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## The Rock-hewn Churches of Təgray (Ethiopia): New Studies in Qwälla and Dəggwə`a Tāmben and Səḥarti Samre districts. A Trip Report

The article is devoted to the results of a study of some little-known monuments of rock-hewn church architecture of the Təgray region (Ethiopia). The considered monuments are concentrated in the insufficiently explored by the scientists areas of Təgray: Qwälla and Dəggwə`a Tāmben, Səḥarti Samre. The paper represents new material obtained during the author's field studies of monuments, including descriptions, photographs and sketch-plans. The Author analyzes the features of rock-hewn churches of these areas, offers his version of the typological affiliation and dating of the monuments. In addition, attention is paid to the current state of preservation of monuments, the causes of their destruction and the dangers to their preservation in the future.

Keywords:  
Ethiopia; Tigray; rock-hewn churches; architecture; heritage

### INTRODUCTION

The Təgray region in northern Ethiopia is famous for the variety of rock-hewn churches mostly of 13th–15th centuries (Lepage, Mercier, 2005, p.108-179).The tradition of cutting churches in rocks continues here to this day (Phillipson, 2009, p. 121). However, the historical areas inside Təgray and their monuments have been studied irregularly. For example, many churches of the districts of Gär'alta, Şəra and Aşbi-Wämbärta are represented quite well in the thematic literature (Lepage, Mercier, 2005; Di Salvo, 2017). But the churches of the Qwälla and Dəggwə'a Tāmben, Səḥarti-Samre districts (see additional map, fig.1) are studied poorly since some parts of this area are difficult to access. However, the study of these churches is important to complete the picture of the history of church architecture in Təgray and Ethiopia as a whole. The author made a trip to the Tāmben and Səḥarti-Samre districts in autumn 2019 and studied some of these mon-

uments. Most of them are known in the scientific literature, but that knowledge cannot be called exhaustive, other churches are presented only nominally and no reliable information about them has been previously published (Sauter, 1976, p. 172-175; Plant, 1985, p. 84-87,144-167).

#### I. MIKA'EL GAWI AND MARYAM GUNFAN

The cave church of Mika'el Gawi in the Səḥarti Samre district (historical area Säläwa) is considered poorly studied today (Plant, 1985, p. 86; Smidt, Pankhurst, 2010). In the works of R. Plant, which are still the most complete to this day in the context of the studied churches of Təgray, this church is only mentioned as simple cave church (Plant, 1973, p.45; Plant, 1985, p. 86). She personally did not visit this place. Indeed, the church of Mika'el Gawi, located at the bottom of the rocks of the south part of the big valley between towns of Samre, Gəḡät and Yäčäla, is a grotto of simple form. (fig.2)

Currently, the church is abandoned and used by the local community as storage space. The structure of the new built church is almost closely adjacent to it, leaving only a narrow passage. The façade of the cave church is constructed in masonry wall covering the opening of grotto. (fig.3) There are also two doorways here, and between them a double window. Inside, a fragment of the rounded masonry whitewashed wall of the mäqdäs (sanctuary) has been preserved. The area inside, probably of natural cave origin, has a flat ceiling, without any decoration or segmentation. The attribution of the monument is difficult, but we can assume a late period, probably 19th – the beginning of 20th centuries. Closeness of a large built and small rock-hewn (or cave) church (often chapel or saint's cell) is common in Ethiopian monasteries. A cave church often appears earlier than a big built one and gradually falls into desolation. A similar situation can be observed in the monasteries of Yoḥannəs Mätməq Koholo (Nosnitsin, 2011, p. 2-6), Kidanä Məḥrät Tänsəḥe (Nosnitsin, 2012a, p.13-18; Nys-

Fig. 1 - A map of Təgray region of Ethiopia (fragment) (PPD, Mekelle, 1997). Designations: 1 - Mika'el Gawi; 2 - Maryam Gunfan; 3 - D'ramba Şəllase; 4 - Maryam Maḥbäräqä; 5 - Arba'ətu Ənsəsa Qaqa; 6 - Maryam Däbrä Tā'amina; 7 - Maryam Həbə'to; 8 - Amanu'el Zala; 9 - Maryam 'Eşəwəto; 10 - Wəqro Yoḥannəs Wäldä Nägwädgwäd; 11 - Tänsəḥe Kidanä Məḥrät; 12 - Kidanä Məḥrät 'Addi Näfas.

Fig. 2 - A sketch-plan of Mika'el Gawi cave church (drawn by S. Klyuev, 2020).

Fig. 3 - The facade of Mika'el Gawi cave church. (Photograph: S. Klyuev, 2019).

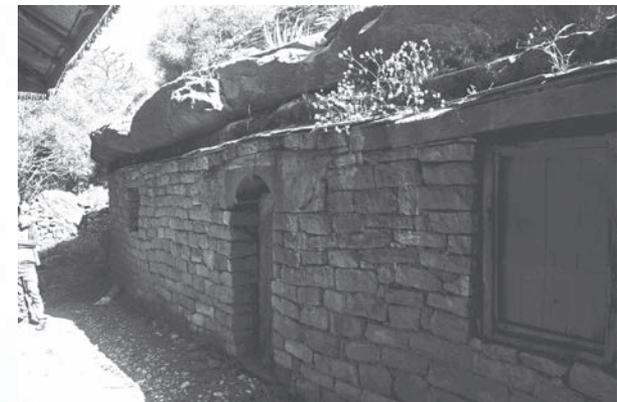
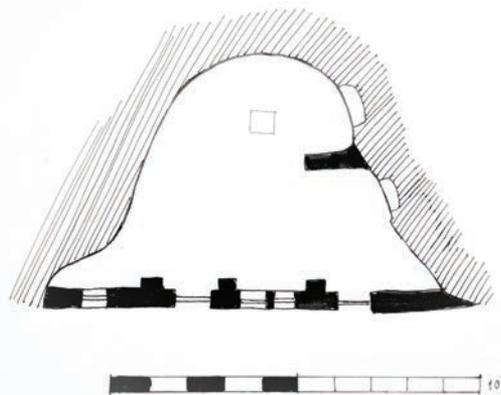
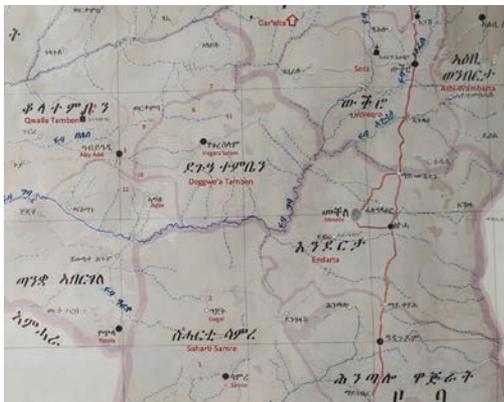




Fig. 4 - Maryam Gunfan cave church. The three-stepped structure (a part of wooden arched door frame of the mäqdäs). Detail. (Photograph: S. Klyuev, 2019).

Fig. 5 - Fragment of the interior of rock-hewn church of Šəllase D'ramba. (Photograph: S. Klyuev, 2019).

sen, Jacob, Frankl, 2019, p.565-566) and located in the same district church Maryam Gunfan (Plant, 1985, p.85). The last one church is also of a cave type. It is in the slope of a cliff at a height of just about 10 meters above the lowland, where a rotunda church is built. This not big naturally shaped cave church, mentioned by R. Plant (Plant, 1985, p.85), is also currently abandoned. The mänbärä-tabot [2], made of stones, is still preserved here in situ, but liturgy is no longer held. The walls separating the mäqdäs, made of a combination of wooden elements (traditional for this period three-stepped arched door frame) (fig.4) and masonry, are gradually collapsing, as the late paintings that have survived fragmentarily on their surface. It is difficult to date this church, but a late period can be assumed, not earlier than 17th century (most likely 19th century). The author's assumption is based on an

analysis of the features of the plan: a two-partite one-nave structure is characteristic for small church buildings of this period (for example, Däbrä Šəllase church in Ašbi (Plant, 1985, p. 124). Indirectly the evidence of this dating is the design of the constructed elements of the walls, like the type of door frames and surviving fragments of wall paintings in Maryam Gunfan. The phenomenon of the prevalence of cave churches of simple natural forms in this area remains to be studied. Most likely, that is a complex of reasons: geology of landscape, spacious valley and a lot of caves in this area, possibly, the preference by the local people to build churches because of the abundance of wood. It should be noted that the Səharti Samre region suffered greatly during the invasion of jihadists army of Aħmad Grañ in the first half of 16th century (Smidt, Pankhurst, 2010).

## II. D'RAMBA ŠƏLLASSE

The rock-hewn church of D'ramba (Däbrä Amba?) Šəllase (Holy Trinity) is carved on top of a rock dominant over the town of 'Abiy 'Addi in Qwälla Tämben (Plant, 1985, p.148). A spacious qəne maħlet (narthex) with high vaults of modern wooden construction (including a dome on the base of the 'lantern' ceiling of rough forms) is attached to the rock-hewn part. The vaults of the rock-hewn parts of church are flat (especially in the aisles) or semicircular (in the nave), without special decoration. The inner space of the qəddəst (naos) is divided into three aisles by two pairs of cruciform pillars. The western pair is badly damaged and is completed by masonry walls. Some pillars have capitals with notable rolls. Rounded shape on their sides is drawn by a contour. (fig.5) The vault of the central nave has a semicircular shape. The

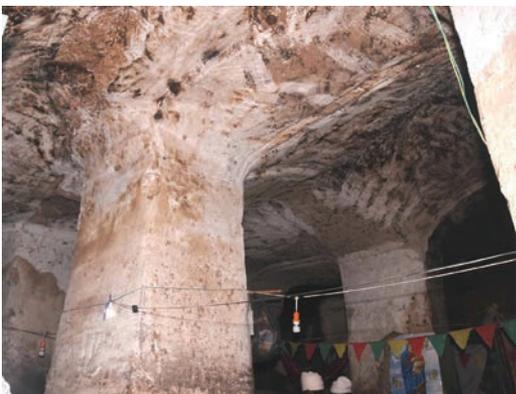


Fig. 6 - Fragment of the interior of rock-hewn church of Maryam Maḥbäräqä. (Photograph: S. Klyuev, 2019).

Fig. 7 - Wooden ceilings in the interior of rock-hewn church of Arba'ətu Ənsəsa Qaqa. Fragment. (Photograph: S. Klyuev, 2019).



analogy can be found in the churches of Lalibäla, especially in Mädhane 'Aläm (Di Salvo, 2017, p. 127), and for Təgray it is unusual. The 'open' type of the mäqdäs was noted by R. Plant (Plant, 1985, p. 148). Local tradition dates this church to the reign of aṣe Dawit (1382-1411), so the church can be dated by its signs to the 15th century (Tewelde Medhin, 1969, p.86-87). It can also be assumed that the church dating from this relatively late period could be decorated not with wall paintings, but with images made on canvases, glued to the rock. So, if this type of decoration was here, it has not survived, but this can explain the almost complete absence of paintings.

### III. MARYAM MAḤBÄRÄQÄ

Church Maryam Maḥbäräqä (Plant, 1985, p.86) is in the Səhərti Samre district, in the same valley as Mika'el Gawi, but on its north side. To the north of the church, a spring, revered as sacred, gushes out of the rock. The layout of the church is unusual. Three pairs of wide rectangular in cross-section pillars divide the interior into four aisles. The pillars have some expansion towards the bottom. The lack of decoration and the design of the flat or slightly semicircular vaults (fig.6) makes this church similar to D'ramba Šəllase. Probably there were some paintings on canvases.

Capitals and imitation of ceiling beams are extremely reduced. However, in some places the ceiling has a voluminous contour. In the eastern wall are two openings closed by metal doors and leading to the mäqdäs. The southern one has arched forms and looks like the main. On the plan made by P. Gilkes for the article of R. Plant, the arched opening in the sanctuary was hidden by a three-walled mäqdäs, laid out in masonry around two southeastern pillars (Plant, 1973, p.41; Plant, 1985, p.86). Currently, this wall is completely destroyed. Probably, the wooden parts (beams) preserved in the church are its fragments. So, analyzing the features of the church Maryam Maḥbäräqä, one can find some similarities with the D'ramba Šəllase church. There are also some similarities with other churches of later period, in interior of

which a three-walled mäqdäs is built. Probably, that is an example of adaptation of the later built centrally planned churches to the forms of rock-hewn architecture. In this case, the dating of the monument can be between 17th-19th centuries.

### IV. ARBA'ƏTU ƏNSƏSA QAQA

This is one of the four rock-hewn churches located on the slopes of the large cruciform rock Däbrä 'Aša (Plant, 1985, p.151-156), known as the 'mountain of fish' (Lepage, Mercier, 2005, p.164). Its historical name was associated with many monks lived here — 'like fish in the sea' (Lepage, Mercier, 2005, p.164). The plan of the church resembles the later centric churches (with a centralized arrangement of liturgical spaces), which suggests an attribution to the 15th-16th century. On the west side is a spacious narthex (qəne maḥlet), but on its north side. To the north of the church, a spring, revered as sacred, gushes out of the rock. The vaults of the narthex between two massive rock walls are covered with wooden structures, similar to traditional ceilings of Təgray such as domes and 'lanterns'. (fig. 7) On the south side, the entrance to the cleft is closed by the built facade of the church. The qəne maḥlet in the north wall has a passage through a narrow door to the outside. The qəne maḥlet contains three wide built pillars with two arches between them and a beam supporting wooden overlap. This construction probably serves as a delimiter for liturgical spaces. The qəddəst is located to the east, indicated by a semicircle of its western wall, in which three arched openings have been cut, as well as a significant rise in the floor level. There are three steps. The qəddəst itself is small. Three more arched openings were cut in the eastern wall (the southern one was turned into a window by masonry, the central and northern are narrowed by masonry and closed with metal doors). Two more pillars expanding to the bottom, without capitals, have been carved in the mäqdäs area. The sanctuary tends to be circular in plan. A window leading to the outside has been cut through the east wall. In the center of mäqdäs is made probably a monolithic (or masonry [?]) mänbärä-tabot. Above it is

placed an additional wooden ark of later type with ciborium. [3] The pillars made in the church do not have a special decoration like the vaults. It should be noted some similarities between the churches Arba'ətu Ənsəsa Qaqa and located in about 17 km to the southwest Abunä Täklä Haymanot Guya (15th-16th centuries) (Plant, 1985, p.157). Both churches have planes in some aspects similar to centric built churches (with circle qəne mahlet in the plan and rectangular mäqdäs inside), but adapted to rock-hewn architecture: the qəne mahlet and qəd-dəst of this church have not a full circle plan, but

something like semicircular. Thus, we can assume that this church can be dated between 15th-16th centuries and classify the church as semicircular rock-hewn type.

#### V. MARYAM DÄBRÄ TÄ'AMINA

Another monastery of the Däbrä 'Aśa rock — Maryam Däbrä Tā'amina (Plant, 1985, p. 151; Bausi, Balicka-Witakowska, 2005, p. 48). Paintings on canvases made here on the mäqdäs walls are studied by E. Balicka-Witakowska. They date

back to the beginning of 20th century (Bausi, Balicka-Witakowska, 2005, p. 48). Unfortunately, the canvases are gradually starting to peel off from the walls and decay. The architectural features of this monument deserve attention. The walls of mäqdäs are built between four rock-hewn pillars in the central part of the church. Thus, a rectangular structure is formed in the center of the church. The orientation of church is distorted: the built facade is made on the eastern side. Around the mäqdäs in the vaults are made small domes (fig. 8) Untypical orientation, decoration of vaults in the form of simple domes (colored in a later period), allows us to assume that the layout of the church was originally different, something similar to the multi-domed 'open' type basilicas [4], such as one located on an other side of the same rock — Abba Yoħanni (Lepage, Mercier, 2005, p. 164-169). Nevertheless, in Tā'amina the imitation of architectural forms is much more simplified. Thus, we can assume the dating for a church of such a plan about 16th century. Subsequently, in the 20th century, with the donation of local noble men it was transformed into a centric church with a beautifully painted mäqdäs (Bausi, Balicka-Witakowska, 2005, p. 48). Unfortunately, we have to admit that the paintings of the early 20th century also already in danger of decay.

Fig. 8 - Maryam Däbrä Tā'amina rock-hewn church, a part of the interior. (Photograph: S. Klyuev, 2019).



#### VI. MARYAM HƏBƏ'TO

The church of Maryam Həbə'to (Plant, Buxton, 1970, p. 245-247; Plant, 1985, p. 162-163; Buxton, 1971, p.41) is located at the end of the picturesque canyon, at the bottom of the rocks, including the amba (flat-topped rock), on top of which one more rock-hewn church is carved — Mika'el 'Ad-di Kawa (other authors call it: Mika'el Werkibet, Mika'el Samba) (Plant, 1985, p. 165; Nyssen, Jacob, Frankl, 2019, p. 569). The name of the Həbə'to church means 'hidden church'. This church is well represented in the literature; however, we note some inaccuracies and the problematic state of preservation of the monument. The dating of this church according to local tradition is 15th century, the reign of Zāra Ya'əqob (1434-1468) (Buxton,

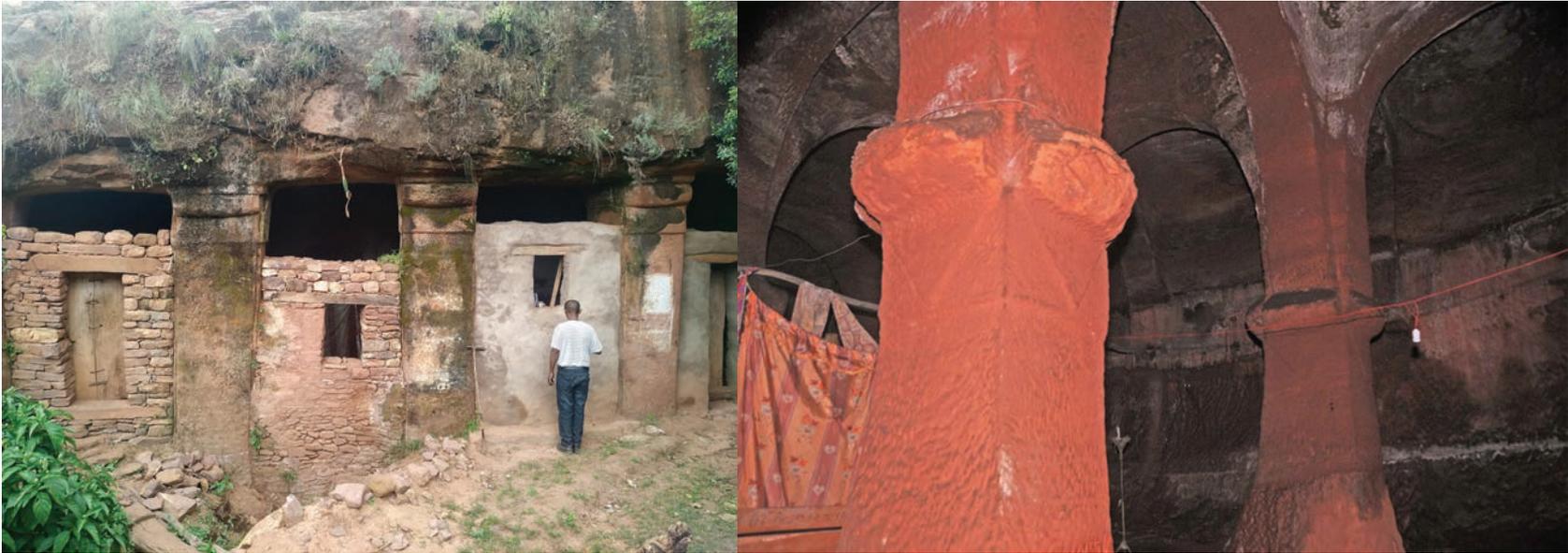


Fig. 9 - Maryam Həbə'to rock-hewn church, a part of the façade. (Photograph: S. Klyuev, 2019).

Fig. 10 - Maryam Həbə'to rock-hewn church, a part of the interior. (Photograph S. Klyuev, 2019).

1971, p. 41). The facade of the church is made in the form of a portico with four pillars. (fig.9) This appearance makes it related to another Təgray church — Mādhane 'Alām 'Addi Qāšo (in Aṣ-bi-Wāmbārta) (Buxton, 1971, p. 38-41; Plant, 1985, p. 135-137; Phillipson, 2009, p. 99-101).

It is important to note that the floor level of the narthex is well below the level of the façade base. By analogy with 'Addi Qāšo, the narthex is combined here with a reduced ambulatory. That is, the qəne maḥlet passages go around the 'body' of the church from the north and south but end approximately at the level of the second bay. Currently, they are open cells where various church items are stored. This layout features has similarities with the ambulatory of 'open' type churches, such as Maryam Dābrä Şəyon (second part of 14th – beginning of 15th century) (Buxton, 1971, p. 58-68; Plant, 1985, p. 47; Lepage, Mercier, 2005, p. 146-

159), as well as churches with external colonnades, such as in Mādhane 'Alām of Lalibāla and Gännätä Maryam (in Lasta historical region) (Phillipson, 2009, p. 110-120, 153-160). But it is important to note that these dead-end passages are separated from the narthex by significant difference of floor level. The passage from qəne maḥlet to the qəddəst of the church is extremely low. Above the door is an arched frieze made of four false arches. Such friezes are typical for the Tāmben area and churches of the 15th century, like Gäbrə'el Wāqen, Abba Yoḥanni and Giyorgis Dābrä Mä'ar in Gär'alta (Buxton, 1971, p. 57, 60-62, 64-65; Lepage, Mercier, 2005, p. 164-169; Balicka-Witakowska, 2005; Balicka-Witakowska, 2010; Balicka-Witakowska, Gervers, 2014). The church Maryam Həbə'to contains inside a spring of water that is revered as a saint. The reservoir is cut in the floor directly at the entrance inside the qəddəst, immediately af-

ter passing through the doorway from the qəne maḥlet. Water flows from the southeastern part of the church. The inner space of the qəddəst is divided by two pairs of pillars connected by arches into six cells. Square in cross-section pillars are expand downward. Some capitals have a molding in form of triangles. (fig. 10)

The majority of the vaults are designed in forms similar to cupolas. Note that in the nave over the arch between first and second bays a frieze of false arches is also placed. Here as in the churches of Gäbrə'el Wāqen and Abba Yoḥanni, the border between the naos and the open sanctuary is symbolically marked (Buxton, 1971, p. 64-65; Balicka-Witakowska, 2010, p. 1135). The māqdäs itself has no floor rises or apses in the east wall. That differs from a plan in R. Plant publications. There are three monolithic mänbärä-tabot by analogy with some other multi-altar rock-hewn

basilicas with mäqdäs of 'open' type. It should be noted the high degree of dampness inside the church, because of the presence of a water source here. The author witnessed the fact that the books stored in the side compartments of the narthex of the church decay from dampness.

## VII. AMANU'EL ZALA

Amanu'el Zala is another church with 'open' mäqdäs, administratively located in the Dəggwə'a Tämben region, in the rocks overhanging the valley of Qwälla Tämben. Earlier in literature it was called May Baha (Buxton, 1971, p. 41, 67-68; Plant, 1985, p. 164). The nearby village is believed to be the birthplace to the Ethiopian ruler (aše) Yoħan-nəs IV (b.1837– d.1889) (Plant, 1985, p.164). In the church his bed is kept as a relic. The church consists of carved in rock qəddəst and mäqdäs separated by two pairs of very wide pillars for nine square cells. A built qəne maħlet is attached to the church from the west. Unfortunately, at the time of October 2019, the old narthex building was renovated by the local community, and a new partly concrete structure was built in its place. (fig. 11) Qəddəst and mäqdäs of the church are not separated by walls or special floor level differences. The only one arch is made in the nave between the eastern pair of pillars. The vaults are decorated traditionally for majority of basilicas of the second part of the 14th - 15th centuries. Imitations of 'lantern' ceilings with Greek cross inscribed in the inner square, staggered caissons and domes are made here. In the central and eastern cells of the nave, cross pattée [5] with a rounded boss in its center is inscribed in the dome. (fig. 12) Analogy of dome with boss is well-known, for example, in the church of Abba Yoħanni (however, without inscribed crosses). There are no apses in the eastern wall, but here in the central part a false arch probably symbolizing ciborium is carved (see the analogy in the eastern wall of Maryam Däbrä Şəyon) (Lepage, Mercier, 2005, p.146-159; Gerster, 1970, fig.47). There is a modern wooden mänbärä-tabot, and no remains of monolithic one. Analyzing some features we can found

Fig. 11 - Amanu'el Zala, the new building of narthex. (Photograph: S. Klyuev, 2019).

Fig. 12 - Amanu'el Zala rock-hewn church, a part of the nave vault. (Photograph: S. Klyuev, 2019).





Fig. 13 - Maryam 'Əṣəwəto rock-hewn church, wooden details on the floor. (Photograph: S. Klyuev, 2019).

Fig. 14 - Maryam 'Əṣəwəto rock-hewn church, a part of the nave. (Photograph: S. Klyuev, 2019).

parallels with the churches of the second half of the 14th –15th centuries, such as Maryam Däbrä Şəyon and Mika'el Bäräqa (Buxton, 1971, p. 58-68; Phillipson, 2009, p.104-106). So, we can date this church probably to the 15th century.

#### VIII. MARYAM 'ƏṢƏWƏTO

The church (Plant, 1985, p.159-160) is located near the town of 'Abiy 'Addi, at a low altitude of rock slope, on the way to D'ramba Şəllase. Currently, on the site of the dismantled building of narthex, a modern spacious concrete structure is being erected. Wooden parts of the old building (beams, fragments of windows and door frames) are disorderly stacked under its vaults. (fig.13) The sanctuary at present is separated from the qəddəst by a wall covering three arched openings. The wall, made of masonry, is covered with late paintings on canvases (probably the second half of the 20th

century), the state of which is also currently deteriorating. (fig. 14) The plan and decoration of the church at the same time have features similar to early Ethiopian basilicas of 7th – 12th centuries and to later 'open' type basilicas of 14th – 15th centuries (Buxton, 1071, p. 52-57). The church has two pairs of pillars, which are in cross-section something between cruciform and square with cut edges. The east pair is difficult to see, as it is laid by the masonry of the wall of modern mäqdäs. All decoration in this church is made quite roughly. The double-slope vault of the nave lies directly on imitation of flat beams, without any traditional friezes. The vaults of the aisles are flat. In the western part there are made rough pilasters on the southern and northern walls and their beams connected with the pillars of the nave. This is a feature characteristic of monuments of the early period, however, here it has a rather rough shape. In the eastern part of the nave on each side of the vault is

carved a diagonal cross. Another relief of cross is carved above the triumphal arch in the nave.

The original mäqdäs is opened into the qəddəst by three arches. The eastern pillars are similar to cruciform, but are wide enough, looks rather like parts of the wall cut by arched openings. The central part of the mäqdäs has a rectangular layout, but the vault is rounded. A large semicircular niche, enough deep, has been carved into the eastern wall. In the northern and southern walls, small arched passages to the side parts of the mäqdäs have been cut. In the northern and southern parts of the mäqdäs, vaults are of the conch type. A stepped rise leads from the qəddəst to the northern part of the mäqdäs. In the central part of the mäqdäs, the modern wooden mänbärä-tabot is located.

Tradition attributes this church to the time of king Zära Ya'əqob (1434 – 1468) (Tewelde Medhin, 1969, p. 86-87). The church of Maryam 'Əṣəwəto combines the features of different

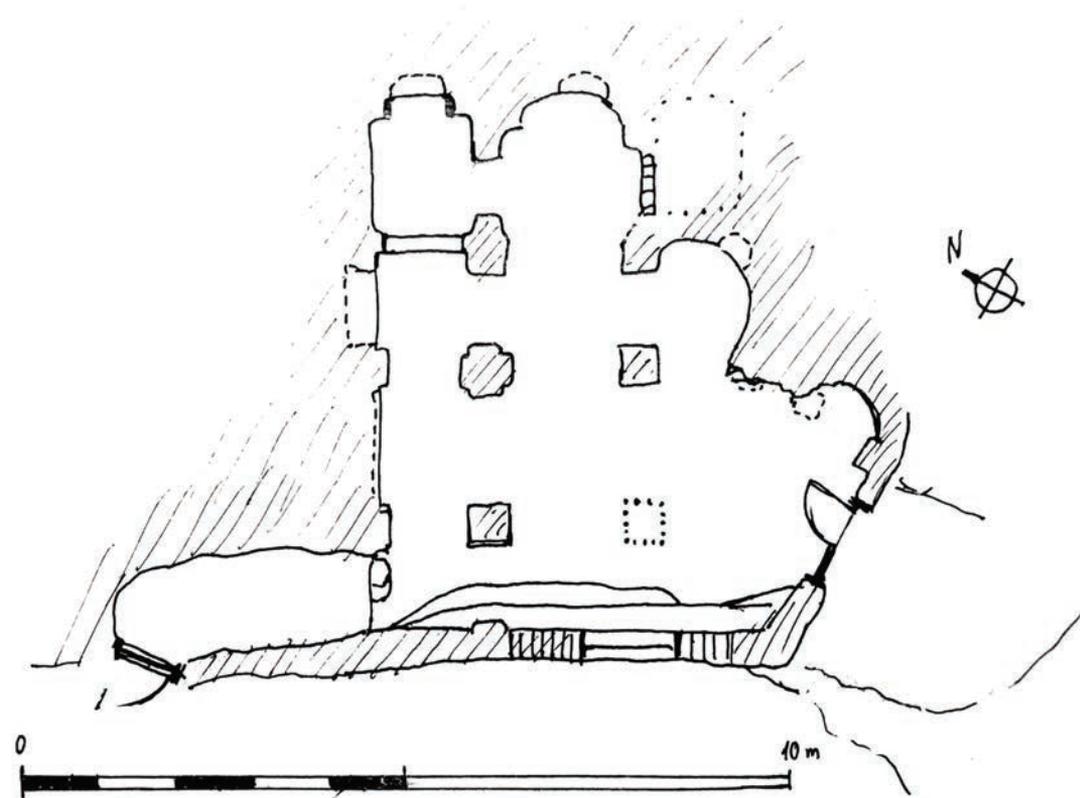


Fig. 15 - A sketch-plan of Wəqro Yoḥannəs Wäldä Nägwädgwäd rock-hewn church (drawn by S. Klyuev, 2019).

periods and types of churches. Thus, it can be attributed to some transition period and suggest dating to the 14th century.

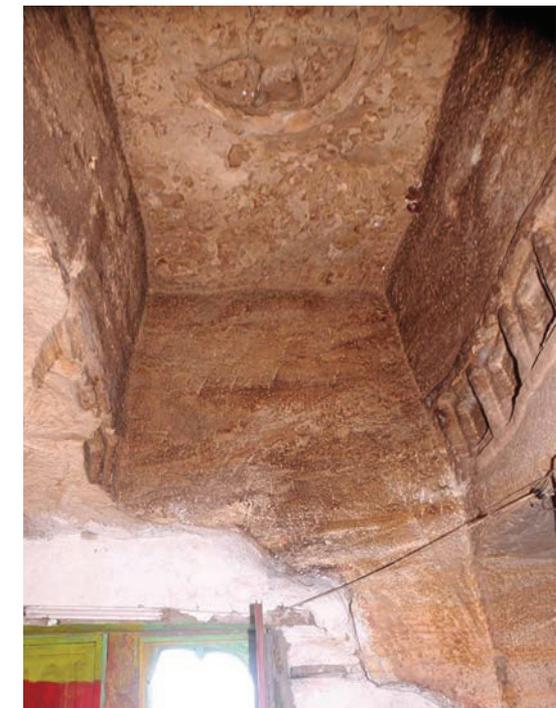
#### IX. WƏQRO YOḤANNƏS WÄLDÄ NÄGWÄDGWÄD

A very notable little-studied rock-hewn church (Plant, 1985, p.33; Nyssen, Jacob, Frankl, 2019, p.586-587) located near the road between 'Abiy 'Addi and Agbe. In the book by J. Nyssen and colleagues, it is named as Däbrä Sämäit (Nyssen, Jacob, Frankl, 2019, p. 123).

The church is carved on top of the rock. It is a three-aisled basilica with a slightly distorted layout. (fig.15) Two pairs of pillars were made here (the southwestern pillar was not preserved due to the collapse of rock in this part). The pillars are rectangular in cross-section, with the exception of the north-eastern of cruciform pillar. The mäqdäs is separated from the qəddäst by a wall with a central triumphal arch. Mäqdäs has three parts (however, the only passage to the southern pastophorion [6] from the central part of the mäqdäs is laid with

masonry). Access to the northern pastophorion is also possible only from the central part of the sanctuary through a spacious arched opening. A small window was cut in the upper part of the eastern wall of northern aisle of qəddäst (perhaps this is a started, but not completed passage). Two western cells of the nave are united and marked by the rising of the vault and have the saddle-back roof shape. (fig. 16) Here, on the vault, is carved a relief cross inside a circle with a rounded boss in its center. Perhaps that is a symbolic representation of the dome. Only in this part, above the flat beams, on the north and south sides, runs the Axumite frieze of false windows — six on each

Fig. 16 - Fragment of the interior of rock-hewn church Wəqro Yoḥannəs Wäldä Nägwädgwäd. (Photograph: S. Klyuev, 2019).



side. And above the eastern arch, there is also a cross inscribed in a square, probably an imitation of a window with a figured grille (as, for example, in Qirqos Agobo) (Lepage, Mercier, 2005, p.102-103; Di Salvo, 2017, p. 42-46). In the number of false windows can be found a symbolic reference to the twelve Apostles and Christ. The vault cell of the nave immediately in front of the triumphal arch is flat and differs in height from west part. The main entrance to the church is now from the southwest side. On the northwest side there is also a short tunnel passage. It is possible that previously there was also an entrance directly from the west, but now a wall with windows has been built on the site of a large opening, probably the result of rock falls. Mäqdäs in the central part has a vault in the form of a conch with an imitation of the ribbed structure of the dome. The ribs converge towards the central ring. Here in the eastern wall carved a semicircular apse. In the

northern pastophorion there is also a vault in the form of a conch. On the east side, a high step is carved into the apse (used as a table or mänbärä-tabot itself). Of particular interest is the unusual decoration of the capital of the northwest pillar. Based on the analysis of the layout and features of decoration of the Wəqro Yohannəs Wäldä Nägwädgwäd church, we can assume the dating by the 14th century.

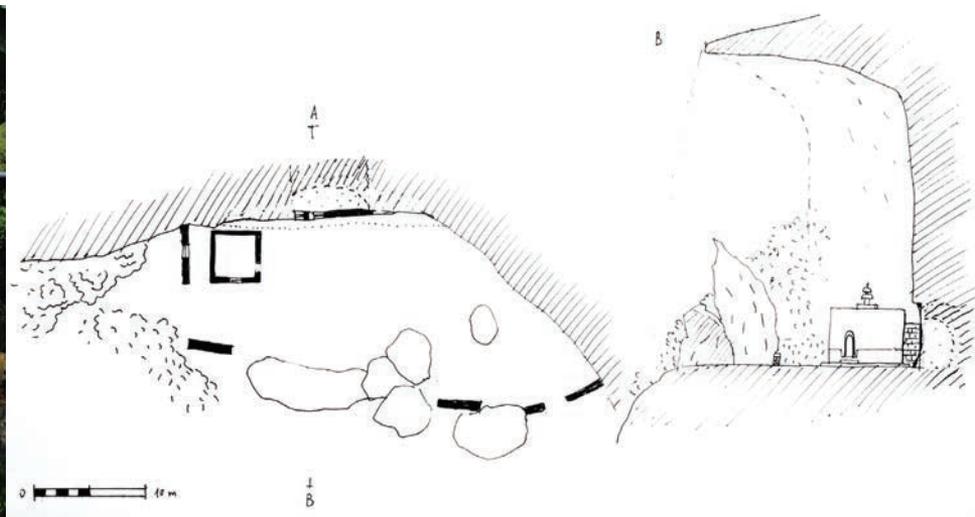
#### X. KIDANÄ MƏHRÄT AND ŞADQAN TÄNSƏHE

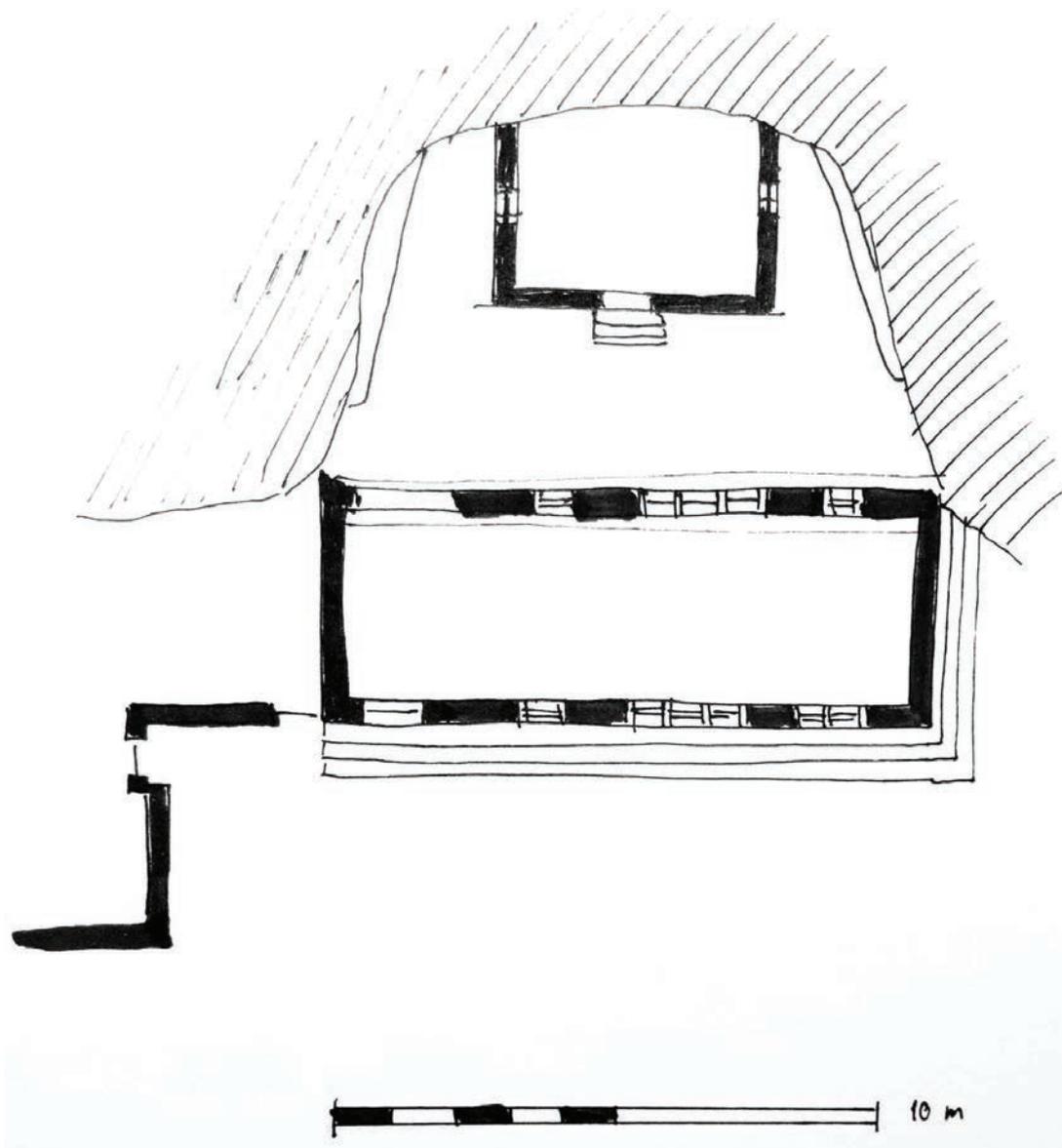
Monastery of Tənsəhe (Sauter, 1976, p. 173; Plant, 1985, p. 33; Nosnitsin, 2012a, p. 13-18; Nyssen, Jacob, Frankl, 2019, p. 565-566) located in very picturesque place on the slopes of the canyon and partly under a rock canopy with a waterfall. (fig.17) There were two rock-hewn churches here, but, unfortunately, at the time of the visit by the author, both were collapsed. According to the priest, the rock-hewn church Kidanä Məhrät,

carved into a porous fragile shell rock, collapsed in 2018 in the process of its expansion. At present, one can observe a passage and a pillar that survived among the ruins covered with soil and debris. Another semi-hewn church of Şadqan was also collapsed. (fig. 18) Its parts made in rock now are hidden from visitors by a fabric curtain. Perhaps there are burials here. Fragments of masonry and wooden elements of built part of the church are still preserved at this place. A new rectangular church has been built here. Essentially it is a separately standing mäqdäs. Thus, for the community other liturgical zones of the church (qəne məhlet and qəddəst) are made by the landscape formed by rocks under a rock canopy, from the height of which the river falls. The old built church was also dismantled and renovated. (fig.17) Unfortunately, these losses of the little-studied monuments of the monastery have occurred in recent years.

Fig. 17 - The Monastery of Tənsəhe Kidanä Məhrät. The new church. On the background a canopy with a waterfall is visible (Photograph: S. Klyuev, 2019).

Fig. 18 - A sketch-plan and section of Şadqan Tənsəhe church ruins (drawn by S. Klyuev, 2020).





## XI. KIDANÄ MƏHRÄT 'ADDI NĀFAS

The church is located on a cliff side surrounded by abundant vegetation to the west from the road connecting 'Abiy 'Addi and Agbe (and further Hagära Sälam) (Nyssen, Jacob, Frankl, 2019, p. 667-668). It is not clear whether it is mentioned in any of R. Plant's list or not (Sauter, 1976, p. 172; Plant, 1985, p. 33). Here, in the rock slope, a whole complex of various premises of the church and auxiliary functions, including living quarters (cells), has been carved. In October 2019 the carving of the rock a spacious modern rock-hewn church of unusual shapes was almost completed.

The old, semi-rock-hewn church is located to the north from the new one. It represents an adaptation of the centric plan of built churches to rock-hewn architecture. (fig.19) Similar examples can be observed in other Təgray churches, for example, in Maryam Dəgulčaqo (Plant, 1985, p.167). The qəne məhlet and qəddəst of the church are built, the wooden structures of the ceiling adjoin the rock vault near the built walls of the məqdäs. Məqdäs has rectangular layout, built by three walls, decreasing to the east following the dimensions of the rock chamber (perhaps the original dimensions of the grotto). So, the walls of the məqdäs are built, but limited by the natural rock forms. The walls of the məqdäs are decorated with modern images (probably the second half of the 20th century). The rock vaults in the məqdäs are flat (fig.20). Unfortunately, it was not possible to examine in detail the mänbärä-tabot and the sanctuary part in general. The location of the complex in the side of the cliffs is also typical, as is the creation of modern rock-hewn churches of a new type in the area. Supposed dating — between the 19th – 20th centuries. Most likely, the built parts of church are of the 20th century.

Fig. 19- A sketch-plan of Kidanä Məhrät 'Addi Nāfas church (drawn by S. Kiyuev, 2020).

## CONCLUSIONS

The studied monuments can be primarily attributed to 6 different types:

Type 1 - One-nave two-part cave churches with linear structure of liturgical zones. The dividing wall between the liturgical zones and the facade wall has been built. The layout of church and its interior is in forms of cave. Built churches of such a plan (for example, Däbrä Šəlasse in Ašbi) dates to the 19th – 20th centuries. Late constructions and late paintings also can be found in Gunfan.

Type 2 - The 'open' plan basilicas. The main feature of this type is the absence of the wall separating mäqdäs from qəddäst. The sanctuary can contain two or three monolithic mänbära-tabots. The eastern wall of sanctuary is without an apse, the nave is equal to the aisles by height (the border of mäqdäs is indicated by the decoration: a different type of arch, friezes). Usually churches of this type have bypass tunnel (gallery), but it can be reduced like in Maryam Həbə'to. The most characteristic church of this type is Maryam Däbrä Şəyon in Gär'alta. In this paper we can attribute to this type the churches Maryam Həbə'to and Amanu'el Zala. (second half of 14th – the 15th century).

Type 3 - Centric type. There are subgroups differing in adaptation of centric type churches layout to the specificity of rock-hewn architecture:

A) Arba'ətu Ənsəsa Qaqa — the rock-hewn church with a large qəne məhlet (analogy of narthex in byzantine basilicas), enveloping the qəddäst in a form of semicircle. The passage to a small qəddäst is through three arched openings along the steps (there is a large difference in the floor level between these zones), the next three arched openings lead to the mäqdäs. There is a lack of decoration of vaults and division into aisles. Probably 15th century.

B) Kidanä Məhrät 'Addi Näfas — partly rock-hewn church: three external walls of facade and three sanctuary walls were built, and the interior of mäqdäs is the rock-hewn part. (Şadqan Tänsəhe should be of the same type). After the 16th century and up to the 20th.

C) Maryam Däbrä Tä'amina: four walls of the mäqdäs are built between rock pillars in the center

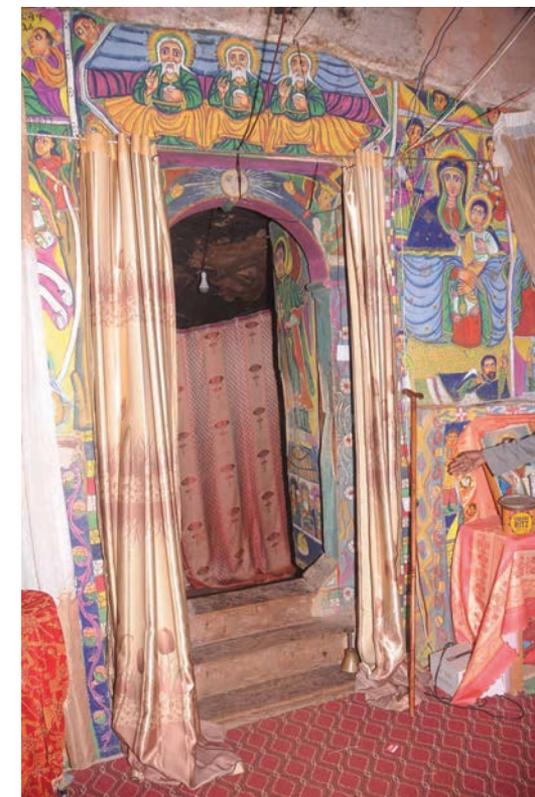
of the church and form a rectangle. Similar to the build centric churches. But earlier this church could have been 'open' plan, perhaps simplified and with minimalization of decorations. First stage — 15th–16th century, second — 20th century.

Type 5 — Basilicas of the 'transitional' type: that is, combining the features of both the early basilicas until the 13th century (the nave vault here deference from aisles by height or form, sometimes it has traditional frieze of Aksumite windows) and the basilicas of 'open' plan ('open' mäqdäs in the church of D'ramba and Maryam 'Əşəwəto). The church of Yoħannəs Wəqro Wäldä Nägwädgwäd generally has layout and decoration of traditional basilicas of early period (for rock-hewn churches — between 7th and 13th century): an elevated vault of the nave with an Aksumite frieze, the mäqdäs is opened only by a triumphal arch in the central part (in northern part there is a window or unfinished passage), but at the same time (mostly in decoration) it has resemblance with 'open' type basilicas. Preliminarily we can date all this churches to the second half of the 14th century.

Type 6 — Four aisles basilica of Maħbäräqä is very untypical, but on the plan of R. Plant, we can see that there was a constructed mäqdäs wall in the south-eastern part. So, we can assume that previously this church has much common with the type 3 of our classification.

Many of the monuments of studied area are in poor condition and require conservation (and restoration) work. Unfortunately, the religious communities themselves, wishing to improve their sanctuaries, are involved in destruction of some monuments or their parts. Paintings on canvases, including those dating from the middle of 20th century, nowadays are in danger of being lost.

Fig. 20 - Kidanä Məhrät 'Addi Näfas church. Fragment of mäqdäs decoration. Triumphal arch. (Photograph: S. Klyuev, 2019).



## NOTE

[1] Project: The article used the results of a study done with financial support from the Russian Foundation for Basic Research: project no. 19-012-00299 A.

[2] Mänbärä tabot — is the so-called 'altar chest', which together with tabot ('altar tablet') can cover the notion of altar. (Fritsch, 2010, p. 804).

[3] Ciborium — canopy over the altar.

[4] 'Open'-type basilica — in Ethiopian architecture rectangular three-aisled church building without separation between mäqdäs and qəddäst by the wall or rising of the floor level.

[5] Cross pattée — a type of cross which has arms narrow at the centre and broader at the perimeter.

[6] Pastophorion — the rooms flanking the sanctuary.

## REFERENCES

Balicka-Witakowska, E. (2005). Däbrä Mä'ar. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol. 2: D-Ha, pp. 29-31). Wiesbaden: Harrassowitz.

Balicka-Witakowska, E. (2010). Wäqen Gabr 'el. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol.4: O-X, pp. 1135-1136). Wiesbaden: Harrassowitz.

Balicka-Witakowska, E., & Gervers, M. (2014). Abba Yohanni. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol.5: Y-Z, pp. 208-210). Wiesbaden: Harrassowitz.

Bausi, A., & Balicka-Witakowska, E. (2005). Däbrä Tä'amina. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol. 2: D-Ha, pp. 48-49). Wiesbaden: Harrassowitz.

Buxton, D.R. (1971). *The Rock-Hewn and Other Medieval Churches of Tigre Province, Ethiopia*. *Archaeologia*, 103, 33–100.

Di Salvo, M. (2017). *The Basilicas of Ethiopia. An architectural History*. London, New York: I.B. Tauris.

Fritsch, E. (2010). Tabot: Mänbärä tabot. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol.4: O-X, p. 804-807). Wiesbaden: Harrassowitz.

Gerster, G. (1970). *Churches in Rock*. London: Phaidon.

Gervers, M., & Balicka-Witakowska, E. (2005 —2017). *MÄZGÄBÄ S LAT. A Database for the Recording of Ethiopian Art, Architecture and Culture*. Retrieved April 12, 2020, from <https://ethiopia.deeds.utoronto.ca/>

Lepage, C., & Mercier, J. (2005). *Les églises historiques du Tigray*

/ *The ancient churches of Tigray*. Paris: ADPF.

Nosnitsin D. (2011). *Ethio-SPaRe. Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research*. Third Mission, April-May 2011. Report. Hamburg: Hamburg University.

Nosnitsin, D. (2012a). *Ethio-SPaRe. Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research*. Fifth Mission, May-June 2012. Report. Hamburg: Hamburg University.

Nosnitsin, D. (2012b). *Ethio-SPaRe. Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research*. Sixth Mission, November-December 2012. Report. Hamburg: Hamburg University.

Nyssen, J., Jacob, M., & Frankl, A. (eds.) (2019). *Geo-trekking in Ethiopia's Tropical Mountains. The Dogu'a Tembien District*. Basel: Springer Nature Switzerland AG.

Phillipson, D.W. (2009). *Ancient churches of Ethiopia: fourth-fourteens centuries*. New Haven [Conn.], London: Yale University Press.

Plant, R. (1973). Notes on 17 Newly-discovered Rock-hewn Churches of the Tigre (Ethiopia). *Ethiopia Observer*, 16 (1), 36 —53.

Plant, R. (1985). *Architecture of the Tigre, Ethiopia*. Worcester: Ravens Educational and Development Services.

Plant, R., & Buxton, D.R. (1970). *Rock-hewn churches of the Tigre province [by R.P.] with additional churches [by D.R.B.]*. *Ethiopia Observer*, 13, 157–268.

Sauter, R. (1976). *Églises rupestres*

au Tigré. *Annales d'Ethiopie*, 10, 157-175.

Smidt, W., & Pankhurst, R. (2010). Säläwa. In S. Uhlig (Ed.), *Encyclopaedia Aethiopia* (vol.4: O-X, p. 492). Wiesbaden: Harrassowitz.

Tewelde Medhin, J. (1969). *Introduction générale aux églises monolithes du Tigray*. In *Proceedings of the Third ICES* (vol. 1, pp. 83–98). Addis Ababa: Institute of Ethiopian Studies.