## Campagne internationale pour la Sauvegarde du Site de Carthage INSTITUT NATIONAL DU PATRIMOINE, TUNIS KELSEY MUSEUM, UNIVERSITY OF MICHIGAN, ANN ARBOR

## JOURNAL OF ROMAN ARCHAEOLOGY®

## JRA® SUPPLEMENTARY SERIES NUMBER 112

General Editor: J. H. Humphrey

This volume is dedicated to ABDELMAJID and LILIANE ENNABLI



ISBN-13: 978-0-9994586-6-2

ISSN 1063-4304 (for the supplementary series)

Copyright © 2023 Journal of Roman Archaeology, L.L.C.

JRA® and Journal of Roman Archaeology® are registered trademarks of Journal of Roman Archaeology, L.L.C.

This and other supplements to the *Journal of Roman Archaeology* may be ordered from: JRA, 95 Peleg Road, Portsmouth, RI 02871, U.S.A.

Telephone (+USA) 401 683 1955

telefax (+USA) 401 683 1975

e-mail: jra@JournalofRomanArch.com

Web site: JournalofRomanArchaeology.com

Permission to copy may be obtained only direct from *JRA*, by e-mail, letter, fax or phone. Kindly note that the Copyright Clearance Center (USA), the Copyright Licensing Agency (UK), and other national

Reproduction Rights Organizations are not permitted to authorize copying or to collect fees for doing so.

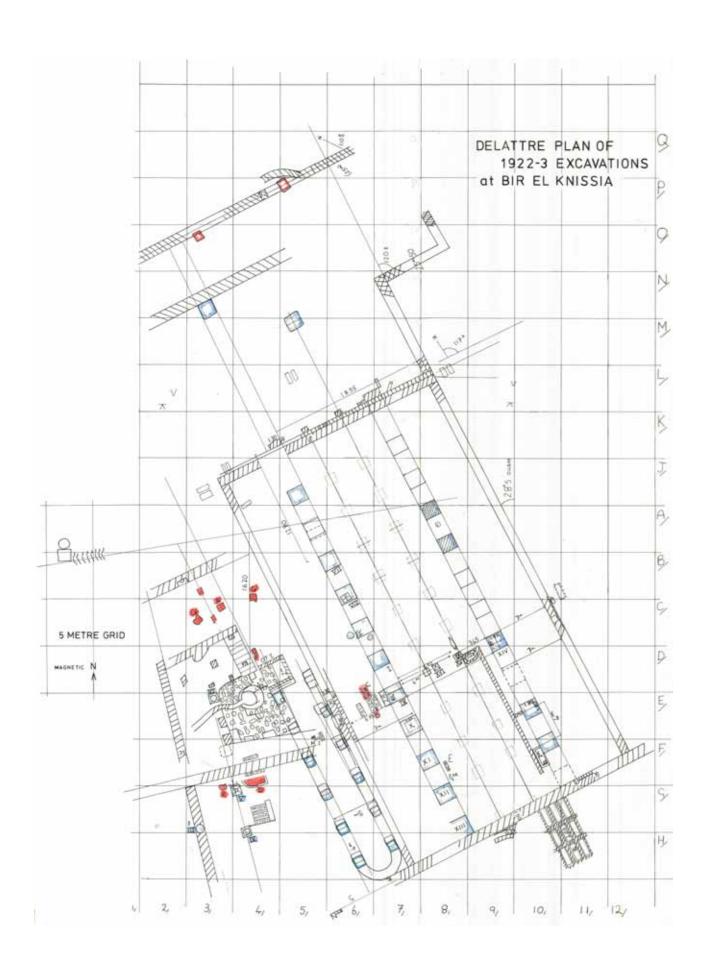
# BIR EL KNISSIA AT CARTHAGE: A MARTYRIAL BASILICA COMPLEX

## Second and final report

directed by Susan T. Stevens

with contributions by

S. Aloui, F. Bessière, B. J. Davey, O. Gorgob, A. Kalinowski, S. Pringle, J. J. Rossiter, E. Smith, A. Sterrett-Krause, S. T. Stevens, J. Terry, F. Touj, P. Visonà and C. K. Walth



### Acknowledgements

#### Susan T. Stevens

The Institut National du Patrimoine, Tunis and its general directors over the years consistently granted the essential permissions to conduct the 1990-1992 excavations at Bir el Knissia and subsequent study seasons. On the ground in Carthage, the project counted on the energy and generosity of the irreplaceable Abdelmagid Ennabli, the director of the museum and site of Carthage under whom we worked. This volume could not have been completed without the help of former and current directors and staff of the Musée national de Carthage, most recently directors Moez Achour and Lamia Fersi, along with Nesrine Nasr who provided access to excavated materials in the midst of a museum renovation.

Generous financial support was provided by EARTHWATCH and its research corps, the Kelsey Museum of Archaeology of the University of Michigan and the Getty Foundation Museum Interpretation Grant Program. Randolph College was unstintingly supportive with course releases, grants, prizes and sabbaticals needed in the preparation of this volume. I am indebted to Elaine Gazda, director of the Kelsey Museum of Archaeology (1986-1996), for her willingness to cosponsor the Bir el Knissia project, to her administrative assistant Helen Baker, and to conservator Geoff Brown who supervised the cleaning of the 1990-1992 coins. I deeply appreciate the encouragement of my colleagues at Randolph College, Amy Cohen, Françoise Watts, Andrea Campbell, Lisa Broughman and Catherine Lotspeich, and the help of former students Emilie Bryant and Sabina Sabat.

The work, patience and good cheer of the many staff, workmen, students, volunteers and visiting specialists were the engine of the excavation and study seasons. They are listed overleaf.

Specialists preparing reports for this book faced the herculean task of making the most of a mountain of fragmentary evidence. Paolo Visonà's insistence that the 7th-c. coins be given their due came at a crucial early stage in the preparation of this report. Susan Pringle's rigorous programme of collecting, recording and analyzing ceramic building materials and worked marble yielded, 30 years later, a glimpse of the floors, walls and roof of the complex. Fabrice Bessière, finishing the work begun by the late Naïdé Ferchiou, put the basilica's architectural fragments in order and then envisioned them in place, restoring dignity to the structure. Angela Kalinowski, Jeremy Rossiter and Cherie Walth made time to complete the project of which they had been a part from the outset. James Terry and Sihem Aloui took over where Liliane Ennabli left off; Allison Sterrett-Krause succeeded John Hayes, and Fatma Touj and Olfa Gorgob reexamined the burials in storage. Former students Barbara Davey and Emily Smith made the most of disarticulated human and animal remains. The indispensable and forbearing Chris Cohen, produced many graphics in this volume.

This volume is a homage to the late, great Noël Duval, whose enduring body of work laid the foundation for this and every other study concerned with Early Christian churches in North Africa (and elsewhere). His thorough and constructive review of *Report no.* 1<sup>1</sup> inspired what I hope is a robust and equally comprehensive response.

The support of admired colleagues and friends has been essential: Abdelmagid and Liliane Ennabli, Nejib Ben Lazreg, Boutheina Maraoui Telmini, Taher Ghalia, Hamden Ben Romdhane, Mohamed Benabbes, Joann Freed, Lea Stirling, Richard Miles, Robin Jensen, Jonathan Conant and Ralf Bockmann, to name just a few. Above all, I thank the indefatigable John Humphrey. As the founder and general editor of the *Journal of Roman Archaeology* and its supplementary series, he provided our field with high-quality, peer-reviewed, multi-lingual and unusually prompt publications. I have benefitted in myriad ways from his generous mentoring, but most of all from engaging in fieldwork at Carthage under his aegis.

Duval 1995, 283-302. See the Appendix below, 390-92.

Faith Allen Margaret Alexander Meg Armstrong Paul Arthur Carole Baldwin **Hugh Barnes** Tess Barnes Shirley Beamer Cindy Becker Fauzi Ben Bechir Brahim Ben Brahim Hamadi Ben Brahim Sami Ben Chaabane Aroussi Ben Trad Jilani Ben Trad Paula Bernstein Marian Block Marvin Block Hamadi Bouafiya Amel Boudhiba Pamela Britnell Barbara Brown Lindsay Brown Kamel Chebli Moez Chelli Linda Clougherty Ida Cole Pat Cotton Elisabeth Craft Gail Cunningham Jim Cunningham

Marilyn Darack Deb Dawson Christine Defouw Philip deVellis Hazel Dodge Neva Duggan-Hicks Bob Eidsmoe Leone Eidsmoe Taieb el Gharbi Liliane Ennabli Vicki Erwin Ali Evans Charlie Everett Naïdé Ferchiou Joann Freed Rachel Freyman Jenny Gibson Betsi Gordon Paul Gowan Kerrie Grant David Grenell Roberta Gribbon Ferjani Hamrouni Sandra Harris John Hayman Loretta Hess Sonia Hewitt Judith Inanchy Josephine Isenberg Michael Jackson Rick Jali

Veronica Kalas Angela Kalinowski Gurson Kantor Sue Kantor Melissa Kaprelian Robert Keck Jim Large Anita Laut Medina Lazansky Mindy LeBlanc Judith Lee Norm Loeffler Mohsen Maatallah Joy MacConnell Beth Manca Jerry Martin C.F. Maurer Mike McMillin Lasaad Meknassi Paddy Micheli Irene Miller Laura Miller Sarah Nolton Claire Padgett Dale Pastrana Charlie Peirce **Brett Phaneuf** Kate Petrycki Ann Pixley

Steve Potthoff

Susan Pringle

Dan Rabinowitz Jim Radz Ramzi Robin Resnick Pam Reynolds **Jim Richerson** Christine Robison Kay Rogers Sue Robinson Dorothy Saltmarsh Fatma Sassi Beverly Schneider Stephanie Selser Stephanie Sigala Marjorie Smuts Joanne Soleimani Nancy Spencer Kusum Stokes **Bob Storch** Mary Strong Frank Taylor Tamara Teghillo James Terry Fred Tirrell Fethi Tlili Clara Velasquez Mara Vostral Cherie Walth Betty Wiesinger **Bob Wiesinger** 

### Introduction

#### Susan T. Stevens

Bir el Knissia is a martyrial basilica complex¹ that spanned the mid-6th through the 7th c. It was subject to two excavations in the 20th c., the first in 1922-23 directed by the Père Blanc A.-L. Delattre,² the second in 1990-92 by the University of Michigan directed by S. T. Stevens in collaboration with J. H. Humphrey. The latter team published a first volume on the results of the 1990 season, focusing on the basilica's latest phases (*Report no. 1*). The current (final) volume is a comprehensive account that presents previously unpublished material from 1991-92, focusing on the earliest phases of the basilica before re-assessing, synthesizing and interpreting the evidence gathered from all three seasons. The present chapter intends to aid the reader by reviewing briefly the history of excavation of the site, the strategies and results presented in *Report no. 1*, and the goals of this volume.

In late antiquity the basilica complex lay on the SW outskirts of the city. Just northeast of the complex, *kardo* 5 East of the urban grid may have passed through a gate in the Theodosian city wall (built *c*.425) before re-orienting to the rural grid where it passed in front of the complex (fig. 2 overleaf). Today, the site lies not far from the ancient ports in a roughly pentagonal field north of Salambo. Its eastern boundary is the TGM (Tunis–La Goulette–La Marsa train line), while its western boundary is Avenue Hedi Chaker (formerly Rue Salambo) where the well lay which gave this field its name ('Well of the church').<sup>3</sup> The NW edge of the field is Rue Habib Thameur, the probable descendant of *kardo* 4 East as it entered the rural grid, while its NE edge is a neighbourhood laid out roughly on the ancient urban grid inside the line of the city wall. To the south a residential street, roughly parallel to Rue Habib Thameur, follows the ancient rural grid. As of 2023, the field lies on the edge of the protected archaeological zone of Carthage and represents one of very few remaining open fields (fig. 1).



Fig 1. View of the "Bir el Knissia 1" field from Rue Habib Thameur, looking southwest toward Salambo, July 2023 (A. Kalinowski).

The martyrial character of the complex was apparent from the special tombs in the basilica's apse and chancel and a large *martyrium* at the basilica's N corner: see below, 354-56. Nonetheless, in all but the concluding chapter the *martyrium* is referred to as the 'NE annexe', since this is how it was referred to in *Report no.* 1.

A French Catholic missionary of Africa, founder of the Musée Lavigerie de Saint-Louis de Carthage in 1875, he excavated at Carthage until his death in 1932 (Ennabli 2020, 26-27; Freed 2012).

<sup>3</sup> Variously spelled Bir el Kenissia, Bir Kenissia, Bir Knissia, Bir el Knissia, Bir el Kenicia or Bir el Kennisi.

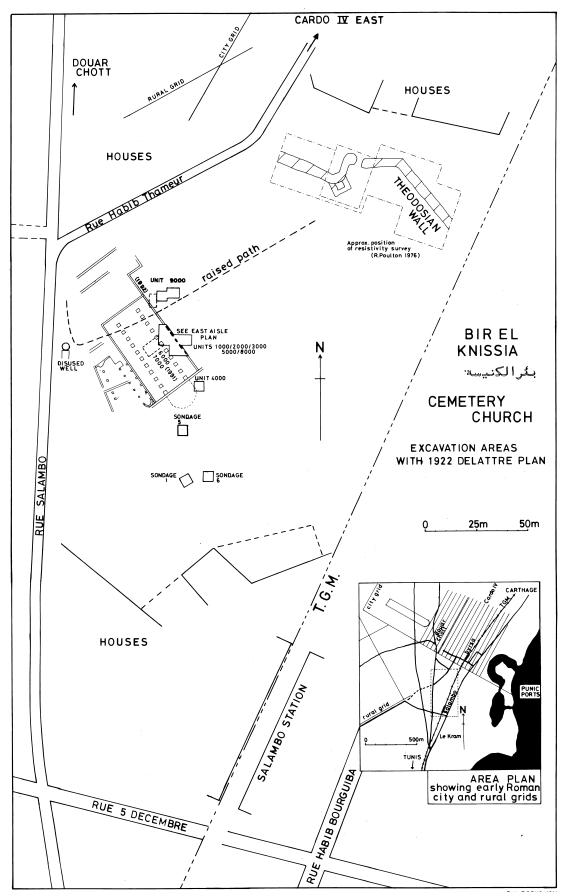


Fig. 2. Plan of "Bir el Knissia 1" field showing location of the 1922-23 and 1990-92 excavations (*Report no.* 1, 4 fig. 3; B. Pritzkat/R. H. Barnes).

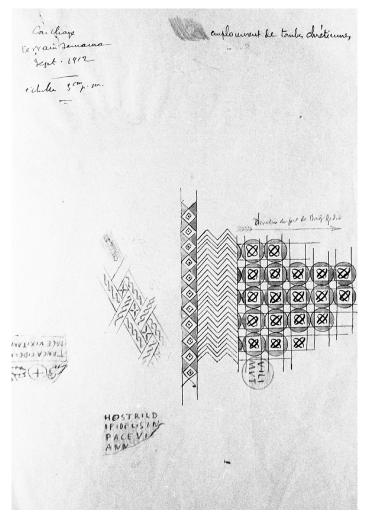


Fig. 3. Drappier's drawing of mosaics at "Bir el Knissia 2" (*Report no. 1*, 5 fig. 5; courtesy of INP and the Musée de Carthage).

Standing remains of the basilica were reportedly quarried in *c*.1836 to build the residence of Ahmed Bey on the shore of the Punic ports; a column used as a door lintel found in the vicinity was inscribed with verse 17 of Psalm 86.<sup>4</sup> From at least 1883, A.-L. Delattre knew that a basilica was located in the field but nearly 40 years passed before he excavated there (1922-23), publishing the results in two very limited reports, together with a postcard plan of the basilica.<sup>5</sup> Bir el Knissia was the last of the 5 basilica complexes he excavated in the ancient *suburbium*, following Bir Ftouha (1880), Damous el Karita (1886), Mcidfa (1906) and Ste. Monique (1915).

Another site lay some 125 m to the southwest, in the vicinity of a different but homonymous well west of the old Rubatino railway. In 1912, L. Drappier opened a sondage which revealed part of a badly-damaged Christian basilica with tombs and 3 funerary mosaics cut into its mosaic floors (fig. 3). When excavation was resumed nearby in 1921, a fourth funerary inscription was recovered, but no more was learned about the site as a whole.<sup>6</sup> Delattre's Bir el Knissia excavation, designated "Bir el Knissia 1" in our *Report no. 1*, was backfilled and its precise location in the field was lost. Drappier's less fortunate Bir el Knissia, designated "Bir el Knissia 2" in *Report no. 1*, is now covered

<sup>4</sup> Ennabli 2020, 289; ICKarth III no. 380.

Delattre 1922; id. 1923. The postcard plan, reproduced below (361 fig. 6), was included on the cover of Delattre 1926. On his methods, see *Report no.* 1, 16; Ennabli 2020, 26-27 and passim.

<sup>6</sup> Ennabli 2020, 289; Cagnat 1913; Poinssot 1921; Duval 1995, 286.

by modern suburban development. The bibliography of the two sites was subsequently conflated by J. Vaultrin.<sup>7</sup> From at least 1929, "Bir el Knissia 1" was tentatively identified (primarily because of its proximity to the ports) as the cemetery basilica named for a local saint, St. Agileus, known as one of the few Homoousian churches functioning under Vandal rule the early 6th c.<sup>8</sup> While "Bir el Knissia 1" and "Bir el Knissia 2" were distinct Christian sites, any tentative identification with the basilica of St. Agileus could apply equally to either.

Overall goals of the 1990-92 University of Michigan project

The goal of this project from the outset was to establish the history of Delattre's "Bir el Knissia 1" basilica complex by combining documentary evidence from his 1922-23 excavations with the results of the 1990-92 excavations. The greatest challenge was to interpret evidence from a pair of excavations employing very different methodologies in a way that would reconstruct accurately the history of the basilica complex and its environs. This enterprise would have been impossible without access to the unpublished dossier of his 1922-23 excavations, which included Delattre's 16-page excavation diary and a field plan by A. Thouverey (frontispiece).

Knowing that "Bir el Knissia 1" was poorly preserved, our strategy was to excavate intensively parts of the field which Delattre had not explored, chiefly on the E side of the basilica, and to focus on those aspects in which Delattre had no systematic interest: the phasing and archaeological dating of the complex through coins and pottery, and the systematic collection and study of its *disiecta membra* such as architectural fragments. As a consequence, our area excavation was limited to a small section cut across the basilica from just outside its E wall extending through the E aisle and nave almost to the W colonnade. We anticipated that this would provide an accurate and in-depth (though topographically restricted) view of a large structure. We hoped that our results would be sufficiently consistent across the excavated areas inside and outside the basilica and would have sufficient points in common with Delattre's work and documents to provide as complete a view of the complex and its history as is possible under rather chequered circumstances.

The 1990-91 excavations proved that few of the basilica's latest features remained *in situ*. In 1992, as the excavation advanced into the basilica's early phases, it became clear that the disruption from tomb-robbing that had begun in the 7th c. left progressively less ancient stratigraphy intact. This meant that artefacts, from large architectural fragments to coins, were fragmentary and often in poor condition, a challenge that all contributors to *Report no. 1* and this volume faced. And yet there was surprisingly little modern material below subsoil levels (even in Delattre's trenches) and many finds seem not to have been displaced too far from their original contexts.

Goals of the 1990 excavation

The first goal in 1990 was to locate the basilica (there being no standing remains) by the rapid excavation of 5 sondages (5 x 5 m) across the E part of the field (see fig. 2). From Delattre's account of the poor condition of the site, we calculated that a fairly large sondage would be needed to recover a sufficient quantity of information. When sondage 3 revealed a stretch of the E wall of the basilica shown on the field plan by Thouverey (see frontispiece, at C10), excavation was discontinued in sondages 5 and 6 (which clearly lay outside the basilica) in order to focus on sondages 2-4, all of which appeared to concern the basilica. The second goal in 1990 was to establish the phases of the complex by opening an area excavation around sondage 3 (incorporating the contiguous units 1000, 2000, 5000 and 8000). By season's end, two more segments of the basilica's E wall had been located in units 1000 and 5000. Indirectly associated with the wall were 8 *in-situ* pieces of a mosaic floor, while more than 300 fragments of it were recovered in destruction débris. The mosaics were lifted and their foundations excavated. An *in-situ* fragment of a tomb mosaic some 40 cm below the surface

<sup>7</sup> Vaultrin 1932, pl. I. See *Report no.* 1, 9-10.

<sup>8</sup> Lapeyre 1929, 123 (Vita Fulgentii 26) and 174; Ennabli 1997, 120. On Agileus, see Report no. 1, 13 n.38.

<sup>9 1989</sup> sondage 1 at the S end of the field was intended to locate either the basilica or its cemetery and investigate the stratigraphy and chronology in that part of the field; see *Report no. 1, 70-71*.

Introduction 13

of the E aisle mosaic indicated the presence of an earlier floor, reminiscent of Delattre's comment (*Diary* p. 5) about a tomb mosaic in the W aisle found "some centimeters" below a mosaic floor. A drainage area outside the basilica's E wall in unit 8000 included traces of numerous grave-shafts.

Excavation continued in sondage 2 (as unit 9200) where *in-situ* pieces of two mosaic floors, a grape-leaf mosaic and a tangent-octagon mosaic, were discovered, respectively, in rooms 1 and 2 of a 'NE annexe' (see n.1) located outside the basilica near its façade. The excavation was extended to the east (as unit 9700) where a small part of a third room was located that had a grape-leaf mosaic matching that in room 1, yielding a building of symmetrical plan. By season's end, the pieces of the tangent-octagon mosaic in room 2 had been lifted and its foundations excavated. Excavation also continued in sondage 4 (as unit 4000), a drainage and burial area close to the basilica's presumed S apse. With the exception of a deep modern robber-trench which removed all ancient stratigraphy in the western third of the area, unit 4000 offered the most intact stratigraphy in the field. By season's end, part of a NE–SW wall had emerged running roughly parallel to the basilica's S wall but differently constructed. Many layers of surfaces had covered and surrounded the wall, but none were the floor in use with it. An intact amphora burial underlay the earliest of these surfaces.

We concluded that an initial report (*Report no. 1*) was in order. The hitherto-unpublished dossiers of both Bir el Knissia 1 and Bir el Knissia 2, with the re-location of the two sites on the map of the city, would be of value in particular for the historiography of the city's Early Christian sites. Of equal importance, the 1990 excavation had identified the latest two phases of the Bir el Knissia 1 complex and produced sufficient material to date them to the late 6th and potentially the mid-7th c., at a time when reliable archaeological dating was not readily available for any of the city's known Early Christian basilicas. These two priorities governed the structure of *Report no. 1*.

#### Brief recapitulation of Report no. 1

Chapter 1 located Bir el Knissia 1 (and Bir el Knissia 2) on maps of Carthage and explored the archaeological history of the site and its environs. Of particular interest was the unpublished (if very limited) archive of Bir el Knissia 2. On one side of a single sheet was L. Drappier's 1: 1000 sketch map locating his 9 x 5 m sondage excavated in September 1912 on the property of M. Samama (see below, 286 fig. 20). On the other side were his 1: 20 scale drawings of floor mosaics cut by 3 tomb mosaics, all differently oriented, commemorating individuals with the presumed Vandal names of Vilimut, Hostrildus and Tanca (see fig. 3). In May 2021, A. Merlin and L. Poinssot resumed excavation in an orchard in the N part of M. Samama's land, revealing a damaged floor mosaic featuring the upper body of a peacock and another circular commemorative mosaic. Poinssot added this information, a sketch of the tomb mosaic and bibliographic references in the margins of Drappier's map. Chapter 1 ended with an appraisal of secondary literature on Bir el Knissia 1.

Chapter 2 included photographs of the original 1:100 plan of Bir el Knissia 1 by A. Thouverey, Ingénieur-adjoint des Travaux publics, and our tracing of that plan on mylar (see frontispiece). It also reproduced and transcribed Delattre's 16-page excavation diary, which was keyed to the plan and provided details that Thouverey could not include. The bulk of the chapter was a preliminary analysis of the parts of the basilica shown on Thouverey's plan, supplemented by information from Delattre's diary. In particular, the large, multi-phase area on the basilica's W flank (our "W annexe") offered insight into how structures outside the basilica proper might be linked to developments inside it. The chapter concluded with published notices on the 1922-23 excavations.

Chapter 3 first outlined the strategy and methods of the 1990 excavation. Crucial to its success were 6 points of reference that located our trenches precisely on Thouverey's plan (*Report no. 1, 64,* fig. 1) and a brief description of the "Basilica wall trench", a long, narrow and shallow trench along the E wall of the basilica that was designed to locate its SE corner, previously excavated by Delattre. The chapter then focused on analyses of sondages 1, 5, and 6. R. H. Barnes' detailed study of the basilica's E wall yielded crucial information about the field's natural topography (*Report no. 1,* 96 fig. 5).



Fig. 4. Tangent-circle mosaic of the E aisle (fragment 2027).

The 1990 stratigraphic report focused on the basilica's latest phases. Each of its 4 chapters was concerned with a different area: the E aisle of the basilica (chapt. 4: contiguous units 1000-3000 and 5000), a symmetrical building adjacent to the NE corner of the basilica (chapt. 5: contiguous units 9200 and 9700), a drainage and burial area adjacent to the basilica's apse (chapt. 6: unit 4000), and a drainage and burial area outside the basilica's E wall (chapt. 7: unit 8000). Each chapter included a discussion of the stratigraphy, followed by preliminary analyses of mosaics (M. A. Alexander), pottery (J. Freed, A. Kalinowski, J. J. Rossiter), and coins (P. Visonà) for dating the basilica's phases. The not-yet-fully-excavated features representing the earlier phases of each area were universally and very generally dated to the late-5th to early-6th c.

The most substantive contribution was the (surprisingly) late date and extent of the last two phases of construction of the basilica complex (phases 3 and 4 in this volume; they will also be treated briefly in the next chapter). In *Report no.* 1, the tangent-circle mosaic in the basilica's E aisle was well represented and dated by coins and pottery to *c.*570-575 (now phase 3A, *c.*570+). It was characterized by very small tesserae of brightly coloured marble for the pattern and of limestone for the dull-white background. Overall, tangent circles formed concave-sided squares containing fish and birds; superimposed on this was a composition of opposing acanthus sinusoids linked by red rings (fig. 4). Immediately overlying the tangent-circle mosaic was a well-attested, though very disturbed, large-tessera mosaic in a geometric pattern (see below, 53 fig. 24) generally dated to the late 6th-early 7th c. (now phase 4A, *c.*650+).

The latest datable floor was the tangent-octagon mosaic attested in 7 small, *in-situ* fragments in room 2 of the symmetrical building outside the basilica proper (unit 9700) (fig. 5). Based on a single coin of Constans II in the mosaic's cobble foundation, it was tentatively assigned to a 660? period A (now phase 4A, *c*.650+). Although damaged by the insertion of graves and rather carelessly repaired, the overall composition was clear: tangent octagons determining 4-pointed stars (= *Décor* no. 183a) were delineated by a single black fillet on a white background; surviving decorative motifs in the octagons included dentilled squares, composite flowers and Solomon's knots. Among the graves cut into this mosaic, 9737 stood out: although its stone marker was lost, its reverse had been carved earlier with a Byzantine inscription preserved in negative imprint in the plaster that secured the marker of the later burial. The inscription probably refers to a grave near

Introduction 15



Fig. 5. Tangent-octagon mosaic (fragment 9207) in room 2 of the 'NE annexe'.

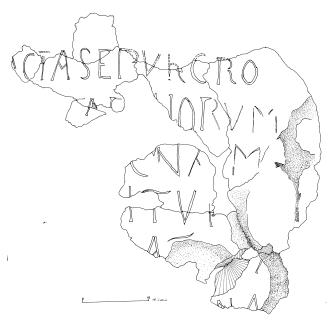


Fig. 6. Reversed plaster-imprint of funerary inscription (Ennabli cat. no. 48, *Report no. 1*, 275; M. Fliss/M. Chelli).

the relics of a saint of the Maiorum which may have been translated from Mcidfa to Bir el Knissia (fig. 6). The mosaic in Room 1 (and 3) of the 'NE annexe' featured a network of dark grey or green opposed grape-leaves on a white background linked by diverging black and red stems forming curvilinear swastikas and a 3-strand braided border (fig. 7). Because this was a popular composition in ecclesiastical settings, including in the basilica and baptistery at Carthagenna (Dermech), the not-yet-fully excavated mosaic was judged on stylistic grounds to be Justinianic or post-Justinianic phase A (now phase 3A, c. 570+).

The well-preserved sequence of sediments and surfaces excavated in 1990 in unit 4000 were crucial to establishing the phasing and chronological framework

in all excavated units in the field that are presented below. With the benefit of hindsight, we can see that the discussion of the earliest phases of the unit in *Report no. 1* (not yet fully excavated in 1990) was tainted by two underlying assumptions which later proved unfounded. First, the earliest feature in the unit was not the wall of the presumed apse of the basilica, subsequently removed by robbing. The assumption that it was had suggested that the NE–SW wall in unit 4000 (not fully excavated until 1992), approximately parallel to the basilica's S wall, was part of the basilica complex from the outset, but it proved not to be. Second, the apse wall was not constructed in the late-5th to early-6th c. but considerably later, in *c.*545+, a date established by the 1992 excavation inside the

basilica. The presumption of an earlier date for the basilica based on the only-generallydated earliest phases of unit 4000 led to an idea that the basilica could be Vandalic in date, which proved not to be the case.

However, the Justinianic and subsequent phases of unit 4000 in *Report no. 1* and their dates coincide fairly well with the phase dates for unit 4000 in the present volume. The correlation between the phases of unit 4000 is illustrated in the Table below, which also reflects the features not fully excavated in 1990 (in square brackets) presumed to belong to an earlier phase than they proved to be in 1992.

Unit 8000 (contiguous with sondage 3) was a drainage and burial area immediately outside the basilica's E wall, where later outdoor surfaces were quite well preserved, probably because they were at a lower elevation than inside the basilica, as they were also in unit 4000. A coin recovered from the repair to an outdoor, mortar-and-sand surface cut



Fig. 7. Grape-leaf mosaic (fragments 9218-19) in room 1 of the 'NE annexe'.

by burials provides a *terminus post quem* of 583 here for phase 3B. A coin in a subsequent clayey layer provided a *terminus post quem* of 601, proof of continued burial activity in unit 8000 into the 7th c.

#### CORRELATION OF PHASES AND DATES BETWEEN REPORT NO. 1 AND THIS VOLUME

Unit 4000 in Report no. 1			Unit 4000 in this volume		
Features	Phase	Date	Features	Phase	Date
[Apse wall built]		Late 5th- early 6th c.			
Room adjacent to basilica's apse; drainpipe; [midden]		Late 5th- early 6th c.	Building preceding basilica construction	phase 1A	c.525+
Room out of use; burial; [drainage channel]	Early Justinianic A	540+	Building out of use; burial; midden	Phase 1B	c.540+
			Apse wall built; drainage channel	Phase 2A	c.545+
Sandy channel from basilica's S wall	Mid-Justinianic B	550+	Sandy channel from basilica's S wall	2B	c.555+

Unit 4000 in Report no. 1			Unit 4000 in this volume		
Features	Phase	Date	Features	Phase	Date
Sediments; surfaces	Late Justinianic C	560-565+	Sediments; surfaces	2C	c.560+
Solid mortar floor 4415	Post-Justinianic A	570-575	Mortary surface 4415	3A	c.570+
Burials	Post-Justinianic B	Late 6th- early 7th c.	Burials	3B-4A	c.585+ to c.650+
Crushed building débris; tomb robbing		Early 7th c.?	Crushed building débris; tomb-robbing	6A	late 7th c. or later

Report no. 1 identified burial as the characteristic activity at Bir el Knissia, which led to our identification of the structure as a cemetery church. Graves were found in, against and near the basilica in every area excavated in 1990 except sondage 6. The digging of graves appeared to have begun just before or when the basilica was built (the amphora burial in unit 4000) and continued into the mid-7th c. or later (the graves in room 2 of the 'NE annexe'). This included two phases of burial attested inside the basilica. An *in-situ* but not-yet-fully-excavated piece of tomb mosaic (2044; see Terry below, 317 fig. 7), at a top elevation c.0.40 m below the tangent-circle mosaic (now phase 2C), had probably been inserted into an early floor level. Nine late 6th-c. graves (subsequently robbed) had been cut from the level of the tangent-circle mosaic in units 1000-2000 and 5000. Graverobbing, which began immediately after the basilica was destroyed by fire in the 7th c., destroyed or disturbed the vast majority of tombs. Only one intact earlier burial and 5 disturbed late-phase burials survived, whereas the (conservative) Minimum Number of Individuals from disarticulated human remains recovered from all areas excavated in 1990 attested to a further 50 individuals.

The 1990 finds were the subject of studies by specialists C. Walth and L. Miller (burials and human remains) P. Visonà (coins), the late N. Ferchiou (architectural fragments), L. Ennabli (inscriptions), J. W. Hayes (glass) and M. L. Allen (terracottas). These were intended to be preliminary reports the results of which would be incorporated into the final report.

By the end of 1990, the goals for 1991 and 1992 were clear: to excavate the features of the earliest phase of the basilica in the E aisle, namely the column foundations of the E colonnade and the first floor, together with any burials subsequently inserted into it; to explore the basilica nave, both phases of its floor, and the small foundations in the middle of the nave that are shown on Thouverey's plan; and to establish the physical and chronological connections between the basilica and the 'NE annexe' through the excavation of unit 9300.

#### Description of this volume and its goals

The stratigraphic report is comprehensive in that it assembles the evidence from all units excavated in 1990-92 into phases. For the sake of clarity, this volume retains the nomenclature of *Report no. 1* (e.g., 'NE annexe', E aisle, W colonnade and S wall), although the features inside the basilica are described in relation to the basilica's NW–SE (more accurately NNW–SSE) or NE–SW (ENE–WSW) axes. The stratigraphic report provides significantly more detail about the earliest phases of the site and the new results from the 1991-92 excavations than for the latest phases already laid out in *Report no. 1*. Nevertheless, we were able to clarify, correct, reconsider and improve on aspects of *Report no. 1*; in particular, we provide a more in-depth analysis of the 1990 sondage 5 in the light of the 1992 results in unit 4000.

The specialists' reports are also comprehensive: P. Visonà on coins; A. Kalinowski on pottery; J. J. Rossiter on lamps; A. Sterrett-Krause on glass; F. Bessière on architectural fragments; S. Pringle on marble and on ceramic building materials; J. Terry on tomb mosaics; J. Terry and S. Aloui on inscriptions; C. Walth, E. Smith, F. Touj and O. Gorgob on burials and human remains; and B. Davey and C. Walth on faunal remains. While focused on the 1991-92 assemblages, they clarify and incorporate information from the preliminary studies in *Report no. 1*. It proved essential to interpret these large but fragmentary assemblages to the fullest possible extent. To attempt a partial

reconstruction of the basilica's interior, Bessière, for example, devised a method to study architectural fragments recovered from disturbances. After sorting the 344 diagnostic fragments by type, original size and material, he assigned them catalogue numbers. On the basis of these groups, and comparable examples at other sites, he was able to suggest, largely independent of the fragments' findspots, where various architectural elements might once have been located. The result of all these studies was to bring some texture and colour to a suburban complex that from its foundation in the mid-6th down into the late 7th c. was both an important pilgrimage destination and a magnet for burials.

In the conclusion, the results of our 1990-92 and Delattre's 1922-23 excavations are combined for the broadest possible view of the development of the complex, its location and immediate environs. The overall goal has been as complete a reconstruction of Bir el Knissia's plan and history as the evidence permits, together with an exploration of its place in the suburban and sacred land-scape of early-6th through 7th-c. Carthage. As intended, Bir el Knissia contributes significantly to Carthage's martyrial legacy and attests to ongoing activity in the city in the 7th c. Despite the great damage that the complex has suffered, the design and decoration of Bir el Knissia sheds revealing light on the other great cemetery basilicas, the three more famous and venerable, though ill-fated, martyrial complexes of Mcidfa, Ste. Monique and Damous el Karita, as well as the pilgrimage complex at Bir Ftouha, its contemporary sister with which Bir el Knissia was intimately connected.