



MERSİN ÜNİVERSİTESİ KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ
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MERSIN UNIVERSITY PUBLICATIONS OF THE RESEARCH CENTER OF
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MERSİN ÜNİVERSİTESİ
KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ
BİLİMSEL SÜRELİ YAYINI ‘OLBA’

Amaç

Olba süreli yayını; Küçükasya, Akdeniz bölgesi ve Ortadoğu’ya ilişkin orijinal sonuçlar içeren Arkeolojik çalışmalarda sadece belli bir alan veya bölge ile sınırlı kalmaksızın 'Eski Çağ Bilimleri'ni birbirinden ayırmadan ve bir bütün olarak benimseyerek bilim dünyasına değerli çalışmaları sunmayı amaçlamaktadır.

Kapsam

Olba süreli yayını Mayıs ayında olmak üzere yılda bir kez basılır. Yayınlanması istenilen makalelerin en geç her yıl Kasım ayı sonunda gönderilmiş olması gerekmektedir.

1998 yılından bu yana basılan Olba; Küçükasya, Akdeniz bölgesi ve Ortadoğu’ya ilişkin orijinal sonuçlar içeren Prehistorya, Protohistorya, Klasik Arkeoloji, Klasik Filoloji (ile Eskiçağ Dilleri ve Kültürleri), Eskiçağ Tarihi, Nüvizmatik ve Erken Hıristiyanlık Arkeolojisi alanlarında yazılmış makaleleri kapsamaktadır.

Yayın İlkeleri

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b- Metin 10 punto; özet, dipnot, katalog ve bibliografya 9 punto olmak üzere, Times New Roman (PC ve Macintosh) harf karakteri kullanılmalıdır.
c-Dipnotlar her sayfanın altına verilmeli ve makalenin başından sonuna kadar sayısal süreklilik izlemelidir.
d-Metin içinde bulunan ara başlıklarda, küçük harf kullanılmalı ve koyu (bold) yazılmalıdır. Bunun dışındaki seçenekler (tümünün büyük harf yazılması, alt çizgi ya da italik) kullanılmamalıdır.
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c) Metin içinde yer alan “fig.” ibareleri, parantez içinde verilmeli; fig. ibaresinin noktasından sonra bir tab boşluk bırakılmalı (fig. 3); ikiden fazla ardışık figür belirtiliyorsa iki rakam arasına boşluksuz kısa tire konulmalı (fig. 2-4). Ardışık değilse, sayılar arasına nokta ve bir tab boşluk bırakılmalıdır (fig. 2. 5).

d) Ayrıca bibliyografya ve kısaltmalar kısmında bir yazar, iki soyadı taşıyorsa soyadları arasında boşluk bırakmaksızın kısa tire kullanılmalıdır (Dentzer-Feydy); bir makale birden fazla yazarlı ise her yazardan sonra bir boşluk, ardından uzun tire ve yine boşluktan sonra diğer yazarın soyadı gelmelidir (Hagel – Tomaschitz).

3. “Bibliyografya ve Kısaltmalar” bölümü makalenin sonunda yer almalı, dipnotlarda kullanılan kısaltmalar, burada açıklanmalıdır. Dipnotlarda kullanılan kaynaklar kısaltma olarak verilmeli, kısaltmalarda yazar soyadı, yayın tarihi, sayfa (ve varsa levha ya da resim) sıralamasına sadık kalınmalıdır. Sadece bir kez kullanılan yayınlar için bile aynı kurala uyulmalıdır.

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Dipnot (kitaplar ve makaleler için)

Richter 1977, 162, res. 217.

Diğer Kısaltmalar

age.	adı geçen eser
ay.	aynı yazar
vd.	ve devamı
yak.	yaklaşık
v.d.	ve diğerleri
y.dn.	yukarı dipnot
dn.	dipnot
a.dn.	aşağı dipnot
bk.	Bakınız

4. Tüm resim, çizim ve haritalar için sadece "fig." kısaltması kullanılmalı ve figürlerin numaralandırılmasında süreklilik olmalıdır. (Levha, Resim, Çizim, Şekil, Harita ya da bir başka ifade veya kısaltma kesinlikle kullanılmamalıdır).

5. Bir başka kaynaktan alıntı yapılan figürlerin sorumluluğu yazara aittir, bu sebeple kaynak belirtilmelidir.
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7. Metin yukarıda belirtilen formatlara uygun olmak kaydıyla 20 sayfayı geçmemelidir. Figürlerin toplamı 10 adet civarında olmalıdır.
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11. Dizilim (layout): Figürler ayrıca mail ekinde bir defada gelecek şekilde yani düşük çözünürlükte pdf olarak kaydedilerek dizilimi (layout) yapılmış şekilde yollanmalıdır.
12. Metin, figürler ve figürlerin dizilimi (layout); ayrıca makale içinde kullanılan özel fontlar 'zip'lenerek, We Transfer türünde bir program ile bilgisayar ortamında gönderilmelidir; çıktı olarak gönderilmesine gerek yoktur. İstendiği takdirde hepsi Dergi Park'a yüklenebilir.

MERSIN UNIVERSITY
‘RESEARCH CENTER OF CILICIAN ARCHAEOLOGY’
JOURNAL ‘OLBA’

Scope

Olba is printed once a year in May. Deadline for sending papers is the end of November each year.

The Journal ‘Olba’, being published since 1998 by the ‘Research Center of Cilician Archeology’ of the Mersin University (Turkey), includes original studies done on prehistory, protohistory, classical archaeology, classical philology (and ancient languages and cultures), ancient history, numismatics and early christian archeology of Asia Minor, the Mediterranean region and the Near East.

Publishing Principles

1. a. Articles should be written in Word programs.
 - b. The text should be written in 10 puntos ; the abstract, footnotes, catalogue and bibliography in 9 puntos ‘Times New Roman’ (for PC and for Macintosh).
 - c. Footnotes should take place at the bottom of the page in continuous numbering.
 - d. Titles within the article should be written in small letters and be marked as bold. Other choices (big letters, underline or italic) should not be used.
2. Punctuation (hyphen) Marks:
 - a) One space should be given after the comma in the sentence and after the dot at the end of the sentence.
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Bibliography (for articles):

Corsten 1995 Corsten, Th., “Inschriften aus dem Museum von Denizli”, Ege Üniversitesi Arkeoloji Dergisi III, 215-224, pl. LIV-LVII.

Footnotes (for books and articles):

Richter 1977, 162, fig. 217.

Miscellaneous Abbreviations:

op. cit.	in the work already cited
idem	an author that has just been mentioned
ff	following pages
et al.	and others
n.	footnote
see	see
infra	see below
supra	see above

4. For all photographs, drawings and maps only the abbreviation ‘fig.’ should be used in continous numbering (remarks such as Plate, Picture, Drawing, Map or any other word or abbreviaton should not be used).
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RE-EVALUATION OF THREE MILESTONES FROM LYCIA WITH DIGITAL EPIGRAPHY STUDIES

Nihal TÜNER ÖNEN – Aykan AKÇAY *

ÖZ

Lykia'dan Üç Miltaşının Dijital Epigrafi Çalışmalarıyla Yeniden Değerlendirilmesi

Bu makale, Fethiye Müzesi ile Liverpool Üniversitesi Çaltılar Arkeoloji Projesi tarafından “Illuminating the Land of Light” başlığıyla gerçekleştirilen proje kapsamında Fethiye Arkeoloji Müzesi'nin izniyle çalışılan, ikisi Fethiye Arkeoloji Müzesi'nde; biri ise Dont'da bulunan üç mil taşına ait yazıtın sayısal görüntüleme yöntemleriyle belgelenecek yeniden değerlendirilmesine ilişkin bilgiler içermektedir. Burada tartışılan mil taşlarının tümü, her ikisi de Kabalia bölgesi kentleri olan Oinoanda ve Balboursa arasındaki bölgeden gelmektedir. İlk mil taşı Dont'da bulunmuştur ve üzerinde iki farklı yazıt barındırmaktadır. Orijinal yazıt Septimius Severus ve Caracalla zamanına aittir ve son 4-5 harfi dışında kazınarak silinmiştir. Alt kısımda bulunan diğer yazıt ise Diocletianus ve Maximianus ile birlikte Constantius ve Galerius döneminde yazılmıştır. Söz konusu tetrarkhia yazıtı kazınırken Severus dönemi metni silinmiştir. Bu nedenle ilk yazıtın silinmiş kısmını direkt gözlemlenmesi mümkün değildir. Öyle ki Severuslar dönemine ait olan yazıt ilk olarak Rudolf Heberdey ve Ernst Kalinka ile Christian Naour tarafından görülüp not edilmişse de ilk olarak, yayınında "taşı okumak son derece zordur çünkü ikinci yazıt birincinin çoğunu yok etmiştir" diye belirten David French tarafından 1981 yılında yayımlanmıştır. D. French 1986 yılında aynı yazıtı revize ederek tekrardan yayımlamıştır. Tetrarkhia yazıtı ise varlığı bilinmesine rağmen 2014 yılına kadar yayımlanmamıştır. D. French bu yayınında ilk yazıtı üçüncü kez revize etmiştir.

Diğer iki mil taşı Zurban köyündeki Su Kaynağı'nda bulunmuştur ve günümüzde Fethiye Arkeoloji Müzesi bahçesinde sergilenmektedir. Her iki yazıt da Stadiasmus Patarensis projesi kapsamında hazırlanan yayımda Sencer Şahin ve Mustafa Adak tarafından bilim camiasına tanıtılmışlardır. Söz konusu mil taşı metinlerinde yönetici imparatorlar Septimius Severus, Caracalla ve Geta ile *procurator* Helvius Marianus'un adları geçmektedir. Her üç mil taşı üzerinde yer alan yazıtlar doğal tahribat nedeniyle aşınmış durumdadır ve geleneksel yöntemlerle

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okunmaları güçtür. Bu durum daha önceki çalışmalarda eksik/hatalı okumalara neden olmuştur. Bu sebeple üç mil taşı da RTI ve SfM fotogrametrisi metodlarıyla belgelenmiş ve yeniden değerlendirilmiştir. Gerçekleştirilen dijital epigrafi çalışmaları sonucunda yeni verilere ulaşılmıştır. Burada ele alınan makalede mil taşlarının önceki edisyonlarına da yer verilerek yeni okumalar karşılaştırmalı olarak paylaşılmıştır. Yazıtların yeniden değerlendirmeleri yapıldıktan sonra bölgenin yol sistemine değinilerek söz konusu mil taşlarının hangi güzergahlarda konumlanmış olabileceklerine ilişkin bilgiler verilmiştir.

Yazıtların çevirileri ise şöyledir:

Nr. 1-A: *Parth Fatihi, Adiabene Fatihi, vatanın babası, tribunus yetkisine haiz, censor; İmparator Caesar Lucius Septimius Severus Pius Pertinax Augustus ve tribunus yetkisine haiz, censor; Imperator Caesar Marcus Aurelius Antoninus Augustus Pius ve Publius Septimius Geta Caesar bu yolları procurator Helvius Marianus aracılığıyla onartttılar. * (Mil).*

Nr. 1-B: *İmparator Caesarlar, dindar Augustuslar C. Val(erius) Diocletianus ve M. Val(erius) Maximianus ile pek muteber Caesarlar evrenin efendileri Constantius ve Maximianus'u (onurlandırdılar).*

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Nr. 3: *Bu yollar procurator Helvius Marianus aracılığıyla onartıldı. (Oinoanda'dan itibaren) 3 (Mil).*

Anahtar Kelimeler: Miltaş, Yazıt, Helvius Marianus, Dont, Zurban, Dijital Epigrafi.

ABSTRACT

This article contains the re-evaluation of three inscribed milestones which are documented using digital imaging methods in the Fethiye Archaeology Museum (2) and Dont (1) by the permission of the Fethiye Archaeology Museum, as part of the project titled "Illuminating the Land of Light" coordinated by the Fethiye Museum and Liverpool University Çaltılar Archaeology Project. All milestones discussed here come from the region between Oinoanda and Balboura, both cities of the Kabalia region. The first milestone was found in Dont and contains two noncontemporary inscriptions. The original inscription belongs to the time of Septimius Severus and Caracalla and has been scraped off except for the last 4-5 letters. The other inscription at the bottom was inscribed during the time of Diocletian and Maximianus with Constantius and Galerius. While the aforementioned tetrarchic inscription was scraped, the Severan period text was erased. For this reason, it is not possible to read the deleted part of the first inscription by direct observation. Although the Severan inscription was first seen and noted by Rudolf Heberdey, Ernst Kalinka and Christian Naour, it was first published in 1981 by David French, who stated in his publication that "the stone is extremely difficult to read because the second inscription destroyed most of the first one". D. French revised and republished the same inscription in 1986. The tetrarchic inscription, on the other hand, was not published until 2014, although its existence is known. D. French revised the first inscription for the third time in this publication. The inscriptions on all three milestones are eroded due to natural conditions and are difficult to read by traditional methods. This situation has caused incomplete/erroneous transcriptions in the previous studies.

The other two milestones were found at the Su Kaynağı in the village of Zurban and are now exhibited in the garden of the Fethiye Archaeological Museum. Both inscriptions were introduced to the scientific community by Sencer Şahin and Mustafa Adak in the publication prepared within the scope of the Stadiasmus Patarensis project. The inscription of these two milestones cover the names of the ruling emperors Septimius Severus, Caracalla and Geta and also the *procurator* Helvius Marianus. For this reason, all three milestones were documented and re-evaluated using the RTI and SfM photogrammetry methods. In this article, the previous published editions of the milestones were also included and the new readings were presented comparatively. After the re-evaluation of the inscriptions, a commentary on the road connections of the region and probable locations of the milestones are presented.

The translations of the inscriptions are as follows:

No. 1-A: Emperor Caesar Lucius Septimius Seuerus Pius Pertinax, Augustus, Parthicus, Adiabenicus, father of the fatherland, *tribunicas potestas, censor*; and the emperor Caesar Marcus Aurelius Antoninus Augustus Pius, *tribunicas potestas, censor*; and Publius Septimius, Geta Caesar have restored the roads through the agency of *procurator* Helvius Marianus. * (Miles).

No. 1-B: (honored) The Imperatores Caesares C. Val(erius) Diocletianus and M. Val(erius) Maximianus, the pious Aug(usti), and Constantius and Maximianus, the excellent Caesares, the savior of the world.

No. 2: Emperor Caesar Lucius Septimius Severus Pius, Pertinax, Augustus, Parthicus, father of the fatherland, *tribunicas potestas, censor*; and the emperor Caesar Marcus Aurelius Antoninus Augustus Pius, *tribunicas potestas, censor*; and Publius Septimius Geta Caesar, have the roads restored through the agency of *procurator* Helvius Marianus. (From Oinoanda) 6 (miles).

No. 3: These roads were restored through the agency of *procurator* Helvius Marianus. (From Oinoanda) 3 (miles).

Keywords: Milestone, Inscription, Helvius Marianus, Dont, Zurban, Digital Epigraphy.

Introduction

This paper presents new readings of four inscriptions on three milestones from Lycia documented with computational imaging methods RTI and photogrammetry, within the framework of EU project entitled Illuminating the Land of Light¹. Before moving on to the interpretations of the four inscriptions, it would be more useful to explain the methods we used in reading these inscriptions.

Methodology: RTI and Photogrammetry

Epigraphical analysis of the inscriptions that have been exposed to natural

¹ We would like to thank the director of Çaltılar Archaeology Project Alan M. Greaves and the director of Fethiye Museum Emel Özkan and archaeologist H. Emirhan Süel for giving us the opportunity to study of the inscriptions and for their support. We also thank to our colleague Betül Gürel for helping with the RTI & SfM captures of the milestones in the field.

conditions or vandalism can be very difficult due to the deformation of their surfaces. This situation may cause erroneous readings in the transcription process of inscriptions. The milestones presented in this study are highly eroded due to the environmental conditions (fig. 1). In addition, their rounded shape cause difficulties while performing epigraphical studies with traditional methods such as squeezing, direct observation and photography. In order to overcome this difficulty, we applied computational imaging methods - RTI and SfM - which have been used in digital epigraphy studies in recent years².

Reflectance Transformation Imaging (RTI) is a computational imaging method that provides detailed surface morphology of the objects by capturing the color value and reflectance information per pixel³. RTI images consist of a series of digital photos in which the object and camera positions remain fixed while the object is illuminated systematically from different directions by a light source. The dedicated RTI software calculates the light position and reflectance information of the object and finally creates an RTI file that presents the digital surrogate of recorded object. Epigraphers can digitally analyze the inscriptions more effectively with RTI viewer software by applying different (virtual) lighting positions and multiple surface rendering filters.

In this study, Highlight-RTI was used in the recording of the inscriptions of milestones, as this recording method can present precise imaging results of archaeological artefacts in remote locations with portable equipment such as camera, tripod, flash *etc.* Since the Roman and Greek inscriptions were usually engraved on rectangular bearers on a flat surface, mostly a single H-RTI capture is sufficient⁴. However, this approach changes in the H-RTI capture of Roman milestones. Due to their cylindrical form it is not possible to capture the whole inscription in a single H-RTI record. For this reason, each milestone captured section by section. In this way, we divided capture points into three equal positions based on the beginning and ending points of the three inscriptions of the milestones. As a result, three different RTI images were obtained for each inscription. We increased the legibility of eroded, visually complex characters on the surface of the aforementioned milestones with the help of the RTI results (fig. 2). However, during the analysis of the inscriptions, we had to open three different RTI images to read the entire inscription simultaneously. Because multiple RTI files cannot be combined in a single image yet. In some cases it can be difficult to follow all the text in a line of the inscription, especially when using a single monitor.

The other digital imaging method we applied to the milestones examined in the study is SfM photogrammetry. Structure from Motion (SfM) is used to create three-dimensional models of objects from two-dimensional digital image data (mostly photographs) overlapping each other⁵. Using three-dimensional models, archaeological

2 For similar studies, see Espinoza-Espinoza – Carrero Pazos 2018, 461-478; Carrero Pazos – Espinoza Espinoza 2018, 1-12.

3 Malzbender et al. 2001.

4 For detailed information about the use of H-RTI method in epigraphy research, see Mudge et al. 2006; Akçay 2016.

5 Hess – Green 2017, 243.

artefacts and inscriptions can be examined with the help of three dimensional analysis software⁶. In this study, we recorded the highly deformed milestone exhibited in the Fethiye Museum (no. 2) with SfM photogrammetry⁷. During the epigraphical analysis process, the surface of the milestone can be virtually illuminated from different angles and the deformed parts of the inscription can be revealed using various mathematical visualizing filters by using the 3D model data. Furthermore, we digitally converted the rounded milestone to a flattened three dimensional model in order to follow the characters in a line and make a straight reading during the epigraphical inspection of the inscription⁸ (fig. 3).

During the epigraphic analysis of the inscriptions, both RTI and SfM data allowed us to generate new readings related to the milestones discussed in the sections below.

1- A/B. Milestone from the Village of Dont

The limestone column was found in the cemetery of the village of Dont and later moved to garden of the mosque in the village. The milestone carries two different inscriptions carved on top of each other. The original inscription was from the period of Septimius Severus and Caracalla and was scraped off except for the last 4-5 letters of each line. In its lower half, a second inscription from the time of Diocletian and Maximian with Constantius and Galerius was engraved. In order to engrave this tetrarchic inscription, the previous Severan text was erased. Therefore, the deleted part of the first inscription is difficult to read with naked eye.

Dimensions: H.: 103 cm; Dia.: 43 cm (top); Lh.: 0.20 - 0.23 cm (A); 0.22 - 0.25 cm (B)

This milestone was first recorded by R. Heberdey and E. Kalinka⁹, C. Naour also referred to this inscription¹⁰. Finally, the inscription from the period of Severus and Caracalla was published by D. H. French¹¹. French emphasized: "*the stone is exceptionally difficult to read, the second inscription having obliterated the greater part of the first*". He restored the text of this inscription as follows:

A

[Αὐτοκράτωρ Κ]αῖσαρ (vac) Λ.

[Cεπτίμιος Cεουήρος Εὐ]σε-

6 MeshLab software (open-source) was used during the epigraphical analysis of the SfM model. For detailed information, see <http://www.meshlab.net>.

7 In order to create three-dimensional photogrammetric model, 120 photographs were taken around the milestone. The recorded image data was processed with Structure from Motion (SfM) algorithms by using the Agisoft Metashape Pro software. Photogrammetric scales with 1/10 mm precision were used during the documentation.

8 During the transformation of the circular shaped milestones to a flattened form, CloudCompare software was used which is an open source 3D point cloud and mesh processing software. For an accurate and coherent result, the diameter of the milestone was calculated and, in accordance with this data the milestone was digitally unrolled to a flat model.

9 Heberdey – Kalinka 1897, 41; cf. RE XIII, 1927, 2272 s.v. *Lycia*.

10 Naour 1978, 183, n. 35.

11 French 1981, 174; cf. Supp. Epigr. XXXI no. 1295.

- [βῆς Πέρτιναξ Σεβαστὸς Π]αρθικὸς
 [μεγ. ἀρχιερεὺς μεγ. πατ]ῆρ πατρί-
 5 [δος ὑπάτος δημαρχικῆς ἐξο]υσίας
 [τὸ . ἀνθύπατος καὶ Αὐτοκ]ράτωρ
 [Καῖσαρ Μάρκος Αὐρήλιος Ἄντω-
 [νεῖνος Εὐσεβῆς Σεβαστὸς] δημαρ-
 [χικῆς ἐξουσίας τὸc.5...]ητῆς
 10 [...c.7...] [[καὶ Σεπτίμιος Γέ]τας Καί]-
 [[[σαρ]]] (vac) αἰ ὁδοὶ ἀποκ]ατεσ-
 [τάθησαν ὑπὸ τοῦ ἐπιτρό]που τῶν
 [Σεβαστῶνc.10.....] Μαρία
 [νοῦ - -] (vac)
 15 [- -]

In 1986, French published another milestone from the time of Septimius Severus and Caracalla of unknown origin, which is now in the museum of Antalya¹². Based on this, he proposed a revised reading for the inscription from Dont, as he assumed that the full text on the inscription in the Antalya Museum similar to the eroded inscription found in Dont. Consequently, French thought that the inscription on the milestone from Dont was shorter than he originally meant in the *editio princeps* and restored the inscription according to the milestone in the Antalya Museum:

Milestone from Antalya Museum	A	Second Edition by D. French
Α[ὐτοκρά]τωρ Καί - σαρ [Λ. Σε]πτίμιος Σε[ουῆρος Ε]ὐσεβῆς		[Αὐτοκράτωρ Κ]αῖσαρ (vac.) Λ. [Σεπτίμιος Σεουῆρος Εὐ]σε- [βῆς Πέρτιναξ Σεβ. Π]αρθικὸς
4 Πέ[ρτιναξ] Σεβ. Παρ- θικὸς [Ἄδ]ιαβηνικὸς πατῆ[ρ π]ατριδὸς δη- μαρ[χικῆς] ἐξουσί-	4	[Ἄδιαβηνικὸς πατ]ῆρ πατρί- [δος δημαρχικῆς ἐξο]υσίας [τειμητῆς καὶ Αὐτοκ]ράτωρ [Καῖσαρ Μ. Αὐρήλιος] Ἄντω-
8 ας τε[ιμ]ητῆς• καὶ Αὐτοκράτωρ Καῖσαρ Μ. Αὐρήλιος Ἄντω- νεῖνος Σεβ. Εὐσε-	8	[νεῖνος Σεβ. Εὐσεβῆς] δημαρ- [χικῆς ἐξουσίας τειμ]ητῆς [[[καὶ Π. Σεπτίμιος Γέ]τας Καί-]] [[[σαρ]]] τὰς ὁδοὺς ἀποκ]ατέσ-

12 French 1986, 84-90.

12	βῆς δημαρχικῆς ἐ- ξουσίας τειμητῆς [[[καὶ Π. Σεπτίμιος]]] [[[Γέτας Καίσαρ]]] τὰς ὁ-	12	[τησαν ἐπὶ ἐπιτρό]που τῶν [Σεβαστῶν] Μαρια- [νοῦ - -] - - - -
16	δοῦς ἀποκα[τέστ]η- [σαν ἐπὶ ἐπιτρόπου] [τῶν Σεβαστῶν -] - - - - -		

In 2007 Sencer Şahin and Mustafa Adak published their book about the Roman roads from the Claudian era in the Provincia Lycia¹³. There they mentioned a milestone from the Severan period in the Fethiye Museum. We shall come back to this inscription later. In this inscription one can read the name of praecurator Helvius Marianus. For that reason, D. French had to revise the same text for the third time in 2014¹⁴. In the new transcription French changed the “ἐπὶ ἐπιτρό]που” in line 12 as “διὰ ἐπιτρό]που” according to the inscriptions published by S. Şahin and M. Adak. He also added the name “Ἐλουιος” in line 13.

New Interpretations of the Inscription Using Digital Methods

As can be clearly seen in the explanations presented below, the suggestions which D. French had to revise based on the inscriptions on the milestone in the Antalya Museum and Zurban, can be confirmed with the help of the RTI method (fig. 4).

Line 1: The first five letters ΑΥΤΟΚ of the word of “Αὐτοκράτωρ” can be seen clearly in the RTI image.

Line 2: On this line, the first three letters C E Π and fifth to the seventh letters ΙΜΙ of the word Σεπτίμιος are also visible.

Line 3: The first three letters ΒΗC are clearly visible.

Line 4: The first three letters ΑΔΙ can be recognized in the RTI image.

Line 5: The first letter Δ, third and fourth CΔ of the πατρίδος and the first letter Δ of δημαρχικῆς are visible.

Line 6: The first T and fourth letter M of the word τειμητῆς can be seen in this line. This confirms the reading suggested by D. French based on the text of the inscription in the Antalya Museum. In the first reading, French expected the ordinal number of the *tribunicia potestas* which is why he let the previous line end with the word ἐξου]σίας. However, the title τειμητῆς (*ensor*) seemed to him extraordinary for Septimius Severus and Caracalla. But the inscriptions in the Antalya and Fethiye museums

¹³ Şahin – Adak 2007, 170.

¹⁴ French 2014, 54 n. 20.

clearly demonstrate this title for both emperors. The letters M and H form a ligature (MH) here.

Line 7-11: The second inscription overlays on the previous inscription beginning from the seventh line. From this line onwards, only very few traces have survived, except for the last 4-5 letters of the inscription from Septimius Severus and Caracalla. Before the last letters **ΔΗΜΑΡ** in the 8th line, the **ΕΒ** are visible; before **ΗΤΗC** on the 9th line, the **ΕΙΜ** can be recognized in the RTI image. M and H together form a ligature (MH) as in the top line (**ΔΗΜΑΡ**).

Line 12-14: Illegible. Based on the inscription from the sacrifice where the Zeilen should be chosen: διὰ ἐπιτρό]που τῶν | [Σεβαστῶν Ἐλουίου] Μαρια]νοῦ

Accordingly, we can now restore this inscription as follows:

A

Αὐτοκ[ράτωρ Κα]ῖσαρ *vac.* Λ.

Σεπ[τ]ῖμι[ος Σεουήρος Εὐ]σε-
βῆς [Πέρτιναξ Σεβ. Π]αρθικὸς

4 Ἄδι[αβηνικὸς πατ]ήρ πατρί-
δ[ος] δ[ημαρχικῆς ἐξου]σίας
τ[ει]μη[τῆς καὶ Αὐτοκ]ράτωρ

[Καῖσαρ Μ. Αὐρήλι]ος Ἄντω-

8 [νεῖνος Σεβ. Εὐσ]εβῆς δημαρ-
[χικῆς ἐξουσίας τ]ειμητῆς

[[[καὶ Π. Σεπίμιος Γέ]ταξ Κᾶ]-]]

[[[σαρ]]] τὰς ὁδοὺς ἀποκ]ατέσ-

12 [τησαν διὰ ἐπιτρό]που τῶν

[Σεβαστῶν Ἐλουίου] Μαρια-

[νοῦ - -] *vac.*

[- -]

The inscription from the period of Diocletian and Maximian was still unpublished in 2014, although it was known¹⁵. The surface of the stone is damaged and the letters were not deeply engraved and the Severan inscription below had been scratched off so that second text could be written over it. For this reason the letters of this inscription are very difficult to read with the naked eye. The tetrarchic inscription begins in the seventh line of the Severan inscription and continues for 8 lines. The difference between the two inscription is very slight. We must now compare D. French's transcription with our reading that we analyzed with the digital imaging methods.

15 Heberdey – Kalinka 1897, 41; Naour 1978, 183 n. 35; French 1981, 174; French 1986, 84; French 1988, 849; Şahin – Adak 2007, 170.

D. French read “Αὐτοκράτορας Καίσι-“ in the first line and started the second line with “-αρας” because he was waiting for the continuation of “Καίσαρας”. But that line started with *sigma* and *gamma*. *Sigma* is the second *sigma* of Kaiss(ares), which is used as the abbreviation of Kaiser duo (two emperors). *Gamma* is also the abbreviation of the *praenomen* Gaius. So the transcription of the second line changes very differently. Using the RTI method, the tetrarchical text can be restored as follows (fig. 5):

Transcription by D. French	B	RTI & SfM Results
Αὐτοκράτορας Καίσι-		Αυτοκράτορας Καίσι-
2 σαρας Οὐαλ Διοκλητια –		σ(αρας) Γ(άϊον) Οὐαλ(έριον) Διοκλητια-
νὸν [καὶ Οὐαλ Μαξιμια]-		νόν [καὶ Μ(ᾶρκον) Οὐαλ(έριον) Μαξιμια]-
4 [νὸν Σεβαστοὺς] καὶ Κων-	4	[νὸν Εὐσεβ(οῦς) Σεββ(αστοὺς)] καὶ Κων-
στάντιον καὶ Μαξιμι-		στάντιον καὶ Μαξιμια-
6 ανὸν ἐπιφφ Καίσις		νὸν ἐπιφφ(ανεστάτους) Καίσις(αρας)
[δεσπότης] τῆς οἰκου-		[δεσπότης] τῆς οἰκου[μέ]-
8 [μένης]	8	[νης
[-]		

2- First Milestone from the village of Zurban

The limestone column was found at the Su Kaynağı in the village of Zurban. Today it is exhibited in the garden of Fethiye Museum. The limestone bears an inscription of eight lines. The text is engraved at regular intervals and in letters of the same size. The surface of the inscription is substantially damaged.

Dimensions: H.: 118 cm; Dia: 38 cm (top) - 40 cm (bottom). Lh.: 2.30-2.60 cm. Inv.no.: 3577

The Zurban inscription was first published by S. Şahin and M. Adak¹⁶. They saw the inscription in the museum within the scope of their field surveys on the road network in Lycia. S. Şahin and M. Adak tried to read the inscription on the milestone as much as possible with the naked eye. Their transcription contains an accurate and objective record, although they were unable to provide a full reading of the text due to the damage on the inscription surface. They emphasized that they could produce an almost complete reconstruction from the highly fragmented visible parts of the text using other published milestones.

¹⁶ Şahin – Adak 2007, 170, n. 363.

First Edition (S. Şahin – M. Adak)

- 01 [Αὐτοκράτωρ Καίσαρ]
 02 [Λ. Σεπτίμιος Σευήρος Σεβαστός]
 1 [δημα]ρχικῆς [ἐξουσίας τὸ ιγ']
 2 [καὶ Αὐ]τοκράτω[ρ Καίσαρ]
 3 [Μ. Αὐρ.] Ἀντωνεῖνος Σεβ[αστός]
 4 [δημαρχικῆς] ἐξουσίας τὸ η' [ο]ί τῆς
 5 [οικουμένης δέσποται? [[καὶ Λ. Σεπτίμιος Γέτας]]]
 6 [τὰς ὁδοὺς ἀποκα]τεσκεύασαν διὰ ἐπιτρόπου
 7 [τῶν Σεβαστῶν] Ἐλουίου Μαριανοῦ
 8 ζ

SfM Results

- 01 [Αὐτοκράτωρ Καίσαρ Λ.]
 02 [Σεπτίμιος Σεουήρος Εὐσεβῆς]
 03 [Πέρτιναξ Σεβ· Παρθικὸς πατήρ]
 1 πατρίδος δ[ημα]ρχικῆ[ς ἐξουσί]ας
 2 τειμητῆς καὶ Αὐτοκράτωρ Καίσαρ
 3 Μ. Αὐρήλιος Ἀντωνεῖνος Σεβ. Εὐσε-
 4 βῆς [δ]ημαρχικῆς ἐξουσίας τειμητῆς
 5 [[[καὶ Λ. Σεπτίμιος Γέτας]]] τὰς ὁ-
 6 δοὺς ἀποκατέστησαν διὰ ἐπιτρόπου
 7 [τῶν Σεβαστῶν] Ἐλουίου Μαριανοῦ
 8 ζ

We can observe the contributions of SfM photogrammetry in the re-evaluation process of this inscription. Digital epigraphy results allowed us to make new reading of the inscription as below (fig. 6):

Line 01: These lines are missing on the column and were reconstructed based on the inscriptions from Dont and Antalya Museum.

Line 1: The first editors began this line with [δημα]ρχικῆς and let it end with [τὸ ιγ']. However, the digital results allow to recognize the whole word ΠΑΤΡΙΔΟΣ at the beginning of the line and to read [ἐξουσί]ας at the end of the line, i.e. also. . . . δ[ημα]ρχικῆ[ς ἐξουσί]ας.

Line 2: At the beginning of this line ΤΕΙΜΗΤΗΣ and ΚΑΙ can be seen in the depth map results of the SfM. The letters Μ and Η form a ligature (MH) here.

Line 3: This line was produced as [Μ. Αὐρ.] Ἀντωνεῖνος Σεβ[αστός]. The digital

imaging results clearly shows the word Μ.ΑΥΦΗΛΙΟΣ at the beginning of the line. The line does not end with Σεβ[αστὸς]. Instead we can see ΣΕΒ • ΕΥΣΕ here. So this line can be edited as Μ. Αὐρήλιος Ἀντωνεῖνος Σεβ. Εὐσε-, where Σεβαστὸς to Σεβ. was abbreviated as Σεβ¹⁷.

Line 4: At the beginning of the fourth line, we can read ΒΗΣ of the word Εὐσεβής. Following this all the whole characters can be seen of δημαρχικῆς except for the the first letter Δ. The last letters of this line were interpreted by S. Şahin and M. Adak as the ordinal number (τὸ η´) of the tribunicia potestas of Caracalla and [ο]ἰ τῆς. Because of this misreading, S. Şahin and M. Adak dated these milestones to the years 205/206, at which time the emperor was holding his 8th *tribunicia potestas*. However, In the photogrammetry results, the title τεμητής can be clearly visible where Μ and Η are drawn together to form a ligature (MH).

Line 5: Geta's name was deleted from all inscriptions across the empire after his murder by Caracalla in February 212. The name 'Geta' on this inscription has also been removed here to make the letters illegible on this line, only last four letters ΤΑΣΟ can be seen.

Line 6: This line was reproduced as [τὰς ὁδοὺς ἀποκα]τεσκεύασαν διὰ ἐπιτρόπου. However SfM results revealed the first letters as ΔΟΥΣ. In addition, the verb was also read incorrectly. We can also clearly see ἀποκατέστησαν in the digital analysis results.

Lines 7-8: No new information could be obtained from these lines.

3- Second Milestone from the village of Zorban

This limestone column was also found at the Su Kaynağ1 site and was moved to the garden of Fethiye Museum. The surface of this milestone is also highly eroded. The inscription was carefully engraved, the size of the letters and the spacing between lines are identical.

Dimensions: H.: 110 cm; Dia.: 39 cm (top) - 41 cm (bottom). L.h.: 2.50-2.60 cm. Inv. no.: 3576

This inscription was also documented by S. Şahin and M. Adak¹⁸. They noted that the inscriptions from Zurban bear the shortened version of the inscription from Dont,

First Edition (S. Şahin – M. Adak)

τὰς ὁδοὺς [ἀπο]-
2 κατεσ]κεύασεν διὰ [ἐπιτρ]-
όπου τῶν Σεβ[αστῶν]

RTI Results

τὰς ὁδοὺς ἀ[πο]-
2 [κατέσ]τησαν δ[ιὰ ἐπι]-
[τρό]που τῶν Σεβα[στῶν]
4 [Ἐλου]ίου Μαρ[ι]ᾶ[νοῦ]
γ´

17 For this abbreviation cf. Avi-Yonah 1940, 66, 100.

18 Şahin – Adak 2007, 170, n. 363.

here being reduced to just five lines. The inscription does not mention the name of the emperor but carries the information that the road had been repaired by the *procurator* Helvius Marianus. Şahin and Adak reported that they could read -τὰς ὁδοῦς [ἀποκατεσ]κεύασεν and διὰ [επιτρ]όπου τῶν Σεβ[αστῶν]- on the milestone. We can now restore this inscription using the RTI method as follows (fig. 7):

Line 1-2: The verb was read incorrectly. The word ἀπ[ο]κατέσ]τησαν is visible.

Line 4: The name of the *procurator* can be read here.

Line 5: The distance Γ milia passuum is clearly visible.

The contexts of the inscriptions and commentary

All milestones discussed in the paper, originate from the region between Oinoanda and Balboursa in Kabalia and were erected on the road between these cities. The first milestone is from Dont. This village is located on the northern edge of the Seki Ovası in the Lycian highlands and located 8 km northeast of Oinoanda. The other two milestones are from Zurban Pınarı. This village is located a few kilometers southwest of Dont (Fig. 8).

Rome demonstrated its right to rule over the conquered region by systematically laying out new roads¹⁹. As it is understood from the Claudian Monument on the Bonda Hill and Stadiasmus Patarensis, Lycia was annexed by the Emperor Claudius as Roman province and subjected to a road system to emphasize Roman sovereignty over the region by the agency of Quintus Veranius²⁰. The Stadiasmus Patarensis tells us that Balboursa could be reached from Oinoanda by two roads, one leading through the plain (160 stadia = 20 mp = ca. 30 km) and the other through the mountains (128 stadia = 16 mp = ca. 24 km)²¹. S. Şahin and M. Adak suspected that the former road could have lead through the high plateau of the Seki Ovası and the Yarış Ovası via the village of Yayla Karaçulha to Balboursa, which lies somewhat south-east of Dirmil (Altınyayla) pass; the mountain road must have lead through the mountains via Kınık, Eldirek and İncebel Tepesi.

These roads were restored or improved from time to time by governors and *procurators* during Roman Period. The milestones from Dont and Zurban indicate that the roads between Oinoanda and Balboursa were repaired in Severan and first Tetrarchic periods. All of the milestones found to date on important public roads in Lycia originate from later centuries, with a noticeable grouping being evident around the time of Septimius Severus and the Tetrarchs²². The earliest milestones in Lycia

19 Pekáry 1968, 140-141; Schneider 1982, 28; Şahin – Adak 2007, 75, 106.

20 Şahin – Adak 2007, 74-75, 106-107; Marksteiner – Wörrle 2002, 545-564. It is a matter of debate whether the roads mentioned in the monument were actually built. For these discussions, see Onur 2016, 573-4.

21 Şahin – Adak 2007, 167-170 (Road 22 and 23).

22 For the milestones from the Severan period see, French 1988, no. 196 (IGR III 730: Turunçova); No. 846-847 (= TAM II/3 718-719: Deliktaş-Kastabara); No. 857 (= IGR III 509 = TAM II/2 655: Üzümlü); Akyurek Şahin – Şahin 2000, 475-478 (Tlos); Şahin – Adak 2007, 114 (Gagai-Korykos). For the inscriptions from the Tetrarchic period see, TAM II 257-258 (Özlen); French 1988, No. 185 (Sıcak

started with Septimius Severus²³. Our three milestone inscriptions are all from the time of Septimius Severus - Caracalla, with the milestone from Dont being reused under Diocletian - Maximian.

These inscriptions from the period of Septimius Severus - Caracalla can be translated as follows:

No. 1-A: (Dont) *Imperator Caesar Lucius Septimius Seuerus Pius Pertinax, Augustus, Parthicus, Adiabenicus, father of the fatherland, tribunicas potestas, censor, and the Emperor Caesar Marcus Aurelius Antoninus Augustus Pius, tribunicas potestas, censor, and Publius Septimius Geta Caesar, have repaired the roads with the help of the Procurator Helvius Marianus. * (miles).*

No. 2: (Zurban) *Imperator Caesar Lucius Septimius Seuerus Pius, Pertinax, Augustus, Parthicus, father of the fatherland, tribunicas potestas, censor, and the Emperor Caesar Marcus Aurelius Antoninus Augustus Pius, tribunicas potestas, censor, and Publius Septimius Geta Caesar, have repaired the roads with the help of the Procurator Helvius Marianus. (from Oinoanda) 6 (miles).*

No. 3: (Zurban) *These roads were repaired by the help of the procurator Helvius Marianus. (from Oinoanda) 3 (miles).*

All three inscriptions name the ruling emperor in the nominative and also the *procurator* Helvius Marianus. His *nomen gentile* and *cognomen* can be read quite clearly on the milestones from Zurban, while only the cognomen can be read on the milestone from Dont. The identity of this *procurator* is still largely unknown²⁴. The *procurator* named on our inscriptions had repaired this road during the reign of Septimius Severus, Caracalla and Geta. In the text of the inscription from Dont one could clearly read the the cognomen (*devictae gentis*) Parthicus of Septimius Severus, which was adopted by the emperor in AD 198. In addition, Geta is not yet called as Augustus. The date for the Geta titled as Augustus is AD 209. Therefore, the milestone was erected between 198 and 209²⁵. There is no long time difference between the two dates²⁶.

In the texts of the two inscriptions from Zurban, the mileage numbers have been

İskelesi); Akyürek Şahin – Şahin 2000, 478-480 (Tlos); Takmer 2004, 107-108 (near Limyra); Leadbetter 2003, 127-136. See also Hellenkemper – Hild 2004, 247-248; Şahin 2014, 116-120.

23 With regard to the absence of Claudian milestones see Şahin 2014, 21-22, 110, 116.

24 An inscription from Phaina in Syria on a centurion named G. Helvius Marianus. The inscription was sent to a centenary (a nave) and a cult statue (*agalma*) for the Temple in Phaina under the Commodity of Gewidme. Waddington 1870, 574, No. 2528a: ὑπὲρ σωτηρίας καὶ νείκ(ης) Αὐτοκράτ(ορος) Καίσαρος Μ. Αὐρηλ[ίου Κομμόδου] Ἀντωνεῖνου Σεβ(αστοῦ) Εὐ[σ]εβ(οῦς) Εὐτυχοῦς, Γ. Ἐλούιος Μαριανὸς [Γαλλικῆς] τὸν ναὸν καὶ τὸ ἄγαλμα ἐκ τῶν ἰδίων ἀνέθηκεν. fn. 575 no. 2536a: [C. Helvius Ma]rianus 7 leg(ionis) III Gal(licae) [sua pecun]ia fecit.

25 Kienast 1990, 156-157, 166.

26 This may lead to the idea that the centurion named on the inscription from Phaina can be identical with the procurator in our inscriptions. Accordingly, G. Helvius Marianus served as centurio in Legio III. Gallica and eventually rose to the position of primipilus, the chief of the first centuria of the first cohort. He then had the opportunity to change over to the equestrian procurator career path. Via the cursus honorum of a centurio to become procurator. See Summerly 1992, 151-152, 163-164, 183-184; Levick 2000, 16-17.

completely preserved, while the number on the milestone from Dont is illegible. The first numeral is ϸ (six) *milia Passuum* (approximately 9 km); the second is Γ (three) *milia passuum* (approximately 4.5 km). Although Zurban is mentioned as the find spot in the inventory records of the Fethiye museum, the fact that both inscriptions carry different *milia passuum* reveals the necessity of considering two possibilities regarding the original locations of these inscriptions. Because the distance ca. 9 km comes to the vicinity of Dont. As a matter of fact the other inscription found in Zurban gives the distance as 3 *milia passuum* which is approximately 4.5 km. In this case, either the aforementioned milestone was moved from Dont or the place where the stone was found recorded incorrectly. As a result, both milestones were built on the road from Oinoanda to Balboura at intervals of 4.5 km.

According to S. Şahin and M. Adak, the milestones were in all probability located at the road intersection in Zurban, where the mountain route to Balboura branched off from the main road. The notes in Schönborn's diary indicate that both roads were in use until 170 years ago²⁷. Wurster and Ganzert discovered the remains of the Roman road 2.9 km north of the village of Dont next to the modern road²⁸. An inscription that was discovered in Kemerarası about 2.5 km north of Oinoanda indicates a bridge that was completed under the rule of Claudius by his governor Eprius Marcellus²⁹. A bridge from the Ottoman period still stands close to the point where this inscription was found. S. Şahin and M. Adak suspect that this bridge was between Oinoanda and Balboura because the inscription was found to the northeast of Oinoanda³⁰.

The milestone from the period of Tetrarches in Dont can be translated as follows:

No. 1-B: *The Imperatores Caesars G. Val(erius) Diocletianus and M. Val(erius) Maximianus, the Pious Aug(usti), and Constantius and Maximianus, the distinguished Caesars, the Rulers of the World (honored).*

This milestone was first erected during the period of Severus reused under Diocletian - Maximian. The reuse of milestones in this way is increasingly documented during the third and fourth centuries³¹. The text of the inscription has the character of an honorary inscription³². The cities that paid for the erection of such honorary stones did so because they wished to show their allegiance to the ruling imperial house of the time³³. For this reason these inscriptions are of great value as a document of the mutual recognition of the rulers and for dating elements of the imperial titles and as evidence of the actual loyal relationships. In the late third and early fourth centuries, milestone inscriptions with dedication or honorary texts often mention citizens or

27 Ritter 1859, 846-848.

28 Wurster – Ganzert 1978, 304 fn. 30; French 1981, 174.

29 Milner 1998, 177-179.

30 See Şahin – Adak 2007, 170; Şahin 2014, 200-1.

31 Kolb 2004, 155.

32 The accusative also appears in the Greek inscriptions whereas the dative and genitive cases as used during the time of Caligula appear in the Latin inscriptions. See Hirschfeld 1913, 717-718, n. 3.

33 Milestones were increasingly used in the third century as mere statements of loyalty, moreover they demonstrated that the Emperor was interested in maintaining the overland roads that passed through the Empire and indicated the distance between the larger settlements. Kolb 2004, 149.

poleis as dedicators or as honored persons in the nominative case with city names in the genitive³⁴. In our text, however, neither citizens nor the poleis are mentioned as benefactors in the nominative case, the inscription also does not show any numeral indicating the number of miles travelled and does not mention the starting point. Nevertheless, here Oinoanda again must be assumed to have been the *caput viae*.

From a number of known milestones and the inscriptions discussed here, it can be inferred that roads on the Lycian peninsula were repaired on a large scale under the Severans and the Tetrarchians³⁵, as was usual in classical Asia Minor. Because all the milestones in Asia Minor were erected between the first century BC and fourth century AD³⁶. The majority of them are from the fourth century. These road construction or repair and distances on the road can be related to the great battles waged in the East by Severus³⁷ and the reorganization during the time of Diocletian-Constantine³⁸.

The revised readings discussed in the article show that the epigraphical data on severely damaged milestones can be revealed with the aid of digital imaging methods. Both RTI and Photogrammetry methods make contribution to epigraphy studies with effective and accurate rendering options in the analysis process of eroded inscriptions that are difficult to read with traditional methods.

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34 See also French 1986, 87. See TAM II 1, no. 257/8 = IGR III no. 606 (Pydnai): *Ἐανθίων | ἡ μητρόπολις*; Akyürek Şahin – Şahin 2000, 478: *ἡ Τλωέων μητρόπολις μί(λιον) α΄*; IGR III nr. 691 (Aperlai): *Ἀπερλειτῶν ἡ πόλις*; Takmer 2004, 107 no. 1a: *Λιμυρέων ἡ λαμπροτάτη μητρόπολις τοῦ Λυκίων ἔθνους*; no. 2a/b: *Μυρέων ἡ μητρόπολις*.

35 For road repairs in the Domitian’s period and new milestones around Sidyma see Avcu – Uzunoğlu 2019, 325-7.

36 Kolb 2004, 139: “*In detail, these are 12 stones from the republic, 86 from the 1st century, 88 from the 2nd century, 306 from the 3rd century and 411 from the 4th.*”

37 Septimius Severus had used the routes through Anatolia for his expeditions into the East. This explains the road construction and repair activities carried out throughout all Anatolia under his rule. See also Magie 1950, 676-679, 1545-1546.

38 For the reorganisation of the provinces see Anderson 1932, 24-32; RE VII A 2, 1948, s. v. Diocletian, 2419-2495; Kuhoff 2001, 335-336.

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Fig. 1 The conservation status of the milestones.

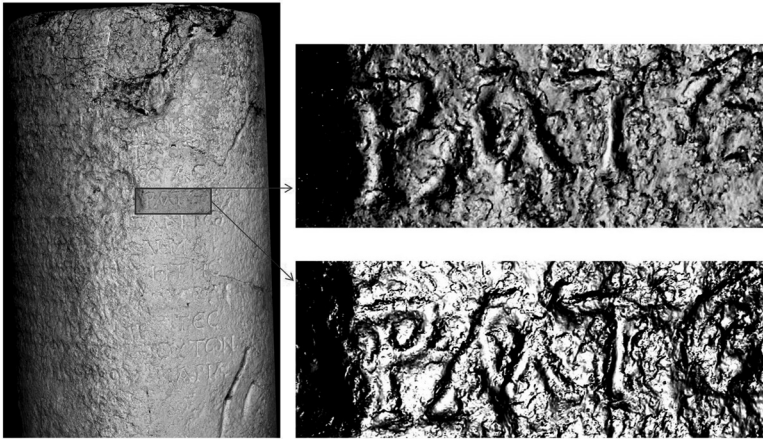


Fig. 2 RTI analysis detail of the milestone no. 1 (A).

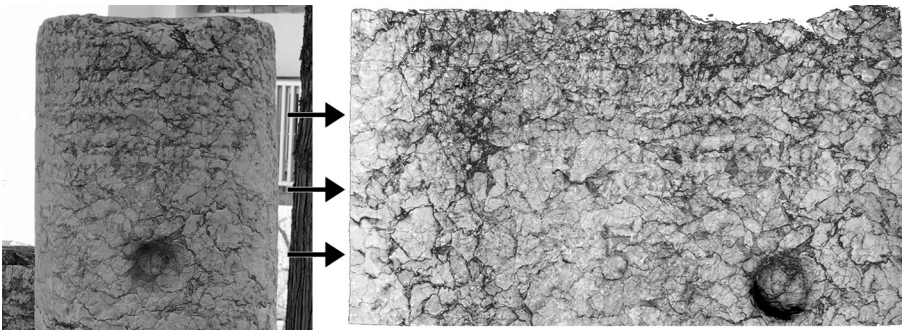


Fig. 3 Photogrammetric model of the milestone no. 2. The rounded milestone is digitally converted into a flattened model for detailed epigraphical analysis.

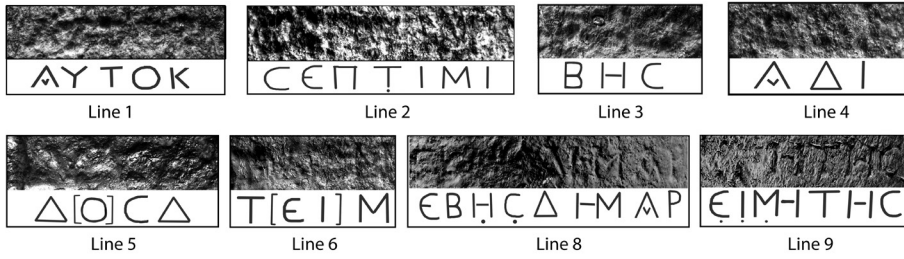


Fig. 4 RTI results of the inscription on milestone no. 1 (A). Still images from the RTI viewer as analyzing the inscription under the interactive virtual illumination.

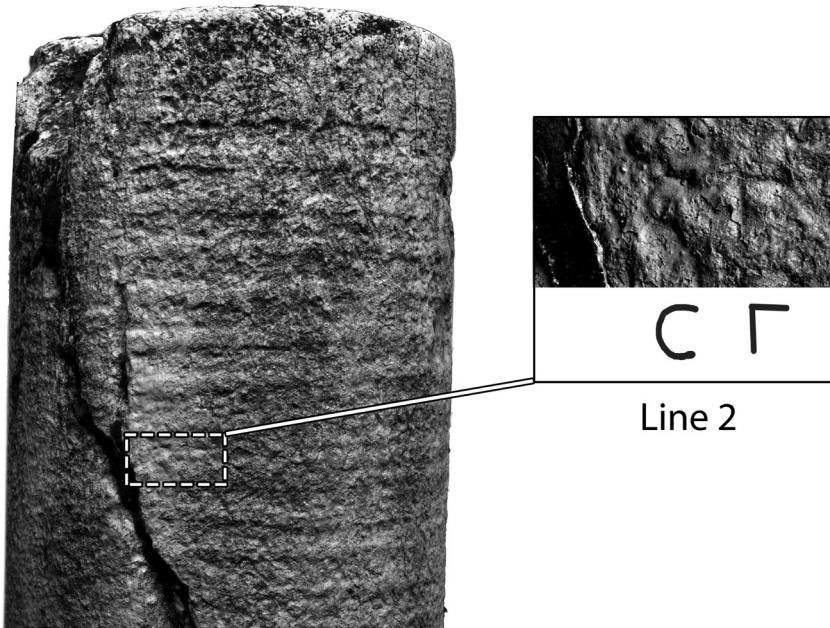


Fig. 5 RTI results of the inscription on milestone no. 1 (B).

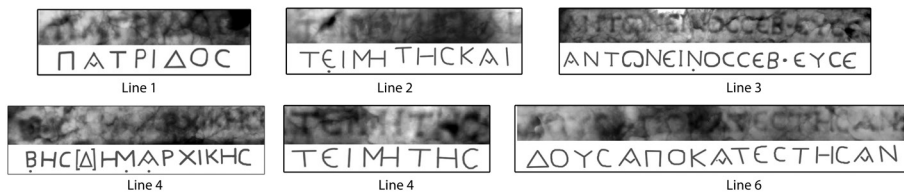


Fig. 6 Photogrammetric depth map results of the milestone no. 2.

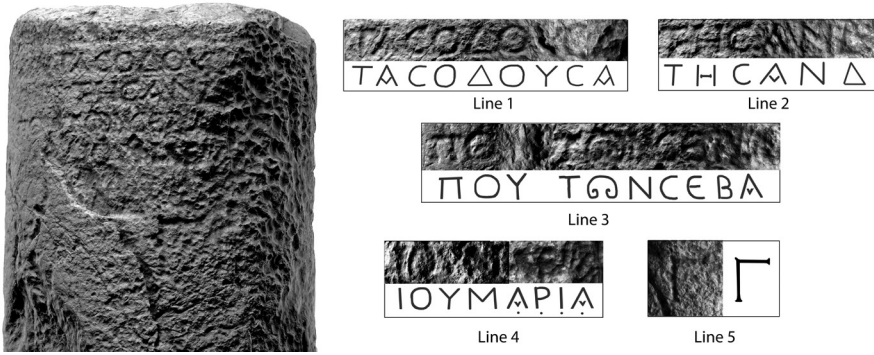


Fig. 7 RTI results of the inscription on milestone no. 3.

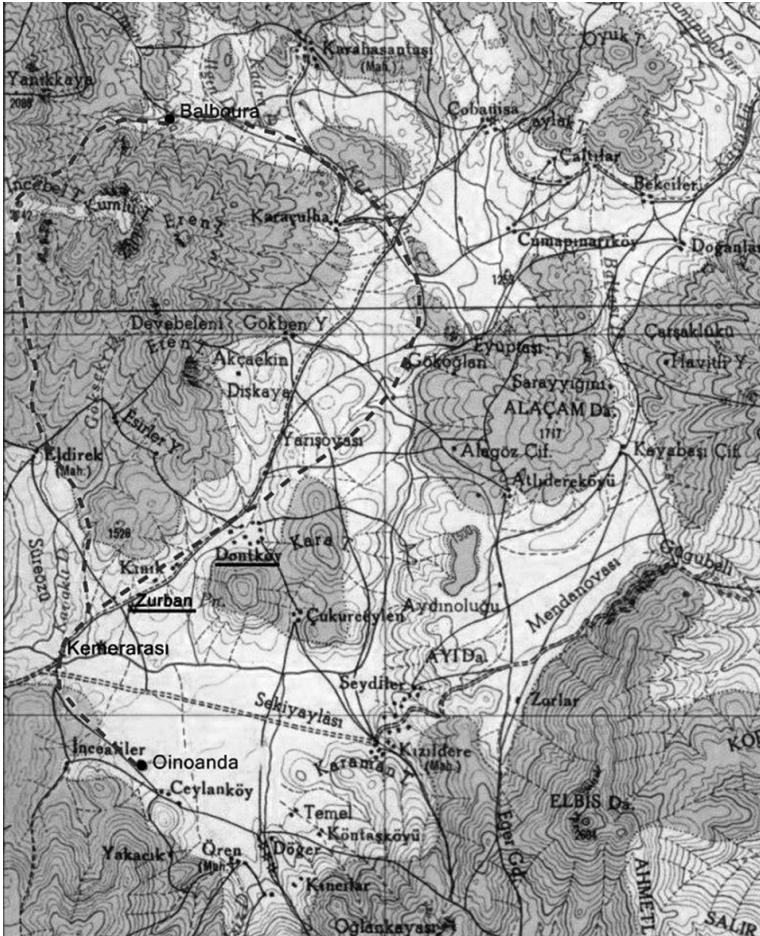


Fig. 8 The map of Seki Ovası, highlands of Lycia.