# Debating the *domus ecclesiae* at Dura-Europos: the Christian Building in context

Camille Leon Angelo<sup>1</sup> , and Joshua Silver<sup>2</sup>

<sup>1</sup>Yale University, Department of Religious Studies <camille.angelo@yale.edu>
<sup>2</sup>The University of Manchester, School of Environment, Education and Development
<joshua.silver-2@postgrad.manchester.ac.uk>

**Abstract:** At Dura-Europos, homes were architecturally adapted across the late 2nd and 3rd c. CE by different religious groups to serve the needs of their communities. Although the Synagogue, Mithraeum, and Christian Building all began as domestic structures and share a similar architectural development, the origins of the latter have received unique attention through its classification as a *domus ecclesiae* or house church. This (hyper)focus on the structure's past use as a house does not do full justice to the archaeology of the building. Through an analysis of architectural adaptations, including before-and-after 3D reconstructions and daylight simulations, the authors show how the renovations significantly differentiated the Christian Building from its domestic antecedent and from Dura's houses more broadly. This approach is meant to shift attention away from more generalized, translocal, evolutionary models of Christian architectural development to micro-level archaeological analysis that situates structures within the spatial vernacular of their local contexts.

Keywords: Dura-Europos, domus ecclesiae, Roman Syria, domestic space, early Christian architecture, house church

At the ancient city of Dura-Europos, a Roman garrison town located along the south-western bank of the Euphrates (near the modern-day village of Salihiyeh in Syria), private homes were architecturally adapted across the late 2nd and 3rd c. CE by different religious groups to serve the needs of their communities. The products of such adaptation include the city's Mithraeum, Synagogue, and Christian Building. All three buildings remained in use until the mid-250s CE, at which time the Sasanians lay siege to the city, the population was displaced, and the site was buried.

The Mithraeum, Synagogue, and Christian Building all began as private residences and share a similar architectural development. Yet, the Christian Building's domestic origins

Hereafter, we refer to Dura-Europos as Dura and the Yale University Art Gallery as YUAG. Earlier versions of the arguments we develop in this article were presented and workshopped at the following conferences: "Graduate Student Conference on Religion and Technology" at Boston University (September 2018), the "Seminar on Digital Humanities and Textual Scholarship" hosted by the Authoritative Texts and their Reception Research School at the University of Oslo (October 2019), the Society of Biblical Literature Annual Meeting (virtual, November 2021), and "Dura-Europos: Past, Present, Future: Celebrating the Centennial of Excavations at Dura-Europos" at Yale University (April 2022). At the last stages of this article's production, we learned of D. K. Pettegrew's forthcoming (2024, in press) article on Dura's Christian Building, in which he proposes a reinterpretation of its dating, phasing, and domestic function. Given this timing, we were not able to engage with Pettegrew's research prior to this article's publication.

have received unique attention and form the subject of ongoing emphasis. This attention has been cultivated and maintained across decades of scholarship in two ways: first, in efforts to situate the structure within a developmental model of Christian architecture that endorses a material progression from the private homes described in the New Testament to basilica;<sup>2</sup> and second, through the use of terminology that presupposes a quasi-domestic character for the building.<sup>3</sup>

Through a critical reexamination of the archeological and material evidence of the architectural adaptations made to the building at Dura by a Christian community in the 3rd c., this article contends that this emphasis does not do full justice to the archaeology of the structure. In fact, acts of architectural differentiation, enacted during the building's renovation to accommodate Christian community use, crucially distinguished the Christian Building from the domestic structure that had preceded it and from Dura's houses more broadly. Drawing upon quantitative analysis and comparison of three-dimensional reconstructions and daylight simulations of the structure before and after renovation, we show how these acts of architectural differentiation reconfigured the space such that visitors could use and experience it in ways that were categorically distinct from its domestic antecedent. The changes effectively divested the building of the key architectural features that constituted Durene house space and disrupted habituated patterns of occupying the city's residences. Disentangling the material reality of the structure from modern imaginings, the Christian Building emerges as a product of its unique built environment. Thus, we show the long-held view of the structure as occupying a pivotal place in a seamless trajectory of Christian architectural development is untenable. The contextual approach that takes seriously practices of architectural and embodied differentiation emerges as fruitful for understanding religion and the built environment at Dura more broadly. It also calls on us to reconsider the material origins of early Christianity and the *domus ecclesiae* as a category of ritual space.

#### The Christian Building in the context of Dura

In the city of Dura, the Mithraeum, Synagogue, and Christian Building were all located on the same street, along the western fortification wall (Fig. 1). The three structures share a similar story, having origins as private houses that were later architecturally adapted to accommodate community use. The Mithraeum underwent two major building phases between the late 2nd and early 3rd c.<sup>4</sup> The first, undertaken sometime around 169 CE, consisted of razing portions of the existing house and installing an engaged altar, raised podium, and benches. Then, sometime around 209–211 CE, the podium was extended, and an entranceway was cut to provide access between the sanctuary and a suite of chambers to the north.

<sup>&</sup>lt;sup>2</sup> L. Michael White (1996, esp. 11–25) has critiqued the evolutionary model's imposition of the basilican form onto earlier periods of Christian architecture but has still maintained the progression from house to *domus ecclesiae*. On White's influence on understandings of the *domus ecclesiae* as an architectural category, see also n. 16 below.

On these points, see "Evolutionary models and the limits of language: critiquing the category of domus ecclesiae" below.

The phasing of Dura's Mithraeum recounted here follows Dirven and McCarty 2020. Dirven and McCarty's phasing substantially revises the chronology proposed in *P.R.* 7/8, 62–80, which was widely adopted in later publications, such as White 1996, 50–53.

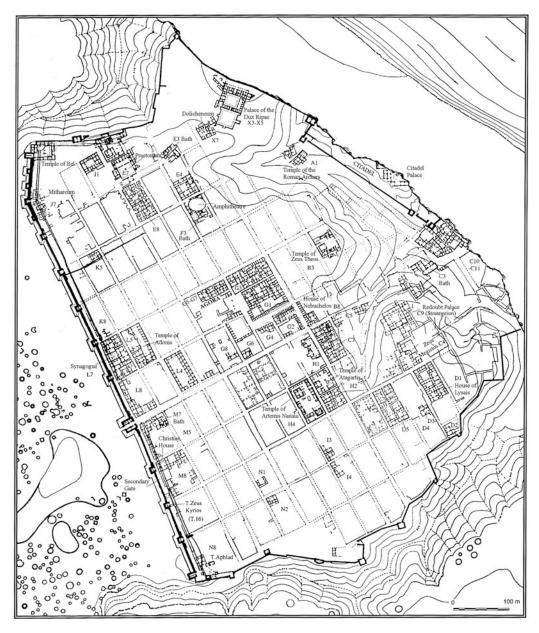


Fig. 1. City plan of Dura by A. H. Detweiler (Dura-Europos Collection, YUAG, neg. Y-733), annotated with names of structures and blocks by J. A. Baird. (Courtesy of J. A. Baird.)

The Synagogue followed a similar pattern of adaptation.<sup>5</sup> Little about the first phase is archaeologically discernible. In the second phase of adaptation, which took place sometime in the late 2nd c., walls were removed to create a hall of assembly and a small Torah niche. Most of the structure's eastern portion, which included several chambers and the triclinium, remained untouched. During the third phase of renovation, in 244/45 CE, these

On architectural adaptation at Dura's Synagogue, see F.R. 8.1, 7–33; P.R. 6, 309–36; White 1996, 93–97.

chambers were removed to accommodate the expansion of the forecourt and sanctuary. The house to the east, House H, was also annexed into the synagogue complex, and four of House H's chambers were left untouched. This change prompted the expedition's architect, Henry Pearson, to hypothesize that House H's chambers were needed to rehouse people who lived in the original building, after the structure's chambers were removed.<sup>6</sup>

The house that became the Christian Building is widely thought to have been constructed sometime around 232/233 CE (Fig. 2a).<sup>7</sup> This date is suspect, however, as it is primarily (and problematically) based on an inscription in an undercoat of plaster in Room 4B, rather than on the construction of the building itself.<sup>8</sup> About a decade later, the structure underwent numerous architectural adaptations, both internally and externally (Fig. 2b), and these are discussed in detail later in this article. Like the city's Synagogue and Mithraeum, the Christian Building remained in use until sometime between 254 CE and 256 CE, when the structure was sealed beneath the rampart and the city besieged by the Sasanians.<sup>9</sup> The nature of the site's abandonment thus provides it with a firmly pre-Constantinian terminus ante quem and makes the Christian Building at Dura the archaeological record's only securely dated example of a pre-Constantinian Christian community space.<sup>10</sup>

<sup>&</sup>lt;sup>6</sup> *P.R.* 6, 228, 336.

Labeled M8-A in the excavation reports. No evidence survives to establish the identity of the property's original owners or to determine when and how the property was given over to the use of the Christian community.

On this inscription and its relevance for dating the structure, see *F.R. 8.2*, 17, 92, no. 10; *P.R. 5*, 239, no. 593. White (1997, 123–24) concurs with Kraeling that the lack of evidence for extensive use of the house prior to its adaptation confirms that the structure was likely not built many years prior to this inscription. Excavators did find ashes and "brittle ware" in the foundation trenches of the structure. Kraeling (*F.R. 8.2*, 35–36) took this as evidence the structure was likely constructed after 165 CE, as brittle ware is a Roman import. However, he also noted that this assertion was problematic as brittle ware was also found in much earlier contexts (*F.R. 8.2*, 36 n. 1). Baird (2014, 165–66 n. 50) also notes the problematic dating of the ware. On brittle ware at Dura, see also *F.R. 4.1.3*.

On the final years of Dura and the abandonment of its cult buildings, see Baird 2018, 35–36; Coqueugniot 2012.

On this assertion and the anomalousness of Dura's Christian Building, see, for example, Bowes 2008a, 579-82; Sessa 2009, 106-8; Osiek 2002, 83, 97. A recent claim for an ante-pacem Christian building comes from excavators of the "prayer hall" unearthed in 2005 just south of Tel Megiddo; Tepper and Di Segni 2006; Tepper and Di Segni 2008. Notably, only one room of the structure appears to have been allocated for Christian community use, while other portions of it seem to have been used contemporaneously as a residence. Unlike the Christian Building at Dura, the structure at Megiddo was not privately owned, but appears to have been the property of the army or state. Excavators thus suggest that the structure was built for the daily use of Christian members of the Roman army and then later abandoned during the reign of Diocletian (284-305 CE). The structure is dated to the ante-pacem period based on the style of the chi-rho on the mosaic floor and the paleographic similarities of a dedication to "God, Jesus Christ" with similar inscriptions ranging from the 3rd or 4th c., as well as ceramic and numismatic evidence. The pottery sherds that the excavators cite to support this date were found in a locus that appears to be fill on top of the mosaic. Without datable material from sealed loci in the "prayer hall", their dating is suspect. Others have raised questions about this date. Adams (2008), for instance, has suggested that, based on the architectural affinities that the Christian Building at Megiddo shares with the mid-4th-c. Lullingstone Christian chapel, it is likely of a later date. Megiddo, also a Roman frontier town, would provide a similar

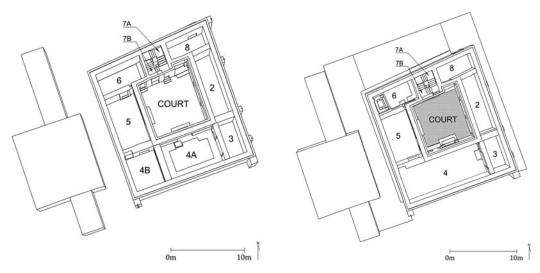


Fig. 2. Plan-perspective of the Christian Building (M8-A): (a) prior to its renovation for Christian community use; (b) following its renovation for Christian community use. (C. Leon Angelo and J. Silver.)

Of the three structures, only the Synagogue is thought to have continued to house people after it was converted into a community cult space. There is no evidence indicating that the Christian Building ever simultaneously served as a domicile and a Christian community space after the renovations were completed. Nevertheless, since its excavation in the early 1930s by a joint team from Yale University and the French Academy of Inscriptions and Letters, scholars have attributed special importance to the domestic origins of Dura's Christian Building.

# Evolutionary models and the limits of language: critiquing the category of *domus* ecclesiae

The discovery of Dura's Christian Building and its initial publication occurred in a period of scholarship invested in tracing an evolutionary progression from the private homes described in the New Testament to later Christian community architecture.<sup>12</sup>

socioreligious climate to Dura, of which scholars, such as Bowes (2008a, 581–82), have argued the city's Christian Building is a product. On the unique visual culture among Dura's cult buildings as a product of the plurality and proximity of religious groups in the city, see Dirven 2004; Elsner 2001; Rajak 2011; DeLeeuw 2011. Tsivikis (2022, esp. 191–92) has also recently argued for identifying a renovated structure at Messene as a *domus ecclesiae* dated to the 3rd and 4th c. He has advanced this argument on the basis of two mosaic floor inscriptions, yet excavation of the complex was still ongoing at the time he put forth this interpretation of the structure.

On the Synagogue, see "The Christian Building in the context of Dura" above. Dirven and McCarty's (2020, 177) revised phasing suggests that the city's Mithraeum replaced the house that had preceded it.

On the history of excavation and publication of Dura's Christian Building, see the "Methodology" section below. On the influence of Dura's Christian Building on the notion of the *domus ecclesiae*, see Bowes 2008a, 576, 579–582. Kirsch was among the first to postulate an architectural linkage between the private house and basilica church. He argued that the post-Constantinian neighborhood basilicas of Rome, known as *tituli*, were built upon pre-Constantinian houses that had been renovated for Christian community use, which he called

The category of *domus ecclesiae* emerged from these discussions as a technical designation for homes architecturally adapted for Christian use in the ante-pacem period, conceived of as a sort of architectural intermediary that still maintained domestic associations. Understood as emblematic of the presumed house-based nature of early Christian gatherings, Understood as emblematic of the presumed house-based nature of this architectural phenomenon. Even as later scholars have refined the definition of the *domus ecclesiae*, two misleading assumptions from that period have persisted: first, that houses renovated for Christian community use were ubiquitous across the Roman Empire in the 3rd c.; and second, that such houses at that time would have been designated *domus ecclesiae* or οἶκος τῆς ἐκκλησίας. However, neither the archaeological nor the literary evidence supports these assertions.

Dura's Christian Building is the only Christian community building previously identified as a *domus ecclesiae* that remains securely dated to the ante-pacem period; all the others have been securely re-dated to after the Edict of Milan.<sup>18</sup> Archaeologists and art historians working more recently in the fields of Roman and Late Antiquity have moved away from evolutionary models of architectural development;<sup>19</sup> Kristina Sessa's survey of the literary

<sup>&</sup>quot;die Häuser der Kirche" or "the houses of the church" (Kirsch 1918, esp. 127–37; see also Sessa 2009, esp. 93). Critiques of early teleological theories of early Christian architecture broadly, and Kirsch's work in particular, include Klauser 1968–69; Pietri 1978; Apollonj Ghetti 1978.

<sup>13</sup> Krautheimer (1965, 1–16) popularized the use of Latin and Greek terminology as a technical designation for the quasi-domestic architectural type that he (Krautheimer 1939) and Kirsch (1918) had theorized years earlier, dubbing the homes architecturally adapted for Christian use *domus ecclesiae* or "community houses." On Krautheimer's use of the term, see also Sessa 2009, 91 n. 1; 91–96.

<sup>&</sup>lt;sup>14</sup> *P.R.* 5, 245–48.

Krautheimer 1965, 1–16, esp. 5–7. In the final excavation report, Kraeling (*F.R. 8.2*, 138–39) formalized this identification, writing, "[T]he Christian Building at Dura may safely be taken as typical of the Christian *domus ecclesiae*." Kraeling (*F.R. 8.2*, xi, xxiii, 127–55) relied extensively on both Kirsch's and Krautheimer's research in this report, even noting his indebtedness to Krautheimer's advice in the acknowledgments. As early as 1935, publications of material from Dura classified the city's Christian Building as a *domus ecclesiae* but did not evoke the term as an architectural category. See, for example, Plooij and Dolder 1935, 471.

White (1996, 21) revised Krautheimer's definition of the *domus ecclesiae* to "designate any building specifically adapted or renovated for such religious use," not just domestic structures, with Dura's Christian Building continuing to serve as the principal case study for the architectural category. At the same time, White acknowledged the importance of patronage as well as the fluidity between categories of space in the Roman world, emphasizing the ways that Mithraic, Jewish, and Christian communities all routinely appropriated and adapted domestic structures for religious use (White 1996). In doing so, he situated early Christian architecture within the larger "adaptive environment" of the time. This was an important observation. Nonetheless, White still argued for a progression from house church to *domus ecclesiae* to *aula ecclesiae* (White 1996, 11–25, 102–39). On White's use of the term *domus ecclesiae*, see also Sessa 2009, esp. 95–96.

White 1997, 26 n. 35; White 1996, 126; Krautheimer 1965, 5. Critiqued by Sessa 2009, esp. 94–96; Bowes 2008a, 581.

On the redating of structures previously identified as *domus ecclesiae*, see n. 10 and n. 12 above; Bowes 2008a, 581; Sessa 2009, 106–8. However, the myth that there are valid Roman examples of pre-Constantinian *domus ecclesiae* still lingers; for example, see Snyder 2003, 127–28.

<sup>&</sup>lt;sup>19</sup> See, for example, Yasin's (2012) important and analogous critique of the evolutionary model of martyrium to church.

evidence has demonstrated that the term *domus ecclesiae* and its Greek equivalent οἶκος τῆς ἐκκλησίας are not attested before the 4th c. and that ancient authors did not use the term to denote a specific architectural category. Nevertheless, the terms *domus ecclesiae* and "house church" are still widely invoked in relation to Dura's Christian Building as a way of emphasizing its domestic origins. New Testament and early Christian scholars in particular routinely uphold the building as critical evidence for continuity in the evolutionary development of early Christian church architecture from private home spaces. However, as we will show, a closer examination of the earliest uses of the phrase *domus ecclesiae*'s Greek equivalent, οἶκος τῆς ἐκκλησίας, reveals that it did not denote a building architecturally adapted for Christian use. Here, we build upon Sessa's findings regarding the architectural indeterminacy of Eusebius's use of the phrase. In doing so, we seek to highlight how dissimilar the structures Eusebius refers to as οἶκος τῆς ἐκκλησίας were from Dura's Christian Building.

Books 7, 8, and 9 of Eusebius's 4th-c. *Ecclesiastical History (Hist. eccl.)*, as well as a passage in his *Martyrs of Palestine*, contain the earliest undisputed attestations of the phrase οἶκος τῆς ἐκκλησίας. <sup>25</sup> In both works, Eusebius uses the phrase τῆς ἐκκλησίας οἶκου to denote a physical building occupied by Christians without offering any qualification for

Sessa 2009. Sessa's study builds on Klauser's (1968–69) critique of Gamber's (1968) use of the term *domus ecclesiae*. The earliest undisputed attestations of the phrase οἶκος τῆς ἐκκλησίας appear in Eusebius's 4th-c. *Ecclesiastical History (Hist. eccl.)*, as well as a passage in his *Martyrs of Palestine*. While Eusebius frequently uses the term in his later works, it appears only once in *Hist. eccl.* 1–7: 7.30.19. Thus, as Sessa (2009, 100–1) notes, this one instance provides the only opportunity to attach a 3rd-c. date to Eusebius's use of the term. White (1997, 26 n. 35) bases his claim that the term was "already in use as a designation for church buildings in the third century" on this sole usage. As Sessa (2009, 100–1) has convincingly argued, however, it is unlikely that the phrase οἶκος τῆς ἐκκλησίας in *Hist. eccl.* 7.30.19 is original to the pre-4th-c. text. In Book 7, Eusebius mentions dates and events that provide the work in its current form with a terminus post quem of 303 CE, such as at 7.32.32. On the dating of *Hist. eccl.* 7, see Attridge and Hata 1992, 38; Louth 1990, 122–23. We concur with Sessa (2009, 100–6) that the fact that Eusebius does not use the term in any of his other 3rd-c. works makes it extremely likely that he added οἶκος τῆς ἐκκλησίας to *Hist. eccl.* 7.30.19 during his extensive post-313 CE revisions of the text. See also n. 25 below.

Recent art historical and archaeological studies that have variously referred to the Christian Building at Dura as a *domus ecclesiae* and/or house church include Peppard 2016; Ousterhout 2019, 6; Loosley 2019, 416–18; Chevallier Caseau 2022, 327, 333; Cianca 2018, 31, 90–104; Adams 2013, esp. 89–112. Cianca (2018, 31), for example, writes of Dura's Christian Building, "It is possible, however, to note that domestic space (in this case, renovated) is the locus for Christian worship in Dura Europos, which can then be compared with other examples in the Empire." See also n. 44 below.

For example, Snyder 2003, 128–34, 299–300, see also 137–40, 144; Manaloto 2019, 33–38; Larson-Miller 2019, 540; Birkey 2019, 55; Billings 2011, 544–69; and, to a certain extent, Adams 2013, esp. 89–95.

<sup>&</sup>lt;sup>23</sup> Sessa 2009, esp. 100–6.

Though Sessa (2009, 106–8) briefly turns to Dura's Christian Building, she does not consider how the structure compares with those that Eusebius describes.

<sup>&</sup>lt;sup>25</sup> Sessa (2009, 96–100) convincingly shows that several other attestations to *domus ecclesiae* and οἶκος τῆς ἐκκλησίας, such as the *Passio Sanctae Caeciliae* and Origen's second homily on Exodus, which are commonly cited as evidence for a 3rd-c. use of the term, do not actually date to the ante-pacem period; see also n. 20 above.

the materiality of the structure to which he is referring. <sup>26</sup> For instance, in *Hist. eccl.* 7.30.19, he uses it to describe the 3rd-c. Christian space in Antioch from which Paul of Samosata is evicted after being deposed as bishop of Antioch.<sup>27</sup> In 8.13.13, the phrase τῶν ἐκκλησιῶν τοὺς οἴκους denotes the buildings belonging to Christians that Constantius I did not destroy.<sup>28</sup> In Hist. eccl. 9.9a.11 and the Martyrs of Palestine 13.1, Eusebius's use of the phrase is similarly enigmatic: in the former, he uses οἴκους ἐκκλησιῶν to refer to the structures that Maximus did not prohibit Christians from holding meetings in or "building" (οἰκοδομεῖν);<sup>29</sup> in the latter, he employs οἴκους εἰς ἐκκλησίας δείμασθαι to denote the structures that Christians built themselves (δείμασθαι).<sup>30</sup> In both these passages, οἴκους τῆς ἐκκλησίας is the direct object of a verb (either οἰκοδομεῖν or δέμειν) that can mean either to build a new structure or to revamp an existing one. As such, it is unclear whether the structures Eusebius is referring to are domiciles that served as spaces where Christians assembled (like the meeting houses described in the New Testament), purpose-built constructions, or preexisting spaces that were architecturally adapted to accommodate Christian community use. Consequently, Hist. eccl. and the Martyrs of Palestine do not provide conclusive evidence that Eusebius is employing the phrase οἶκος τῆς ἐκκλησίας to describe constructions that are akin to the Christian Building at Dura.<sup>31</sup>

Indeed, in his later works, Eusebius uses the phrase to refer to entirely new constructions, not architecturally adapted ones. In the *Life of Constantine (Vit. Const.* c. 337 CE), Eusebius designates two post-Constantinian Christian buildings erected by imperial powers οἶκοι τῆς ἐκκλησίας. <sup>32</sup> In *Vit. Const.* 3.43.3, he identifies the structure Constantine's mother, Empress Helena, "raised" (ἀνεγείρασα) on the Mount of Olives as a "sacred house of the church" (ἱερὸν οἶκον ἐκκλησίας). <sup>33</sup> In *Vit. Const.* 3.58.3, he attests to Constantine's construction of "a very large church building" (οἶκον εὐκτήριον ἐκκλησίας μέγιστον) in the place of the Temple of Aphrodite at Heliopolis (Baalbek). <sup>34</sup> In both instances, Eusebius pairs οἶκος τῆς ἐκκλησίας with a verb that is typically used to connote the construction of a new structure, not the adaptation of an older one. In *Vit. Const.* 3.43.3, the verb is ἀνεγείρειν, which means "to raise a new structure." <sup>35</sup> In *Vit. Const.* 3.58.3, the verb governing the sentence is ἐπάγειν, which often implied a colonial action or

On this point, we concur with Sessa 2009, 100–6.

<sup>&</sup>lt;sup>27</sup> Ed. and transl. Oulton 1932, 222–23. See also Sessa 2009, 103.

<sup>&</sup>lt;sup>28</sup> Ed. and transl. Oulton 1932, 300-1.

<sup>&</sup>lt;sup>29</sup> Ed. and transl. Bardy 1958, 67. See also Sessa 2009, 103.

<sup>&</sup>lt;sup>30</sup> Ed. and transl. Bardy 1958, 170. See also Sessa 2009, 103.

<sup>&</sup>lt;sup>31</sup> See also Sessa 2009, 105.

For the date of *Vit. Const.*, see ed. Attridge and Hata 1992, 34. On both these mentions, see also Sessa 2009, 103–4.

<sup>33</sup> Ed. Winkelmann 1975, 102; transl. Cameron and Hall 1999, 138; see also 291–92 n. 41–43.4.

<sup>&</sup>lt;sup>34</sup> Ed. Winkelmann 1975, 111; transl. Cameron and Hall 1999, 146; see also 304–5 n. 58.

For example, in *Anthologia Graeca* 693.1 and Libanius's *Oration* 11.56, where the context explicitly indicates that the direct object of ἀνεγείρειν is a new, purpose-built construction. In *Anthologia Graeca* 693.1 (ed. and transl. Paton 1917, 384–85), the direct object of ἀνεγείρειν is the Temple of Fortune that Demetrius of Hierius erects after "feeling compassion for the city," presumably because they did not have one. Likewise, in Libanius's *Oration* 11.56.6 (ed. Foerster 1903, 454; transl. Downey 1959, 660), the direct object of the verb is Herakleia, the "addition" (προσθήκην) to the city of Daphne that the Herakleidae built after settling in the area. (Προσθήκην is in apposition.)

bringing something unfamiliar to a community. Moreover, *Vit. Const.* 3.58.3 describes Constantine as "setting in their midst (καταβαλλόμενος) also a very large church building for worship," which implies that it was a new structure. There confirming that Eusebius is not referring to a renovated structure in *Vit. Const.* 3.58.3 is the later church historian Sozomen's account of Constantine's actions at the Temple of Aphrodite. Sozomen describes Constantine as first destroying the Temple of Aphrodite, then erecting a new ἐκκλησία on its ruins. Representations of the structure of the truins of truins of the truins of the truins of the truins of the truins of tr

Admittedly, we can only speculate as to what architectural form Eusebius imagined each time he described a Christian space as an οἶκος τῆς ἐκκλησίας. Yet Helena's and Constantine's imperial constructions occupied landscapes long treated as sacred, such as the Mount of Olives, where they purportedly attracted people away from competing cults. It seems improbable that Eusebius would have considered them architecturally analogous to the structures that the martyrs built near the copper mines of Palestine "to serve the assemblies" that he mentions in *Martyrs of Palestine* 13.1.<sup>39</sup> Consequently, it appears that Eusebius indiscriminately applied οἶκος τῆς ἐκκλησίας to Christian space regardless of architectural form.<sup>40</sup> This would explain why Eusebius retrospectively applied it to Paul of Samosata's οἶκος τῆς ἐκκλησίας (*Hist. eccl.* 7.30.19), even though it predated Constantine's imperial constructions.<sup>41</sup> As Sessa has argued, this was likely because Eusebius was writing at a time when there was not an established terminology for Christian architecture.<sup>42</sup>

In our view, the continued reference to Dura's Christian Building as a *domus ecclesiae* or house church, terminology that emerged out of evolutionary understandings of early Christian material origins, has created blind spots in scholars' interpretations of it. Even as scholars using *domus ecclesiae* as a category have considered renovation a requisite characteristic, they have presumed an underlying continuity between the *domus ecclesiae* and the structure that preceded it, regardless of the degree of renovation it underwent. The idea that the Christian Building maintained its domestic function and associations has also been bound up with other problematic assumptions about the threat of persecution in pre-Constantinian Christianity in ways that have implicitly marked such Christian structures as different from other renovated private spaces, such as the Mithraeum and Synagogue at Dura. As a result of such macro-historical and translocal assumptions,

<sup>&</sup>lt;sup>36</sup> For example, in the *Histories* 5.67 and 6.34 (ed. Wilson 2015, 473, 533), Herodotus uses ἐπάγειν to convey the introduction of a foreign person or people as an act of colonial expansion.

<sup>&</sup>lt;sup>37</sup> Ed. Winkelmann 1975, 111; transl. Cameron and Hall 1999, 146; see also 304–5 n. 58.

<sup>&</sup>lt;sup>38</sup> Hist. eccl. 5.10.7 (ed. Bidez and Hansen 1960, 207).

<sup>&</sup>lt;sup>39</sup> Ed. and transl. Bardy 1958, 170.

On this point, we concur with Sessa 2009, 100–6.

<sup>&</sup>lt;sup>41</sup> Ed. and transl. Oulton 1932, 222–23. See also Sessa 2009, 100–6.

<sup>42</sup> Sessa 2009, esp. 104–5.

As Krautheimer (1965, 5) wrote, "all known community houses remain bound in plan and design to the tradition of utilitarian domestic architecture, as well as subject to the regional variations of third-century building within the Roman Empire."

For example, in her recent discussion of early Christian spaces, Chevallier Caseau (2022, 333) asserts that Dura's Christian Building is "no different from other houses: it is organized around a courtyard, and from the street, it looked like other houses, likely an intentional strategy because during this period, Christians had to be discreet for fear of being denounced and

scholars have not trained their attention on how practices of architectural differentiation operated on a local scale or considered the implications of these changes for the Christian Building at Dura.

In fact, a critical reexamination of the architectural adaptations made to the structure indicates that the renovations to the Christian Building designed to accommodate new patterns of community use set it apart from Dura's houses in both form and function. Such practices of architectural differentiation disrupted habituated patterns of residential occupation characteristic of domestic space at Dura, engendering new ways of accessing, using, and moving within the building. Taken together, the accumulation of these differences – both to the structure itself and to how bodies inhabited it – reshaped the building's function to such an extent that labeling it a "house church" is misleading on several levels.

In making this argument, we do not mean to imply that ancient buildings were either "domestic" or "cultic," or that they can or should ever be neatly categorized as one to the exclusion of the other. Indeed, in antiquity, there was fluidity and overlap between private and public, cultic, commercial, and household spaces. <sup>45</sup> This was particularly true at Dura, where structures were not only regularly readapted, but also often served multiple functions simultaneously. <sup>46</sup> Rather, we want to highlight the ways in which the adaptations to the Christian Building reflect an intentional move away from household space and to raise questions about how Durenes might have experienced the space from a locally situated perspective. <sup>47</sup> In doing so, we seek to integrate the Christian Building more fully within Dura's wider adaptive built environment, showing how a deeply contextual approach sheds new light on this much discussed structure.

#### Methodology

In what follows, we detail aspects of the renovations to Dura's Christian Building, focusing on the ways and extent to which those adaptations differentiated it from the space that had preceded it and from Dura's house spaces more broadly. We consider how acts of architectural differentiation created new ways of using, perceiving, and experiencing the building. Our analysis relies upon multiple modalities. We employ quantitative methods to

arrested." The narrative of persecution was likewise central to Krautheimer's imagination of the *domus ecclesiae*. Christian communities, he surmised, relied on domestic architecture out of necessity, providing Christians with an alternative to the religious architecture embedded with "pagan connotations," as well as a shield from unwanted attention at a supposedly tenuous time (Krautheimer 1965, 3–8). On the myth of Christian persecution and its influence on 20th-c. scholarship on early Christianity, see Moss 2013. On the influence of literary accounts on interpretations of ante-pacem space, see, for example, Duval 1978; Apollonj Ghetti 1978.

For studies problematizing these categories in their application to Late Antique archaeological remains, see Bowes 2008b; Allison 2001; Allison 2004; Nevett 2010, 89–118; Crawford 1990, 19–106 and, in particular, 37–43, 49–52; Tuori and Nissin 2015; cf. Clarke 1991. And on the dangers of "false analogy" in the archaeology of housing more generally, see Meyer 2022.

On the multiplicity of functions served by Dura's houses, see Baird 2014, 155–200.

Our argument about Dura's Christian Building resonates with Finney's (1994, 99–293, quote on 292) larger claim about the ways in which late 2nd- and 3rd-c. Christianity reflected a desire to "make Christianity a recognized, respected, and visible form of Greco-Roman religiosity." We are grateful to one of the anonymous reviewers for pointing out this convergence to us.

consider what would have prompted Dura's population to think of it as domestic. To do this, we analyze architectural elements and their combinations in Dura's houses. We then use this information to evaluate the degree to which the architectural adaptations to the Christian Building differentiated it from other domestic spaces at Dura. We also employ three-dimensional modeling and daylight simulations to consider the effect that the renovations had on the embodied and perceptual experience of visitors to the Christian Building. Underlying our approach is the understanding that "spatiality is not simply defined by the architectonic setting, but emerges in the co-presence of moving human bodies and material culture." That is to say that architecture, sensory experience, and embodied practices all work together to engender spatial form. Architectural differentiation reshaped experiential and usage patterns. In turn, such patterns worked in tandem with architecture to determine the impression the Christian Building gave to its visitors. Focusing on this combined impact enables us to make more comprehensive and historically situated judgments about the ways that the renovations to the Christian Building changed how Durenes experienced it.

Ultimately, the evidence discussed in the remainder of this article indicates the Christian Building came to bear neither a material relationship with the specific domestic structure that had preceded it nor the key architectural features that commonly constituted Durene household space more broadly. To make this judgment, we seek to understand the Christian Building through a locally situated perspective, rather than imposing contemporary perceptions of space onto it. This is challenging as patterns of perception and embodiment are deeply habituated and culturally produced, and the temporal remove that separates modern contexts from Dura's is vast.<sup>51</sup> However, it is possible to gain insight into Durene sensibilities about their built environment through a methodology that is sensitive to the local dynamics of space at the time.

In antiquity, the boundaries between household and cultic space were permeable.<sup>52</sup> Nonetheless, we seek to establish what features likely constituted household space at Dura with two assumptions based on such distinctions: first, that the markers of domestic space are discernable in household architecture, and second, that the architectural characteristics commonly associated with household space are in some way delineable from those of other types of space at Dura. The distinctions we apply are not meant to construct a false binary between cultic and household spaces, or even to set these two categories in opposition to each other. Rather, we undertake this approach in order to think critically about what features often constituted a house at Dura and to see how the Christian Building compared. Relatedly, "domestic" and "domesticity" are themselves fraught categories,

For a discussion of our methods related to the creation of the models and daylight simulations, see the Supplementary Materials.

<sup>&</sup>lt;sup>49</sup> Sørensen 2015, 66.

On this point, see Sørensen 2015, esp. 64–66; Reckwitz 2012; and on the influence of light on perceptions of architectural surroundings and emotional dispositions, see Ingold 2016; Zumthor 2006, esp. 57–61. On the importance of illumination to the sensory experiences of ancient synagogues, see Stern 2023.

On the difficulties in interpreting archaeological remains of spaces through the eyes of the communities that inhabited them and strategies to do so, see, for example, Hamilton et al. 2006; Bille and Sørensen 2016; Love 2016; Brück 2005.

On this point, see n. 45 and n. 46 above.

particularly within household archaeology, which has rightly noted how this terminology wrongly projects modern assumptions about domesticity onto ancient material where it has no place.<sup>53</sup> Yet, in this study, we occasionally employ the term "domestic" to refer to household space at Dura in order to interrogate the category of space through which scholarship has historically treated the Christian Building.

In order to establish what elements served as markers of domestic space, we select structures at Dura originally categorized as houses and completely excavated by the Yale University and the French Academy of Inscriptions and Letters between 1928 and 1936. Among these 89 structures (not including the Christian Building), we exclude 27 because documentation is prohibitively scant, because the building did not exist simultaneously with the Christian Building, because it was significantly adapted by the Roman military for their own use, or because it was differentiated by an attached shop.<sup>54</sup> As to the last category, it is often not possible to delineate the extent of commercial enterprise in a given building due to the excavation methods employed at the time.<sup>55</sup> At the same

Critiques of the "domestic" relevant to this study include Meyer 2022; Spencer-Wood 1999; Allison 1999; Allison 2004. See also n. 45 and n. 46 above.

L7-H is omitted because it was annexed during the third phase of the Synagogue's renovation, dated to 244/245 CE, and thus was no longer a domicile in the period contemporaneous to the Christian Building. Three houses' size, number of rooms, and/or architectural features were not documented in sufficient detail for the analysis of the interiors of the structures: C4-A, M8-F, and D1. The little recorded information about C4-A does not suggest it was a domicile, and it may have had a relationship to the Temple of Zeus Megistos, to which it was adjacent. D1, popularly called the House of Lysias, stood two stories high and sprawled over a square city block, making it anomalous to any other structure at Dura. It included specialized installations for housing animals and was affiliated with one elite family, though it is probably a misnomer to call the property a single house. Moreover, while the structure remained in use until the 3rd c., it was built in the Parthian period. For D1's enigmatic qualities see Baird 2014, 285–95; de Pontbriand 2012. The terminus ante quem for its construction is based on graffiti dated to 159 CE; see Frye et. al. 1955, 147–51.

The following houses had attached shops: B8-H, C7-A2, C7-F, D5-E, G1-D, G3-J, G2-B, G2-C, G4-A, G5-B, G5-C, G5-D, G5-E, G6-C, G6-D, and M7-W. While this exclusion carries the theoretical risk of imposing a modern dichotomy between commercial and domestic space onto a society that did not maintain these distinctions, excluding these houses makes it less likely that we will conflate the architectural qualities of spaces predominately used for commercial activity with those of domestic spaces. As Baird (2006, 98-99) observes, Dura's excavators have categorized structures that opened directly onto the street as shops, equating the "elbowturn" entrance typical of Dura's domestic spaces as normative. We exclude G2-B, G2-C, G5-B, G5-D, G5-E, and G6-C because we concur with Baird's (2014, 190-97) suggestion that the archaeological evidence indicates that these houses, which are concentrated around the agora, served supra-domestic functions. We have also left G6-D out of the dataset because the excavation reports give conflicting information as to whether the original excavators failed to differentiate the interior level of G6-D from the shop S-22 and the main street to the south; P.R. 9.1, 156 n. 52. We have adopted Baird's (2014) identification of houses with attached shops with two exceptions: B2-C and H2-G. We consider the archaeological evidence insufficient to support the categorization of these two structures as shops and suggest that the way their entrances are structured would indicate otherwise. There is inadequate evidence to determine that the owners and operators of Dura's shops also inhabited the attached homes. G5-C illustrates the problematic nature of assigning ownership and delineating enterprises within Dura's structures that functioned as both domiciles and shops. Researchers widely accept that the epigraphic and archaeological evidence shows that G5-C was a brothel in the period of M8-A's use as the Christian Building; P.R. 9.1, 115-18, 166-67, 203-65; McGinn 2004, 223-25; Baird 2014, 186-99;

time, we know that housing associated with the Roman military was often materially, and in some cases geographically, differentiated from civilian homes.<sup>56</sup>

Portions of the Christian Building were first unearthed during the fourth season of excavation at Dura by Yale University and the French Academy of Inscriptions and Letters (October 1930–March 1931). Field director Maurice Pillet, who led the expedition's first four seasons of excavation, identified the structure as "the Edifice of Tower 17" because its connection to the Christian community at Dura and its significance were not yet apparent. The remainder of the building was uncovered during the fifth season of excavation (October 1931–March 1932), with some final archaeological work continuing until the summer of 1933. Following the fifth season, in 1934, the then field director, Clark Hopkins, published a preliminary and incomplete account of the findings from the excavation with Paul V. C. Baur. Though work on the Christian Building continued, the publications slowed after that. During the seventh season (October 1933–March 1934), Pearson, a graduate student of architecture at Yale University at the time, studied the standing remains of the Christian Building and investigated the subsoil under the structure. He produced plans, elevations, and sections of the Christian Building and its various phases. Pearson's drawings and findings from this season did not appear in print, however,

Baird 2007, 428–29; Pollard 2000, 53–54. Renovations to outfit the structure as a brothel took place simultaneously with renovations to Room 4 of the structure to convert it to a cellar with a shop above. The shop opened onto the street but did not communicate with the rest of the house, suggesting it was a separate enterprise from the brothel.

These buildings, classified as houses, show clear evidence of renovation for use as barracks for the Roman military: X7-A, X7-B, K5-A, J1-A, E4, E8, and L7-A. We do not exclude houses where Roman soldiers were only billeted. The evidence of the last Roman military occupation of Dura suggests the majority of Roman military buildings were in the northern quarter of the city. For discussion of the nature of the Roman military presence at Dura, refer to Pollard 2000, 44-58; James 2019. On the effect of the Roman military presence on Dura's local inhabitants, as well as on the city's architecture and the military's adaptation of X7-A and X7-B, see Baird 2014, 111-54; P.R. 9.3, 93-99. On K5-A, see James 2007, James 2019, 155. J1-A was located within the central area of the military base, and phasing indicates the Roman military built it for their use, P.R. 5, 235-37. E4 and E8 are both entire blocks that underwent adaptations when taken over by Roman military for housing. On E4 and E8, see Baird 2014, 115-27; James 2019. On the adaptations to the southern portion of E4 by the Roman military, see P.R. 6, 26-32. L7-A is one such structure that illustrates the material differentiation of military residences at the city. It is the only structure with a vaulted roof tiled with fired brick. Neither of these technologies appear in domiciles that the Roman military forces did not occupy. This suggests that when the Roman military converted the house to military accommodation, they employed techniques of architectural adaptation that were not native to Dura and not consistent with its standard domestic structures. For discussion of roofing techniques and building technologies exclusive to the Roman military, as well as billeting at Dura, see Baird 2014, 115-48; Baird 2006, 110-56. See also Baird's (2014, 115-23) discussion of structural adaptations to facilitate communication between different wings of the house. Moreover, there is no indication that Roman personnel frequented the Christian Building, but substantial evidence of the Roman army's cultural differentiation from the local Durene community suggests that if they ever did, their cultural system for interpreting space would be vastly different than that of Durene civilians. Baird (2011, esp. 56-61), for example, argues that the military had distinct discursive and administrative cultures at Dura.

<sup>&</sup>lt;sup>57</sup> *P.R.* 4, 11–13, 165–77, 215–21.

<sup>&</sup>lt;sup>58</sup> F.R. 8.2, x.

<sup>&</sup>lt;sup>59</sup> *P.R.* 5, 238–88.

until Carl H. Kraeling published the *Final Report on the Christian Building* in 1967.<sup>60</sup> Though Kraeling had visited the site in the 1930s, the majority of his magisterial account was not based upon firsthand knowledge of the structure, but rather on the careful analysis of materials contained in the Dura archives at Yale, especially Pearson's and Hopkins's accounts.<sup>61</sup>

Due to the excavation methods employed by Yale University and the French Academy of Inscriptions and Letters in the early 20th c., our ability to provide a nuanced picture of other aspects of the Christian Building is limited. For example, excavators primarily recorded architectural remains, with little attention to small finds.<sup>62</sup> Yet, small finds are imperative to understanding the function of spaces within the Christian Building and tracing changes in the use of the space over time. 63 As such, it is challenging to elucidate patterns of use before and after the structure was adapted that are not discernable from the architectural remains. It is also likely that the renovations to the Christian Building happened somewhat gradually, but there is no documentation of the phasing of the renovations beyond the account provided in the excavation reports and the stratigraphic relationships immediately visible in photographs from the excavation.<sup>64</sup> Presumably, then, the people who interacted with the space as the renovations were at varying levels of completeness would have experienced the space differently. It seems likely that the domestic features of the original structure were more visible during the initial stages of architectural adaptation than after the successive stages of renovation were complete. Similarly, we have little information about the property's history prior to its renovation and what collective memories Dura's community may have held about it. Stories about the Christian Building's formation must certainly have informed how visitors perceived and interpreted it, but these unfortunately escape the archaeological record.<sup>65</sup>

The early excavations at Dura were also not primarily concerned with documenting the houses they uncovered. There is no final report on Dura's domestic structures, and the preliminary excavation reports document the houses with various levels of detail and accuracy. The reports generally give the sizes of structures, the number of rooms excavated, and any notable architectural features found within them. Thus, the points of comparison

<sup>&</sup>lt;sup>60</sup> F.R. 8.2.

<sup>&</sup>lt;sup>61</sup> F.R. 8.2, x-xi.

There was a relative paucity of small finds excavated at the Christian Building. Kraeling (F.R. 8.2, 30–32) surmised this was the result of the structure having been "systematically cleared" or "looted" prior to the arrival of the Sasanians. Even still, the few finds that were recorded lack context.

On the importance of small finds to the study of domestic contexts in Late Antiquity, see Putzeys 2008; Cahill 2002, 73–147.

White (1996, 44) noted that Dura's religious buildings often followed a pattern of "gradual appropriation and adaptation," yet he contended, without substantiation, that the renovations to the Christian Building "must have been done all in one campaign" (White 1997, 124; echoed by Adams 2013, 95). Considering the cost and scale of the renovations and the difficulty of logistical coordination of workshops they would have required, this is improbable. Moreover, the archaeological and epigraphic evidence from Dura's Mithraeum and Synagogue evidence that these structures underwent several periods of renovation over the span of several decades. For further evidence indicating the gradual nature of the renovations, see n. 68 below.

On the ways in which Dura's houses may have been perceived and experienced over time and the importance of these household memories, see Baird 2022.

between Dura's domestic spaces are limited to the features that excavators consistently recorded, like cisterns or staircases. Jennifer A. Baird's monumental *The Inner Lives of Ancient Houses* provides the most thorough analysis of Dura's houses, and our attempt to establish what key architectural features constituted Durene household space relies on a quantitative analysis of the data that she meticulously compiled in her monograph.<sup>66</sup>

Woven throughout the discussion of the archaeological material in this article are the results of daylight simulations that compare how natural light flowed before and after the renovations. These simulations were executed using revised three-dimensional models of the Christian Building before and after it was architecturally adapted. We have detailed our methodology for creating the daylight simulation models, provided explanations of what the different types of simulations show, and included additional renders in the Supplementary Materials (Suppl. Figs. 2a–9b). There were certainly other sensory phenomena beyond light that shaped experiential and usage patterns at the Christian Building. Unfortunately, because the information that excavators recorded almost exclusively pertains to the architectural findings, it is not possible to reconstruct olfactory and auditory details.

#### Acts of architectural adaptation as practices of differentiation

When the residence was architecturally adapted to accommodate use by the Christian community at Dura and to facilitate that community's ritual needs, its original configuration changed. Room partitions, ceiling heights, seating installations, floors, and walls all underwent alterations that differentiated the Christian Building from local examples of domestic space. The majority of these renovations affected the courtyard and three rooms at the western end of the building, namely 4A, 4B, 5, and 6 (Figs. 2a and 2b).

During the renovations, partitions between rooms were modified. Changing the size and number of rooms delineated the interior of the Christian Building in ways that departed from the spatial and visual patterns of local domestic space. After the renovations, the Christian Building had six ground-floor rooms (excluding the courtyard), while the average Durene house had seven (excluding the courtyard). While this might not seem like a great difference, it resulted in two spaces – Room 4 and Room 6 – that had particularly uncommon proportions.<sup>67</sup> The partition wall between Room 4A and Room 4B had been taken down, combining the triclinium with its adjacent antechamber. The resulting Room 4 spanned nearly the entire length of the house and contained 35% of the structure's total floor area.

Room 6 also had uncommon proportions – in this case, its small size and shape. Even before the renovation, the room is thought to have had two entrances, which was rather unusual for a room of such size at Dura. 68 Then the extensive renovations to make it

<sup>&</sup>lt;sup>66</sup> Baird 2014, appendix; see also Baird 2012.

<sup>&</sup>lt;sup>67</sup> Jensen (2019, 598) has erroneously stated that Room 6 originally functioned as the house's "dining room." However, Room 4A most certainly functioned as the house's triclinium. Plaster benches lined the perimeter walls of such rooms, which are well established to have functioned as spaces of banqueting and reception within the city, though these are not the only function they served.

Even the field director at the time, Hopkins, struggled to make sense of Room 6. He hypothesized the original owners of the private house must have built the room intending it to be used

into a baptistery further considerably reduced the room's usable space.<sup>69</sup> The floor was excavated to bedrock to construct a foundational bedding for a baptismal font, a process that included adding an extra layer of hydraulic plaster.<sup>70</sup> A sizeable canopy and basin were laid down. After that, the floor of the room was raised. A new ceiling was then created out of large wooden beams and plaster (Fig. 6a; Suppl. Fig. 1). After the walls were plastered over, they were painted from floor to ceiling with two registers of figural scenes.

The conversion of Room 6 into the baptistery exaggerated the room's already odd dimensions. The installation of the baptismal font against the west wall reduced the total usable floor space of the room by approximately 30%. A new ceiling, bisecting the original room horizontally at a height of approximately 3.60 m from the floor, created a floor for a new "upper story room" (Room 6B), and reduced the wall height in the baptistery by 2.0 m. As such, walking from Room 5 to Room 6 involved a 36% decrease in ceiling height. To imagine the sensory implications of the re-ordering and resizing of this space for visitors, one must consider how these adaptations functioned within the structure. The Christian Building occupied approximately 229 m², making it 14.5 m² (5%) larger than the average Durene home. The creation of one large room (Room 4) and one exceptionally small room (Room 6) produced a spatial polarity between "functional" rooms within the structure that is atypical of Dura's domestic architecture.

The form and arrangement of the architectural decorations that were added to the Christian Building during the renovations were also uncharacteristic of the design of Dura's households. This is especially the case for the decorative modifications made to Room 6, which indicate an appropriation of Durene cultic spatial aesthetics and reflect a shift away from formations of domestic space. Individually, many of the elements added to Room 6 bear a strong similarity to features of the decorative program at both the Mithraeum and the Synagogue at Dura. For example, the drop ceiling in Room 6 and the vault of the font's canopy were both painted dark blue and decorated with motifs of white dots that looked like stars, closely resembling those painted on the reveal of the Mithraeum's niche and the vault of its later shrine.<sup>72</sup> As Kraeling has noted, both the design and the decoration

as a "chapel," as that would be the only explanation for a room of such an unusual shape (*P.R. 5*, 245). It is generally accepted that both of Room 6's doors are original. The evidence in favor of this interpretation is that the bench added alongside the northern side of the court, which is certainly associated with the Christian Building's adaptation, runs over the steps leading up to the entrance into Room 6 off the court. This indicates that this entrance existed prior to the installation of the bench. However, it is worth considering the possibility that perhaps this second entrance was not original to Room 6. Rather, Room 6's renovation might represent an early phase of adaptation to the Christian Building, at which time this second entrance was added. Then, at a later time, the adaptations to the courtyard took place. While there is insufficient evidence to say for certain, as we discussed above ("Methodology"), it is likely that these renovations took place gradually. As such, this possibility must be considered.

<sup>&</sup>lt;sup>69</sup> Baur (P.R. 5, 254–55) and Lietzmann (1937, 233–34) identified Room 6 as a martyrium primarily on the basis of the installation's shape and features. Kraeling (F.R. 8.2, 110, 145–46) convincingly rebuffed their assessment of the room and instead identified it as a baptistery. Most scholars today concur with Kraeling's appraisal, though some, including Crostini (2022), still argue for the identification of Room 6 as a funerary space.

<sup>&</sup>lt;sup>70</sup> F.R. 8.2, 25, 51, 51 n. 1.

The measurement we provide here follows Baird 2014 (appendix). However, our calculations indicate that the total footprint of M8-A was 351 m<sup>2</sup>.

<sup>&</sup>lt;sup>72</sup> Compare F.R. 8.2, 44–45 with P.R. 7/8, 102–3, fig. 36.5.

of the canopy also bore an unmistakable similarity to the Synagogue's Torah shrine.<sup>73</sup> While wall paintings are not unique to Durene cultic space, the most comparable instances of floor-to-ceiling painted panels like those within the room in the Christian Building come from Dura's Synagogue and Mithraeum. Room 6's painted program framed the baptismal font, above which was a painting of the Good Shepherd.<sup>74</sup> At the Synagogue and Mithraeum, the placement of paintings likewise worked in tandem with architectural features to create a focal point at one end of the room. In the case of the late Mithraeum at Dura, wall paintings, depicting the life and cosmogony of Mithras, surrounded a niche containing the cult image.<sup>75</sup> In the case of the Synagogue, paintings of biblical scenes covered the walls and framed a niched Torah shrine, set against the western wall. Given these similarities, the phenomenological associations of being in a room surrounded by images would have prompted viewers to conceptualize the space in a way analogous to neighboring cultic spaces.

These points of visual convergence also suggest that those responsible for the Christian Building's renovation took strong cues from the Mithraeum and Synagogue and may have even employed some of the same workshops. The use of figural decoration in cult spaces across the wider Dura community evidences the city's view of the utility of figural art for didactic purposes and its appropriateness for community cult spaces. Given that there is no evidence that the community at Dura had other dedicated Christian worship spaces at its disposal, the presence of floor-to-ceiling wall paintings (in a room containing a cult like image, as we have in the Mithraeum) points to the Christian community's desire to articulate their own space through the local idiom of community cult space rather than household space.

The distribution of architectural decoration within the Christian Building also deviated starkly from what was found in the majority of Dura's household spaces. Typically, windows, lintels, and doorframes received the most elaborate decoration at Dura. Within the interiors of the city's houses, the most intricate decorative treatments, such as plaster molding and wall paintings, most often took the form of discrete panels found within the triclinium. The distribution of decorative elements at the Christian Building departed from this pattern. After the renovations, Room 6 was the most sumptuously decorated, while Room 4, part of which had previously served as the triclinium, was left relatively unadorned. It thus seems likely that the local Durene visitor would have found Room 6's wall paintings and the absence of such decor in Room 4 to be highly unusual for a domestic context. The choice to richly decorate only Room 6 of the Christian Building, while leaving the rooms where users would most expect to find decorations undecorated, strongly points to a lack of interest in maintaining the trappings of household space. The insertion of wall paintings thus constituted one practice of architectural differentiation.

The removal of the building's cistern and its food preparation area further delineated the Christian Building from Dura's domestic spaces. Cisterns and food preparation areas were architectural features especially characteristic of local house architecture. As Baird has noted regarding Dura's cisterns, "[a]ccess to water, and management of water,

F.R. 8.2, 26, 39, 43–44, 44 n. 3, 45, 158, 197–98, 217. For analysis and discussion of the vault and ceiling decoration in Room 6, see Harley-McGowan forthcoming.

On the depiction of the Good Shepherd at Dura's Christian Building, see Harley-McGowan forthcoming.

On the decoration of the Mithraeum, see Dirven and McCarty 2020, 166–74.

<sup>&</sup>lt;sup>76</sup> See also F.R. 8.2, 220–27, esp. 221; McClendon 2011, esp. 160–63; Harley-McGowan forthcoming.

would have of course been an important everyday domestic concern at Dura as it is everywhere, whether it was ensuring availability of potable water during the hot summers or managing the torrential downpours of spring."<sup>77</sup> Processing and preparing food is likewise an inescapable reality of daily life. The absence of these elements meant that visitors would have interacted differently with the space than with the houses where they dwelled.

Prior to the renovations, the cistern was located in the northwest corner of the courtyard, but it was paved over when the courtyard floor – originally beaten red earth sprinkled with a dry plaster surface – was tiled with limestone. Kraeling, mistaking the cistern for a cesspool, thought that this adaptation indicated the house's "transformation into a *maison sacrée*," with the paving of the courtyard serving to "dignify" it for "formal use." When the installation is correctly identified as a cistern, however, the decision to tile over the feature suggests a more dramatic change in the structure's use. While cisterns are found in both houses and temples at Dura, many of the cisterns that do appear in temples were originally constructed as part of the building's former use as a residence, as is the case for the Synagogue. Making a cistern entirely inoperative points to the likelihood that the Christian Building was no longer meant to function as a domicile.

Indeed, no other adaptations to the structure during the renovation compensated for cistern water access. One likely reason for this is that without residential use of the building, smaller quantities of water were needed. Indeed, while the baptismal font that was added during the renovations was clearly outfitted to hold water, as evidenced by the fact that the font was coated with same material as was used in the Roman baths at Dura, water was likely needed less frequently for this ceremony, and was thus obtained and removed through other means.<sup>82</sup>

The adaptations to the Christian Building also seemingly divested it of a food preparation area, and in particular, of any type of oven installation. And, while food production was not a uniquely domestic activity at Dura, it certainly was embedded in the

Baird 2024, 156. On the renovations to water management infrastructure at Dura's Christian Building and their implications for understanding the community's baptismal rites, see Berg 2023. Unfortunately, Berg's article came to our attention just as we finalized this article, so his conclusions are not incorporated in our discussion.

<sup>&</sup>lt;sup>78</sup> F.R. 8.2, 11–12, Pl. XVI.1. We agree with Baird (2024, 158–60) that this installation was a cistern, not a cesspool. This is likely why, as Kraeling reports (F.R. 8.2, 37), only "a small accumulation of waste matter" was found in it. On the reasons why installations like this one in M8-A are clearly cisterns, see also Baird 2024, 157–64; Baird 2014, 30–32, 101–2; Berg 2023, 271–72.

F.R. 8.2, 11–12, quote on 12. Even if he had correctly identified the feature as a cesspool, this was still an erroneous conclusion. There were several more formal and elaborate houses with cisterns located in the courtyard, notably including those with paved courtyards akin to the Christian Building's. For instance, house G1-A had two courtyards, both with fired brick floors and a cistern located in the middle of the court; Baird 2012, 151–63; P.R. 5, 49–52; P.R. 9.1, 136–42. This indicates that paving the courtyard of a house did not prompt the removal of its cistern. The latrines that do appear at Dura are primarily associated with the Roman military installations; Baird 2014, 102, 102 n. 254; Baird 2024, 163.

While there were myriad ways to remove waste without a cesspool, water storage and access was not as easily compensated for. See also Berg 2023, 270–79.

<sup>81</sup> Baird 2024, 158.

<sup>&</sup>lt;sup>82</sup> On this construction, see F.R. 8.2, 26; P.R. 6, 84–104.

architectural fabric of homes.<sup>83</sup> Within the city's domiciles, three different types of kitchen technologies are archaeologically attested: *tanurs*, fire pits, and brick hearths.<sup>84</sup> Domestic spaces contained at least one of these types of installation, and sometimes all three existed in the same house, or even in the same room.<sup>85</sup> After renovation, however, none of these cooking installations seems to have been present in Dura's Christian Building.

None of the excavation reports documents the discovery of a tanur, fire pit, or brick hearth in the Christian Building. Nonetheless, it is inconceivable that prior to the renovation, the private house did not have a food preparation area. Where would it have been located? The presence of reed matting, wood rafters, and wood beams in the construction of the roof would have made it too flammable for cooking with a heat source. 86 Two more likely locations were the courtyard or the alcove under the stairs. If a clay oven once existed in the courtyard, it would have been undetectable after the space was renovated. The alcove under the stairs (Room 7B), floored with packed earth and left open to the courtyard, also could originally have been a food preparation area. If that was the case, it would not have remained so after the Building's renovations, when the floor in the courtyard was raised roughly 65.5 cm higher than the floor in the area under the staircase (Room 7B). 87 This change in flooring level, along with the addition of a plaster-rubble bench in the northwest corner of the court, covered the lowest steps of the staircase (Room 7A) and the vestibule (Room 8), as well as the single step that led from the courtyard to Room 6 (Fig. 3a-b).<sup>88</sup> The plaster-rubble bench added to the northwestern corner of the court also obstructed access to Room 7B. All this suggests that the Christian community did not consider it necessary to keep this area accessible for everyday use.

It is important to recognize that cooking facilities within Dura's houses were not put out of sight in the same way that they were at Pompeii's and Ostia's wealthy homes. 89 Rather,

<sup>83</sup> On food production at Dura, see Baird 2007, 413–37; Baird 2014, 163–72.

On domestic cooking installations, see Baird 2006, 150–65. G5-F, for example, includes a brick hearth in F2, and a fire pit and *tanur* in the courtyard; *P.R. 9.1*, 113–15. Examples of claims excavators made for discrete "kitchen" space include H. Detweiler's "Idealized Durene House" (*P.R. 5*, 47) which demarcated a room with an oven exclusively for food production; see Baird 2014, 29–32, fig. 9. The non-architectural remains associated with food production, such as portable cooking equipment and vessels, have not been analyzed. It is beyond the scope of this study to evaluate such assemblages, but to do so is critical to understanding daily life and social practices at Dura. On domestic cooking installations, see Baird 2006, 119, 121–25; Baird 2014, 68–69, 164–65.

We concur with Baird (2014, 164–65, 193–96) that the prevalence of multiple technologies within proximity to each other indicates that each had a different function. Several of the homes that contained multiple types of fixed cooking installations appear to have been outfitted to serve a "supra-domestic" function; that is, to prepare amounts of food that exceeded the normal needs of a house. For example, supra-domestic space G5-B, which is excluded from this study based on its extensive supra-domestic architectural adaptation, contained a fire pit in the center of the courtyard and a second fire pit and oven beneath the staircase; *P.R. 9.1*, 119–22; Baird 2014, 196.

<sup>86</sup> On the flammability of these materials in ancient roof constructions, see Hirschfeld 1998, 182.

<sup>&</sup>lt;sup>87</sup> F.R. 8.2, 11–12, 29.

<sup>&</sup>lt;sup>88</sup> F.R. 8.2, 11.

On the visibility of kitchens at Pompeii's and Ostia's houses, see the important work of Joshel and Peterson 2014, 24–59.

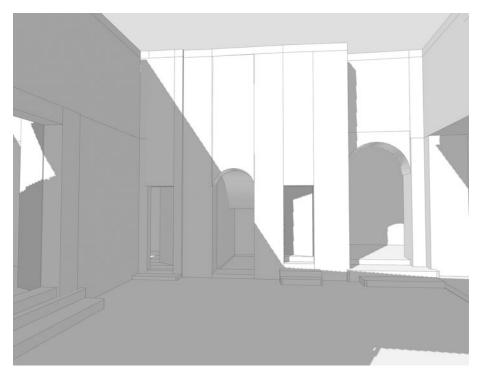


Fig. 3a. Schematic render of the Christian Building (M8-A) prior to adaptation; view from the entrance of Room 4A looking northwest across the courtyard to (from left to right) Rooms 6, 7B, 7A, and 8. (C. Leon Angelo and J. Silver.)

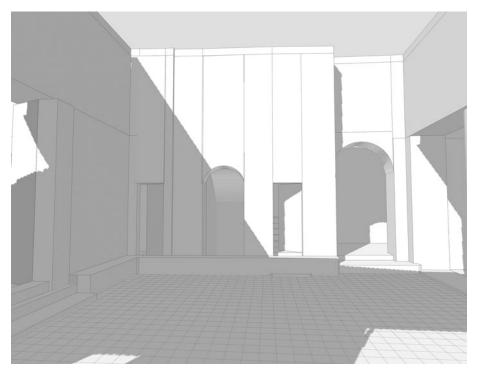


Fig. 3b. Schematic render of the Christian Building (M8-A) after adaptation; view from the entrance of Room 4 looking northwest across the courtyard to (from left to right) Rooms 6, 7B, 7A, and 8. (C. Leon Angelo and J. Silver.)

their positions in courtyards and under the stairs of Dura's homes meant that food preparation areas were clearly visible. They were also audible and smellable: the noises and aromas they created were an integral part of Durene home life. Removing them from the Christian Building reconfigured the functionality of its structure, thereby reshaping how visitors experienced it. In recent years, household archaeology has moved towards a framework of understanding domestic architecture through the quotidian activities it facilitates. If we imagine that certain architectural markers are associated with households because they support the daily activities that most commonly occur within them, the renovations to the Christian Building likely had a profound effect on restructuring the space. By divesting the structure of features necessary to carry out routine functions of domestic daily life, namely the cistern and a food preparation area, the renovations further differentiated the Christian Building from Dura's other household spaces. The practical consequence was that the Christian Building ceased to function as a domestic residence.

#### Combinations of features

Of course, visitors to the Christian Building did not experience each of the structure's architectural elements discretely. Instead, these features worked together to inform how visitors inhabited the space. Establishing the frequency with which particular combinations of architectural features appeared together within Dura's domestic contexts makes it possible to determine the extent to which the adaptations to the Christian Building differentiated it from Dura's domestic spaces.

As Baird's careful survey of the houses at Dura noted, wall paintings, courtyard staircases, and cisterns are the three architectural features that are recorded most consistently across the majority of the households excavated at Dura. As such, the points of comparison between the 62 buildings in the dataset that can be quantitatively expressed are related to these three features. Here, we will use the maximum likelihood estimation method to compute how often cisterns, courtyard staircases, and wall paintings appeared together or separately in certain combinations in Dura's households to discern whether a visitor to the Christian Building would have expected to encounter certain features together. By applying this method, we can get a sense of how the addition of certain features during the renovation differentiated it from the town's other domestic spaces.

The Christian Building had a courtyard staircase that pre-dated the renovations and wall paintings that were added during the renovations. Only 9.5%, or seven, of Dura's houses (including the Christian Building) had both a courtyard staircase and wall paintings or pictorial graffiti. Thus, this combination was dissonant with the architecture of over 90% of Dura's household spaces (Fig. 4). When we take into account the removal of the cistern in the courtyard, the difference between Dura's Christian Building and local household spaces becomes even starker. No other house at Dura in this dataset had the combination of figural wall paintings plus a courtyard staircase but no cistern.

<sup>90</sup> For example, Allison 1999; Allison 2001; Allison 2004; Alston et al. 2022, 3–16; Nevett 2010.

Baird 2014, appendix; see also Baird 2012, esp. 166.

We are grateful to our friend, data scientist Omar Abboud, for recommending this approach.

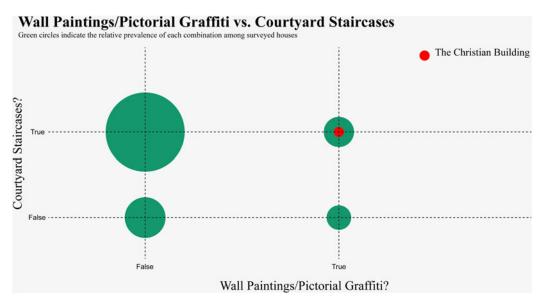


Fig. 4. Dura-Europos's houses: wall paintings versus courtyard staircases/pictorial graffiti. (C. Leon Angelo and J. Silver.)

The question of residential use: the "Upper Room" and the roof

Despite the extent to which the architectural adaptations differentiated the Christian Building from Dura's domestic spaces, scholars occasionally posit two possible areas of the structure that may have facilitated its simultaneous use as a residence and community space: the so-called second-story room, known as the "Upper Room" (Room 6B), and the roof. However, neither of these arguments is convincing.

The upper story (Room 6B) was not original to the house. Located above Room 6, it was created by installing a new ceiling in Room 6 during the renovations. When the new ceiling of Room 6 was essentially retrofitted around the canopy, Room 6B was formed in the space above. That is, Room 6's new ceiling formed the floor of the Upper Room (6B). Based on our reconstruction, the ceiling height in this Upper Room (6B) was approximately 1.75 m.

Judging by Pearson's sectional elevation (Fig. 5), we could conclude that the Upper Room's floor (which, as mentioned, also functioned as Room 6's new ceiling) was sturdy and that the room had a window. However, in Room 6B, there was no window to the west, and any theories about a window to the south have been entirely speculative due to the state of preservation of the building. Pearson's reconstruction of the ceiling in Room 6 also made it far thicker than the excavation documentation indicates. In fact, his section drawing (Fig. 5) shows the ceiling of Room 6 as significantly thicker than the roof of the structure. However, the ceiling of Room 6 was actually only approximately

<sup>&</sup>lt;sup>93</sup> See also F.R. 8.2, 155.

We concur with Kraeling on this sequence of construction; F.R. 8.2, 24–27.

F.R. 8.2, Plan VII.I–II (= Fig. 5 below). Notably, while Pearson's reconstructed sectional elevations are not supported by the archaeological evidence, his isometric projection of the extant remains of the Christian Building is reasonably accurate; F.R. 8.2, Plan III.

On the absence of windows in this room, see F.R. 8.2, 25, 155.

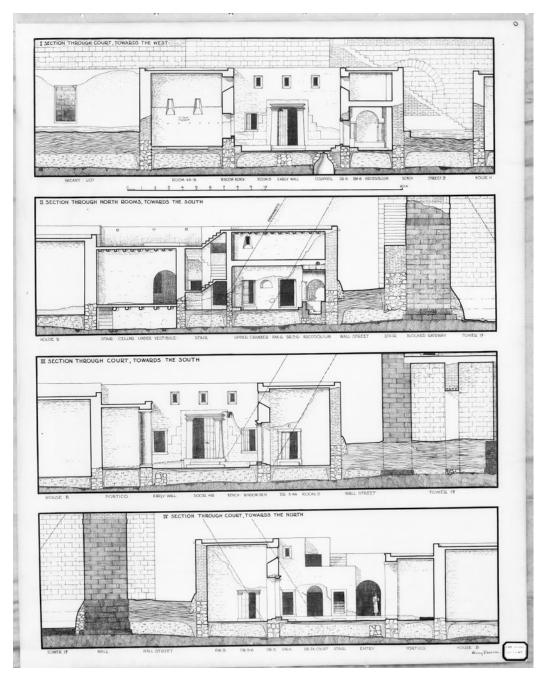


Fig. 5. Christian Building, section elevations, restoration. (Drawn by H. Pearson, Dura-Europos Collection, YUAG, neg. Yale-2219-01, courtesy YUAG.)

0.27 m thick, roughly 31% thinner than the roof, which had a thickness of approximately 0.37 m (Fig. 6a–b). Further, the construction of Room 6's ceiling indicates that it was not a

Compare F.R. 8.2, Plan VII.II with Kraeling's descriptions of the construction of the ceiling in Room 6 and the building's roof and excavation photos in F.R. 8.2, 5–9, 12–13, 20–29, Pl.V.I; see also YUAG Dura E-312-01; I682b-01. Note that the roof was not of a consistent thickness

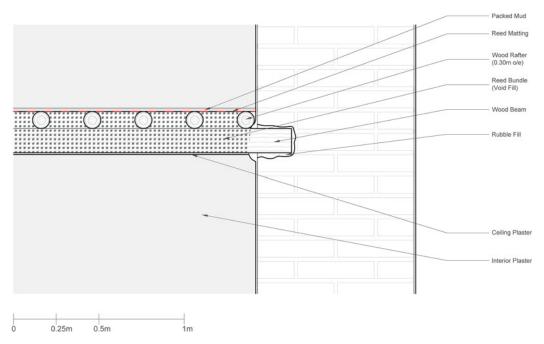


Fig. 6a. Section detail, showing the construction of the new ceiling above the canopy in Room 6 of the Christian Building (M8-A). (C. Leon Angelo and J. Silver.)

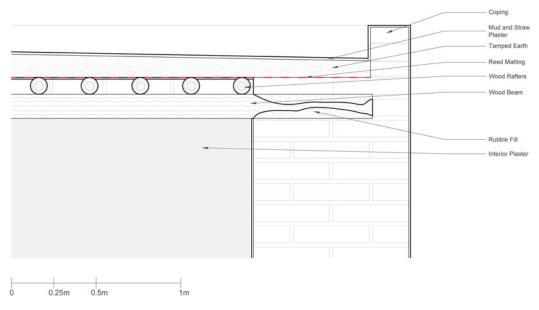


Fig. 6b. Section detail, showing the construction of the roof of the Christian Building (M8-A). (C. Leon Angelo and J. Silver.)

structurally sound floor for human occupancy, nor was it ever intended to be (Fig. 6a). The thick wooden beams running north and south, which formed the "structural" joists

as it had a slight pitch toward the building's exterior, presumably to allow water to run off the roof. On the roof construction, see also Kraeling F.R. 8.2, 8–9; 9, fig. 3, 28–29.

<sup>98</sup> On the construction of the new ceiling in Room 6, see Suppl. Fig. 1; F.R. 8.2, 24–25; Pl. XI.1–2.

of Room 6's ceiling, were in fact only inserted firmly at their north end; at the south end, they were merely tension fit. The rafters, which were placed perpendicularly upon the thick beams, do not appear to have ever been affixed to them. In addition, only the terminal east and west ends of the rafters were embedded in the walls of the room. A thin matting was placed on top of these rafters, followed by a thin mud coating upon the matting. This coating would have prevented the matting and rafters, as well as the reeds which were packed in between the thick beams, from moving when the ceiling was plastered and sealed off. Our revised section drawings of Room 6's ceiling and the Christian Building's roof (Fig. 6a-b) reflect these details. The packed mud on the matting and rafters was considerably thinner than the layer of tamped earth used for the roof construction. Moreover, because the rafters used in the ceiling construction were not affixed to the beams, any movement on top of the packed mud layer of the ceiling of Room 6/the floor of Room 6B would have damaged the decorated plaster ceiling of Room 6. Enough movement on top of the "floor" of Room 6B - Room 6's ceiling - and it would have cracked and eventually collapsed. The low ceiling height, lack of light, and structurally unsound floor of Room 6B all provide conclusive evidence against human occupation of the Upper Room (6B). The idea that the second story would have served a domestic purpose is unlikely anyway, since functional second stories were rare among Dura's households. In fact, the only two houses excavated at Dura that certainly had upper stories had both been adapted for use by the Roman army, thus suggesting that the utilization of second stories within households was likely limited to this group.<sup>99</sup>

The question of whether the roof of the Christian Building may have provided an area for continued domestic use of the structure is less easily answered. Like most structures at Dura, the Christian Building had a flat roof. It was reached via an enclosed staircase (7A) accessed through a doorway off the courtyard. This doorway swung inward towards the stairs (see Fig. 3a–b) and could be barred from inside the staircase (7A). Though the stairs were only preserved up to the third landing, Kraeling rightly suspected that they continued up to the roof over the vestibule, thus providing access to the roof over the other chambers of the building. The staircase, the doorway, and the door's locking mechanism are all thought to have been original to the residence and remained accessible after the renovations to the Christian Building.

The functionality of the roof, both before and after the building's adaptation, remains elusive, however. The picture is again further complicated by Pearson's sectional elevation drawings (Fig. 5), which provide a reconstruction that does not align with Kraeling's descriptions or the excavation photographs. If the details Kraeling provides regarding the roof construction are correct, as seems to be the case, it was certainly occupiable. The general consensus based on other Near Eastern case studies is that Dura's roofs were flexible spaces, which could have been used for a range of activities, including processing foodstuffs, storage, and sleeping, depending on the season. <sup>101</sup>

As Baird has argued (2006, 111). See also Baird 2014, 87, 94–95, 135, 141, 289–90. The two other houses with confirmed upper stories are L7-A and E4. D1 also likely had an upper story, though it was not extant at the time of excavation. These three houses are excluded from the quantitative dataset for reasons discussed above in the "Methodology" section of this article.

<sup>&</sup>lt;sup>100</sup> F.R. 8.2, 29. It is unclear how the stairs terminated.

Baird 2014, 94–95; Saliou 1992, 84. On the multiplicity of functions the roof served in ancient Near Eastern homes, see also Hirschfeld 1995, 246–47.

Whether the functionality of the Christian Building's roof changed after it was adapted is not known. Given the option to bar the door of the staircase (7A) shut, the roof space could certainly have been separated from the activities happening on the ground floor of the Christian Building. Considering how little we know about the nature of the roof's functionality, certainly individuals may have continued to occupy it in a way consistent with how they had prior to the structure's adaptation, yet this seems unlikely given that access to water was limited after the cistern was removed.

#### Experiencing the adaptations: movement and illumination

On one hand, renovations, such as the addition of wall paintings and the removal of the cistern, differentiated the Christian Building in function from Dura's domestic spaces and foreclosed possibilities of occupying the structure in ways that were consistent with how it had been used prior to its conversion. At the same time, these adaptations also engendered new ways for visitors to inhabit and engage with the structure, which bore little resemblance to patterns of residential occupation representative of domestic space at Dura.

The results of our light simulations indicate that the way natural light flowed within the Christian Building also changed radically as a result of the renovations. When the courtyard was repaved with stone tiles, plaster-rubble benches were added in the southwest and northwest corners. Paving the courtyard raised the height of the floor by 8 cm. This new tile surface had a high light reflectance (Fig. 7a-b; Suppl. fig. 3a-b). Unlike the original beaten red earth sprinkled with dry plaster, which reflected light diffusely, the tile reflected light specularly (Fig. 7a-b; Suppl. fig. 3a-b). The specular reflection of light off the tiles meant that light entered rooms with entrances off the courtyard at the western end of the building more intensely, namely Rooms 4, 5, and 6 (Fig. 7a-b). Moreover, when the low windows were added to Rooms 4 and 5, the light that reflected off the courtyard also entered these rooms rather than reflecting off the walls of the southwest corner of the court (Figs. 7 and 8). The implication of these changes was that, if their doors were open and their windows were unshuttered, a greater area of each of these rooms was illuminated and the rooms could be used at more times throughout the day without the need for a lamp or candle (Fig. 7a-b; Suppl. fig. 4a-b). 102 Moreover, because a greater area of the western rooms off the courtyard was illuminated, more people could comfortably congregate in the rooms without needing a secondary source of light.

These changes in lighting worked in combination with other architectural strategies to disrupt habituated patterns of residential occupation typical of Dura's domestic spaces, and to afford new ways of using and moving within the building. For example, several of the Christian Building's features after renovation were designed to monitor and mediate

Room 6 was dark before and after the structure was renovated if the room's doors were shut, primarily because it never had windows. Suppl. fig. 2a–b shows simulations of the Christian Building, before and after the renovations, in July – the brightest month of the year – and at 2:50 pm – the brightest time of day – with the structure's windows open and its doors closed. In both images, the room is completely dark. Such renderings hint that it might have been necessary for the niche in the south wall, in between Room 6's two doorways, to hold a light source when the room was in use.

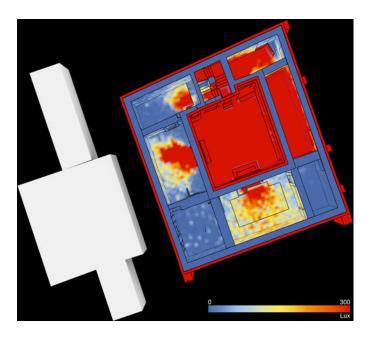


Fig. 7a. Cumulative yearly illuminance simulation of the Christian Building (M8-A) before adaptation (orientation is to true north; render parameters: 243 CE, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

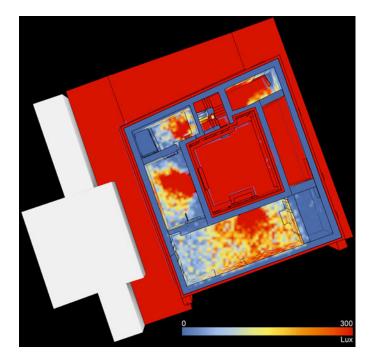


Fig. 7b. Cumulative yearly illuminance simulation of the Christian Building (M8-A) after adaptation (orientation is to true north; render parameters: 253 CE, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

natural light within rooms. The two gypsum-paneled windows in Room 4, for instance, had draw cords. <sup>103</sup> The low window installed in the north wall of Room 4 had wooden

F.R. 8.2, 17, see also 17 n. 2. We follow Kraeling's understanding that these windows were blocked with rubble during the construction of the first embankment, rather than during the building's adaptation as Hopkins (P.R. 5, 244) had originally contended.

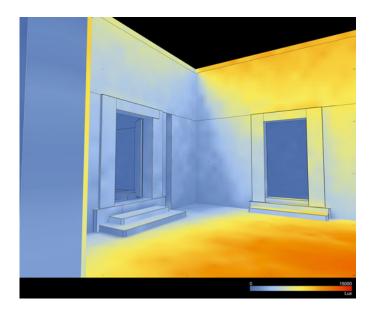


Fig. 8a. Cumulative yearly illuminance simulation of the Christian Building (M8-A) before adaptation; view from Room 2, looking southwest. The entrance to Room 4A is on the left and the entrance to Room 5 is on the right (render parameters: 243 CE, windows and doors open; scale: 0-1500 lx). (C. Leon Angelo and J. Silver.)

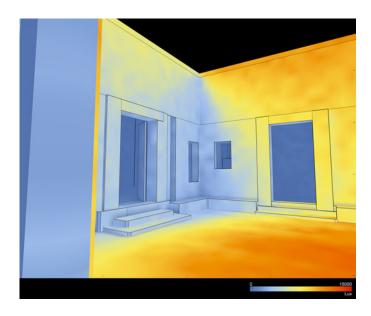


Fig. 8b. Cumulative yearly illuminance simulation of the Christian Building (M8-A) after adaptation; view from Room 2, looking southwest. The entrance to Room 4 is on the left and the entrance to Room 5 is on the right (render parameters: 253 CE, windows and doors open; scale: 0-1500 lx). (C. Leon Angelo and J. Silver.)

shutters, and the low window in the east wall of Room 5 likely did as well (Fig. 8a–b). Users of the building could employ the cords and shutters as well as the doors onto the court to darken these rooms if they wished.

The modifications made to the Christian Building's windows indicate an impulse to restructure the movement of bodies within the space. During the renovations, two low-level

Kraeling notes both windows in his description, *F.R. 8.2*, 19; 21–22. While he only calls attention to the shutters in relation to Room 4, a window with wooden shutters in Room 5 is noted on Pearson's plan (*F.R. 8.2*, Plan V). Based on their similar features, it seems highly likely that both of these windows featured the same shuttered construction.

wood-shuttered windows were inserted: one in the southeast corner of Room 5 and another on the north wall of Room 4, west of the door to the courtyard (Fig. 8a–b). <sup>105</sup> This type of aperture is evident in only one other instance at the site, and it is not in a private residence, but rather in the *principia*, or Roman military headquarters building, in Block E7. <sup>106</sup> Pivot holes in these windowsills at the Christian Building indicate that the shutters swung inward towards the interiors of the rooms. <sup>107</sup> In doing so, the windows provided visual access from the rooms onto the court and also facilitated communication between people standing in the court and those within Room 4 and Room 5. These windows would have controlled the flow of people and sound between the courtyard and Room 4, as well as between the courtyard, Room 5, and the baptistery (Room 6), which could be accessed through Room 5. Moreover, the restriction of the features to two rooms suggests a distinct concern with regulating people's departure from Rooms 4 and 5 and the court. Such a conclusion hints there was a ritualized pattern of movement between these three spaces following the structure's renovation.

Adaptations to the Christian Building's doorways suggest a similar concern with regulating movement between rooms. The baptistery (Room 6) had two entranceways, both located in its south wall. The first doorway provided access between Room 5 and Room 6, opening into Room 6. 108 Though this doorway appears to have been original to the structure, the proportions of the door and evidence of later embellishment suggest that one face of the doorframe was adapted during the conversion of the building. Namely, a lavish molded plaster trim was added to the southern face of the doorway in Room 5, but not to its northern face in Room 6. This strongly suggests that the renovation was made with the expectation that visitors would now enter Room 6 through Room 5 but would not enter into Room 5 from Room 6. Moreover, the plaster trim made the doorway far more elaborate than the entryway between Room 5 and the courtyard. As Kraeling noted, this degree of decoration was atypical of the internal doorways of Dura's houses; doorways between the courtyard and a house's larger rooms, or between the triclinium and its adjoining rooms, usually received the most elaborate decoration. 109 The choice to decorate the doorway between Room 5 and 6 rather than the doorway leading from the courtyard to Room 5 further hints that after the renovation, people likely entered Room 5 through the doorway at the west end of the north wall of Room 4 and then carried on through Room 5 into Room 6. The fact that the doorway into Room 4 from Room 5 was left undecorated lends further support to this conclusion. The second entrance to the baptistery was a narrow door, set 0.5 m from the east end of the wall, which connected Room 6 with the courtyard. This door also opened into Room 6 and, like the entrance to the

<sup>&</sup>lt;sup>105</sup> See n. 104 above.

F.R. 8.2, 19 n. 2; P.R. 5, 212, Pls. III, XI.1. Like the two windows onto the court at the Christian Building, these windows at the *principia* similarly do not appear to have had gypsum or glass panes. Unlike these two windows at the Christian Building, there is no record of the *principia*'s having shutters. The *principia* was called the "Praetorium" in the *Preliminary Reports*, but is now conventionally called the *principia*. On the archaeology of Dura's *principia*, see James 2019.

<sup>&</sup>lt;sup>107</sup> F.R. 8.2, 19.

Details in photos of both rooms and the molding of the door lintel make it clear that the door had to open into Room 6. On this door, see *F.R. 8.2*, 21–22, Pl. VIII.I, Plan VII.

<sup>&</sup>lt;sup>109</sup> F.R. 8.2, 22.

staircase, could be barred from the inside using a vertical lock bar. The baptistery's two doorways are puzzling; it was highly unusual for a Durene home to have a chamber of such small size with two entrances. Moreover, the locking mechanism for the door between Room 6 and the courtyard was cut into the existing doorframe, hinting that the mechanism was not original to the structure but added later as part of the renovation of the baptistery. The two doors would have enabled a traffic pattern unlike those of other Durene domestic chambers of such size. The juxtaposition of the size and decoration of Room 6's two doorways suggests that, after entering Room 6 from Room 5, individuals exited Room 6 into the courtyard. This conclusion also stands in opposition to the received opinion about the liturgical use of the space, which has supposed that initiates processed in the same direction as the women depicted in the lower register of the wall painting, located at the west end of the north wall.

The removal of the built-in benches from the triclinium (Room 4A) and the addition of plaster-rubble benches in the southwest and northwest corners of the courtyard and Room 6 also suggests an interest in regulating visitors' movements. Benches in the triclinium were very prevalent in Durene houses the size of the Christian Building. Their removal points to an effort to structure visitors' movements through the space by means of visual cues, subliminally signaling it was not appropriate to linger in the triclinium. It also suggests a recapitulation of the courtyard space for use by visitors. Paving the courtyard and adding benches to it would have made it more welcoming than the assembly room (Room 4). As Kraeling noted, benches indicate the presence of groups larger than the typical family, suggesting an effort to accommodate a larger number of people than were typically present in household gatherings. 114

The results of the daylight simulations also present new clues about how the reconfiguration of natural light worked together with other adaptations to provide visitors to the Christian Building with an embodied experience of individual rooms that was categorically different from the one provided by its domestic antecedent. This is especially true for Room 4. Prior to the renovation, the partition that separated Rooms 4A and 4B contained the light that entered the windows along the southwest wall of Room 4B within that small chamber. At the same time, light almost exclusively entered Room 4A - the house's triclinium – unidirectionally through the doorway off the courtyard when open and only softly lit the room (Fig. 7a). In the late afternoon and evening, this light would have gently illuminated the low benches that lined the walls of the room, where guests would recline during dinners (Fig. 9a; Suppl. figs. 5a, 6a, 7a). The lighting of the room, in addition to the U-shaped benches, encouraged guests to recline along the benches, facing the center of the room. Typically, in the triclinia of Dura's domestic spaces, there was no such singular line of sight. While a specific axial view may have been more privileged in cases where the triclinium was decorated with murals, for the most part, guests were able to orient themselves freely towards the center of the room.

<sup>&</sup>lt;sup>110</sup> F.R. 8.2, 23, Pl. XIV.1.

<sup>&</sup>lt;sup>111</sup> See n. 68 above.

<sup>&</sup>lt;sup>112</sup> F.R. 8.2, 23, Pl. XIV.1. Also see n. 68 above.

On the insertion of benches in the courtyard and the building's exterior, see *F.R. 8.2*, 11, 30, 154–55

<sup>&</sup>lt;sup>114</sup> F.R. 8.2, 12.

The architectural adaptations to Room 4A and 4B disrupted these habituated practices of domestic inhabitation. Removing the partition wall between Rooms 4A and 4B created an unobstructed line of sight within the space. Upon the removal of the partition, a new floor was packed down. This floor covered the original plaster floor and the plaster benches that had formerly lined the south, east, and west walls of Room 4A, originally the structure's triclinium, creating a downwards slope of 0.07 m towards the east wall of Room 4. This slope would have led the visitors' eyes downwards towards the slightly rhomboidal dais made of low rubble and plaster that was subsequently installed against the east wall of Room 4 (0.97 × 1.47 × 0.20 m) (Fig. 2b). These adaptations oriented bodies to stand facing the east wall, not to recline towards the interior of the room as the previous space had prompted them to do and as they normally would have done in Dura's triclinia.

The change in how natural light flowed into Room 4 after the renovations also encouraged people in Room 4 to assume this new posture when they inhabited the space. After the adaptations, light entered the room from three or four points: the door off the courtyard if left open, a new low window beside the door, and the two windows on the west wall (Fig. 7b). In the afternoons, the light from the windows along the west wall (roughly 2.35 m above floor level) streamed in and reflected off the room's east wall. 116 This illuminated the northeastern corner of Room 4 and in the late afternoon created a sort of soft floodlight above where the dais was located (Fig. 10b; Suppl. fig. 9b). When the door off the courtyard was left open, the light over the dais was even brighter and more comparable to a spotlight than a floodlight (Fig. 9b; Suppl. figs. 5b, 6b, 7b). This lighting effect was most intense around 3:30pm in the afternoon and lasted until around 5:30pm, though it was more subdued in the winter (Suppl. figs. 5b, 7b) than in the summer (Figs. 9b, 10b; Suppl. fig. 6b). The area of the wall directly above the dais was also brightly illuminated immediately after sunrise, around 7:48am (Fig. 11b; Suppl. fig. 9b), though primarily by light that poured in from the low window and the entrance onto the courtyard. Tower 17 and the wall directly west of the building blocked the morning light from entering through the two windows at the western end of Room 4. The results of the daylight model, therefore, lend support to Kraeling's hypothesis that the dais functioned as a platform where a person sat or stood when addressing an assembly. (It is also possible, however, that an object may have been placed upon the dais and not a person.) These findings help to explain why the rubble dais was set against the east wall of Room 4 and immediately beside the doorway to Room 3, instead of being centered on the wall. Because of where the light hit the east wall, had the dais been installed against the center, it would have been more difficult for the occupants of the room to see the person or thing standing upon it.

The axial organization of bodies towards the east wall might explain why the community responsible for the renovations did not feel it was necessary to remove Room 4's original decoration entirely. A small portion of a plaster Bacchic frieze, which is thought to

On the adaptations to this room, see *F.R. 8.2*, 18–19.

The measurement we provide here for the interior height of the windows and used for our reconstruction follows after Pearson's isometric projection of the extant remains (*F.R. 8.2*, Plan III), rather than Kraeling's description (*F.R. 8.2*, 16), which seems to be an error given that it is contradicted by all the drawings of the building, the exterior height of the windows he supplies, and the measurement that Hopkins gives in *P.R. 5*, 239.

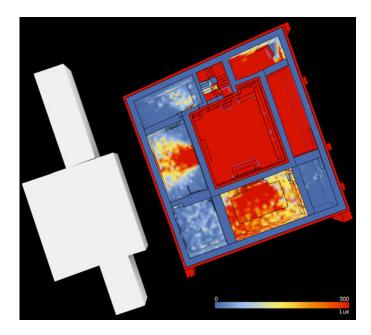


Fig 9a. Point-in-time illuminance simulation of the Christian Building (M8-A) before adaptation (orientation is to true north; render parameters: July 243 CE, 1530 hours, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

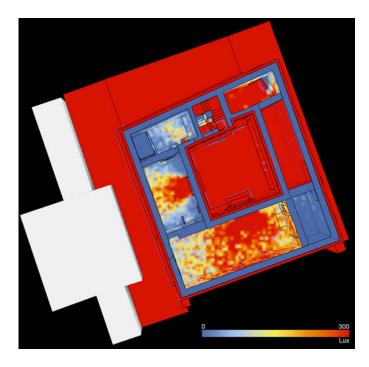


Fig. 9b. Point-in-time illuminance simulation of the Christian Building (M8-A) after adaptation (orientation is to true north; render parameters: July 253 CE, 1530 hours, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

have originally decorated all four of the room's walls before the renovations, remained at the east end of Room 4's north wall afterwards. <sup>117</sup> If our reconstruction is correct – that

On the frieze, see F.R. 8.2, 14, 16, Pl. VI.1; Cianca 2018, 91–104.

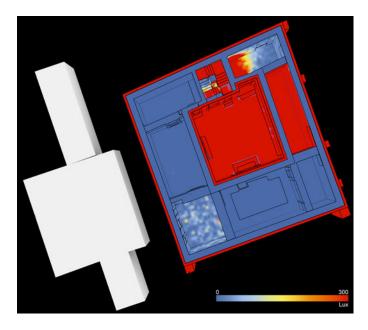


Fig. 10a. Point-in-time illuminance simulation of the Christian Building (M8-A) before adaptation (orientation is to true north; render parameters: July 243 CE, 1530 hours, windows open and doors closed; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

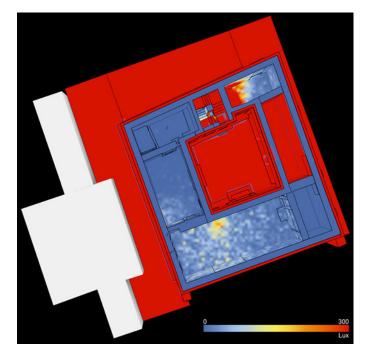


Fig. 10b. Point-in-time illuminance simulation of the Christian Building (M8-A) after adaptation (orientation is to true north; render parameters: July 253 CE, 1530 hours, windows open and doors closed; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

when the Christian community congregated in Room 4 they faced the east wall – then the frieze left in situ would have been largely out of view, except for when exiting the room.

However, Room 4 received consistent light throughout the day, and Durenes had other forms of lighting technology available to them. Thus, it is probable that the Christian community at Dura also gathered in Room 4 at times of day other than the early mornings and late afternoons and that these configurations did not have the same axial nature as the early morning and late afternoon gatherings. Even so, with the removal of the triclinium's (Room 4A)

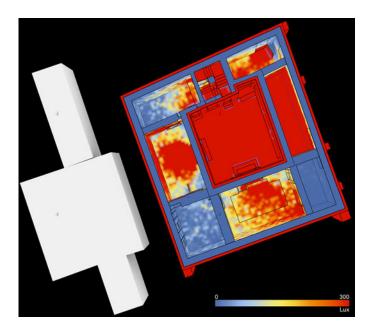


Fig. 11a. Point-in-time illuminance simulation of the Christian Building (M8-A) before adaptation (orientation is to true north; render parameters: July 243 CE, 0748 hours, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

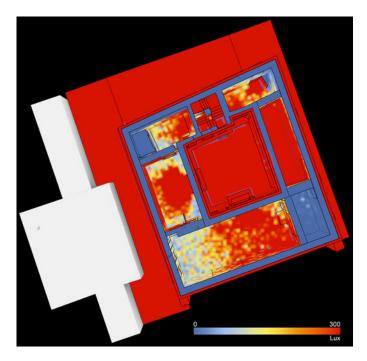


Fig. 11b. Point-in-time illuminance simulation of the Christian Building (M8-A) after adaptation (orientation is to true north; render parameters: July 253 CE, 0748 hours, windows and doors open; scale: 0-300 lx). (C. Leon Angelo and J. Silver.)

benches, these configurations would in no way have resembled how individuals had congregated in the space prior to the renovation.

The daylight simulations also suggest that the renovations to the Christian Building engendered new patterns of movement between rooms with ritualized uses. In the late afternoon, when the dais in Room 4 would have been most illuminated, the baptismal font in Room 6 was softly illuminated, but the lower half of the northwest wall, where

there was a series of wall paintings, would have been well lit (Fig. 9b; Suppl. figs. 5b, 6b, 7b) if either or both of the doors was open or even slightly ajar. It is unclear whether either entrance to Room 6 would have been open during the baptismal ritual, but given the illumination of these spaces in the late afternoon, it is possible that certain types of ritualized activities were performed in Room 4 then and that the baptism was performed around the same time. If this reconstruction is correct, then it would represent another way in which habituated patterns of movement, facilitated by the orchestration of light, were altered as a result of the renovations to the Christian Building.

#### Conclusion

This investigation has sought to challenge the well-established interpretation of Dura's Christian Building as a house church or *domus ecclesiae* by reconsidering the archaeological remains of the building in relationship to Dura's domestic architecture. Our reexamination reveals that the renovations to the Christian Building constituted acts of architectural differentiation that engendered new ways of experiencing and perceiving the structure that bore little resemblance to the established practices of residential occupation characteristic of Dura's houses. With our shift of attention away from the domestic origins of the structure and toward micro-level archaeological analysis, Dura's Christian Building emerges more fully as a product of its unique built environment, one in which structures were commonly readapted, reused, and repurposed.

If this study of Dura's Christian Building provides any direction forward, it is that Christians took their architectural cues from the spatial vernacular of their immediate contexts. As such, it would be helpful to reconsider the post-adaptation form of the Christian Building at Dura in relation to the city's other cultic architecture, and not just the Mithraeum and the Synagogue. What other insights might spaces such as the Temple of Aphlad or the Temple of Artemis provide about what early Christianity at Dura looked like in practice? It is also time to revisit early Christian architecture more broadly, by sponsoring other studies that work at the intersection of the material record, embodied practice, and sensory experience, with an eye toward developing a more textured sense of how ancient religious communities perceived and interacted with their built environments.

**Acknowledgments:** We are grateful to our many colleagues who provided us with their encouragement and invaluable feedback on this article. Foremost among them are D. An, J. A. Baird, D. Bohac, S. Bond, C. E. Bonar, A. H. Chen, S. J. Davis, M. E. Doerfler, D. Frankfurter, F. Harley-McGowan, A. McGowan, R. MacMullen, V. Marinis, C. Moss, L. S. Nasrallah, C. R. Rice, K. B. Stern, N. Smith, our anonymous peer-reviewers, and the editors at *JRA*, most especially G. Woolf. We are also appreciative to YUAG and L. Brody, who kindly provided us with access to the Dura collection and archive. We are especially indebted to our steadfast mentors S. J. Davis and F. Harley-McGowan who helped us turn an idea, conjured in their seminar nearly a decade ago, into this article.

**Supplementary Materials:** The Supplementary Materials contain a description of our methodology for creating the daylight simulations analyzed in this article, an explanation of what the different types of daylight simulations included visualize, and additional renders. To view the Supplementary Materials for this article, please visit https://doi.org/10.1017/S1047759424000126.

On conceptions of illumination in Late Antique Christian initiatory rituals, see also Peppard 2020.

#### References

#### **Abbreviations**

- P.R. 4 Baur, P. V. C., M. I. Rostovtzeff, and A. R. Bellinger, eds. 1933. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters. Preliminary Report of Fourth Season of Work October 1930–March 1931. New Haven: Yale University Press.
- P.R. 5 Rostovtzeff, M. I., ed. 1934. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters. Preliminary Report of Fifth Season of Work, October 1931–March 1932. New Haven: Yale University Press.
- P.R. 6 Rostovtzeff, M. I., A. R. Bellinger, C. Hopkins, and C. B. Welles, eds. 1936. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters. Preliminary Report of Sixth Season of Work, October 1932–March 1933. New Haven: Yale University Press.
- P.R. 7/8 Rostovtzeff, M. I., F. E. Brown, and C. B. Welles, eds. 1939. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters: Preliminary Report of the Seventh and Eighth Seasons of Work, 1933–1934 and 1934–1935. New Haven: Yale University Press.
- P.R. 9.1 Rostovtzeff, M. I., A. R. Bellinger, F. E. Brown, and C. B. Welles, eds. 1944. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters. Preliminary Report of the Ninth Season of Work, 1935–1936. Part 1: The Agora and Bazaar. New Haven: Yale University Press.
- P.R. 9.3 Rostovtzeff, M. I., A. R. Bellinger, F. E. Brown, and C. B. Welles, eds. 1952. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters, Preliminary Report of the Ninth Season of Work 1935–1936. Part 3: The Palace of the Dux Ripae and the Dolicheneum. New Haven: Yale University Press.
- F.R. 4.1.3 Dyson, S. L. 1968. The Excavations at Dura-Europos Conducted by Yale University and the French Academy of Inscriptions and Letters. Final Report 4, Part 1, Fasc. 3. The Commonware Pottery, the Brittle Ware. New Haven: Yale University Press.
- F.R. 8.1 Kraeling, C. H. 1956. The Excavations at Dura Europos Conducted by Yale University and the French Academy of Inscriptions and Letters, Final Report 8, Part 1. The Synagogue. New Haven: Yale University Press.
- F.R. 8.2 Kraeling, C. H. 1967. The Excavations at Dura Europos Conducted by Yale University and the French Academy of Inscriptions and Letters, Final Report 8, Part 2. The Christian Building. New Haven: Yale University Press.
- Adams, E. 2008. "The ancient church at Megiddo: The discovery and an assessment of its significance." *The Expository Times* 120: 62–69.
- Adams, E. 2013. *The Earliest Christian Meeting Places: Almost Exclusively Houses?* London: Bloomsbury. Allison, P. M. 1999. "Introduction." In *The Archaeology of Household Activities*, ed. P. M. Allison, 1–18. London: Routledge.
- Allison, P. M. 2001. "Using the material and written sources: Turn of the millennium approaches to Roman domestic space." *AJA* 105: 181–208.
- Allison, P. M. 2004. *Pompeian Households: An Analysis of the Material Culture.* Los Angeles: Cotsen Institute of Archaeology.
- Alston, R., J. A. Baird, and A. Pudsey. 2022. "Introduction: Between words and walls: Material and textual approaches to housing in the Graeco-Roman world." In *Housing in the Ancient Mediterranean World: Material and Textual Approaches*, ed. J. A. Baird and A. Pudsey, 1–26. Cambridge: Cambridge University Press.
- Apollonj Ghetti, B. M. 1978. "Problemi relativi alle origini dell'architettura paleocristiana." In *Atti del IX Congresso Internazionale di Archeologia Cristiana*, vol. 1, 491–511. Vatican City: Pontificio Istituto.
- Attridge, H., and G. Hata. 1992. "Introduction." In *Eusebius, Christianity, and Judaism*, ed. H. Attridge and G. Hata, 27–49. Studia Post-Biblica 42. Detroit: Wayne State University Press.

- Baird, J. A. 2006. "Housing and households at Dura-Europos: A Study in Identity on Rome's Eastern Frontier, vol. 1." PhD diss., Univ. of Leicester.
- Baird, J. A. 2007. "Shopping, eating and drinking at Dura-Europos: Reconstructing contexts." In *Objects in Context, Objects in Use: Material Spatiality in Late Antiquity,* ed. L. Lavan, E. Swift, and T. Putzeys, 413–37. Leiden: Brill.
- Baird, J. A. 2011. "The graffiti of Dura Europos: A contextual approach." In *Ancient Graffiti in Context*, ed. J. A. Baird and C. Taylor, 49–68. New York: Routledge.
- Baird, J. A. 2012. "Re-excavating the houses of Dura-Europos." JRA 25: 146–69.
- Baird, J. A. 2014. The Inner Lives of Ancient Houses: An Archaeology of Dura-Europos. Oxford: Oxford University Press.
- Baird, J. A. 2018. Dura-Europos. New York: Bloomsbury Academic.
- Baird, J. A. 2022. "Houses and time: Material memory at Dura-Europos." In *Housing in the Ancient Mediterranean World: Material and Textual Approaches*, ed. J. A. Baird and A. Pudsey, 412–41. Cambridge: Cambridge University Press.
- Baird, J. A. 2024. "The significance of household cisterns at Roman Dura-Europos." In *Water in Ancient Mediterranean Households*, ed. R. Bonnie and P. Klingborg, 152–71. London: Routledge.
- Bardy, G., ed. and transl. 1958. Eusèbe de Césarée. Histoire ecclésiastique, III: Livres VIII–X et les martyrs en Palestine. Sources Chrétiennes 55. Paris: Éditions du Cerf.
- Berg, K. 2023. "A curious problem in the renovation of the Christian Building at Dura-Europos: Reconstructing the use of water in the Durene baptismal rite and its ritual significance." *Journal of Late Antiquity* 16, no. 2: 259–88.
- Bidez, J., and G. C. Hansen, eds. 1960. Sozomenus. Kirchengeschichte. Berlin: Akademie Verlag.
- Bille, M., and T. F. Sørensen. 2016. "A sense of place." In *Elements of Architecture: Assembling Archaeology, Atmosphere, and the Performance of Building Spaces*, ed. M. Bille and T. F. Sørensen, 159–62. London: Routledge.
- Billings, B. S. 2011. "From house church to tenement church: Domestic space and the development of early urban Christianity—The example of Ephesus." *JThS* 62: 541–69.
- Birkey, D. 2019. The House Church: A Model for Renewing the Church. Eugene, OR: Wipf and Stock Publishers.
- Bowes, K. 2008a. "Early Christian archaeology: A state of the field." Religion Compass 2: 575-619.
- Bowes, K. 2008b. *Private Worship, Public Values, and Religious Change in Late Antiquity.* Cambridge: Cambridge University Press.
- Brück, J. 2005. "Experiencing the past? The development of a phenomenological archaeology in British prehistory." *Archaeological Dialogues* 12: 45–72.
- Cahill, N. 2002. Household and City Organization at Olynthus. New Haven: Yale University Press.
- Cameron, A., and S. G. Hall, transl. 1999. Life of Constantine. Oxford: Clarendon Press.
- Chevallier Caseau, B. 2022. "Spaces of Roman religion and Christianity in Late Antiquity." In *The Oxford Handbook of Religious Space*, ed. J. H. Kilde, 327–43. Oxford: Oxford University Press.
- Cianca, J. 2018. Sacred Ritual, Profane Space: The Roman House as Early Christian Meeting Place. Montreal and Kingston: McGill-Queen's University Press.
- Clarke, J. R. 1991. *The Houses of Roman Italy, 100 BC–AD 250: Ritual, Space, and Decoration.* Berkeley: University of California Press.
- Coqueugniot, G. 2012. "Des espaces sacrés dans la tourmente: les lieux de culte d'Europos-Doura durant le siège sassanide de la ville (milieu du IIIe s. de n.è.)." In *Europos-Doura Varia* 1, ed. P. Leriche, G. Coqueugniot, and S. de Pontbriand, 215–30. Bibliothèque Archéologique et Historique 198. Beruit: Institut français du Proche-Orient.
- Crawford, J. S. 1990. *The Byzantine Shops at Sardis*. Archaeological Exploration of Sardis 9. Cambridge: Harvard University Press.
- Crostini, B. 2022. "The Dura 'baptistery' a funerary space?" In *Why We Sing: Music, Word and Liturgy in Early Christianity,* ed. C.-J. Berglund, B. Crostini, and J. Kelhoffer, 355–92. Vigiliae christianae Supplements 177. Leiden: Brill.
- DeLeeuw, P. 2011. "A peaceful pluralism: The Durene Mithraeum, Synagogue, and Christian Building." In *Dura-Europos: Crossroads of Antiquity*, ed. L. Brody and G. Hoffman, 189–99. Chestnut Hill: McMullen Museum of Art.
- Dirven, L. 2004. "Religious competition and the decoration of sanctuaries: The case of Dura Europos." *Eastern Christian Art* 1: 1–20.

- Dirven, L, and M. M. McCarty. 2020. "Rethinking the Dura-Europos Mithraeum: Diversification and stabilization in a Mithraic community." In *The Archaeology of Mithraism: New Finds and Approaches to Mithras-Worship*, ed. M. M. McCarty and M. Egri, 165–81. Leuven: Peeters.
- Downey, G. 1959. "Libanius' oration in praise of Antioch (Oration XI)." PAPS 103: 652-86.
- Duval, N. 1978. "Les edifices de culte des origines à l'époque Constantinienne." In *Atti del IX Congresso Internazionale di Archeologia Cristiana*, Vol. 1, 513–37. Vatican City: Pontifico Instituto.
- Elsner, J. 2001. "Cultural resistance and the visual image: The case of Dura Europos." CP 96: 269–304.
- Finney, P. C. 1994. *The Invisible God: The Earliest Christians on Art*. New York: Oxford University Press. Foerster, R., ed. 1903. *Libanii opera*, vol. 1, fasc. 2. Leipzig: B. G. Teubner.
- Frye, R. N., F. Gilliam, H. Ingholt, and C. B. Welles. 1955. "Inscriptions from Dura-Europos." *Yale Classical Studies* 14: 127–213.
- Gamber, K. 1968. Domus ecclesiae. Die ältesten Kirchenbauten Aquilejas sowie im Alpen- und Donaugebiet bis zum Beginn des 5. Jh. liturgiegeschichtlich untersucht. Studia Patristica et Liturgica Fasc. 2. Regensburg: Verlag Friedrich Pustet.
- Hamilton, S., R. Whitehouse, K. Brown, P. Combes, E. Herring, and M. S. Thomas. 2006. "Phenomenology in practice: Towards a methodology for a 'subjective' approach." *EJA* 9, no. 1: 31–71.
- Harley-McGowan, F. Forthcoming. "Shepherd as allegory in ancient Christian art: The case of Dura-Europos." In *Imperial Allegory, its Cultural Contexts and Intermedial Entanglements: Reading Across Divides,* ed. J. Grethlein and B. Kruchio. Cambridge: Cambridge University Press.
- Hirschfeld, Y. 1995. *The Palestinian Dwelling in the Roman-Byzantine Period*. Jerusalem: Israel Exploration Society.
- Hirschfeld, Y. 1998. "Early Roman manor houses in Judea and the site of Khirbet Qumran." *JNES* 57: 161–89.
- Ingold. T. 2016. "Lighting up the atmosphere." In *Elements of Architecture: Assembling Archaeology, Atmosphere, and the Performance of Building Spaces,* ed. M. Bille and T. F. Sørensen, 163–76. London: Routledge.
- James, S. 2007. "New light on the Roman military base at Dura-Europos: Interim report on a pilot season of fieldwork in 2005." In *The Late Roman Army in the Near East from Diocletian to the Arab Conquest: Proceedings of a Colloquium Held at Potenza, Acerenza and Matera, Italy (May 2005)*, ed. A. S. Lewin and P. Pellegrini, 29–47. BAR international series 1717. Oxford: Archaeopress.
- James, S. 2019. *The Roman Military Base at Dura-Europos, Syria: An Archaeological Visualization*. Oxford: Oxford University Press.
- Jensen, R. M. 2019. "Ritual and early Christian art." In *The Oxford Handbook of Early Christian Ritual*, ed. R. Uro, J. J. Day, R. E. Demaris, and R. Roitto, 587–609. Oxford: Oxford University Press.
- Joshel, S. R., and L. H. Peterson. 2014. *The Material Life of Roman Slaves*. Cambridge University Press.
- Kirsch, J. P. 1918. *Die römischen Titelkirchen im Altertum*. Studien zur Geschichte und Kultur des Altertums 9.1–2. Paderborn: F. Schöningh.
- Klauser, T. 1968–69. "Besprochen: K. Gamber, *Domus ecclesiae*. Die ältesten Kirchenbauten Aquilejas sowie im Alpen-und Donaugebiet bis zum Beginn des 5. Jh. liturgiegeschichtlich untersucht." *Jahrbuch für Antike Christentum* 11/12: 215–24.
- Krautheimer, Ř. 1939. "The beginning of early Christian architecture." *The Review of Religion* 3, no. 2: 127–48.
- Krautheimer, R. 1965. Early Christian and Byzantine Architecture. Baltimore: Penguin Books.
- Larson-Miller, L. 2019. "Eucharistic practices." In *The Oxford Handbook of Early Christian Ritual*, ed. R. Uro, J. J. Day, R. E. Demaris, and R. Roitto, 538–53. Oxford: Oxford University Press.
- Lietzman, H. 1937. "Reviewed Work(s): The Excavations at Dura-Europos. Preliminary Report of Fifth Season of Work October 1931–March 1932; Prelim. Report of Sixth Season of Work October 1932 — March 1933 by M. I. Rostovtzeff, A. R. Bellinger, C. Hopkins and C. B. Welles." Gnomon 13: 225–37.
- Loosley, E. 2019. "Syria." In *The Oxford Handbook of Early Christian Archaeology*, ed. D. K. Pettegrew, W. R. Caraher, and T. W. Davis, 410–29. Oxford: Oxford University Press.
- Louth, A. 1990. "The date of Eusebius' Historia Ecclesiastica." JThS 41: 111-23.

- Love, S. 2016. "A sense of architecture in the past: Exploring the sensory experience of architecture in archaeology." In *Elements of Architecture: Assembling Archaeology, Atmosphere, and the Performance of Building Spaces*, ed. M. Bille and T. F. Sørensen, 213–30. London: Routledge.
- Manaloto, E. T. 2019. Let the Church Meet in Your House!: The Theological Foundation of the New Testament House Church. Carlisle: Langham Publishing.
- McClendon, C. B. 2011. "The articulation of sacred space in the Synagogue and Christian Building at Dura-Europos." In *Dura-Europos: Crossroads of Antiquity*, ed. L. Brody and G. Hoffman, 155–67. Chestnut Hill: McMullen Museum of Art.
- McGinn, T. 2004. The Economy of Prostitution in the Roman World: A Study of Social History and the Brothel. Ann Arbor: University of Michigan Press.
- Meyer, C. 2022. "Domesticating the ancient house: The archaeology of a false analogy." In *Housing in the Ancient Mediterranean World: Material and Textual Approaches*, ed. J. A. Baird and A. Pudsey, 68–95. Cambridge: Cambridge University Press.
- Moss, C. 2013. The Myth of Persecution: How Early Christians Invented a Story of Martyrdom. New York: HarperCollins.
- Nevett, L. C. 2010. Domestic Space in Classical Antiquity. New York: Cambridge University Press.
- Osiek, C. 2002. "Archaeological and architectural issues and the question of demographic and urban forms." In *Handbook of Early Christianity: Social Science Approaches*, ed. A. J. Blasi, J. Duhaime, and P.-A. Turcotte, 83–105. Cambridge: Harvard University Press.
- Oulton, J. E. L., ed. and transl. 1932. *Eusebius: Ecclesiastical History, Volume II: Books 6–10*. Loeb Classical Library 265. Cambridge: Harvard University Press.
- Ousterhout, R. G. 2019. Eastern Medieval Architecture: The Building Traditions of Byzantium and Neighboring Lands. Oxford: Oxford University Press.
- Paton, W. R., ed. and transl. 1917. *The Greek Anthology, Volume III: Book 9: The Declamatory Epigrams*. Loeb Classical Library 84. Cambridge: Harvard University Press.
- Peppard, M. 2016. The World's Oldest Church: Bible, Art, and Ritual at Dura-Europos, Syria. New Haven: Yale University Press.
- Peppard, M. 2020. "The photisterion in Late Antiquity: Reconsidering terminology for sites and rites of initiation." *Journal of Ecclesiastical History* 71: 463–83.
- Pettegrew, D. K. 2024 (in press). "The Christian Building at Dura-Europos: Rethinking the archaeology of the world's oldest house church." *AJA* 128, no. 3.
- Pietri, C. 1978. "Recherches sur les *domus ecclesiae.*" *Revue des Études augustiniennes* 24, no. 1–2: 3–21. Plooij, D., and D. Dolder. 1935. "A fragment of Tatian's Diatessaron in Greek." *The Expository Times* 46: 471–76.
- Pollard, N. 2000. Soldiers, Cities, and Civilians in Roman Syria. Ann Arbor: University of Michigan Proces
- de Pontbriand, S. 2012. "La résidence de Lysias à Europos-Doura: un première approche." In *Europos-Doura Varia* 1, ed. S. de Pontbriand and G. Coqueugniot, 77–92. Bibliothèque Archéologique et Historique 198. Beirut: Institut Français d'archéologie du Proche-Orient.
- Putzeys, T. 2008. "Domestic space in Late Antiquity." In *Objects in Context, Objects in Use: Material Spatiality in Late Antiquity,* ed. L. Lavan, E. Swift, and T. Putzeys, 49–62. Leiden: Brill.
- Rajak, T. 2011. "The Dura-Europos Synagogue: Images of a competitive community." In *Dura-Europos: Crossroads of Antiquity*, ed. L. Brody and G. Hoffman, 141–54. Chestnut Hill: McMullen Museum of Art.
- Reckwitz, A. 2012. "Affective spaces: A praxeological outlook." Rethinking History 16: 241-58.
- Saliou, C. 1992. "Les quatre fils de Polémocratès (P. Dura 19)." In *Doura-Europos Études 1990, Syria* 69: 65–100.
- Sessa, K. 2009. "Domus Ecclesiae: Rethinking a category of ante-pacem Christian space." JThS 60: 90–108
- Snyder, G. F. 2003. *Ante Pacem: Archaeological Evidence of Church Life before Constantine*. Rev. ed. Macon: Mercer University Press.
- Sørensen, T. F. 2015. "More than a feeling: Towards an archaeology of atmosphere." *Emotion, Space and Society* 15: 64–73.
- Spencer-Wood, S. M. 1999. "The world their household: Changing meanings of the domestic sphere in the nineteenth century." In *The Archaeology of Household Activities*, ed. P. M. Allison, 162–89. London: Routledge.

- Stern, K. B. 2023. "Does smoke mean fire? Illumination, incense, and the senses in Late Antique synagogues." *Journal of Late Antiquity* 16: 189–237.
- Tepper, Y., and L. Di Segni. 2006. A Christian Prayer Hall of the Third Century CE at Kefar 'Othnay (Legio). Jerusalem: Israel Antiquities Authority.
- Tepper, Y., and L. Di Segni. 2008. "Ancient Christian prayer hall at Kefar 'Othnay (Legio)." *Qadmoniot* 136: 113–20.
- Tsivikis, N. 2022. "Christian inscriptions from a third and fourth-century house church at Messene (Peloponnese)." *The Journal of Epigraphic Studies* 5: 175–97.
- Tuori, K., and L. Nissin, eds. 2015. *Public and Private in the Roman House and Society*. JRA Suppl. 102. Portsmouth, RI: Journal of Roman Archaeology.
- White, L. M. 1996. The Social Origins of Christian Architecture. Vol. 1. Building God's House in the Roman World. Harvard Theological Studies 42. Valley Forge: Trinity Press.
- White, L. M. 1997. The Social Origins of Christian Architecture. Vol. 2. The Christian Domus Ecclesiae in its Environment. Harvard Theological Studies 42. Valley Forge: Trinity Press.
- Wilson, N. G., ed. 2015. Herodoti Historiae, Libri V-IX. Oxford: Oxford University Press.
- Winkelmann, F., ed. 1975. Eusebius Werke, Band I:I Über das Leben des Kaisers Konstantin. Die griechischen christlichen Schriftsteller. Berlin: Akademie Verlag.
- Yasin, A. M. 2012. "Reassessing Salona's churches: Martyrium evolution in question." *Journal of Early Christian Studies* 20, no. 1: 59–112.
- Zumthor, P. 2006. Atmospheres: Architectural Environments, Surrounding Objects. Basel: Birkhäuser.