## Research Article



# An archaeology of conversion? Evidence from Adulis for early Christianity and religious transition in the Horn of Africa

Gabriele Castiglia\* (D



<sup>\*</sup> Pontificio Istituto di Archeologia Cristiana (PIAC), Rome, Italy ( castiglia 84@gmail.com & castiglia@piac.it)



The port-city of Adulis in modern Eritrea was a key node on the Red Sea linking the Kingdom of Aksum to the Mediterranean, the Middle East and the Indian Ocean. Recent excavations at Adulis have reinvestigated two early Christian churches. New radiocarbon analysis dates both structures to the sixth and early seventh centuries AD, with multiple phases of architectural development reflecting changing use and liturgy. The author uses evidence for both continuity and change in architectural materials, construction styles and sacred practices to assess religious transition at Adulis, and across the Aksumite Kingdom more broadly. Moving beyond an archaeology of conversion, the article reinforces recent work on cosmopolitanism in the Horn of Africa.

Keywords: Horn of Africa, Aksumite Kingdom, Adulis, early Christianity, churches, Islam, cosmopolitanism

## Introduction: conversion, multiculturalism and cosmopolitanism

The investigation of early Christian sites in border regions, remote from centres of power, provides the opportunity to frame the archaeological record in the context of wider historical themes, such as conversion, multiculturalism and cosmopolitanism. This article focuses on the excavation of two of the three known early Christian churches in the Aksumite city of Adulis, located in present-day Eritrea. The long stratigraphic sequences documented since 2017 by the Pontificio Istituto di Archeologia Cristiana allow assessment of not only these two buildings but also of wider developments across the region, in terms of what might be called an 'archaeology of conversion'. The concept of conversion may appear restrictive, reducing religious change to the passage from bad to good, or from disorder to civilisation. Conversion, however, relates to not only cultural and spiritual change, but also to many other spheres of human life; indeed, "religious change is actually change in worldview" (Shaw 2013: 1). This broad context could be framed as 'multicultural', an approach that "extends

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equitable status or treatment to different cultural or religious groups within the bounds of a unified society" (Meskell 2009: 4); yet this risks a 'Western-centric' perspective that neglects the "indigenous perceptions of history" (González-Ruibal 2009: 115). Instead, Timothy Insoll (2021: 452) has recently characterised the early historic Horn of Africa as the cradle of a "cosmopolitan milieu". This approach values cultural differences, seeking to balance local and non-local elements in the shaping of new cultural and religious realities (Meskell 2009: 4–5).

The present article therefore aims to examine new archaeological data from Adulis in light of this theoretical context and to consider the following questions: can we speak of conversion —that is, the process of immediate and complete change of religious creed—or should we instead view religious change as a process of adhesion, whereby new social and religious models are progressively adapted to (Papaconstantinou 2015)? How did internal and external factors shape the complex transition from paganism to Christianity and then to Islam? And can we move beyond conversion to develop an archaeology of cosmopolitanism?

## Historical and archaeological background

Between the first and eighth centuries AD, the Kingdom of Aksum extended across much of what is today northern Ethiopia and Eritrea (key studies include Munro-Hay 1990, 1991; Phillipson 1998, 2012; Fattovich 2018). Via the Red Sea, the kingdom maintained maritime trade routes with the southern Arabian Peninsula (Tomber 2008; De Romanis & Maiuro 2015), as well as India, Taprobane (Sri Lanka) and Tzinista (China). Following the canonical chronology, affirmed by excavations at Bieta Giyorgis hill near the capital city of Aksum (Bard et al. 2014), the kingdom's floruit was during the Middle Aksumite Period (AD 380–580). This was marked by a distinctive monumental architectural tradition (Eigner 2003; Phillipson 2009; Breton 2015; Gaudiello & Yule 2017: 236–44), the scale of economic activity, and an early sixth-century expansion into the Himyarite Kingdom of southern Arabia (Gajda 2009; Robin 2015).

During the fourth century AD, under King Ezana, the royal court converted to Christianity. At the same time, Fumentius, the first bishop of Aksum, was appointed by Patriarch Athanasius of Alexandria, establishing an enduring link between the Ethiopian and Egyptian churches (Kaplan 1982; Fedalto 1988: 670; Munro-Hay 1988, 1997; Amidon 2016 [1997]: 394–96). Some scholars argue that this conversion was a top-down process, with the court initially adopting Christianity, and the wider population only following sometime later (e.g. Hable Selassie 1972: 104; Kaplan 1982; Phillipson 2009: 30; contra Seland 2014). The recent discovery of a fourth-century church at Beta Samati (Ethiopia) (Harrower et al. 2019; Bausi et al. 2020), as well as the work reported here from Adulis, however, provide an enlarged dataset with which to revisit interpretations of the adoption of Christianity in the Kingdom of Aksum.

## The site of Adulis

Adulis stands on the Gulf of Zula, 50km south of Massaua, in a flat desert area. Although originally a port city, today it lies 6km inland (for a history of research, see Paribeni 1907;

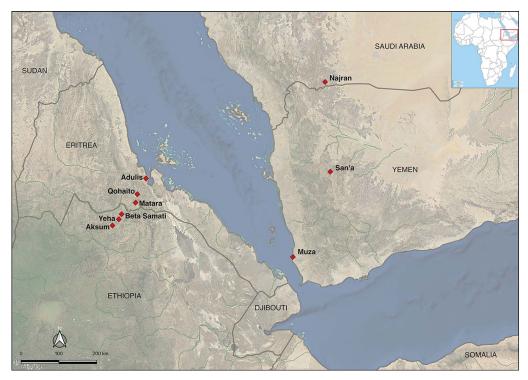


Figure 1. The main sites mentioned in the text (figure by G. Castiglia).

Sundström 1907; Anfray 1974; Munro-Hay 1989; Peacock & Blue 2007; Zazzaro 2013; Anfray & Zazzaro 2016) (Figure 1). One of the most important centres of the Aksumite Kingdom, the port-city of Adulis is noted in first-century AD sources, such as Pliny the Elder and the *Periplus Maris Erythraei*, as an important trade centre (Casson 1989: IV-5). The site also played an important role in the Christianisation of the Horn of Africa, with its first known bishop, Moses, appointed in the fifth century (Palladius. *De Gentibus Indiae et Bragmanibus* I-4; Berghoff 1967; Fedalto 1988: 683). In the early sixth century, the Egyptian merchant Cosmas Indicopleustes travelled to Adulis, recording the visit in his *Topographia Christiana* (Kominko 2013) and included a description of the 'Throne of Adulis', which was inscribed with a bilingual inscription known as the *Monumentum Adulitanum* (Cosmas Indicopleustes *Topographie chrétienne*: II-52/64; Wolska-Conus 1968–1973; Bowersock 2013).

The site of Adulis covers approximately 40ha. Only a small percentage of this area has been excavated, however, and most of the site is poorly known (the Throne, for example, has not yet been located) (Figure 2A). The river Haddas forms the southern boundary of the city, but no defensive walls—as are known from other Aksumite towns—have yet been identified (Phillipson 2012: 119). The best-documented phases of activity are those dating to the Middle Aksumite Period, and a recent study suggests that the city's decline and abandonment should be dated to the late sixth to early seventh century (Zazzaro *et al.* 2014), although the results of the latest excavations, presented below, appear to delay this final phase by a few decades.

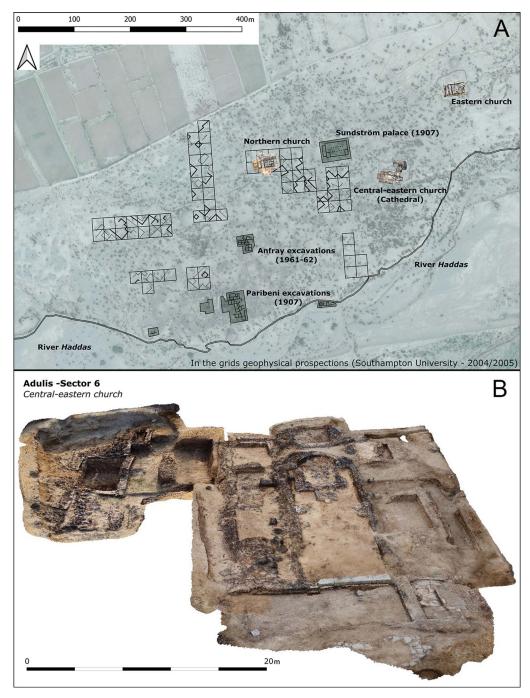


Figure 2. A) The site of Adulis; B) photogrammetry of the central-eastern church (images by S. Bertoldi and G. Castiglia).

## The central-eastern church

The recent excavations by the Pontificio Istituto di Archeologia Cristiana have focused on two early Christian buildings: the central-eastern church and the eastern church. Here, I document the evolving structural forms of these buildings and their associated material culture, before assessing the significance of these results for changes in liturgy and perceptions of space and, in the case of the conversion of one of the churches into a small Islamic cemetery, the transition to a new religious identity and function.

The central-eastern church was located close to the centre of the city. It was first investigated in 1868 by a British expedition (Munro-Hay 1989), which compromised elements of the archaeological deposits. The most recent excavations, however, have been able to identify and fully investigate well-preserved contexts, which form the basis of a five-phase construction sequence (Figures 2B & 3).

#### Phase I

The first phase of the church is a structure, built on a massive platform (typical in the Aksumite tradition; Di Salvo 2017), and measuring approximately 30 × 20m. The building fabric comprises regular courses of basalt blocks and schist slabs. In contrast to the unshaped basalt blocks used in the other Adulis churches, in the south-eastern church the basalt blocks are rectangular and all of similar size (150mm high and 250/300mm wide) (Figure 4). The entrance, to the west, is marked by a massive granite threshold. Inside, in the southern part of the narthex, a wall added in Phase II to create a new room (Room C; see below) has erased the earlier stratigraphy; we hypothesise, however, that this later intervention was intended to restore a small chapel of Phase I.

The main hall is divided into three naves, separated by two rows of pillars. At the eastern end of the building is a semi-circular apse, which frames a rectangular structure that formed a base for the main altar. The apse is flanked by two square rooms, of which the southern bears traces of hydraulic mortar (SU 6065), probably indicating the presence of a baptistery. The pavement, although only preserved across approximately half of one of the square rooms, bears traces of a curving edge, which possibly relates to a decentralised *fons* (baptismal font) that was positioned off-centre within the room and was lost when the floor collapsed. Radiocarbon analyses on wood charcoal from the preparation layer (SU 6086) beneath the baptistery floor give a date for the first phase of construction of cal AD 400–535 (Figure 5; note that calibration with both IntCal20 and SHCal20 (Hogg *et al.* 2020; Reimer *et al.* 2020) is provided, though there is no significant difference; the same is true for the other radiocarbon dates discussed below).

Finds from Phase I include a number of marble and alabaster fragments associated with the liturgical functions and decoration of the church. The style of the decorative stonework is typical of the Syro-Palestinian tradition of the sixth century AD, recalling Byzantine styles characteristic of the Justinianic period, suggesting close contact with nearby Himyar (Pola in Castiglia *et al.* 2020, 2021; see also Yule 2013) (Figure 6), while also corroborating the radio-carbon chronology. In this phase, a Y-shaped chancel divided the presbytery from the main hall, and we assume that some of the decorated marble fragments formed part of this chancel, which was also used in later phases. Based on the building's size, the quality of construction,

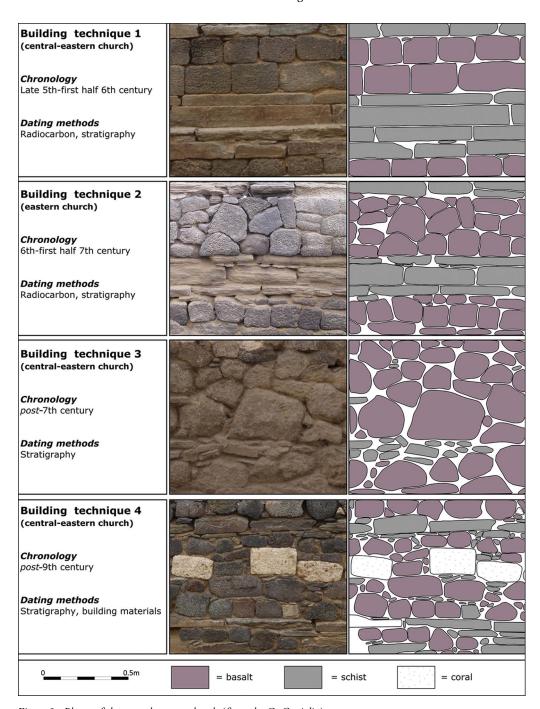


Figure 3. Phases of the central-eastern church (figure by G. Castiglia).

the presence of a baptistery, and its location within the city, it is reasonable to hypothesise that this church fulfilled the role of a cathedral.

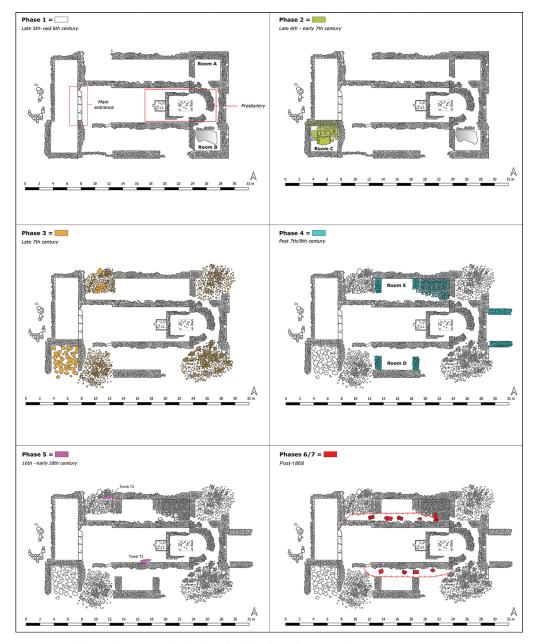


Figure 4. Building techniques in the churches of Adulis (figure by G. Castiglia).

## Phase II

In Phase II, a significant change was made to the south-western part of the church, with the addition of a square room (Room C). The installation of a central square platform suggests the presence of an altar; if so, this room may have been a chapel where the Christian community left offerings before entering the church, as was common in Byzantine liturgy (Taft

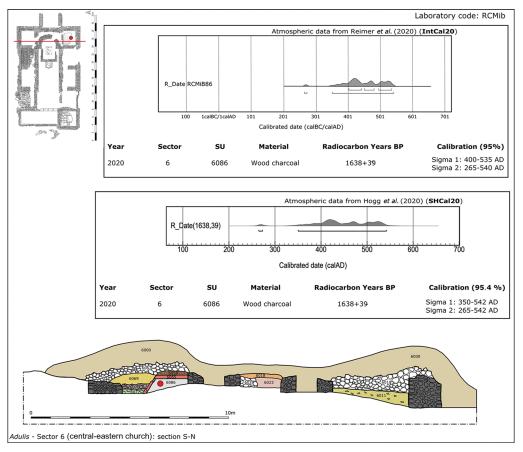


Figure 5. Radiocarbon data from the central-eastern church. The red dot indicates the sampling area. Chronology provided using both IntCal and SHCal (Hogg et al. 2020; Reimer et al. 2020) (figure by G. Castiglia).

1995; Mulholland 2014). Alternatively, the central platform might have formed the foundation for a stairway leading to a tower in the façade (common in Syriac churches; Tchalenko 1990) or to an upper floor (similar to sixth-century Nubian churches, such as Faras; Obłuski 2016).

Important Phase II chronological markers from directly above the baptistery floor (in SU 6058) include Late Aksumite pottery (some marked with crosses), sherds of Ayla-Aksum amphorae and various bronze elements (mostly rings of different sizes relating to at least one polychandelon, or lamp with multiple candles); all date to the late sixth and early seventh centuries (Figure 7). The church arguably continued to serve as a cathedral at this time, with only a minor architectural change (Room C), which suggests a possible evolution in liturgy towards the Byzantine tradition (Taft 1995).

#### Phase III

Phase III presents the first signs of abandonment, such as the massive structural collapses, especially in the northern nave. This may date to the second half of the seventh or early eighth

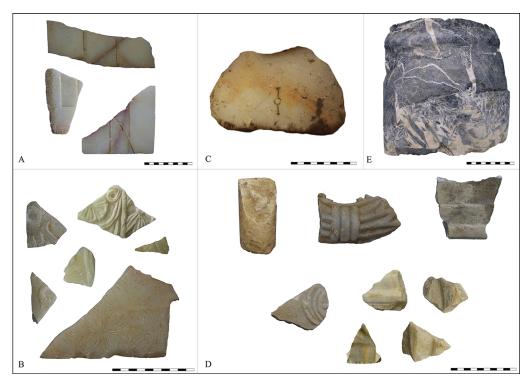


Figure 6. Specimens of marble and alabaster from the central-eastern church: A) alabaster slabs with linear line decoration; B) alabaster slabs with phytomorphic decorations; C) fragments of alabaster slab bearing a Q in Late Sabiac, used as a production mark in Himyar; D) fragments of liturgical specimens in Proconnesian marble; and E) fragment of column in Bianco e nero antico marble (scales in cm) (photographs by M. Pola).

centuries, although most of the collapse deposits and other traces of abandonment were erased by the British expedition of 1868.

#### Phase IV

In Phase IV, the building likely ceased to function as a church, although the nature of activity remains unclear. Partial repair and reconstruction of the building include significant interventions in the northern and central naves, where some of the earlier collapse is cut through and retaining walls inserted to create two new rooms (Rooms D and E; Figure 3). Two massive trenches from the 1868 expedition, however, severely damaged the stratigraphy within these rooms. In the northern nave, a floor of rough stones was laid at the same time as the construction of Room E. Even though the reconfiguration of the church in this phase remains unclear, it appears that the building was shortened, with the western part almost entirely abandoned. Moreover, two parallel walls were added against the eastern external wall of the church. These walls are mostly composed of *spolia*, alongside blocks of white coral laid in irregular courses. The adoption of coral as a building material in the Horn of Africa coincides with the arrival of Islam, with the ninth century providing a *terminus post quem*; it remained a popular building material until the thirteenth century (Horton 1991: 114–15; Insoll 2003: 172–73).

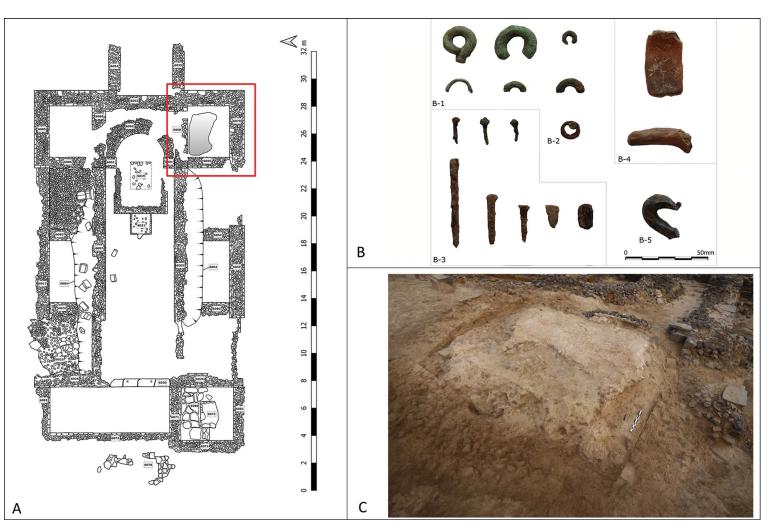


Figure 7. Central-eastern church: A) overall plan, showing baptistry (red square); B) finds from the layer above the baptistry (SU 6058); and C) the baptistry during excavation (images by G. Castiglia).

#### Phase V

In Phase V, the function of the building continued to change, as exemplified by the insertion of a small funerary area in the central nave, with evidence of two burials. There are strong indications that both individuals were buried in accordance with Islamic tradition, including the positioning of the bodies to face Mecca, the presence of stone pillows to prevent the head from touching the earth and the absence of grave goods (see Insoll 2003: 196; for an anthropological study of the burials and a wider discussion on their interpretation, see Larentis in Castiglia *et al.* 2020). Radiocarbon analysis of bone from one of these burials (T1) provides a wide chronology, but the most reliable calibration for the geographic area under study (IntCal20) suggests an early sixteenth century date (Figure 8)—a time when the area would imminently fall under Ottoman rule (Chekroun & Hirsch 2020).

#### Phases VI-VII

Phases VI–VII record the definitive abandonment of the church, followed by the excavations of the British expedition of 1868.

## The eastern church

The recent excavations of the eastern church have proven problematic due to the damage caused by a dig in 1907, led by Roberto Paribeni, which completely erased the stratigraphy of the building except for a small but important portion around the western entrance. Nevertheless, architectural analysis and radiocarbon dating allow us to establish an absolute chronology for the construction of this building and to identify two main phases (Figure 9).

#### Phase I

The building typifies the Christian and secular architecture of the Aksumite Kingdom, characterised by construction on a massive platform of basalt blocks and schist slabs (Giostra 2017; Castiglia 2019). The church measures approximately  $26 \times 18$ m and has a semi-circular apse, with two external rooms, one either side of the apse. A circular fons, decorated with red plaster, in the room immediately south of the apse indicates the presence of a baptismal font. The western entrance passage into the internal hall of the basilica is bordered by a small presbytery enclosure that leads into the main nave of the basilica, where eight central pillars would have provided support for a dome. To the immediate west of the building, excavation has revealed a large quantity of schist slabs and collapse deposits from a structure—perhaps a staircase that connected the raised church to the level of the surrounding city.

Excavation of the western entrance identified an element crucial for dating the church: a large, carbonised wooden beam, probably carved to define a step or threshold, and which clearly formed part of the primary construction phase (SU 4102). Radiocarbon analysis of two samples from this beam gives a date between the late fifth and the first half of the seventh century, providing an indication of the date of Phase I (Figure 10). Considering its location, it is possible that the eastern church served as a suburban sanctuary, perhaps providing baptismal rites to the Christian community of Adulis, or else part of a wider strategy of stational

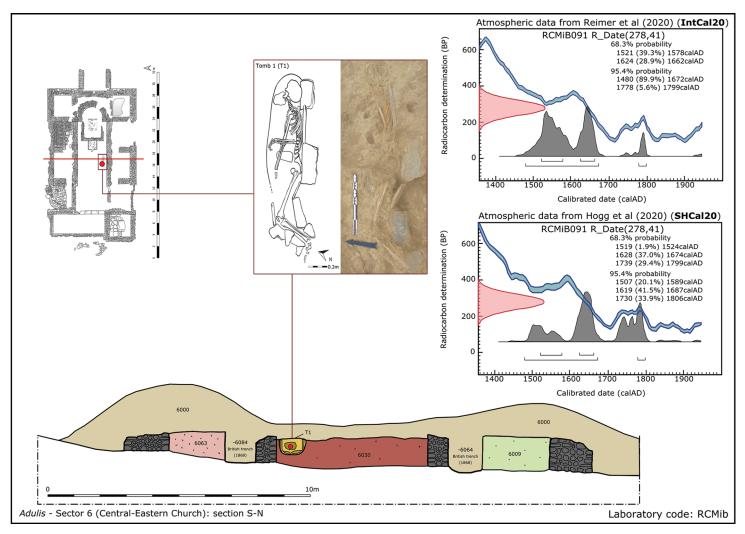


Figure 8. Radiocarbon data from the burial in the main nave of the central-eastern church. The red dot indicates the sampling area. Chronologies provided using both IntCal20 and SHCal20 (Hogg et al. 2020; Reimer et al. 2020) (figure by G. Castiglia).

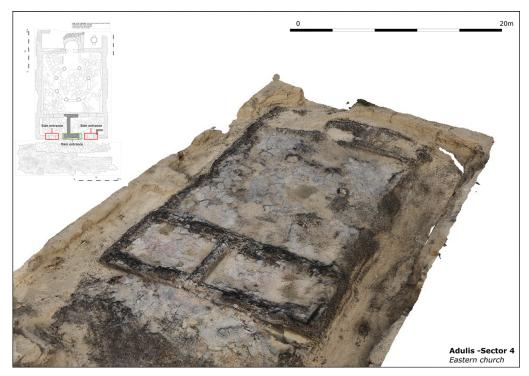


Figure 9. Overall plan and photogrammetry of the eastern church (figure by G. Castiglia and S. Bertoldi).

liturgy, in which bishop and clergy processed through all of the churches within a city to provide liturgical rites.

### Phase II

In Phase II, the most important alteration observed concerns the main entrance, where a massive, T-shaped wall split the narthex into two separate rooms, each equipped with two small side entrances. In contrast to the Phase I building technique, the Phase II wall mostly comprises roughly organised spolia. As in the central-eastern church, a small room was added in the south-western corner of the narthex, but its function is difficult to interpret. Based on the radiocarbon analyses of the beam, which was directly beneath the new wall, Phase II dates to the second half of the seventh century or later.

## Discussion

The central-eastern church is the largest and most elaborate Christian building currently known at Adulis (Figure 3). The dimensions of the building and the evidence for a baptismal font suggest that it fulfilled the role of the *ecclesia episcopalis* (cathedral) of Adulis. The eastern church, on the other hand, is currently unique within the Askumite architectural tradition as the only known Christian building with a circular arrangement of pillars—most probably to support a dome. This feature may reflect direct influence of the Byzantine world of the

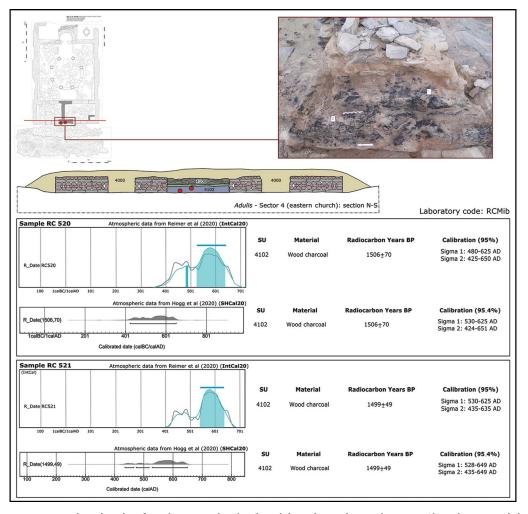


Figure 10. Radiocarbon data from the eastern church. The red dot indicates the sampling area. Chronologies provided using both IntCal and SHCal (Hogg et al. 2020; Reimer et al. 2020) (figure by G. Castiglia).

Justinianic period, when central domes became popular for churches throughout the empire. This influence may be linked to contacts between Constantinople and Aksum in the first half of the sixth century in the context of the Persian Wars, when Byzantium sought an alliance with the Kingdoms of Aksum and Himyar to counter the Persian monopoly of the silk trade (Greatrex 1998; Beaucamp 2010).

Comparison of the new dates for the south-eastern and, especially, eastern churches with radiocarbon dates from excavations elsewhere around Adulis (e.g. Zazzaro et al. 2014) suggests that the decline of the city occurred a few decades later than previously thought. Variation in the dates of the latest activity at different locations across the city, however, may indicate that, rather than a sudden and unexpected abandonment, Adulis experienced a process of gradual decline, with some areas remaining in use longer than others.

In light of these findings at Adulis and those from the recent excavations at Beta Samati, including the fourth-century church (Harrower *et al.* 2019; Bausi *et al.* 2020), we now have evidence of multiple chronologies for early Christianity within the Aksumite Kingdom. It is plausible that Beta Samati, located near Aksum, may have been directly influenced by the capital, and that the royal court's conversion to Christianity may have had an immediate effect on such surrounding settlements. On the other hand, Adulis, located further away, may have undergone a later transition, probably under the influence of the Byzantine Empire via the Red Sea. The church at Beta Samati does, however, testify to prolonged use over an extended period, with close parallels to the later chronologies of the churches at Adulis. The discovery of evidence for post-Aksumite activity at Adulis—namely the two Islamic burials—points towards a wider phenomenon. We cannot exclude the possibility that there might be traces of a later and partial re-occupation in other (unexcavated) areas of the city.

Returning to the issues raised in the introduction, we can now address the themes of conversion, multiculturalism and cosmopolitanism. Does the materiality of early Christianity (and, later, of Islam) at Adulis suggest a process of definitive and straightforward conversion? There is no doubt that the material impact of Christianity was an imposing phenomenon, with the churches representing monumental interventions in the urban topography. At the same time, the church chronologies reveal a process of Christianisation that was gradual and evolving. Written sources and epigraphy indicate that this 'new' religion took root in the early fourth century (at least among the royal court), but its adoption by the wider population only reached its full extent by the late fifth or early sixth centuries. It is reasonable, however, to hypothesise that these processes were heterogeneous, varying across the kingdom, with forms and chronologies depending on many internal and external factors (including trade, cultural influences, politics and war). In this regard, Aaron Butts has suggested that the conversion of Ezana as the first Christian king of Aksum may not have followed the 'classic' linear model—that is, a transition from pagan to monotheist to Christian. Butts (2021: 380–81) points out that:

this linear narrative of Ezana's conversion is not, however, without problems, and other interpretations of the data are possible and perhaps even preferable: the distinct self-presentations of Ezana may, for instance, have been motivated by different aims and intended audiences.

Can we encompass all this evidence within an interpretation of a singular and definitive conversion? It is improbable. Instead, the evidence points to a gradual and ongoing process of change among different peoples and cultures without leading to either a violent or complete process of conversion. If we look, for example, at the coexistence of "pagan and Christian ritual paraphernalia" in the fourth-century phase at Beta Samati (Harrower *et al.* 2019: 1550), we see a mix of local and non-local elements, which encapsulate the definition of 'vernacular cosmopolitanism' recently applied to the western Ethiopian borderlands (González-Ruibal 2021: 530). In such contexts, the transition from pagan to Christian was the result of various influences that never aimed to erase definitively the vernacular peculiarities of an area.

Can we say the same for the transition to Islam? In this case, the evidence from Adulis remains unclear. Nonetheless, the insertion of a small Islamic cemetery within a ruined

church during the late fifteenth or early sixteenth century may well represent the appropriation of a sacred place by generating a multi-layered context of religious expression, "overlaying rather than erasing pre-existing cultural strata" (Loiseau *et al.* 2021: 509). On the other hand, this material process may introduce the concept of hybridisation through a symbolic strategy of memory, where the early Christian past became the vernacular, and Islam the new cosmopolitan element.

All of these issues lead us to the final question: can we go beyond an archaeology of conversion? Across the Horn of Africa, religious change was never a top-down process, nor did it result in a clear-cut break with the past and loss of the vernacular. Instead, different religions acted as both innovative and conservative factors. Churches monumentalised a new religion but, at the same time, perpetuated the architecture and building techniques of the pre-Christian Askumite tradition. Mario Di Salvo has emphasised how the craftsmen who built the churches of the Aksumite Kingdom "became 'Ethiopian' through conscious choice and adopted features which articulated the structural elements and decorative motifs closely based on what had been inherited from the past" (Di Salvo 2017: 5). Similarly, the use of carved marble and alabaster communicated the Christian message, but also preserved existing artistic expressions, such as the use of incense burners for early Aksumite, Christian and Islamic rituals (Phillipson 2012: 91–106). Islamic burial practices, meanwhile, transformed Christian rites while simultaneously perpetuating the existence of former sacred buildings as *lieux de mémoire*.

## **Conclusions**

The new data from Adulis attest to the value of an archaeological approach to the materiality of religious change, and the successive phases of church construction and modification reflect evolving practices and connections. Moreover, our findings reflect how an archaeology of cosmopolitanism, as framed above, allows for a wider perspective on religious transition and heterogeneous inputs that contributed to the framing of new and particular cosmopolitan identities.

Consequently, an archaeology of conversion is too simplistic: as François-Xavier Fauvelle (2020: 113) has recently stated, "the history of Christianity and Islam in medieval Ethiopia cannot be narrated as that of Christian and Muslim immigrants arriving *en masse* in an empty land". This cuts to the core of the issue: the need to leave aside our Western- and Mediterranean-centred approaches in order to view these pivotal transitions as *milieux* of local and external elements that frame cosmopolitanism as the force that shapes past—and indeed present—societies. In this way, the 'archaeology of conversion' can move forward as an archaeology of cosmopolitanism and complexity (Insoll 2021).

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### References

- AMIDON, P.R. 2016 [1997]. Rufinus of Aquileia: history of the Church. Washington, D.C.: CAU Press.
- ANFRAY, F. 1974. Deux villes axoumites: Adoulis et Matara, in Accademia Nazionale dei Linc (ed.) *IV Congresso Internazionale di Studi Etiopici. Roma 10–15 aprile 1972*: 745–65. Roma: Accademia Nazionale dei Lincei.
- Anfray, F. & C. Zazzaro. 2016. Recherches archéologiques à Adoulis (Érythrè). Tolouse: Presses Universitaires du Midi.
- BARD, K.A., R. FATTOVICH, A. MANZO & C. PERLINGIERI. 2014. The chronology of Aksum (Tigrai, Ethiopia): a view from Bieta Giyorgis. *Azania* 49: 285–316.
  - https://doi.org/10.1080/0067270X.2014.943484
- Bausi, A., M. Harrower & I.A. Dumitru. 2020. The Gə əz inscriptions from Beta Samāti (Beta Samati). *Bibliotheca Orientalis* 77: 34–56.
- BEAUCAMP, J. 2010. Le rôle de Byzance en Mer Rouge sous le règne de Justin: mythe ou réalité?, in J. Beaucamp, F. Briquel-Chatonnet & C.J. Robin (ed.) Juifs et chrétiens en Arabie aux V et VI siècles: regards croisés sur les sources: 197–218. Paris: CNRS.
- Berghoff, W. 1967. *Palladius. De Gentibus Indiae et Bragmanibus*. Meisenheim: Anton Hain.
- BOWERSOCK, G.W. 2013. The throne of Adulis: Red Sea wars on the eve of Islam. Oxford: Oxford University Press.
- Breton, J.-F. 2015. *Les bâtisseurs des deux rives de la Mer Rouge*. Paris: Éditions de Boccard. https://doi.org/10.4000/books.cfee.792
- Butts, A. 2021. Ethiopic, in J.E. Walters (ed.) *Eastern Christianity: a reader*: 367–412. Grand
  Rapids (MI): William B. Eerdmans.

- CASSON, L. 1989. The Periplus Maris Erythraei: text with introduction, translation and commentary. Princeton (NJ): Princeton University Press.
- CASTIGLIA, G. 2019. *In Adule, Aethiopum Urbs Maritima*. L'impatto monumentale del Cristianesimo ad Adulis e nel Corno d'Africa in età tardo antica. *Antiquité Tardive* 26: 327–48. https://doi.org/10.1484/J.AT.5.116762
- Castiglia, G. et al. 2020. Le campagne del Pontificio Istituto di Archeologia Cristiana ad Adulis (Eritrea): scavi 2018 e 2019. Rivista di Archeologia Cristiana 96: 165–218.
- 2021. For an archaeology of religious identity in Adulis and the Horn of Africa: sources, architecture, and recent archaeological excavations. *Journal of African Archaeology* 19: 25–56.
  - https://doi.org/10.1163/21915784-20210006
- CHEKROUN, A. & B. HIRSCH. 2020. The Muslim-Christian wars and the Oromo expansion: transformations at the end of the Middle Ages (ca. 1500–ca. 1560), in S. Kelly (ed.) *A companion to medieval Ethiopia and Eritrea*: 454–76. Leiden: Brill. https://doi.org/10.1163/9789004419582\_017
- DE ROMANIS, F. & M. MAIURO (ed.). 2015. Across the ocean: nine essays on Indo-Mediterranean trade.

  Leiden: Brill.

  https://doi.org/10.1163/9789004289536
- Di Salvo, M. 2017. *The basilicas of Ethiopia. an architectural history.* London: I.B. Tauris. https://doi.org/10.5040/9781350988477
- EIGNER, D. 2003. Architecture, in S. Uhlig (ed.) Encyclopaedia Aethiopica: 323–24. Wiesbaden: Harrassowitz.

- FATTOVICH, R. 2018. From community to state: the development of the Aksumite polity (northern Ethiopia and Eritrea). *Journal of Archaeological Research* 27: 249–85.
  - https://doi.org/10.1007/s10814-018-9122-x
- FAUVELLE, F.-X. 2020. Of conversion and conversation: followers of local religions in medieval Ethiopia, in S. Kelly (ed.) *A companion to medieval Ethiopia and Eritrea*: 113–41. Leiden: Brill.
  - https://doi.org/10.1163/9789004419582\_006
- Fedalto, G. 1988. Hierarchia Ecclesiastica Orientalis: Series Episcoporum Ecclesiarum Christianarum Orientalium. Volume 2: Patriarchatus Alexandrinus, Antiochenus, Hierosolymitanus. Padova: Messaggero.
- GAJDA, I. 2009. Le royaume de Ḥimyar à l'époque monothéiste. L'histoire de l'Arabie du Sud ancienne de la fin du IV siècle de l'ère chrétienne jusqu'à l'avènement de l'islam. Paris: Académie des Inscriptions et Belles-Lettres.
- GAUDIELLO, M. & P. YULE (ed.). 2017. Mifsas Baḥri: a Late Aksumite frontier community in the mountains of southern Tigray. Survey, excavation and analysis, 2013–16 (British Archaeological Reports International Series 2839). Oxford: British Archaeological Reports.
  - https://doi.org/10.30861/9781407315799
- GIOSTRA, C. 2017. La diffusione del Cristianesimo lungo il Mar Rosso alla luce dell'archeologia: la città porto di Adulis e il regno di Aksum. Rivista di Archeologia Cristiana 93: 249–313.
- González-Ruibal, A. 2009. Vernacular cosmopolitanism: an archaeological critique of universalistic reason, in L.M. Meskell (ed.) *Cosmopolitan archaeologies*: 113–39. Durham (NC): Duke University Press. https://doi.org/10.1215/9780822392422-006
- 2021. The cosmopolitan borderland: western Ethiopia c. AD 600–1800. Antiquity 95: 530–48. https://doi.org/10.15184/aqy.2021.23
- Greatrex, G. 1998. *Rome and Persia at war, 502–532* (ARCA Classical and Medieval Texts, Papers and Monographs 37). Leeds: Francis Cairns.
- Hable Selassie, S. et al. 1972. Ancient and medieval Ethiopian history to 1270. Addis Ababa: United Printers.
- HARROWER, M. et al. 2019. Beta Samati: discovery and excavation of an Aksumite town. Antiquity 93: 1534–52. https://doi.org/10.15184/aqy.2019.84

- Hogg, A.G. *et al.* 2020. SHCal20 Southern Hemisphere calibration, 0–55 000 Years cal BP. *Radiocarbon* 62: 759–78. https://doi.org/10.1017/RDC.2020.59
- HORTON, M. 1991. Primitive Islam and architecture in East Africa. *Muqarnas* 8: 103–16. https://doi.org/10.2307/1523158
- INSOLL, T. 2003. The archaeology of Islam in Sub-Saharan Africa. Cambridge: Cambridge University Press.
- 2021. The archaeology of complexity and cosmopolitanism in medieval Ethiopia: an introduction. *Antiquity* 95: 450–66. https://doi.org/10.15184/aqy.2020.168
- KAPLAN, S. 1982. Ezana's conversion reconsidered. Journal of Religion in Africa 13: 101–109. https://doi.org/10.1163/157006682X00087
- KOMINKO, M. 2013. *The world of Kosmas: illustrated Byzantine codices of the Christian topography.*Cambridge: Cambridge University Press.
- LOISEAU, J. *et al.* 2021. Bilet and the wider world: new insights into the archaeology of Islam in Tigray. *Antiquity* 95: 508–29. https://doi.org/10.15184/aqy.2020.163
- MESKELL, L.M. 2009. *Cosmopolitan archaeologies*. Durham (NC): Duke University Press.
- Mulholland, B. 2014. The Early Byzantine Christian church: an archaeological re-assessment of forty-seven Early Byzantine basilical church excavations primarily in Israel and Jordan, and their historical and liturgical context. Oxford: Peter Lang.
- Munro-Hay, S. 1988. The dating of Ezana and Frumentius. *Rassegna di Studi Etiopici* 32: 111–27.
- 1989. The British Museum excavation at Adulis, 1868. Antiquaries Journal 69: 43–52. https://doi.org/10.1017/S0003581500043407
- 1990. The rise and fall of Aksum: chronological considerations. *Journal of Ethiopian Studies* 23: 47–53.
- 1991. Aksum: an African civilization of late antiquity.
   Edinburgh: Edinburgh University Press.
- 1997. Ethiopia and Alexandria: the metropolitan episcopacy of Ethiopia. Warsaw: Zaś Pan.
- Obłuski, A. 2016. Nobadian and Makurian church architecture: Qasr el-Wizz, a case study, in A. Łajtar, A. Obłuski & I. Zych (ed.) Aegyptus et Nubia Christiana: the Włodzimierz Godlewski jubilee volume on the occasion of his 70<sup>th</sup> birthday: 481–512. Warsaw: University of Warsaw.
- PAPACONSTANTINOU, A. (ed.). 2015. Conversion in late antiquity: Christianity, Islam, and beyond.

- London: Routledge. https://doi.org/10.4324/9781315574202
- Paribeni, R. 1907. Ricerche sul luogo dell'antica *Adulis* (Colonia Eritrea). *Monumenti Antichi* 18: 437–572.
- Peacock, D. & L. Blue. 2007. The ancient Red Sea port of Adulis, Eritrea: results of the Etritro-British expedition 2004. Oxford: Oxbow. https://doi.org/10.2307/j.ctvh1dpst
- PHILLIPSON, D.W. 1998. Ancient Ethiopia. Aksum: its antecedents and successors. London: British Museum.
- 2009. Ancient churches of Ethiopia: fourth– fourteenth century. New Haven (CT): Yale University Press.
- 2012. Foundations of an African civilisation: Aksum
   the northern Horn 1000 BC-AD 1300.
   Croydon: Boydell & Brewer.
- Reimer, P.J. et al. 2020. The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0–55 cal kBP). Radiocarbon 62: 725–57. https://doi.org/10.1017/RDC.2020.41
- ROBIN, C.J. 2015. Himyar, Aksum, and *Arabia Deserta* in late antiquity: the epigraphic evidence, in G. Fisher (ed.) *Arabs and empires before Islam*: 127–71. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199654529.003.0004
- SELAND, E.H. 2014. Early Christianity in East Africa and Red Sea/Indian Ocean commerce. African Archaeological Review 31: 637–47. https://doi.org/10.1007/s10437-014-9172-5
- SHAW, J. 2013. Archaeology of religious change: introduction. World Archaeology 45: 1–11. https://doi.org/10.1080/00438243.2013. 783968

- SUNDSTRÖM, R. 1907. Archaeological work at the ruins of Adulis and Gabaza, in E. Littmann (ed.) Preliminary report of the Princeton University expedition to Abyssinia. *Zeitschrift für Assyriologie* 20: 151–82.
  - https://doi.org/10.1515/zava.1907.20.1.151
- TAFT, R.F. 1995. Church and liturgy in Byzantium: the formation of the Byzantine church, in C.C. Akentiev (ed.) Liturgy, architecture, and art in Byzantine world. Papers of the XVIII International Byzantine Congress (Moscow, 8–15 August 1991) and other essays dedicated to the memory of Fr. John Meyendorff: 13–29. Saint Petersburg: Society for Byzantine and Slavic Studies
- TCHALENKO, G. 1990. Églises syriennes à Bêma. Paris: Librairie orientaliste Paul Geuthner.
- Tomber, R. 2008. *Indo-Roman trade: from pots to pepper*. London: Duckworth.
- Wolska-Conus, W. 1968–1973. Cosmas Indicopleustes, Topographie chrétienne. Introduction, texte critique, illustration, traduction et notes. Paris: Les éditions du cerf.
- YULE, P.A. 2013. A late antique Christian king from Zafar, southern Arabia. Antiquity 87: 1124–35. https://doi.org/10.1017/S0003598X00049905
- ZAZZARO, C. 2013. The ancient Red Sea port of Adulis and the Eritrean coastal region: previous investigations and museum collections (British Archaeological Reports International Series 2569). Oxford: British Archaeological Reports.
- ZAZZARO C., E. COCCA & A. MANZO. 2014. Towards a chronology of the Eritrean Red Sea port of *Adulis* (1<sup>st</sup>—early 7<sup>th</sup> century AD). *Journal of African Archaeology* 12: 43–73. https://doi.org/10.3213/2191-5784-10253