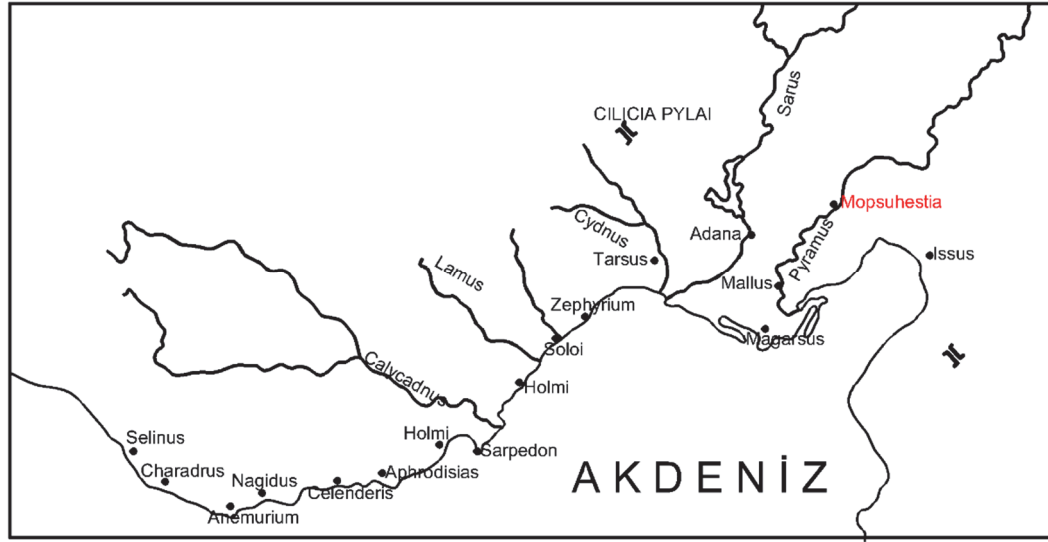


## The Construction Date of the Misis Bridge

Murat DURUKAN\* – İlkay GÖÇMEN\*\*

### The Description of the Misis Bridge

The ancient city, Misis (= Mopsuestia), is located in the town Yakapınar of Yüreğir District, Adana<sup>1</sup>. The earliest information concerning the route that heads east via Misis is found in the writings of Herodotus<sup>2</sup>. Xenophon does not make mention of the settlement situated on the edge of Pyramus (= Ceyhan River); however, he notes that Cyrus the Younger reached the rivers, Sarus and Pyramus, after Tarsos<sup>3</sup>. Strabo informs that this city forms a border between Cilicia and Syria (Fig. 1)<sup>4</sup>.



Map 1) *The Map of Cilicia Region*

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<sup>1</sup> Ünal 2006, 75, Ünal – Girginer 2007, 192.

<sup>2</sup> Herodotos V. 52.

<sup>3</sup> Xenophon I. IV. 1.

<sup>4</sup> Strabon XIV. 5. 19.

The Misis bridge, which provides a road connection over Pyramus, extends along the northwest-southeast axis and consists of a total of nine spans. The length of the deck of the bridge is measured as 129.51 m and the width as 6.50 m (Fig. 1). Damaged by the earthquake in 1998, the structure was restored subsequently.



Fig. 1) *The Downstream of the Misis Bridge*

Stone blocks made of local porous limestone were used as building material for the bridge. Different arch forms are observed on the structure, and this is associated with the repairs the bridge underwent in different periods. When the structure is viewed from the downstream, it is seen that the first and the third arches in the northwest are designed in a circular form. On the other hand, the second and the fourth arches exhibit a lowered pointed arch, while the fifth arch in the center of the structure exhibits the style, the *parabolic* arch, prevalently used in the Ottoman architecture. The last four arches in the southeast are shaped in the form of a pointed arch, also named as *penci* arch (=five centred arch). The fact that the spans display different arch forms must be related to the restorations the structure underwent in different periods. When the bridge is viewed from the front, a gentle slope that rises from the approaches to the center arch, in other words, the use of *harpuştâ*<sup>5</sup> (coping) attracts attention. Such an arrangement is known from Turkish bridges. However, it is understood that this slope is much more apparent in the Turkish bridges, and this characteristic is not fully emphasized in the bridge discussed here. The northwestern section of the bridge with circular arches exhibits a flatter appearance when compared to the other side. Accordingly, it can be said that the remains from the earlier phases were used in the repairs made in the later periods. Therefore, particularly the northwestern section of the bridge bears a similarity

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<sup>5</sup> *Harpuştâ* is a word of Persian origin. While 'har' means donkey, 'puştâ' means back, and it is used to describe the slope formed in the center of the bridge deck. On the architectural features of the Turkish bridges, see Bektaşoğlu 2013, 105.

in appearance to the flat decks<sup>6</sup> observed in the bridges associated with the Roman and Byzantine periods.

On the upstream of the bridge piers, there exists nine triangular cutwaters. On the other hand, there are no cutwaters on the downstream.

### The Analyses of the Restorations of the Bridge

The first and the third spans<sup>7</sup> of the Misis bridge in the northwest on the downstream side display a different design from the other spans of the bridge with their circular arches. It is known that semicircular and, albeit rarely, circular arches were preferred in the Roman and Byzantine periods<sup>8</sup>. On the other hand, evidence of an earlier phase can be detected in the vaults of these two arches. The first seven or eight rows of the vaults differ from the upper sections in wall texture. Furthermore, the beam holes that serve the purpose of placing the centring are located just above the walls from the earlier phase. Therefore, it can be considered that these two arches were repaired in a later period, adhering to their original construction.

Pointed arches, also seen on the bridge discussed here, appear in bridge architecture after the 11<sup>th</sup> century. It is known that this form was also used in Anatolia in the aforesaid period<sup>9</sup>. In addition, it is also known that pointed arches were preferred in bridges built in Europe in the 12<sup>th</sup> and 13<sup>th</sup> centuries<sup>10</sup>. The second and the fourth arches of the Misis bridge on the downstream also display the form of a pointed arch and therefore, some parts of the bridge can be considered to have undergone repairs in the Middle Ages<sup>11</sup>.

However, these two arches exhibit a relatively lowered form compared to the four arches in the southeast. Additionally, decorative elements in the shape of an encircled rosette are observed on the second and fourth arches. It is known that these decorations on the keystone are characteristic of the Ottoman architecture. Beam holes are seen on the eighth row of the vault of the fourth arch, which reflects the same features as the second arch as well. The rows located below the row with

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<sup>6</sup> On the technique of flat decks in Roman and Byzantine bridges and for the rectangular façades of such bridges owing to this technique, see Gençer – Turan 2017, 194; Tunç 1978, 158.

<sup>7</sup> It is known that the bridge was seriously damaged by the Ceyhan earthquake in 1998 and subsequently restored. According to 1: 50 scale drawings in the restoration project, the first and the third arches reflect a circular form. However, the current appearance of the third arch after restoration is closer to that of a pointed arch.

<sup>8</sup> For the arches whose height is less than half of the span and the use of this arch form in Roman bridges, see Tyrrell 1911, 24; O'Connor 1993, 163-164; Strickland 2010, 24. For the Alcantara Bridge built with circular arches in the Roman period, see O'Connor 2010, 25.

<sup>9</sup> Tanyeli 2000, 14; Bektaşoğlu 2013, 105.

<sup>10</sup> For the bridges, Pont d'Avignon built with pointed arches in southern France between the years of 1178 and 1186, Pont Valentre built in 1280, Pont Albi built in Montauban in France between the years of 1303 and 1316 and dated to 1035, see Tyrrell 1911, 39-42. In addition, the use of *harpušta* (coping), known from the Turkish bridges is observed on Ponte della Maddalena (the Devil's Bridge) located near Lucca in Italy and thought to be built ca. 1000. See Tyrrell 1911, 44.

<sup>11</sup> Hild – Hellenkemper 1990, 388.

the beam hole can be associated with the Roman era of the structure. It is observed that there are no decorative elements on the downstream side of the fourth arch, unlike the upstream.

Exceeding a span of 11.00 m, the fifth arch is located in the center of the bridge. With a height of 7.41 m, this is the highest arch of the structure. The most important characteristic that distinguishes this arch from the others is that it is designed in the shape of a *parabola*. This form of arch is known to be used in Ottoman bridge architecture<sup>12</sup>. Additionally, there is a highly eroded depiction of a rosette embossed on the keystone, indicating the Ottoman period.

The last four arches of the bridge in the southeast bear a resemblance to one another in terms of the architectural characteristics they exhibit and are associated with a restoration in the Ottoman period. It is observed that these four arches are narrower than the second and the fourth arches, which display the form of a lowered pointed arch. Additionally, it is understood that the keystones of these four arches are not decorated when compared with the second and fourth arches (Fig. 2).

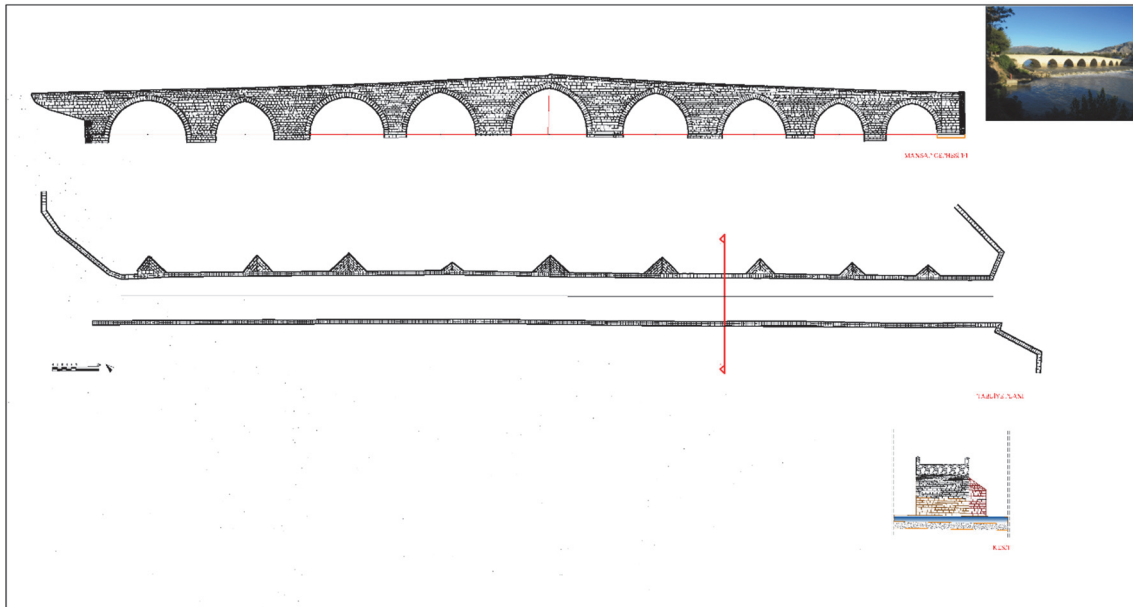


Fig. 2) The Illustration of the Downstream

In addition to the differences incorporated into the bridge concerning the arch form, there are a total of nine cutwaters in different sizes on the upstream. Contrary to the characteristic of the Roman period, all of these cutwaters rest on springers. In fact, the cutwaters of the bridges pertaining to Roman and Byzantine periods are designed in such a way that they do not exceed the size of the springers<sup>13</sup>. Furthermore, the upper sections of the cutwaters are terminated in a conical form. High cutwaters and their conical forms are observed on the bridges dated to the Ottoman period. In addition, there are embossed decorative elements on the cutwaters of the bridge in the northwest, while the cutwaters located after the fifth arch display a plain design.

When the architectural features of the Misis bridge are evaluated as a whole, it is seen that a total of six spans are designed in the form of a pointed arch, which is associated with the Turkish bridge architecture throughout Anatolia. While two of these spans exhibit the form of a lowered pointed

<sup>12</sup> For *parabolic* arches, also see Çeçen 2002, 252; Uçar – Şakar 2011, 38 ff.

<sup>13</sup> For the use of cutwaters in Roman bridges, see Alaboz 2008, 14.

arch, the other four are shaped as *penci* arches. Additionally, it is possible to relate the fifth span in the center of the bridge to the Ottoman period, based upon its *parabolic* arch design. The spans associated with the ancient phase of the structure are the first and the third arches. However, it is understood that these arches also underwent a restoration after the original construction (Fig. 3).



Fig. 3) The First Arch in the Northwest

### Archaeological Data on the Construction Date of the Bridge and Proposals for Dating

With reference to the available data, at least four phases of restoration are identified after the original construction of the Misis bridge. In this context, it can be suggested that the aforesaid structure was built in antiquity, and it underwent multiple repairs. In the northwestern section, in which the first and the third arches are located, which are related to the initial construction phase, the bridge deck is relatively flat compared to the sections in the southeast. This characteristic supports the suggestion that these two arches are associated with antiquity. On the other hand, in the southeastern section, in which the last four arches are located, the deck slopes distinctly, and this slope calls to mind the use of *harpuṣta*<sup>14</sup> (coping) in Turkish bridges. Consequently, it is understood that the original construction of the bridge included circular arches and that the bridge had a flat deck in this phase. Additionally, evidence of the second restoration phase of the bridge is clearly seen in the second and fourth arches. These two arches, designed in the form of a lower pointed arch, include rosette-shaped decorative elements on the upstream.

<sup>14</sup> Tunç 1978, 8; Çulpan 2002, 6-15.

The traces related to the third restoration phase of the bridge can be detected in the sixth, seventh, eighth, and ninth arches. It is understood that these four arches, designed in the form of a *penci* arch, were constructed in the same phase. The fifth one, a *parabolic* arch, in the center reflects a different design from the other arches of the structure, and should be associated with the fourth and the last comprehensive restoration of the bridge. Additionally, the non-standard dimensions and the conical designs of the cutwaters on the upstream suggest that they were built during the Ottoman period.

The first construction of the Misis bridge is associated with the 1st century AD without any evidence in a publication<sup>15</sup>. Some researchers suggest that the bridge was constructed in the middle of the 3<sup>rd</sup> century CE during the reign of Emperor Valerian<sup>16</sup>. This suggestion is based on a coin depiction, which is also encountered on the coins of both Misis and Aigeai (=Ayaş/Yumurtalık). On the coin, a five-arch bridge accessed via a triumphal arch is depicted. There are Greek letters written, one under each arch, and the inscription reads ‘ΔΩΡΕΑ ΠΥΡΑΜΟC’. Accompanying the rest, the depiction also features a personification of the Pyramus River (Fig. 4). The word ΔΩΡΕΑ is translated as 'donation or gift', and consequently the original construction of the bridge is ascribed to the Valerian period<sup>17</sup>. This proposal is supported also by the data that the said emperor was present at the region from 254 CE to 18 January 255 CE to deal with the Sassanid threat<sup>18</sup>. Another researcher, Galliazzo, says that the bridge might have been built during the reign of Valerian. However, he does not rule out the possibility that the structure may have been constructed at an earlier period either<sup>19</sup>.



Fig. 4) *The Coin of Misis in the Valerian Period (Von Aulock, 1963, Abb. 5)*

<sup>15</sup> Hild – Hellenkemper 1990, 352.

<sup>16</sup> Pekary 1966, 140; Galliazzo 1994, 410; Sayar 1992, 458; Anabolu 1995, 323; Ünal – Girginer 2007, 493; Buyruk 2016, 6; Yurtsever 2018, 2-3.

<sup>17</sup> The earliest coins of Misis, called Mopsu(h)estia in ancient times, date to between 175-164 BC. For the coins of Misis, see Head 1887, 608; Von Aulock 1963, 232. For the five-arch bridge depicted on the Misis coin, see Von Aulock 1963, 237, Abb. 5; Anabolu 1995, 323.

<sup>18</sup> Pekary 1966, 140.

<sup>19</sup> Galliazzo 1994, 410.

Another emperor associated with the original construction of the bridge is Flavius Iulius Constantius. According to this proposal, the said structure was constructed in the 4<sup>th</sup> century CE<sup>20</sup>. However, other than the mentioned emperor's activities and road maintenance works in the east, this suggestion has no basis.

### A New Dating Proposal and Its Basis

It can clearly be seen that both suggestions for the dating of the bridge are highly ambiguous. Ambiguous because some of the parameters that should have been taken into consideration while clarifying the construction date of the Misis bridge were not factored in the suggestions. For instance, the infrastructure works carried out by the Roman emperors have great significance in understanding the construction dates of such strategic structures. It is known that the name of Emperor Vespasian is distinguished in this context and that the coastal route was designed during the rule of this emperor<sup>21</sup>. The construction of a bridge located in the region as well as the establishment of some cities are also associated with Vespasian<sup>22</sup>. Additionally, a milestone was found approximately 9 km south of the Misis bridge, and inscribed on this milestone, the date 73 AD can be read together with the name Vespasian. Also, the fact that a distance of 48 miles was inscribed on the milestone confirms the distance between Tarsus and Misis (Fig. 5)<sup>23</sup>. As can be deduced from this information, the mentioned milestone was discovered at a location close to its original place.

Besides the milestone on which the name Vespasian is seen, the records written by the French traveler Langlois, who visited the region in the 19th century, contain highly valuable information regarding the dating of the discussed structure. Within the information he conveys, this traveller mentions of an inscription, which is gone now, erected at the entrance of the bridge to commemorate the Legio XVI Flavia Firma<sup>24</sup>. In the writings, although there are no details given on the content of the inscription, the historical process renders it possible to make inferences on the activities of the legion in the region. The aforementioned legion was founded by Emperor Vespasian in 70 CE to replace the disbanded Legio XVI Gallica and was stationed at Satala (= Gümüşhane/Kelkit) in Asia Minor<sup>25</sup>. The legion, which also participated in the Parthian campaign of Trajan, was deployed in Samosata during the reign of Hadrian<sup>26</sup>. In addition, it can be verified by a nonextant inscription that the said legion was engaged in a construction work near Antiocheia between April and July 75 CE<sup>27</sup>. At this point, the mention of the legion's name on the

<sup>20</sup> Tunç 1978, 142-143; O'Connor 1993, 127; Tanyeli 2000, 13; Çulpan 2002, 23; Pekin – Yılmaz 2008, 16-17.

<sup>21</sup> Magie 1950, 576; Mitford 1980, 1247; Sayar 1992, 452; Sayar 2004, 24-25; Gerçek – Yastı 2016, 16.

<sup>22</sup> For the construction of Silifke Stone Bridge during the reign of Vespasian, see Keil – Wilhelm 1931, 6 Abb. 10. On the establishment of the city of Flaviopolis in Kadirli District of Osmaniye, and the reconstruction of the ancient city of Neronias as Eirenepolis in Düziçi, see Magie 1950, 576; Mitford 1980, 1247; Sayar 1992, 452; Gerçek – Yastı 2016, 15-16.

<sup>23</sup> Sayar 2011, 249; Sayar 2019, 158.

<sup>24</sup> Langlois 1861, 450-454.

<sup>25</sup> Tacitus II. 99-100.

<sup>26</sup> Yıldırım 2013, 172-173.

<sup>27</sup> Şenocak 2014, 61.

bridge discussed here suggests that the said legion might also have worked in the construction of this bridge, as they did in Antiocheia. The information that, during the Roman period, legions were largely employed as manpower in the construction of roads and bridges<sup>28</sup> renders it possible to make such an inference.

Also, the archaeological examination on the bridge indicate that the structure was built during the Roman period. Especially the rows on the walls of the foundations indicate this phase in terms of the differences both in the wall axis and texture, and the stone sizes. The first and third spans in the northwest on the downstream suggest that after the original construction of the structure it may also have undergone a repair during antiquity, because the methods used on the bridges of the Roman and Byzantine periods are plainly evident. Following its original construction, information on the structure going through repair during antiquity is mentioned in the writings of Procopius. The late antiquity author, Procopius, speaks of a bridge that crosses over Pyramus and how it suffered as time went on. In addition, the author provides the information that the bridge was repaired as a result of the attempts of Emperor Justinian<sup>29</sup>.

### Later Period Restorations of the Bridge

When the current situation of the bridge is examined, the second, fourth, fifth, sixth, seventh, eighth and ninth arches can be associated with the repairs done during the Ottoman period. The restoration phases of the structure are determined based on the changes in the forms of the arches. In this context, the second and fourth arches in the northwest display the form called the lowered pointed arch or, as named in the Turkish architecture, the eight-centred arch,<sup>30</sup> which makes them differ from the other pointed arches of the structure in this respect. Moreover, it is a known fact that the rosette-shaped decoration seen above these two arches was used in the Ottoman architecture after the 16<sup>th</sup> century<sup>31</sup>. In addition to all these, it is understood from the historical documents that during the Ottoman period the structure underwent many renovations. The first of these documents verify that the bridge had a substantial repair in 1661 during the reign of Mehmed IV, and that a caravanserai was built on the southeast of the bridge during this renovation<sup>32</sup>.

Like the second and fourth arches, the sixth, seventh, eighth and ninth spans at the southeast side of the bridge were constructed in the pointed (five-centred) arch form. However, unlike the second and fourth spans, these four arches exhibit the form called the *penci* arch in Ottoman architecture. The absence of decorative elements on these arches and the related cutwaters requires a different evaluation for this part of the structure. Historical documents provide information on the damage the said structure suffered and the collapse of its five arches, as a result of a flood in

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<sup>28</sup> O'Connor 1993, 42.

<sup>29</sup> Procopius V. 5. 4.

<sup>30</sup> Alioğlu 1991, 52-62; Çulpan 2002, 7.

<sup>31</sup> For rosette-shaped ornaments in Ottoman architecture, see Demiriz 1979, 28.

<sup>32</sup> For the bridge inscription, which is preserved in the Adana Archaeology Museum, see Çulpan 2002, 23-25; Yurtsever 2018, 37-40.



1737. Moreover, it is conveyed that the collapsed parts of the structure were repaired in 1757 under the rule of Mustafa III<sup>33</sup>.

The fifth span in the center of the Misis bridge exhibits a different form than the rest of the arches. This span has a form between that of a circular and a pointed arch. It is known that this form, called *parabolic* arch, was used in Ottoman architecture<sup>34</sup>. At this point, the writings of Langlois and an engraving by the English painter Bartlett explain why the aforementioned span has a different design from the others. Langlois states that Ibrahim Pasha of Egypt blew up an arch of the bridge while retreating. Also in these writings, it is told that the exploded arch was not repaired for a long time and that temporary solutions were devised to cross over the bridge<sup>35</sup>. The engraving drawn by Bartlett in 1836 provides an answer to the question of what the temporary solution was. In the said engraving, it is seen that the section where the fifth arch was located is covered by a wooden setup (Fig. 5).



Fig. 5) *The Engraving drawn by Bartlett in 1836 (Yurtsever 2018, 43)*

## CONCLUSION

The Misis bridge represents one of the most significant connection points of the international road route that passes through the Cilicia Region. Conveyed sources, historical process, and archaeological data all verify that the original construction of the bridge goes back to the Early Roman Imperial period. The accomplishments of Emperor Vespasian are distinguished in this context, because it is known that this emperor had endeavors to construct roads and bridges in the Cilicia Region. The discovery of a milestone, near the bridge discussed here, bearing the name of Vespasian proves that the said emperor carried out infrastructure work on the part of the coastal

<sup>33</sup> Langlois 1861, 454; Çulpan 2002, 24; Yurtsever 2018, 44.

<sup>34</sup> Çeçen 2002, 252; Uçar – Şakar 2011, 38.

<sup>35</sup> Langlois 1861, 454.

route that extends to Misis. Additionally, the inscription erected at the bridge entrance to commemorate the Legio XVI Flavia Firma, as mentioned in the 19<sup>th</sup> century records, strengthens the suggestion that the bridge should be associated with Vespasian. The fact that the said legion was deployed by Vespasian in Asia Minor in 70 CE and transferred to Samosata during the reign of Hadrian also confirms that the bridge discussed here should be associated with Vespasian. Moreover, information regarding the legions playing active roles in road and bridge constructions, and the said legion carrying out construction activities near Antiocheia in 75 CE supports the established Misis bridge-Vespasian connection as well. Considering all these data, it is suggested that the Misis bridge was built during the reign of Emperor Vespasian (69-79 CE), or more specifically, between 70 CE and 75 CE.

Based on the depiction on the coin that dates to the Valerian period, it can be considered that the bridge, which was built during the Vespasian period, perhaps have been subjected to a restoration during the Valerian period. As understood from the writings of Procopius, the last restoration of the bridge in antiquity was carried out in the 6th century CE under the rule of Emperor Justinian. The first and the third arches on the northwestern must be a part of this restoration. For this reason, they are designed in a circular form, reflecting the architectural features of Roman and Byzantine bridges.

In conclusion, the differences observed on the arches of the Misis bridge verify that the structure went through at least three restorations during the Turkish era. Built during the Early Imperial period of Rome, the bridge underwent many repairs both in antiquity and during the later period; and as a result of these renovations, it has substantially lost its original features. In its current condition, the aforesaid structure represents the use of *harpušta* (coping), which is the characteristic feature of the Turkish bridges. However, traces of the earlier period that can be detected at the foundation level and on the inner surfaces of the vaults, as well as the different arch applications on some of the arches provide insight on the construction of the structure in the Roman period and its renovation during the Byzantine period.

### Bibliography

- |                 |   |
|-----------------|---|
| Alaboz 2008     | M. Alaboz, Mimar Sinan Köprülerinin Güncel Durum Değerlendirmesi ve Kapuağası Köprüsü Restorasyon Projesi, İstanbul 2008.                             |
| Alioğlu 1991    | F. Alioğlu, Geleneksel Yapı Elemanları, İstanbul 1991.  |
| Anabolu 1995    | M. U. Anabolu, Küçük Asya Sikkeleri Üzerindeki Köprü Betimlemeleri, Belleten CLIX, 1995, 323-326.   |
| Bektaşoğlu 2013 | M. Bektaşoğlu, Anadolu Şehrinin Su Yapıları, Ankara 2013.   |
| Buyruk 2016     | H. Buyruk, Çukurova'yı Orta Anadolu'ya Bağlayan Kuzey Kervan yolu, in: Y. Kurt- M. Fatih Sansar (eds.), Tarihte Adana ve Çukurova, Ankara 2016, 1-25. |
| Çeçen 2002      | K. Çeçen, Köprü, in: Türk İslam Ansiklopedisi Cilt 26, Ankara 2002, 252-255.  |
| Çulpan 2002     | C. Çulpan, Türk Taş Köprüleri, Ankara 2002.   |
| Demiriz 1979    | Y. Demiriz, Osmanlı Mimarisinde Süsleme I: Erken Devir (1300-1453), İstanbul 1979.  |
| Galliazzo 1994  | V. Galliazzo, I Ponti Romani (Vol. I), Canova 1994.   |

- Gençer – Turan 2017 F. U. Gençer – M. F. Turan, The Masonry Techniques of a Historical Bridge in Hypokremnos (İçmeler), METU JFA 1, 2017, 187-207.
- Gerçek – Yastı 2016 A. Gerçek – M. N. Yastı, Neronias-Eirenepolis Kurtarma Kazısı: İlk Bulgular, Çukurova Araştırmaları Dergisi 2/ Cilt II, 2016, 14-31.
- Head 1887 B. V. Head, *Historia Numorum. A Manual of Greek Numismatics*, Oxford 1887.
- Hild – Hellenkemper 1990 F. Hild – H. Hellenkemper, *Kilikien und Isaurian*, Vienna 1990, TIB 5.
- Keil – Wilhelm 1931 J. Keil – A. Wilhelm, *Denkmäler aus dem Rauhen Kilikien*, Manchester 1931, MAMA 3.
- Langlois 1861 V. Langlois, *Voyage dans la Cilicie et dans les Montagnes du Taurus: Exécuté pendant les années 1851-1853*, Paris 1861.
- Magie 1950 D. Magie, *Roman Rule in Asia Minor*, New Jersey 1950.
- Mitford 1980 T. B. Mitford, *Roman Rough Cilicia*, ANRW 7, 1980, 1230-1261.
- O' Connor 1993 C. O'Connor, *Roman Bridges*, Cambridge 1993.
- O' Connor 2010 C. O'Connor, Bridges, in: M. Gagarin – E. Fantham (eds.), *The Oxford Encyclopedia of Ancient Greece and Rome (Oxford University Press on Demand 1)*, New York 2010, 24-25.
- Pekary 1966 T. Pekary, Kaiser Valerians Brückenbau bei Mopsos in Kilikien, in: A. Alföldi (ed.), *Historia Augusta Colloquium 1964-1965*, Bonn 1966, 139-141.
- Pekin – Yılmaz 2008 F. Pekin – H. F. Yılmaz, *Türkiye'nin Kültür Mirası: 100 Köprü, İstanbul 2008*.
- Sayar 1992 M. H. Sayar, Antike Strassenverbindungen Kilikiens in der römischen Kaiserzeit, *Geographika Historia* 17, 1992, 452-473.
- Sayar 2004 M. H. Sayar, Kilikya'da Epigrafi ve Tarihi Coğrafya Araştırmaları 2002, XXI. AST/Cilt I, 2004, 155-168.
- Sayar 2011 M. H. Sayar, Kilikya Yüzey Araştırmaları 2009, XXVIII. AST/Cilt 2, 2011, 247-250.
- Sayar 2019 M. H. Sayar, Römische Straßen und Meilensteine im Ebenen Kilikien, in: A. Kolb (ed), *Roman Roads. New Evidence- New Perspectives*, Bonn 2019, 147-165.
- Strickland 2010 M. H. Strickland, *Roman Building Materials, Construction Methods, and Architecture: The identity of an Empire*, South Carelino 2010.
- Şenocak 2014 M. B. Şenocak, *Anadolu'da Roma Lejyonları ve Askeri Birlikler*, Konya 2014.
- Tanyeli 2000 G. Tanyeli, Türkiye Köprüleri, in: M. Germen – G. Tanyeli – M. Sözen (eds.), *Türkiye'nin Köprüleri*, İstanbul 2000, 10-24.
- Tunç 1978 G. Tunç, *Taş Köprülerimiz*, Ankara 1978.
- Tyrrell 1911 H. G. Tyrrell, *History of Bridge Engineering*, London 1911.

- Uçar – Şakar 2011 T. Uçar – G. Şakar, Kemerlerin Statik Analizi için Basitleştirilmiş bir Yaklaşım, Dumlupınar Üniversitesi Fen Bilimleri Enstitüsü Dergisi 24, 2011, 35-42.
- Ünal 2006 A. Ünal, Eski Çağlarda Çukurova'nın Tarihi Coğrafyası ve Kizuwatna (Adana) Krallığının Siyasi Tarihi, ÇÜSBED 15, 2006, 15-44.
- Ünal – Girginer 2007 A. Ünal – S. Girginer, Kilikya-Çukurova: İlk Çağlardan Osmanlılar Dönemine Kadar Kilikya'da Tarihi Coğrafya, Tarih ve Arkeoloji, İstanbul 2007.
- Von Aulock 1963 H. Von Aulock, Die Münzprägung der Kilikischen Stadt Mopsos, Archäologischer Anzeiger 2, 1963, 231-278.
- Yıldırım 2013 E. Yıldırım, Roma İmparatorluğu'nun Doğu Sınırını Korumak İçin Fırat Nehri Boyunca Kurulan Lejyonlar, Anadolu Üniversitesi Sosyal Bilimler Dergisi 13/4, 2013, 167-182.
- Yurtsever 2018 C. Yurtsever, Yüreğir Tarihi, Ankara 2018.

### Misis Köprüsü'nün Yapım Tarihi

#### Özet

Korakesion ile Aleksandria Kat'Isson arasında uzanan Kilikia Bölgesi; kuzeyde Toroslar, güneyde Akdeniz tarafından sınırlandırılmaktadır. Kaynaklar tarafından Kilikia olarak tanımlanan bölge Doğu ve Batı toplumları arasında doğal bir köprü görevi görmekte ve farklı kültürler arasında iletişim sağlayan önemli bir güzergâh da bölgeden geçmektedir. Gülek Geçidi'ni aşan güzergâh, Tarsus üzerinden Misis'e ulaşmakta ve ardından Mezopotamya'ya yönelmektedir. Bu güzergâhın önemli duraklarından birini temsil eden Mopsu(h)estia'da (= Misis) dokuz kemerli Misis köprüsü konumlanmaktadır. Köprünün ilk inşası Roma Dönemi ile ilişkilendirilse de ne zaman ve hangi imparator yönetiminde inşa edildiği tartışmalıdır. Bazı araştırmacılar onun inşasını Valerianus Dönemi'yle ilişkilendirirken, bazıları da II. Constantius Dönemi'ne atfetmektedirler.

Çalışmanın amacı, Misis köprüsünün inşa tarihine yönelik yeni bir görüş ortaya koymaktır. Köprünün konumlandığı güzergâh konusundaki antik kaynak aktarımları, buradaki yolun ciddiyetini ortaya koyar niteliktedir. Ayrıca İmparatorluk Dönemi'nin başlarından itibaren doğudaki karışıklıklara müdahalede Roma'nın hassas bir tutum benimsediği de bilinmektedir. Gerek lejyonların hareketleri gerekse de lojistik destek açısından bu güzergâhın Roma için önem arz ettiği anlaşılmaktadır. Dolayısıyla köprünün inşa tarihi olarak önerilen her iki görüşün de tartışmalı olduğu ve önerilen tarihlerin köprü için çok geç olduğu görülmektedir. Bu nedenle erken dönem kayıtları, arkeolojik bulgular ve tarihsel süreç dikkate alınarak köprünün kronolojik problemleri hakkında yeni bir öneri geliştirilmiştir.

*Anahtar Sözcükler:* Misis Köprüsü, Roma Dönemi, İmparator Vespasianus, XVI. Flavia Firma lejyonu, Miltaşı.

### The Construction Date of the Misis Bridge

#### Abstract

The Cilicia Region, which stretches between Korakesion and Alexandria Kat'Isson, is bordered by the Taurus Mountains in the north and the Mediterranean Sea in the south. Defined as Cilicia by

the sources, the region serves as a natural bridge between Eastern and Western societies, and a significant route that provides communication between different cultures also passes through the region. Crossing the Gülek Pass, the route reaches Misis via Tarsus, then heads towards Mesopotamia. The nine-arch Misis Bridge is situated in Mopsu(h)estia (= Misis), which represents one of the important stops of this route. Even though the original construction of the bridge is associated with the Roman period, when and under which emperor it was built is controversial. Some researchers relate the construction to the Valerian period, whereas others attribute it to the period of Constantius II.

The aim of the study is to put forward a new view on the construction date of the Misis bridge. The ancient sources concerning the route, on which the bridge is located, reveal the significance of the road here. Additionally, it is also known that from the beginning of the Imperial period, Rome adopted a sensitive attitude in intervening in the turmoil in the east. It is understood that this route is of particular importance for Rome in relation to both the movements of the legions and the logistical support. Accordingly, it is seen that both views suggested as the construction date of the bridge are disputable and the suggested dates are too late for the bridge. Therefore, considering the early historical records, archaeological findings and the historical process, a new proposal has been developed regarding the chronological problems of the bridge.

*Keywords:* The Misis Bridge, Roman Period, Emperor Vespasian, XVI. Legio Flavia Firma, Milestone.