossing of the River of Sand, where Alexander sits on the rocks in the manner of a triumphant ‘Byzantine’ emperor (Fig. 15). Both the text passages and the images consider the building of bridges and their guarantee of a safe crossing to be the task of a victorious ruler. The emphasis was put on his triumph over nature, which

enabled the ‘Byzantine Alexander’ to proceed on his victorious march to the end of the earth and contributed to the general interpretation of the book as a commission reflecting the claims of its imperial patron.

However, the story of the manuscript does not end here. After the conquest of Trebizond by Sultan Mehmed II (1451–1481) in 1461, it obviously fell into Ottoman hands, as is attested by the captions added in black, in Ottoman Turkish, to each of the miniatures of the book. Since the illustrations also contain Greek captions, in red ink, written at the same time as the text, the Ottoman captions are likely to have served a similar purpose: they explain the illustrations, and along with them, guide the viewer through the story. Although the Greek captions, which reproduce an abbreviated version of the text, influenced the content of the Ottoman, in many cases the latter offer a rather free interpretation of

the images.¹⁹ In the context of the present study, a comparison of the Greek and Ottoman captions on the four miniatures reveals the perception of the bridge motif by the Ottoman scribe and his audience. The construction of bridges is mentioned only on folios 68r and 101v (Fig. 15), but in both cases, the rivers are replaced by seas which exalts the merit of Alexander's achievements. However, the material used for the River of Sand, which is explicitly mentioned in the Greek caption, is omitted by the Ottoman scribe, as well as the information that it took the army 66 days to cross it. Even more striking is the fact that the construction of the bridge on fol. 127v (Fig. 16) and the proud donor inscription are totally ignored. The Ottoman caption laconically mentions that Alexander encountered a bridge and crossed it; on fol. 130r the same bridge is simply referred to as 'that place'. One gets the impression that the Turkish captions emphasize the conquests and victories over real and legendary foes and view the bridges simply as landmarks for the Islamized Alexander on his conquering mission.

Unlike the 'Byzantine Alexander', who obviously regarded the construction of a bridge as mastery over nature and a step towards conquering new territories, the 'Ottoman Alexander' was challenged only by bridging the sea, whose crossing would have meant a campaign beyond the limits of the known world. This shift in emphasis may be explained by the political situation in both Byzantine Trebizond of the 14th century and the Ottoman Empire of the 15th century. While the emperors in Trebizond struggled for survival and used the image of Alexander to project their claims and wishes for the re-establishment of past glories, the relationship between the Ottoman sultans and the victorious Macedonian king, who within a few years had managed to conquer an extensive territory stretching from Greece to the borders of the known world, reflected their current imperial expansion to both east and west that culminated in the capture of Constantinople in 1453. Thus, the perception of the bridge motif clearly reflects contemporary Byzantine and Ottoman political fortunes and opposes imagined landscapes to the real.

Conclusion

This investigation of bridges as both physical structures and pictorial motif in works of art has provided

¹⁹The Ottoman captions have not yet been translated or extensively studied as a whole. A few of them were translated in Trahoulia (1997a: 221–26) and studied by Kastritsis (2011). I am grateful to Sultan Akülker who translated the Ottoman captions on the four miniatures containing bridges for me and to Paraskevi Sykopetritou and Christodoulos Papavarnavas who translated the Greek captions.

greater insight into both the political situation and the self-perception of the Byzantines during the last two centuries of their empire's existence. They had inherited a considerable Roman infrastructure and continued to maintain it in the territories they ruled. The quality of their restoration work indicates that knowledge of bridge-building had not been lost; indeed, we find indications that Byzantine building techniques and expertise influenced Seljuk and Ottoman monuments. However, the changed political and economic situation in Byzantium did not allow their construction to rival either earlier achievements, or the contemporary projects of their neighbours.

The diminished capacity of Byzantium to carry out impressive public works was balanced with the creation of imagined landscapes, which are exemplified beautifully by the use of the bridge motif in visual sources. Compared to earlier times, the depiction of bridges increased during the Late Byzantine period; emphasis was placed, not on the representation of a particular famous structure, but on symbolic meaning. The bridge was regarded as a sign of connection, transition and transformation, as well as domination over nature. Well aware of their political situation, the Byzantines counterbalanced their loss of power and glory by bridging imagined rivers and creating fantastical waterscapes.

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