

THE CHURCH AT DEREĞİZİ SECOND PRELIMINARY REPORT

James Morganstern and Richard E. Stone

The second campaign at the site of the Byzantine church at Dereğizi in southern Anatolia took place in June 1968. Work continued at the Antalya Museum during late August and early September.¹

Our efforts this year were devoted primarily to the cleaning and study of the mosaic fragments and the traces of wall painting found during the first cam-

aign. In addition, several measurements taken in 1967 were checked, and some unsolved problems relating to the church and the settlement were re-studied. The neighboring fort was also investigated further.

THE MOSAICS:

The mosaics under consideration include three sets: those of the diaconicon, the nave, and those of the north octagon (fig. 1). All except the patch in the nave were consolidated and cleaned, and the fragments in the diaconicon were removed to the safety of the Antalya Museum².

The diaconicon

The mosaics of the diaconicon are particularly instructive³. They consist of three fragments, which, before their removal, decorated the half-dome of the apsidiole and the barrel vault of the adjacent chancel-like element. They rested against the cornice and extended from the northern section of the half-dome to the neighboring barrel vault (fig. 2).

The first fragment (I), a slightly concave, triangular piece, occupied the northern section of the half-dome. Its base,

¹ We are once again indebted to the American Research Institute in Turkey for financial support and to the Turkish Department of Antiquities for permission to undertake this work. We should like to thank particularly the Under Secretary for Cultural Affairs, Bay M. Önder, the Director General of the Department of Antiquities, Bay H. Gürçay, and Bay B. Tezcan for their kind assistance. In Antalya we were aided also by the Director of the Antalya Museum, Bay İ. Ünal, and his assistants, and in Istanbul, by Dr. N. Firatlı of the Istanbul Archeological Museums and by Prof. D. Kuban of Istanbul Technical University. For technical advice we are indebted also to Mr. E. J. W. Hawkins, Prof. L. Majewski, and Mr. D. C. Winfield, and for further assistance, to Prof. H. Buchthal and Prof. C. Mango.

The staff this year consisted of the writers and Mrs. Morganstern. The Department of Antiquities was represented by Bay A. Özgür.

For a discussion of the first campaign, see J. Morganstern, "The Church at Dereğizi: A Preliminary Report", *Dumbarton Oaks Papers*, 22 (1968), p. 217 ff., or *id.*, "The Church at Dereğizi: A Preliminary Report", *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 161 ff. (without the corrections which appear in the preceding article). A brief note appears also in M. J. Mellink, "Archaeology in Asia Minor", *American Journal of Archaeology*, 73 (1969), p. 226. To the primary bibliography cited in the first preliminary report should now be added the following: O. Wulff, *Altchristliche und Byzantinische Kunst*, II = *Die Byzantinische Kunst* (Berlin, 1918), p. 392 ff. (where the church is dated not later than the eighth century) and Abb. 339, and *id.*, *Bibliographisch-Kritischer Nachtrag zu Altchristliche und Byzantinische Kunst* (Potsdam, 1937), Abb. 539

² The mosaic fragments of the north octagon are so small and their subject matter so uncertain that their removal did not appear justified. Instead, after consolidation and cleaning, they were coated with poly-vinyl acetate resin in toluene and then masked by a protective layer of mud. Because of their location and the unstable condition of the rubble above them, the nave mosaics could not be treated.

³ The mosaics of the diaconicon are discussed in detail in J. Morganstern and R. E. Stone, "The Church at Dereğizi: A Preliminary Report on the Mosaics of the Diaconicon", *Dumbarton Oaks Papers*, 23 (1969), forthcoming.

supported by the cornice, measured 0.57 m.; its height, 0.51 m. Its western edge was located 0.125 m. from the west face (II) occupied the face of the half-dome. Anon-descript, flat patch, it extended 0.06 m. from the soffit of the adjacent barrel vault and rose to a height of 0.545 m. above the cornice. Set against this fragment was the third (III), a flat, L-shaped piece, which occupied the northern haunch of the barrel vault. Its base, supported by the cornice, extended 0.545 m. west of the face of the half-dome; its height measured 0.585 m.⁴

Fragment I (figs. 3 and 4) depicts part of the vision of Christ in Majesty⁵. The left half of the fragment is filled by a large wheel, surrounded by fire and accompanied by an inscription⁶. To the right appears part of a cherubim or seraphim: his feet are visible at the base of the fragment; the two wings, which cover his legs, are indicated by the pale V-shaped area above. The area to the right of the cherubim-seraphim is filled with fire. The background appears only occasionally.

The wheel is rendered primarily by tesserae dipped in red lead paint⁷, the

rim by tannish-brown stones, and the inscription above the wheel by white marble. The cherubim-seraphim is modeled by predominantly light cubes. His feet are cream and pink marble, with some red-brown glass, and his wings are varied light marbles and glasses. The fire is rendered primarily by reddipped cubes, and the background is indicated by green, turquoise, and blue glasses.

So little of fragment II (fig. 5) is preserved today that it is difficult to determine precisely what is represented. All that remains is a thin, tendril-like element, set against a plain background. It may be part of a vine or merely a decorative motif.

The tendril-like element is rendered by green, turquoise, and blue glasses. The background consists of white marble cubes.

Fragment III (fig. 6) reveals the lower portion of a male figure, clad in tunic and sandals and set against a plain background⁸. The figure starts forward to

as half of their paint, and most showed only traces of it. The former tesserae we left as we found them. The latter were re-painted with red lead pigment, identical in color to that originally employed; the vehicle used was poly-vinyl acetate resin and toluene.

On the use of dipped tesserae in other Byzantine monuments, see C. Mango and E. J. W. Hawkins, "The Apse Mosaics of St. Sophia at Istanbul. Report on Work Carried out in 1964", *Dumbarton Oaks Papers*, 19 (1965), pp. 119, note 9 and 138, note 31.

⁸ Scattered along the top of the fragment, beyond the edge of the tunic, are several isolated tesserae. They may form part of the pallium which originally probably covered the upper part of the tunic.

⁹ A similar arrangement appears at Dodo (Georgia) in the apse of the cave church of David-Garedza. S. J. Amiranashvili, *Istorija gruzinskoj monumental'noj zivopisi*, I (Tbilisi, 1957), p. 30 ff., pl. 17-23, dates this painting in the seventy to eighth century, while V. Lazarev, *Storia della pittura bizantina* (Turin, 1967), pp. 167 and 182, note 127, places it in the ninth century. In the apse of the monastery church of Lmbat (Armenia) and in the Pantokrator vault of the south gallery of St. Sophia in Istanbul the cherubim are flanked by two wheels on each side. On the paintings at Lmbat (early seventh century), see L. A. Durnovo, *Kratkaja istorija drevnearmianskoj zivopisi* (Erevan, 1957), p. 9 f., frontispiece, and pl. 1 and J. Strzygowski,

⁴ In addition, scattered tesserae were found above the junction of fragment II and fragment III, continuing almost to the crown of the barrel vault. No tesserae were found on the southern haunch of the vault. The plaster preserved there was, however, identical to that found on the northern haunch, thus indicating that it too was decorated with mosaic. No evidence of tesserae was found west of the barrel vault.

⁵ This identification was first suggested to us, after preliminary cleaning, by Dr. O. Feld and Herr U. Peschlow. On the subject of visions of Christ in Majesty, see Morganstern and Stone in *Dumbarton Oaks Papers*, 23 (1969), note 6.

⁶ Only two letters remain: an E and a Λ. While the content of the inscription is uncertain, the most likely possibility appears to be (.....) (or ... cherubim-seraphim (...)) or (.....), the Hebrew word meaning "wheel", found in the text of the Septuagint (Ezekiel 10 : 13).

⁷ When fragment I was cleaned and examined in 1968, very little of the original paint still covered the dipped cubes. Only a few tesserae preserved as much

his left. His identity is uncertain. His antique costume identifies him as an Old or New Testament figure. His animated stance, however, suggests he may participate in the vision to his left. In this case he may be an angel, possibly the archangel Michael, or a prophet, Isaiah or even Ezekiel.

The tunic worn by the figure is rendered by white marble and transparent amber glass; the shadows, by various green glasses. His feet are modeled with pink and tannish-cream marble and red-brown glass; the sandals are indicated by red-brown and opaque bright red glass. The background consists primarily of apple green glass.

In spite of the size of the fragments, it is still possible to reconstruct most of the decoration of the diaconicon.

The half-dome of the apsidiole was decorated with a vision of Christ in Majesty. Its northern section was occupied by a cherubim or seraphim, flanked by a large wheel surrounded by fire (fragment I). To the right of the winged creature probably stood another wheel.⁹ A corresponding representation presumably filled the southern section of the half-dome. Its eastern section was occupied, as usual, by an enthroned Christ, enclosed probably in a mandorla.

The west face of the half-dome was filled by a tendril-like element (fragment II).

The barrel vault to the west was decorated probably by four standing figures. The eastern portion of the northern haunch was occupied by a Biblical figure, an angel possibly or a prophet (fragment III). The western portion of the same haunch was filled probably by another figure, and the southern haunch, by two corresponding figures.

Die Baukunst der Armenier und Europa, II (Vienna, 1918), p. 498 f. and fig. 530. On the mosaics in St. Sophia (late ninth or early tenth century), see C. Mango, *Materials for the Study of the Mosaics of S. Sophia in Istanbul* = *Dumbarton Oaks Studies*, VIII (Washington, 1962), p. 29 ff. and fig. 29-35.

The tesserae of fragment I consist of glass, stone, terracotta, and cubes dipped in red paint. Those of fragment II and fragment III are glass and stone. The tesserae are generally irregular, and, for the most part, either small (4.0 - 7.0 mm.) or medium-sized (6.0 - 10.0 mm.).¹⁰

The lime plaster beneath the tesserae of each fragment, as usual, is composed of three layers, averaging 4.0 - 5.0 cm. in total thickness. The corresponding layer of each fragment is identical. The "rough-coat" consists of straw, crushed brick, and lime. Its texture is coarse, its color pinkish-cream, and its average thickness 2.0 - 3.0 cm. The second layer contains straw and lime, but no crushed brick. It is coarse, creamy-white in color, and measures between 1.0 - 1.5 cm. in thickness. The setting-bed consists of lime and possibly some marble dust. Its texture is fine, its color creamy-white, and its thickness approximately 1.0 cm.

In preparations for the next layer of plaster, the "rough-coat" and the second layer of each fragment were both worked when wet. The "rough-coat" was keyed with the tip of a pointed trowel; the second layer, scored with the edge of a trowel, in a herringbone pattern.

The fragments found in the diaconicon were probably executed during one campaign, at the time that the church was constructed. While it is still uncertain precisely when this was, it seems to have taken place sometime after the Feast of Orthodoxy in 843¹¹.

The north octagon:

The mosaics of the north octagon are somewhat more puzzling¹². They consist

¹⁰ A few very large cubes, one or both sides of which may measure more than 10.0 mm., do occur. Such cubes, found for example in the rim of the wheel (fragment I), are, however, exceptional.

¹¹ The problems summarized in this paragraph are treated more fully in Morganstern and Stone in *Dumbarton Oaks Papers*, 23 (1969).

¹² The mosaics of the north octagon and those of the nave will be discussed in detail in the final report.

of 27 irregular patches, scattered across the barrel vault of the chancel and the west rim of its northern haunch¹³. All of the patches are small: only three are as large as 400 cm. square, and the others are all less than 200 cm. square.

Their subject matter is uncertain. The three largest patches probably represent parts of garments, but how many figures are depicted and who they are is still unclear.

The tesserae, like those of the diaconicon, are predominantly glass and stone, of which several were dipped in red paint. Metallic cubes (gold and silver), absent from the diaconicon, are also apparent. The tesserae are generally irregular and measure usually between 4.0 - 7.0 mm. or 6.0 - 10. mm.¹⁴

The lime plaster is also similar to that found in the diaconicon. While the total thickness, 3.5 - 4.0 cm,¹⁵ is somewhat less, the composition, the texture and the color are identical. As in the diaconicon, the "rough-coat" and the second layer of plaster were also worked when wet: the former with the tip, the latter with the edge of a trowel in a herringbone pattern.

The mosaics of the octagon are apparently contemporary with the construction of the subsidiary building.

The similarity between the tesserae and the plaster in the north octagon and the diaconicon is most intriguing. In view of the fact that the decoration of both structures is probably contemporary with

¹³ The tesserae found on the west rim of the northern haunch extend as much as 0.125 m. from the soffit of the vault. They are apparently part of a border which once decorated the west face of the vault. The west rim of the southern haunch has preserved none of its tesserae, and the half-dome of the apsidiole has been destroyed. The rest of the octagon, with the possible exception of the central vault, was apparently painted.

¹⁴ A few large cubes, one side of which measures more than 10.0 mm., do occur, as in the diaconicon, but rather infrequently.

¹⁵ The "rough-coat" measures usually between 1.5 - 2.0 cm., the second layer, 1.0 cm., and the setting-bed, approximately 1.0 cm.

their construction, it is quite likely that the octagon and the church were built at the same time¹⁶.

The nave:

Of all the mosaics preserved, those of the nave are the most problematic. They consist of several irregular patches located on the barrel vault which shelters the west bay of the nave. The mosaics are confined today to the eastern portion of the northern haunch, but cover an area as large perhaps as 1.20 m. (length) × 0.80 m. (height)¹⁷. Their subject matter remains uncertain.

THE WALL PAINTINGS:

The traces of wall painting found within the church complex are confined to three major areas: The three exterior niches of the north octagon, a passageway leading from the nave of the church to the north aisle¹⁸, and the north wall of the nave. All were re-examined, and the paintings located in the niches of the north octagon and the passageway leading from the nave to the north aisle were given a preliminary cleaning¹⁹.

¹⁶ On this problem see Morganstern in *Dumbarton Oaks Papers*, 22 (1968), p. 221 and note 26 ff., or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 164 and note 26 ff. It is interesting to note also that the plaster used in the interior of the north and south octagons for painted surfaces is identical to that used most frequently in the interior of the church proper.

It is applied directly onto the masonry in one coat measuring ca. 1.5 cm. and consists of straw and lime. Its texture is coarse; its color, creamy-white to off-white; its surface is troweled smooth.

¹⁷ The mosaics are visible in Morganstern in *Dumbarton Oaks Papers*, 22 (1968), fig. 5, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), fig. 5.

¹⁸ The traces of painting found in the passageway leading from the east bay of the nave to the south aisle and mentioned in the first report (Morganstern in *Dumbarton Oaks Papers*, 22 1968, p. 223, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 1967, p. 166) were also examined. They are located on the east haunch of the arch covering the passageway. They are, however, so faded that it is no longer possible to determine either the subject matter or the color of the paints.

¹⁹ The painting of the western and southern niches of the octagon and that of the passageway leading to the north aisle were also treated with polyvinyl acetate resin in toluene.

The exterior niches of the north octagon:

Of the paintings examined, those of the north octagon are the best preserved²⁰. All three of the niches which adorn the exterior of the octagon were painted, and while it is no longer possible to determine what was represented in the niche to the south, the traces found in the niches to the west and north can be identified²¹. Both were decorated with a large *croix fleurée*²².

The cross which decorated the western niche is the better preserved (fig. 7). Originally it must have filled the semi-circular niche (0.66 × 0.30 × 1.135 m.); today, little more than its upper half remains. The vertical and the horizontal members are broadly drawn, outlined by a thin band, and joined perhaps by a boss at their intersection. Both flare slightly as they approach the edge of the niche; their terminations are no longer clear. The four quadrants formed by the cross are each filled by a single lily, delineated with a few thin bands. Beyond the

lilies are other traces of paint. Just what they represent is still uncertain²³.

The cross, the lilies, and the other traces are all rendered in red-purple paint, applied directly to the plaster²⁴. The painting seems to be contemporary with the construction of the octagon.

The passageway from the nave to the north aisle:

The painting found in the passageway between the west bay of the nave and the north aisle is badly preserved. It consists of a small, formless patch which decorates the soffit of the arch above the passageway. It covers an area ca. 0.26 m. (length) × 0.56 m. (height), near the center of the eastern haunch, ca. 0.73 m. above the cornice.

The design is wholly geometric (fig. 8). Although only a few traces remain, it is still possible part of the original design: a series of large intersecting octagons, set against a broad rectangular grid²⁵.

The octagons are delineated in black paint; the grid is rendered by wide bands

²⁰ The paintings were found during the first campaign by Bay E. Emiroğlu.

²¹ The northern niche is visible in Morganstern in *Dumbarton Oaks Papers*, 22 (1968), fig. 4, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), fig. 4.

²² For other *croix fleurées* see, for example, the capitals and the aisle architraves in the Church of the Nativity in Bethlehem (H. Vincent and F. - M. Abel, *Bethléem. Le Sanctuaire de la Nativité* (Paris, 1914), p. 87, note, fig. 33, and pl. XI 1, XII, and XIII); the monuments cited in M. Avi Yonah, "Oriental Elements in Palastinian Art, II", *Quarterly of the Department of Antiquities in Palestine*, XIII (1947 - 1948), pl. XLVII, 4 and 5, and *id.*, "Oriental Elements in Palastinian Art", *Quarterly of the Department of Antiquities in Palestine*, XIV (1950), p. 73 and fig. 25; the mosaics on one of the arches of the south gallery in St. Sophia in Istanbul (E. M. Antoniadou) "EK. II (Athens, 1908), pl. 77); Cod. Vat. gr. 699, f. 38 (C. Stornajolo, *Le Miniature della Topografia Cristiana di osma Indicopleuste. Codice Vaticano Greco 699 = Codices e Vaticanis Selecti*, X (Milan, 1908), p. 25 and pl. 4), and Cod. Paris gr. 550, f. 153ro (H. Omont, *Miniatures des plus anciens manuscrits grecs de la Bibliothèque Nationale du VIe au XIVe siècle* (Paris, 1929), pl. CXII).

²³ In the upper left quadrant there appears to be something resembling a double scallop and in the upper right a small X-shaped element. It is possible that we are confronted with $\frac{[I] C X [C]}{\text{or } [NI] [KA]}$, but the lower "scallop" in that case becomes somewhat confusing.

²⁴ The plaster is applied directly to the masonry. The single coat is troweled smooth and measures between 1.0 - 1.5 cm. in thickness. It consists of straw and crushed brick, both in large quantities, and lime. Its texture is coarse, and its color, pink.

²⁵ In painting a very similar design is found beneath the encorbelments and on the soffit of the arcosolium of the south wall in the Church of St. Barbara at Soğanlı, (G. de Jerphanion, *Une nouvelle province de l'art byzantin. Les églises rupestres de Cappadoce*, II, 1 (Paris, 1936), p. 328 and Album III (Paris, 1934), pl. 186, 4, 187, 2, and 189, 1 and 3; M. Restle, *Die Byzantinische Wandmalerei in Kleinasien*, III (Recklinghausen, 1967), Abb. 435). See also the ceiling in the "nave" of the church at Al Oda (M. Gough, "A Church of the Iconoclast (?) Period in Byzantine Isauria", *Anatolian Studies*, 7 (1957), p. 156 f., fig. 2, and pl. XI, a).

of red-purple²⁶. The painting appears to be contemporary with the construction of the church.

The north wall of the nave:

Of all the paintings, that found in the northwest corner of the nave is the most illegible. The patch is located at the western edge of the north wall, below the cornice which marks the level of the gallery floor. The size of the patch is less than 100 cm. square. The subject matter can no longer be determined.

The colors still visible are yellow, yellow-green, and red-purple, applied directly to the plaster. The painting seems contemporary with the church.

THE CHURCH AND THE SETTLEMENT :

During the course of our study, it was also possible to re-measure and re-examine several problem areas within the church complex and the settlement.

In the church the two central piers of the main apse were located and measured, and the recently constructed stone wall in the south window of the diaconicon was re-plotted (fig. 1). In addition, the vaults above the chancel and the east bay of the nave were re-studied. The upper portions of both vaults are definitely built of stone; both, however, date from the original building period.²⁷

West of the church, the "apsed" wall of space (B) was re-examined.²⁸ The

²⁶ The plaster is applied in one coat directly to the masonry. Troweled smooth, it measures between 1.0 - 1.5 cm. It consists of straw and lime, with a very small amount of finely crushed brick. Its texture is coarse, and its color, creamy-white, with a slight tinge of pink.

²⁷ With regard to this problem, see Morganstern in *Dumbarton Oaks Papers*, 22 (1968), p. 220, note 19 or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 163, note 19. The stones are, in fact, bonded to the adjacent bricks. It is important to note also that the stones comprising the eastern portion of the east nave vault project no further into the nave than the bricks comprising the western portion of the same vault.

²⁸ On this space, see Morganstern in *Dumbarton Oaks Papers*, 22 (1968), p. 224 and fig. B, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 167 and fig. B.

curve described by the few stones still visible is quite flat: it may be due merely to a shift in the position of the wall. Indeed, it is very possible that space (B) is not terminated by an apse.²⁹

THE FORT :

The neighboring fort (fig. 9) was also studied further.³⁰ Its plan was clarified, and several new discoveries were made.

The perimeter wall, which crowns the top of the hill, is roughly triangular in plan. Its three flanks face to the north, the southwest, and the east. The northeast angle is anchored by the pentagonal tower noted in the first preliminary report, and the northwest angle, by an irregular polygonal salient. The spur wall, or *avancée*, cited in the first report, begins at the southeast angle and continues down the spine of the hill to the southeast, where it terminates in a small circular structure.³¹ The northern flank is protected by four salients: two are pentagonal, one rectangular, and one triangular. The southwest flank is reinforced by at least one triangular salient.

Within the perimeter wall on the high ground to the south stands a second

²⁹ Five additional pieces of architectural sculpture and part of an inscription were found in the vicinity of the church and settlement. They have been deposited in the Antalya Museum and will be published in the final report.

In the meantime it has been brought to our attention, through the kindness of the editors of this journal and Dr. B. Brenk, that the architrave discussed in the first preliminary report (Morganstern in *Dumbarton Oaks Papers*, 122 (1968), p. 222 and fig. 7, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 165 and fig. 7) was published upside-down. The photograph which appeared in the *Dergi* has been oriented correctly; the photography in the *Papers* and the descriptions in both journal, however, should be reversed. What was thought to be a "festoon" becomes, in fact, a rather debased Lesbian cyma, when the piece is righted.

³⁰ For a brief discussion of the fort and the relevant bibliography, see Morganstern, *Dumbarton Oaks Papers*, 22 (1968), p. 224 and note 45, as well as fig. 10, or *id.* in *Türk Arkeoloji Dergisi*, XVI, 2, p. 167 45, and fig. 9.

³¹ The termination of the spur wall is hollow and appears to have been vaulted.

enclosure. To the southwest and the east it follows closely the path of the perimeter wall. Its north flank parallels the north flank of the perimeter wall, but further up the hill.

The northwest corner of the inner enclosure is occupied by a small chapel, comprised of ante-chamber, single nave, and semi-circular projecting apse³². The width of the ante-chamber and nave measures ca. 3.90 m.; the length of the ante-chamber, ca. 4.00 m., and that of the nave, ca. 8.00 m. The chord of the apse measures 3.50 m. and the thickness of the wall 0.75 m. The masonry consists of rough stone and mortar, with occasional bricks and brick fragments, and probably a rubble core.

In addition to the walls, cisterns, and the complex of storage vessels found during the first campaign, several new cisterns were located within the fort. Outside the perimeter wall, beneath its north flank, a series of retaining walls were found, and at the base of the hill toward the northeast, the foundations of a classical wall or structure.

Although considerably more investigation is necessary, it appears that the builders of the Byzantine fort at Dereğzi incorporated within their plan a large number of existing classical walls.

³² The resemblance to the chapel of period II at Dikmen is particularly striking. The chapel at Alakilise (Alakilise 5) may also be relevant. On the former, see R. M. Harrison, "Churches and Chapels of Central Lycia", *Anatolian Studies*, 13 (1963), p. 130 f. and fig. 8; on the latter, see *ibid.*, p. 130. The ante-chamber and the nave at Dereğzi are flanked to the south by a long, narrow corridor.

These are apparent particularly along the north flank of the perimeter wall and the east and south flanks of the inner enclosure. It remains uncertain precisely when the present fort was constructed³³.

MISCELLANEOUS: THE WATER CHANNEL :

West of the fort, above the west bank of the Kasaba River, an old water channel was found. It continues downstream on the west bank of the Demre River south of the fort (fig. 10), past the fort at Demre (Myra), and along the north slope of the valley at Andriake³⁴. Its source could not be located. Its width measures generally between 0.25 - 0.40 m.; its depth varies depending on the location. Near the fort at Dereğzi the channel is rock-cut; further downstream, it is built of stone and mortar. Its date is uncertain. It does, however, seem to post-date the large Roma structure at the north edge of the Andriake valley³⁵.

A third campaign is planned for 1971 to be devoted to a survey of the fort and to further study of the water channel and the road found in 1967.

³³ This question will be treated by one of us at a later time.

³⁴ The portion of the water channel located in the Demre gorge was first noted by L. Ross, *Kleinasien und Deutschland* (Halle, 1850), p. 18. We are indebted to Prof. R. M. Harrison for bringing to our attention the existence of the channel beneath the fort at Demre and in the Andriake valley.

³⁵ This seems to be the building noted by E. Petersen and F. von Luschan, *Reisen in Lykien, Milyas und Kibyrtis = Reisen im südwestlichen Kleinasien*, II (Vienna, 1889), p. 41.

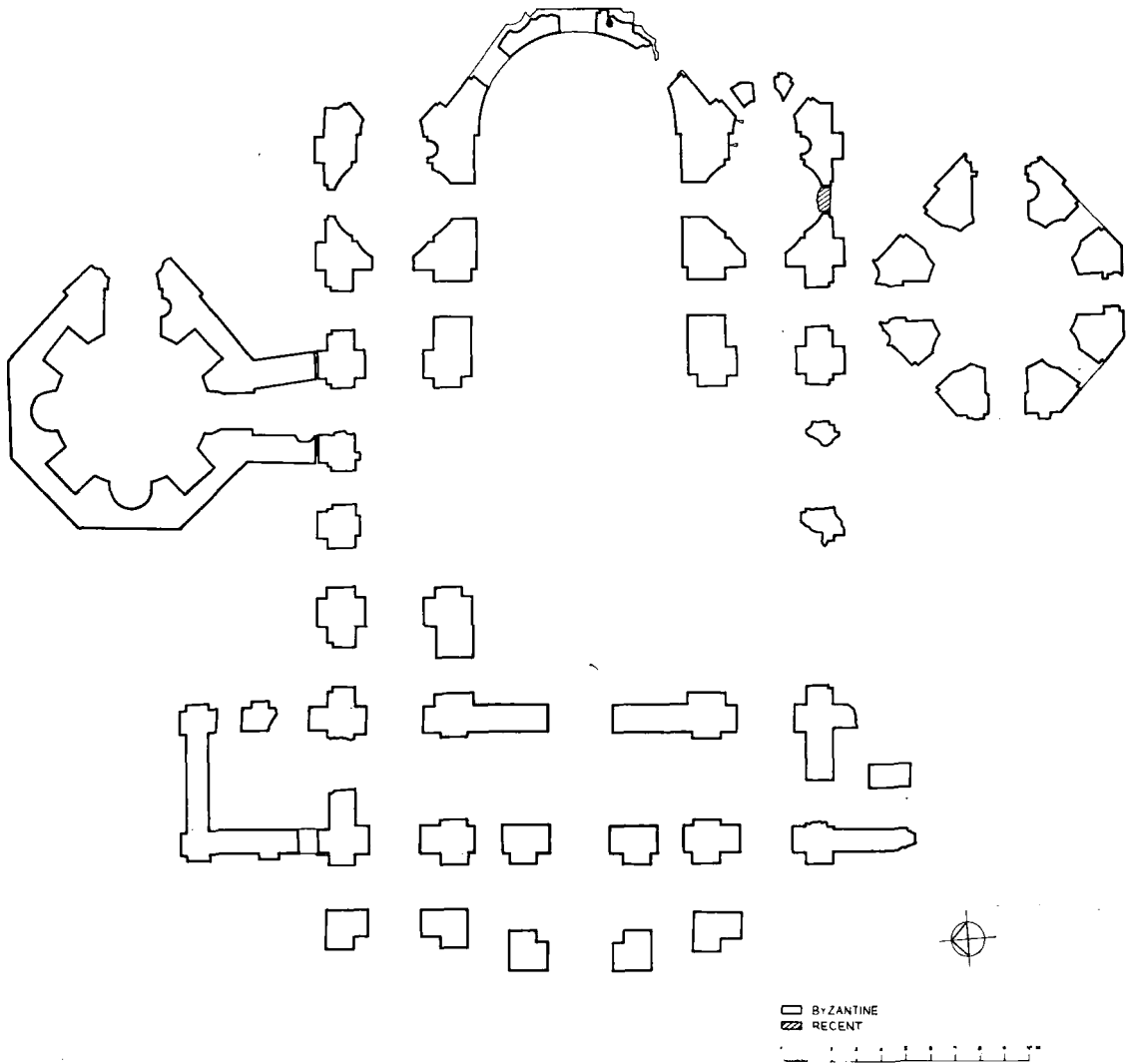


Fig. 1

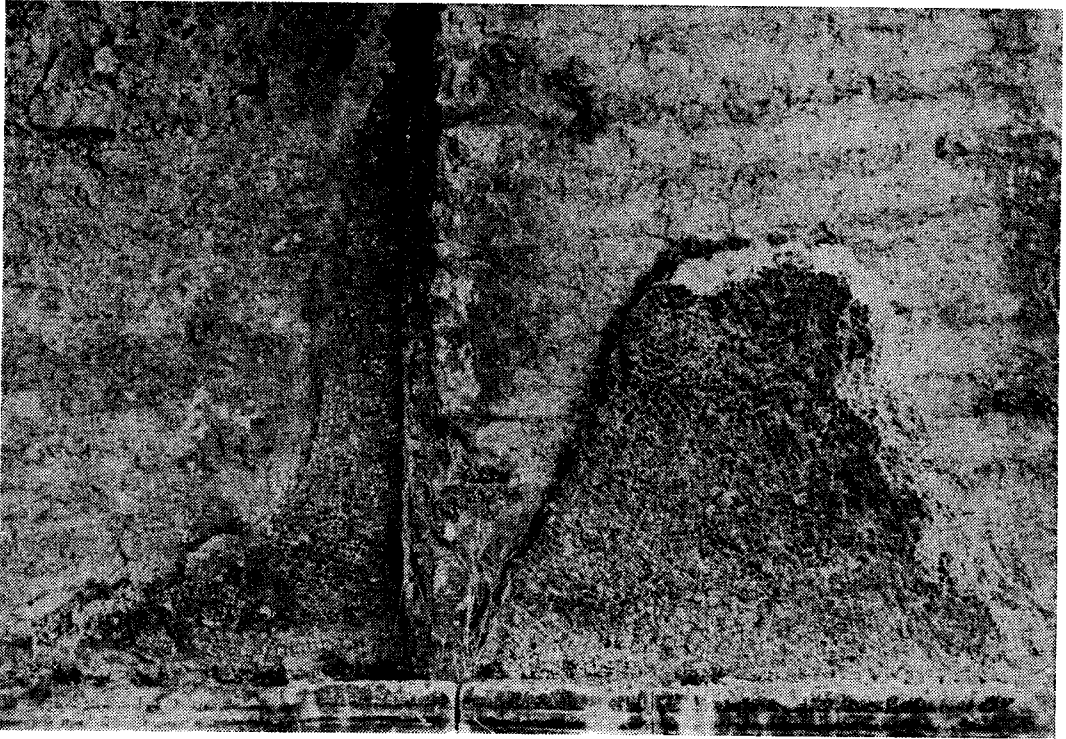


Fig. 2

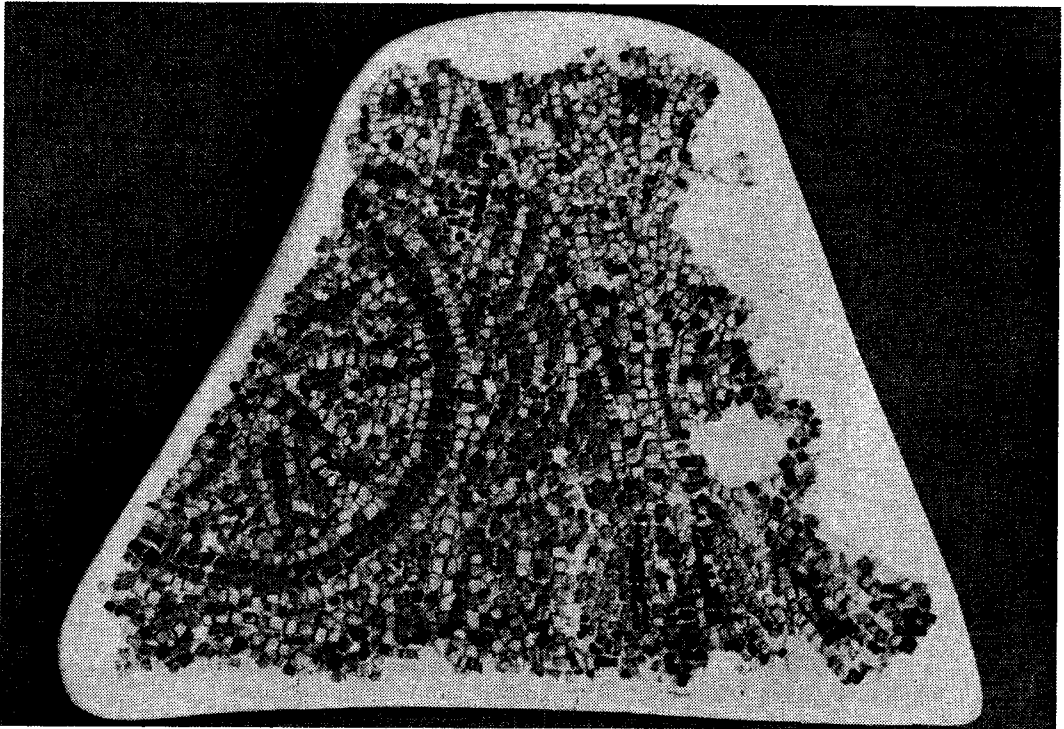


Fig. 3

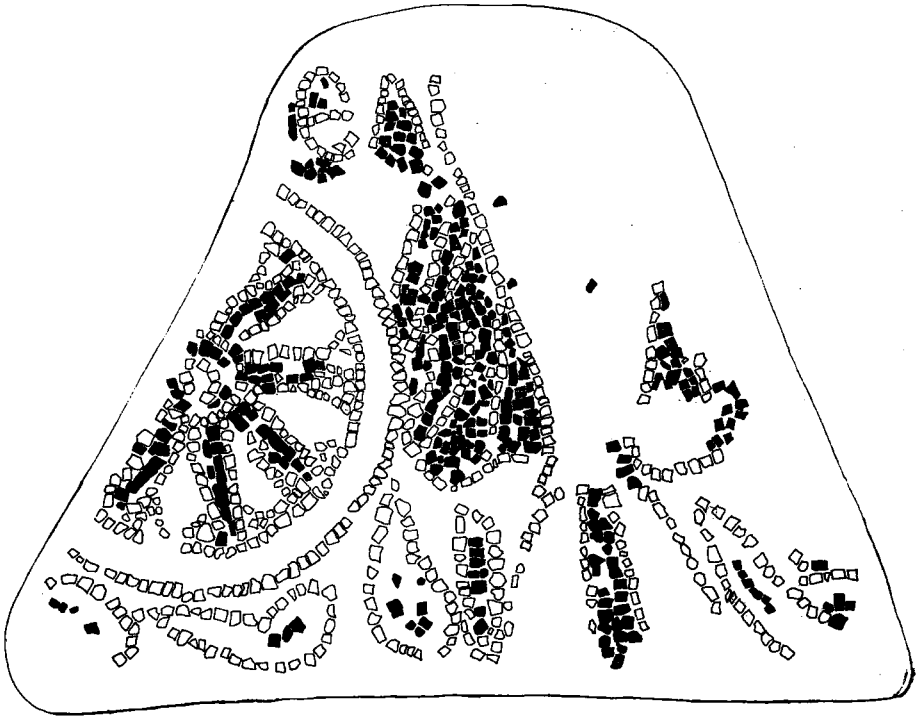


Fig. 4



Fig. 3

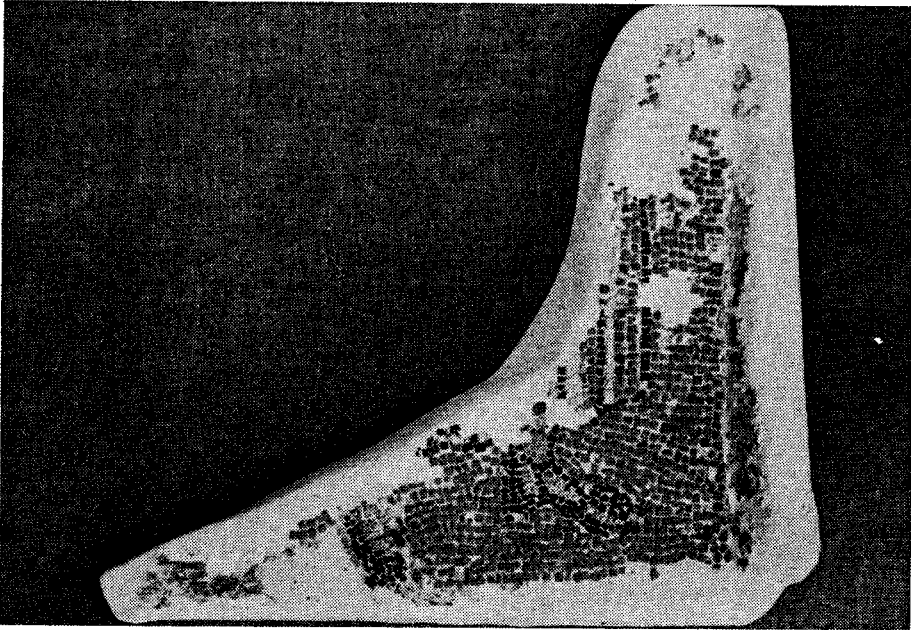


Fig. 6



Fig. 7

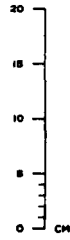
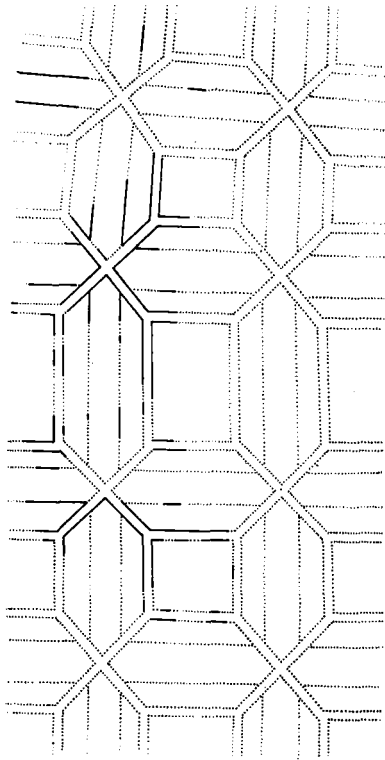


Fig. 8



Fig. 9



Fig. 10