

## References

- Bielfeldt, R. 2007. "Der Liber-Tempel in Pompeji, S. Abbondio. Oskisches Vorstadtheiligtum und kaiserzeitliches Kultlokal." *RM* 113: 317–71.
- Benefiel, R. 2021. "Graffiti in religious spaces in first-century Pompeii: Lararia, neighbourhood shrines, and graffiti in the Early Roman Empire." In *Cultic Graffiti in the Late Antique Mediterranean and Beyond*, ed. B. Ward-Perkins, 1–16. Turnhout: Brepols.
- Bowes, K. 2020. *The Roman Peasant Project 2009–2014: Excavating the Roman Rural Poor*. University Museum monograph 154. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
- Burkert, W. 2011. *Griechische Religion der archaischen und klassischen Epoche*. Die Religionen der Menschheit 15. Stuttgart: Kohlhammer Verlag. Original edition, 1977.
- Carroll, M. 2008. "Nemus et Templum. Exploring the sacred grove at the Temple of Venus in Pompeii." In *Nuove ricerche archeologiche nell'area vesuviana (scavi 2003–2006)*. *Atti del convegno Roma 1-3 febbraio 2007*, ed. P. G. Guzzo and M. P. Guidobaldi, 37–45. Rome: "L'Erma" di Bretschneider.
- Carroll, M. 2010. "Exploring the sanctuary of Venus and its sacred grove. Politics, cult and identity in Roman Pompeii." *PBSR* 78: 63–106.
- De Caro, S. 1992. *Alla ricerca di Iside: analisi, studi e restauri dell'Iseo pompeiano nel Museo di Napoli*. Rome: ARTI.
- Foss, P. W. 1997. "Watchful Lares: Roman household organization and the rituals of cooking and eating." In *Domestic Space in the Roman World: Pompeii and Beyond*, ed. R. Laurence and A. Wallace-Hadrill, 197–218. *JRA Suppl.* 22. Portsmouth, RI: Journal of Roman Archaeology.
- Giacobello, F. 2008. *Larari pompeiani: iconografia e culto dei Lari in ambito domestico*. Milan: LED.
- Haynes, S. 2000. *Etruscan Civilization: A Cultural History*. Los Angeles: J. Paul Getty Museum.
- Ridgway, D. 2016. "Pyrgi." *Oxford Classical Dictionary*. <https://doi.org/10.1093/acrefore/9780199381135.013.5452>.
- Swetnam-Burland, M. 2015. *Egypt in Italy: Visions of Egypt in Roman Imperial Culture*. Cambridge and New York: Cambridge University Press.
- Swetnam-Burland, M. 2022. "Staging memories in the home: Intention and devotion in Pompeii and Herculaneum." In *Future Thinking in Roman Culture: New Approaches to History, Memory, and Cognition*, ed. M. Popkin and D. Ng, 73–92. Abingdon: Routledge.
- Van Andringa, W. 2000. "Autels de carrefour, organisation vicinale et rapports de voisinage à Pompéi." *RStPomp* 11: 47–86.
- Wyler, S. 2011. "Le sanctuaire dionysiaque de Sant'Abbondio (Pompéi): reconsidérations archéologiques." *RA*, Nouvelle Série Fasc. 1: 209–17.

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## Expanding Jarash: excavations bring new insights into the northwest urban quarter

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LICHTENBERGER, A., and R. RAJA, eds. 2020. *Environmental Studies, Remote Sensing, and Modelling. Final Publications from the Danish-German Jerash Northwest Quarter Project I*. Jerash Papers 6. Turnhout: Brepols. Pp. xiv + 247, 80 b/w, 4 col., 19 tables b/w. pISBN 978-2-503-58886-5, eISBN: 978-2-503-58980-0.

LICHTENBERGER, A., and R. RAJA, eds. 2020. *Metal Finds and Coins. Final Publications from the Danish-German Jerash Northwest Quarter Project II*. Jerash Papers 7. Turnhout: Brepols. Pp. xii + 182, 47 b/w, 19 col., 9 tables b/w. pISBN 978-2-503-58887-2, eISBN: 978-2-503-58981-7.

LICHTENBERGER, A., and R. RAJA, eds. 2021. *Glass, Lamps, and Jerash Bowls. Final Publications from the Danish-German Jerash Northwest Quarter Project III*. Jerash Papers 8. Turnhout: Brepols. Pp. xii + 248, 102 b/w, 77 col., 3 tables b/w, 10 maps b/w. pISBN 978-2-503-58937-4, eISBN: 978-2-503-58982-4.

LICHTENBERGER, A., and R. RAJA, eds. 2022. *Architectural Elements, Wall Paintings, and Mosaics. Final Publications from the Danish-German Jerash Northwest Quarter Project IV*. Jerash Papers 9. Turnhout: Brepols. 2 vols. Pp. xiv + 446, 371 b/w, 842 col., 15 tables b/w, 1 table col., 3 maps color. pISBN 978-2-503-59666-2, eISBN: 978-2-503-59113-1.

Despite more than two centuries of admiration and tourist fame, archaeological interest in Jarash (Gerasa) has languished since the sudden termination of the 1925–34 colonial enterprise to relieve the site's ruinous landscape from fields of crumpled stone and to terminate traditional economic activities by local villagers. That aborted awakening of an applauded classical *polis* by European-based agencies and their representative organizations in Palestine was gradually followed by an ultimately botched return to measure and document all that which remained obscured: the temples, streets, theatres, bathhouses, circuit walls and their gates, while funds from international institutions financed the restoration of monuments left exposed after 1934.<sup>1</sup> In time, fresh eyes looked away from the cleared monuments to the vast areas of still heavily buried parts of the site and, by scanning visually the unexplored landscape, wondered enthusiastically about what discoveries of a golden (classical) age could rest there under centuries of earthen buildup. Jordan, though, was no longer mandated, and contrary opinions found an opening. Excavations in 1977–78 by the then University of Jordan's Professor Asem N. Barghouti snapped the old, but still current, principle to "clear and rebuild" the "Roman" town. Rather, he set targets to investigate from fieldwork the neglected social history of Jarash by researching its prominent urban framework, his thesis being that planning initially followed a Hellenized Seleucid model with subsequent Roman influence being just a "secondary intrusion." To demonstrate this, Barghouti opened five excavation areas, some beyond the conventionally "prime" zones, from which he concluded that the urban layout of Jarash was very much a creation of the townsfolk's own making.<sup>2</sup> By 1982, four of the five excavation areas had produced archaeological strata that "uniformly belong successively to Umayyad, Byzantine, Roman and Hellenistic habitations."<sup>3</sup> Nevertheless, many projects since have struggled to advance noticeably an understanding of Jarash's civic profile in Hellenistic to early

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<sup>1</sup> Abu-Khafajah and Miqdadi 2019; Abu-Khafajah et al. 2015, for a piercing assessment.

<sup>2</sup> Barghouti 1982, 217, 227.

<sup>3</sup> Barghouti 1982, 219–27. The chronology is, in good archaeological fashion, from later to earlier periods. In the 1970s, the identification of 8th-c. CE pottery and later was in its infancy; for pottery complexity in 7th- to 11th-c. CE Jordan, see Holmqvist 2019; Walker and Sauer 2012; Walmsley 2022, and references in these.

Roman times.<sup>4</sup> The problem was not in the material record but, rather, an addiction to naïve practices and assumptions by practitioners in the field, with only a few exceptions.<sup>5</sup> Projects old and new carried on as before. Sadly, Barghouti's pioneering work did not get the recognition it deserved, and his application of urban theory to guide and interrogate archaeological work was not replicated.

A modicum of advances came with the "Jerash Archaeological Project" (1981–88 CE), primarily a Jordanian government initiative, which ultimately rolled out a program set on enhancing monuments and the supposed benefits of tourism.<sup>6</sup> After 1988, work proceeded at a reduced rate, but along the same line of thought: French work on the Zeus Temple and bathhouses; Italian work on the Artemis temple and the pottery kilns there, the streets, and the Propylaea Church; the hippodrome; and a Department of Antiquities program, all of which focused on monuments. The 2000s upheld the status quo. Still, there was a surprising boost to understanding the nature of Hellenistic settlement in 2001 with the discovery of an intact tomb sated with "spectacular" burial gifts of 2nd- to 1st-c. BCE date as part of a cemetery, which in time was intersected by the north circuit wall west of the north gate.<sup>7</sup> Then in 2002, this author, beset with positive views on early Islamic life in Jarash, commenced excavations in the southeast quadrant of the south crossroads in the belief that an early congregational mosque would be found in the economic and social center of the town.<sup>8</sup>

Almost 10 years later, a new team was to descend on the barely scratched Northwest Quarter (hereafter NWQ) of Jarash, in an elevated area sandwiched between the Artemis temple and the west circuit wall. In an early publication, the project directors Achim Lichtenberger and Rubina Raja laid out their expectations underlying the "Jerash Northwest Quarter Project" (hereafter JNWQP): to trace changing urban patterns "from the pre-Hellenistic to early Islamic periods" with a focus on the "impact of Hellenisation in the Near East in general and Gerasa in particular, and to determine whether or not these processes can be traced throughout the Roman imperial period."<sup>9</sup> Earlier, Lichtenberger had argued that Jarash originally comprised two Hellenistic towns, a "Greek Antioch and an indigenous Gerasa" made up of "Greek settlers or Hellenized Syrians" and "natives" with competing cult centers (those of Zeus and Artemis, respectively). The "conflicting contrast between 'Greek' and 'Oriental'" may have continued into the Roman period but, if so, was disguised by "the normative attraction of Greek culture."<sup>10</sup>

The books reviewed here, the first four in the JNWQP Final Publications series, give a revealing insight into the modified opinions of the two directors a decade later. As we will

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<sup>4</sup> Lichtenberger and Raja 2022a, 733.

<sup>5</sup> Singularly, the protracted and complex history of the Zeus temple compound as unravelled by Jacques Seigne is a stark witness to Jarash's concealed history before Rome, see Seigne 1993; Seigne 1997.

<sup>6</sup> Abu-Khafajah et al. 2015, 441. Overseas teams were enrolled, with this author leading the Australian team.

<sup>7</sup> Kehrberg 2017.

<sup>8</sup> Rattenborg and Blanke 2017, with references. Growing the project with a greater urban reach was dashed by vagarious changes in Denmark resulting in the abrupt termination of the program in the mid–2010s, a common fate of many an archaeological project.

<sup>9</sup> Lichtenberger and Raja 2012, 231. The uncanny similarity to Barghouti's aims is obvious, but overtly ethnic based.

<sup>10</sup> Lichtenberger 2008, esp. 144, 150–51.

see, those 10 years forced a fast change in the thinking by Lichtenberger, Raja, and their team due to, from their perspective, the unprecedented and unexpected discoveries given up by Jarash's earth. The four books, edited by Lichtenberger and Raja, are subsumed within the "Jerash Papers" (hereafter JP) series, of which Lichtenberger and Raja are the general editors. Four earlier volumes in the JP include one on a history of predominantly western interests at Jarash, and three on pottery and related matter (Volumes 1, 3–5).<sup>11</sup> The publication of the Final Publications series does not follow any particular subject order. Currently, a pot-pourri of chapters differ in academic value, yet in themselves they are free-standing, sometimes well presented, and informative in their own way. A drawback is the absence of detailed accounts on the most crucial of matters to an excavation: an exhaustive study of site stratigraphy and chronological outcomes that binds together the studies and facilitates grouping of archaeological finds, crucially an in-depth and stratigraphically determined pottery type series. The pressing need for JNWQP's core studies is acknowledged, belatedly, by the project directors,<sup>12</sup> although their claim of "a full quantification strategy" across the project does not extend to the pottery, by their own admission.<sup>13</sup>

### Review of Final Publications Volume 1, Environmental Studies, Remote Sensing, and Modelling (JP 6)

This volume of 261 pages is in small format and contains 10 mostly short chapters. Chapter 1 (1–44, A. Lichtenberger and R. Raja) presents an edited overview of the JNWQP that relies heavily on previous papers and chapters, to the extent that readers will need to access many works to get a fuller overview. In the first section, two short presentations cover a history of research, followed by an account of preceding volumes in the JP series and its purpose. The next section, on document and registration systems, describes the field work and physical interventions in the NWQ. The illustrations, including a new site plan, are in black and white and small. Field terminology is explained, such as the term *evidence* (aka locus) used to "label archaeological complexes, assemblages, and in situ finds" (9).<sup>14</sup> A 5-by-5 m grid was applied to locate excavation trenches that often did not remain square. The registration of extracted materials (finds, samples) in their many hundreds of thousands was systematic but, as the volumes show, publication could be inexplicably outsourced to external experts. The next section briefly summarizes the project's 24 trenches and their excavation (A–X), supplemented by key references to the relevant publications, particularly those co-written by the project's field director Georg Kalaitzoglou. The chapter ends with a working chronology, the contents of the volume, acknowledgements, the project bibliography to 2020, and team members.<sup>15</sup>

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<sup>11</sup> "Book Series, Jerash Papers," <https://www.brepols.net/series/JP> (Accessed 5 May 2023). Volume 2 has not appeared.

<sup>12</sup> Lichtenberger and Raja 2021, 1–4.

<sup>13</sup> Lichtenberger et al. 2017, n. 2. Equally unclear is whether the sieving of *evidences* (loci) occurred, but it seems not; on the low levels of sieving for faunal remains, see Kalaitzoglou et al. 2019a, 117; Lichtenberger et al. 2018, 54. No sieving means the "small" and the "unknown" – often critical markers – in all finds categories are excluded.

<sup>14</sup> Referencing Kalaitzoglou et al. 2013, which demonstrates how the *evidence* term is applied.

<sup>15</sup> Jordanian participants are not named in the team photo gallery, and only two are named in nearly two pages of acknowledgements, yet the Department of Antiquities of Jordan was the main, and authorising, Jordanian sponsor.

The next six chapters are gathered under the title “Environmental Studies.” These are: the geology of the NWQ (Chapter 2, 47–63, G. Holdridge); preliminary research into soils and sediments and their impact on settlement (Chapter 3, 65–78, G. Holdridge, S. M. Kristiansen, et al.); the archaeobotany of the NWQ from flotation or, commonly, “grab” samples extracted from archaeological fills, of which olive was the most predominant (Chapter 4, 79–92, M. M. Hald); archaeofaunal remains selected from secure, dateable contexts, consisting mostly of domestic mammals (sheep/goat, domestic pig, equid mostly donkey, and cattle) as well as domestic fowl and catfish (Chapter 5, 93–125, P. Bangsgaard; this coherent chapter greatly exceeds its statistics); two human burials, omitting reference to the 7th- or 8th-c. CE mass burial in the hippodrome of Jarash<sup>16</sup> (Chapter 6, 127–38, M. L. S. Jørkov); and a last chapter on the ambitious but unsuccessful attempt to date human bone by radiocarbon testing (Chapter 7, 139–54, B. Philippsen and J. Olsen). Of these chapters, Bangsgaard’s contribution stands out by utilizing only that data shown to be precise in its context and complete in its collection, and explains the processed data in a diligent manner; baffling, however, is the use of indistinguishable shades of an insipid grey in the graphs – a publishing error.

The last three chapters tackle matters of Remote Sensing and Modelling. Standard processes were used, notably LiDAR with data provided by the Royal Jordanian Geographical Centre, ‘Ammān, verified by ground proofing (Chapter 8, 157–72, S. M. Kristiansen and D. Stott); also, a twofold application of Magnetic Survey and Ground Penetrating Radar (GPR) by a commercial company (Chapter 9, 173–91, R. Kniess, A. Lichtenberger, et al.). Results varied, with GPR being the poorest method. An uneven terrain, surface obstacles, and shared attributes between natural and built environments played havoc with differentiating one from the other. Next, securing radiocarbon dates and building a workable chronology from them through the application of Bayesian statistics have played a significant role in chronological determinations for the JNWQP, as is explained in Chapter 10 (193–240, B. Philippsen and J. Olsen). The total sum of secure <sup>14</sup>C dates were collated to produce graphs depicting activity (a “rise and fall” reading) over time (1000 BCE to 2000 CE), “assuming unbiased sampling.”<sup>17</sup> However, there is an obvious barrier to a proposed peak of activity ca. 130–230 CE. The NWQ experienced significant modification through the use of externally sourced landfills and/or urban waste, which introduced every type of discarded material, including charcoal. This is not unusual, as the transfer of urban soils on a huge scale in the past is widely observed, but rarely discussed, in Middle Eastern archaeology.<sup>18</sup> The first peak is, therefore, little more than a booming echo from an earlier time and place. Returning to the graph, a second peak in the early 5th c. CE. seems the more likely date for the widespread inhabitation of the NWQ, which is followed by minor peaks and falls and seemingly an overall gentle reduction of activity after the 6th c. CE, but this may be related to the growing scarcity of hard woods.<sup>19</sup> It is a reminder that Bayesian manipulations will only work if the responsible archaeologist provides full details and an overview of competing historical opinions relevant to the <sup>14</sup>C results.

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<sup>16</sup> Ostrasz and Kehrberg-Ostrasz 2020; commentary Seigne 2007.

<sup>17</sup> Philippsen and Olsen 2020, 194–95.

<sup>18</sup> At Jarash, soils were moved about within the archaeological site down to pre-modern times, activities most recently attributed to Circassian farmers; Blanke 2018, 54; Walmsley 2003, 120.

<sup>19</sup> Wilcox 1992, 256, on scarcity of wood in the Pella (Fihl) region, which adjoins Jarash territory.



## Review of Final Publications Volume 2, Metal Finds and Coins (JP 7)

The three other volumes under review are published in a larger format, with color more generously used for illustrations even when unnecessary. Volume 2, at 194 pages, is of slim size with four chapters of which one (Chapter 2), on small finds in metal (in German), dominates the book. Chapter 1 (1–3, A. Lichtenberger and R. Raja) introduces the reader to the contents of the book, beginning with an abbreviated repeat of the settlement history of the NWQ, a quick reference to the metal finds (minus the geochemical analysis published elsewhere), two chapters on coins (minus an archeometallurgical study and a previously reported hoard),<sup>20</sup> and acknowledgements. The hoard is of 11 Byzantine and Arab-Byzantine copper coins and was closed in the 7th c. CE, yet managed to linger, likely concealed,<sup>21</sup> within a residential structure until it was entombed in the building's collapse in the mid-8th c. CE.

Chapter 2 (7–121, C. Eger) begins with a general description of the 747 metals items present, mostly iron, copper alloys, and lead, followed by notes on the absence of reports on metal finds in the region,<sup>22</sup> and a summary of the 12 categories of metal finds applied to this study. The catalogue largely consists of fragmentary and heavily corroded pieces relating to household functions. The objects are grouped according to year of excavation, that is, 2012–2016, with large numbers originating from the three 7th- to 8th-c. CE residences. The accompanying color plates are large and bright. Despite these pictures and the excellent drawings in the commentary, many of the catalogue items are not illustrated.

The last section of the book considers coins in two unequal parts. Chapter 3 (125–29, A. Lichtenberger and R. Raja) is a short description of 19 large-sized Hellenistic and Imperial Roman coins.<sup>23</sup> The recovery of these few coins correlates with the picked-over nature of introduced fills, and wear on most coins suggests a long life until the eventual withdrawal of the base-metal currency. Chapter 4 (131–78, I. Schulze and W. Schulze) covers the full field of retrieved coins at Jarash, overwhelmingly coppers, by way of a statistical study. The focus is on the Early Islamic period issues, especially the coins from mid-7th- to 8th-c. CE residences, then followed by a comparative study of the NWQ Early Islamic coins with others excavated at Jarash,<sup>24</sup> and finally a geographically wider comparison with other towns in the region. The chapter ends with the full list of the 803 coins from the JNWQP excavations sorted by year and trenches and includes metadata and features.<sup>25</sup> These are accompanied by four plates of 26 specimens in color. The authors engage with some crucial issues such as the validity, or at least acceptance, of Late Roman *minimi* in the marketplace in later centuries and implications that holds for the building of archaeological chronologies, as well as the high probability of copper-alloy coin production

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<sup>20</sup> Birch et al. 2019; Lichtenberger and Raja 2015b.

<sup>21</sup> See Walmsley 2010.

<sup>22</sup> Reports on metal finds from other excavations are not as absent as implied but can differ in content. In Jordan alone, a parallel household with metal items roughly of a compatible date is published in Daviau 2013; also Holly Parton in McQuitty et al. 2020, 152–73; Stefanie Hoss in Kenkel and Hoss 2020, 393–425, and at least four more; see also the archeometallurgical studies in Bani-Hani et al. 2012.

<sup>23</sup> For a thorough contextual study of Hellenistic and Roman coins by the authors, see Lichtenberger and Raja 2020.

<sup>24</sup> It should be noted that the coins from the Asem Barghouti excavations, many cleaned, are held in the museum of Jordan University; cf. n. 27 of I. Schulze and W. Schulze's chapter.

<sup>25</sup> But not to the same degree as in Lichtenberger and Raja 2015b.

(following the new Islamic type initiated in ca. 720 CE) into the later 8th and early 9th c. CE, also confusing for chronologies.<sup>26</sup> Overall, the chapter focuses on continuity of currency from transitional Byzantine into the early Islamic period, which helps greatly in the scrutiny of earlier research outcomes built on purchased collections known to be unreliable due to forgery and contamination.

### Review of Final Publications Volume 3, Glass, Lamps, and Jerash Bowls (JP 8)

Volume 3 is also a four-chapter presentation, this time extending over 260 pages, of which one chapter on lamps makes up most of the book. As editors, Lichtenberger and Raja offer an introduction (Chapter 1, 1–9), which commences with an update on the intended documentation policy,<sup>27</sup> and explains the reason behind variations in reporting styles by invited experts, not all of whom were on the excavation team. A new and detailed open-source map in color is provided with a list of 63 places. Detailed data lists (finds, *evidences*) are promised for later volumes, including the all-important site stratigraphy and ceramics, as is an open access data dump on-line to delve deeper into specific topics.<sup>28</sup> There follows an introduction to each topic: glass, lamps, and Jerash bowls, in which earlier registration and analysis work by project members is noted.

Chapter 2 (13–49, R. Jackson-Tal) considers 104 (or 105, according to the catalogue) items from 1,740 diagnostic finds of the ca. 5,500 glassware specimens, some intact, assembled by the JNWQP. The chapter is arranged with a commentary and a catalogue. Both sections divide glass into the following categories: bowls, beakers, and bottles,<sup>29</sup> jugs, goblets (wine glasses), lamp bowls, unguent holders, window glass, bracelets/anklets, inlay, and glass mosaic cubes. Each of the 105 items are numbered, the field find number is provided, and a brief description of the piece is given, supported by a line drawing and/or a high-quality color photograph with scales showing length and color balance. In the commentary, the main categories are conveniently subdivided based on form, whereas comparison lists to other sites lack specificity. A mold-blown concave bottle base in blue (CN 64) would benefit from further study, as would CN 58, 59, and perhaps 57. Continuities into the second half of the 8th c. Arḍ al-Shām (Syria-Palestine), while very unclear, are in need of more attention than that given here.<sup>30</sup> While a technical report, the glass study seems hurried and omits a previous chemical study on a selection of glass pieces from the JNWQP, which must be consulted separately.<sup>31</sup>

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<sup>26</sup> The dating and terminology of 7th- to 8th-c. coins of the early Islamic period is as awkward as its typology. For detailed studies based on collections, see Foss 2008; Goodwin 2005 and papers since. For the similarity between late “Umayyad” forms, see Ilisch 1993.

<sup>27</sup> See observations in n. 13, this review.

<sup>28</sup> <https://doi.org/10.6084/m9.figshare.12116286.v4>, currently basic (15 May 2023).

<sup>29</sup> Headings in the commentary and catalogue sections do not agree. The “Beakers and Bottles” heading seems omitted from the catalogue (32), where it should be placed before catalogue number 36 (cf. p. 16 in the commentary, listing “Beakers with Tapering Conical Walls”). Rather, the “Bottles” heading appears on p. 38 linked with “Jugs,” which do not commence until catalogue number 65 (cf. 19).

<sup>30</sup> Jackson-Tal 2021, 22–23. On page 21, the author states “the third to the seventh centuries AD [were] the main period of occupation at the Northwest Quarter,” which seems to be the author’s default date, contrary to the settlement history revealed by the NWQP.

<sup>31</sup> See Barfod et al. 2018.

Chapter 3 (53–223, A. Uscatescu) is a timely reappraisal of pottery lamps found in Jarash, most of which were of local manufacture. Regrettably, only a preselected corpus of 422 lamp specimens from an unknown total were available to the author, which is not an ideal situation.<sup>32</sup> The distinctive lamps of Jarash have been studied numerous times over many years (referenced in the chapter), creating a surfeit of catalogues, each with their own numbering system; this tangled legacy is tackled head-on by the author with a new and encompassing typology. Following a brief summary of lamp studies in Arḍ al-Shām, Uscatescu offers an overview of lamp discoveries in Jarash from Hellenistic to early Islamic times with a clear focus on the later 6th into the 8th c. CE. At that time, lamp production at Jarash was at its peak in tandem with the production of other decorative ceramic forms.<sup>33</sup> The longevity of lamp production, as revealed in other excavations at Jarash, extended into the later 8th to 9th c. CE (‘Abbāsīd period), perhaps longer. These three introductory segments are concise and stacked full of detail. The catalogue fully accounts for the 442 lamp specimens selected by the JNWQP: a detailed description, decorative styles, fabric including Munsell readings, measurements, type, dating, and references including any earlier publication by the JNWQP. The listing of the entries is arranged by the source trenches, which ensures the finds numbering of the lamps matches the year of excavation. By way of contrast, the commentary rearranges the sequence according to a commonly used dynastic table.<sup>34</sup> The commentary also includes line illustrations of lamps, as well as maps and color charts. Nonetheless, moving between text and illustrations is not unduly difficult. The descriptions of the 31 types and, on occasions, their variants are coherent and thorough. Lamp features are described and their contexts identified as recorded in: a) the JNWQ excavations with *evidence* numbers; b) elsewhere at Jarash; c) the wider region. The conclusions reached by Uscatescu from the lamp series places them within the social dynamics of Jarash from the 3rd to 8th c. CE, revealing the existence of a “cosmopolitan population at the end of Late Antiquity.”<sup>35</sup> While constrained by the corpus and chronological ambiguity at more than one level, this chapter is a scholarly and literary masterwork.

Chapter 4 (227–44, P. Bonnekoh) deals with iconography on painted Jerash Bowls of the 6th and 7th c. CE, notably depictions of animals and humans, recovered in small numbers from the JNWQP’s excavations. The animals are birds, fish, artiodactyls, and a felid. With the humans, the focus is on one depiction labelled “the curly-haired boy,” a young servant holding a basket. Their clothing, a necklace, and the hairstyle are discussed.

### **Review of Final Publications Volume 4, Architectural Elements, Wall Paintings, and Mosaics (2 Parts, JP 9.1 and 9.2)**

Volume 4 of 460 pages consists of 11 chapters in two parts. Volume 9.1 focuses on architecture and building ceramics, and volume 9.2 on wall paintings and mosaics. Chapter 1 (1–10, A. Lichtenberger and R. Raja) defines more precisely the term “fill” as used for

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<sup>32</sup> Uscatescu 2021, 53, 124.

<sup>33</sup> Walmsley 2022, esp. 94.

<sup>34</sup> Uscatescu 2021, 124. The use of the term “Late Byzantine” is especially confusing and needs to be discarded by archaeologists, as dynastic terms in general counteract the writing of sound socio-economic history: Borrut 2014.

<sup>35</sup> Uscatescu 2021, 123.



the NWQ excavations, notably its archaeological meaning, worth, and outcomes. As explained by the authors, “fills” refer to placed mixed contexts and comprise the main type of deposit in the NWQ, whereas in situ objects are “relatively few.”<sup>36</sup> The exact attributes of the fills and their dates, based on the latest datable material found, is a crucial element in understanding the urban colonization of the NWQ, which will be difficult to establish until more information on the stratigraphy is presented. That will determine at what point in time the NWQ was extensively developed, and expose the role served by the architecture within a broader social, political, and economic context as, for sure, the NWQ was a stand-out, go-to area in the town from Late Antiquity into the 8th c. CE. Continuing, the authors return to discussing the “full quantification” policy already addressed in earlier JP volumes (above n. 13). Due to the absence of stratigraphic contexts, the depth of studies in this volume is constrained, as the editors admit. They briefly address the issue by naming the obstacles and defining terminologies for in situ and out-of-context finds, including architectural; they concede that cross-subject studies are limited until core data is readily available.<sup>37</sup> The exceptions, albeit major, are the “Mosaic Hall” and 7th- to 8th-c. CE residences, both felled by an earthquake attributed to the mid-8th c.

Beginning the studies, Chapter 2 (11–60, P.-A. Kreuz) offers a catalogue in color of architectural elements and a commentary. The elements are divided into six standard architectural classifications. All the material was retrieved from secondary contexts in a damaged state. It should be noted that entry 44 (42) is a column drum turned into a roller used to compress and harden clay surfaces, among other uses. Evidence for applied stucco was observed on capitals and columns, opening up images of decorative painted surfaces such as faux marble. Kreuz determines that the architectural elements were sourced in other parts of Jarash, given the heterogeneous nature of the group (21). The comments on the original architectural contexts and matters of spoliation (21–24) are topical and stimulating, with Kreuz squeezing all they can out of the catalogued material.

A short Chapter 3 (61–64, A. Lichtenberger and R. Raja) focuses on three select decorative pieces, all partial, probably of Byzantine make. Chapter 4 (65–74) by the same authors returns to an already published monumental architectural block of local stone shaped to form a part of an ornamented monumental gateway with altar iconography.<sup>38</sup> Likely brought in from outside the NWQ, the block was an integral part of an olive press in Byzantine times.

Chapter 5 (75–170, P. Ebling) presents a detailed study on ceramic building materials retrieved from the NWQP excavations. Two sections make up the chapter: a detailed commentary and a catalogue of 232 pieces. The catalogue offers information on type, dimensions, description, petrography (if available), and a proposed date. Entries are accompanied by illustrations, all with excellent black-and-white photographs and some line drawings. The commentary, which is substantial and informative, details the types of ceramic forms recovered according to the common styles of the period: roof tiles, box

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<sup>36</sup> Lichtenberger and Raja 2022b. The authors heavily reference whole books and papers on the excavations but unfortunately do not specify examples by page number; this creates ambiguity.

<sup>37</sup> The circularity of argumentation becomes apparent in the references/accolades made on p. 4 n. 12.

<sup>38</sup> Previously published, including Lichtenberger and Raja 2015a.

flues, hypocaust bricks, and floor/wall tiles. Nearly all the selected pieces came from secondary contexts, predominantly fills, dating from the 4th to mid-8th c. CE, the exception being roof tiles extracted from the 7th- to 8th-c. CE residences, nearly all in secondary usage. Surface treatments of the ceramics were common, especially scoring and marking. Noticeable is the use of a “beige washed” surface (83–84), the applied wash being prepared from local clays, according to tests. Much if not all of the ceramic building materials retrieved originated in the kilns of Jarash. Repurposing of the materials was universal, achieved by cutting mostly roof tiles into useable items from floor foundations to stoppers. Moving beyond just descriptions of “ceramic building materials,” this chapter deals with the ever-changing afterlife of Jarash’s long-lasting roof tiles.

Specialist technical reports on the ceramics follow. Chapter 6 (171–89, P. Ebeling and G. H. Barfod) presents a report on the use of macroscopic, microscopic, and chemical analyses of building ceramics at Jarash from the 4th to 8th c. CE, followed by a short report on the technological basis of a tile with a finish of beige wash overpainted in red and black. Chapter 7 (191–99, G. H. Barfod, P. Ebling, and C. E. Leshner) discusses the technology of kiln firing at Jarash as seen in overfired (melted) ceramics. The chemical composition of the roof tile samples unusually shows little change between unmelted and melted sample parts, whereas texture and color changed, with the melted parts becoming blacked, glassy, and more vesiculated at around 1000 °C.

Chapter 8 (201–386, K. D. Thomsen) constitutes, almost, the totality of Volume 9.2 – which raises the question as to why principal authors do not get bibliographical recognition in edited volumes.<sup>39</sup> The catalogue holds 981 specimens of painted wall plaster selected from an original count of some 5,000 plus. The presentation of these specimens is arranged chronologically, with the specimens in each period arranged according to the field finds number. Although an *evidence* could hold numerous fragments, the catalogued specimens are individually identified by a catalogue number (number + trench letter, in this case). Focusing on the three mid-7th- to 8th-c. CE residences, 310 fragments are listed, often with photographs of good color balance and exposure. However, the photographic display stops abruptly after catalogue number 750 (351). No Munsell readings are given. The comments section commences with a quick review of historic wall paintings in Jordan, after which the author embarks on an analysis of the wall pieces. The three residences, supported by firm dating and contextual integrity,<sup>40</sup> are featured. Of these residences, Unit P/V returned a large collection of richly colored plaster specimens from rooms on an upper floor (or floors) in patterns of multicolored bands and circles. On the ground floors, the walls were plastered and decorated with stuccowork. A residence adjacent to Unit P/V, Unit K, was under renovation. Two conclusions can be drawn from these observations. First, both residences had been continuously altered and maintained from their construction sometime in the 7th c. until a powerful earthquake struck; and second, the richly decorated plaster walls and mosaic carpets of, especially, Unit P/V reached beyond what was expected in a modest abode, indicating, through a confident display of panache and sangfroid, that these buildings were the residences of Jarashī elites.

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<sup>39</sup> Note the doctoral thesis, Thomsen 2019.

<sup>40</sup> Main reports are Kalaitzoglou et al. 2019a, 40–46; Kalaitzoglou et al. 2019b, 147–63; Kalaitzoglou et al. 2018, 27–31. Note that the incidences of earthquakes in the mid-8th c. CE are still debated. See recently, Triantafyllou et al. 2022, 1720–22.

With Chapter 9 (387–96, G. H. Barford), the elevated status of the NWQ community in the 7th and 8th c. CE becomes even more apparent.<sup>41</sup> In Unit P/V, the pigments used in the plaster wall paintwork were subjected to chemical analysis. Colors were commonly red, yellow, orange, green, and grey/black formed from ochres, “green earths,” charcoal/soot and, in rare instances, minium, all of which were mixed with lime for application. The toxins of minium (a lead derivative), used in the manufacture of orange pigments, and realgar (derived from arsenic), added to enhance reds, were likely acquired at a significant cost (393–94). Not surprisingly, all three specimens with the costly but color-enhancing toxic additives came from the most lavishly decorated residence in the NWQ, that of Unit P.

Chapter 10 (397–423, W. T. Wootton) deals with three categories of mosaics: mosaic panels found in situ, dislocated fragments of mosaic panels imbedded in floor mortar, and loose tesserae and offcuts. The material is arranged by chronology, then by trench, with commentaries on technology and techniques predominating. While mosaic fragments from fill contexts may give some hope of a late 1st- to early 4th-c. CE structure high up in the NWQ, the in situ carpets of the Mosaic Hall and the presence of floor mosaics in the upper rooms of the 7th- to 8th-c. CE residences – all functional in purpose – reveal an ongoing commitment to the creation of meaningful and inspiring interiors after Justinian, that is, from the later 6th into the 8th c. CE. The chapter, however, does not go much beyond describing the mosaics, comparing technical traits, and discussing inscriptions.

### Endnotes

It is probably too early to come to a grand conclusion on the eventual achievement of the series “Final Publications from the Danish-German Jerash Northwest Quarter Project.” Without the necessary core information, especially inter-trench stratigraphic sequencing, the value of the studies in these pioneering volumes is degraded. Patience, then, is necessary, but some volume indexing and principal context lists would have helped. Nevertheless, being able to review four consecutive volumes has assisted understanding and brightened optimism. Even though the contents of the various “finds” catalogues were differently arranged to meet author preferences, in the end they all revolve around the *site/evidence* numbering tag applied diligently in the field, it would seem. Accessing the numbers individually across catalogues, though, may be challenging without assistance, which will become even more important with the publication of the ceramic type series, hopefully in all its minutiae including troublesome *unknowns*. The JNWQP has already acknowledged that research does not always get the outcomes expected (above, Vol. 1, 139–54, Philippsen and Olsen), and it would be particularly informative to see the *unknowns* alongside the obvious *knowns* of primarily Jarash manufacture.<sup>42</sup>

A recent paper by A. Lichtenberger and R. Raja has provided the briefest of summaries on the JNWQP, followed by eight pages of bibliography.<sup>43</sup> The bibliography ends with a listing of earlier books by the authors that functioned as the “Research Basis” for the project. As referenced previously, Lichtenberger argues that the NWQ/Temple of Artemis precinct was founded in Hellenistic times to serve the town’s “natives,”<sup>44</sup> whereas Raja’s book

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<sup>41</sup> Identifying specimens as “Umayyad 600-700” is something more than odd (390, Table 9.2).

<sup>42</sup> Lichtenberger and Raja 2021, 3, and Lichtenberger and Raja 2022a, 734.

<sup>43</sup> Lichtenberger and Raja 2022a.

<sup>44</sup> Lichtenberger 2008.

argues for a 2nd-c. CE date for the temple, circuit wall, and urban grid between wall and temple.<sup>45</sup> Not so, says the archaeology, apparently, for there was, in the NWQ, “little activity in the Hellenistic and Early Roman periods,”<sup>46</sup> and the grid turns out to be no earlier than “late Roman,” but primarily “Byzantine.”<sup>47</sup> The four volumes reviewed here show how the JNWQP has adapted to this new reality, bringing valuable “new insights” to our understanding of the Northwest Quarter of Jerash.

## References

- Abu-Khafajah, S., and R. Miqdadi. 2019. “Prejudice, military intelligence, and neoliberalism: Examining the local within archaeology and heritage practices in Jordan.” *Contemporary Levant* 4, no. 2: 92–106.
- Abu-Khafajah, S., R. Al Rabady, and S. Rababeh. 2015. “Urban heritage ‘space’ under neoliberal development: A tale of a Jordanian plaza.” *International Journal of Heritage Studies* 21, no. 5: 441–59.
- Bani-Hani, M., R. Abd-Allah, and L. El-Khouri. 2012. “Archaeometallurgical finds from Barsinia, Northern Jordan: Microstructural characterization and conservation treatment.” *Journal of Cultural Heritage* 13, no. 3: 314–25.
- Barfod, G. H., I. C. Freestone, A. Lichtenberger, R. Raja, and H. Schwarzer. 2018. “Geochemistry of Byzantine and Early Islamic glass from Jerash, Jordan: Typology, recycling, and provenance.” *Geoarchaeology* 33, no. 6: 623–40.
- Barghouti, A. 1982. “Urbanization of Palestine and Jordan in Hellenistic and Roman times.” *SHAJ* 1: 209–29.
- Birch, T., V. Orfanou, A. Lichtenberger, R. Raja, G. Barfod, C. E. Leshner, I. Schulze, and W. Schulze. 2019. “From *nummi minimi* to *fulūs*—small change and wider issues: Characterising coinage from Gerasa/Jerash (Late Roman to Umayyad periods).” *Archaeological and Anthropological Sciences* 11, no. 10: 5359–76.
- Blanke, L. 2018. “Abbasid Jerash reconsidered: Suburban life in Jerash’s Southwest District over the longue durée.” In *The Archaeology and History of Jerash: 110 Years of Excavations*, ed. A. Lichtenberger and R. Raja, 39–57. Jerash Papers 1. Turnhout: Brepols.
- Borrut, A. 2014. “Vanishing Syria: Periodization and power in Early Islam.” *Der Islam* 91, no. 1: 37–68.
- Daviau, P. M. M., ed. 2013. *Excavations at Tall Jawa, Jordan 4. The Early Islamic House. Culture and History of the Ancient Near East 11/4*. Leiden: Brill.
- Foss, C. 2008. *Arab-Byzantine Coins. An Introduction with a Catalogue of the Dumbarton Oaks Collection*. Dumbarton Oaks Byzantine Collection Publications 12. Washington DC: Dumbarton Oaks Research Library and Collection.
- Goodwin, T. 2005. *Arab-Byzantine Coinage*. Studies in the Khalili Collection 4. London: Nour Foundation/Azimuth Editions.
- Holmqvist, E. 2019. *Ceramics in Transition: Production and Exchange of Late Byzantine – Early Islamic Pottery in Southern Transjordan and the Negev*. Oxford: Archaeopress Archaeology.
- Ilisch, L. 1993. *Palästina Iva Bilâd aš-Šâm I*. Sylloge Numorum Arabicorum Tübingen. Tübingen: Ernst Wasmuth.
- Jackson-Tal, R. 2021. “The glass finds from the Northwest Quarter of Jerash.” In *Glass, Lamps, and Jerash Bowls. Final Publications from the Danish-German Jerash Northwest Quarter Project III*, ed. A. Lichtenberger and R. Raja, 13–49. Jerash Papers 8. Turnhout: Brepols.
- Kalaitzoglou, G., A. Lichtenberger, and R. Raja. 2013. “Preliminary report of the second season of the Danish-German Jerash Northwest Quarter Project 2012.” *ADAJ* 57: 57–79.
- Kalaitzoglou, G., A. Lichtenberger, and R. Raja. 2018. “Preliminary report on the fourth season of the Danish-German Jerash Northwest Quarter Project 2014.” *ADAJ* 59: 11–43.

<sup>45</sup> Raja 2012, 175–76.

<sup>46</sup> Lichtenberger and Raja 2022a, 733.

<sup>47</sup> Kalaitzoglou et al. 2018, 12.

- Kalaitzoglou, G., A. Lichtenberger, H. Möller, R. Raja, P. Bangsgaard, C. Eger, S. Merkel, M. Prange, A. Springer, S. Polla, and J. M. Larsen. 2019a. "Preliminary report of the fifth season of the Danish-German Jarash Northwest Quarter Project 2015." *ADAJ* 60: 17–129.
- Kalaitzoglou, G., A. Lichtenberger, H. Möller, R. Raja, and C. Eger. 2019b. "Preliminary report of the sixth season of the Danish-German Jarash Northwest Quarter Project 2016." *ADAJ* 60: 131–226.
- Kehrberg, I. 2017. "A caravan merchant family of 'Antioch on the Chrysorroas'. A glimpse of Hellenistic Gerasa as a caravanserai." In *To the Madbar and Back Again*, ed. L. Nehmé and A. Al-Jallad, 439–48. Studies in Semitic Languages and Linguistics. Leiden: Brill.
- Kenkel, F., and S. Hoss. 2020. *Tall Zirā'a: The Gadara Region Project (2001–2011). Vol. 6: Hellenistic to Umayyad Period (Strata 8–3), Ceramic, Glass and Metal Finds*, ed. D. Vieweger and J. Häser. Jerusalem, Amman, and Wuppertal: German Protestant Institute of Archaeology, Biblical Archaeological Institute Wuppertal.
- Lichtenberger, A. 2008. "Artemis and Zeus Olympios in Roman Gerasa and Seleucid religious policy." In *The Variety of Local Religious Life in the Near East in the Hellenistic and Roman Periods*, ed. T. Kaizer, 133–54. Leiden: Brill.
- Lichtenberger, A., and R. Raja. 2012. "Preliminary report of the first season of the Danish German Jarash Northwest Quarter Project 2011." *ADAJ* 56: 231–40.
- Lichtenberger, A., and R. Raja. 2015a. "An architectural block with altar-iconography from the North-west Quarter of Jerash." *Levant* 47: 112–30.
- Lichtenberger, A., and R. Raja. 2015b. "A hoard of Byzantine and Arab-Byzantine coins from the excavations at Jerash." *NC* 175: 299–308.
- Lichtenberger, A., and R. Raja. 2020. "Roman city coins of Gerasa: Contextualizing currency and circulation from the Hellenistic to the Late Roman period." In *Hellenistic and Roman Gerasa: The Archaeology and History of a Decapolis City*, ed. A. Lichtenberger and R. Raja, 369–81. Jerash Papers 5. Turnhout: Brepols.
- Lichtenberger, A., and R. Raja. 2021. "Glass, lamps, and Jerash bowls: The finds from the Danish-German Jerash Northwest Quarter Project's excavation campaigns 2012–2016." In *Glass, Lamps, and Jerash Bowls. Final Publications from the Danish-German Jerash Northwest Quarter Project III*, ed. A. Lichtenberger and R. Raja, 1–9. Jerash Papers 8. Turnhout: Brepols.
- Lichtenberger, A., and R. Raja. 2022a. "Archaeological work at Gerasa/Jerash: New perspectives on the city on the Gold River. The Danish-German Jerash Northwest Quarter Project 2011–2017." *SHAJ* 14: 731–44. Amman: Department of Antiquities.
- Lichtenberger, A., and R. Raja. 2022b. "Contextualizing finds from complex urban archaeological situations. Methodological considerations on the architectural elements, building materials, and mosaics from the Northwest Quarter (2011–2016)." In *Architectural Elements, Wall Paintings, and Mosaics. Final Publications from the Danish-German Jerash Northwest Quarter Project IV*, ed. A. Lichtenberger and R. Raja, 1–18. Jerash Papers 9.1. Turnhout: Brepols.
- Lichtenberger, A., R. Raja, and A. Højen Sørensen. 2017. "The Danish-German Jarash Northwest Quarter Project 2013 preliminary registration report." *ADAJ* 58: 39–103.
- Lichtenberger, A., R. Raja, and A. Højen Sørensen. 2018. "The Danish-German Jarash Northwest Quarter Project 2014 preliminary registration report." *ADAJ* 59: 45–131.
- McQuitty, A., H. Parton, A. Petersen, D. Baird, D. Collon, J. Johns, M. Khoury. 2020. *Khirbat Faris: Rural Settlement, Continuity and Change in Southern Jordan: The Nabatean to Modern Periods (1st Century BC – 20th Century AD). Vol. 1: Stratigraphy, Finds and Architecture*. Oxford: Archaeopress.
- Ostrasz, A. A., and I. Kehrberg-Ostrasz. 2020. "Ancient burials at the Hippodrome of Gerasa/Jarash." In *The Hippodrome of Gerasa, A Provincial Roman Circus*, 307–13. Oxford: Archaeopress.
- Philippson, B., and J. Olsen. 2020. "Radiocarbon dating and Bayesian modelling." In *Environmental Studies, Remote Sensing, and Modelling. Final Publications from the Danish-German Jerash Northwest Quarter Project I*, ed. A. Lichtenberger and R. Raja, 193–240. Jerash Papers 6. Turnhout: Brepols.
- Raja, R. 2012. *Urban Development and Regional Identity in the Eastern Roman Provinces, 50 BC–AD 250: Aphrodisias, Ephesos, Athens, Gerasa*. Copenhagen: Museum Tusulanum Press.
- Rattenborg, R., and L. Blanke. 2017. "Jarash in the Islamic Ages (c. 700–1200 CE): A critical review." *Levant* 49: 312–32.
- Seigne, J. 1993. "Découvertes récentes sur le sanctuaire de Zeus à Jerash. Rapport préliminaire à la campagne de fouille de 1992." *ADAJ* 37: 341–58.



- Seigne, J. 1997. "De la grotte au périptère. Le sanctuaire de Zeus à Jerash." *Topoi. Orient-Occident* 7: 993–1004.
- Seigne, J. 2007. "Deux « mass burials » du VIIe siècle p.C. ou la dernière vie de l'hippodrome de Gerasa (Jerash, Jordanie)." In *Épidémies et crises de mortalité du passé: actes des séminaires, année 2005, de la Maison des sciences de l'homme*, ed. D. Castex and I. Cartron, 23–37. Paris: Ausonius/Boccard.
- Thomsen, K. D. 2019. "Urban Life in Jerash, Jordan: The Technological and Stylistic Development of Mortar, Plaster and Wall paintings from Roman Times to the Middle Islamic Period from an Archaeological and Geoarchaeological Perspective." PhD diss., Aarhus University.
- Triantafyllou, I., A. C. Katsiyannis, and G. A. Papadopoulos. 2022. "Historical earthquakes, tsunamis, volcanic eruptions and comets in the eastern Mediterranean and the Sinai sub-plate: Evidence from two little-known Greek documents." *Natural Hazards* 116, no. 2: 1711–33.
- Uscatescu, A. 2021. "Pottery oil lamps from the Northwest Quarter of Jerash." In *Glass, Lamps, and Jerash Bowls. Final Publications from the Danish-German Jerash Northwest Quarter Project III*, ed. A. Lichtenberger and R. Raja, 53–223. Jerash Papers 8. Turnhout: Brepols.
- Walker, B. J., and J. A. Sauer. 2012. "The Islamic period." In *Hesban 11: Ceramic Finds: Typological and Technological Studies of the Pottery Remains from Tell Hesban and Vicinity*, ed. J. A. Sauer and L. G. Herr, 507–93. Berrien Springs, MI: Andrews University Press.
- Walmsley, A. G. 2003. "The Friday Mosque of Early Islamic Jarash in Jordan: The 2002 field season of the Danish-Jordanian Islamic Jarash Project." *Journal of the C. L. David Collection* 1: 110–31.
- Walmsley, A. G. 2010. "The Early Islamic coin hoard." In *Excavations at Tall Jawa*, ed. M. Daviau, 393–413. Leiden: Brill.
- Walmsley, A. G. 2022. "The Early Islamic Period (Umayyad, Abbasid, Fatimid)." In *The Pottery of Jordan: A Manual*, ed. J. Haron and D. Clark, 89–107, 151–56. Amman: American Center of Research and Madaba Regional Archaeological Museum Project.
- Wilcox, G. 1992. "Archaeobotanical investigations at Pella (1983)." In *Pella in Jordan 2. The Second Interim Report of the Joint University of Sydney and College of Wooster Excavations at Pella 1982–1985*, ed. A. W. McNicoll†, P. C. Edwards, et al., 253–56. Mediterranean Archaeology Suppl. 2. Sydney: Mediterranean Archaeology.

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## Caesarea Maritima. The port, the city, and a long narrative of settlement

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The site of Caesarea Maritima, on the northern coast of Israel, was founded as an anchorage in the Hellenistic epoch and greatly expanded thanks to an innovative artificial harbor project commissioned under Herod the Great in 22–10 BCE. From then through the