

CHAPTER 7

The Christian Symbols and Iconography of the Aqueducts of Thrace

by James Crow

One can see [the cross] celebrated everywhere, in houses, in marketplaces, in deserts, in streets, in mountains, in valleys, in hills, on the sea, in boats, on islands, on beds, on clothes, on weapons, in chambers, at banquets, on silverware, on objects in gold, in pearls, in wall paintings, on the bodies of much burdened animals, on bodies besieged by demons, in war, in peace, by day, by night, in parties of luxurious livers, in brotherhoods of ascetics; so must do all now seek after this miraculous gift, this ineffable grace.¹

ARCHITECTURAL DECORATION

No other bridge on the Thracian water supply system or indeed in the Roman world is as extensively decorated with Christian or other apotropaic symbols as Kurşunlugerme (Fig. 7.1; see elevation Fig. 4.7).² Similar symbols are also known from other major bridges in Thrace, especially Karamanoğlu, Balligerme, Keçigerme, and Kumarlıdere, plus one surviving decorated chrismon on a keystone of the Bozdoğan Kemer in Istanbul. This range of Christian symbols from secular monuments is

unparalleled. It could be argued that in the early Christian and medieval world there was no real distinction in the mind of believers between the religious and secular and that such a dichotomy is a modern construction. Without becoming engaged in an essentially modern debate between the sacred and the profane, this distinction in the Byzantine world remains to be fully explored, since most discussions have invariably concentrated on explicitly religious contexts, where there is often a presumption that,



FIG. 7.1 Kurşunlugerme (K20), general view.

¹ Quoted in Maguire *et al.* (1989), 18; *Contra Iudaeos et Gentiles* 9; attributed to St John Chrysostom.

² A single phallus is known from the face of the Pont du Gard; the fourth- and fifth-century repairs to the aqueducts of Rome include Christian motifs, see Coates-Stephens (2003), 166, fig. 1.

‘Religion was the soul of Byzantine culture, permeating all aspects of life’,³ with little attempt to assess how the applications of such imagery and symbolism might be more nuanced in varying situations and times.

The discussion of the decorative symbols and inscriptions will consider the distribution, iconography and form of the carvings, and assess their role and function, and what they can contribute to a better understanding of the chronology of the structure in the absence of direct epigraphic and other documentary evidence. There is a wide range of motifs and texts but all the major carvings are in relief and therefore can be seen to be contemporary with the construction of the bridge. In addition the significant number of blank keystones and unworked bosses surviving indicates those areas of the structure which were undecorated or never completed (cf. S38).

Distribution (Figs 4.7; 7.2)

Relief carvings are found on all three tiers of the bridge at Kurşunlugerme, especially on cornice blocks, voussoirs and keystones. The distribution of these symbols is in part affected by the survival of the structure, so that relatively few are known on the west face where there has been very extensive collapse, caused by centuries of earthquakes. Other factors such as accessibility and visibility will be discussed below. The catalogue records all known symbols and inscriptions that we were able to identify and also those recorded in the past. It is unlikely to be complete since parts of the bridge remain inaccessible and are often obscured by vegetation and trees, for instance one of the best preserved crosses with a detailed inscription above Arch 10 (S40) went unrecorded by both Oreshkov and Dirimtekin.

On the bottom tier, no symbols survive from the west face, although an inscription with the invocation beginning *Kyrie Boethe* is set in a damaged *tabula ansata* on the west face of the north pier of Arch 18.⁴ At the south end Arch 20 has an elaborate keystone with a jewelled cross, partly unfinished



FIG. 7.2 Kurşunlugerme (K20); general view of Buttress V from the east showing the location of crosses and other symbols and masons' marks.

(S3). This is complemented by a cross on the voussoir to the left with the name Alexander (S2). The matching voussoir to the right does not survive, but may be an unlocated cross with the name Theophilus noted by Oreshkov.⁵ On the chamfered cornice immediately above the keystone of Arch 20 is a cross (S13), and at the foot of Buttress VII south of the south pier is another simple cross (S1). The lowest cornice at the level of the springing of Arches 18, 19 and 20 is a cyma recta moulding, in contrast with the chamfered string-courses above. On the face of a voussoir on the north side of Arch 19 is a cross in the form of a staurogram (S22). The east face of the vault of Arch

³ Mathews (1997), 21; see the discussion following a recent exhibition on the theme of ‘Sacred Art, Secular Context’, in Kirin (2005), 13–17; for a wide and perceptive review of ‘Defining the Holy’ in medieval and early modern Europe, setting the debate in a clear theoretical perspective, see Spicer and Hamilton (2005), 1–26.

⁴ See Oreshkov (1915), 102–3, fig. 22; Dirimtekin (1959), 235, fig. 32.10, mistakenly associated this text with the *tabula ansata* below the christogram on Buttress V, which is blank, see S16. Oreshkov clearly states that the text was located about 3 m from the ground surface (1915), 102.

⁵ Oreshkov (1915), 101, fig. 19.

18 is partly obscured by vegetation, but there is a sequence of three crosses: a small cross is visible on the south impost (S4), above this on the south side is a vertical cross (S5), which unlike S2 is not aligned with the angle of the voussoir, and the keystone is partly obscured but appears as an incomplete chrismon (S6). Matching crosses on the north side are not visible. On the internal north face of the arch are two crosses (S7 and S8) on or above the chamfered plinth of the socle.

The second tier is marked by a chamfered string-course, running across the face of the buttresses and the bridge. On the east face the keystones of Arches 13, 14, 15 and 17 have fallen, and 12 and 16 can be seen to be unfinished. Significant symbols survive on the string-courses of the buttresses and on the voussoirs of the arches. On the first string-course, level with the base of the middle arches, there is a clear cross on Buttress V (S12) and also above the keystone of Arch 20 (S13).

On the east face the greatest number of surviving crosses is found at the level of the springing of the second tier arches. On the string-course of Buttress II are two symbols: a wreath with a simple acclamation to the emperors (S9) and a cross within a circle (S10) beside it. On the north impost of the adjacent arch, 12, is another cross (S11). The next two arches (13 and 14) are partly obscured by trees and creepers, but a relief cross can be seen on the south impost of Arch 14 (S14). Two small crosses are positioned at each end of the cornice on Buttress V (S17 and S18) and at the centre of the buttress is a large six-armed chrismon (S15), below which is the carved outline of a *tabula ansata* (S16), though no inscription is visible within it. It is difficult not to recognize that Buttress V was treated as if it were 'central' to the programme of decoration, even though it flanks the central Arches 15 and 19 (Fig. 7.2). A small cross straddling the angle of the impost block is seen on the south side of Arch 15 (S19). To the south, at the same level on Buttress VI there are two simple crosses (S20 and S21).

Although the external voussoirs of Arch 17 have collapsed, in the interior north face there are two bands of crosses: the first two (S23 and S24) on the chamfered imposts, and a second row of three crosses cut three courses below (S25, S26 and S27). Much less is known to survive from the west face of the bridge, however close to the stairs at the south end of the bridge on Buttresses VII and VIII is a group of crosses on the lower string-course of the second tier (S28, S29 and S30); these have now been badly damaged by treasure-hunters.

Unlike the lower two tiers, both the west and east faces of the upper tier arches are preserved, as well as much of the superstructure. In Arch 1, the west keystone is unworked, but the east has a tall, bold cross, on a high, triangular base, now damaged (S31). On the west side of Arch 2 there is an elaborate arrangement combining texts, symbols and crosses. The finely-carved chrismon on the keystone is flanked by two crosses with the texts 'Emmanuel' and 'God with us' (S33, S34 and S35). On the east-facing keystone there is only a chrismon (S32), without any accompanying texts. A fallen chamfered block from the main string-course below Arch 3 has a relief cross flanked by two engraved monograms (see p. 192). Both the keystones of Arch 3 are unworked, but on the cornice above is a cross with the letters ΓΕΝ ΑΩ (S37). On the west face of the next arch (4) the keystone has a rough cut-out of a chrismon but without the encircling wreath (S38). There is no further evidence for decoration on the next five arches (5–9), although the keystones survive.

The final two arches to the south reveal some of the most remarkable decoration from the bridge. On Arch 10 there is a pair of crosses; on the east side it is an uncomplicated high relief cross (S39), but to the west the imagery combines a cross with an inscription reading 'The Cross has conquered. It always conquers', surmounted by an eight-armed wreathed chrismon (S40). On the next arch (11) the east keystone is unworked, but the west keystone has a triumphant eagle with a snake (S41).

Overall there are thirty-one carved Greek or Latin crosses, one jewelled cross, and four chrisma, including one possible chi-rho sign, with additional symbols limited to the eagle and snake. Crosses and chrisma are found on all three tiers, although the complex imagery is located on the west side of the upper tier. Inscriptions are only known in contexts where they can be read.

Iconography

The eagle and serpent

On the western keystone of Arch 10 there is a relief carving of an eagle and serpent (S41); the bird is shown with open wings and holds a serpent across its talons with a victor's wreath in its right talon. Images such as this are known in early Byzantine art but are not common. A well-known example from Constantinople is from the Great Palace mosaic showing the violent struggle of the eagle and the snake. It has been considered to symbolize the

emperor's triumph over his enemies.⁶ In an ecclesiastical context, Henry Maguire has recently published an example from Kavalla in northern Greece. This is thought to be part of an ambo and shows an eagle simultaneously grasping a small animal, either a rabbit or hare, and attacking a snake with its beak and claw.⁷ Almost all the comparisons Maguire cites, with the exception of the Great Palace mosaic, are from ecclesiastical contexts, especially ambos, and from the group of two-zone capitals of the type known from St John of Stoudios and elsewhere.⁸ The use of the motif of the eagle and snake on a keystone as at Kurşunlugerme is not attested elsewhere.

In addition to these examples, the eagle alone was prominently used on imperial monuments in Constantinople. The best known example is from the Column of Marcian, with four eagles at the angles of the capital.⁹ A closer comparison is from the Golden Gate, where an eagle with outspread wings and a victor's wreath and ribbons in its claw survives at the level of the cornice on the south-west angle of the northern pylon.¹⁰ Both examples clearly show the continuing use of the eagle as an imperial symbol into the fifth century. At the Golden Gate, Kramer has argued that the eagle forms part of a programme of sculptures combined to celebrate triumph: Victories, elephants, and a statue of the emperor.¹¹

At Kurşunlugerme, although the eagle on the keystone may be seen to have resonances of the imperial use known from fifth-century Constantinople, as noted before, the snake in its talons and the overall range of Christian images on the bridge strongly suggest a Christian symbolism, as paralleled at Kavalla and elsewhere. In this context the eagle can be understood to have a range of meanings, including renewal, resurrection, immortality, and Christ himself.¹² More particularly, combined with the serpent the image evokes the struggle with evil and ultimately the triumph of Christ. Maguire provides a num-

ber of examples of how the eagle and snake motif was understood in early Church commentaries, such as St Jerome and others. According to these interpretations, the eagle and snake either signifies that God protects his children from the devil, like the eagle protects his offspring from the snake, or alternatively is a symbol of Christ defeating the devil and thus releasing mankind from sin, or finally the eagle triumphant over the snake represents the blessed in Paradise. At Kurşunlugerme the imagery is modified by the victor's wreath in the eagle's talon, suggesting that above all it was to be understood as a symbol of Christ's victory over evil and death, matching the image and text of the triumphant cross in the adjacent arch, 9 (S40). The eagle and wreath alone could simply represent the triumphant Christ, but by showing the serpent, with its obvious reference to the devil, the victory is commemorated.

The triumphant cross

The relief carving of cross and chrismon with an inscription 'The Cross has conquered. It always conquers' on Arch 9 (S40) is again very unusual, since the Latin relief cross clearly supports the wreathed chrismon, although unlike the other chrisma on the aqueduct the wreath does not have ribbons. Within the arms of the cross is the inscription quoted above. What is explicit in the imagery and what reinforces the text is that the cross is the Cross of Christ. The combination of a relief cross with this text is known from Egypt amongst the images associated with the physical conversion of the temple of Isis at Philae, dated 535–37. Nautin observes that this acclamation is first recorded in the Coptic version of the Acts of the Council of Ephesus in 431, although its first use as an inscription is not till a century later.¹³ Also reminiscent of the combined chrismon, cross and text at Kurşunlugerme, although with a different combination of words and images, is the ivory of Anicius Petronius Probus,

⁶ Jobst and Gurtner (1997), fig. 26; for a discussion of the interpretation of the mosaic see Trilling (1989).

⁷ Maguire (1992), 286, notes that while the motif is known from both Roman and Byzantine art, the eagle killing the serpent is more common in later Byzantine art (1992), 288; see the British Museum panel from Constantinople, Buckton (1994), 140, no. 151.

⁸ Maguire (1992), especially 288; Kautzsch (1936), 157, pl. 30; for the middle Byzantine period see an example recently excavated from Amorium, Lightfoot *et al.* (1995), 128–9, pl. 16b.

⁹ Known locally as the Kuştaş (bird stone); Kollwitz (1941), 75, pl. 10/11; see also eagles decorating the base of the Column of Arcadius in the early Trinity College drawings, but missing by the end of the eighteenth century, Kollwitz (1941), figs 6 and 8.

¹⁰ Strykowski (1893), 13–15, figs 9–11.

¹¹ Kramer (1968), 7–35; Sodini (1994), 74–5; Bardill (1999) argues that the inscription on the gate is more likely to refer to Theodosius the Great than his grandson as Kramer suggests; see below p. 209, n. 49.

¹² See the discussion in Maguire (2000), 22–4.

¹³ Nautin (1967), 6, 14–15; also Acts of the Council of Constantinople, 536, ACO, vol. 3 p. 87, l. 3, and p. 88, l. 24. I am grateful to Charlotte Roueché for this reference.

showing the emperor Honorius holding a standard surmounted by a small banner with a chi rho, with a Latin text IN NOMINE XPI VINCAS SEMPER, clearly a variation on Constantine's standard, the *labarum*.¹⁴ The image of the triumphant cross in Byzantine art has been recently discussed by Christopher Walter,¹⁵ but he considers this mainly in the context of the eighth and later centuries; earlier epigraphic examples are not considered.¹⁶

Chrismon with flanking crosses

On Arch 2 is the third significant group of symbols and acclamations. On the west-facing keystone is a finely-worked chrismon within a wreath and a carefully carved knot for the two ribbons with vine-leaf terminals (S33). It is flanked by two crosses with the acclamation 'Emmanuel' and 'God with us', a direct quotation from St Matthew's gospel (S34, S35). Such a decorative programme is frequently found on the chancel screens of early Christian churches, although not usually with texts as seen here.¹⁷ The combination of chrismon and flanking crosses is also known from a lintel of the outer Golden Gate, where, in common with examples from chancel screens, the central chrismon is linked to the flanking crosses by extended ribbons or filets.¹⁸ The reason that this element is absent from Kurşunlugerme is probably because it would have been impractical to carve them across the individual voussoirs. Another example from Constantinople is from the gate through the Sea Walls by the tower of Theophilus, and Leo and Alexander.¹⁹ This shows a central monogram with an allegorical religious text, below a quotation from Psalm 118, verse 19, across the top of the lintel. It is thought to date from the later fifth or sixth century.

The chrismon is important; basically it is a variation of the chi rho symbol for Christ and the Cross.²⁰ The chi rho may have been used on Buttress V (S15), but the head is damaged. On the Thracian aqueducts the number of arms for the chrismon varies between six and eight. In its simplest form the arms are surrounded by a circular undecorated border, but in the more complex form, as seen from Arch 2 and elsewhere, the symbol is set within a wreath of laurels, with a gem at the top. This wreath may be interpreted either as an athlete's symbol of victory or the imperial crown as shown on the head of Galerius from Romuliana.²¹ The examples from the west and east sides of Arch 2 (S33 and S32) are particularly well-executed, comparable to carving in Proconnesian marble from Constantinople.²² The form of the knot for the ribbon at the base of the wreath is especially significant (see catalogue S33), since it is an accurate portrayal of a lark's head knot, sometimes confused for the reef knot. Elsewhere other examples of wreathed chrisma representing the binding of the ribbons to wreaths were either very simplified or were elaborate abstract designs.²³ The wreathed chi rho symbol from the south side of the base of the Column of Arcadius belongs to the former category;²⁴ however there are a number of examples comparable to Kurşunlugerme. Two are illustrated by Guidobaldi *et al.* from Iznik and Egypt, both undated; however the most significant, especially as an indicator of date, are the worn examples from the south and east sides of the base of the Column of Marcian, which appear to show clear similarities.²⁵ The form of this knot may have symbolic significance since it resembles one half of a reef knot, itself associated with the knot of Hercules and found on a number of mosaic pavements in early

¹⁴ Kiilerich (1993), 65–7; see also Kollwitz (1941), 49–50.

¹⁵ Walter (1997).

¹⁶ See examples from the walls of Aphrodisias, Roueché (1989), 134 vi, 139.

¹⁷ See a wide range of examples illustrated by Guidobaldi *et al.* (1992); Teterianikov (1995), 690–2 discusses the symbol of the three crosses and its association with Christ on Golgatha between two thieves.

¹⁸ Guidobaldi *et al.* (1992), fig. 228; Meyer Plath and Schneider (1942), fig. 11d.

¹⁹ Demangel and Mamboury (1939), 73–4, fig. 84; the verse of the psalm is translated as 'Open the gates of righteousness to me, I will come in and give thanks to the Lord'.

²⁰ Wessel and Restle (1991); Kollwitz (1941), 70–1, discusses examples of chrisma or christograms from Constantinople in comparison with the mid-fifth-century Column of Marcian.

²¹ Srejić (1993), 232–3, pl. 4.

²² Firatlı (1990); Kollwitz (1941), pl. 45.

²³ For the former see examples in Guidobaldi *et al.* (1992), fig. 230 from Hagia Sophia, and fig. 239, a porphyry sarcophagus from Istanbul Archaeological Museum; for the latter see *ibid.*, fig. 225, a marble panel from Istanbul Archaeological Museum.

²⁴ Freshfield (1922), pl. 17; Kiilerich (1993), 62.

²⁵ Guidobaldi *et al.* (1992), fig. 229, Iznik; fig. 233, el-Felusyat; for the Column of Marcian, see Sodini (1994), 75–8, and Kollwitz (1941); the loop is clear on the south face of the base, pl. 13, 2; although Kollwitz's drawing (1941), pl. 10/11, of the column base incorrectly restores an additional ribbon, not visible on the column today.

Christian churches, where it is considered to have an apotropaic value.²⁶ The reef knot is also found in association with crosses as part of an assemblage of apotropaic symbols from a tower at Resafa,²⁷ probably dating to the early sixth century.

Crosses

A wide variety of crosses can be found at Kurşunlugerme. Some are very simple, two inscribed lines, sometimes with terminals in the form of a letter T. These smaller crosses are cut into cornices or into the faces of blocks and these may well be later in date than the main repertory of crosses and other symbols which are contemporary with the construction of the bridge. There is a wide range of types of relief crosses; the simplest have plain surfaces, with parallel sides, or sometimes ending in a slight splay (see S1, S7). Close parallels to these come from the Golden Gate where they are found on quoins or imposts. One example is found on the surviving south base of the Arch of Theodosius.²⁸ Many crosses are more complex, although most have arms

of equal length (Greek cross) rather than longer vertical arms (Latin cross), but there are notable exceptions of the latter form, especially on the arches of the upper tier where the crosses are often in high relief (see S31, S39). This contrasts with the majority, which are in low relief with channelling to create shadows and to emphasize the form by providing a visual texture to the surface — an important feature when seen from a distance. One unusual cross is the jewelled cross with the letters Alpha and Omega on the keystone of Arch 20 (S3). This is a well-known variation but its complexity and uniqueness among the Thracian aqueducts mark it out as exceptional.²⁹ A form more frequently seen at Karamanoğlu, Keçigerme and Kumarlidere is the cross with a hooked ligature, the staurogram, known at Kurşunlugerme on the east face (S2, S15, S22). None of these forms can be dated with any precision, although the simple relief crosses can be associated with monuments in Constantinople dating to the reign of Theodosius the Great.³⁰

DISCUSSION

With over forty Christian symbols and texts surviving and recorded from the bridge at Kurşunlugerme, as well as a smaller number known from other major bridges in Thrace, the corpus may provide evidence for the chronology of the system and also can offer significant insights into the broader debate concerning texts and monuments in the ancient world and Byzantium. To what extent were texts in public spaces and within churches intended to be read? How far do they reflect literacy at different periods? To what extent do words fulfil other roles, offering a spiritual or magical power beyond literal meaning or functioning within a building as decoration?³¹ From the discussion above we can observe that at the most imposing aqueduct in Thrace, despite its remoteness,

it would seem that all the surviving texts were located in positions which were easily legible in Late Antiquity, either one tier from ground level, or on the narrow upper tier where they could be seen from the level platform. Furthermore we can say that most of the elaborate crosses and symbols are found in the more prominent locations, especially the jewelled cross in the keystone of lower Arch 20 (S3) and the dramatic six-armed chrismon (S15) on Buttress V above a blank *tabula ansata* (S16).

The most prominent carving could be thought to suggest visibility and S15 is unusual, since it is exceptionally large compared to the majority of other higher carvings which can only be seen with a telescope from the ground or many others which are

²⁶ Maguire *et al.* (1989), 3–4; Maguire (1994), 267; Kalavrezou-Maxeiner (1985), 96 for continuing use of the *nodus Herculeus* in the middle Byzantine period. The knot also forms a motif in the relief moulding of the frieze of the west gallery of Haghia Sophia.

²⁷ Karnapp (1976), 49–50, see below.

²⁸ Meyer-Plath and Schneider (1942), pl. 10a; Müller-Wiener (1977), fig. 298; Sande (2003), 106.

²⁹ Wessel and Restle (1991); see also the base of the Column of Arcadius (Freshfield (1922)).

³⁰ See Bardill (2004) for a review of the chronology of many of these monuments, but see also Chapter 8, note 49.

³¹ See Papalexandrou (2001) and James (2007); the latter makes an important connection between text and decoration, although both mainly limit their discussion to examples from Byzantine churches; Bierman (1998) provides a valuable discussion of Fatimid public texts, although is less convincing in some of her Byzantine analogies, see especially ch. 2; Maguire *et al.* (1989), 1–33 is an essential introduction to the range and purpose of images used in the early Christian world; Prentice (1922) considers evidence from door lintels of houses and churches from Syria. The range of texts from religious and vernacular structures is not considered in the following discussion which is limited to public, secular structures, city gates, walls, bridges etc. Rogers (1991) presents an important discussion of the reading of Classical Greek inscriptions in Ephesus and elsewhere.

only visible by climbing into the upper arches; this applies especially to the small crosses on the middle tier, located both on the string-course and at the springing of the arches. By contrast the most sophisticated compositions, combining crosses, chrisma and texts, are located on the upper row of Arches 2, 10 and 11 where they could easily be seen from the broad platform on the second tier passing beside the upper arches. The carvings and texts on the upper tier also indicate that what we see now is probably only a proportion of what was originally intended to be decorated. Most of the facings from the lower two tiers on the west side are lost and, to judge from the upper tier, the carvings on the west face were more elaborate than those to the east. There are no surviving texts on the middle tier except at Buttress II at the north end, which can easily be read from the hillside (S9). The blank *tabula ansata* S16 poses a problem since we might expect that it was intended to carry an inscribed text which was never executed. Close to the floor of the valley, however, there was at least one text in Arch 20 (S2), possibly matched by another name, and there is a long, if now largely illegible, text beginning 'Lord have mercy' on the west face north of Arch 18 close to the ground.³² We can conclude firstly, that in this instance the written inscriptions were intended to be legible and, secondly, that the word, either as blessing or protection, required a reader to give it power. Where the text could not be read, as on the blank *tabula ansata* on Buttress V, it was never carved. The same may also be the case at the keystone at Keçigerme, where there is an ansate panel below the twin busts; it is also apparently blank and is too high to be read even through binoculars.³³

In his discussion of non-Christian motifs as textile designs in the early Byzantine period, Henry Maguire has noted that it is possible to distinguish between those that were intended to *protect* the user from harm and those that aimed to *attract* good fortune and prosperity; significantly for his sample the majority of examples were secular rather than religious.³⁴ At Kurşunlugerme we can observe differences in location and visibility and apply this paradigm, though these symbols are clearly Christian, even if the context is not ecclesiastical. One group of images we have identified is certainly apotropaic. The

protective role emerges from the location of crosses at places of potential weakness, where reinforcement might be needed. Thus a number of crosses are found on the lowest chamfer at the base of the lower piers and buttresses, for instance S1, S8, and S9, and similarly at impostes and keystones, although the decoration of the latter features in the classical world, such as triumphal arches, was also decorative and was not necessarily apotropaic. These were also natural focal points on the structure, and the worked blocks and string-courses offered convenient working surfaces. This latter function has, however, been observed by Slobodan Ćurčić in his discussion of fifth- and sixth-century buildings where crosses are found at potential points of weakness, such as keystones or the spandrels between arches.³⁵ Ćurčić proposes that the position of the crosses illustrates 'reliance on the miraculous power of the cross to ensure structural stability of the building, in all likelihood against earthquakes'.³⁶

The evidence from Kurşunlugerme, however, would suggest that the positioning of crosses on voussoirs is more complex; often they are not at the springing of the arch, but are positioned on the face of the voussoir, three or more blocks towards the centre. In Arch 20, for instance, there is an elaborate cross with an inscribed name; another named stone is reported from earlier studies, possibly matching the remaining example to the right (Alexander (S2) and Theophilus). The individuals cannot be identified but may have been involved in some aspect of the building process. Elsewhere crosses of varying forms are found on the outer faces of the voussoirs of Arches 19 and 18, as well as the upper Arch 2. The decoration of the upper tier arches presents the most complete and complex evidence and suggests that the builders were going beyond mere apotropaic symbolism. On the west faces of Arches 2 and 10 (both inset one arch from the end of the bridge) are the most complex groups of text and images. On Arch 2 this comprises a chrismon flanked by two crosses, with the combined text: 'Emmanuel' and 'God with us'. Across the bridge to the south this is matched by an image and text acclaiming the Victorious Cross. The iconographic significance of this cross has been discussed, but neither of these texts is explicitly apotropaic in the manner of the inscription from

³² Oreshkov (1915), 102, fig. 22. See above n. 4.

³³ Oreshkov (1915), 98, fig. 10.

³⁴ Maguire (1990), 216.

³⁵ Ćurčić (1992), 18–19.

³⁶ Ćurčić (1992), 20.

Kourion, cited by Ćurčić, which specifically states that the buildings are protected by 'the much invoked signs of Christ'.³⁷ Both examples from Arches 2 and 10 might be better understood in Maguire's second category which aimed to attract divine fortune and blessing.³⁸ Similarly the image of the eagle on the keystone of Arch 11 can be recognized as a parallel to the Victorious Cross adjacent to it; both complement the notion of Christian triumph and neither have an explicitly apotropaic role.

A further distinction can be made from the straightforward apotropaic function of the texts and symbols. In their discussions of the use of crosses and other symbols at the basilica of St John of Stoudios and at Haghia Sophia in Constantinople, both Ćurčić and Teteriatnikov draw attention to examples of protective symbols which were knowingly covered from view with facings or plaster-work.³⁹ Similar examples are known from elsewhere and we can note especially the Justinianic inscription from the vaulted cistern of the Nea church in Jerusalem.⁴⁰ This comprises a monumental inscription moulded from plaster, with letters in high relief, recording the building work of the emperor and the Abbot Constantine; below this is a cross, also in high relief. Especially significant in this context is the fact that because of the darkness of the cistern the inscription and cross had passed unnoticed by previous investigators and as the excavator noted, 'The inscription should rather be considered as a building inscription, which was unveiled and seen only during the inauguration ceremony'.⁴¹

At Kurşunlugerme and other Thracian aqueducts there is, however, a difference between the crosses on arches and those on other parts of the structure, which like the Nea, have a passive, apotropaic, role and are often not clearly visible. The latter do not presuppose the involvement of a viewer and it would seem that the initial act of carving and dedication

was the most significant event. By contrast the main texts on the bridges are located in positions where the viewer may be involved in the invocation of blessing. In turn this raises questions of orality in reading texts, a subject recently discussed by Papalexandrou.⁴² By ensuring that the texts may be seen and read without difficulty, it can be argued that the act of reading was a vocal action in itself, ensuring that the acclamation was proclaimed by the literate viewer. In urban contexts this can be seen to commemorate an event, although at Kurşunlugerme by making the acclamations they could also take on an active role in the protection of the monument.⁴³

A parallel for these images and texts can be seen from the late antique inscriptions on monuments such as bridges or in public spaces, especially the group published from the city walls of Aphrodisias.⁴⁴ One difficulty in studying those monuments inscribed with biblical or religious texts is that, since they often do not provide reliable information about the builder or the date of a structure, they have been ignored in historical collections⁴⁵ — a problem we also faced in Thrace. One example is a fine stone bridge on a tributary of the upper Euphrates with the text 'The Lord shall preserve thy going out and thy coming in for now and for evermore Amen' (Psalm 121, v. 8) and a cross decoration on the keystone.⁴⁶ These monuments lack the sophistication or grandeur of Kurşunlugerme, but they recall the ubiquity of Christian symbols in the fifth- and sixth-century eastern Mediterranean town and country, although the interpretation of these symbols and texts has focused on their application in religious or domestic contexts such as floor mosaics and clothing.⁴⁷

One other group of public buildings which provides an analogy with the monumental aqueducts of Thrace is the use of Christian symbols associated with major fortifications. The Theodosian Golden

³⁷ Ćurčić (1992), 20; see also, Maguire *et al.* (1989), 19–20 for an illustration and translation of the text.

³⁸ Maguire (1990), 216.

³⁹ Ćurčić (1992) and Teteriatnikov (1995).

⁴⁰ Avigad (1977).

⁴¹ Avigad (1977), 149–50, pl. 19 A, B.

⁴² Papalexandrou (2001), 261–4.

⁴³ In arguing for the orality of these texts, I should acknowledge the discussion of painted inscriptions from the Byzantine churches and their relationship with liturgy by Amy Papalexandrou (2001); however not all texts can expect to have been read, see the judicious comments of Rogers (1991), 20–4 concerning the functionality of text in past societies, particularly in the context of Roman Ephesus; for inscribed acclamations in Late Antiquity, see Roueché (1984); (1999).

⁴⁴ Roueché (1989), 185–7, nos 139–41.

⁴⁵ See for example Greatrex and Lieu (2002).

⁴⁶ Ilter (1976), 205–13, pls 120–31, especially pl. 129. The decoration and text would indicate an early Byzantine date for the bridge, but it was constructed with a pointed arch, a form usually associated with Islamic builders.

⁴⁷ Maguire *et al.* (1989); Maguire (1994).

Gate has already been mentioned, but in practice the range of evidence is much wider, although little studied. In this discussion only a selection of well-published monuments will be considered, although the potential is probably much greater. Nearly contemporary with the Theodosian Land Walls of Constantinople was the major restoration of the walls and gates of Rome by Honorius. Associated with this phase of construction is a wide range of decorated keystones and symbols in the brickwork of the walls and towers. These vary from a range of crosses and chi rho symbols with alpha and omega to christograms with Greek and Latin texts and also brick crosses and a Tree of Life.⁴⁸ Comparable brick decoration with crosses and other Christian symbols, although on a grander scale, is known from the fifth-century walls of Thessalonike,⁴⁹ where the crosses form a decorative pattern in the brickwork of the curtain wall. It would be difficult to interpret these as merely apotropaic symbols, rather they form part of the exterior display of the city, clearly demonstrating its Christian character.⁵⁰ Significantly all these monuments belong to the period between 400 and 450, a period when we can recognize an overt display of Christian symbolism on imperial monuments in Constantinople, such as the Columns of Arcadius and Marcian.

Christian symbols associated with fortifications can only survive in any quantity where the walls are well preserved, so it is not surprising that the majority are known from the great circuits of the Eastern frontier. Keystones and lintels decorated with crosses are known from a number of places, including Amida (Diyarbakır) and Viranşehir in Cappadocia,⁵¹ but the clearest examples are known

from two major sixth-century fortifications in Syria. The fortifications at Resafa are amongst the most elaborately decorated secular structures in the early Byzantine world and can provide an analogue for the decorative programme at Kurşunlugerme.⁵² Simple crosses are seen in a number of contexts such as the centre stone for the domical vault in Tower 36, although the majority of vaults and keystones are plain.⁵³ However the main concentrations of crosses and other symbols are seen at entrances and gateways. These can be divided into two types: monumental and informal. The external façade of the inner, east gate has an elaborate display of niches, consoles, and hood mouldings around the single gateway, containing a number of crosses and other Christian symbols such as peacocks and the Tree of Life.⁵⁴ The main north gate, however, presents the most elaborate assembly of decorative forms, combining an honorific arch with a fortified city gate unmatched in the late antique world. The richness of the carving of the pilasters, capitals and other mouldings, which includes crosses as part of the decoration of capitals and of the keystone of the central archway,⁵⁵ can only be paralleled in contemporary religious buildings, although it may have found parallels in the lost palace-architecture of Constantinople, Antioch and elsewhere. The informal settings are equally instructive; at the south postern gate there is an incised text with a cross proclaiming the faith and penury of the writer, Sergios the watchman,⁵⁶ and at the upper entrance and gallery wall of Tower 27 there are incised crosses and knot designs on the side walls, although not on any specific architectural feature.⁵⁷ None of these symbols or texts are explicitly apotropaic, insofar as

⁴⁸ The keystones of the Portae Pinciana, Latina, Appia and Ostiense are decorated with Maltese and Greek cross designs, and an inscription in Greek at the Porta Appia with the names of the Greek saints Conon and Sergios, in addition to a wide range of brick crosses and motifs, including the palm and tree of life, Cozza (1987), figs 12–39. Cozza compares the brick crosses with decorations on the fifth-century phases of SS Giovanni e Paolo and S Stefano Rotondo, (1987), figs 27, 28a–d. Similar motifs are found on the late repairs to the aqueducts of Rome, see Coates-Stephens (2003), 166.

⁴⁹ Speiser (1999); see also Crow (2001); the mid-fifth-century date for the walls is to be preferred.

⁵⁰ Bakirtzis and Oreopoulos (2001), 46–64; Crow (2001), 96–7; in her discussion of tenth-century Cairo, Bierman (1998), 31–2 prefers to interpret inscriptions at gates, ‘city thresholds’ as she terms them, as ‘a visual index of official layers of rule and of belief system’. This interpretation might apply in the early fifth century when the urban élites of Asia Minor and the Balkans were not entirely won over to the new state religion, but her concept of contested sectarian space is less relevant to early medieval Byzantium than to Fatimid Egypt; it could be very relevant to the Honorian gates of Rome.

⁵¹ For Diyarbakır see Gabriel (1940) and Crow (forthcoming); Viranşehir-Kaleköy is illustrated in Restle (1974), fig. 13.

⁵² Many studies have assumed this elaborately decorated monumental gateway to be Justinianic in date, however recent research by Brands, based on the detailed analysis of the architectural decoration, indicates that dated comparisons belong to the late fifth and early sixth centuries, rather than to the period when Justinian ruled as sole emperor, Ulbert (2000), 144; Fowden (1999), 78, 94.

⁵³ Karnapp (1976), 92, 259.

⁵⁴ Karnapp (1976), 49, figs 115, 121–2, 126–7.

⁵⁵ Karnapp (1976), figs 190, 198, 211.

⁵⁶ Karnapp (1976), 46, figs 227–9.

⁵⁷ Karnapp (1976), 49–50, figs 253–6.

they are explicitly concerned with the protection of the structure, rather they can be seen as bringing fortune to the 'dedicant' or carver. The same can be argued for the crosses and other Christian symbols seen as part of the formal decoration of the west and north gates, where they form part of the monumental Christian context of the pilgrimage centre and fortress city. Less elaborate crosses are also known from Zenobia (Halibiye), where only informal contexts are known, such as graffiti crosses in towers and doorways.⁵⁸ More extensive and more clearly programmatic decorations are seen on the external defensive walls constructed by Justinian at the monastery of St Catherine in Sinai. The exterior of the curtain walls are 'enlivened by decorative carved panels', set above the lowest row of narrow window loops and on the machicolation over the original main entrance. The latter includes a cross with an inscription on a *tabula ansata*. Many of the designs are carved onto hoods above the window loops and combine crosses with *tabulae ansatae*, the majority of which are uninscribed.⁵⁹ The position of the decorated panels above the window loops can be seen to be directly apotropaic, but they also served, like the brick decorations from Thessalonike, as a way of defining the Christian identity of the place.

From this review of fortifications it can be concluded that the most numerous examples of decorated keystones are known from the Honorian walls of Rome, c. 400, which from their position on the gates and towers can be seen to have been both protective and visual markers of the Christian rulers of the city.⁶⁰ Similarly at Thessalonike, about half a century later, it is the latter role which appears to be significant; identity is also an important element in the decoration of the monastic defences at Sinai, although it can also be seen that there is particular provision at a vulnerable place in the defences.⁶¹ From the two major Syrian frontier fortresses of the

early sixth century onwards, Christian images appear in both monumental and 'domestic' contexts not as especially protective, apotropaic images of the type Ćurčić invokes, but rather as part of the new decorative order at the gates, or as sketches or graffiti around the walls with more general concerns for the welfare or good fortune of the individual. At none of these defences, at least from the material record, do we recognize the transition towards an expectation of and reliance on supernatural intervention.

None of the examples discussed here date any later than the mid-sixth century and it may be significant that it is not until the later sixth and early seventh century that we are aware of increasing reliance on the supernatural defenders of Byzantine cities, especially at Constantinople and Thessalonike.⁶² It is possible to recognize this change in the formulae known from two inscriptions associated with the fortifications around Corinth dating late in Justinian's reign. One is known to come from the Isthmian wall and the other probably from the town defences. The latter reads 'Light of Light, True God of True God, guard the emperor Justinian and his servant along with those who dwell in Greece according to God', and the second from the Isthmian wall invokes the aid of 'Holy Mary Theotokos safeguard the empire of the Christ-loving emperor Justinian and his servant Viktorinus'.⁶³ Initially the first inscription is similar to the texts from Kurşunlugerme, for it begins with a liturgical quotation but then it differs in specifically requesting protection for the emperor and his people. In these examples once more, Maguire's distinction between those symbols and texts which *protect* the user and those that *attract* good fortune enables us to recognize subtle but significant differences in intention between the aqueduct texts and those from other, often later, contexts.

⁵⁸ Lauffray (1983), 95, 116, 118; fig. 17, showing a Syriac inscription, and pl. 19d and fig. 45, painted symbols and crosses on the either side of a window in Tower 32.

⁵⁹ Forsyth and Weitzman (1966), 6–7, pls VIIa, Xa–c, XI a, c–d, e; the main entrance is seen on pls XIIa and XIb (detail); pls Vb and VIIIa show general views of the curtain.

⁶⁰ See above note 49.

⁶¹ It can be noted that visual display in both urban and military fortifications does not seem to have been such an aspect of the defences of the High Empire; the elaborate decoration of the Roman walls of Cologne is unusual, although the extent to which walls were plastered and painted is not certain.

⁶² Notably the Theotokos and St Demetrius, see Cameron (1979), 18–24; Bakirtzis and Oreopoulos (2001), 63–4.

⁶³ Gregory (1993), inscriptions 4 and 5, pp. 12–14; see also a group of Justinianic epigrams also mentioning Viktorinus, Feissel (2000b), 92, nos 19–20.

CHRONOLOGY

Finally how far do the carvings, iconography and texts discussed so far help us to gain a clearer idea about the chronology of Kurşunlugerme and the other great aqueducts? From the sequence of building it is clear that the main bridge is later than the primary construction inaugurated by Valens. The texts from the bridge provide no explicit help, unlike the inscription of Longinus at Elkaf Dere, which gives a date for a restoration of part of the major system under Justinian (see Chapter 3). The text on Buttress II is clearly addressed to the *augusti*, in the plural, and this could narrow the field, since the majority of fifth-century emperors ruled alone (Marcian, Leo, Zeno and Anastasius I). We can be sure the work was completed before Justinian for, in addition to the reconstruction dated by the Longinus text, a work of such scale is unlikely to have escaped the attention of Procopius. The new construction, including the great aqueducts and the line to Vize, is therefore likely to date earlier than Justinian. Another possible indicator of date is the text relating to the Victorious Cross. The formula is attested by the Council of Ephesos (431) as is the significance of 'Emmanuel' and 'God with us'; these terms are also significant, however, from later Church councils and

the similarity with the Latin text on the ivory diptych of Honorius from Aosta has already been noted. Therefore a fifth-century or later date is indicated by the text with the form of the cross.

Finally, the form of the major carvings on the bridge: the closest parallels for the crosses, chrisma and the carvings such as the eagle are to be found in Constantinople from monuments dating between Theodosius I (Golden Gate, arch base), Arcadius (base of column), and Marcian (base and capital of column). The examples from Kurşunlugerme and the other major bridges resemble these models much more closely than carvings from any other period, before or after. Furthermore there are a number of very close parallels, such as with the specific knot on the chrismon at the base of Marcian's Column, which strengthen this comparison. Significantly, elaborate decoration does not seem to have been a feature of the repairs carried out by the former prefect Longinus under Justinian. Such evidence remains inconclusive and cannot provide a precise date for the construction of the main long-distance line or indicate whether it is the same line as the Theodosiac aqueduct noted in the law of December 396.⁶⁴

CONCLUSION

If we compare the conclusions of this review with the evidence from fortifications, it is clear there are both similarities and differences with the use of Christian symbols on the Thracian aqueducts. While the contexts in both cases would seem to be secular, rather than religious, the decorative programme at Kurşunlugerme is both more extensive and complex in its meaning. Comparing the north and west gates at Resafa, the differing numbers, size and density of the crosses between the main façades of the two gates is likely to have been a decorative, rather than a symbolic decision. It contrasts with the middle tier of arches at Kurşunlugerme, where apart from the large christogram (S15), the crosses are not easily visible from the ground and where we can assume their role was essentially apotropaic, rather than decorative. A feature of a number of the examples from fortifications was the significance of the crosses and other images as a way of defining the Christian identity of

the city at gates and along the walls, as at Rome and Thessalonike, or the monastery at Sinai. In many cases, such as Sinai, it is likely that the intention was both display and also divine protection. What is apparent is that merely to appeal to the apotropaic function of imagery is to diminish and restrict our fuller understanding of its intended roles.

Kurşunlugerme presents another aspect of the display of imagery and text with the use of specific acclamations, both imperial and liturgical. As the discussion above makes clear, in this instance it appears that there was a clear link between the location of text and complex images (such as the eagle and serpent) and their visibility. On the east side of the lower tier was the elaborate keystone with the jewelled cross (S3), plus texts with names. At ground level on the west face is the fragmentary line of text beginning 'Lord have mercy'. On the slope to the north, still visible from the ground was the

⁶⁴ *Cod. Theod.* 6.4.30. See Chapter 2.

acclamation to the Augusti. However, elsewhere on the two lower tiers no texts are seen. By contrast on the upper tier of arches, which is narrower than the main bridge and carried the high-level narrow channel, there was a platform on both the west and east sides, ensuring that any inscriptions and carvings would have been easily visible. From this it is possible to suggest that there is a clear relationship between visibility/legibility and the location of the most complex texts and carvings. In turn this raises the question concerning orality, and the extent to which these texts were positioned in order to elicit a spontaneous acclamation from the literate viewer, either to the Victorious Cross or Emmanuel. Significantly, unlike the example quoted by Maguire and Ćurčić from Kourion, where the mosaic text makes a direct connection between divine protection and the structural integrity of the building, these texts fall more closely within the category of acclamations, comparable especially with the keystone from Cyrrhus or the gate in the Sea Walls from Constantinople with the quotation from Psalm 118.⁶⁵

There is, however, a major difference between the context of the majority of the examples considered here and the aqueduct bridges. So far as we understand the settlement of the region, the Stranja forest crossed by the great aqueducts was always sparsely populated. So who read these texts, who could appreciate the iconography of the eagle and serpent? There is no obvious neighbouring literate community, but significantly, unlike the other monumental bridges of the aqueduct system, to the west side of

Kurşunlugerme there was a well-constructed set of stone stairs leading from the valley floor. These are not seen elsewhere, not even at Keçigerme where the climb from the valley floor is much steeper, so we can assume that they do not have a merely practical function. Rather they may have had some processional role, possibly relating to the carvings on the upper tier and at ground level.

Brian Croke has recently summarized much of the evidence for the processional calendar and topography of Constantinople, noting the two occasions when the emperor and empress travelled outside the city to nearby Selymbria and Pythia respectively.⁶⁶ Themistius and other texts report the emperor Valens welcoming the first phase of the Thracian aqueduct to the city in 373, but the second even more monumental stage of the long-distance water supply is undocumented in our surviving sources. It is not difficult to imagine that with the completion of the Vize channel and its great bridges there was also great ceremony. Indeed we might suggest that it was intended that there should be regular commemorations of the achievement, focused especially at Kurşunlugerme. Threats and invasions later in the fifth century brought such events to an end and by the sixth century the imperial and religious ceremonial was clearly focused within the city. Although such an explanation remains entirely hypothetical, it is a measure of the monumentality of these structures and their decoration that we are obliged to look beyond the practical and esoteric.

CATALOGUE OF CROSSES AND OTHER SYMBOLS

KURŞUNLUGERME (K20)

S1

Location: at base of Buttress VII.

Description (Fig. 7.3): relief Latin cross with slight splays, located on the chamfered course at the north-east angle of the buttress, facing east.

S2

Location: Arch 20, facing east, on the third voussoir from the south.

Description (Fig. 7.4): a relief cross with a clear hook to the right; across the lower vertical arm are the letters AΛE/ΞAN; the arms are marked by a distinct splay.

Illustrated by Oreshkov (1915), 101, fig. 18, although the hook is omitted. This sketch was copied by Dirimtekin (1959), 233, 1, fig. 32, where it is incorrectly noted that it was on the cornice of the last pier to the north. A similar cross with the inscription ΘΕ ΟΦ was not seen by us (Oreshkov (1915), 101, fig. 19; Dirimtekin (1959), 233, fig. 32, 1).

S3

Location: keystone of Arch 20, east face.

Description (Fig. 7.5): a relief cross with a circular border. The arms of the cross are splayed at the ends, probably with a hook on the upper arm of the cross (forming a

⁶⁵ For imperial acclamations above the citadel gate at Cyrrhus, see Greatrex and Lieu (2002), 111; at Ephesos and Aphrodisias the inscribed acclamations can be seen to record actual urban processions, see Roueché (1999), 161–2; see also acclamations at the gate of Amida in Mesopotamia (Crow (forthcoming), 440, 446–7).

⁶⁶ Croke (2005), 60, 76–8.



FIG. 7.3 Kurşunlugerme (K20); S1, relief Latin cross, Buttress VII.



FIG. 7.5 Kurşunlugerme (K20); S3, jewelled cross on keystone of Arch 20.



FIG. 7.4 Kurşunlugerme (K20); S2, relief cross with inscription, Arch 20.

stauogram). The arms are decorated with an interlace pattern and below the horizontal arm there is a relief Alpha and Omega with channelled carving within the letter forms. The circular border is plain but is proud of the face of the keystone; it represents an unfinished wreath. The raised band of a ribbon can be seen running to the bottom left; the stone is broken to the bottom right. The decoration appears to represent an incomplete form of the 'crux gemmata' or the jewelled cross.

Not illustrated by Dirimtekin (1959), but probably shown as a keystone decoration in Oreshkov (1915), 99, fig. 15, where the interlace is omitted; see also Çeçen (1996a), 165, note that this image is reversed.

S4

Location: east face of Arch 18, south side.

Description: plain inscribed cross located on the east face of the first voussoir above the springing.

S5

Location: east face of Arch 18.

Description: a relief cross on the east face of the sixth voussoir south of the keystone. Unlike S2, the cross is set at right angles to the ground.

S6

Location: keystone on east face of Arch 18.

Description: roughed-out circular motif; it is unclear how far this is complete, due to vegetation cover.

S7

Location: north pier of Arch 18.

Description (Fig. 7.6): low relief cross with plain, parallel arms and slightly splayed ends; the cross measures 280–270 mm. It is located at the west end of the angled face of the chamfered corner plinth, above the south-facing socle of the bridge abutment.

S8

Location: north pier of Arch 18.

Description: small graffito cross cut into a block on the third course of the socle, above the stream through Arch 18. Cross with T-shaped terminals, for three arms and a rho at the top.



FIG. 7.6 Kurşunlugerme (K20); S7, low relief cross, Arch 18.

S9

Location: Buttress II, east face.

Description: wreathed inscription, with a three line text: ΕΙCΕΩΝΑ/ΤΟΥCΑΓΟΥ/CΤΟΥC, with a small cross above. Destroyed by treasure hunters 2007.

Oreshkov (1915), 101, fig. 20; Dirimtekin (1959), fig. 32, 5.

S10

Location: Buttress II, east face.

Description: cross within simple circle on same string-course as S9.

Oreshkov (1915), 102, fig. 20.

S11

Location: Arch 12, north impost, facing east.

Description: cross carved in relief on the downward-facing chamfer of the east-facing impost for Arch 12; disturbed by treasure-hunters in 2003.

S12

Location: Buttress V, east face.

Description (Fig. 7.7): simple relief cross, possibly splayed at the end of the horizontal arms. Carved on the downward-facing chamfer, located on the middle block of



FIG. 7.7 Kurşunlugerme (K20); S12, simple relief cross, Buttress V.

the string-course across Buttress V at the base of Arches 14 and 15.

S13

Location: east face, on the chamfered string-course at the base of Arch 16, immediately above S3.

Description: cross carved in relief, channelled and with v-shaped terminals. Carved on the downward-facing chamfer below Arch 16, above keystone S3; partly obscured by vegetation.

S14

Location: Arch 14 south impost, facing east.

Description (Fig. 7.8): cross carved in relief, channelled and with v-shaped terminals. Carved on the downward-facing chamfer of the east facing, south impost of Arch 14.

S15

Location: Buttress V.

Description (Figs 7.2; 7.9): six-armed chrismon carved in relief, channelled and with v-shaped terminals. Carved on the downward-facing chamfer at the centre of Buttress V. A sketch drawing of the symbol published by Dirimtekin shows it as a six-armed chrismon; however the end of the central, upper arm has been damaged, probably by a rifle shot. This is confirmed in the photograph in the DAI archive, c. 1969; it is possible therefore that this arm terminated with a rho or a crook ligature.

Dirimtekin (1959), 235, fig. 32, 11; DAI Istanbul, KB, 4138.

S16

Location: Buttress V.

Description (Figs 7.2, 7.9): the long quadratic block below the string-course with the chrismon S15 has been dressed back smooth and has the outline of a *tabula ansata* cut into it; there is no text visible within the panel. According to Dirimtekin, (1959), 235, 10, Oreshkov saw an inscription through a telescope; however Dirimtekin seems to have wrongly located a different inscription published by Oreshkov (1915), 102–3, fig. 22.

DAI Istanbul K8, 4138.



FIG. 7.8 Kurşunlugerme (K20); S14, relief cross on chamfered impost of Arch 14.



FIG. 7.9 Kurşunlugerme (K20); S15, six-armed chrismon on Buttress V, below is the outline of a *tabula ansata* with no visible text.

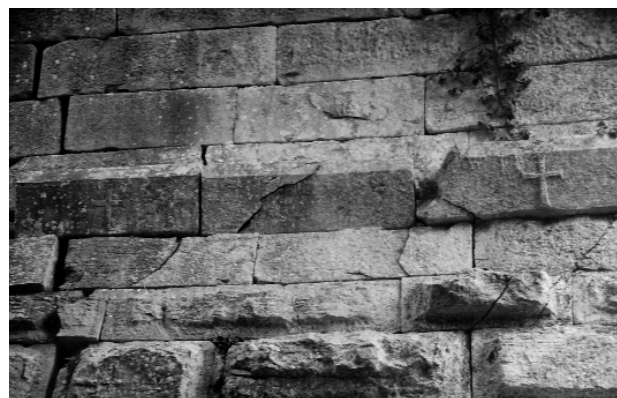


FIG. 7.11 Kurşunlugerme (K20); S23 and S24, relief crosses on chamfered impost blocks of Arch 17.



FIG. 7.10 Kurşunlugerme (K20); S22, relief cross, Arch 19.



FIG. 7.12 Kurşunlugerme (K20); S25, relief cross carved on the bossed work, Arch 17.

S17

Location: East face, Buttress V.

Description: Small cross straddling the south-east angle of the corner block of the buttress, level with S14.

S18

Location: East face, Buttress V, north end.

Description: small cross straddling the angle of the corner block of the buttress at the north end, level with S9 and S14.

S19

Location: East face, Arch 15.

Description: small cross straddling the angle of the impost block at the south side of Arch 15.

S20

Location: East face, Buttress VI.

Description: small, simple cross placed midway along the north string-course block on Buttress VI.

S21

Location: East face, Buttress VI.

Description: small, simple cross placed midway along the south string-course block on Buttress VI.

S22

Location: East face, Arch 19.

Description (Fig. 7.10): monogram cross (staurogram), with hooked ligature to right. Carved in relief on the east face of the third voussoir above the impost on the north side of Arch 19.

DAI Istanbul, KB 4140.

S23

Location: Arch 17, north cornice.

Description (Fig. 7.11): cross carved in relief (west) on the downward-facing chamfer of the springing for Arch 17.

S24

Location: Arch 17, north cornice.

Description (Fig. 7.11): cross carved in relief (east) on the downward-facing chamfer of the springing for Arch 17.

S25

Location: Arch 17, north pier.

Description (Fig. 7.12): cross carved in relief into the bossed work on the fourth course below the springing, channelled with v-shaped terminals.



FIG. 7.13 Kurşunlugerme (K20); S27, relief cross carved on the bossed work, Arch 17.



FIG. 7.14 Kurşunlugerme (K20); S29, relief cross from string-course on west face, now destroyed.



FIG. 7.15 Kurşunlugerme (K20); S31, cross on the east keystone of Arch 1.

S26

Location: Arch 17, north pier.

Description: small cross carved in relief into the bossed work on the fourth course below the springing.

S27

Location: Arch 17, north pier.

Description (Fig. 7.13): cross carved in relief into the bossed work on the fourth course below the springing, channelled and terminating with 'v's.

S28

Location: Buttress VII, west face.

Description: plain cross carved in relief, located on the lower string-course of the second tier.

S29

Location: Buttress VIII, west face.

Description (Fig. 7.14): channelled cross; the string-course has now been broken and torn from the structure by treasure-hunters.

S30

Location: Buttress VIII, west face.

Description: plain cross carved in relief.

S31

Location: Arch 1, east side, keystone.

Description (Fig. 7.15): a Latin cross carved in high relief, with wide splayed ends and a channelled centre; the cross stands on a triangle in low relief. The cross is set forward on a lower field. The central part of both arms has suffered considerable damage since the DAI photograph in 1969. 200 mm across, 350 mm high; lower triangle 150 mm high. The west keystone of Arch 1 is unworked.

Dirimtekin (1959), fig. 31; DAI Istanbul, R2687.

S32

Location: Arch 2, east side.

Description (Figs 7.16; 7.17): eight-armed chrismon set in laurel wreath with ribbons. It is convex in profile and the wreath is shown in segments of a three-pointed design; above the central arm the wreath ends with a small globe. The arms of the chrismon are simply splayed without channelling. At the base a ribbon with two leaf-shaped terminals is tied by a loose knot, identifiable as a 'lark's head' knot. The face of the keystone is set proud of the adjacent voussoirs. The stone is broken on the bottom left side and there is a crack across the centre of the wreath. DAI Istanbul, R 2686; Çeçen (1996a), 167; Crow and Ricci (1997), fig. 13.



FIG. 7.16 Kurşunlugerme (K20); S32, wreathed chrismon on the east keystone of Arch 2.



FIG. 7.17 Kurşunlugerme (K20); S32, side view showing relief carving on the east keystone of Arch 2.



FIG. 7.18 Kurşunlugerme (K20); S33, S34, S35, chrismon and two flanking crosses on the west voussoirs of Arch 2.

S33

Location: Arch 2, west side.

Description (Figs 7.18; 7.19): eight-armed chrismon set in laurel wreath with ribbons flanked by two inscribed crosses (S34 and S35). The chrismon is similar to S32 but is more carefully carved, with channelling in the arms and the ribbons. The ribbon is tied by the same knot but an acanthus leaf masks the wreath at the bottom. Until 1969 (DAI photograph) the chrismon was undamaged; however



FIG. 7.19 Kurşunlugerme (K20); S33, wreathed chrismon on the west keystone of Arch 2.

before our first visit in 1995 the centre and the base of the keystone were badly damaged, probably by a rifle shot. Oreshkov (1915), fig. 21; Dirimtekin (1959), fig. 32, 4; DAI Istanbul, R 2684, 2685; Çeçen (1996a), 166.

S34

Location: Arch 2, west side.

Description (Fig. 7.20): a Latin cross with letters, located on a voussoir three blocks north of the wreathed chrismon (S33). The cross is carved in relief and has splayed ends, formed by small triangles, with a clear central channel in both the horizontal and vertical arms. On the left side above the arm are the letters EM and below are NO cut into the dressed face of the voussoir. The right side is damaged but has the letter M above and Y below. Dirimtekin reads this as *Emmanouel* (1959, 233). Oreshkov (1915), fig. 21; Dirimtekin (1959), fig. 32, 2; DAI Istanbul, R 2684, 2689; Çeçen (1996a), 166.



FIG. 7.20 Kurşunlugerme (K20); S34, cross and inscription 'Emmanuel' north of S33, Arch 2, west side.



FIG. 7.21 Kurşunlugerme (K20); S35, cross and inscription 'God with us' south of S33, Arch 2, west side.

S35

Location: Arch 2, west side.

Description (Fig. 7.21): a Latin cross with letters, located on a voussoir three blocks south of the wreathed chrismon (S33). The cross is carved in relief and has splayed ends, formed by small triangles, with a clear central channel in both the horizontal and vertical arms. On the left side above the arm are the letters ME, and below MΩ. To the right are ΘΗ above the arm and N below. At the base of the cross are the letters ΟΘ. Dirimtekin reads this as

'God is with us', a quotation from the Gospel of St Matthew

(1, 23); (Dirimtekin (1959), 233, 3).

Oreshkov (1915), fig. 21; Dirimtekin (1959), fig. 32, 3; DAI Istanbul R 2683; Çeçen (1996a), 166.

S36

Location: string-course block, west side.

Description: fallen string-course block with decorated chamfer, from the top of the second tier below Arch 2. A relief cross without decoration, flanked by two monograms (see Chapter 8). The string-course block is 290 mm thick and the cross is 275 mm high and 180 mm wide.

S37

Location: Arch 3, east side.

Description: a splayed cross inside a wide plain circle. The cross is located on the string-course above Arch 3 on a block to the right of the keystone. The cross is clearly defined by channelling and has v-shaped terminals. In the four angles of the cross-arms are the Greek letters Γ, EN, A, Ω. The plain circle around the cross is an unfinished wreath. Both the keystones of Arch 3 are unworked.

Oreshkov (1915), fig. 17; Dirimtekin (1959), fig. 32, 8; Çeçen (1996a), 166.



FIG. 7.22 Kurşunlugerme (K20); S38, roughed out chrismon with six arms, Arch 4, west side.

S38

Location: Arch 4, west side.

Description (Fig. 7.22): rough-out of a chrismon with six arms, on the keystone of the arch.

S39

Location: Arch 10, east side.

Description (Fig. 7.23): tall Latin cross carved in relief with splayed ends and deep channelling, on the east keystone of Arch 10.



FIG. 7.23 Kurşunlugerme (K20); S39, Latin cross on the east side of Arch 10.



FIG. 7.24 Kurşunlugerme (K20); S40, wreathed chrismon and Latin cross with the text 'The Cross has conquered. It always conquers', Arch 10, west side.

S40

Location: Arch 10, west side.

Description (Fig. 7.24): wreathed chrismon with a Latin cross below. The cross is carved in relief, with splayed ends and deep channelling, on the west keystone of Arch 10. The chrismon has eight arms and the wreath, although it is partly damaged, does not appear to have had ribbons below. At the base the wreath terminates in a globe. The cross is very similar to the cross on the east keystone (S39) but the right arm is damaged; there is an inscription in the four quadrants formed by the cross: top left OCT OCE; top right A N; bottom left KHC AEI KA; bottom right EN NI the right side is damaged and hence letters are partly missing. The inscription reads: ὁ σταυρὸς ἐν[ι]κησεν. αἰεὶ νικᾷ. The stone is now obscured by trees and was seen by us from above.

DAI Istanbul KB 4137.

S41

Location: Arch 11, west side.

Description (Fig. 7.25): keystone for Arch 11, decorated with the relief carving of an eagle. The eagle's head is lost, but is shown in Oreshkov's sketch looking down. The wings are open, but not spread; it holds a snake between its talons with the head rearing to the left. In the right talon



FIG. 7.25 Kurşunlugerme (K20); S41, eagle and snake relief on the west keystone of Arch 11.

is a laurel wreath with a single ribbon falling to the right. The bird is shown complete in Oreshkov's sketch (c. 1912), whilst the DAI photograph shows the loss of the head and the right shoulder (1969). The top of the keystone and the right voussoir are now further damaged, but the right wing is still sound. The left foot is clearly shown with three talons around the snake's body. Dirimtekin merely copies Oreshkov's sketch.

Oreshkov (1915), 103, fig. 23; DAI Istanbul R2681.

Not seen, recorded in Dirimtekin and Oreshkov

A Possibly opposite Alexander voussoir **S2**, voussoir with cross and hook and letters **ΘΕ** and **ΟΦ** on either side of the vertical arm. Oreshkov (1915), 101, fig. 19; Dirimtekin (1959), 233, fig. 32, 1.

B Seen by Oreshkov (1915), 99, fig. 15. Keystone from Kurşunlugerme (V), Greek cross set within a plain circle with hook and **A** and **Ω**. Location not given, probably fallen.

C Recorded by Dirimtekin ((1959), 234, 7, fig. 32). Simple Greek cross with letters **O Y**, seen on the second tier on the north stone of the springing on the north side of the north pier.

D Recorded by Dirimtekin ((1959), 234, 8, fig. 32), on the east face of the upper level, on arch stones. Greek cross in circle with **Ω** and **A**.

E Recorded by Dirimtekin ((1959), 234, 9, fig. 32), on an arch stone on the lowest tier at the extreme south end (Arch 20?). Greek cross with splayed ends and channelling and a hook ligature with a plain circle. Outside the circle to the bottom left and right are two small birds. This drawing is identical to Oreshkov's sketch from Keçigirme ((1915), 99, fig. 14).

F Photograph in DAI Istanbul KB 4140 shows a broken voussoir of an arch on the first tier, probably 20; cyma-recta cornice is also visible. Relief cross with hook to right, channelling and splayed ends. The stone is broken on the right side, but to the bottom left of the cross is a letter **O**.

KARAMANOĞLU (K13)

Five-arched arcades of which the first four arches survive; they are numbered from east to west. Designs were only seen on keystones. Nothing was seen on either the north or south face of Arch 1.

S1

Location: Arch 1, keystone south side.

Description: traces of the upper, splayed arm of a cross survive on the broken keystone of Arch 1.

Çeçen (1996a), 142.

S2

Location: Arch 2, keystone south side.

Description: monogram cross with a ligature hooked to the right. The ends are splayed and there are deeply incised lines within the arms. The lower part is damaged but it is possible to recognize a drilled terminal for a split volute emerging from the base of the cross; the cross is set within an incised circle.

Çeçen (1996a), 142.

S3

Location: Arch 2, keystone north side.

Description: chrismon in the form of an eight-armed star.

S4

Location: Arch 3, keystone south side.

Description (Fig. 7.26): relief chrismon in the form of an eight-armed star, set within a circular frame, at the base are two ribbons. Photographs have been published by Çeçen; however when we visited in 1997 the central star had been hacked out and a hollow remained. No keystone was visible on the north side.

Çeçen (1996a), 143.



FIG. 7.26 Karamanoğlu (K13); S4, relief chrismon, now damaged, on the keystone of Arch 3, south side.

S5

Location: Arch 4, keystone south side.

Description (Figs 7.27; 7.28): relief staurogram with hooked ligature to the right, slightly splayed arms, and broken at bottom.

Çeçen (1996a), 141 (note reversed) and 144.



FIG. 7.27 Karamanoğlu (K13); S5, Arch 4 south side, showing relief staurogram.

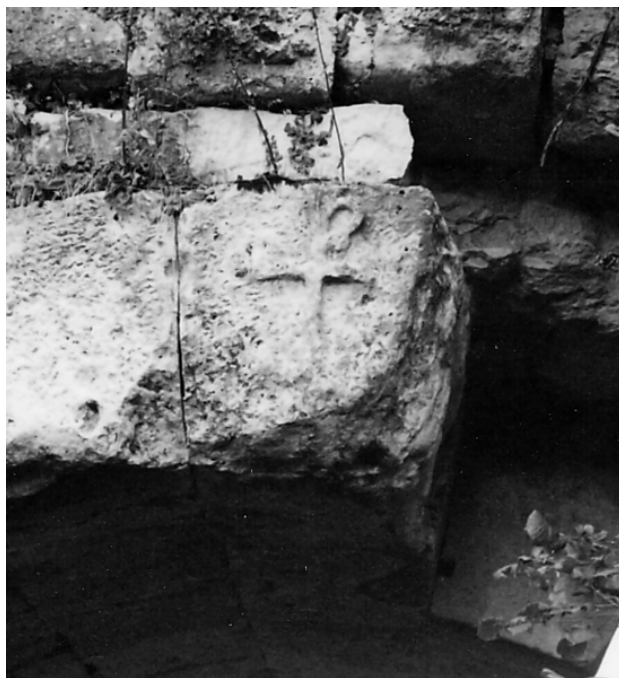


FIG. 7.28 Karamanoğlu (K13); S5, detail, Arch 4 south side, showing relief staurogram.

S6

Location: Arch 4, keystone north side.

Description: fragmentary cross on north keystone.

S7

Description: fallen keystone with relief cross, wide splays at the ends; possibly from arch or fallen Arch 5.

BALLIGERME (K18)**S1**

Location: Arch 1, east side.

Description: simple relief cross located at north-east corner of pier.

S2

Location: west abutment of upper tier.

Description: a rough carved tree, representing the Tree of Life, probably contemporary with later repairs.

BÜYÜKGERME (K29)**S1**

Location: Arch 10; Dirimtekin ((1959), 227, figs 16, 17) records a cross at the base of the pier facing the river on the west side.

S2

Location: Arch 2, west side.

Description: relief chi-rho with alpha and omega on impost on south side.

S3

Location: east pier, Arch 12.

Description: simple, relief eight-armed chrismon on impost.

KEÇİGERME (K30)**S1**

Location: keystone of Arch 1, west side.

Description: Oreshkov recorded two relief carvings in the south and north faces of the main lower arch. On the south he was able to observe that the keystone has a carving showing two busts, one bearded and the other clean shaven. Below this was a *tabula ansata*, but he was unable to see if there was a text. We were able to confirm this, but the relief is partly obscured by hanging creepers and can only be viewed at an oblique angle. It is clear that the relief busts are quite small, altogether only half of the face of the keystone is carved; the two figures are cut off at waist height and are supported by a stone shelf, below which is the *tabula ansata*. The left figure is fully bearded with a prominent moustache. See the similar bearded head of a late antique senator from Athens (Kollwitz (1941), 125–6, pl. 41).

On the south keystone Oreshkov saw a well-cut relief Greek cross in a wreath, but this does not survive (Oreshkov (1915), 98, figs 10, 11).

S2

Location: Arch 1, east pier.

Description (Fig. 7.29): Latin cross carved in relief within a plain circle; in the lower quadrants are the letters A and Ω. Located on the east face of the east pier, on the socle two courses below the chamfer on a long bossed block. Loop of the rho is not visible. In the centre of the block is another raised roundel but it is not carved out.



FIG. 7.29 Keçigerme (K29); S2, relief Latin cross within a plain circle with A and Ω, Arch 1.

S3

Location: Arch 1, north face.

Description: simple relief cross at the springing at the corner of Arch 1.

S4

Location: Arch 2, east pier.

Description (Fig. 7.30): Latin cross carved with a hook in relief within a plain circle; in the lower quadrants are the letters Ω and A. Located on the north face of a quoion on the east pier of the arch, carved into the bossage thirteen courses above the chamfer for the socle.

Not seen, but recorded by Oreshkov

Oreshkov notes three examples of crosses within plain circles with the letters A and Ω (1915, figs 12, 13, 14) from Keçigerme. These could be the same as S2 and S3 above; however one is shown to be broken on the lower left side and without a hook (1915, fig. 12). In addition one is illustrated with two birds and a channelled cross with a hook (fig. 14).



FIG. 7.30. Keçigerme (K29); S4, relief Latin cross with ligature and Ω and A in Arch 2.



FIG. 7.31. Kumarlidere (K30); S1, high relief Latin cross with ligature on the keystone of Arch 2, east side.

KUMARLIDERE (K31)

S1

Location: Arch 2, east face.

Description (Fig. 7.31): large Latin cross, in high relief, with an incised centre line along the arms, splaying at the terminals, and forming a circle at the centre. The upper arm is hooked to the right and touches the right arm of the cross.

S2

Location: Arch 2, west face.

Description (Fig. 7.32): eight-armed chrismon, in high relief, broken at top left, with trailing fillets and similar knot to Kurşunlugerme S32.

S3

Location: Arch 1, east face.

Description (Fig. 7.33): low relief cross with plain, parallel arms and slightly splayed ends. The cross is located at the



FIG. 7.32. Kumarlıdere (K30); S2, relief wreathed chrismon, Arch 2, west side.



FIG. 7.33. Kumarlıdere (K30); S3, low relief cross on the chamfered plinth at the top of the socle of Arch 2, west side.

angled face of the chamfered corner plinth, above the socle of the bridge pier, compare Kurşunlugerme S7.

S4

Location: Arch 2, west face.

Description (Fig. 7.34): low relief cross straddling the angle of the impost block, compare Kurşunlugerme S19.



FIG. 7.34. Kumarlıdere (K30); S4, cross straddling the impost on the north side of Arch 2, west face.



FIG. 7.35. Bozdoğan Kemerî, fragmentary chrismon on the keystone of Arch 30.

BOZDOĞAN KEMERİ

S1

Location: Arch 30, south face.

Description (Fig. 7.35): damaged chrismon on the keystone of Arch 30.

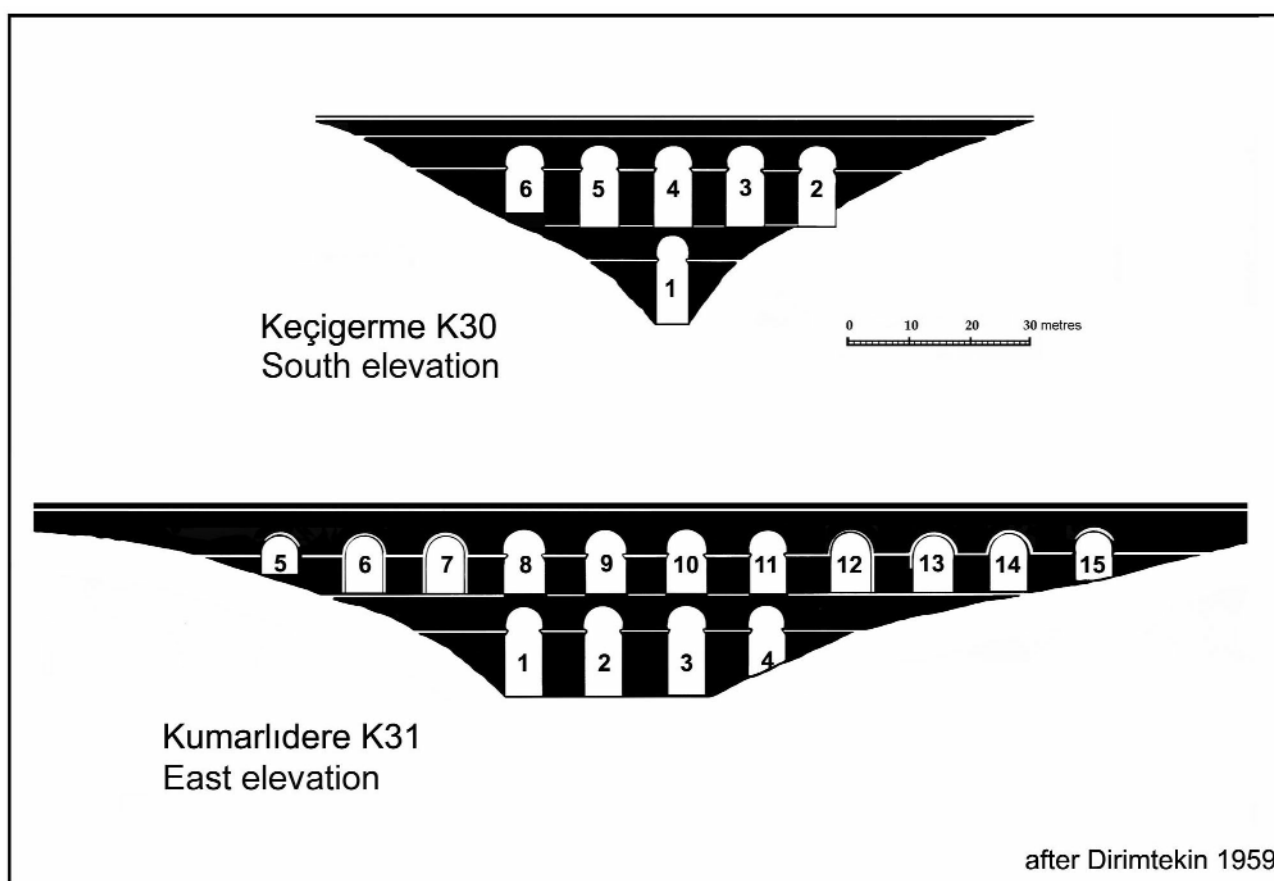


FIG. 7.36. Restored outline elevations of the Keçigerme (K30) and Kumarlidere (K31) bridges showing arch numbers.