

Publikationen des Deutschen Archäologischen Instituts

Ine Jacobs, Marc Waelkens

Five Centuries of Glory: The North-South Colonnaded Street of Sagalassos in the First and the Sixth Century A.D.

Istanbuler Mitteilungen 63, 2013, 219-266 (Sonderdruck)

https://doi.org/10.34780/k4acmk57

Herausgebende Institution / Publisher:

Deutsches Archäologisches Institut

Copyright (Digital Edition) © 2024 Deutsches Archäologisches Institut

Deutsches Archäologisches Institut, Zentrale, Podbielskiallee 69–71, 14195 Berlin, Tel: +49 30 187711-0 Email: info@dainst.de | Web: https://www.dainst.org

Nutzungsbedingungen:

Mit dem Herunterladen erkennen Sie die Nutzungsbedingungen von iDAI.publications an. Sofern in dem Dokument nichts anderes ausdrücklich vermerkt ist, gelten folgende Nutzungsbedingungen: Die Nutzung der Inhalte ist ausschließlich privaten Nutzerinnen / Nutzern für den eigenen wissenschaftlichen und sonstigen privaten Gebrauch gestattet. Sämtliche Texte, Bilder und sonstige Inhalte in diesem Dokument unterliegen dem Schutz des Urheberrechts gemäß dem Urheberrechtsgesetz der Bundesrepublik Deutschland. Die Inhalte können von Ihnen nur dann genutzt und vervielfältigt werden, wenn Ihnen dies im Einzelfall durch den Rechteinhaber oder die Schrankenregelungen des Urheberrechts gestattet ist. Jede Art der Nutzung zu gewerblichen Zwecken ist untersagt. Zu den Möglichkeiten einer Lizensierung von Nutzungsrechten wenden Sie sich bitte direkt an die verantwortlichen Herausgeber*innen der jeweiligen Publikationsorgane oder an die Online-Redaktion des Deutschen Archäologischen Instituts (info@dainst.de). Etwaige davon abweichende Lizenzbedingungen sind im Abbildungsnachweis vermerkt.

Terms of use:

By downloading you accept the terms of use of iDAI.publications. Unless otherwise stated in the document, the following terms of use are applicable: All materials including texts, articles, images and other content contained in this document are subject to the German copyright. The contents are for personal use only and may only be reproduced or made accessible to third parties if you have gained permission from the copyright owner. Any form of commercial use is expressly prohibited. When seeking the granting of licenses of use or permission to reproduce any kind of material please contact the responsible editors of the publications or contact the Deutsches Archäologisches Institut (info@dainst.de). Any deviating terms of use are indicated in the credits.

DEUTSCHES ARCHÄOLOGISCHES INSTITUT ABTEILUNG ISTANBUL

ISTANBULER MITTEILUNGEN

BAND 63, 2013

PDF Dokument des gedruckten Beitrags PDF document of the printed version of

INE JACOBS – MARC WAELKENS

Five Centuries of Glory. The North-South Colonnaded Street of Sagalassos in the First and the Sixth Century A. D.

© 2013 Deutsches Archäologisches Institut / Ernst Wasmuth Verlag

Sigel der Istanbuler Mitteilungen IstMitt

HERAUSGEBER

Prof. Dr. Felix Pirson, Dr.-Ing. Martin Bachmann

Wissenschaftlicher Beirat

Prof. Dr. Halûk Abbasoğlu (Istanbul), Prof. Dr. Franz Alto Bauer (München), Prof. Dr. Albrecht Berger (München), Prof. Dr. François Bertemes (Halle), Doç. Dr. Yaşar Ersoy (Çorum), Prof. Dr. Ralf von den Hoff (Freiburg), Prof. Dr.-Ing. Adolf Hoffmann (Berlin), Prof. Dr. Klaus Kreiser (Bamberg), Prof. Dr. Mehmet Özdoğan (Istanbul), Prof. Dr. Peter Pfälzner (Tübingen), Prof. Dr. Christopher Ratté (Ann Arbor), Prof. Dr.-Ing. Klaus Rheidt (Cottbus), Prof. Dr.-Ing. Dorothée Sack (Berlin), Prof. Dr. Martin Zimmermann (München)

Herausgeber und Redaktion: Deutsches Archäologisches Institut, Abteilung Istanbul İnönü Cad. 10, TR – 34437 İSTANBUL – Gümüşsuyu

© 2013 by Verlag Ernst Wasmuth Tübingen

Alle Rechte vom Deutschen Archäologischen Institut, Abteilung Istanbul, vorbehalten. Wiedergaben, auch von Teilen des Inhalts, nur mit dessen ausdrücklicher Genehmigung. Satz, Gestaltung u. Reprographie: Linden Soft Verlag e.K., Aichwald. Druck und Einband: AZ Druck und Datentechnik GmbH, Kempten.

Printed in Germany

ISBN 978-3-8030-1654-6 ISSN 0341-9142

ISTMITT 63, 2013 219

INE JACOBS - MARC WAELKENS

Five Centuries of Glory. The North-South Colonnaded Street of Sagalassos in the First and the Sixth Century A.D.

Schlüsselbegriffe: Frühbyzantinisch, Straßen, Kolonnaden, Kleinasien, Architektur Keywords: Early Byzantine, Streets, Colonnades, Asia Minor, Architecture Anahtar sözcükler: Erken Bizans dönemi, Yollar, Sütunlu caddeler, Küçük Asya, Mimari

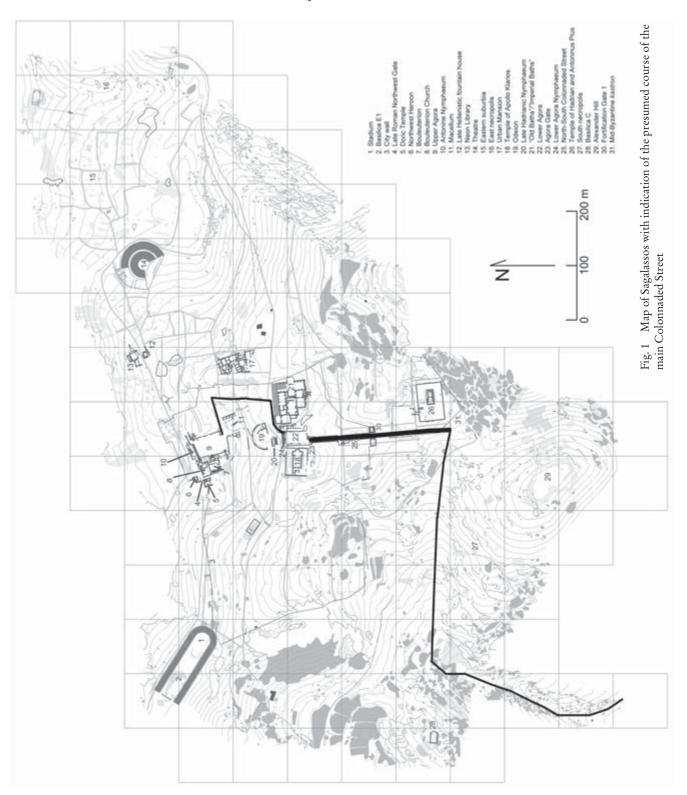
Introduction

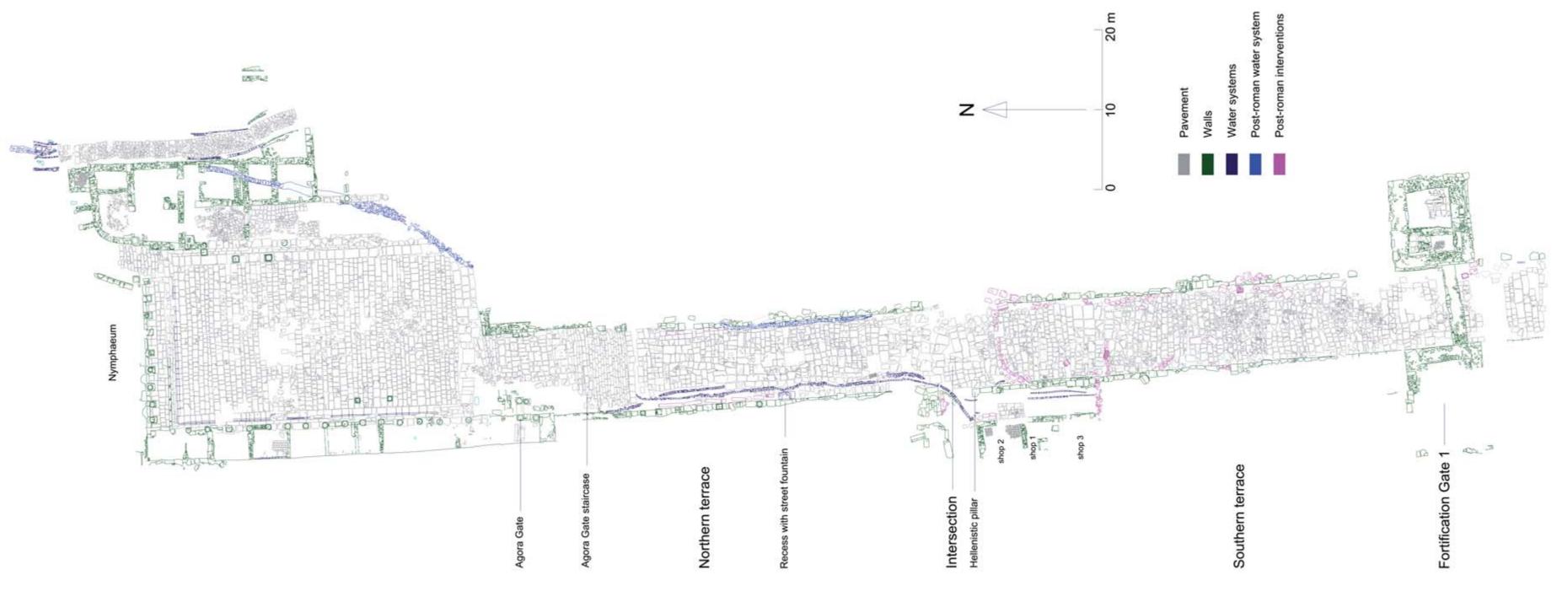
The most important artery of Sagalassos (southwest Turkey) was a large north-south axis that connected the Upper and Lower Agora of the town and that functioned as a major access route to the town centre (fig. 1). Excavations have uncovered a 90-m-long stretch of this street between the Lower Agora to the north and the site known as Fortification Gate 1 to the south, where a Byzantine barrier wall blocked the street completely (fig. 2). This street section experienced at least two major building phases, of which the first was very early, attributable to the second quarter of the first century A. D. and most likely to the second half of the reign of Tiberius (A. D. 14–37), and the second was surprisingly late, datable to the second quarter of the sixth century A. D. This article will focus on the first and last decades of the street's existence, with both periods reflecting the vicissitudes of the town as a whole very well. The results of the excavations will be discussed in full in volume 8 of the Sagalassos Series.

The Pisidian town of Sagalassos was built on the south-facing slope of a mountain crest in the western Taurus. Since 1990, a multi-disciplinary research team directed by Marc Waelkens (KU Leuven) has aimed to reconstruct all aspects of the development of the town and its territory in

Ine Jacobs is Chancellor's Fellow in Classics at the University of Edinburgh. She wrote this article when she was still working as a postdoctoral researcher of the Research Foundation-Flanders (FWO). Marc Waelkens is the director of the Sagalassos Archaeological Research Project. The field research at Sagalassos was made possible by permission and under the supervision of the General Directorate for Cultural Heritage and Museums of Turkey (Turkish Ministry of Culture and Tourism). It was supported financially by the Belgian Programme on Interuniversity Poles of Attraction (IAP 6/22), the Research Fund of KU Leuven (BOF-GOA 07/02), project G.0421.06 of the Research Foundation-Flanders and a Methusalem Grant from the Flemish Ministry for Science Policy granted to Marc Waelkens. Preliminary dating of the ceramics was done by Jeroen Poblome and Philip Bes.

Sources of illustrations: fig. 1 = Joeri Theelen and the Sagalassos Archaeological Research Project. – fig. 2 = Ine Jacobs, Joeri Theelen and the Sagalassos Archaeological Research Project. – fig. 3. 5. 11. 12 = the Sagalassos Archaeological Research Project. – fig. 4. 6. 7. 9. 10. 13–17 = Ine Jacobs. – fig. 8 = the Sagalassos Archaeological Research Project, drawn by Özge Başağaç.





iig. 2 Plan of the Lower Agora and the excavated section of the Colonnaded Street

relation to the natural environment¹. Archaeological research has exposed the town centre and has permitted the reconstruction of the general process of urbanisation from Early Hellenistic to Mid-Byzantine times. After a devastating earthquake in the early seventh century², the town centre shifted towards a new *kastron* located on a promontory to the south of the old centre, with additional small-scale communities – hamlets – probably located in the central and southern parts of the old town³. Because large areas of Sagalassos were no longer intensively occupied after the sixth century, the final phase of large-scale occupation at the site is particularly well preserved⁴.

After initial topographical surveys⁵, a systematic investigation of the street network and related water infrastructure was initiated in 1998⁶. Between 1998 and 2005, information on the character and chronology of the layout of the urban infrastructure was gathered from 11 small-scale trenches excavated throughout the urban area. One of them was situated on the former western flank of the southern section of the Colonnaded Street, two others examined the street pavement and the portico⁷. Between 2006 and 2009, large-scale excavations were carried out⁸. Whereas the programme of test soundings at Sagalassos was initially set up to locate streets and study the urban development, the large-scale excavations aimed at investigating the technology of ancient road-building over the centuries, and especially at documenting the later occupation phases of this major north-south street. They entailed both the clearing of the pavement and further soundings below the street surface in the area of an intersection as well as near the Byzantine Fortification Gate 1. Two shops to the west of the street were uncovered, as was the walkway in front of them. In addition, test soundings executed in 2007 underneath the pavement of the Lower Agora and the staircase connecting the street with this town square further clarified the development of the lower city in general and that of the street in particular.

¹ Waelkens 2001; 2006; 2011a.

A terminus ante quem for this major event has been established by radiocarbon dates obtained from pellets of an eagle owl (Bubo bubo) found on the floor of the large eastern frigidarium of the Imperial Baths. The animal must have been able to establish its habitat in the bath complex after parts of its vaults came crashing down in the earthquake (De Cupere et al. 2009). The animal bones in the pellets have been dated between cal A. D. 560 and 605 with 68.2 % probability (one σ), and between cal A. D. 540 and 620 with 95 % probability (two σ) (De Cupere et al. 2009, 4). A reevaluation of the coins found underneath the destruction layers, however, revealed that the last coins were invariably datable to the reign of Phocas (A. D. 602–610), which suggests that the earthquake took place in or shortly after the early seventh century (Jacobs – Waelkens forthcoming a).

Vionis et al. 2010 for the Middle to Late Byzantine occupation of the site.

⁴ This is also clearly reflected in the surface record, see Martens 2005, 248 fig. 11.

The first mapping of the main streets was already done by K. Lanckoroński in the late 19th century (Lanckoroński 1893). The visible remains of the southern part of the main colonnaded street were mapped on a scale of 1:200 as part of the topographical survey of the Pisidia Project (Waelkens *et al.* 1990, 193 fig. 6).

⁶ As part of the doctoral research of F. Martens (2004). This dissertation will be published as volume 9 in the series Studies in Eastern Mediterranean Archaeology.

⁷ Martens 2007, 325.

Under the supervision of Ine Jacobs. Preliminary publications have appeared in Waelkens 2009, 429–431; Waelkens et al. 2011, 265–267.



Fig. 3 Aerial view of the Colonnaded Street from the Lower Agora staircase in southern direction

A TIBERIAN COLONNADED STREET

The first colonnaded street to the south of the Lower Agora was laid out at some point between A.D. 25 and 50, in all likelihood already during the second half of the reign of Tiberius. This thoroughfare was 280 m long and 9.60 (south) to 10 m (north) wide; it connected the road coming up from the valley and passing through the south necropolis on the slopes of Alexander Hill with the Lower Agora⁹. In order to overcome the height difference between its southern and northern end, staircases divided the street pavement into three 90 to 100 m long separate

This makes it much wider than the other streets of the city, which ranged between 5 m and 6.70 m in width (Martens 2007, 338–339).

Fig. 4 Pedestal bases and a Hellenistic frieze block with greaves incorporated into post-Roman walls on top of the street pavement



sections¹⁰, which individually only possessed a gradient of some 3.5 %. The surface of the street consisted of white limestone slabs. This sloping street pavement was eventually flanked on both sides by colonnades located on top of horizontal terraces, two of which have been excavated in between the Lower Agora and Fortification Gate 1. The northern terrace was ca. 40 m in length in between the staircase leading up to the Lower Agora and the intersection (fig. 2.3). The length of the southern terrace could only be estimated, as its southern end remains hidden underneath the post-Roman structures. Judging by the modern slope of the terrain, this second terrace was somewhat longer. Because the road slopes down and the walkways do not, in the south the terraces were located some two meters above the street pavement. The columns of the street colonnade were positioned on top of high walls bordering the street pavement here (hereafter indicated as the bordering walls of the street), whereas real stylobates were only present at the northern ends of the terraces.

Preparing for Street Construction

The street was not the first large construction operation that took place in this lower part of the town. The presence of significant Late Hellenistic occupation was indicated by contemporaneous sherds found in soundings inside the later street shops, as well as by the discovery of two blocks of a Late Hellenistic weaponry frieze in the immediate surroundings (fig. 4)¹¹. Most importantly, at the northern end of the south terrace to the west of the street, a Late Hellenistic

¹⁰ Waelkens et al. 1990, 193.

Find numbers of the Hellenistic sherds: SA-2005-SS1-167, SA-2005-SS1-180, SA-2005-SS1-171, SA-2006-SS1-160-227 and SA-2006-SS1-151-207. The Hellenistic weaponry reliefs – one carrying a shield with a Medusa head and two greaves, and another with two greaves – had been reused more than once and eventually ended up in post-Roman walls on the street pavement. Nevertheless, it is probable that they originated in a building nearby, presumably one located just to the north of the Late-Hellenistic stoa or square, where remnants of (undated) ashlar walls are still





Fig. 5 The heart-shaped Hellenistic pillar, partially reconstructed, seen from the south

Fig. 6 The first-century water channel provisioning the southern city quarters

heart-shaped Corinthian corner pillar was discovered, stylistically dated by Marc Waelkens to the third quarter of the first century B. C. (fig. 2. 5)¹². As the engaged columns were turned away from the later street, facing south and west, this was likely a remnant of an L-shaped stoa or peristyle courtyard that once occupied the area to the south of the hill that would come to house the Augustan Apollo Klarios shrine. Geophysical research carried out during the 2012 campaign confirmed its presence. Although an exact identification eludes us, as this building was already adorned with columns in the Corinthian order, it must have been prestigious in nature. And yet the older stoa or peristyle was erased by the layout of the north-south street barely one or two generations after its completion¹³. Only the northeastern corner pillar was integrated into the street colonnades. There must have been a specific reason that this one pillar was safeguarded. Perhaps its survival is related to the marble or bronze plaque, maybe carrying a religious mean-

visible under later phases. In general, the area around the Upper Agora is better known for the Hellenistic phases of Sagalassos (Waelkens 2002a, 332–333; 2004, 454–455. 464–465; Waelkens et al. 2000, 297–298).

Waelkens 2008, 160; Waelkens *et al.* 2011, 266. The two lower drums of the pier were still *in situ*, four more were found where they had collapsed and one additional drum had been incorporated in one of the walls of the excavated eastern Byzantine tower of Fortification Gate 1 55 m to the south. The combined height of the drums found on the street was 3.20 m.

It is not uncommon that older buildings had to make way when colonnaded streets were planned. See Tabaczek 2002, 240–241 for more examples.

ing, that had once been inserted into its upper east face. Its existence is today indicated only by a shallow rectangular depression with gable extending over the top two drums of the pier and the holes of the four metal clamps by means of which the plaque was held in place.

The street itself was constructed in several subsequent stages. Even the preparation of the area must have been a substantial undertaking. The new thoroughfare was laid out in a valley in between two hills: the hill with the Augustan temple dedicated to Apollo Klarios to the west and the hill with the city's bath building to the east¹⁴. Generally speaking, the terrain sloped down from north to south and from west to east. In order to achieve a suitable plane for the new thoroughfare, its western border was cut into the bedrock, whereas the eastern border probably needed artificial fills. These particular topographical circumstances also explain why the street had to be positioned exactly in this location, despite the presence of an older Hellenistic building. Furthermore, soundings and corings underneath the ancient road and colonnade pavements have suggested that just to the south of the excavated intersection, a small east-west oriented crevice was filled in¹⁵. Indeed, core drillings at this location only reached natural clays of the ophiolithic mélange at depths of 1.8 m in the middle and 3.2 m at the eastern edge of the street. Conversely, archaeological soundings underneath the pavement in the area of Fortification Gate 1 clarified that artificial fills above these clays were restricted to a thickness of ca. 0.30 m here.

That the laying of the street was part of a much greater plan is also suggested by the fact that a generous water supply for the lower quarters of the town was ensured from the start¹⁶. More or less in the middle of the northern terrace, a channel coming from the west – probably along the southern slope of the Apollo Klarios Hill – was cut into the bedrock underneath the wall bordering the west side of the street (*fig. 6*). The channel was between 0.28 m (bottom) and 0.42 m (top) wide and at least 0.33 m high, indicating that the water flow was substantial. It is likely that this was a continuation or side-channel of one of the three western aqueducts of the city¹⁷. Its presence suggests that the lower part of the city was planned or even in full development in the second quarter of the first century A. D. When it reached the street, the water ran down a channel cut into a limestone ashlar of which the walls were raised with mortared rubble walls. It then continued underneath the street pavement in an east-southeasterly direction. It is not clear whether or not it was originally possible to draw water from a fountain alongside the street itself. The location where the channel crossed the bordering wall was in any case marked by a recess 0.89 m deep and 0.99 m wide from the very beginning (*fig. 7*).

The first bath building of the city or »Old Baths« was constructed before A.D. 10–30 (Waelkens et al. 2011, 268; 2012a, 241). A century later it was incorporated in a much larger complex, the »Imperial Baths«. For a summary on the latter, see Waelkens 2002a, 350; 2005a, 385.

¹⁵ Waelkens 2008, 163; 2009, 429.

It was fairly common to lay out the main lines of the water-supply network with the street system (Hodge 1992, 340; Crouch 1993, 187; Jansen 2000, 109).

Due to the topography in this area, a function as storm drain is not very likely. On the water systems of Sagalassos, see Owens 1995; Martens 2001; 2006; 2008; Martens et al. forthcoming. From the Early Imperial period onwards, Sagalassos was progressively equipped with at least five aqueducts. In the past it was assumed that they were built for the three monumental fountains and the grand Imperial Baths. However, as mentioned above, a bath building that is 100 years older has recently come to light. In addition, it now seems that the earliest fountain on the Lower Agora also predates the early second century A.D. (Jacobs – Waelkens forthcoming a). Finally, in 2008 Femke Martens also excavated a first-century A.D. water supply in the eastern suburbia, which very likely represents a branch of one of the eastern aqueducts (Waelkens 2008, 151–157).



Fig. 7 The western border of the Colonnaded Street

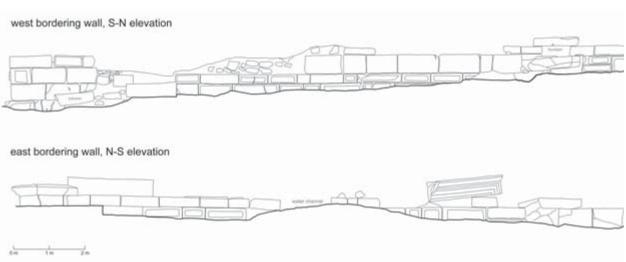
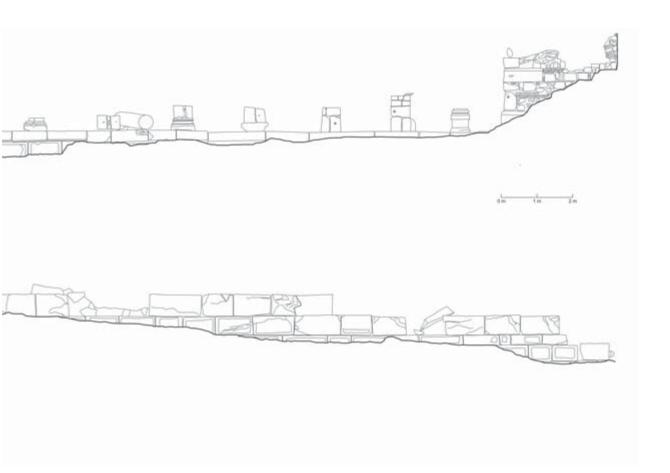


Fig. 8 Elevation of the west and east bordering walls of the northern terraces

After the installation of this water supply, the bordering walls and the terraces along the street were finished (fig. 8a-b). In the west, the remaining space between the bedrock and these ashlar walls was supplemented with a fill consisting of sharp medium-sized rubble blocks, bonded with white mortar. In the east, due to the topographical circumstances sketched above, it was unlikely that there were solid terraces rising above the street. It is more feasible that the walkway was laid out on top of a cryptoportico, but since the structures to the east of the street are very badly preserved, this could not be ascertained.

At the northern end of the terraces, where they were located at the same height as the street pavement, the ashlars of the stylobates were very worn. Indeed, a disadvantage of the present configuration was that pedestrians could access the walkways along the street at only two locations: at their northern extremity and, in addition, at their southern end, where staircases bridged the height difference between the walkways and the street (*fig. 9*)¹⁸. Finally, more or less in the middle of the southern street section, the western bordering wall featured another rectangular recess 0.9 m wide and 0.88 m deep, the same dimensions as those of the above-mentioned recess located ca. 56 m further north. The eastern bordering wall possessed a single recess measuring 2.69 m by 0.93 m¹⁹. The function of these two more southern recesses remains unclear. The western one is too small to have accommodated staircases leading up to the colonnades and neither shows signs of water supplies, benches or any other features. Possibly they were intended for a long since disappeared statuary display.

¹⁹ They did not exactly face each other. The eastern recess was located ca. 2.10 m further to the north.



The southern end of the west wall of the highest terrace survived to a height of 1.80 m, that of the east wall to a height of 1.41 m.



Fig. 9 The southern end of the most northern terrace

In a subsequent stage, the actual street pavement was laid out. For this purpose, the undulating terrain was levelled with an artificial, compact fill. On top of this fill, a second, very shallow and very loose layer supported the street slabs and enabled the creation of a horizontal street surface. The slabs were of variable size, ranging from 0.25 m by 0.40 m to 0.80 m by 1.50 m. They were laid in orderly east-west rows, perpendicular to the traffic flow. As is clearly visible on the plan (fig. 2), some of the slabs are in perfect condition even today, while others have badly deteriorated. This is probably related to the use of batches of stone of different quality rather than to chronological differences²⁰.

Even though it seems to have been the main access route into the town centre, the Colonnaded Street below the Lower Agora was probably never used by wheeled traffic. Not only did it incorporate staircases – one of which would be replaced by the Byzantine barrier wall in the seventh century –, there were also no traces of wheel ruts on the street pavement²¹. This means that the monumental street could only be used by pedestrians and pack animals.

The street surface was bordered by walkways and rows of shops. Only part of the 3.5 m wide western walkway has been explored by means of soundings²². Excavation of the lowest terracing

²⁰ Pers. comm. Patrick Degryse and Luke Lavan.

Overall, no continuous wheel ruts have been discovered in the pavements at Sagalassos so far. Although topographical factors obviously hindered wheeled traffic, it seems highly unlikely that the entire city was off-limits for carts. For a wider discussion, see Martens 2007, 340–341.

Only the colonnade and shops alongside the lower terrace to the west of the street were researched because the continuation of the west portico to the north was covered by several meters of rubble and soil that came down from the Apollo Klarios Hill, and because the entire eastern portico is very badly preserved, presumably due to its

Fig. 10 The interior of Shop 2 with two superposed floor levels and an underground storage



fills underneath the walkway in any case clarified that a ceramic water supply was also planned and executed in the early stages of the project²³. However, there was no further information to enable a reconstruction of the floor of the walkway, or to determine with absolute certainty the appearance of the colonnades in this first phase. Seven Corinthian capitals discovered in the rubble along the northern terrace apparently all belonged to the Hadrianic period (A. D. 117–138) and must represent a later phase of repair or refurbishment²⁴. The building elements of the more

dismantling when the *kastron* to the south of the old city centre was constructed. In addition, the excavations of the barrier wall of this *kastron* also uncovered some remains of (work)shops behind the eastern colonnade.

The pipe possessed a very straight N-S oriented course. It was composed of segments with a length of 0.54 m and a diameter between 0.13 m and 0.14 m. It had openings for cleaning at more or less regular intervals in its upper surface, which were cut after firing the clay. They were covered with brick fragments.

SA-2009-SS1-13-101, SA-2009-SS1-91-229-3, SA-2009-SS1-115-265-3, SA-2009-SS1-117-291-4, SA-2009-SS1-174-304-1, SA-2009-SS1-174-304-3, SA-2009-SS1-184-328-11. A detailed study of the architectural decoration found along the colonnaded street will appear in the Sagalassos Series.

southern colonnades were virtually all removed in Byzantine times. Only a few fragments of the egg-and-dart of an *echinus*, which according to Marc Waelkens belong to Early Imperial Ionic capitals, were recovered. In all probability they represent the only remnants of the earliest colonnade, into which the Late-Hellenistic heart-shaped pillar was integrated²⁵.

Like the walkways, the shops too were rebuilt several times throughout their existence, but soundings in the interior did uncover 1.10 m high mortared rubble foundation walls that date back to the original construction phase. The shops were some 4.75 m wide. Their exact depth remains unknown, but exceeded 3.20 m. As was the case for the walkway and the street, several superimposed foundation fills supported the shop floors. In shop 1, there were no longer any traces of a floor; inside shop 2, a thin layer of mortar was all that remained of the earliest floor level (fig. 10, upper right corner).

Side Streets

The main north-south Colonnaded Street was crossed by minor side streets, presumably at regular intervals²⁶. One side street, running west, was located above the northern stretch of the Hellenistic L-shaped stoa or peristyle courtyard mentioned above. As can be seen in *fig.* 2, the northern wall of the row of shops to the west of the Colonnaded Street was constructed in the extension of the north face of the preserved heart-shaped pillar. The passage in between this pillar and the higher terrace to the north was 4.3 m wide²⁷.

The existence of a side street on the west side of the main thoroughfare suggested a corresponding street running east. Indeed, there was a ca. 4 m gap present in the bordering wall to this side of the Colonnaded Street as well. In addition, although the area was badly disturbed by post-Roman activities, the pavement here seemingly extended beyond the main street itself. Assuming that the lower city of Sagalassos was created according to a regular city plan, another crossroad could have been present near the location of the later Byzantine barrier wall. Although its existence could not be verified at the surface, a geophysical survey of the area did confirm its presence, as well as that of another north-south street to the west of the Colonnaded Street, running parallel to it²⁸.

Street Articulation

At the top of a staircase which must once have connected the Colonnaded Street to the Lower Agora of the town but which was dismantled in the sixth century A.D.²⁹, a very elegant Corinthian gateway was constructed (*fig. 11*). The gateway consisted of two podia with simple upper and lower mouldings, set on both sides of the staircase. Each podium originally bore three

²⁵ Alternatively, it is possible that not only this pillar but also some of the Corinthian columns of the older Hellenistic stoa or peristyle were reused on top of the Early Imperial stylobates (Waelkens 2008, 163–164).

For street planning at Sagalassos, see Martens 2007, 328–330.

At the western border of the excavation, the street was only 3.33 m wide, but it seems that its northern bordering wall in this section underwent several later alterations.

Geophysical research at Sagalassos has been carried out since 2002 by a team from Ljubljana University (Slovenia) supervised by B. Mušič.

²⁹ Cf. infra.

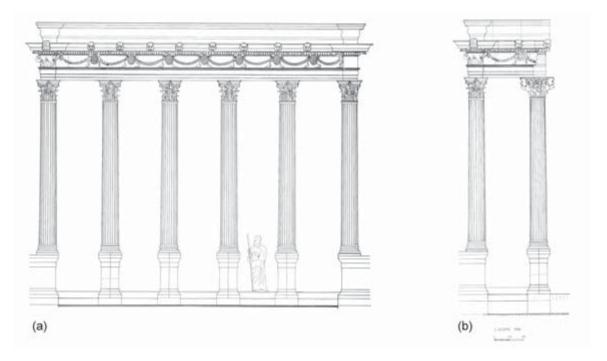


Fig. 11 Original Tiberian gate and sixth-century monument at the top of the Agora Gate staircase

Corinthian columns that supported an elaborately decorated entablature with an architrave and a frieze composed of fruit garlands dangling from theatre masks and furnished with animal protomes at either end. The entablature of the side wings was carried across the street by four Corinthian columns connecting the northern end of the side wings. These columns stood on hexagonal pedestals with the same height as that of the lateral podia. Above the cornice a hollowed out S-shaped profile functioned as a kind of attica originally supporting statuary. Based on a careful study of its architectural decoration – especially on the garlands on the frieze blocks that strongly resemble those of the Portico of Tiberius at Aphrodisias – this highly decorative gate has been assigned to the Tiberian period³⁰.

In addition, the southern end of the street section near Alexander Hill, where the street turned sharply to the west to descend into the valley, was articulated with the purely aesthetic South Gate which has not yet been excavated but could also be dated to Tiberian times based on the architectural decoration visible at the surface³¹.

For a complete argumentation, see Vandeput 1997, 58–63; Waelkens *et al.* 1997, 208–212; 2000, 362–367; Waelkens 2002a, 341; 2002b, 72–73. The study of the building elements of the gate has shown that the two podia and the lateral wings of the original monument at a certain moment in time were shortened from three to two columns. The great care with which the entire monument was reconstructed points to the Early or probably the Middle Imperial period date for this intervention.

³¹ Vandeput 1997, 62 note 114; Waelkens 2008, 158–159.

A Tiberian Colonnaded Street

Although several distinct fill layers could be recognised in all soundings underneath the street pavement, both in the area of the intersection and near the Byzantine Fortification Gate 1, all ceramics belonged to the second quarter of the first century A.D.³². This date was further corroborated by the ceramics found in the terracing fills underneath the west colonnade just south of the intersection, which could be assigned to phase 1 of the local ceramic production (ca. 25 B.C. – A.D. 50), and by those within the fills underneath the oldest floor inside shop 2, also belonging to phase 1 of the Sagalassos Red Slip Ware production and most likely to the Tiberian-Claudian period (A.D. 17–54)³³. Furthermore, as said above, the few small fragments of Ionic capitals found south of the intersection probably indicate the presence of an Early Imperial colonnaded section. Finally, a more precise construction date for the thoroughfare in Tiberian times (A.D. 14–37) is indicated by the presence of the two Tiberian gateways at the street's northern and southern end³⁴. As such gates were invariably built after the street which they decorated had taken form, it seems safe to conclude that a wide street was created very early on, complete with (partially) colonnaded walkways on top of terraces, shops at the back and with monumental, purely aesthetic gates at its ends.

Establishing how much of the street was provided with columns already in the Tiberian period remains very difficult, since on the whole very few datable architectural elements have been preserved, and most of these seem to have been introduced to the street only during later phases of refurbishment and renovation. The Corinthian capitals found along the section in between the Agora Gate staircase and the intersection were much later in date and in all likelihood represent a Hadrianic phase of refurbishment. Although it is possible that the street was completely colonnaded from the very beginning, column sets probably popped up more gradually, section by section, with those near the Tiberian gates and those in front of major public monuments receiving priority³⁵. Nevertheless, considering the relatively modest length of the Colonnaded Street, it is unlikely that the completion of the project took longer than a few decades. Consequently, the

Most datable material came from a very deep sounding, executed by Femke Martens in 2005, which reached a depth of ca. 1.75 m below the top surface of the pavement. Core drillings confirmed that ca. 0.15 m below the level where the excavations were halted, the soil no longer contained archaeological finds. In this sounding, at ca. 0.30 m below the paved surface inside the second layer underneath the pavement, a Late Hellenistic to Early Imperial coin was found (SA-2005-SS1-105). Ceramics from an additional sounding in 2007 were assigned to the same period (SA-2007-FG1-147-397).

³³ Find numbers for fills in the portico area: SA05-SS1-163, SA05-SS1-157, SA-2006-SS1-131-166, SA-2006-SSA-128-151, SA-2006-SS1-126-147, SA-2006-SS1-124-149 and SA-2006-SS1-122-162, SA-2006-SSA-118-145, SA-2006-SS1-112-137. Fills underneath the floor of shop 2: SA-2007-SS1-64-188, SA-2007-SS1-62-183, SA-2007-SS1-60-174 and one corresponding fill level underneath shop 1: SA-2006-SS1-149-203.

³⁴ At Perge, the creation of the colonnaded street, the construction of the Northern Nymphaeum and the conversion of the Hellenistic Gate into a more open gate filled with statuary are also considered to represent a single large-scale building programme (Heinzelmann 2003, 204).

Tabaczek 2002, 183–186 for a stepwise adornment with columns. The chronological gap between start and end date of a project grows larger with the length of the street. For instance, the 710 m long *cardo* of Gerasa was laid out at the end of the first century, the first columns appeared only in its northern section in the early second century, the middle section would be colonnaded in the Antonine period and the southern stretch of the street had to wait until the Severan age (Tabaczek 2002, 163–166. 174. 179–180; 2004, 210). A parallel development can be assumed for all major colonnaded streets of North-Syria, Cilicia and the Decapolis (Tabaczek 2002, 194 for Gadara, Pompeiopolis, Philadelphia-Amman, 194–198 for Apamea, 124–134 for Palmyra, 243).

north-south monumental avenue of Sagalassos represents a rare example of a well-dated colonnaded street planned and largely laid out in the first decades of the first century A.D.

Until now, the evidence for first-century colonnaded streets in Asia Minor has been very scanty and sometimes untrustworthy. Nevertheless, as Sagalassos was only a medium-sized town in Pisidia, it is very likely that its colonnaded street was created in response to similar building projects initiated in more prominent cities of the region such as Ephesus. It is therefore very probable that further examples of early colonnaded streets existed, but that they have not yet been identified in excavations. Non-archaeological sources have long dominated the research on first-century colonnaded streets. For instance, an inscription from Attaleia, 100 km to the south of Sagalassos, mentions the restoration of the streets (vias refecit) by means of a grant from the emperor Claudius, yet there is no reason to assume that they were already colonnaded at this time³⁶. Arif Mansel originally dated the main colonnaded street of Side to the second half of the first century, but his main argument appears to have been the inscription from Attaleia³⁷. More recently, the street has been re-dated to the middle of the second century³⁸. At Antiochea ad Pisidiam, inscriptions mention an »Augusta platea« and a »Tiberia platea« 39, but this label in fact only designates a broad and long street and does not indicate the presence of colonnades⁴⁰. Furthermore, when excavations have occurred they often did not reach the lowest levels, or else the picture is distorted by an elongated construction time or clouded by later phases of renovation. It is thus generally assumed that the construction of the first colonnaded street in Asia Minor was the so-called Marble Road of Sardis, laid out with imperial assistance after an earthquake in A.D. 1741. The only excavations so far, in the area of the Bath-Gymnasium Complex, suggested that the colonnade and shops abutting this huge monument were created only at the end of the first or in the early second century A.D.⁴². However, in this case it is conceivable that this particular section was actually postponed until the bath complex behind it was finished and that the remainder of the street will turn out to be older⁴³. The Theatre Street at Ephesus, part of the processional road to the Artemis sanctuary in between the theatre and the stadium, may have received its first porticoed sections in the middle of the first century, though later renovations cloud the reconstruction of its earlier phases⁴⁴. Likewise, judging from the monuments at its two ends, the street in between the Tetragonos Agora and the West Harbour Gate of Ephesus may date back to the Early Imperial period, but this date has not yet been corroborated by excava-

³⁶ Ramsey 1883, 258–260 for the inscription; Bejor 1999, 36.

³⁷ Mansel 1963, 20. 36–37; 1968, 239.

Heinzelmann 2003, 217–218, note 53 with argumentation for the later date.

³⁹ The so-called »Augusta platea« may have indicated the local *cardo maximus*, whereas the »Tiberia platea« may have referred to the stretch of the *decumanus* in between the *cardo* and the Augustan imperial sanctuary of Antioch, both of which are very badly preserved. See Mitchell – Waelkens 1998, 100–101. 147–154. 219–221 with further examples of epigraphically attested *plateiai/plateae*.

⁴⁰ Bejor 1999, 123; Tabaczek 2002, 222.

The earthquake and the subsequent imperial grant, tax remissions and the despatch of ex-praetor Marcus Ateius to assist in the reconstruction were mentioned in Tacitus (ann. 2, 47). For the resumption of building activity after the A.D. 17 earthquake in Sardis, see Foss – Hanfmann 1975, 31; Hanfmann 1983, 141–142; Bejor 1999, 21.

⁴² Yegül 1986, 18–19; Tabaczek 2002, 214–215.

Moreover, it seems that this street was not yet one of the main thoroughfares of the city in the beginning of our era, so it is possible that other streets in the city gained priority, see Rautman 2011, 11.

⁴⁴ Knibbe 1985; Bejor 1999, 25.

tions and the street's current form is again largely late antique⁴⁵. Finally, a single more certain example of a first-century colonnaded street already dates to the final decades: under the reign of Domitian (A.D. 81–96), Proconsul Sextus Iulius Frontinus provided the main street of Hierapolis with pseudo-colonnades consisting of engaged Doric columns that have been attested both epigraphically and archaeologically⁴⁶.

The main proliferation of colonnaded streets in the region seemingly only occurred between the early second and early third century A.D., as part of the general monumentalisation that characterized the cities of the Roman East during their peak of prosperity⁴⁷. Thus the earliest colonnades of the Arkadiane at Ephesus date back to the early second century A.D., probably to Hadrianic times⁴⁸. At Perge, the harbour city which for centuries had been used by Sagalassos for import and export, Hellenistic porticoed sections may have existed as well, but the construction of the present colonnaded street dates to the reign of Hadrian⁴⁹. The colonnaded street of Cremna in Pisidia, located some 25 km from Sagalassos, was only begun in the second half of the second century and continued into the early third century, which was also the case at Pompeiopolis in Cilicia and in other cities⁵⁰.

Furthermore, also outside of Asia Minor, including the provinces of the Near East where the largest number and also grandest examples of colonnaded streets can be found⁵¹, full-fledged colonnaded streets datable to before the second century A. D. have not yet been identified. The concept of a street lined with columns along its entire length no doubt already existed here in the late first century B. C., but it is not fully certain that this idea also materialized since archaeological confirmation of the colonnaded street at Antioch which according to Flavius Josephus (Ios. ant. Iud. 16, 148; Ios. bell. Iud. 1, 425) had been laid out by Herod the Great, is still lacking⁵². A few cities in the region, including Antioch, may have already possessed columns lining certain stretches of streets in the first century A. D. or even earlier, but one has to wait until the second century for unambiguous evidence of full-fledged colonnaded streets. For instance, the northernmost section of the main street at Apamea received columns over a length of almost 100 m

⁴⁵ Halfmann 2001, 29 with further references.

⁴⁶ De Bernardi Ferrero 1963–1964, 398–401.

Heinzelmann 2003, 216–220. For colonnaded streets as powerful and monumental urbanistic tools, see Lyttelton 1974, 215; MacDonald 1986, 32–33; Bejor 1999, 7; Heinzelmann 2003, 197; Jacobs 2013, 113–114.

Schneider 1999, 469–474. Until the second half of the reign of Trajan Ephesus largely depended on financing by non-Ephesian residents and possessed relatively few local benefactors contributing to the adornment of the cityscape, see Halfmann 2001, 38. 44. 64–65.

⁴⁹ The occasion for the creation of the street, together with the erection of the Arch of Plancia Magna and the Agora in the south as well as the nymphaeum in the north, were the visits of Hadrian to Perge in the 120's. For a complete argumentation, see Heinzelmann 2003, 201–205.

⁵⁰ S. Cormack in Mitchell 1995, 123–139 for Cremna; Peschlow-Bindokat 1975 for Pompeiopolis.

And where they also may have originated. See, amongst others, Ward-Perkins 1974, 32; Lassus 1976; Ward-Perkins 1981, 393. 482; MacDonald 1986, 43; Tabaczek 2002, 226–239. For the origin of colonnaded streets as a derivative of agorae: see Lyttleton 1974, 214–215; Segal 1997, 5–10; Bejor 1999, 15–18.

Tabaczek 2002, 211–214 discusses both the literary and archaeological sources for the colonnaded *cardo* of Antioch. She believes that Herod conceived this monumental avenue, but for one reason or another never had it executed. See also Bejor 1999, 10–13. At Alexandria, for which a Hellenistic colonnaded street is sometimes proposed, literary sources are also dubious and archaeological evidence points to its construction in the second century (Bejor 1999, 75; Tabaczek 2002, 217–219).

already in the second century B. C. 53, but no matching portico on the other side of the street has yet been discovered 54. The street was then paved during the reign of Tiberius 55. Further porticoes possibly appeared in the second half of the first century A. D., as is indicated by capitals from this period discovered in a later spolia wall to the north of the agora, but the complete transformation of the street into a colonnaded thoroughfare was only begun after an earthquake which is dated to A. D. 115, under the reign of Trajan, and continued as late as the Severan period 56. The first columns along the *cardo* at Gerasa only appeared in Trajanic-Hadrianic times, and those of the colonnaded street at Damascus probably belonged to the early second century, whereas the oldest columns along the great colonnaded street of Palmyra date back to Late Hadrianic or Early Antonine times 57.

After the Tiberian Period

It is certain that the Colonnaded Street remained the backbone of Sagalassos for many centuries. Its significance could only have grown when, during the reign of Hadrian, the promontory to the south of the city became the site of a sanctuary dedicated to the imperial cult. This shrine, the largest in Pisidia and presumably the reason for the first *neokoros*-title of Sagalassos, no doubt attracted worshippers from the wider region⁵⁸. They would all have used the Colonnaded Street as a procession street to ply between the new sanctuary and the already existing Apollo Klarios Temple, which had also already been dedicated to the imperial cult since the early Flavian period, as well as the town centre⁵⁹. The augmented importance of the street may very well have prompted the replacement of some of the Early Imperial Ionic capitals with more luxurious Corinthian ones. It is in any case certain that the vista along the street was also improved in Late Hadrianic times, when a new nymphaeum was constructed on top of the terrace just above the Lower Agora. Though the monument was hardly visible from the market square itself, visitors to Sagalassos would have seen it appearing just above the Agora Gate at the top of the staircase leading to the Lower Agora from the moment that they passed underneath the Tiberian gate at the southern end of the street⁶⁰.

Further evidence pertaining to occupation of the Colonnaded Street between the first and the sixth century is scanty and incoherent. Much of it was erased by the large-scale sixth-

Balty 1994, 81–98; Bejor 1999, 18–19. No matching portico on the other side of the street has yet been discovered.

Balty (1994, 84) suggests that the remains on the other side of the street were erased during later building phases. Tabaczek (2002, 194) argues that the columns discovered only belonged to a stoa in front of a row of shops and workshops.

⁵⁵ Mertens 1969, 67.

⁵⁶ Balty 1981, 46–69; Tabaczek 2002, 194–195; 2004, 211.

⁵⁷ Tabaczek 2002, 163–166. 174. 179–180 and 2004, 210 for Gerasa; 2002, 217 for Damascus; 2002, 124–133 and 2004, 210 for Palmyra.

The sanctuary was originally dated to the reign of Antoninus Pius based on a fragmentary building inscription (Lanckoroński 1893, 224 no. 188; IGR III 348). However, research into the architectural decoration pushed the date backwards to the second half of the reign of Hadrian (Vandeput 1997, 77). This has been confirmed by the discovery of the missing start of the inscription clarifying that the temple was dedicated to the *divus* Hadrianus and to Antoninus Pius. Finally, this date was confirmed by test soundings (Waelkens 2005b, 428). For the importance of the shrine and the *neokoros*-titles of Sagalassos, see Talloen – Waelkens 2004, 177–180.

⁵⁹ For the history of the Temple of Apollo Klarios, see Talloen – Waelkens 2004, 175–177.

Mägele et al. 2007, 471–473 on the thought-through location of this monument.



Fig. 12 Shop sign found in the door of an unexcavated shop

century renovation and by the construction of the Byzantine kastron in the course of the seventh century A.D., for which not only many statuary bases but also building blocks of the streets' bordering walls and columns were reused. Consequently, despite the high visibility of the zone, only four statuary bases - a base for emperor Trajan, one for Gallienus and his son Saloninus, one for a certain Publius Aelius Tiuba dated to the late second or early third century A.D., and an unidentified base - were discovered in situ along the street⁶¹. A fragment of a shop sign discovered in between two limestone doorposts of an unexcavated shop (shop 3, fig. 12) is further evidence for continuous usage. Based on the meander motif surrounding the central panel and the geometrical or diamond-shaped Greek

characters, Werner Eck dated it to after the fourth century⁶². Additionally, the street pavement saw multiple later interventions. Thus, the slabs at the borders were repeatedly lifted in order to repair water supplies or install new pipelines. In addition, in contrast to the generally neat rows of slabs, some pavement sections, including the intersection, are so irregular that it is likely that they bear testimony to later replacements. Finally, the finds of intrusive sherds and coins in the higher fills underneath the colonnade and shop floors confirm such later interventions⁶³.

THE SIXTH-CENTURY COLONNADED STREET

Around the year A.D. 500, Sagalassos suffered a major seismic catastrophe⁶⁴. The damage was no doubt substantial, but the Sagalassians were obviously still numerous and wealthy enough to undertake extensive renovations. Although these were often executed with reused materials, they still testify to a sense of monumentality⁶⁵. Public buildings such as the Macellum remained in use, the Imperial Baths were extensively renovated, fountains were repaired or adapted to guarantee a proper water supply and porticoes alongside both the Upper and Lower Agora were

Mägele forthcoming, cat. no. B114–116.

The Lesbian cymation and bead-and-reel decoration on the upper edge appear to be of Early Imperial date, indicating that an older architectural fragment was reused to create this sign.

⁶³ For instance, one of the higher compact fill layers of the portico comprised first-century ceramics (SA-2006-SS1-128-151), but also two second- or third-century coins (SA-2006-SS1-128-156 and -157).

For the earthquake, see Sintubin *et al.* 2003, 6–15; Similox-Tohon *et al.* 2006, 81. 91. The long-supposed date of this earthquake was confirmed in 2012 by soundings underneath the mosaic floor of *frigidarium* I in the Imperial Baths (Waelkens *et al.* 2012b, 104–105).

⁶⁵ On the scale of the damage caused by this earthquake, see Waelkens et al. 2000; Sintubin et al. 2003. The extent of the renovations also suggest that the town was still efficiently governed by prosperous ruling authorities, see Waelkens et al. 2006, 231.

re-erected. The north-south Colonnaded Street also underwent an extensive renovation during the second quarter of the sixth century.

The Colonnades

Along the rebuilt colonnaded street the bordering walls from the original phase were largely preserved. Only the southern end of the highest terrace – or the northern border of the side street – was completely reconstructed. It thereafter consisted of several amalgamated wall sections constructed largely with monumental, though reused ashlars (*fig. 9*). It also incorporated a monumental entrance giving access to an unknown space⁶⁷, as well as a new but poorly constructed staircase leading up to the west colonnade of the street⁶⁸.

The colonnades of the street were completely re-erected, with the exception of the sturdy Hellenistic heart-shaped pillar that had apparently survived the seismic event. The appearance of these colonnades could be reconstructed based on a short preserved section of the west colonnade in between the Agora Gate staircase and the recess underneath which the first-century aqueduct crossed the street. Furthermore, collapsed colonnade building elements were found on the pavement alongside the bordering walls; they had also been reused in post-Roman interventions along the street and constructions on top of it. On the whole, the appearance of this colonnade was thoroughly unclassical. The constituent elements that were still in place were quite varied in their appearance (fig. 7. 8a). The remaining northernmost component of the colonnade was a column pedestal⁶⁹, with an associated column shaft and Corinthian capital found in the rubble just next to it. Their added height was some 4.40 m, which can be taken as the minimum height of the colonnade. Consequently, the colonnade to the north of the crossroads may have been higher than that to the south, where the heart-shaped pillar only reached a maximum height of ca. 4 m. The two elements to the south of the column pedestal were full-fledged piers constructed of tuff and brick. This is suggested by the preserved remains, by the many tuff blocks encountered in the collapse layer in front of them and, in addition, also by the absence of column fragments on the street pavement in this area. The northern pillar consisted of one very large ashlar at the bottom, topped by three courses of tuff and one preserved brick layer. The southern pier was built with two ashlars of limestone below and tuff blocks on top⁷¹. Both of them were covered with mortar, which undoubtedly served to conceal the nature of their building materials and make

For the Macellum, see Richard – Waelkens 2012; Waelkens et al. 2012a, 245–247; Waelkens et al. 2013, 141–142; Imperial Baths: Waelkens 2009, 435–437; Waelkens et al. 2011, 270; Waelkens 2011b, 71; fountains: Jacobs – Richard 2012; the agorae: Jacobs 2011; Jacobs – Waelkens forthcoming a–b.

⁶⁷ The monumental door was 2.41 m wide, 0.68 m deep and at least 2.17 m high. It was composed of reused elements. A low, 2.03 m long ashlar functioned as door lintel. In between this wall section and the preserved part of the staircase, another, shabbier-looking wall, composed of small and larger rubble blocks, was partially preserved.

⁶⁸ Firstly, the six or seven steps of this staircase varied in height between 0.19 m and 0.36 m. They were only moderately worn, indicating that they were not in use for a very long period of time. Secondly, they were laid out on a loose fill of rubble and soil in which a large number of *tesserae*, presumably belonging to a pre-sixth century floor of the colonnaded walkway, were found. Upon excavation, some steps of the western border of the staircase were missing. It may well be that the steps used to access shop 2 in its latest phase (cf. infra) were taken from this staircase after the colonnades had collapsed.

⁶⁹ Sides of max. 0.59 m, 0.75 m high and intended for a column with a diameter of 0.51 m.

⁷⁰ 0.70 m by 0.61 m large, maximum preserved height 1.33 m.

^{71 0.68} m by 0.61 m large and preserved to a height of 0.83 m. A metal hook was inserted into the east face of this pillar.

them look like solid ashlar. The fourth and fifth colonnade supports consisted of reused upper or lower mouldings of honorific monuments carrying ashlars joined with mortar⁷². Judging by the remains of column drums and capitals in front of them, these arrangements functioned as column bases. The same is true for the structure next to them that was composed of two ashlars with mortar and small rubble in between⁷³. The most southern element in the row was a reused hexagonal base intended for a round monument⁷⁴. A further unclassical feature was the fact that all these supports had been attached to the stylobate by means of abundant quantities of mortar. The interdistance between the supports was fairly constant, ranging between 1.65 m and 1.84 m. Only the column pedestal at the foot of the staircase was positioned at 1.26 m from the nearest pillar and barely 1.14 m from the lowest step of the stairs.

Although there are no more *in situ* remains to the south of the recess in the bordering wall, there is sufficient circumstantial evidence to suggest that the western colonnade continued on over the entire length of the north terrace. One support may have been placed just to the north and another just to the south of the recess. At least one more complete column base was indeed retrieved from within the recess itself⁷⁵. Additionally, fragments of Corinthian capitals were also present at the southern end of the terrace, as were further column fragments belonging to two different column shafts. Finally, pockets of tuff stones in the debris on the street suggest the former presence of at least two more pillars made of this material on both sides of the street⁷⁶.

All colonnade supports that were present to the south of the recess were situated at a lower level than those preserved in the north. Indeed, a stone used to cover the recess originally belonged to the upper course of the street's bordering wall just to its south. The remainder of this upper course, with the exception of one ashlar, was removed, presumably when the southern end of the terrace and the staircase leading up to it were rebuilt. This was a premeditated action, confirmed by the fact that the dowels that had connected the now missing upper course to the one below had been flattened down on the new surface. On top of this surface, a rectangular game board was carved, consisting of three by twelve dots, divided by a line, used for *duodecim scriptorium*⁷⁷.

Although the eastern as well as the western colonnade of the southern terrace are much less well preserved and their collapsed architectural elements were largely removed for reuse in Byzantine times, the few remains left suggest that they were as varied in appearance as the section just described. As said, the Corinthian heart-shaped pier was kept in place. It was flanked by a simplified pedestal base (fig. 13). Three identical pedestal bases were found on top of the pavement just to the east and to the southeast, two of which had been integrated in post-Roman walls (fig. 4). Conversely, on top of the stylobate a simplified Attic-Ionic base was still in situ some five meters further south of the pedestal base. On the opposite side of the street, roughly shaped Attic-Ionic bases were present, as well as a hexagonal shaft of a honorific monument and a larger Attic-Ionic base with guilloche and laurel leaf decoration on the lower and upper torus respectively. Some of the bases on both sides of the street may have been topped by fluted

The fourth support was still 0.69 m high and rested on a top moulding of max. 0.91 m long and 0.16 m high, the fifth was 0.85 m high and consisted of two mortared ashlars supported by a base profile of max. 0.83 m long and 0.38 m high.

o.75 m long, 0.62 m wide and 0.52 m high.

⁷⁴ 0.53 m diameter, 0.53 m high, sides of max. 0.465 m.

⁷⁵ Cf. infra.

⁷⁶ Cf. infra.

⁷⁷ Bell – Rouché 2007, 109 type 3 Rows. 3.

Fig. 13 A collapsed arch to the south of the Late-Hellenistic pillar



columns, as was suggested by the find of a column drum in one of the post-Roman walls, although most column fragments belonged to unfluted shafts. Likewise, in the Byzantine blockage wall, three unfluted white limestone columns had been incorporated.

Over the entire excavated length of the rebuilt street, not a single element belonging to an entablature was found. It is indeed highly unlikely that the varied supports ever carried architraves in stone or in wood. Connecting supports that are varied in shape, and no doubt also in height, is much easier when working with arcades. Their presence is confirmed by a collapsed arch just to the south of the Hellenistic pier (*fig. 13*). It was composed of bricks of late antique size⁷⁸, connected with generous amounts of mortar. Tuff blocks found in the collapse layer presumably also belonged to this arcade, which would have resembled the arched opening found next to the Agora Gate staircase (remains visible utmost right in *fig. 8a*). In addition, alongside the northern terrace, seven voussoirs were found⁷⁹. Their cross-section was that of a pentangle, with a flat base and slightly curved sides. They could have rested on top of the pillars as well as on the column capitals. Indeed, they were found along the length of the terrace, making it possible that they functioned as a springer for the arches of the colonnade.

Within the colonnade itself, a new floor substrate had been laid out (fig. 14). It consisted of small cobbles embedded in a compact mixture of soil and mortar. A floor of limestone slabs was only present in front of the entrance of shop 2 over a surface of 3.27 m by 1.84 m. The rest of the substrate was covered by a hard layer, containing large quantities of mortar fragments, which in all likelihood was intended to serve as a walking surface. Possibly, the original intention was to

⁷⁸ Ca. $0.27 \times 0.27 \times 0.03$ m.

Four of them were located to the north of the street fountain, a fifth some 10 m further to the north, a sixth one in the sector below the Agora Gate staircase and a seventh was found already during the 1995 excavations at the Agora Gate. Another similar block was found integrated in the sidewall of the Agora Gate staircase.



Fig. 14 A sixth-century floor substrate and paved section found in the western colonnade

install a larger paved zone – hence the extensive substrate – but this never materialized⁸⁰. This layer also continued into the side street running west. The ceramics inside the substrate, as well as the layer laid down to serve as the floor, could be attributed to phase 8 of the local ceramic production and more exactly to the period between A.D. 525–575⁸¹.

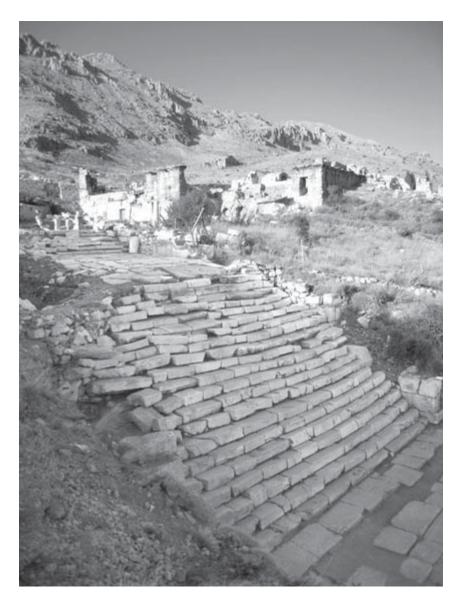
Considering the extent of this renovation operation, it is not unlikely that the shops too were in need of repair after the ca. A. D. 500 earthquake and were thus renovated. The walls of the shops testify to several reconstructions throughout their existence. An exact chronology, however, remains tentative. In their last phase, the walls were in any case constructed with mortared rubble of varying size, combined with broken brick in an irregular fashion, including some reused architectural fragments such as ashlars and column fragments. The entrance to the unexcavated shop 3 was marked by two limestone doorposts, one of which had fallen down. The original width of this entrance could be reconstructed as 0.85–0.90 m. An opening 0.66 m wide provided access to shop 1. This opening did not have door jambs or a sill, although three carefully positioned rubble stones underneath it made it clear that it was intended as a door. The 1.54 m wide entrance to shop 2 was indicated by a very worn doorsill present in the southeast corner of the room. The floor of the shop consisted of beaten earth, with the exception of the area just behind the entrance, where a neat brick floor had been created (fig. 10)82. As already mentioned, the only paved area in the portico as well was that in front of this shop door. In the northeast corner of shop 2 a 0.90 m (N-S) by 1.01 m (E-W) pit lined with brick was present,

⁸⁰ On top of this layer against the Hellenistic pier, a small (0.85 × 0.40 × 0.13 m) unidentified structure consisting of only three stones was created.

Find numbers of the ceramics in the substrate: SA-2008-SS1-44-175 and SA-2008-SS1-60-187; in the floor: SA-2008-SS1-48-194.

Covering a surface of 1.90 m (N–S) by 1.70 (E–W) m. Brick size: $0.28 \times 0.28 \times 0.035$ m.

Fig. 15 The Agora Gate staircase



which can be interpreted as a small underground storage area⁸³. Finally, none of the shop walls were preserved to a height that enabled us to ascertain the presence or position of windows that might have provided additional light.

The Agora Gate Staircase

The staircase connecting the street to the Lower Agora was completely re-laid during this renovation phase (fig. 15). Soundings underneath the pavement established a date for this staircase in

For its construction, a pit was dug out in the existing layers, after which its brick floor and walls were built and finally, the remaining space was filled with mortar.

the second quarter of the sixth century A.D.⁸⁴, but also clarified that it was constructed several meters to the south of its predecessor. Consequently, the agora itself seems to have been extended. This hypothesis is corroborated by the fact that the most southern 2.30 m of the square was paved with larger slabs laid in less orderly rows than the rest of it (*fig. 2*).

The new staircase itself was 4.81 m (east) to 5.01 m (west) high. The flight of steps was now divided into two parts by an intermediate terrace 8.75 m wide; to the north was a flight of six steps, to the south were 21 steps⁸⁵. Unsurprisingly, the new staircase was composed of reused elements, not only cornices once belonging to the almost completely collapsed Tiberian Agora Gate, but also wall mouldings, the top of a smaller monument, etc. In contrast to the street pavement that was heavily worn because of many centuries of intensive usage, the surface of this new staircase and intermediate platform showed no traces of wear whatsoever, which indicates a much shorter period of use.

The new staircase was bordered by walls on both sides. The east wall belongs to an unidentified building, which, considering the fact that the entire south side of the agora had been extended during this renovation phase, must belong to this sixth-century phase or a later time period. This is substantiated by its construction technique which combined various reused ashlars and rubble. The southern and most vulnerable end of the western bordering wall of the Agora Gate staircase⁸⁶ was likewise constructed with large, reused ashlars (*fig. 8a, utmost right*); the remainder possessed a mortared rubble core faced with alternating rubble and brick sections. Higher up and more to the north, the wall facing consisted of tuff and, as a consequence, is less well preserved. The wall featured an opening 1.57 m wide, spanned by a brick and tuff arch⁸⁷.

The Narrowing of the Street, a Fountain and a New Water Supply

In between the steps and the western bordering wall of the Agora Gate staircase, a narrow stretch of earth provided a level surface for a water pipe coming from the Lower Agora⁸⁸ (fig. 2. 16). To allow the continuation of this water supply further south, a 1.4 m wide stretch of slabs along the western border of the street was removed over a length of 40 m – from the Agora Gate staircase in the north to the intersection with the side street in the south – resulting in the pavement being narrowed from ca. 10 m to ca. 8.6 m. After this pipe had descended the staircase and reached the level of the street, it continued in the form of a built channel. Its cover, consisting of brick fragments of varying size, was visible on the surface over a distance of ca. 10 m⁸⁹. Further on, the channel was hidden underneath an elongated row of displaced pavement slabs (fig. 7, outer right) and near the southern end of the terrace under an amalgam composed of small pavement slabs, rubble and water channel segments. Although the channel obviously turned in the direc-

Find numbers for the six subsequent fill layers encountered underneath the staircase: SA-2007-AG-14-34, SA-2007-AG-12-30, SA-2007-AG-10-21, SA-2007-AG-8-14, SA-2007-AG-6-5, SA-2007-AG-4-1.

Waelkens et al. 1997, 208–210; 2000, 367.

Preserved to a height of 2.72 m, max. 0.79 m thick.

In the north, this arch is still preserved to a height of 0.96 m. In a later phase, the opening appears to have been partially blocked with small tuff blocks.

It was built with pipe segments of more or less the same dimensions (0.32–0.33 m long, max. diameter of 0.13 m at the ends and min. diameter of 0.11 m in the centre).

The channel underneath had a bottom consisting of 0.28 × 0.28 m bricks. The sides were between 0.17 m wide and 0.19 m high and built with rubble stones. These were then finished with a layer of pink, watertight mortar of min. 0.013 m thick.

Fig. 16 Two sixth-century water pipelines along the western border of the street



tion of the colonnade thereafter, its remains in the area of the walkway itself were dismantled already in antiquity when it was replaced by an even later water pipe. It ended up in a settling basin – a reused dolium – located to the northeast of shop 2. This dolium was reused by the abovementioned later pipe as well, but an older hole in the body of the vessel (closed off with mortar in the final phase) was in all likelihood associated with the first water system, which must have again merged from a water channel into a water pipe before it reached the dolium. A third opening in the southwest of the dolium indicated that the system continued in a western direction, underneath the surface of the side street. Considering the apparent contemporaneity of the relaying of the Agora Gate staircase and that of the colonnade, this first pipe was presumably fully embedded in the cobble substrate.

More or less in the centre of the northern terrace, a new street fountain was installed on top of the exposed pavement substratum, at the location of the older recess in the western bordering wall of the street (fig. 7). For this purpose, the existing first-century water channel passing

underneath the recess was exposed and the water flow was blocked some 0.58 m to the east of the west wall. Thereafter, a large basin composed of a massive limestone ashlar was installed on top⁹⁰, so that the water could be captured on the street itself. As mentioned above, it is not unlikely that this sixth-century basin was a replacement of an earlier fountain. A 0.06 m wide gap in between the basin and the bordering wall of the street was filled using white mortar. In addition, the lower part of the basin was supported by small rubble stones embedded in mortar on the outside. It may be that these were later interventions after the basin had been displaced – maybe as the result of a seismic shock, maybe because its foundation was of poor quality – but it is also possible that the heavy basin was never properly pushed against the wall.

The top of the basin possessed a protruding moulding ca. 0.12 m wide, underneath which a water spout of 0.04 m wide and 0.06 m high was cut. A second hole measuring 0.055 m by 0.055 m was present at the bottom of the basin. Maybe this also discharged water, or maybe it functioned as a cleaning hole and was therefore blocked most of the time. In any case, considering the amount of the original water supply and the size of the spout of the basin, it can be concluded that by this point the water flow was drastically reduced. It indeed seems that the early sixth-century tectonic activity caused a thorough reorganization of the supply network of Sagalassos⁹¹. The distribution system within the city was presumably maintained, but also underwent major adaptations⁹². Besides the appearance of water storage facilities from A. D. 500 onwards93, water resources were increasingly diversified: some of these installations collected natural runoff water resulting from the melting of snow94. The Sagalassians thus apparently saw a need to supplement the older supply system by tapping water from local as well as more or less remote springs. The findings at the location of this street fountain again indicate that the output of at least one of the five aqueducts of the city had been seriously reduced. Moreover, the need to divert water from the Lower Agora – presumably from the water supply of the nymphaeum along the square's north side – towards structures in the southern city quarters also corroborates that the original supply of this quarter had been interrupted or at least diminished.

The installation of this new street fountain, the removal of the pavement slabs, the new water supply coming down from the Lower Agora and its partial covering by reused pavement slabs were all related and contemporaneous actions. The street fountain was only put in place after the western strip of the street pavement had been removed, but it was only after the first-century supply had been blocked and the street fountain had been installed, that the new water system could physically pass by. In addition, the fact that the street fountain was located exactly in the middle of the row of reused slabs on top of the channel not only confirms that the basin was already present, but also suggests that the stones were intended to protect the underlying water channel from traffic attracted by the new water distribution point. Furthermore, the fact that the water pipe coming down from the Lower Agora was taken into account when constructing the

^{90 2.10} m long, 0.48 m wide and a maximum of 0.76 m high.

Martens 2006; 2008. For a somewhat more optimistic view, see Jacobs – Richard 2012, 65–67.

For instance, the Late Hellenistic Doric Fountain House was no longer used as a public fountain, but functioned instead as a kind of secondary castellum for water distribution. See Waelkens et al. 1997, 110–114; 2000, 324–329; Jacobs – Richard 2012, 56–57; Martens et al. forthcoming.

They also comprised a monumental basin arranged in front the Upper Agora's west portico, a water collection point and a small Byzantine fountain built along the west and east sides of the North-West Heroon, respectively (Martens 2008, 255–256).

Martens 2006, 183 footnote 37 for further references.

new Agora Gate staircase indicates their contemporaneous planning. Consequently, although direct dating evidence for the fountain and the water pipe alongside the street is scanty because the area was so often disturbed during later interventions⁹⁵, the relationship between all abovementioned elements places them all in the second quarter of the sixth century A.D.

A Representative Approach

Although the extent of these renovations is already impressive, this new street was further adorned with decorative monuments: the Tiberian gateway that originally surmounted a predecessor of the current monumental staircase had collapsed, but the architectural elements that had remained intact – three columns, two of the original capitals, the entablature of the western lateral wing as well as the adjoining part above the central row of columns – were collected. Together with one recycled capital taken from elsewhere, they were again positioned on top of the old podium of the west wing and on the first pedestal of the adjoining central part, which at this time may have been moved somewhat more to the south together with the Agora Gate staircase. In this manner, a somewhat unclassical L-shaped monument with three columns was erected, recreating the northwest inner corner of the Tiberian gate⁹⁶.

An older statuary base, resting on the upper moulding of a statue pedestal turned upside down, was re-erected inside this inner corner⁹⁷. It carried a new inscription partly in Latin, partly in Greek, which could be identified as a dedication to Julian the Apostate98. Finally, also the northern street section in between the staircase and the intersection was further adorned with statuary at this very late moment in time99. Consoles had been integrated in at least some of the brick and tuff pillars alongside the street. The individual items were similar in design, all of them rather rough and simple, but of quite dissimilar measurements, their lengths varying between 0.71 m and 1.04 m and their widths between 0.32 m and 0.47 m. Nevertheless, they were all intended to carry a small statue: at the foot of the two pillars preserved in the western colonnade, the remains of a group of the Three Graces were found; in the section to the south of the fountain, a statuette of Aphrodite and a draped female, possibly Hygeia, were present; and at the opposite side of the street, a Hygeia had been displayed next to an Apollo (fig. 17). These statues had diverse dimensions - for instance the height of the Apollo, Hygeia and the second draped female was estimated to be ca. 0.80 m, but the Three Graces must have been much larger - and various production dates between the second and the fourth century A.D. Since in total eight consoles have been found among the debris lying on the street, as well as embedded in the masonry of the Byzantine barrier wall to the south, at least eight statuettes may once have been on display.

The presence of statuary alongside a grand avenue such as that of Sagalassos is not in itself surprising. As said above, the north-south Colonnaded Street had always been the main approach to the town centre. From the overview of renovation activities provided above, it is clear that a

A single sherd found embedded in the mortar in between the fountain basin and the bordering wall presumably belongs to phase 8 of the local Sagalassos Red Slip Ware production (ca. A.D. 450/475–550/575).

⁹⁶ Waelkens et al. 1997, 208–210 figs. 173–174; 2000, 362–367 figs. 187–188; Waelkens 2008, 158–159.

⁹⁷ Mägele forthcoming, cat. no. B56.

The creation of a statuary base for Julian so late in time is very rare. The reasons behind this operation and the meaning of the monument in relation to the Lower Agora will be discussed in full detail elsewhere.

⁹⁹ The statuettes were studied by Lea Stirling during the 2012 Sagalassos campaign. This statuary display is extensively discussed in Jacobs et al. in preparation.



Fig. 17 The statuette of Apollo

strong desire to preserve this highly impressive thoroughfare remained present well into the sixth century A.D. Parallel to earlier centuries, statues would only have improved the street further. However, in contrast to the statues of previous ages, the new items were all smallscale. On the whole, this statuary composition was thoroughly unclassical in appearance¹⁰⁰. These small-scale statuettes were created to be displayed in a closed, private context and certainly not along a 10 m wide colonnaded street. Moreover, they also strongly referenced the pagan past. I have discussed the reasons for such a late and unusual-looking statuary composition in detail elsewhere¹⁰¹. To summarize, it is likely that a provincial city such as Sagalassos suffered from an ever-growing shortage of statuary in Late Antiquity, as on the one hand, few new statues were added¹⁰² and on the other hand, the store of existing statues was inevitably thinned out over the course of the centuries103. Consequently, it is not unlikely that by the second quarter of the sixth century, a considerable part of the town's statuary had already been toppled over or had disappeared into limekilns and bronze furnaces¹⁰⁴ and that smaller statuettes, usually

originating from private dwellings, were the only presentable items still available to provide the new street with additional decoration. As unusual as the end result may have been, it suited the

¹⁰⁰ For characteristics of late antique and early Byzantine displays of statuary, see Jacobs forthcoming.

Jacobs forthcoming.

There was little reason for new statuary imports in a medium-sized town such as Sagalassos in Late Antiquity. The new political situation of the fourth century had ensured that the political arena, together with the largest supplies of money, became concentrated in the provincial capital. In these centres, honorific statues of proconsuls and governors made up the majority of new dedications, supplemented by imperial statues and a few private benefactors. See Slootjes 2006, 141–152 for statues for governors. In the smaller cities of the provinces, late antique honorific statues were largely limited to statues of emperors of the fourth century A.D. Only occasionally did a statue of a governor or an imperial magistrate occur.

Statues could have been relocated more than once, both for practical and aesthetic reasons, or could have simply toppled over during earthquakes. During such events, statuary ran the risk of being damaged, sometimes beyond repair.

For instance, at least two lime kilns and no less than nine metal furnaces were established inside the Imperial Baths between 525 and 575, which explains why so few metal and marble statues have been recovered from this enormous complex, and why, for instance, only three out of originally six acrolithic statues on display in the dining hall were retrieved (Waelkens *et al.* 2013, 143–144). For the statues found in this complex, see Mägele forthcoming, no. 141–162; Waelkens – Mägele forthcoming.

mismatched supports of the street colonnades and the three-column monument closing off the vista of the street to the north. In both cases, the building elements needed to create a more »classicizing« composition were simply no longer available after the earlier gate and colonnades had crashed down onto the pavement as a result of the early sixth-century earthquake. The Byzantine builders simply collected all elements that were still useable. If indeed small-scale statuettes were the only option left to create a statuary display on the street, positioning them on consoles was the best possible solution, in a manner reminiscent of the statue brackets on the streets of Syria and Cilicia 105. The subject matter of the statuettes is more difficult to explain. It is true that their pagan or mythological nature was not necessarily regarded as offensive by Christians, as long as they held no reference to pagan cults¹⁰⁶. Also in the early Christian ages, small-scale statuettes in particular were popular collection items among the rich urban elites, who deployed them as an expression of status and rank or as an intellectual statement¹⁰⁷. Nevertheless, tolerance for such depictions was evaporating by the later fifth and certainly in the early sixth century. Statuary disappeared from public monuments108 and even from villas, many of which were losing their elite character in the course of the sixth century¹⁰⁹. Christian iconography began to supplant more traditional themes in other media such as pottery and even silverware as well¹¹⁰. This shift was part of a much wider transformation of society. Christianity was clearly enhancing its hold on all aspects of society and on the whole had little tolerance for elements referring to the unregenerate classical past¹¹¹. Even if statues in this period were not necessarily violently destroyed, the new Christian sensibilities and tastes ensured that they were no longer repaired when they

- Palmyra once possessed a staggering number of statues positioned on top of consoles along virtually all its colonnaded streets (Tabaczek 2002, 49–53). Smaller numbers of consoles have also been found in the colonnaded streets of Apamea in North-Syria (Balty 1981, 69), Pompeiopolis (Peschlow-Bindokat 1975, 376), Anazarbos (Gough 1952, 104–105) and Hierapolis-Kastabala (Bent 1891, 234; Verzone 1957, 55. Conversely, Krinzinger – Reiter 1993, 277–278 interpret them as supports for architraves) in Cilicia. In addition, the back wall of one section of the colonnaded street of Perge (West 4) was provided with consoles presumably for statuary. For a comparison between these compositions and those at Sagalassos, see Jacobs *et al.* in preparation.
- ¹⁰⁶ Jacobs 2010.
- Classical education (*paideia*) was reserved for the *happy few*, so that, especially from the fourth century onwards, it provided a social identity to the upper classes and became a symbol of elite status (Brown 1992). Gazda 1981, 168–170. 177; Stirling 2005, 26–27. 153–155; Hannestad 2007, 273–274 point to the importance of *paideia* for collections of statuary. Liebeschuetz (1995/1996) argues for a continuation and assimilation of pagan myths in Christian visual and literary culture in general. Maguire (2001, 243–247) provides an overview of pagan and mythological motifs reflecting general ideas of plenty and good fortune in the late antique house.
- For instance, imperial portraits on display in the basilica of Ephesos ended up in a foundation around A.D. 500 (Alzinger 1972–1975, 260–263); pagan statues in the East Baths at Skythopolis were disposed of around A.D. 515 (Tsafrir Foerster 1997, 129–131; Tsafrir 2003, pl. 110–111). Even the magnificent collections built up during the fourth and early fifth century at Constantinople began falling apart under Justinian (Bassett 2004, 128–129).
- For instance, at Aphrodisias, the philosopher portraits were taken from the hall in the Atrium House in which they had been on display and thrown into an inaccessible alley behind the main apse of the house (Smith 1990, 153–155). At Athens, various portraits and statuettes found their way into pits and wells around A.D. 530 (Frantz 1988, 41. 87).
- Jacobs 2010, 287 with further literature. In the local ceramic production of Sagalassos as well, Dionysiac iconography was in decline from the later fifth century onwards (Talloen Poblome 2005, 70).
- Even if images were secular, holding no religious meaning, they were considered to impede a distinctive Christian identity. Markus 1990, esp. discusses how Christianity made its mark on all aspects of life, leaving no space for the »secular«. The closing of the last philosophical school at Athens by Justinian can also be regarded as part of this shift (Cod. Iust. 1, 11, 9–10 and Watts 2004).

were damaged nor re-erected when they fell down or when their surroundings experienced a new building phase. Consequently, examples of statuary of pagan or mythological nature still relocated in the sixth century are extremely rare, though not completely unknown. A fairly good example can be found at Caesarea Maritima, where two statues of colossal size were added to an esplanade created sometime between A. D. 546 and 606 by the *pater tès poleos* Flavius Strategius. One of them could be identified as the Emperor Hadrian – probably the cult statue from the city's temple of Hadrian – while the second represented another emperor or god¹¹². As at Sagalassos, the manner in which they were installed indicates a broadening of classical aesthetics: the statue of Hadrian did not fit the granite throne he was seated on, and, moreover, makeshift bases and odd bits of stone were used to prop the statues up where parts of the original sculpture were missing. And just like at Sagalassos, these examples of relocation were associated with solidly dated infrastructure work, which is surely no coincidence. Examples such as those of Caesarea and Sagalassos strongly suggest that very late relocations of statuary occurred more often than is commonly assumed. It remains, however, very difficult to distinguish such interventions from statuary that was left standing throughout the ages¹¹³.

At sixth-century Sagalassos, statuary was apparently an indispensable component when creating a new colonnaded street mimicking the situation of old. The envisioned grandeur of the end result probably made up for the use of mythological statuary. The statuettes had in all likelihood lost their pagan connotations and were interpreted more generally as »adornment elements«, items useful for self-display, for enhancing the prestige of a location, just as they had done in the past¹¹⁴. In their capacity as cultural heritage, these images were combined with an abundant amount of Christian graffiti. Some of the column fragments found on the Colonnaded Street were literally covered in crosses, some of them inscribed quickly and superficially, others were more elaborate and cut professionally. In addition, two more substantial texts were found, one of which read, »with the help of the son of God«.

The Sixth-Century Colonnaded Street in Comparison

That the extensive rebuilding of the north-south Colonnaded Street at Sagalassos could be dated to the sixth century is at the moment highly exceptional within Asia Minor, where many large-scale renovations of colonnaded streets have been dated to the late fourth or the early fifth century A.D.¹¹⁵, the latest being the renovation of the Marble Street at Ephesos, assigned to the third quarter of the fifth century¹¹⁶. However, as was already said in relation to the earliest phases of these streets in other cities, it is possible that more extensive archaeological work will somewhat alter our current views. Outside Asia Minor, evidence for streets that were still

Avi-Yonah 1970; Holum 2003, 158. Kristensen 2010 discusses these statues as well as their re-display in detail. In the same city, another relocation of the statue of Tyche could also be assigned to the later sixth or even early seventh century, see Gersht 1984; Wenning 1986; Holum et al. 1988, 10–12; Kristensen 2010, 276–277. For intolerance towards cult statues of Roman emperors, see Jacobs 2010, 288.

¹¹³ See Jacobs forthcoming for the difficulties in distinguishing between passive and active preservation of statuary.

For references and discussions of ancient texts and edicts referring to these values, see Lepelley 1994; Salzman 1999, 131–132; Stewart 2003, 154–155; Schmidt 2003, 215; Saradi-Mendelovici 1990; Saradi 1997.

For an overview, see Jacobs 2012, table 3 with references. Examples include a new colonnaded street at Aizanoi, the relaying of the Sebasteion Street at Aphrodisias, of the Embolos, the Arkadiane and no doubt also other colonnaded streets at Ephesos, as well as of the Marble Road at Sardis, among others.

¹¹⁶ IvE IV 1304.

newly laid and entirely renovated in the sixth century is more widespread¹¹⁷. In addition, as said above, the renovation of the Colonnaded Street was part of a larger renovation programme that was initiated after an earthquake that occurred around A. D. 500, which apparently lasted until the mid-sixth century. Only at Caesarea Maritima has a contemporary renovation phase of this scale been identified¹¹⁸.

These streets outside Asia Minor still possessed a very uniform appearance even in this late period, with homogeneous colonnades continuing over their entire length. Conversely, the best known feature of late antique colonnaded streets and also porticoed squares within the region was the variety of building elements in their colonnades¹¹⁹. This variety appeared from the later fourth century onwards, in large and smaller towns, in smaller and larger thoroughfares. The appearance of these streets had little to do with city status or finances, which is demonstrated by the fact that even the Arkadiane at Ephesos, reconstructed with imperial funds in the early fifth century, possessed diversified architectural fragments¹²⁰. The ample availability of older architectural fragments was apparently more decisive. Building elements recovered from earlier phases were supplemented with elements taken from derelict buildings, streets and squares elsewhere in the city. This at least led to non-classical combinations between column bases, shafts and capitals, but they could also be further supplemented with »foreign« elements that did not belong to a colonnaded street. One of the most varied ensembles can be found in the Theatre Street at Ephesos, which was obviously renovated several times throughout its history¹²¹.

Although it remains possible that part of the heterogeneity in the aforementioned complexes was indeed due to subsequent repairs, by the sixth century, all-encompassing reconstructions resulted in a varied appearance as well. Thus at Aphrodisias, the sixth-century restoration of the south portico of the South Agora comprised a great amount of variety in the shape of the

New streets were virtually limited to imperially founded settlements – such as Justiniana Prima (Guyon – Cardi 1984, 65–70), Resafa (Kollwitz et al. 1964, 83), and Zenobia (Lauffray 1991, 37–40. 163. 167–169) – and pilgrimage centres such as Abu Mina (Grossmann 1991, 459). Examples of renovated streets include Silvanus Street at Skythopolis in the year 515/6, the cardo of Antioch, Apamea and Jerusalem in the Justinianic period, see Jacobs 2013, 174–175.

Wiemken - Holum 1981, 29-41; Vann 1982, esp. 165. 169.

¹¹⁹ For an extensive overview of the appearance of colonnaded streets in late antique and early Byzantine Asia Minor, see Jacobs 2013, 136–145.

Although only few quarries, especially those located along the sea routes to Constantinople such as Karystos on the Greek island of Euboia, and especially the Prokonnesian quarries on the island of Marmara in the Sea of Marmara very close to the capital, remained active in Late Antiquity (Waelkens 1999, 560), it can be assumed that the central administration could still acquire newly carved building elements.

Column bases here included traditional and simplified Attic-Ionic bases, pedestal bases, and pedestals, but also mouldings of statuary monuments – sometimes even with inscriptions – reused upside down. There were full-fledged Doric, Ionic, Corinthian and fluted capitals present, but also some simplified elements, and even a simplified Attic-Ionic base was placed upside down on top of a column. Column shafts were both fluted and unfluted (site observations). The date of the last phase of the street is unclear. Inscriptions referring to a restoration in the first quarter of the third century A.D. serve as TPQ. Knibbe (1985) suggested that this reconstruction was carried out in haste because worshippers kept on coming to the Artemis sanctuary. And indeed, two of the inscriptions mentioning the reconstruction were carved on different kinds of marble, suggesting that various elements were used. However, since other buildings known to have been executed by the same benefactor possess a classical character that sharply contrasts with that of the street, the present heterogeneous appearance may have come into existence in a later period. Other buildings and streets all over the town were severely damaged during the A.D. 262 earthquake and/or earthquakes occurring between A.D. 358 and 368. The Theatre Street was presumably also in need of repair, and at least some of the architectural elements had to be replaced.

bases¹²². Although the remainder of the street network at Sagalassos has not been extensively excavated, survey evidence and soundings suggest that their (partial) colonnades in this last phase were also composed of assorted columns. The columns of the lower east-west colonnaded street – another one of the town's important thoroughfares – differed in measurement and style¹²³. The most remarkable element was a Doric column that in the past had been endowed with a funerary function, indicating that it must have been transported to its new location from one of the town's necropoleis. Furthermore, the porticoes of the two agorae were also reconstructed with diverse bases and columns¹²⁴.

As varied as all these ensembles were, the presence of pillars was only rarely attested. Even though pillars were very easy to construct, columns apparently remained the preferred solution for the greater part of the period. It was only in the course of the sixth century A.D. that pillars appeared more frequently as valuable substitutes. Outside Asia Minor, brick piers regularly replaced columns in the new colonnaded streets of Justiniana Prima (southern Serbia) and Resafa (northern Syria)¹²⁵. Elsewhere, pillars supplemented an insufficient supply of columns. For instance, although the original, late fifth- or early sixth-century section of the processional road at Abu Mina was flanked by reused columns, when the street was extended towards the north, every third or fourth column was replaced by a pillar with a T-shaped cross section. When columns could be acquired in sufficient quantities, pillars were only added for very specific purposes. In the sixth-century Decumanus of Zenobia, only the two eastern columns of the northern colonnade were replaced by pillars that could be hollowed out for the passage of water¹²⁶. The interior of the early sixth-century Silvanus Hall at Skythopolis was supported by an alternation of square piers and columns in order to support the large span of the roof¹²⁷. At the agora of Side, pillars were constructed as reinforcements for the columns at the east ends of the north and the south porticoes¹²⁸. At Sagalassos, where pillars have not been attested except on the Colonnaded Street, the only reason to integrate them here may have been the possibility for statuary display on top of consoles.

FALL FROM GLORY

Aesthetic Decay in the Later Sixth Century

Although the renovation of the Colonnaded Street was no doubt a prestigious urban project testifying to the continuing prosperity of the city in the second quarter of the sixth century, the thoroughfare lost its impressive character in a very short period of time. Moreover, the

De Chaisemartin – Lemaire 1996, 157.

The majority was plain without flutes, whereas four others were fluted, another was a Doric column drum with plain flutes, and one was a half-column (Martens 2007, 348).

For a description of the west portico of the Lower Agora in its sixth-century-A. D. phase, see Jacobs 2013, 178–179; Jacobs – Waelkens forthcoming a.

For Abu Mina, see Grossmann 1991, 459; for Justiniana Prima, Guyon – Cardi 1984, 65–70. At Resafa, the presence of massive pillars positioned at more or less regular intervals along the western edge of the road might be the remnants of a portico, see Kollwitz *et al.* 1964, 83.

¹²⁶ Lauffray 1991, 40.

Foerster - Tsafrir 1993, 27.

¹²⁸ Mansel et al. 1956, 26-27.

cobbled floor substrate encountered in the west colonnade never carried stone slabs, indicating that the renovation programme never reached completion. The planned magnificence soon gave way to practical considerations. When the water supply coming down from the Lower Agora stopped functioning just a few years after it had been put in place, the west border of the street was disturbed once more for the installation of another water pipe coming from the area to the northeast of the street (fig. 16)129. This pipe cut the previous supply and then curled around the row of pavement slabs on top of the older water channel in the direction of the settling basin to the northeast of shop 2 (fig. 7). Its installation necessitated the removal of additional pavement slabs, which were not placed neatly to the side as before, but were thrown at random against the bordering wall of the street. This late pipe was also located very high up, its top being at the same height as that of the original pavement. Consequently, in the colonnade section, it was given additional protection by a brick cover and an additional semi-circular tuff wall that diverted traffic coming up and down the staircase leading to the highest terrace (fig. 9, foreground). Such precautions were not taken at the street fountain, even though the pipe passed just in front of it and made it very difficult to reach the water. This indicates that the area was no longer visited and that the street fountain had already gone out of use¹³⁰.

Indeed, in the second half of the sixth century, the basin started being filled with debris and refuse, including a large amount of bone and ceramic sherds. In fact, after the installation of the most recent pipe the entire strip in between the west bordering wall of the street and the remaining pavement was covered with dumps of secondary refuse, containing both large numbers of animal bones and ceramics datable to the late sixth and first half of the seventh century A.D.¹³¹. Dumping continued longest at the bottom of the staircase, which eventually resulted in a large heap of bones and sherds. Its location confirms that the origin of the refuse on the Colonnaded Street was the Lower Agora. This square was indeed inhabited into the early seventh century, until the town was hit by yet another earthquake¹³².

It is not certain whether or not habitation on the Colonnaded Street itself had by that time already ended. At the time of its excavation, the underground structure inside shop 2 was filled with refuse, including ceramic sherds and an *oinophoros* of the third quarter of the sixth century A.D., which suggests that at least this structure, and perhaps the entire shop, went out of use¹³³.

Unlike the older water supply, this one was created with recycled water pipe segments of rather varying dimensions, with lengths ranging from 0.27 m to 0.49 m and diameters between 0.10 and 0.14 m. Substantial amounts of mortar were then used to attach the pipes together, some segments were even cut at the ends to make them fit the smaller adjoining pipes. Quite a few pipe segments possessed cleaning holes at their top, most of them filled with white mortar, some of them covered by brick or tile fragments.

The fountain may, for a short while, still have been reachable from the north, where a new pavement was installed when the second pipe was put into place. The slabs both abut the rubble blocks protecting the pipe and are covered by them, which confirms their contemporaneity. Nevertheless, the fountain was never used for a long period of time, as is indicated by the complete lack of traces of wear on the basin's edge.

The refuse was in all likelihood not deposited at once, but as various deposits that were steadily brought to the area from the mid-sixth century onwards, as could be deduced from the slightly varying dates of their ceramic content. The oldest dump could be found near the southern end of the terrace, the most recent one at the bottom of the staircase.

¹³² Jacobs – Waelkens forthcoming a.

One later, post-earthquake occupation phase could be recognised. At this time, the original door was blocked by a tuff wall and a new 1.54 m-wide entrance was cut into the northern end of the east wall, just above the disused

Possibly at this time, the shop entrance was blocked with tuff blocks. Also the general scarcity of everyday objects, furniture elements and so on in the past has been taken as an indication that the area was abandoned and thoroughly robbed before the final collapse. However, it has in the meantime become clear that the absence of archaeological finds as well as of architectural fragments belonging to the Colonnaded Street and its shops was due to post-Roman occupation of the area. And indeed, also the need for a new water supply indicates that people were still living in the southern town quarters.

The decline of the Colonnaded Street paralleled evolutions noted in other areas of Sagalassos. Soundings on other streets confirmed that a large-scale rebuilding programme was initiated, but that it was also interrupted before new pavement slabs could be put into place¹³⁴. Overall, after the middle of the sixth century, no more buildings were constructed. During the second half of the sixth century, pottery kilns in the so-called Coroplast Workshop in the eastern suburbium were transformed into lime kilns that in turn were given up before the end of the century. The statuary of the Imperial Baths was disappearing into large lime kilns and bronze furnaces installed in the former frigidarium II135. Former mansions were subdivided and lost their grandeur when their marble decoration was taken from the walls and burned into lime, while »rural« structures proliferated within intra-mural areas¹³⁶. Fountains apparently became favourite locations for waste disposal: a contemporary dump has been found in a sixth-century water basin installed on the Upper Agora and another one in a Trajanic street fountain along the northeast entrance to the Lower Agora. Other disused buildings such as the Odeion suffered a similar fate. The fact that waste was left to rot in full view, producing putrefying smells in the very centre of the city, suggests a drastic change in mentality from the civic pride displayed only a few years earlier¹³⁷. Also the progressive abandonment of the artisanal and commercial units alongside the agorae indicates that the population quite suddenly had other preoccupations¹³⁸. Evidence on the extent and density of the occupation of the town suggests a significantly less widespread and, perhaps, also less dense occupation during this period¹³⁹. Similar developments have been noted in almost all other cities within Asia Minor as well as beyond¹⁴⁰. A number of factors - increasing aridity, the decline of long distance trade, external military threats, brigandage - may have been responsible for this sudden reversal of Sagalassos's fortunes as well as for the general dissolution of the network of cities in the Roman Empire¹⁴¹. Although direct evidence is hard to find, it is

and filled-up storage compartment. The new door could be reached from the portico via a small, shabby staircase composed of reused worn slabs.

Martens 2007, 349 for removal of the pavement of the Western Colonnaded Street at Sagalassos; 350 for the west-east axis linking the eastern suburbia with the Library esplanade and Upper Town to the west; 353–354 for the north-south colonnaded street in between the Lower and Upper Agora.

¹³⁵ See note 104.

Waelkens et al. 2006, 233–235; Uytterhoeven et al. forthcoming.

That the expulsion and disposal of waste became problematic, suggests that there was no longer a civic administration, such as had previously taken care of this task (Waelkens *et al.* 2006, 235).

¹³⁸ Jacobs – Waelkens forthcoming a.

¹³⁹ Martens 2005, 249; Waelkens et al. 2006, 231–232.

¹⁴⁰ See, amongst others Whittow 2001; Jacobs 2013, 676–678.

For Sagalassos specifically, see Vanhaverbeke et al. 2004; Waelkens et al. 2006, 247–248; Vanhaverbeke et al. 2007, 635–640; Whittow 2001, 151.

tempting to link this sudden decline to the recurrent appearance of the Bubonic Plague from A.D. 541/2 onwards¹⁴². Whatever the cause or causes, it is certain that Sagalassos was drastically weakened in a short period of time. When the city was finally struck by an earthquake in the early seventh century A.D., large-scale occupation had already come to an end.

Post-Roman Occupation: A Definite Break with the Past

This major tremor caused the colonnades of the street to topple over onto the pavement. Fairly soon afterwards though, activities on the Colonnaded Street were resumed: at the upper end, in between the staircase leading to the Lower Agora and the intersection, larger fragments of column drums, capitals and so on were rolled against the borders of the street, indicating that there was still some traffic to and from the old city centre. This traffic may have already been linked to the Byzantine *kastron* that was emerging on the promontory to the south (*fig. 1*). Much of the collapse material of the shops and the colonnades, but also column shafts, elements of the bordering walls and possibly also of other neighbouring buildings were collected en masse and transported to the new building site¹⁴³. The collapsed portico and shop roofs as well as the shop walls ended up in the foundations and the fill of the fortification, while large architectural fragments such as columns, ashlars and so on were used in its wall faces. This spoliation especially affected the area to the south of the excavated intersection – thus one of the drums of the Hellenistic heart-shaped pillar ended up in the inner face of the north wall of the barrier wall – whereas the street section to the north appears to have been largely spared.

When rummaging around on the street, the Sagalassians must also have come across the remains of the statuettes. On the whole, they were apparently not very interested nor affected and left them where they fell. However, this was not the case for the naked female torso of Aphrodite. With the growing esteem of ascetic Christianity in the course of the fifth and certainly the sixth century, attitudes towards the human body had drastically changed. Sexual shame and avoidance of temptation in general are recurrent themes in Early Christian literature¹⁴⁴. As a consequence, mixed bathing was forbidden, and nude statues, regardless of their subject or function, became offensive¹⁴⁵. Although the statuette may have survived the sixth century in its elevated position, when the seventh-century population came across its remains lying on the street, they decided to permanently dispose of it. They threw the torso into the disused street fountain, into a pile of butchery refuse and ceramics, and covered it with a heavy column base (that until that time must still have been *in situ* on top of the bordering wall just to the north of the fountain cover), no doubt to make sure that it would never see daylight again.

A disease such as the Plague could have considerably reduced an urban population, including members of its local government, and would have made primary needs more pressing, see Stathakopoulos 2004, 146–165.

¹⁴³ Inside the foundations of the towers, massive amounts of ashlars, rubble and roof tiles mixed with a diversity of smaller artefacts deriving from the colonnaded street and its shops were found.

¹⁴⁴ Brown 1988, esp. 315–321; Markus 1990, 59–61. 81–82.

Jacobs 2010, 288; forthcoming. Some naked statues in bath buildings and nymphaea were adapted to suit Christian notions of nudity, meaning that the offending parts of the statues were hammered away, see Hannestad 2001 (also available online at http://www.archaeologie-sachbuch.de/Fleischer/index1.htm) for bath buildings; Auinger – Rathmayr 2007 mention several examples from the bath buildings and fountains at Ephesos.

Conclusion

Summarizing, the large-scale excavations and associated soundings on the main north-south Colonnaded Street of Sagalassos suggest the unified design and creation of a monumental colonnaded avenue in Asia Minor during the reign of Tiberius. Although later phases of refurbishment and renovation as well as Byzantine interventions in the area make it difficult to reconstruct this first-century street in detail, it could be established that, after passing underneath the decorative Tiberian South Gate in the south, visitors would have been faced with an almost 10 m broad and bright white avenue, directed towards the large Agora Gate, also Tiberian in date, in the north. From the very beginning, the street surface was flanked by (partially) colonnaded walkways on top of terraces and a row of shops at least along its west side. Little evidence remains of the original, probably Ionic colonnades, as some of them were replaced by more luxurious Corinthian columns in a refurbishment phase a century later, whereas additional columns and capitals must have been lost in later renovations such as that of the sixth century.

In contrast to the still partially hypothetical reconstruction of the thoroughfare in the first century, its appearance in the sixth century is much better known. In the second quarter of the sixth century, the colonnades were re-constituted with mismatched columns and piers placed on a variety of supports and bases, a new colonnade floor was begun, and the shops were probably reconstructed as well. In addition, part of the street pavement must have been replaced, whereas the staircase between the street and the Lower Agora was re-laid in its entirety several meters further to the south. Finally, this new street was further adorned with decorative monuments: the new monumental staircase was surmounted by a re-constructed decorative columnar monument; a new street fountain was put in place on the street itself; and, most remarkably, small-scale statuettes collected from elsewhere in the city were exhibited on both sides of the road.

The Sagalassos example shows that well into the sixth century A.D., the need was still felt to generate an impressive scenery for public events, for processions, for the reception of magistrates and so on, in both larger and smaller cities. This resulted in highly impressive, and admittedly somewhat peculiar-looking, urban spaces. Their creators obviously went to a lot of trouble, using inventive solutions when necessary. Statuary apparently remained the essential finishing touch. But the excavations also clarified that the large-scale rebuilding programme of the first half of the sixth century was interrupted long before its completion. Judging by the huge extent of the street renovation and considering the difficulties arising from around the mid-sixth century onwards, this is not all that surprising.

After the early seventh-century earthquake, nothing remained of the proud civic attitude manifested by the creation of the impressive ensemble less than a century earlier. The traffic flow to and from the city centre would soon be permanently blocked by the Byzantine barrier wall belonging to the new *kastron* to the south of the old city centre, the building materials of the Colonnaded Street were dragged to these new building sites, and the superstitious reaction to the naked torso of Aphrodite heralded the beginning of the »Dark Ages«.

Abstract: Excavations undertaken between 2005 and 2009 on the north-south Colonnaded Street of Sagalassos (southwest Turkey) have provided valuable information concerning the very early, Tiberian, planning and creation of such a street in Asia Minor. Moreover, after having functioned as the backbone of the town for almost five centuries, the street was thoroughly renovated. Its colonnades were reconstructed, the pavement repaired, a new staircase and a street fountain were installed, and a new statuary display was created. As such, it is also a rare example of a highly representative, sixth-century colonnaded street, as well as one of the last major civic undertakings in the entire Eastern Mediterranean. This article reconstructs the main building phases of the Colonnaded Street at Sagalassos in detail and puts them into context by comparing them with contemporaneous undertakings in and outside of Asia Minor.

Fünf Jahrhunderte Pracht. Die Nord-Süd-Säulenstrasse von Sagalassos im 1. und 6. Jh. n. Chr.

Zusammenfassung: Die von 2005 bis 2009 durchgeführten Grabungen an der Nord-Süd-Säulenstraße von Sagalassos (SW-Türkei) erbrachten angesichts der Datierung in tiberische Zeit wertvolle Hinweise im Hinblick auf die sehr frühe Planung und Entstehung solch einer Straße in Kleinasien. Nach einer Nutzung von nahezu fünf Jahrhunderten wurde die Säulenstraße nicht zuletzt wegen ihrer zentralen urbanistischen Bedeutung vollständig erneuert. Die Maßnahmen umfassten den Neuaufbau der Kolonnaden, die Ausbesserung des Straßenpflasters, die Errichtung einer neuen Treppe und eines Straßenbrunnens sowie die Neuaufstellung von Skulpturen. Als eines der seltenen Beispiele repräsentativer Säulenstraßen des 6. Jahrhunderts zählt die Nord-Süd-Säulenstraße von Sagalassos zu den letzten großen urbanistischen Unternehmungen der Spätantike im östlichen Mittelmeerraum. Der Beitrag widmet sich der Rekonstruktion der Hauptbauphasen der Säulenstraße von Sagalassos und stellt diese nach einer vergleichenden Analyse in Zusammenhang mit zeitgleichen Projekten in und außerhalb Kleinasiens.

Beş Yüzyıl Boyunca İhtişam. Sagalassos'da MS 1. ve 6. Yüzyıllarda Kuzey Güney Doğrultulu Sütunlu Cadde

Özet: 2005 ve 2009 yılları arasında Sagalassos'da kuzey-güney doğrultulu sütunlu caddede yürütülen kazı calışmalarıyla Tiberius dönemine tarihlendirilmesiyle cadde Küçük Asya'da bu tür bir caddenin erken planlama ve oluşumu hakkında önemli bulgular ortaya çıkartmıştır. Yaklaşık beş yüzyıllık bir kullanımdan sonra şehrin belkemiği olan bu cadde kapsamlı olarak yenilenmiştir. Yenileme işlemleri arasında sütu sıralarının yeniden yapımı, yol döşemesinin onarımı, yeni bir merdivenin ve çeşmenin oluşumu ve yeni heykellerin yerleştirilmesi yer almaktadır. Yüksek prestijli altıncı yüzyıl sütunlu caddelerinin nadir bir örneğini oluşturan bu cadde, Doğu Akdeniz bölgesinde, Geç Antik dönemin en geç kentsel projelerinden birisini teşkil etmektedir. Makale, Sagalassos'taki sütunlu caddenin başlıca yapılaşma dönemlerini saptayarak ve karşılastırıcı bir analizden sonra Küçük Asya'da ve dışında bulunan çağdaş yapı projeleriyle ilişkilendirmektedir.

Bibliography

| Alzinger 1972–1975 | W. Alzinger, Das Regierungsviertel, ÖJh 50 Beibl., 1972–1975, 229–300 |
|--|---|
| Auinger – Rathmayr 2007 | J. Auinger – E. Rathmayr, Zur spätantiken Statuenausstattung der Thermen und Nymphäen in Ephesos, in: Bauer – Witschel 2007, 237–269 |
| Avi-Yonah 1970 | M. Avi-Yonah, The Caesarea Porphyry Statue, IEJ 20, 1970, 203–208 |
| Bagnall et al. 2011 | R. Bagnall – K. Brodersen – C. B. Champion – A. Erskine – S. R. Huebner (eds), Encyclopedia of Ancient History (Oxford 2011) |
| Balty 1969 | J. Balty, Apamée de Syrie. Bilan des recherches archéologiques 1965–1968. Actes du colloque tenu à Bruxelles les 29 et 30 avril 1969 (Brussels 1969) |
| Balty 1981 | JCh. Balty, Guide d'Apamée (Brussels 1981) |
| Balty 1994 | JCh. Balty, Grande colonnade et quartiers nord d'Apamée à la fin de l'époque hellénistique, CRAI 90, 1994, 77–101 |
| Bassett 2004 | S. Bassett, The Urban Image of Late Antique Constantinople (Cambridge 2004) |
| Bauer – Witschel 2007 | F. A. Bauer – C. Witschel (eds), Statuen in der Spätantike. Akten des Internationalen Workshops in München am 11. und 12. Juni 2004, Spätantike – Frühes Christentum – Byzanz. Kunst im ersten Jahrtausend. Reihe B: Studien und Perspektiven 23 (Wiesbaden 2007) |
| | |
| Bejor 1999 | G. Bejor, Vie colonnate. Paesaggi urbani del mondo antico, RdA Suppl. 22 (Rome 1999) |
| Bejor 1999 Bell – Rouché 2007 | , |
| · | (Rome 1999) R. C. Bell – C. M. Roueché, Pavement Signs and Game Boards of the |
| Bell – Rouché 2007 | (Rome 1999) R. C. Bell – C. M. Roueché, Pavement Signs and Game Boards of the Graeco-Roman World, in: Finkel 2007, 105–108 |
| Bell – Rouché 2007 Bent 1891 | (Rome 1999) R. C. Bell – C. M. Roueché, Pavement Signs and Game Boards of the Graeco-Roman World, in: Finkel 2007, 105–108 J. T. Bent, Recent Discoveries in Eastern Cilicia, JHS 11, 1891, 231–235 Ch. Berns – H. von Hesberg – L. Vandeput – M. Waelkens, Patris und Imperium. Kulturelle und politische Identität in den Städten der römischen |
| Bell – Rouché 2007 Bent 1891 Berns <i>et al.</i> 2002 | (Rome 1999) R. C. Bell – C. M. Roueché, Pavement Signs and Game Boards of the Graeco-Roman World, in: Finkel 2007, 105–108 J. T. Bent, Recent Discoveries in Eastern Cilicia, JHS 11, 1891, 231–235 Ch. Berns – H. von Hesberg – L. Vandeput – M. Waelkens, Patris und Imperium. Kulturelle und politische Identität in den Städten der römischen Provinzen Kleinasiens in der frühen Kaiserzeit (Leuven 2002) Ph. Bes – I. Jacobs – M. Waelkens, Sagalassos VII. The Upper and Lower Agora. Final Report on the Buildings along the Long Sides of the City |
| Bell – Rouché 2007 Bent 1891 Berns et al. 2002 Bes et al. forthcoming | (Rome 1999) R. C. Bell – C. M. Roueché, Pavement Signs and Game Boards of the Graeco-Roman World, in: Finkel 2007, 105–108 J. T. Bent, Recent Discoveries in Eastern Cilicia, JHS 11, 1891, 231–235 Ch. Berns – H. von Hesberg – L. Vandeput – M. Waelkens, Patris und Imperium. Kulturelle und politische Identität in den Städten der römischen Provinzen Kleinasiens in der frühen Kaiserzeit (Leuven 2002) Ph. Bes – I. Jacobs – M. Waelkens, Sagalassos VII. The Upper and Lower Agora. Final Report on the Buildings along the Long Sides of the City Squares (Leuven forthcoming) N. Birke – I. Domes – S. Fähndrich – A. Nießner – T. Reiß – A. Zschätzsch |

| Bowersock et al. 2001 | G. Bowersock – P. Brown – O. Grabar (eds), Interpreting Late Antiquity. Essays on the Postclassical World (Cambridge, MA 2001) |
|-----------------------------------|--|
| Brands – Severin 2003 | G. Brands – HG. Severin (eds), Die spätantike Stadt und ihre Christianisierung. Symposion vom 14. bis 16. Februar 2000 in Halle/Saale, Spätantike – Frühes Christentums – Byzanz. Kunst im ersten Jahrtausend. Reihe B: Studien und Perspektiven 11 (Wiesbaden 2003) |
| Brandt et al. 2005 | B. Brandt – V. Gassner – S. Ladstätter, Synergia. Festschrift für Friedrich Krinzinger (Vienna 2005) |
| Brown 1988 | P. Brown, The Body and Society. Men, Women and Sexual Renunciation in Early Christianity (New York 1988) |
| Brown 1992 | P. Brown, Power and Persuasion in Late Antiquity. Towards a Christian Empire (Madison 1992) |
| Chankowski – Karvonis 2012 | V. Chankowski – P. Karvonis (eds), Tout vendre, tout acheter. Structures et équipements des marchés antiques. Actes du colloque d'Athènes, 16–19 juin 2009, Scripta Antiqua 42 (Paris 2012) |
| Crouch 1993 | D. P. Crouch, Water Management in Ancient Greek Cities (New York – Oxford 1993) |
| Dally – Ratté 2011 | O. Dally – C. Ratté (eds), Archaeology and the Cities of Asia Minor in Late Antiquity, Kelsey Museum Publication 6 (Ann Arbor, MI 2011) |
| De Bernardi Ferrero 1963– 1964 | D. De Bernardi Ferrero, L'architettura monumentale della porta d'onore e della cosiddetta via colonnata a Hierapolis di Frigia, ASAtene 41–42, 1963–1964, 391–407 |
| De Chaisemartin – Lemaire 1996 | N. De Chaisemartin – A. Lemaire, Le Portique de Tibère. Recherches sur son architecture et sa fonction, in: Roueché – Smith 1996, 149–172 |
| De Cupere et al. 2009 | B. De Cupere – S. Thys – W. Van Neer – A. Ervynck – M. Corremans – M. Waelkens, Eagle Owl (Bubo bubo) Pellets from Roman Sagalassos (SW Turkey). Distinguishing the Prey Remains from Nest and Roost Sites, International Journal of Osteoarchaeology 19, 2009, 1–22 |
| Demoen 2001 | K. Demoen (ed.), The Greek City from Antiquity to the Present. Historical Reality, Philosophical Concept, Literary Representation (Leuven 2001) |
| Dobesch – Reherenböck 1993 | G. Dobesch – G. Reherenböck (eds), Hundert Jahre kleinasiatische Kommission des Österreichischen Archäologischen Instituts, Akten des Symposiums 1990 (Vienna 1993) |
| Duval – Popović 1984 | N. Duval – V. Popović (eds), Caričin Grad. Les Basiliques B et J de Caričin Grad. Quatre objets remarquables de Caričin Grad. Le trésor de Hajducka Vodenica (Belgrade – Rome 1984) |
| Finkel 2007 | I. Finkel (ed.), Ancient Board Games (London 2007) |

Foerster -Tsafrir 1993 G. Foerster - Y. Tsafrir, The Bet She'an Excavation Project (1989–1991), ExcIsr 11, 1993, 2-32 Foss - Hanfmann 1975 C. Foss - G. M. A. Hanfmann, Regional Setting and Urban Development, in: Hanfmann - Waldbaum 1975, 17-34 Frantz 1988 A. Frantz, Late Antiquity, A.D. 267-700, Agora 24 (Princeton 1988) Gazda 1981 E. K. Gazda, A Marble Group of Ganymede and the Eagle from the Age of Augustine, in: Humphrey 1981, 125-178 Gersht 1984 R. Gersht, The Tyche of Caesarea Maritime, PEQ 1984, 110-114 Gough 1952 M. Gough, Anazarbus, AnSt 2, 1952, 85-150 Gros 1996 P. Gros, L'architecture romaine du début du IIIe siècle av. J.-C. à la fin du Haut-Empire. 1. Les monuments publics (Paris 1996) Grossmann 1991 P. Grossmann, Abu Mina. 12. Vorläufiger Bericht. Kampagne 1984–1986, AA 1991, 457-486 Guyon - Cardi 1984 J. Guyon - G. Cardi, L'église B dite Basilique cruciforme, in: Duval -Popović 1984, 1–90 Halfmann 2001 H. Halfmann, Städtebau und Bauherren im römischen Kleinasien. Ein Vergleich zwischen Pergamon und Ephesos, IstMitt Beih. 43 (Tübingen Hanfmann 1983 G. M. A. Hanfmann, Sardis from Prehistoric to Roman Times. Results of the Archaeological Exploration of Sardis, 1958-1975 (Cambridge, MA 1983) Hanfmann – Waldbaum G. M. A. Hanfmann - J. C. Waldbaum (eds), A Survey of Sardis and the 1975 Major Monuments Outside the City Wall, Archaeological Exploration of Sardis 1 (Cambridge - London 1975) Hannestad 2001 N. Hannestad, Castration in the Baths, in: Birke et al. 2001, 66-77 Hannestad 2007 N. Hannestad, Late Antique Mythological Sculpture. In Search of a Chronology?, in: Bauer - Witschel 2007, 273-306 Harris 1999 W. V. Harris (ed.), The Transformations of Urbs Roma in Late Antiquity. The Proceedings of a Conference Held at the University of Rome la Sapienza and at the American Academy in Rome, JRA Suppl. 33 (Portsmouth 1999) Heinzelmann 2003 M. Heinzelmann, Städtekonkurrenz und kommunaler Bürgersinn. Die Säulenstraße von Perge als Beispiel monumentaler Stadtgestaltung durch

Hodge 1992 A. T. Hodge, Roman Aqueducts and Water Supply (London 1992)

Hohlfelder 1982 R. L. Hohlfelder, City, Town and Countryside in the Early Byzantine Era

kollektiven Euergetismus, AA 2003, 197-220

(New York 1982)

| Holum 2003 | K. G. Holum, The Christianizing of Caesarea Palaestinae, in: Brands – Severin 2003, 151–164 |
|------------------------------------|--|
| Holum et al. 1988 | K. G. Holum – R. L. Hohlfelder – R. J. Bull, King Herod's Dream. Caesarea on the Sea (New York 1988) |
| Humphrey 1981 | J. H. Humphrey (ed.), Excavations at Carthage Conducted by the University of Michigan 4 (Ann Arbor 1981) |
| Jacobs 2010 | I. Jacobs, From Production to Destruction? Pagan and Mythological Statuary in Late Antique Asia Minor, AJA 114, 2010, 267–303 |
| Jacobs 2011 | I. Jacobs, Recovery and Fall of Late Antique Sagalassos, AW 2011.3, 76–80 |
| Jacobs 2012 | I. Jacobs, A Tale of Prosperity. Asia Minor in the Theodosian Period, Byzantion 82, 2012, 113–164 |
| Jacobs 2013 | I. Jacobs, Aesthetic Maintenance of Civic Space. The >Classical City from the 4th to the 7th c. A. D., Orientalia Lovaniensia Analecta 193 (Leuven 2013) |
| Jacobs forthcoming | I. Jacobs, Old Habits Die Hard. A Group of Mythological Statuettes from Sagalassos and the Afterlife of Sculpture in Asia Minor, in: Kristensen – Stirling forthcoming |
| Jacobs – Richard 2012 | I. Jacobs – J. Richard, »We Surpass the Beautiful Waters of Other Cities by the Abundance of Ours«. Reconciling Function and Decoration in Late Antique Fountains, Journal of Late Antiquity 5, 2012, 3–71 |
| Jacobs – Waelkens forthcoming a | I. Jacobs – M. Waelkens, The Lower Agora. Stratigraphy, Architectural Description and Building Chronology, in: Bes <i>et al.</i> forthcoming |
| Jacobs – Waelkens forthcoming b | I. Jacobs – M. Waelkens, The West Portico of the Upper Agora. Stratigraphy, Architectural Description and Building Chronology, in: Bes <i>et al.</i> forthcoming |
| Jacobs et al. in preparation | I. Jacobs – L. Stirling – M. Waelkens, A Sixth-Century Statuary Display at Sagalassos, JRA in preparation |
| Jansen 2000 | G. C. M. Jansen, Urban Water Transport and Distribution, in: Wikander 2000, 103–126 |
| Knibbe 1985 | D. Knibbe, Der Asiarch M. Fulvius Publicianus Nikephoros, die ephesischen Handwerkszünfte und die Stoa des Servilius, ÖJh 56, 1985, 71–77 |
| Kollwitz et al. 1964 | J. Kollwitz – W. Wirth – W. Karnapp, Die Grabungen in Resafa. 3. Vorbericht, AAS 14, 1964, 5–108 |
| Krause – Witschel 2006 | JU. Krause – C. Witschel (eds), Die Stadt in der Spätantike. Niedergang oder Wandel? Akten des internationalen Kolloquiums in München am 30. und 31. Mai 2003, Historia Einzelschrift 190 (Stuttgart 2006) |
| Krinzinger – Reiter 1993 | F. Krinzinger – W. Reiter, Archäologische Forschungen in Hierapolis Kastabala, in: Dobesch – Reherenböck 1993, 269–281 |

63, 2013

Kristensen 2010 T. M. Kristensen, The Display of Statues in the Late Antique Cities of the Eastern Mediterranean. Reflections on Memory, Meaning, and Aesthetics, in: Sami - Speed 2010, 265-291 Kristensen – Stirling T. M. Kristensen - L. Stirling (eds), The Afterlife of Roman Sculpture. Late forthcoming Antique Reception and Response (Ann Arbor forthcoming) Lanckoroński 1893 C. Lanckoronski, Les villes de la Pamphylie et de la Pisidie 2. La Pisidie (Paris 1893) Lassus 1976 J. Lassus, Quelques remarques sur les rues à portiques, in: Schlumberger - Seyrig 1976, 175-189 Lauffray 1991 J. Lauffray, Halabiyya-Zenobia. Place forte du Limes Oriental et la Haute-Mésopotamie au VI siècle. 2. L'Architecture publique, religieuse, privée et funéraire, Bibliothèque Archéologique et Historique 138 (Paris 1991) Lavan 2001 L. Lavan (ed.), Recent Research in Late-Antique Urbanism, JRA Suppl. 42 (Portsmouth 2001) Lavan et al. 2007 L. Lavan – E. Zanini – A. Sarantis (eds), Technology in Transition A.D. 300-650, Late Antique Archaeology 4 (Leiden 2007) C. Lepelley, Le musée des statues divines. La volonté de sauvegarder le Lepelley 1994 patrimoine artistique païen à l'époque théodosienne, CArch 42, 1994, 5-15 Liebeschuetz 1995/1996 J. H. W. G. Liebeschuetz, Pagan Mythology in the Christian Empire, IntJClTrad 2, 1995/1996, 193-208 M. Lyttelton, Baroque Architecture in Classical Antiquity (London 1974) Lyttleton 1974 MacDonald 1986 W. MacDonald, The Architecture of the Roman Empire. 2. An Urban Appraisal (New Haven 1986) S. Mägele, Die Skulpturen von Sagalassos. Funktionen und Kontexte, Stud-Mägele forthcoming ies in Eastern Mediterranean Archaeology 11 (Turnhout forthcoming) Mägele et al. 2007 S. Mägele – J. Richard – M. Waelkens, A Late-Hadrianic Nymphaeum at Sagalassos (Pisidia, Turkey), IstMitt 57, 469-504 H. Maguire, The Good Life, in: Bowersock et al. 2001, 238–257 Maguire 2001 Mansel 1963 A. M. Mansel, Die Ruinen von Side (Berlin 1963) Mansel 1968 A. M. Mansel, Osttor und Waffenreliefs von Side (Pamphylien), AA 1968, 239-279 Mansel et al. 1956 A. M. Mansel - G. Bean - J. İnan, Die Agora von Side und die benachbarten Bauten. Bericht über die Ausgrabungen im Jahre 1948, TTKY 15 = Untersuchungen in der Gegend von Antalya 4 (Ankara 1956) Markus 1990 R. A. Markus, The End of Ancient Christianity (Cambridge 1990) Martens 2001 F. Martens, Urban Water Management at Sagalassos. Studying Urban

Development from an Hydrological Perspective, in: Demoen 2001, 49–86

| Martens 2004 | F. Martens, Interdisciplinary Research Concerning the Urban Development of Sagalassos. Settlement Development, Urban Layout and Infrastructure (PhD diss. Katholieke Universiteit Leuven 2004) |
|----------------------------|--|
| Martens 2005 | F. Martens, The Archaeological Urban Survey of Sagalassos (SW Turkey). The Possibilities and Limitations of Surveying a Non-typical Classical Site, OxfJA 24.3, 2005, 229–254 |
| Martens 2006 | F. Martens, The Diachronic Research of Urban Water Management at Sagalassos (SW Turkey), in: Wiplinger 2006, 165–174 |
| Martens 2007 | F. Martens, Late Antique Urban Streets at Sagalassos, in: Lavan <i>et al.</i> 2007, 321–365 |
| Martens 2008 | F. Martens, Water Abundance and Shortage at Sagalassos (SW-Turkey), in: Ohlig 2008, 247–262 |
| Martens et al. forthcoming | F. Martens - E. Owens - M. Waelkens, Sagalassos, in: Owens forthcoming |
| Mertens 1969 | J. Mertens, Sondages dans la grande colonnade et sur l'enceinte, in: Balty 1969, 61–74 |
| Mitchell 1995 | S. Mitchell, Cremna in Pisidia. An Ancient City in Peace and War (London 1995) |
| Mitchell – Waelkens 1998 | S. Mitchell – M. Waelkens, Pisidian Antioch. The Site and its Monuments (Swansea 1998) |
| Ohlig 2008 | C. Ohlig (ed.), Cura Aquarum in Jordanien. Proceedings of the 13th International Conference on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Petra/Amman, 31 March – 9 April 2007 (Siegburg 2008) |
| Opper forthcoming | T. Opper (ed.), Hadrian. Proceedings of a British Museum Conference, 16th–18th December 2009 (London forthcoming) |
| Owens 1995 | E. J. Owens, The Aqueducts of Sagalassos, in: Waelkens – Poblome 1995, 91–112 |
| Owens forthcoming | E. Owens (ed.), The Water Systems of Pisidian Towns (Cardiff forthcoming) |
| Peschlow-Bindokat 1975 | A. Peschlow-Bindokat, Zur Säulenstraße von Pompeiopolis in Kilikien, IstMitt 25, 1975, 373–391 |
| Poulter 2007 | A. Poulter, The Transition to Late Antiquity. The City, the Fortress and the Countryside, Proceedings of the British Academy 141 (Oxford 2007) |
| Radt 2006 | W. Radt, Stadtgrabungen und Stadtforschung im westlichen Kleinasien. Geplantes und Erreichtes. Internationales Symposion 6./7. August 2004 in Bergama (Türkei), Byzas 3 (Istanbul 2006) |
| Ramsey 1883 | W. M. Ramsay, Unedited Inscriptions of Asia Minor, BCH 7, 1883, 258–328 |

63, 2013

Segal 1997

Rautman 2011 M. Rautman, Sardis in Late Antiquity, in: Dally - Ratté 2011, 1-26 Reiter 1992 W. Reiter, Die Säulenstraßen Kleinasiens. Bemerkungen zur städtischen Raumplanung in römischer und frühbyzantinischer Zeit (degree diss. Vienna 1992) Richard - Waelkens 2012 J. Richard - M. Waelkens, Le macellum de Sagalassos. Un marché »romain« dans les montagnes du Taurus? Compte-rendu préliminaire des fouilles archéologiques menées depuis 2005, in: Chankowski - Karvonis 2012, 83-104 Roueché – Smith 1996 C. Roueché – R. R. R. Smith (eds), Aphrodisias Papers 3. The Setting and Quarries, Mythological and other Sculptural Decoration, Architectural Development, Portico of Tiberius, and Tetrapylon, JRA Suppl. 20 (Ann Arbor 1996) Salzman 1999 M. Salzman, The Christianization of Sacred Time and Space, in: Harris 1999, 123-134 D. Sami - G. Speed, Debating Urbanism Within and Beyond the Walls Sami – Speed 2010 A.D. 300–700, Leicester Archaeology Monograph 17 (Leicester 2012) Saradi 1997 H. Saradi, The Use of Ancient Spolia in Byzantine Monuments. The Archaeological and Literary Evidence, IntJClTrad 3, 1997, 395-423 Saradi-Mendelovici 1990 H. Saradi-Mendelovici, Christian Attitudes toward Pagan Monuments in Late Antiquity and their Legacy in Later Byzantine Centuries, DOP 44, 1990, 47-61 Schlumberger - Seyrig 1976 D. Schlumberger - H. Seyrig (eds), Palmyre. Bilan et perspectives (Strasbourg 1976) Schmidt 2003 V. M. Schmidt, Statues, Idols and Nudity. Changing Attitudes to Sculpture from the Early Christian Period to the Counter-Reformation, in: Schmidt - von Martels 2003, 211-229 Schmidt – von Martels 2003 V. M. Schmidt – Z. R. W. M. von Martels, Antiquity Renewed. Late Classical and Early Medieval Themes (Leuven 2003) Schmidt-Colinet 2004 A. Schmidt-Colinet (ed.), Lokale Identitäten in Randgebieten des römischen Reiches. Akten des Internationalen Symposiums, Wien 2003, Wiener Forschungen zur Archäologie 7 (Vienna 2004) Schneider 1999 P. Schneider, Bauphasen der Arkadiane, in: H. Friesinger – F. Krinzinger (eds), 100 Jahre Österreichische Forschungen in Ephesos. Akten des Symposions Wien 1995, AF 1 (Vienna 1999)

A. Segal, From Function to Monument. Urban Landscapes of Roman

Palestine, Syria and Provincia Arabia (Oxford 1997)

| Similox-Tohon et al. 2006 | D. Similox-Tohon – M. Sintubin – P. Muchez – G. Verhaert – K. Vanneste – M. Fernandez – S. Vandycke – H. Vanhaverbeke – M. Waelkens, The Identification of an Active Fault by a Multidisciplinary Study at the Archaeological Site of Sagalassos (SW Turkey), Tectonophysics 420, 2006, 371–387 |
|--|---|
| Sintubin et al. 2003 | M. Sintubin – P. Muchez – D. Similox-Tohon – G. Verhaert – E. Paulissen – M. Waelkens, Seismic Catastrophes at the Ancient City of Sagalassos (SW Turkey) and their Implications for Seismotectonics in the Burdur-Isparta Area, Geological Journal 38, 2003, 359–374 |
| Slootjes 2006 | D. Slootjes, The Governor and his Subjects in the Later Roman Empire, Mnemosyne Suppl. 275 (Leiden – Boston 2006) |
| Smith 1990 | R. R. R. Smith, Late Roman Philosopher Portraits from Aphrodisias, JRS 80, 1990, 127–155 |
| Stathakopoulos 2004 | D. C. Stathakopoulos, Famine and Pestilence in the Late Roman and Early Byzantine Empire (Aldershot 2004) |
| Stewart 2003 | P. Stewart, Statues in Roman Society. Representation and Response (Oxford 2003) |
| Stirling 2005 | L. M. Stirling, The Learned Collector. Mythological Statuettes and Classical Taste in Late Antique Gaul (Ann Arbor 2005) |
| Tabaczek 2002 | M. Tabaczek, Zwischen Stoa und Suq. Die Säulenstraßen im Vorderen Orient in römischer Zeit unter besonderer Berücksichtigung von Palmyra (PhD diss. Universität zu Köln 2002) |
| Tabaczek 2004 | M. Tabaczek, Die Säulenstraßen des Vorderen Orients, in: Schmidt-Colinet 2004, 209–221 |
| Talloen – Poblome 2005 | P. Talloen – J. Poblome, What Were They Thinking of? Relief Decorated Pottery from Sagalassos. A Cognitive Approach, MEFRA 117, 2005, 55–81 |
| Talloen – Waelkens 2004 | P. Talloen – M. Waelkens, Apollo and the Emperors I. The Material Evidence for the Imperial Cult at Sagalassos, AncSoc 34, 171–216 |
| Tsafrir 2003 | Y. Tsafrir, The Christianization of Bet Shean (Scythopolis) and its Social-cultural Influence on the City, in: Brands – Severin 2003, 275–284 |
| Tsafrir – Foerster 1997 | Y. Tsafrir – G. Foerster, Urbanism at Scythopolis. Bet Shean in the Fourth to Seventh Centuries, DOP 51, 1997, 85–146 |
| Uytterhoeven <i>et al.</i> forthcoming | I. Uytterhoeven – H. Kökten – V. Muros – M. Waelkens, Bits and Pieces. Wall Paintings in the Late-Antique Urban Mansion of Sagalassos (Ağlasun, Burdur – Turkey), in: Zimmermann forthcoming |
| Vandeput 1997 | L. Vandeput, The Architectural Decoration in Roman Asia Minor. Sagalassos: A Case Study, Studies in Eastern Mediterranean Archaeology 1 (Turnhout 1997) |

| Vanhaverbeke <i>et al.</i> 2004 | H. Vanhaverbeke – F. Martens – M. Waelkens – J. Poblome, Late Antiquity in the Territory of Sagalassos, in: Bowden <i>et al.</i> 2004, 247–279 |
|---------------------------------|--|
| Vanhaverbeke <i>et al.</i> 2007 | H. Vanhaverbeke – F. Martens – M. Waelkens, What Survey Can Tell. Changes in the Cityscape of Sagalassos (Pisidia, SW Turkey) in Late Antiquity, in: Poulter 2007, 611–648 |
| Vann 1982 | R. L. Vann, Byzantine Street Construction in Caesarea Maritima, in: Hohlfelder 1982, 165–198 |
| Verzone 1957 | P. Verzone, Città ellenistiche e romane dell' Asia Minore. Hierapolis-Catabala, Tarso, Soli-Pompeiopolis, Kanytelleis, Palladio 7, 1957, 54–68 |
| Vionis et al. 2010 | A. K. Vionis – J. Poblome – B. De Cupere – M. Waelkens, A Middle-Late Byzantine Pottery Assemblage from Sagalassos. Typo-Chronology and Sociocultural Interpretation, Hesperia 79, 2010, 423–464 |
| Waelkens 1999 | M. Waelkens, Marble, in: Bowersock et al. 1999, 559-562 |
| Waelkens 2001 | M. Waelkens, Die Forschungen in Sagalassos. Ein Versuch zu einer interdisziplinären Archäologie, NüBlA Sonderdruck 17, 2001, 63–82 |
| Waelkens 2002a | M. Waelkens, Romanization in the East. A Case Study: Sagalassos and Pisidia (SW Turkey), IstMitt 52, 2002, 311–368 |
| Waelkens 2002b | M. Waelkens, The Transformation of the Public and Sacred Landscapes in Early Imperial Sagalassos, in: Berns <i>et al.</i> 2002, 63–75 |
| Waelkens 2004 | M. Waelkens, Ein Blick von der Ferne. Seleukiden und Attaliden in Pisidien, IstMitt 54, 2004, 435–471 |
| Waelkens 2005a | M. Waelkens, Provincial Capitals and Hinterland Cities. A Dialogue at Sagalassos, in: Brandt <i>et al.</i> 2005, 377–386 |
| Waelkens 2005b | M. Waelkens, The 2003 Excavation and Restoration Season at Sagalassos, KST 26.1, 2005, 421–438 |
| Waelkens 2006 | M. Waelkens, Sagalassos 1990–2004. A Balance of Fifteen Years of Urban Excavations and Research, in: Radt 2006, 325–286 |
| Waelkens 2008 | M. Waelkens, Sagalassos. Jaarboek 2008. Het kristallen jubileum van twintig jaar opgravingen (Leuven 2008) |
| Waelkens 2009 | M. Waelkens, Report on the 2006 and 2007 Excavation and Restoration Activities at Tepe Düzen and at Sagalassos, KST 30.3, 2009, 427–456 |
| Waelkens 2011a | M. Waelkens, Sagalassos, in: Bagnall et al. 2011 |
| Waelkens 2011b | M. Waelkens, »Erste Stadt Pisidiens, Freund und Bundgenosse der Römer«. Neue Forschungen in Sagalassos, AW 2011.3, 62–71 |
| Waelkens – Poblome 1995 | M. Waelkens – J. Poblome (eds), Sagalassos III. Report on the Fourth Excavation Campaign of 1993, ActaALovMono 7 (Leuven 1995) |

Waelkens – Poblome 1997 M. Waelkens – J. Poblome (eds), Sagalassos IV. Report on the Survey and Excavation Campaign of 1994 and 1995, Acta ALov Mono 9 (Leuven 1997) Waelkens - Loots 2000 M. Waelkens – L. Loots (eds), Sagalassos V. Report on the Survey and Excavation Campaigns of 1996 and 1997, ActaALovMono 11 (Leuven 2000) Waelkens - Mägele M. Waelkens - S. Mägele, The Colossal Statue of Hadrian from the Roforthcoming man Baths at Sagalassos. Typology, Function, Political Context, in: Opper forthcoming Waelkens et al. 1990 M. Waelkens – S. Mitchell – E. Owens, Sagalassos 1989, AnSt 40, 1990, 185 - 198Waelkens et al. 1997 M. Waelkens – P.-M. Vermeersch – E. Paulissen – E. J. Owens – B. Arıkan – M. Martens – P. Talloen – L. Gijsen – L. Loots – C. Peleman – J. Poblome – R. Degeest - T. C. Patricio - S. Ercan - F. Depuydt, The 1994 and 1995 Excavation Seasons at Sagalassos, in: Waelkens - Poblome 1997, 103-216 Waelkens et al. 2000 M. Waelkens – J. Poblome – E. Paulissen – P. Talloen – J. Van Den Bergh – V. Vanderginst - B. Arıkan - I. Van Damme - İ. Akyel - F. Martens -M. Martens – I. Uytterhoeven – T. Debruyne – D. Depraetere – K. Baran – B. Vandaele – Z. Parras – S. Yıldırım – S. Bubel – H. Vanhaverbeke – C. Licoppe - F. Landuyt - R. Degeest - L. Vandeput - L. Loots - T. Patricio - S. Ercan - K. Van Balen - E. Smits - F. Depuydt - L. Moens - P. De Paepe, The 1996 and 1997 Excavation Seasons at Sagalassos, in: Waelkens – Loots 2000, 217-398 Waelkens et al. 2006 M. Waelkens – H. Vanhaverbeke – F. Martens – P. Talloen – J. Poblome – N. Kellens - T. Putzeys - P. Degryse - T. Van Thuyne - W. Van Neer, The Late Antique City in Southwest Anatolia. A Case Study: Sagalassos and its Territory, in: Krause - Witschel 2006, 199-255 Waelkens et al. 2011 M. Waelkens – K. Vyncke – H. Vanhaverbeke – D. Braekmans – J. Poblome – V. Lauwers – I. Jacobs – J. Claeys – M. Lefere – H. Uzunoğlu – J. Richard – K. Schuitema – I. Uytterhoeven – E. Murphy – R. Willet – E. Torun – S. Ercan, Sagalassos 2008 ve 2009 Kazı ve Restorasyon Sezonları, KST 32.3, 2011, 263-281 Waelkens et al. 2012a M. Waelkens – J. Poblome – R. Rens – E. Murphy – I. Uytterhoeven – E. Torun – J. Richard – G. Üner – T. Işıklar – P. Degryse – E. Risser – S. Ercan – J. Theelen, Sagalassos 2010 Yılı Kazı ve Restorasyon Çalışmaları, KST 33.3, 2012, 239-265 Waelkens et al. 2012b M. Waelkens en het Sagalassosteam, Sagalassos. Jaarboek 2011–2012. Twee jaren van succes. De onderzoeks- en opgravingscampagnes in 2011 en 2012 (Leuven 2012) Waelkens et al. 2013 M. Waelkens - K. Vyncke - J. Claeys - J. Poblome - J. Richard - R. Rens -

E. Murphy – I. Uytterhoeven – R. Van Beeumen – I. Jacobs – S. Ercan, Sagalassos 2011 Kazı ve Restorasyon Sezonu, KST 34.3, 2013, 139–158

Wiplinger 2006

Ward-Perkins 1974 J.-B. Ward-Perkins, Cities of Ancient Greece and Italy. Planning in Classical Antiquity (New York 1974) Ward-Perkins 1981 J.-B. Ward-Perkins, Roman Imperial Architecture, The Pelican History of Art (London 1981) Watts 2004 E. Watts, Justinian, Malalas, and the End of Athenian Philosophical Teaching in A. D. 529, JRS 94, 2004, 168–182 Wenning 1986 R. Wenning, Die Stadtgöttin von Caesarea Maritima, Boreas 9, 1986, 113–129 Whittow 2001 M. Whittow, Recent Research on the Late-Antique City in Asia Minor. The Second Half of the 6th Century Revisited, in: Lavan 2001, 137–153 Wiemken - Holum 1981 R. C. Wiemken - K. G. Holum, The Joint Expedition to Caesarea Maritima. Eight Season 1979, BASOR 244, 1981, 27-52 Wikander 2000 Ö. Wikander (ed.), Handbook of Ancient Water Technology, Technology and Change in History 2 (Leiden 2000)

G. Wiplinger (ed.), Cura Aquarum in Ephesus: Proceedings of the Twelfth International Congress on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Ephesus/Selçuk, Turkey,

October 2-10, 2004 (Leuven 2006)

Yegül 1986 F. K. Yegül, The Bath-Gymnasium Complex at Sardis, Archaeological

Exploration of Sardis Reports 3 (Cambridge, MA 1986)

Zimmermann forthcoming N. Zimmermann (ed.), Proceedings of the XI. Internationales Kolloquium

der AIPMA (Association internationale pour la peinture murale antique)

– Antike Malerei zwischen Lokalstil und Zeitstil? 13.–17. September 2010

- Ephesos/Selçuk - Türkei (Vienna forthcoming)

INHALT

| Metin Alparslan, In Memoriam Ali Dinçol |
|--|
| Martin Bachmann, In Memoriam Oktay Aslanapa |
| Daniel Schwemer, In Memoriam Heinrich Otten |
| Martin Bachmann, Das ehemalige deutsche Generalkonsulat. Zeuge der kosmopolitischen Vergangenheit İzmirs |
| Hülya Bulut, Westabhangkeramik aus Daskyleion |
| Eva Christof, Neufund aus Istanbul/Byzantion: Eine hellenistische Grabstele einer Priesterin der Artemis von Sardis |
| Francesco D'Andria, Das <i>Ploutonion</i> von Hierapolis in Phrygien |
| Burkhard Емме, »Das Märchen von den drei Märkten«. Bauten merkantiler Funktion und die städtebauliche Entwicklung des hellenistischen Milet |
| Maryl B. Gensheimer – Katherine E. Welch, Die Achilles-Penthesilea-Statuen-Gruppe vom Tetrastyl-Hof der Hadriansthermen in Aphrodisias |
| Tommaso Ismaelli, Antike Architekturrestaurierung in Kleinasien. Eine Diskussion der Typologie, Techniken und Bedeutung mit Bezugnahme auf Beispiele von großflächigen öffentlichen Bauten in Hierapolis in Phrygien, einer erdbebengefährdeten Stadt im Westen der Türkei |
| Ine Jacobs – Marc Waelkens, Fünf Jahrhunderte Pracht. Die Nord-Süd-Säulenstraße von Sagalassos im 1. und 6. Jh. n. Chr |
| Néhémie Strupler, Vorratshaltung im mittelbronzezeitlichen Boğazköy – Spiegel einer häuslichen und regionalen Ökonomie |
| Sabine SZIDAT Versteinert durch Gorgos Blick 379 |

KURZMITTEILUNGEN

| Ulrike HERRMANN, Die Überwölbung der westlichen <i>parodos</i> im Odeion des Pergamener Gymnasiums – baugeschichtliche Beobachtungen anläßlich der Restaurierung 2012 | 455 |
|---|-----|
| Anschriften der Autoren | 463 |
| Hinweise für Autoren | 465 |

TABLE OF CONTENTS

| Metin Alparslan, In Memoriam Ali Dinçol | . 11 |
|--|------|
| Martin Bachmann, In Memoriam Oktay Aslanapa | . 15 |
| Daniel Schwemer, In Memoriam Heinrich Otten | 7 |
| Martin Bachmann, The Former German Consulate-General. Evidence of İzmir's Cosmopolitan Past | 421 |
| Hülya Bulut, West Slope Ware from Daskyleion | . 75 |
| Eva Christof, New Find from Istanbul/Byzantion: A Hellenistic Grave Stele of a Priestess of the Artemis of Sardis | 129 |
| Francesco D'Andria, The <i>Ploutonion</i> of Hierapolis in Phrygia | 157 |
| Burkhard Емме, »The Tale of the Three Market Places«. Building Structures of Mercantile Function and the Urban Development of Hellenistic Miletus | . 51 |
| Maryl B. Gensнеімеr – Katherine E. Welch, The Achilles and Penthesilea Statue Group from the Tetrastyle Court of the Hadrianic Baths at Aphrodisias | |
| Tommaso Ismaelli, Ancient Architectural Restoration in Asia Minor. Typology, Techniques and Meanings Discussed with Reference to Examples of Large-scale Public Buildings in Hierapolis of Phrygia, a Seismic City in Western Turkey | 267 |
| Ine Jacobs – Marc Waelkens, Five Centuries of Glory. The North-South Colonnaded Street of Sagalassos in the First and the Sixth Century A.D. | 219 |
| Néhémie Strupler, Storage at Boğazköy During the Middle Bronze Age – Mirror of a Domestic and Regional Economy | . 17 |
| Sabine SZIDAT Turned to Stone by Gorgo's Gaze | 379 |

NOTES

| Ulrike HERRMANN, The Vaulting of the Western <i>parodos</i> in the Odeon of the Gymnasium in Pergamon – Architectural Observations on the Occasion of the Restoration in 2012 | 455 |
|---|-----|
| Adresses | 463 |
| Information for authors | 465 |