

SAVING TIGRAY'S PAINTED CHURCHES



ABOVE A large number of churches are built into the cliffs in the northern Ethiopian province of Tigray. Here we look down over the site of the hermit cave church of Daniel Qorqor and its larger neighbour, the church of Maryam Qorqor. The modern-built facade of the church is visible just at the right edge of the cliff.

Over the past few years, the Ethiopian Heritage Fund has been scaling cliffs and mountains to study and conserve the remarkable rock-hewn painted churches of Ethiopia's Tigray region, currently in the grips of conflict. Blair Priday, Stephen Rickerby, and Lisa Shekede guide us through their work.

ngoing conflict in northern Ethiopia's Tigray region is devastating many lives, with reports of civilians being killed and an estimated 2.2 million people displaced. As well as the heavy human toll, armed conflict often leads to the damage and destruction of cultural heritage, including places of worship. Tigray's rich cultural heritage includes the rock-hewn churches that make up the 'Sacred Landscapes of Tigray', submitted to the tentative list of UNESCO World Heritage Sites in 2018. Many of them are already in need of conservation, and dangerous conflict threatens the sites themselves, the possibility of continuing conservation work, and potential future income from tourist visits to the churches.

The wall-paintings in Tigray's rock-hewn churches – and in others elsewhere in the country, such as the famous churches at Lalibela – are an important part of Ethiopia's unique ecclesiastical artistic heritage, which also encompasses some of the world's most ancient illuminated gospels, icons, and crosses. These arts are the products of a long Christian tradition that dates back to the 4th century AD, when Ezana, King of Aksum, the powerful and well-connected empire that flourished between the 1st and 7th centuries AD approximately, was converted to Christianity by his scribe Frumentius. According to the historian Rufinus, this Frumentius was one of two Syrian brothers who were spared death and brought to the court after a trading vessel on which they were travelling stopped at one of Ethiopia's Red Sea ports. In time, Frumentius became Ethiopia's first bishop, laying the foundations of the country's enduring Orthodox faith.

It is the long-held religious practices of the Ethiopian Orthodox church that underpin the country's Christian artistic traditions, but the techniques and stylistic developments exhibited by such works reflect a confluence of earlier traditions – notably from the Aksumite empire – and influences from far beyond Ethiopia's borders, including ancient Rome, Coptic Egypt, Renaissance Italy, India, and the Arab world, testifying to extensive and long-lasting networks of trade and cultural exchange. \rightarrow



ABOVE The Nine Saints (important missionaries in the early spread of Christianity through Ethiopia) are painted on plaster on the dome of Abuna Yemata Guh. The paintings date from the second half of the 15th century. BELOW The difficult ascent to the church of Maryam Dengelat, whose entrance is stranded 40m above the ground as a result of cliff-face collapse. OPPOSITE Inside Maryam Dengelat, the paintings include this one on cloth of St Victor on horseback, dated to the second half of the 17th century.

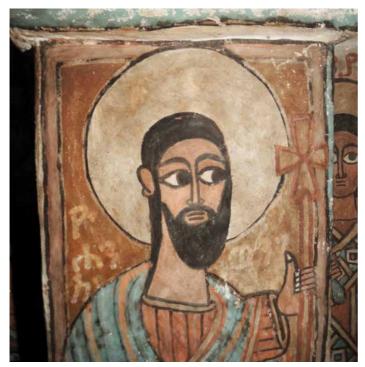


Wall-paintings preserved in churches that have been carved into the cliffs are notable examples of these artistic traditions. Such sites have been the subject of recent efforts by the Ethiopian Heritage Fund (EHF), a UK-based charity founded in 2005 to conserve and promote Ethiopia's cultural heritage. Since 2013, the EHF has been working with the Ethiopian Orthodox Tewahedo Church, the Authority for Research and Conservation of Cultural Heritage (ARCCH), and Regional Bureaux of Culture and Tourism to study and conserve the painted churches, principally in the province of Tigray.

Tigray's rock-hewn churches are scattered in remote and mountainous terrain. Although about 150 sites are recorded, their total number remains elusive. They range in size from small hermits' caves to others with cathedral-like proportions. More than 40 of the recorded churches preserve wall-paintings, which mainly date from the medieval period to the 18th century. The paintings include biblical scenes ranging from the fall of Adam and Eve to episodes from the life of Christ, but, under the influence of Orthodox religious texts such as the Book of Enoch, many of these are shown in ways that differ from Western Christian painting traditions. Also painted inside the churches are monks, martyrs, and saints intimately associated with the movement of ascetic monasticism that took root in the area, such as the revered Abba

34 MINERVA MARCH/APRIL 2021





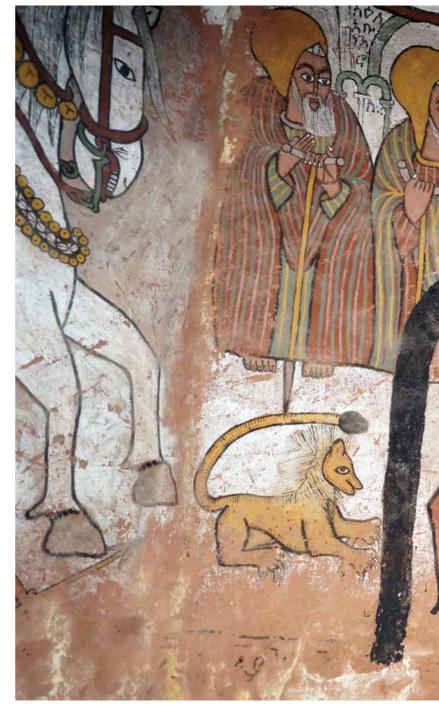
ABOVE Paintings at Maryam Bahera include St John painted on plaster on a pillar in the late 14th/early 15th century. RIGHT Abuna Yemata on horseback, in his church at Guh. BOTTOM RIGHT A painting on plaster, dating from c.1400, in the church of Debra Tsion shows St Theodore the Egyptian on horseback spearing a giant snake. He is followed by the archangel Gabriel and St Claudius (or Galawdewos).

Garima. Given their rock-hewn nature, painted churches are exposed to a wide range of environmental and geological threats. They survive in a delicate balance with nature and it forces.

Alongside natural threats, newer risks come from both human action and inaction. The current ongoing conflict in the Tigray region poses real dangers to people in the area, and, as related in *The Telegraph*, there are reports of churches and mosques being looted. Before this crisis, there was a trend for growing communities in the region to demand larger modern churches in closer proximity to their population centres, and as a result ancient churches in remote locations were falling into infrequent usage and poor maintenance. Well-intended efforts can cause harm, too. For example, painted interiors that are smoke-blackened may be whitewashed or repainted, and electric light fixtures added on to painted surfaces.

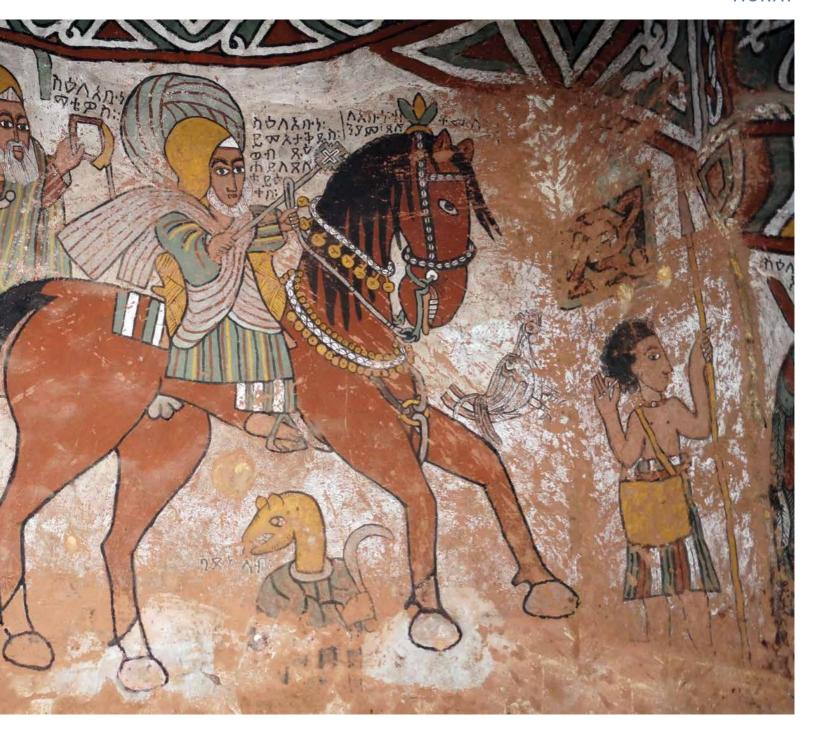
In 2013, the EHF undertook a technical and condition survey of some of Tigray's wall-paintings, the first of its kind to be carried out in the region, with the aim of establishing scientific knowledge of the paintings and of compiling an up-to-date record of the churches. We expanded on this with generous funding from the Gerda Henkel Stiftung, and in 2019 started a comprehensive survey of all the known paintings in the rock-hewn churches of Tigray. To date, we have surveyed some 31 sites where evidence of paintings is documented, often in remote locations that can only be accessed by off-road trekking, and in some cases reached only with the aid of climbing ropes and harnesses.

In these hard-to-reach places, the picture is worrying, with cases of wall-paintings being destroyed or irretrievably covered over in recent years. We estimate that 19% of Tigray's known wall-paintings have disappeared in the last 50 years, half of those in the last five years. The need for technical examination and condition recording at each church has never been more urgent.



Our survey incorporated a number of remarkable sites, little known to the outside world. One is the church at Dengelat, the entrance of which is now stranded 40m above the ground, as a result of a cliffface collapse. In consequence, its paintings have remained largely inaccessible for 200 years. We were only able to gain entry with the help of a French mountaineering team, collaborating on a project organised by Adigrat University and with logistical support from Luigi Cantamessa of the Qorqor Lodge. Inside, our team trod over metres of accumulated bird guano to carry out the first detailed technical and condition assessment of the paintings. Unusually for this area, the rock-hewn walls were first covered with cloth before being plastered and painted. The astounding scheme, which includes Marian scenes, the winged Elders of the Apocalypse, and one of the most-extensive cycles of Tigray's hermit-saints and holy men, was painted in the socalled 'first Gondarine style' and is datable to the second half of the 17th century. This period of painting is associated with Fasilides, Emperor

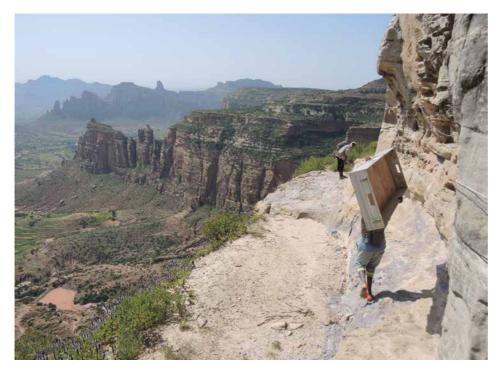
36 MINERVA MARCH/APRIL 2021



of Ethiopia, who ascended to the throne in 1632 and established a new capital at Gondar. The style is vigorous and brightly coloured, defined by bold contouring and the expressive red modelling of facial features, in contrast to the more naturalistic appearance and darker palette of the 'second Gondarine style', which emerged during the reign of lyasu II (1730-1755). The paintings at Dengelat are of the highest quality and survive in unbelievably good condition.

Gaining access to sites like this is gradually increasing technical knowledge of Tigray's wall-paintings, few of which have been previously studied. The plaster technology of a majority of the churches, regardless of their location and date, is gypsum-based, a feature not recognised before. A basic colour palette of carbon black, white, red and yellow ochre, and green earth was normal practice, but rare and more expensive paint materials are found in some churches distinguished by specific patronage. At the church at Maryam Bahera, for example, hewn into a sandstone cliff in a secluded valley of the Agame Massif, \rightarrow





LEFT Taking equipment along the cliff-ledge that leads to the entrance of Daniel Qorqor.

BELOW Virgin and Child painted on plaster in the hermit cave at Daniel Qorqor, late 14th/early 15th century. The Virgin is flanked by St Peter and St Paul.

RIGHT Another Virgin and Child painted on plaster, this time dating from the second half of

the 17th century and at the church of Pétros

Tefetsamé Semaet, Mellahayzengi.

the benefaction of a local landowner is recorded in a prominent inscription. In its paintings, dated to the late 14th/early 15th century, the precious yellow pigment orpiment, applied in a medium-rich glaze (identified as animal glue), is used lavishly. Royal patronage at the magnificent church of Debra Tsion, covered in paintings of local saints and their exploits shortly after it was built around 1400 by the monk Abraham and his followers, afforded it a rich palette that included red lead, vermilion, and orpiment. Here too, so far uniquely, vermilion is combined with a bright red resin, which is almost certainly dragon's blood, an extract derived from trees of the *Dracaena* genus – including *Dracaena ombet*, also known as the Nubian dragon tree, which is native to Ethiopia.

Blues are conspicuously absent until about the 17th century, when they appear to have been introduced under the influence of Jesuit $\frac{1}{2}$

European art. Prior to this, when a blue colour was required, green earth with a bluish hue was generally used instead. Alternatively, black was mixed with or layered over white to produce a 'false blue'. The church of Abuna Yemata Guh is famous both for its stunning cliff-face location and its remarkable 15th-century wall-paintings, which include a dome showing the Nine Saints (of whom Abuna Yemata was one), missionaries who helped spread Christianity in Ethiopia. These painting are some of the finest in the country and also provide an interesting insight into the development of pigments in relation to the use of blue. In a prominent scene of the Virgin and Child, the Virgin's robes are painted blue, the only example of its presence in the entire interior. Our investigations confirm that this painting was historically restored, probably in the 17th century, when a new blue colour – probably the organic colourant indigo – was introduced for the first time.



38 MINERVA MARCH/APRIL 2021



Such discoveries raise wider questions about the origins of the pigments used. The prevalence of distinctive green-blue earth pigments in Ethiopian wall-paintings suggests that indigenous geological sources were used, although materials could also have been imported from elsewhere. These possibilities can be extended to other pigments identified in the paintings so far, which could have been sourced or manufactured both within and outside Ethiopia. In addition, indigenous pigments may have been available locally or brought from locations far from the churches in which they are now found. Analysis of the 13th-century wall-paintings at Maryam Qorqor, for example, shows a close pigment match with local minerals, including a distinctive green earth. It seems that the monastic community of this early rock-cut church used materials that were close at hand. But at the small hermit's cave of Abuna Daniel, which is located nearby at Qorqor's summit, much better quality pigments were used for its later paintings, including a far superior green earth. These were presumably purchased from a non-local source.

The churches have been an important driver for tourism in this area of Ethiopia, and as they began to receive more promotion and publicity their preservation needs came into focus, prompting an increase in interest from the international conservation community. So far, the painted churches have largely escaped the mistaken interventions (typically stemming from a misunderstanding of original painting technology) that have caused damage at sites elsewhere in the world. But as they gain more interest, new information about the paintings, such as the pigments used, must be used to guide conservation practice.

To this end, we have also conserved a number of painted churches in Tigray. Although these were selected primarily because their paintings were judged to be at risk of imminent loss, it is essential that outcomes are sustainable in the long term, too. Our conservation endeavours have adopted a broad perspective, dealing with wider contextual dangers, such as rock fissuring and collapse, and inherent problems of moisture and salts, while also addressing more immediate concerns, such as safeguarding paintings executed on vulnerable gypsum plasters. Our work has included analysing plasters and their local materials, so that any repairs are both compatible and durable, and, similarly, obtaining technical data on the vulnerability of the original paint materials to establish how to clean the painted surfaces safely. This is, to our knowledge, the first time that wall-painting conservation in Ethiopia has been carried out with such a scientific foundation.

Important though these measures are, they are not enough for sites and communities that face far greater problems. If tourism returns, including the painted churches in sustainable tourism developments is crucial, as this supplements incomes reliant on vulnerable subsistence farming. The charity had been working hard to encourage tourism to the church at Maryam Bahera, for example, in partnership with local communities, visitor guides, and tourism agencies. As well as conserving the paintings, we worked to rehabilitate the church interior, by reinstating a low-level wooden barrier and installing new curtains, to provide liturgical divisions that in recent times have been lost. In collaboration with a trekking agency, the church was incorporated on a walking tour, encouraging a small but steady flow of fee-paying visitors and helping to diversify tourist itineraries away from over-visited churches, where the presence of too many tourists may cause damage to paintings in small interiors as well as the fragile ecological environments in which the churches are found.

Other initiatives include teaching and training, targeting a wide range of audiences, including heritage professionals, universities and, not least, tour guides. Guides can help preservation efforts in numerous ways, such as controlling visitor groups at vulnerable sites, and influencing visitor behaviour in sensitive religious and ecological environments. Critically, they can also highlight risks to painted churches before damage and loss occur. Recognising the importance of these roles, we delivered a training course in 2019 for more than 20 guides who work in the region.

The preservation of Ethiopia's unique wall-paintings stands at a critical point. Tourism – and much else – is in the balance, and in the face of rapid political, social, and cultural change, traditional safeguards for the protection of the country's religious heritage are being eroded. Nevertheless, the painted churches retain an authenticity that is rare. While conservation is needed, it must be carried out with caution and sensitivity, considering the 'untouched' nature of these precious sites. The technical knowledge of the paintings studied and the up-to-date record of the sites compiled during our survey lay the groundwork for future conservation of the remarkable churches, which, amid the ongoing conflict in Tigray, now face new, pressing challenges. •

FURTHER INFORMATION

To learn more about the Ethiopian Heritage Fund (EHF) and its other projects, visit www.ethiopianheritagefund.org.