ERC project HornEast

Connections, Mobility and Exchange between
the Horn of Africa and the Middle East in the Middle Ages

Preliminary Report
Excavations and Surveys

Bilet (Tigray, Ethiopia)

1-20 December 2018

Presented by
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To
the Authority of Research & Conservation of Cultural Heritage
(ARCCH)

July 2019

Depuis 80 ans, nos connaissances bâtissent de nouveaux mondes

TEAM COMPOSITION

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Yared Assefa (ARCCH, Addis Ababa): archaeological expert
Dr. Deresse Ayenachew (Debre Berhan University, Aix-Marseille University): historian
Fesseha Berhe (PhD candidate, Mekelle University): historian
Dr. Hiluf Berhe (Mekelle University): archaeologist
Dr. Amélie Chekroun (CNRS, Aix-Marseille University): historian
Simon Dorso (PhD candidate, University Lyon-2): archaeologist
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Dr. David Ollivier (CNRS, Aix-Marseille University): archaeologist, topographer
Dr. Hélène Réveillas (Bordeaux-Métropole): archaeologist, anthropologist
Guesh Tsehaye (Culture and Tourism Office of Tigray): archaeological expert
Camille Vanhove (Archéodunum): archaeologist, anthropologist

Note that several students in archaeology from Mekelle University took part to the fieldwork under the supervision of their teacher, Dr. Hiluf Berhe. Ten workers from K^{w}iḥa were hired for the duration of the fieldwork, according to instructions of Goitom Besrat, head of the kebele, and worked under the supervision of Neguse Hagos.

ACKNOWLEDGMENTS[1]

The mission wishes to thank several institutions and individuals for their support and the valuable help they provided during the campaign:

the Authority of Research & Conservation of Cultural Heritage (ARCCH), its Cultural Heritage Research Directorate Director Ato Demerew Dagne, and its archaeological expert Yared Assefa

the Office of Culture and Tourism of Tigray (Mekelle), its Director Madam Brekti, its Deputy Director Madam Zenebu Halefom and its archaeological expert Guesh Tsehaye

the Institute of Ethiopian Studies (University of Addis Ababa) and its former director Dr Ahmed Hassen Omer

the University of Mekelle and among its scholars Dr Hiluf Berhe, Dr Wolbert Smidt and Fesseha Berhe

the Kebele of Kwiḥa and its head Goitom Besrat

the French Embassy in Ethiopia and its counsellor for cooperation and cultural action Hubert Tardy-Joubert

the French Centre for Ethiopian Studies (CFEE), its Director Madam Marie Bridonneau and its team (Clément Ménard, Abera Solomon, Hanna Siyum Tadesse)

the Institute for research and studies of the Arab and Muslim Worlds (IREMAM, Aix-Marseille University) and its director Richard Jacquemond

the Laboratory of Medieval and Modern Archaeology in the Mediterranean (LA3M, Aix-Marseille University), its Director Madam Anne Mailloux, its Deputy director David Ollivier and in its team Laurent Maggiori

Aix-Marseille University, its branch Protisvalor and in its team Jonathan Bartoli, Hélène Helluin, Séverine Pitel

in Addis Ababa, Prof. Fesseha Abraham

in Mekelle, Yohannes Gebresellasié; the Debre Amo Guest House, its owner Desta and her team

in K^{w}iḥa, Neguse Hagos and his family, and the team of workers

in Adigudem and Arra, Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, imām of Adigudem, Yāsin Aḥmad, ʿAbd al-Qādir Kuhlay, ʿAbd al-Qādir Ṣāliḥ Kahsay and Muḥammad ʿAlī Kahsay

in Aix-en-Provence, Lamia Mellal (junior coordinator of the ERC project HornEast)

the European Research Council (ERC)

1 This research has received funding from the Eu's Horizon 2020 research and innovation programme under Grant Agreement no 726206.

OFFICIAL AUTHORIZATIONS

A field research permit for « Archaeological Excavation at Bilet Medieval cemetery and its surroundings (Tigray regional state, Ethiopia) has been issued by the ARCCH, and signed by Ato Demerew Dagne, on 18 September 2018 (Ref. No. 08/RL-8-2/003: see Appendix 6), with permission to conduct fieldwork from 1 to 20 December 2018.

Leaving Addis Abeba on 29 November 2018, the team was joined by Yared Assefa, assigned to the mission as archaeological expert for the ARCCH. Upon our arrival in Mekelle on 30 November 2018, the team was introduced to Madam Zenebu Halefom, deputy director of the Culture and Tourism Office of Tigray. Guesh Tsehaye, archaeologist in the Culture and Tourism Office of Tigray, was assigned to the mission as archaeological expert for the Office. A letter has been provided by the Office to facilitate the introduction of the mission to the local authorities of Kʷiḥa kebele (Ref. No. 799/55 : see Appendix 8).

On the same day, 30 November 2018, the team has been introduced to Goitom Besrat, head of Kʷiḥa kebele, who was well informed of the mission's objectives since the fieldwork conducted in March 2018 which he strongly supported. Local authorities of Kʷiḥa kebele have been insofar informed of the upcoming beginning of the fieldwork. The team has also requested the help of Goitom Besrat to hire a team of 10 workers for the whole duration of the mission. Finally, thanks to Goitom Besrat's facilitation, a financial agreement has been found with Abadi Kelele, land owner of the field where excavations have been planned: the plot has been rented for one year by the mission for the amount of 8 000 ETB.

At the end of the fieldwork, permission has been granted by Madam Brekti, Director of the Culture and Tourism Office of Tigray (Ref No. 941/31 & 945/79: see Appendix 9-10)

1. to move the archaeological material (ceramics, animal bones, human remains, shells, metal artefacts) to the storages of the ARCCH in Addis Abeba for purpose of study in its laboratory facilities
2. to take samples of animal bones, human remains, sediments, and charcoals, for purpose of destructive analysis to be conducted in France
3. to export by loan to France a piece of Islamic ceramic for purpose of study

Finally, upon departure from the country, permission has been granted to the mission by the ARCCH to export to France the samples intended for destructive analysis, along with the sample of Islamic ceramic selected for purpose of study (Ref. No. 11/CH-8-3/036, see Appendix 11).

FIELDWORK OBJECTIVES

This first fieldwork season on Bilet, the medieval cemetery and its surroundings, followed a survey previously conducted in March 2018 by Julien Loiseau, Amélie Chekroun and Bertrand Hirsch, with official letter and permit of the ARCCH and support of the Culture and Tourism Office of Tigray, and authorization of the kebele.

This survey made it possible to identify the probable location of the cemetery from which came 17 Arabic funerary stelae found in the area of Kʷiḥa between the 1930's and the early 2000's. This probable identification is based on the finding in March 2018 of 21 Arabic funerary stelae, or fragments of stele, most of them in reuse among stone alignments along fields and paths, the last three most likely found in situ in vertical position.

This survey also resulted in highlighting the remains of an important settlement on the hill where the present church of Kʷiḥa Kirkos is located. The area is known for its ruins first described in 1937 by Carlo Conti Rossini, which consist in 30 broken columns and dressed stones. Whenever these stones were carved, they are currently lying on top of an archaeological tell covered with pottery. Several walls have been also documented in March 2018 in the tell's periphery, along with human and animal bones visible out the ground.

Following the survey of March 2018, the objectives of Bilet's first fieldwork season were manifold:

1. to check the location of Bilet's medieval cemetery, to excavate a sample of graves and to assess its surface area by test pits
2. to excavate a ruined building located about 200 meters south of the probable location of the cemetery, which was described by local inhabitants in March 2018 as a domed structure and might have coincided with the Muslim mausoleum (*qubba*) mentioned by C. Conti Rossini as already ruined in 1937
3. to open test pits in the area of the present church of Kwiḥa Kirkos in order to get evidence of datation of the tell's occupation
4. to carry on conducting prospections in Bilet's surroundings and in other locations in Eastern Tigray in order to identify unknown ancient Muslim settlements

Medieval Muslim cemeteries have already been identified in other areas of Ethiopia. Up to now, however, no Muslim cemetery has ever been excavated in Ethiopia. Excavations of Bilet cemetery, provided that its exact location has been identified, would be the first of its kind in Ethiopia and would provide a valuable insight into funerary practices and anthropological data of a medieval Muslim community from Ethiopia.

As for the archaeological tell of Kʷiḥa Kirkos, the question at stake is to figure out wether or not the settlement was inhabited at the same time that the Muslim cemetery was in use. In such a case, it would offer the unique opportunity to excavate a medieval urban settlement on the Ethiopian highlands.
Finally, in line with the visit of Nägash paid in March 2018, prospections will help to better understand the medieval environment of Bilet, in the surroundings of the site as well in a larger area along the North-South route leading from the Red Sea shore to the very heart of the medieval Christian kingdom.

REPORT SUMMARY

Following the identification of the medieval Islamic cemetery of Bilet (K^{w}iḥa, Tigray) in March 2018 (Hirsch 2018 ; Loiseau et al. 2019), a first season of excavation took place on the site between the 1st and 19th December 2018. The main goals of this campaign were 1) **to confirm the extent and state of preservation of the cemetery, 2) to collect dating material in relation with the tombs, and 3) to initiate a comprehensive study of its environment, especially the relationship between the cemetery itself and the archaeological tell of K^{w}iha Kirkos**.

Three areas have been excavated in the course of the campaign. Area 1 (128 sq. metres) (the cemetery) is located in the vale known as Bilet where funerary inscriptions were discovered during the survey of March 2018. Area 2 (36 sq. metres) was implanted on the north-eastern slope of tell Kirkos where outcropping walls and pottery were spotted during a preliminary survey. Area 3 (100 sq. metres) is located on the agricultural terraces overlooking the cemetery from the south, where remains of a collapsed building were designated by local inhabitants as a « qubba », an Arabic term generally referring to a domed building with a funerary function (Conti Rossini 1937 ; Hirsch 2018).

In parallel to the excavation proper, a systematic survey of the tell and its immediate surroundings was initiated and pottery has been collected in order to produce a first master plan of the site and to assess its sequence of occupation.

Short report by areas

Area 1: The archaeological soundings in the cemetery brought evidences of important lootings of the site probably at different times. Different plunder trenches and pits were observed and the archaeological structures were found covered by a large pile of stone, mainly in the northern part of the main sounding (sounding 1). Within this sounding, at least 8 funerary substructures, one burial and one wall were discovered. In the northern part of the sounding, a wall (F1028) - 7.3 m long and 0.85 wide - was exposed. It is mainly oriented north and south and turns east in its southern part. It is possible that the wall was interrupted in its northern part allowing passage between the two areas. To the south, it presents a curve and then turns east to enclose a space. Within this space at least one funerary substructure (F1080) was discovered, oriented est-west. In the sediment around this tomb, a unique glazed potsherd was discovered among other common sherds. This sherd resembles Egyptian Fatimid productions. It is possible that the wall corresponds to an enclosure in which grave F1080 was installed. On the western side of the wall – opposite of F1080 - a second funerary substructure (F1017) follows the same orientation as F1080. South of the southern part of the wall stands another grave, the only structures having delivered human remains. The orientation and position of the skeleton in primary deposit follow Muslim practices. Bones in the secondary position found around the skeleton testify to the overlap or reuse of an older tomb. Further south, a third rectangular substructure is partially surrounded by a crown of basalt blocks to the west. It could be originally surrounded by a circle of blocks because the areas to the east and north were destroyed during the various lootings. Finally, in the southwest part of the sounding, four other rectangular substructures are aligned and oriented east-south-east/west-north-west. One of them (F1051) was originally surrounded by a circle of basalt blocks and an inscribed stele was placed to its eastern end. At the same place, the structure further north presented an arrangement for a stele that was no longer present (location of a stele found in March 2018?). Finally, an uninscribed stele was observed at the eastern end of the southernmost structure. The presence of an inscribed stele, the overall orientation of these structures and the position of the body are good evidence of Muslim burials.

The excavations of the rectangular substructures did not expose any human remains. It can be explained by their looting. However, the presence of several ceramic deposits (F1017, F1051 and F1058) in their periphery informs on some funerary practices operated around the tombs. Finally, at least the remains of two circulation levels were observed between F1054 and F1058.

To the East, two test pits attested the continuity of the cemetery. At least 6 graves were exposed in sounding 2 and at least 8 in sounding 3. None of those structure were excavated. Visible substructures had east-west orientations, like the tombs of the northern part of sounding 1. In sounding 2, fewer scattered blocks were present and one (or two) grave had two vertical uninscribed stelae at both ends.

These soundings attest to the presence of the Muslim cemetery, which continues eastward. The excavation showed that the great majority of the graves were looted. However, information on the orientation, the architecture of the tombs and distinct practices could be recorded allowing to study the organization of the funeral space.

Area 2: In area 2, the remains of a monumental wall running from WNW to ESE were partly exposed, consisting of a fine masonry work of small irregular blocks (Wall 2001, width: 80 cm). The wall is preserved to a maximum height of c. 2.8 meters (c. 30 courses) and was destroyed or collapsed toward the East i.e. in direction of the slope. So far, the plan, nature and function of this wall are unknown. Hypothesis for the dating could come from regional parallels through the distinctive feature of recess courses and the type of the masonry.

It is fairly possible that this wall only represents the foundation or substructures of a building as in the south it seems to be cutting through thick layers containing pottery, stone debris and animal bones. This stratigraphy rather confirms the long occupation of the tell prior to the edification of the building, the foundation trench of which is clearly visible in section. Four earlier circulation levels were discerned south of the wall composed of a thick layer of backfill covered by a chalky layer. It is not clear whether these layers belong to earlier occupations or if they are contemporaneous of the construction of the building.

Structures postdating the wall were also exposed. On the top and against the wall to the south, a pit has been dug through a layer abutting the wall. It was filled with burnt layers and its edge is arranged with three courses of field stones, seemingly attesting its use as a fire place. North of the wall, several phases of occupation were noted, all of them postdating Wall 2001. At least two badly preserved basalt flagstone floors were exposed at two different level, the upper one being in relation with a second wall (Wall 2002) perpendicular to Wall 2001. Wall 2002, abuts the large wall and possibly divides the inner space of the building. A nearly complete pottery was found lying on the floor, at the corner formed by the two walls. This is further evidence that the remains preserved north of the wall belong to an inner space, the function of which is still unknown.

Due to the short duration of the excavation in this area (3 days) and its limited extent, only preliminary conclusions can be reached. Although no absolute datations were obtained, the sounding confirm the existence of monumental remains on the tell, and the stratigraphy points toward a long and complex occupation in this area.

Area 3: After the clearance of the large pile of stone, the foundation of the north-eastern corner of a square or rectangular building was exposed. It appears that the southwestern part of the building was destroyed by the installation of a threshing floor. The stones removed during the clearance belonged for some of them to the ruined building, the others having been piled there by local farmers to clean their parcels and the threshing area. The building seems to have been built of roughly rectangular blocks of c. 20x10 cm, some of which were found reused in the nearby terrace walls. Unfortunately, the clearance has shown that the building had been almost utterly dismantled, and its inner hard-packed surface floor was reached virgin of any archaeological material. The ruin/collapse/pile of stones delivered a fair amount of pottery, metal finds and cattle bones as well as modern plastic and fragmented metal tools indicating recent activities and perturbations in the area. Potsherds belonging to a partly complete pottery were found in the shallow foundation trench of both the western and northern walls of the building. Considering the location of those finds, and the fact that the sherds belong to the same pot and can be re-assembled, it seems consistent with a foundation deposit.

East of the square building, the remains of a later circular house were exposed, abutting the so-called “Qubba”. It consists of two parallel and circular rows of stones forming the inner part of the house, and probably supporting a wall made of stones or a lighter mix of wood and earth. A roof should have been supported by a central pillar maintained by blocks of basalt. The floor of the house consisted of hard-packed ground and a rectangular fireplace as well as two complete potteries were found in place. The diameter of the house could not have been less than 3,5m, although it was not entirely exposed. The domestic function of the house is attested by the fireplace and potteries, but its modest dimensions might fit for a single inhabitant rather than a family. Such houses were previously studied and their plan does not belong to a specific period, region or population. Charcoals samples from the pottery deposits will hopefully date the last occupation of this housing unit.

INTRODUCTION & BACKGROUND

The archaeological site of Bilet-Kirkos is located on the northern fringe of the town of K^{w}iḥa, East of Mekelle (Tigray, Ethiopia) in Enderta (see fig. 1). During the Middle Ages, the region was inhabited by Christians and Muslims and came under the influence of the Zagwe dynasty between the 11th-13th century (Derat 2010).

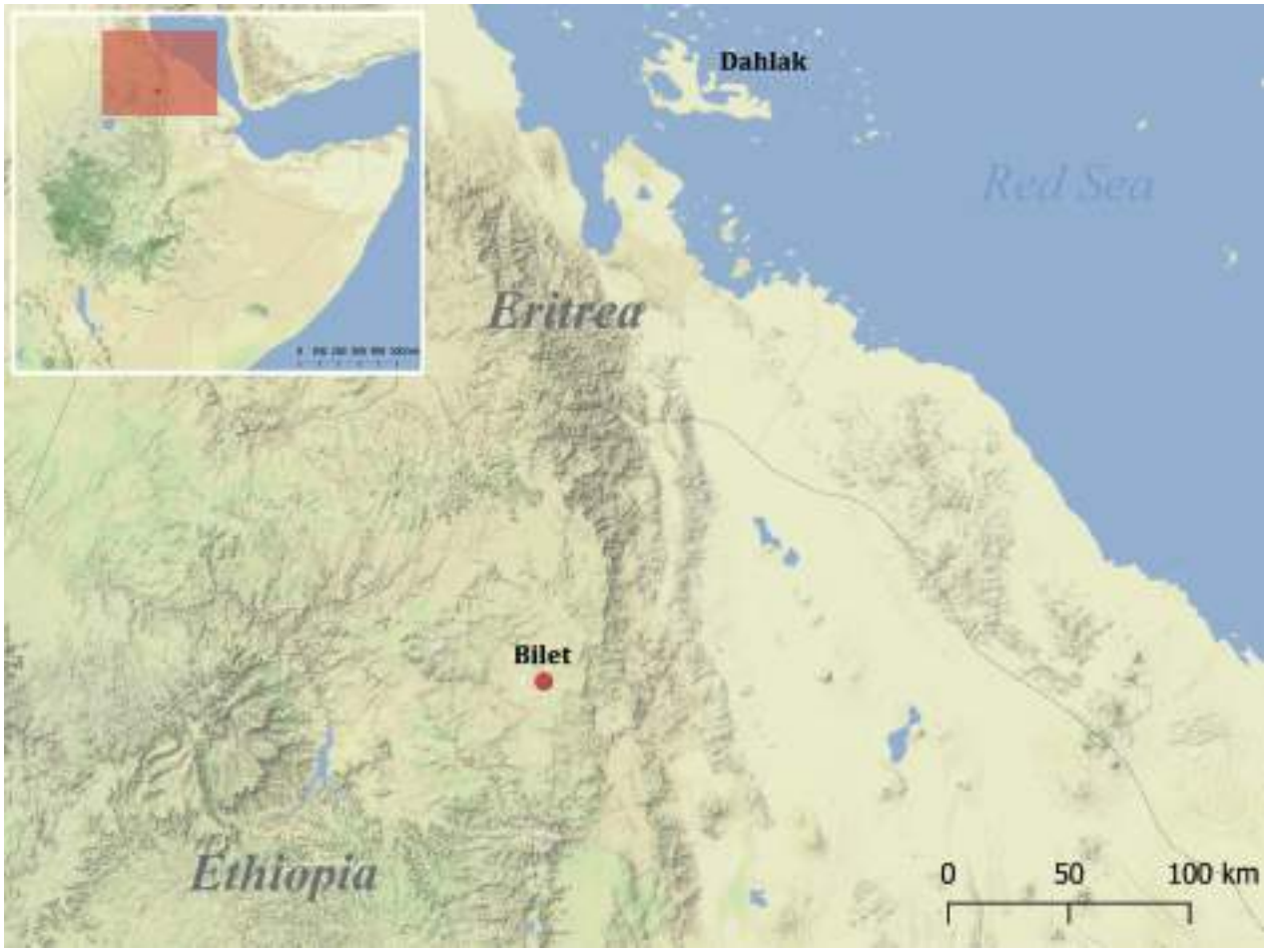


Fig. 1: Bilet and the Horn of Africa

The existence of an Islamic community in the area is evidenced by Arabic inscriptions dated between the 10th and 12th century but virtually nothing is known neither about the importance, origin or social/political organisation of this community, nor about the date of its arrival in the highlands of northern Ethiopia (Loiseau et al. 2019). All the Arabic inscriptions but one are funerary stelae bearing similarities to other sites such as the large necropolis of the Dahlak archipelagos in modern Eritrea (Conti Rossini 1937 ; Schneider 1967 ; 1976 ; 2009 ; Smidt 2004 ; 2009 ; 2010 ; Fauvelle-Aymar, Hirsch 2008 ; Smidt, Rashidy 2012). The non-funerary Arabic inscription discovered in Wekro Kirkos is so far the only example of monumental Islamic epigraphy in northern Ethiopia dating from the Middle Ages (Smidt 2009 ; 2010 ; 2011).

Due to the importance of the Islamic necropolis of Dahlak, Islamic presence in Enderta has been regarded as an extension of the Islamic sultanate established on this island around the 11th century. Considering that before 2018, only three sites with Arabic inscriptions were known for the whole Ethiopia, scholars have suggested that Bilet, from where most of the inscriptions (22 known prior to 2018) came from, could have been a trading post connected to Dahlak (Fauvelle-Aymar, Hirsch 2008). The location of the inscriptions along a North-South axis allowed to consider the existence of a medieval trading route following the eastern edge of the Tigray plateau (Fauvelle-Aymar, Hirsch 2011) (see fig. 2).

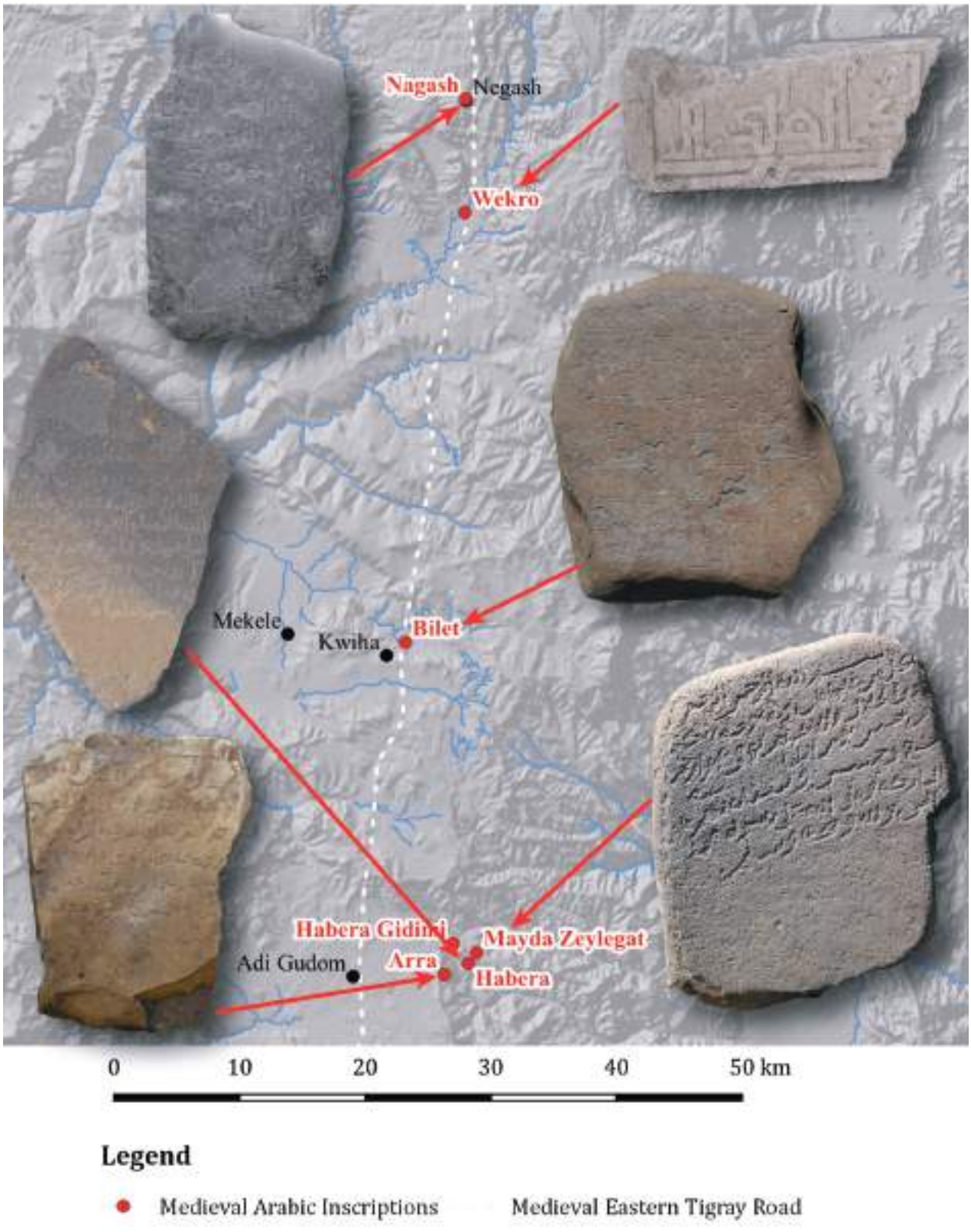


Fig. 2: Medieval Arabic epigraphy along the Eastern Tigray Road

The discovery of at least three previously unknown Muslim cemeteries (see below) along the road further south during our campaign sheds new light on the importance of the Islamic network in northern Ethiopia. The proximity of those cemeteries also implies that Islamic communities were far more numerous than previously thought in the area. The discovery of more Islamic sites can be expected from future surveys in the region.

So far, the ongoing study of the inscriptions from Arra, Habera and Mayda Zeylegat tends to strengthen the chronological sequence of Islamic presence in Tigray where Muslim cemeteries are documented between the 10th and 13th century. Hopefully excavations in Bilet will bring more information regarding the identity and social structure of the Muslim communities and about their relations with the neighbouring Christian communities.

The common hypothesis presenting the Muslims buried in Bilet as merchants should now be re-considered in the light of the recent discoveries. The existence of previously unknown sites South of Mekelle shows that Bilet was not isolated but probably belonged to a network of permanent communities attested at least during three centuries in the region. Those new sites offer valuable opportunities to engage comparative analysis of the medieval funerary practices. Preliminary observations testifies of several types of tombs architecture in use by Muslims during the period. It should also be compared to contemporary Christian practices and in relation to the dwelling areas and cult places (see figs. 3-4).

Relying on the names and surname of some of the deceased mentioned by the inscriptions from Bilet, Madeleine Schneider suggested that some of them were converts of local origin (Schneider 1967). It also seems that individuals from Bilet refered on their funerary inscriptions to a common ancestor: Ḥafs b. ʿUmar al-Yamāmī, buried in Dahlak (Schneider 2009). Hopefully, the increasing number of inscriptions will provide more evidence of such connexions not only with Dahlak but also between the Tigrayan sites themselves. Evidence for conversion of local inhabitants bearing non Arabic names attest a complex process of islamization and question the extent and linearity of Christianisation in northern Ethiopia at the turn of the Millennium.

While encouraging, the recent advances also come with a number of challenges. At this stage only the funerary dimension of the Islamic communities is documented and one still has to look for domestic structures and villages sites, as well as religious buildings. This will be achieved by new surveys.
An important question mark relates to the genesis of Islamic communities in the region following the decline of Aksum and while a Christian State emerged in the region. Aksumite influence is evidenced on the tell of Kwiha Kirkos, through pottery (Breton, Aytenew Ayele 2015 ; Breton 2018), lithic industry (especially obsidian) but before all through monumental remains exposed in December 2018 .

This sequence of occupation and the question of transition between Aksumite and Medieval period is to be dealt with caution. Indeed, it is obvious that the area of Mekelle received long-lasting influence from the somewhat distant Aksumite centres, and some of the characters of Aksumite culture both in material culture and religious or public architecture might have persisted during later period (Negash 2006 ; Dugast, Gajda 2014a ; 2014b). In general, evidences for a long human presence in Kʷiḥa also question the nature of the site and its natural advantages. The possible continuous occupation of the site during the first Millennium makes it a valuable case study to investigate major social and cultural changes and in particular the development of Christianity and Islam in inland Ethiopia (see fig. 5).

1. Kwiha Kirkos (Chr. cem.)
Rectangular platform grave with standing anepigraphic central stella

2. Kwiha Kirkos (Chr. cem.)
Heap grave with standing anepigraphic head-stella

3. Kwiha Kirkos (Chr. cem.)
Rectangular heap grave with standing anepigraphic head-stella

4. Kwiha Kirkos (Chr. cem.)
Circular grave with central stone

5. Kwiha Kirkos (Chr. cem.)
Rectangular platform grave with standing anepigraphic head-stella

6. Arra(Mus. cem.)
Circular grave with central triangular stella

7. Arra(Mus. cem.)
Triangular stella standing in the middle of a circular grave. Note the geometric glyph

Fig. 3: Tombs typology

8. Arra (Chr. cem.)
Rectangular platform grave with standing anepigraphic central-stella

9. Arra (Chr. cem.)
Rectangular platform grave with standing anepigraphic central-stella

10. Arra (Chr. cem.)
Large rectangular platform or area with standing anepigraphic triangular stella and rectangular-shape stellae. Note the divergent orientation of the stellae

11. Mayda Zeylegat (Mus. cem.)
Rectangular platform grave with standing anepigraphic central-stella

12. Habera (Mus. cem.)
Circular grave with standing anepigraphic central-stella

13. Habera (Mus. cem.)
Circular grave with standing anepigraphic central-stella

Fig. 4: Tombs typology

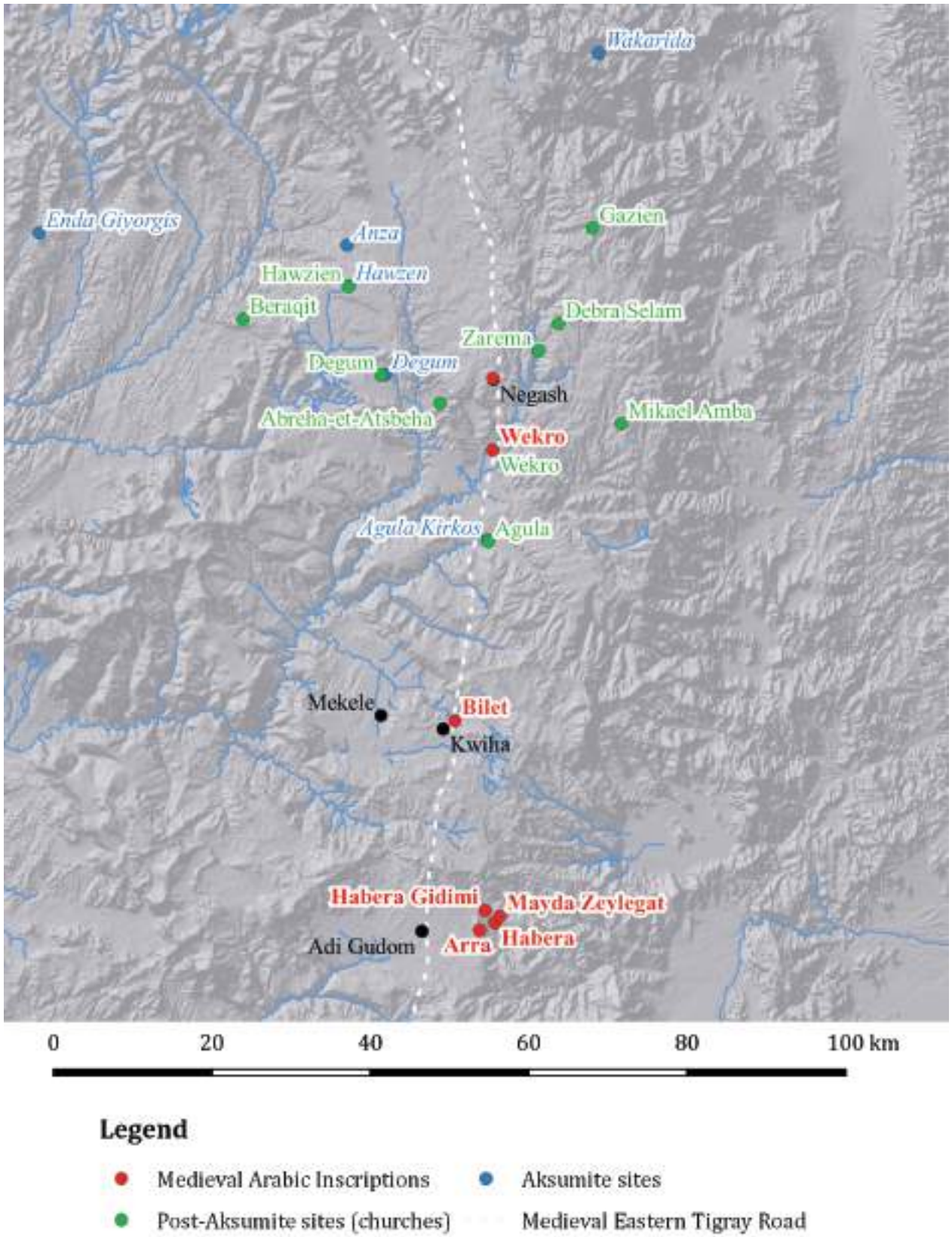


Fig. 5: Bilet in its Historical and Monumental Environment

GENERAL DESCRIPTION OF THE SITE

The archaeological site of Bilet-Kirkos is located on the northern fringe of the town of Kʷiḥa, east of Mekelle (Tigray, Ethiopia). The total extent of the site is yet unknown, but archaeological remains composing the site of Bilet itself are comprised in an area of c. 20 ha., north of Kʷiḥa, around the hamlet of Kʷiḥa Kirkos (see fig. 6).

The site is renowned for its medieval occupation and above all for its Islamic cemetery. However, the remains on the site, the quantity and density of potsherds scattered on the surface of the tell in its western parts are clear evidence of a long sequence of occupation. In this report, one will distinguish two archaeological areas: the place known as "Bilet" (cemetery and nearby fields), and the tell of Kirkos (see fig. 7 and plan 1-3).

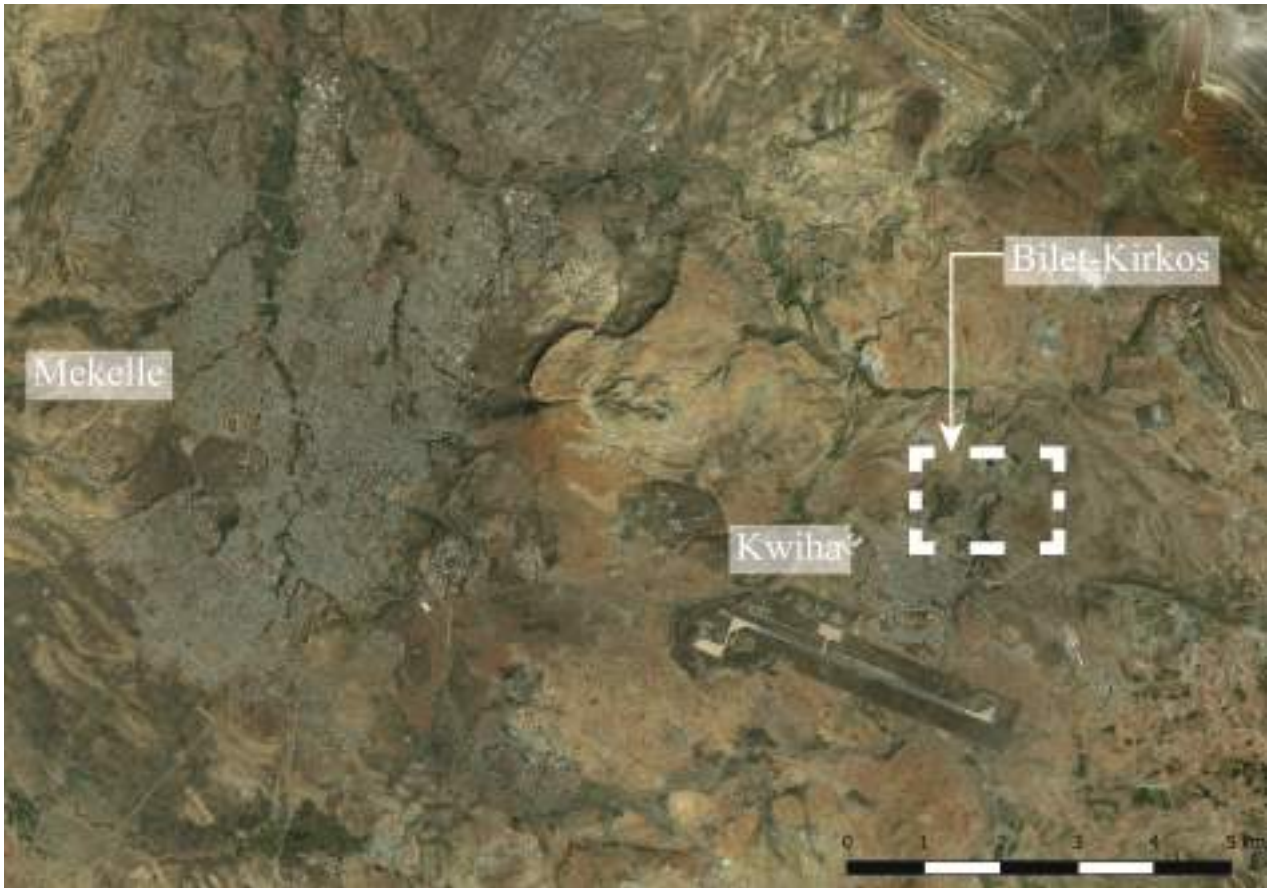


Fig. 6: Location map - Bilet in the outskirts of Kwiha and Mekelle

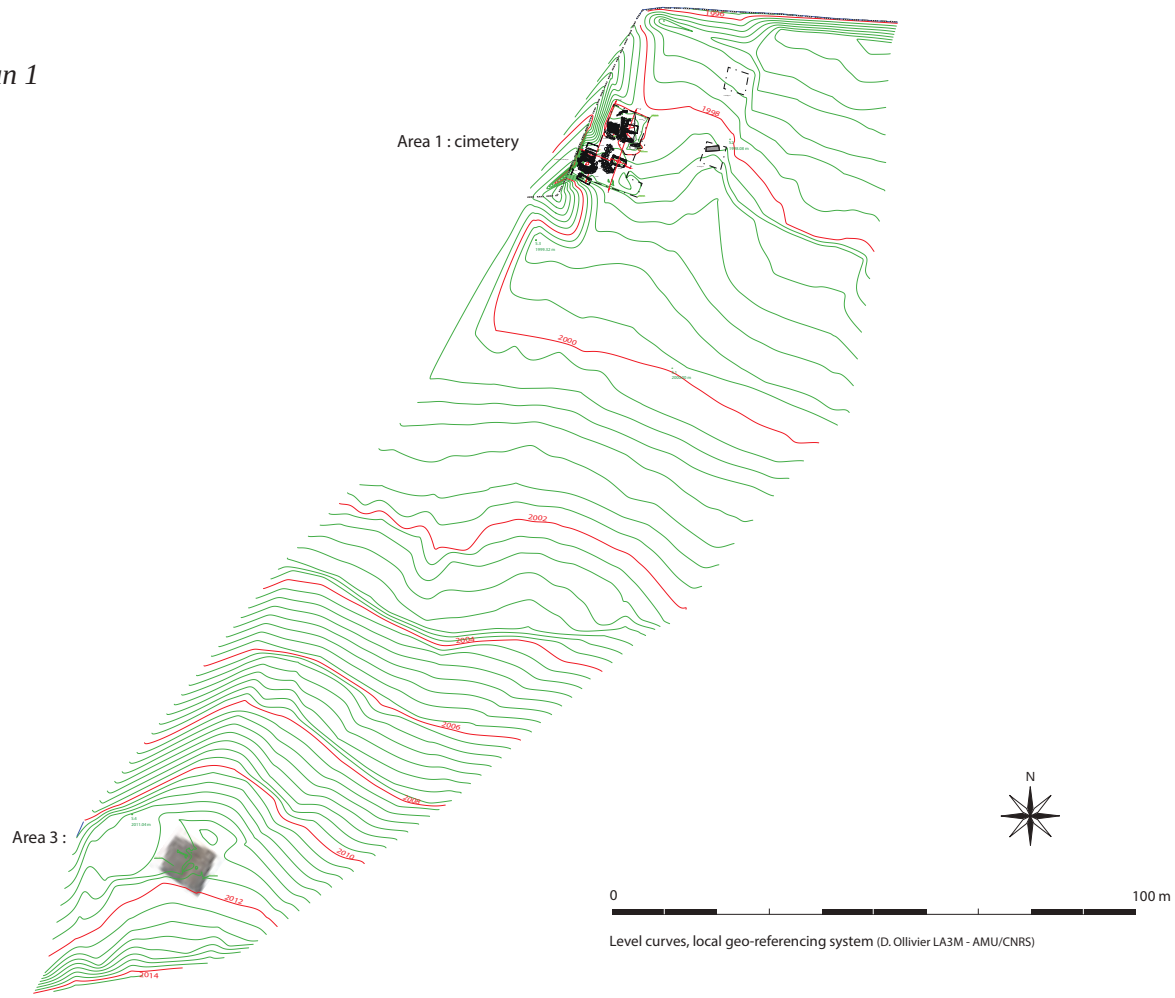
The tell of Kʷiḥa Kirkos

The hill of Kʷiḥa Kirkos culminates at the height of nearly 2200 m above sea level. It is currently inhabited and occupied by a few dozens of houses surrounded by gardens. Two churches stand at its top, the largest of which was constructed recently during the 2010's. In the course of building work several pits were dug mechanically in the vicinity of the modern cemetery, exposing and perturbing archaeological structures. Some of the pits which according to local inhabitants were intended for burial purposes were found opened during the campaign. Large sections of walls and collapsed masonry were still visible during the 2018 campaigns attesting the artificial and anthropic nature of the relief in this area. The existence of monumental remains on the tell and its surroundings is further evidenced by long monolithic stone pillars deposited in the middle of a field south-east of the church. During the excavation campaign, enlargement work of the road leading to the church also exposed several walls and burials on the northern slope of the tell. Other human burials were also spotted on the eastern slope of the tell, near the irrigation channels running through private gardens below the parcel hosting the fragmented pillars (see figs. 8, 10-13).

Fig. 7: Bilet Satellite wiew of the site and location of its major components

Fig. 8: Tell Kirkos

Plan 1



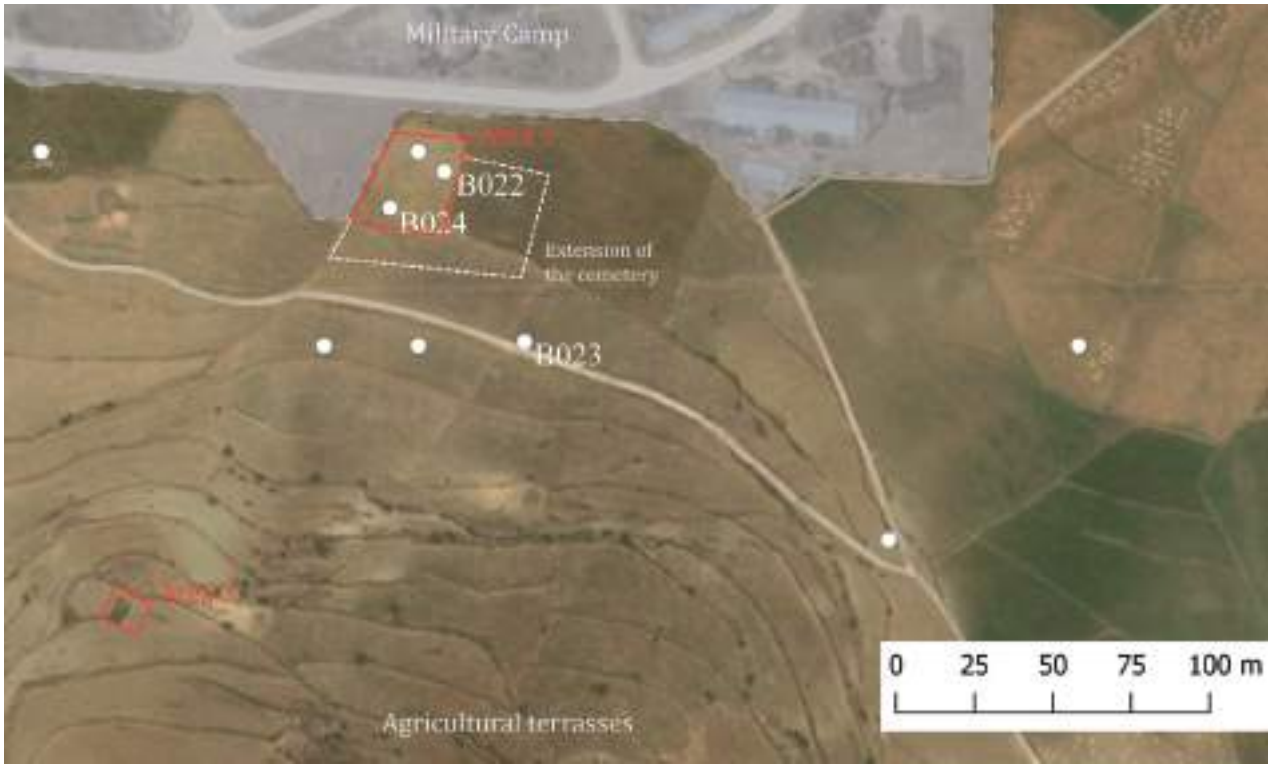
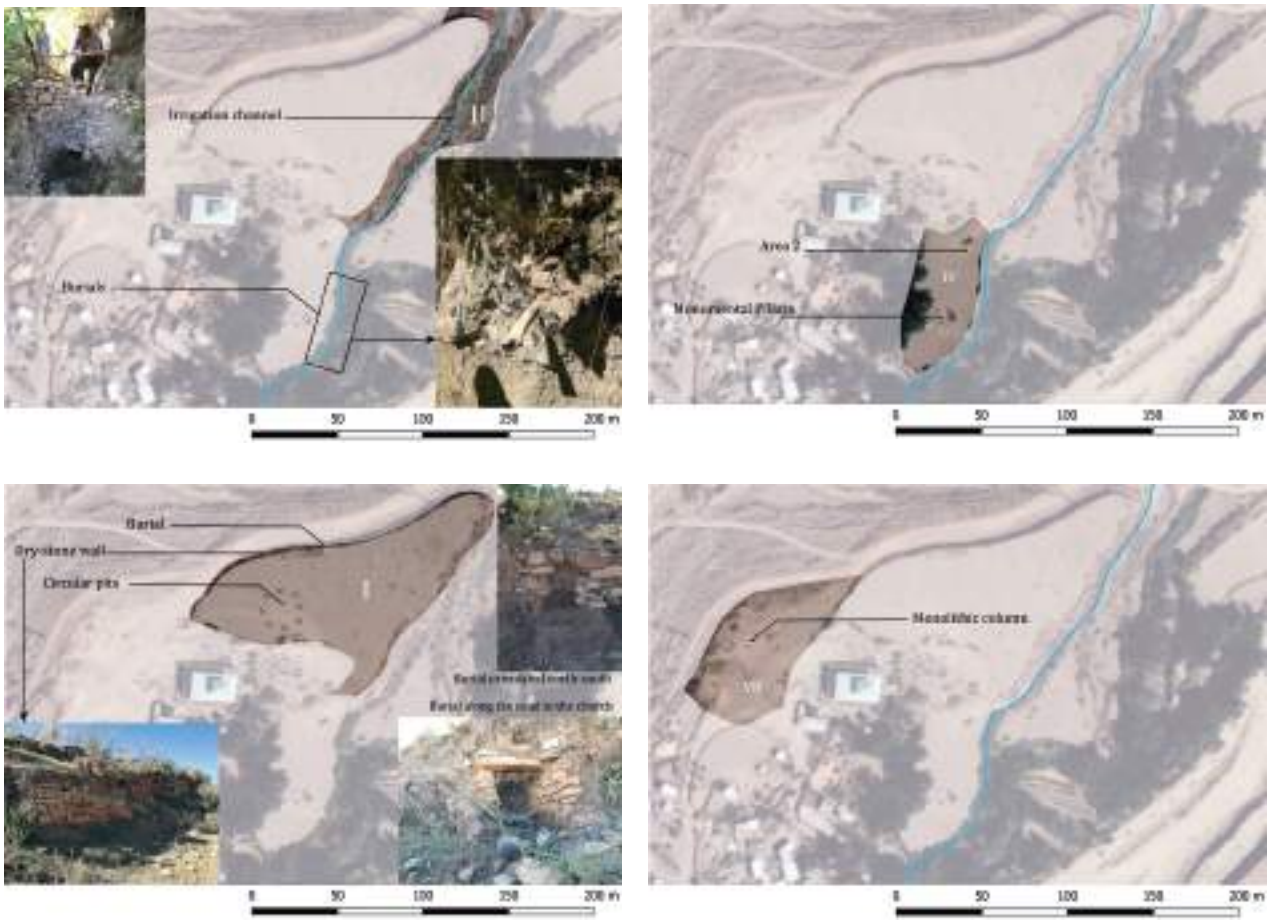


Fig. 9: Bilet, the cemetery in its environment-01



Figs. 10-13

Bilet cemetery

The place called Bilet is situated some 700 meters east of the tell, beyond road n°2 (Asmara-Addis Abeba). The place name was remembered by local inhabitants as a parcel in the middle of crops fields, a location corroborated by the discovery of several fragments of Arabic funerary inscriptions in March and December 2018 (see fig. 9) In March 2018, local famers also designated a pile of stones on the slope south of Bilet as being the ruins of a qubba mentioned in Italian sources of the 1930's (Conti Rossini 1937).

Previous studies and the identification of Bilet cemetery

Presence of Arabic inscriptions near Igre Hariba (also Egär Hariba, Wegär Hariba, Wäger Hariba, Eger Hariba, Uogher Hariba, Wober Hariba) was first mentionned by the British traveller Nathaniel Pearce in the first quarter of the nineteenth century (Pearce 1831). Between Pearce's journey and the survey of March 2018, 22 stelae bearing Arabic inscriptions had been spotted around Igre Hariba and K^{w}iḥa:

• 1 by the Italians in 1935-1936, which, according to Carlo Conti Rossini (1937-1939: 399-408), was brought to Brescia (Italy). Its present location is unknown.

• 4 by Carlo Conti Rossini in 1937 (Conti Rossini, 1937-1939: 399-408). Their present location is unknown.

• 14 by French archaeologists in 1962 and 1966 (among which 11 are preserved in the National Museum of Ethiopia, Addis Ababa) (Schneider, 1967)

• 2 by Prof. Tekle Hagos (Addis Ababa University) in 1993. They are currently preserved in the museum of the Tourism and Culture Office of Tigray, Mekelle. (Loiseau 2018)

• 1 by Dr. Wolbert Smidt in 2000 (preserved in the church of Kʷiḥa Kirkos) (Smidt, 2004)

15 stelae (out of 22) were published and translated:

• 2 by Costantino Pansera in 1945 (revised by Madeleine Schneider in 2009)

• 12 by Madeleine Schneider in 1967

• 1 by Wolbert Smidt in 2004 (revised by Frédéric Bauden in 2011)

However, until March 2018, the original location of the stelae was not precisely known. According to N. Pearce, Wagar Ḥaribā / Igre Hariba was the main site of the area, where an important leader of the region, the brother of Walda Sellāśē, choose to settle. The same witness located the original place of the stelae near the village of "Quened". More than a century later, Carlo Conti Rossini did not recognize the site described by N. Pearce and was unable to identify the original location of the stelae. Like his successors (the French archaeologists in the 1960's and W. Smidt in the 2000's), he only had access to displaced and reused stelae, coming from a place named "Bilet". In the 1930's, according to Conti Rossini, the main locality of the area was already Kʷiḥa, following the construction of the road between Asmara and Addis Ababa by the Italians who also built a new fountain around the local spring.

Between 2011 and 2017, Dr. Jean-François Breton and students of the Archaeology Department of Mekelle University carried various surveys in the area of Kʷiḥa Kirkos. They collected pottery but did not investigate further the matter of the Arabic inscriptions or medieval artefacts, nor did they identify the place of the Muslim cemetery. The pottery collected by Dr. Breton is now kept at the Mekelle University (Breton, Aytenew Ayele 2015 ; Breton 2018).

One of the inscribed stelae was kept in the church where Wolbert Smidt first witnessed it in 2000. He published its Arabic inscription from its own drawing made on site. According to him, the inscription was believed to be written in Hebrew by the inhabitants, who looked at it as relic of "Ancient Israel". For this reason, it was kept inside the church *mäqdas*. Local opinion about the stone changed after Smidt's first observations. Its Arabic script being identified, the stone was moved to a lesser prestigious location inside the church. Eventually, according to oral tradition, a nun used the stone for cooking and the latter broke because of the heat, explaining the current state of the stela from which a part is missing.

In March 2018, with the permission of the ARCCH, a team composed of Julien Loiseau, Bertrand Hirsch and Amélie Chekroun surveyed the area in order to identify the original location of the stelae (Loiseau et al. 2019). The team was introduced to Ato Neguse Hagos, a farmer living in the vicinity of the Kʷiḥa Kirkos church. He confirmed the location of the place name "Bilet", on the Eastern side of the road and he also informed us that a stone bearing an Arabic inscription was currently lying in the fields of Bilet, used with other stones to delineate paths and plots of land.

With the help of Ato Neguse Hagos, Ato Goitom Besrat, Ato Ephrem Kidane, Ato Kibrom Belay, and of inhabitants of the area, 15 stelae and 6 fragments of stele bearing Arabic inscriptions were found in four days of survey. Most of them were used to mark the limits of parcels, but one fragment of limestone was found on the ground. The last three ones were in vertical position and probably found in situ.

The identification of the exact location of the Muslim cemetery of Bilet allowed for the first time the study of Muslim burials from the Middle Ages in Ethiopia.

Environment

The cemetery lies near the bottom of a shallow vale delimited in the south by low hills used as agricultural terraces. The area is currently exploited by farmer to grow crops as well as grazing land for cattle. Several circular threshing floors are still in use seasonally, some of which covering and perturbing the archaeological remains. The closest perennial spring is located some 500 metres from the vale to the west, alimenting a brook at the foot of the tell.

The entire geological substrate in this area seem to belong to the antalo group, mostly composed of marls, shale and limestone. Most of the rock used in houses building, medieval tombs and inscriptions have been extracted in the vicinity.

Due to the recent economic development of Kʷiḥa, and the proximity of the regional airport, the area has experienced rapid and dramatic changes in the course of the last decade. To the North, the parcel hosting the cemetery stops at the fence of a military camp. To the North-East, several factories were also established, and a new one might be built on the cemetery in the coming years. To the South East, East of the road, the hillside is used as a small-size quarry for limestone and the road itself has been broadened. This heavy work have impacted considerably the site and its environment. Both the cemetery and the tell are threatened by new projects including the creation of the road leading to the new church of Kirkos and the extension of the industrial compound to the north and south.

AIMS OF THE EXCAVATIONS (DECEMBER 2018)

The main objectives of the first archaeological were **to locate and evaluate the preservation and organisation of the medieval cemetery of Bilet and to survey its immediate environment**. The first step consisted in finding and assessing the state of conservation of the graves corresponding to the funerary inscriptions visible in surface and to collect information about the organisation of the funerary space, funerary practices and identity of the deceased (age, sex, social status and religious affiliation). A second aim consisted to collect dating material (pottery, charcoals, and human bones) to clarify the chronology of the site and **locate a potential dwelling area** contemporaneous of the cemetery.

The ruins designated as a "***qubba***" **also required an investigation** as the name would consistently indicate a possible building in direct relation with the cemetery.

Eventually, **the tell of Kʷiḥa Kirkos** also required an exploration in order **to evaluate the extent of the site and its potential relationship with the cemetery**. Surface collection and limited soundings were planned in order to build a first referential of the material culture offering opportunity of comparisons with the cemetery.

METHODS AND ORGANISATION OF THE EXCAVATION

Excavation work was carried out simultaneously in three areas (*Areas 1, 2* and *3*). The campaign started on December 1st and ended on December 19th (19 days). The work was operated manually with traditional tools (picks, shovels, trowels and dentist tools for the burials). Samples of mineral and organic material were kept in sealed plastic bags. At the end of the campaign, the three soundings were completely backfilled.

Recording and documentation

A unique recording protocol was followed in the three areas (see documentation in Appendix). Stratigraphic Units (US) were distinguished as well as Archaeological Facts (Faits), the latter sometimes incorporating several US. A descriptive file was created for each US and Fait. They are presented in a Harris Matrix (see Appendix 2 and 4).

Drawings, plans and photographs were numbered according to Area, as well as the sketches used as recordings for the othophotographs. At the end of the campaign, the raw documentation was gathered and scanned by the team in Aix-en-Provence (MMSH). A digital copy will be kept in the CFEE in Addis Ababa.

Archaeological artefacts

The artefacts from the excavations were packed in sealed plastic bags according to Areas and US. A total of 9 boxes were sent to the National Archaeological Museum for storage and awaits further specialized study (see Appendix 10). Samples for destructive analysis were shipped to France (C14 Datation Laboratory, Lyon), and sediment samples are kept in Aix-en-Provence for further analysis (see Appendix 9). Epigraphic stelae discovered during the March and December campaigns were numbered, documented and deposited in the storage of the Regional Office of the Tigray Antiquities in Mekelle (figs. 101-102)

*Bilet Cemetery (*Area 1*)*

The excavation focused where the majority of stelae and stelae fragments had been discovered in March 2018. Area 1 was excavated during 19 days by 16 archaeologists and workers. One main sounding alongside the western fence and two test pits further east were opened. The totality of these areas were cleaned manually. Archaeological and geological layers were identified as well as different archaeological structures including a burial located on the northern limit of the main sounding.

After photographic, graphic and photogrammetric recording of the potential gravestones, the tombs were excavated and precisely documented (description of the fills, drawings of the plan and sections, photographic recording…). The graves and human remains were analyzed according to archaeothanatological methods (Duday 2009). Based on a critical study of bones position inside the grave, these methods aim to discuss the mode of deposition of the bones, to determine in the case of a primary deposit the original position of the body, the position of the funerary artefacts, the relative chronology of the deposits within the grave(s) and the architecture of the burial. After the excavation, first biological data will be studied (age of death, sex and pathology). The same excavation and anthropological methods were used during the excavation of the cemetery of Qedemt at Lalibela (Gleize et al. 2015).

The maximum extent of the main sounding (128 sq. metres) was only reached at the end of the campaign as the sounding was successively extended in order to encompass most of the visible structures to the south and to the west. Once completed, the area was entirely backfilled. Two test-pits (16 sq. metres each) confirmed the continuation of the cemetery toward the East. The neighbouring parcel was leased for one year to prevent any disturbance before its future excavation.

*Kʷiḥa Kirkos Tell (*Area 2*)*

During the campaign, heavy groundwork was carried out in relation to the enlargement of road n°1 and to build a new access to the main church. It cut part of the tell in the north-west, exposing remains of walls and ancient burials along the road leading to the summit of the tell (see fig. 12).

Fearing more damage, a systematic survey was carried out on the tell to collect pottery from the surface. This survey led to the discovery of a wall and nearly complete pottery on the eastern slope of the tell (see figs. 47 and 49). A sounding was implanted at the spot at the end of the campaign in order to expose the wall and a stratigraphic section. Only three days and 5 to 6 workers supervised by three archaeologists were devoted to this limited excavation.

*Northern terraces and "*Qubba*" (*Area 3*)*

The stone pile designated by local farmers as the "*qubba*" was cleaned, allowing the exposure of two badly preserved stone walls forming the corner of a building. To the east, the sounding was extended to include part of another structure later identified with the remains of a circular house. This house was only partially excavated. 8 to 10 workers were employed in Area 3 during a total of 8 days.

Mapping and topographical survey

Plans and sections were produced for each Areas, as well as orthophotographs for Area 1 and 3 (plan 1). A general plan of the site was produced including a micro-topography of the areas surroundings.

RESULTS OF DECEMBER 2018 CAMPAIGN

Archaeological soundings

Area 1: *the Muslim cemetery*

The discovery in March 2018 of several Muslim funerary stelae, some of them which remained in situ in a field, allows to select an area to excavate several soundings and assess the conservation of the remains and the extent of the funeral space. The site has a slight slope to the north and it is bordered by a military area bounded by a fence. There i s a slope fracture on the western edge of the field most likely caused by anthropic digging in the military compound rather than to a geological discontinuity.

In this area, three soundings were implanted (see ortho 1 and plan 2). The first was located in the area where steles were discovered near the western fence (fig. 14). It followed the slope and encompasses 128 sq. meters. The other two soundings, each measuring 16 sq. meters, were located further east to confirm the continuation of cemetery towards this direction. The excavation focused on sounding 1. For the other two areas, only surface observations were made.

Ortho 1

Bilet (Tigray, Ethiopie)
Area 1
Orthophotogpahie (S. Dorso, D. Ollivier, 2018)

Plan 2

N
Coupe B'
Coupe A'
Porte
Tranchée
F1017
F1080
F1039 ?
1998.09 m
F1058
F1009
1997.49 m
1997.67 m
1998.05 m
US1050
F1054
F1051
F1006
F1065
US1062
F1060
B
A
C
Area 1: cimetery
1998.27 m
1998.66 m
Dépôt de céramique
Stèle ou emplacement de stèle
0
5m
D. Ollivier LA3M - AMU/CNRS

Fig. 14

Sounding 1

Immediately below the ploughed topsoil (US 1001), structures appeared at a depth of about 0.15 m. A deep test-pit revealed the last geological layers. At the base of the stratigraphic section is a marly white bedrock, fractured into small slabs (US 1015) covering a greenish clay layer (US 1072). The bedrock is covered by a whitish level which could come from its decomposition (US 1033) and then by a homogeneous clay layer (US 1032=1045). A yellow ochre and grey layer with small block inclusions (US 1002) seals the previous stratum (fig. 15 and pl. A: AA' section). It seems that the bedrock tends to rise eastward because it appears very close to the surface in southwest of the sounding (US 1066) (fig. 16). It is possible that US 1032 and 1002 tend to disappear in the western part of sounding 1 where a white level (US 1062) appears at the base of the structures and could correspond to the top of the layer US 1033.

Fig. 15

Fig. 16

The stripped area is evidence of many disturbances. In the south part of sounding 1, the geological levels are largely destroyed and penetrated beyond the surface of the bedrock. This includes a large digging (US 1035), filled with blocks (US 1024) and several recent sedimentary phases (US 1024, 1036 and 1037). The morphology of this excavation and its filling is consistent with a destruction by a mechanical engine. Another modern disturbance (F1005) was also observed at the northeast boundary of sounding 1. Finally, at the northwestern corner of the sounding, all bedrock slabs were torn off (US 1098) and this excavation was then refilled by a pile of blocks (US 1093).

Location of archaeological structures

In the northern part of sounding 1, the archaeological structures (F1017, F1028 and F1080) are sealed by a layer (US 1003) of basalt blocks and slabs linked with sediment, with no particular organization (fig. 17). This layer attests ancient destructions of archaeological structures because it was cut at the east by a trench F1005 and possibly by another one in the south. Despite these destructions, at least 9 structures could be distinguished: at least 8 looted funerary rectangular superstructures sometimes surrounded by a crown of blocks, a burial (F1008) and a wall consisting of two sidings (F1028). This wall is located in the northern part of sounding 1. Most of the preserved part is oriented north-south and divided the area in two. There could be an interruption in its northern part allowing passage between the two zones. In its southern part, it is curve and turns east to close the east area. Inside this area was discovered at least one tomb (F1080), perhaps even a second further north of which there would be only a few blocks left. West of F1028 is a second substructure (F1017). Both substructures lean against the wall and are therefore post-construction (fig. 18).

Fig. 17

Immediately south of the curved wall, is the only burial that delivered bones during the campaign (F1008) (fig. 19). Further south, there is a third rectangular substructure (F1068) surrounded to the west by basalt blocks (US 1013). They could originally correspond to a circular structure partially destroyed by sounding F1035. Some of blocks exposed in the eastern limit of the sounding may be part of the same structures. The area between F1068 and F1017 is probably disturbed (US 1040) and an alignment of blocks (US 1039) could possibly be the remains of a funeral structure (fig. 20).

Fig. 18

Fig. 19

Finally, east of F1068, a row of at least 4 rectangular structures (F1060, 1051, 1054 and 1058) was identified. West of F1060, there could be a fifth structure (F1065). It did not ensure the existence of this funeral structure because the blocks of F1065 are at the limit of sounding but also in a break in slope (fig. 21).

Wall F1028

Part of a wall (F1028) was exposed in the northern part of sounding 1. The wall is oriented north-south (5 m long) and its southern part is curved and turns towards the east (about 2 m long) (see fig. 22). Trench F1005 destroyed its eastern extremity. The wall is preserved on more than 5 courses and was exposed to its foundation: its preserved height is around 0.45 m (fig. 23). The wall is built with marly limestone slabs without mortar. The foundation trench (US 1027) cuts the geological layer US 1002 (see pl. A: CC' section).

F1028
US 1040
US 1039
F1068
US 1013
F1035

Fig. 20

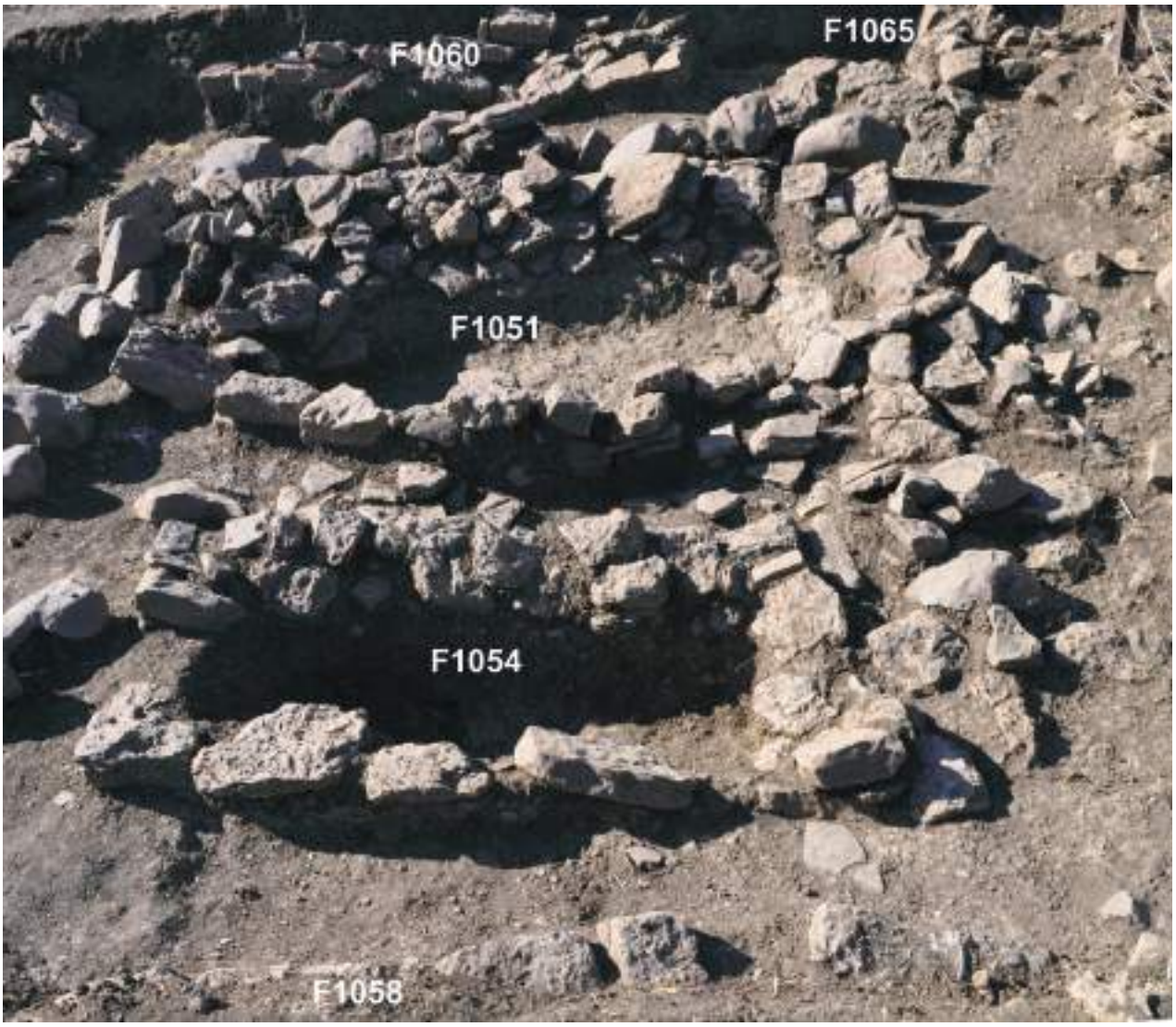

F1060
F1065
F1051
F1054
F1058

Fig. 21

Fig. 22

Fig. 23

Its southern part cut an undetermined structure F1046 which could continue to the south and cut tomb F1008 (fig. 24). The curved wall may have been installed on a dual north-south and east-west slope, or even an existing slope fracture (see sections). In its northern part, a hiatus (c. 0.98 m wide) is filled by collapsed blocks (US 1061) (fig. 25). This interruption could have been c. 0.20m narrower. Indeed, if the northern jamb of the possible entrance seems preserved, its southern jamb collapsed towards to the north.

Funerary monuments and funeral practices

The majority of the archaeological structures in sounding 1 are platforms. They have a rectangular plan and their dimensions range from 2.06 to 3.04 m long and from 1.08 to 1.92 m wide (see table). All these structures have been looted in their center, sometimes beyond bedrock (F1068, fig. 26). It is therefore impos-

sible to precise what they contained. They are built with small slabs linked with sediment – from one course (F1068) to 5 courses (F1051 and F1080) can be preserved. Following the lootings, their walls collapsed inside the looting pit but also northward in the direction of the ground slope (F1054 and F1080) (F1080, fig. 27).

Fig. 24

Fig. 25

Fig. 26

Fig. 27

	Plan	Length (m)	Width (m)	Orientation	stele/structure for stele
F1017	rectangular	2,16		E/W	?
F1051	rectangular	3,04	1,92	ESE/WNW	stele
F1054	rectangular	2,06	1,08	ESE/WNW	structure for stele
F1060	rectangular	2,72	?	ESE/WNW	stele
F1065	rectangular	?	?	?	?
F1068	rectangular	2,71	1,67	ESE/WNW	
F1080	rectangular	?		E/W	
F1058	?	2,21		ESE/WNW	
F1008	?	?	?	E/W	?

Two stelae, one of which is epigraphed (F1051: B24 and F1060), were found at the eastern end of two rectangular substructures from the southwestern part of sounding 1 (F1060, fig. 28). These discoveries attest that, despite the looting, some elements remain in place. The two stelae were placed vertically in an empty space in the middle of the substructure eastern side. Such a structure is observed in the eastern wall of F1054 and could indicate the location of a stele discovered in March 2018 (F1054, fig. 29). Finally, some substructures are surrounded by a circle of basalt boulders: US 1013 around F1068 with a maximum radius of 3.2 m and US 1053 around F1051 with a maximum radius of 2.2 m. A few blocks on the south side of F1017 could be the remains of a similar structure, which has been destroyed by the different looting.

Fig. 28

Fig. 29

Outside funerary deposits

The excavation inside the monuments had not delivered any material. However, several concentrations of potsherds (US 1044 and 1030 – F1017 (fig. 30), US 1042, US 1042, US 1048 and US 1049 – F1017, US 1099 – F1058 (fig. 31) or even pot (US 1063 – F1051, fig. 32) were exposed around and against the substructures (see plans 1-2).

Fig. 30

Fig. 31

Fig. 32

These fragmented ceramic elements are mostly located East of the structures (F1017, F1051 and maybe F1058) and at their base close to the original surface level. For F1017 and F1051, potsherds were confined between the rectangular substructure and the crown US 1053 or the wall F1028. The presence of ceramics thus does not seem fortuitous and it could be linked to commemoration rites around the tombs. Note the discovery of a glazed potsherd between graves F1080 and wall F1028 in a level of destruction (US 1041, figs. 33-34) In this case, its stratigraphic location does not allow to attribute the same utility in funeral practices.

Fig. 33

Fig. 34

Burial F1008

Grave F1008 is the only structure that delivered human bones. No substructure was identified on its surface. But the skeleton was covered by several limestone slabs (US 1011, fig. 35). The burial pit (US 1008) was dug until the bedrock (US 1015) and it is possible that its western end was cut by the F1046 structure (tibias and feet of the skeleton US 1009 are missing). However, it was not possible to specify the limits of the burial pit. It contains the primary deposit of a female - between 18 and 22 years old at death - individual (US 1009). The body was originally buried on the right side with the upper limbs extended, placed in front of the body (fig. 36). Several movements of the bones (left femur, right humerus…) outside the original volume of the corpse attest a decay in empty space. The lateral pressures observed on the skeleton could be due to the pit walls and/or a shroud. The segmentation of the anatomical areas observed on the excavated skeleton and the reversal of some bones (skull, vertebrae, scapula…) could attest the collapse of the bones due to the decay of wood boards or floor originally under the body in the grave (fig. 37). Despite the reversal of the upper part of the skeleton, the global position of the bones attests that the face of the dead was towards the north or the north-east. After the burial of the body, the limestone slabs could close the pit.

Several bones (US 1016) from a second individual (adult with undetermined sex) are also present in the burial pit, placed against the skeleton in primary deposit. The absence of anatomical logic and of connections attest to a secondary deposit, that is, these bones were deposited dry in the burial pit during the interment of the body (US 1009). Two alignments of limestone blocks east of F1008 (US 1087 and 1088) are the same level and could be the remains of stones cover from a destroyed grave (fig. 38). The digging of the burial F1008 could cut this previous grave and bones in the secondary position (US 1016) could possibly come from this structure.

The bones in primary and secondary positions globally are bad preserved. Several taphonomic defects - as tunneling, gnawing and perforations - were observed mainly on the bone extremities (fig. 39) and pelvic bones (fig. 40). These osteolytic lesions could be due to subterranean termites as I had already observed it at Qedemt (Lalibela). The observation of termite colony in the north part of sounding 1 (US 1072) testified their presence at Bilet. Termite action could also explain the absence of bones in or around the looted graves. These structures were looted until the bedrock whose the upper part – the marly white slabs (US 1015) – were removed. As we saw, in the F1008, the body was buried on this layer and it could be maybe the same in the other graves. So the bones from the structures could be removed during these destructions. The looting could thus expose human remains and facilitate termite access to bones and their destruction.

Fig. 35

Fig. 36

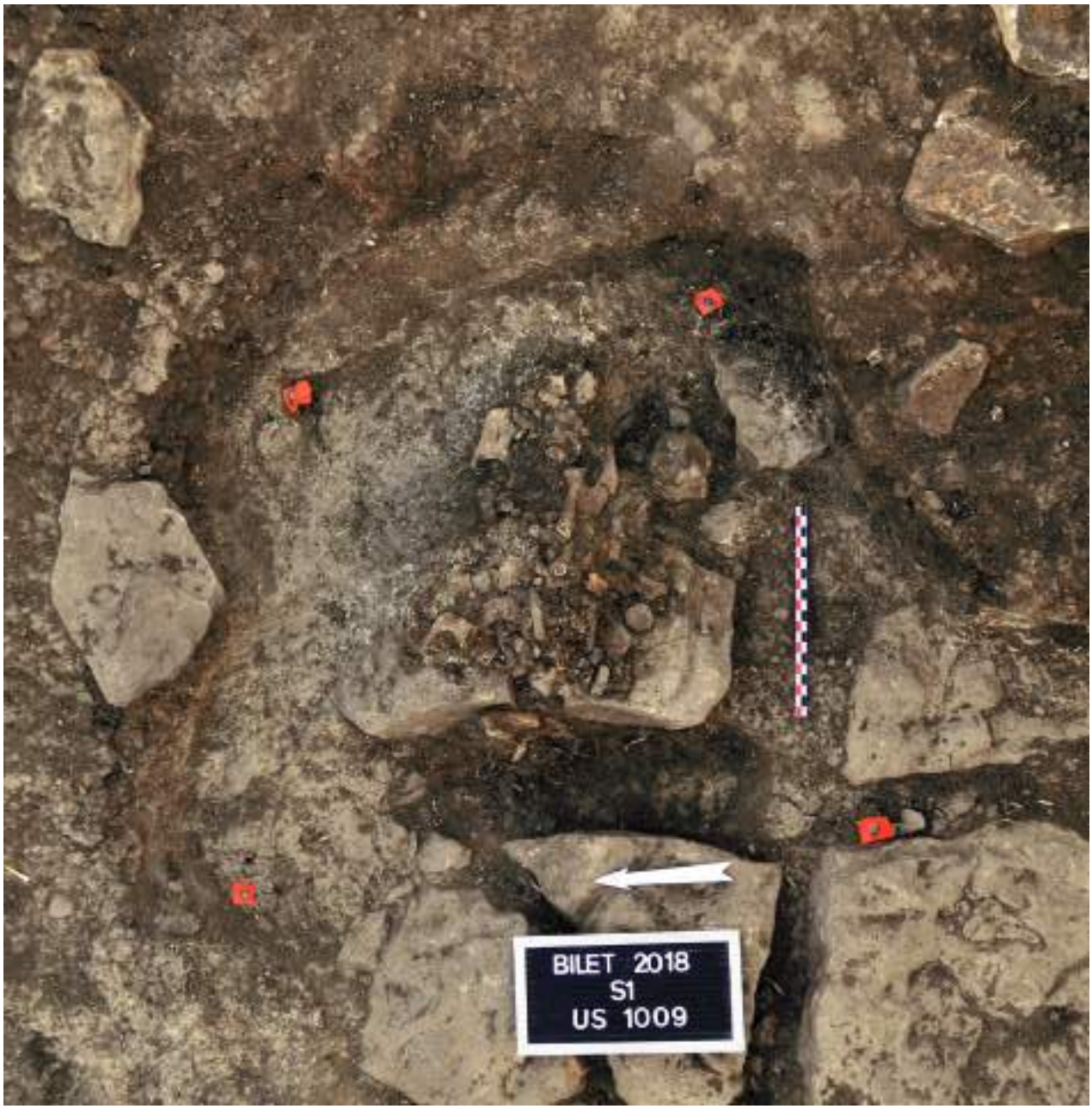


Fig. 37

Fig. 38

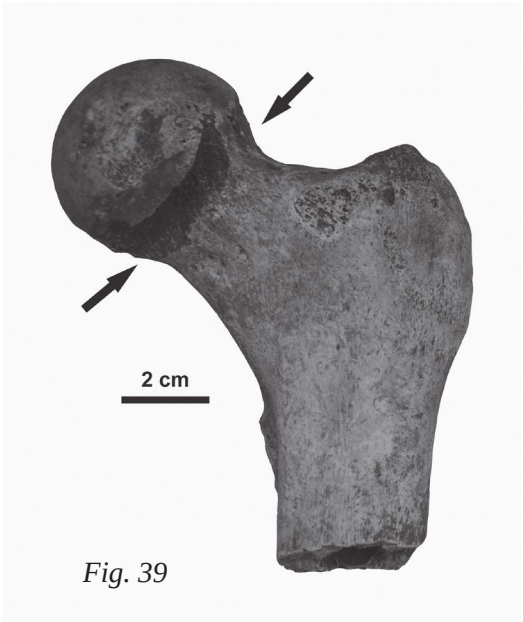


Fig. 39

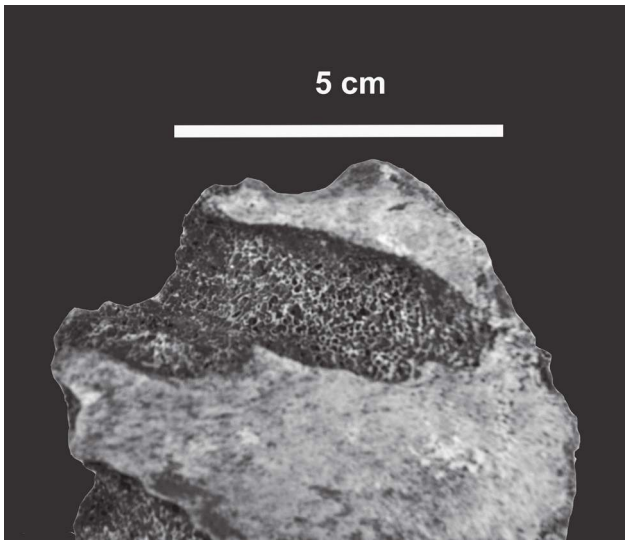


Fig. 40

Possible circulation levels

Significant destruction of the site makes it difficult the preservation of soil or circulation levels. However, between structures F1054 and F1058, several layers containing flat ceramic were exposed: US 1050 (fig. 41) and US 1074 (fig. 42). The first is posterior to the second and the both are located on a clay level (US 1075) which contains rare flat slabs. These two levels may be contemporary to the use of the cemetery. Under the substructure (US 1055) of the grave F1054, another layer containing ceramic (US 1086) could be equivalent to US 1074. So US 1050 could be a circulation level contemporaneous or posterior to F1054.

Fig. 41

Fig. 42

The circulation level US 1074 could thus be a level prior to the grave F1054. It also seems that F1054 can overlap the blocks circle around F1051. This level could eventually use as the same time F1051. Unfortunately between F1054 and F1051, level US 1074 does not seem to continue because only flat slabs (US 1092) (fig. 43) were observed under the collapse (US 1056) of the F1051 substructure. But it is fairly possible that US 1094 slabs are equivalent to US 1075, present below US 1050 and US 1074 circulation levels.

Finally, a white level (US 1033) was exposed west of boulders edge (US 1013) of F1068. It contained some potsherds and ceramic (US 1099) in front of the east side of F1058. This level seems to be equivalent to the level US 1062, located south of F1051 (fig. 44). These levels are at the base of these monuments and surely close to the circulation level around them.

Datation

For the moment, the only precise chronological data is provided by the B24 stele of the structure F1051 which dates back to 431 AH. (1039-1040 CE). The stratigraphic relation between F1051 and F1054 could indicate that F1054 dates from the middle of the 11th century. The ceramics discovered are typologically similar to material known on other medieval Ethiopian sites. However, the lack of typochronology for medieval ceramics in Ethiopia does not allow for any additional conclusion at this time. The exogenous glazed potsherd found in the northern part of sounding 1 could be dated between ninth and the eleventh century. For this same zone, we are waiting for the radiocarbon dating of the two distinct individuals of tomb F1008. If the trench F1046 properly cuts the tomb F1008, this relation could give a *terminus postquem* to the wall F1028 that covers F1046. No stratigraphic relationship could be established between the southern and northern parts of the sounding. As we saw, the orientation of the funerary structures are distinct in these two area: E/O in the north and ESE/ONO in the south. But it is not yet possible to specify whether this is a chronological difference or a change due to the presence of the wall or to the ground topography.

Fig. 43

Fig. 44

Muslim practices and specificities of the cemetery

The discovery of a new stele with Muslim inscription in place confirms once more the presence of Muslim tombs on the Bilet site. In addition, the position of the body of the only skeleton in primary position respects certain classical Muslim rites, burial on the right side with the face towards the *qibla* (here towards the north). The two main orientations of the substructures (E/W and ESE/WNW) on the site are quite compatible for bodies buried according to these rites.

The organization of the graves in this part of the cemetery presents a certain diversity. Some graves could have followed rows or alleys (F1051, F1054, F1058 and F1060). F1080 and F1017 substructures lean against the wall F1028 and are therefore more recent. This wall may have been used as a burial enclosure wall with an entrance to circulate between two areas.

Extensions of the cemetery to the East

Soundings 2 and 3 attest the continuity of the cemetery towards the east. In sounding 2, fewer scattered blocks are present and at least 4 east-west oriented graves were exposed. One (or two) grave(s) have two vertical stelae not inscribed at its ends (fig. 45). In sounding 3 as in sounding 1, a lot of spread stones was exposed (fig. 46). Among them, at least 6 east-west oriented graves have been observed.

The results from the pits tests attest that the cemetery extends further east. In addition, the discovery of several scattered steles several tens of meters to the south and several hundreds of meters to the east raises the question of the continuity of the site or of the existence of several burial spaces.

Fig. 45

Fig. 46

These preliminary results indicate that the medieval Muslim cemetery of Bilet has probably been largely looted. It will therefore be impossible to realize a broad analysis of funeral practices. Given the destructions, it is improbable also to have biological data for monumental graves. But, the discovery of the tomb F1008 attests that simpler tombs could be partially preserved. It seems important to continue the exploration of the cemetery to get a better idea of its plan and its extension but also to highlight different substructures such as in Sounding 2.

Fig. 47

Fig. 48

Fig. 49

AREA 2 : "KIRKOS" TELL (Pl. B: Plan 3, Pl. C: section 1, Appendix 2)

Stratigraphy and structures

First phase: A monumental building

During the survey of the area, outcropping walls were spotted (figs. 47-49). They belong to a monumental building, two walls of which have been excavated.

The main wall (W 2001) is preserved on more than 30 courses and was exposed to its foundations (figs. 50-52). The preserved height of the wall inside the sounding reached 2,8 m. Wall 2001 is oriented WNW-ESE and does not follow a linear course, forming a "Z" shape. Although it doesn't employ mortar, its masonry is rather fine, using small calibrated but unworked field stones bonded together with earth. It shows regular steps and recessed sections of 51 cm, setting back about 6-8 cm, and separated from other recessed courses by flagstone of slate or schist forming steps (figs. 53-54).

The preservation of the wall follows the slope of the hill and it is better preserved in the north than in the south-east. Only 5 courses are preserved in its southern end, and it is possible that the southern section functioned as a buttress wall in order to strengthen the main section to the north in direction of the slope.
The stratigraphic sequence of the area north of Wall 2001 totally differs from the one to the south, suggesting the existence of an inner space to the north.

To the south, Wall 2001 is founded in a thick layer of dark clay marked in surface by a level of pebbles (US 2016, alt. sup. 2097,4 m). This stratum is cut by the foundation trench (US 2018) which is clearly visible both in plan and sections (fig. 55).

On top of US 2016 a succession of grey layers of slit are covered by a c. 3-5 cm thick layer of white lime. US 2029, 2024, 2026, 2023, 2025 and 2025 (altitude 2097,5 ; 2097,7 ; 2098,2 m) may correspond to several circulation floor, or occupation/working floors that were successively raised, possibly to level the eastern slope of the tell. The fact that foundation trench 2018 cuts through all of them as well as US 12 indicates that the three lowest recessed sections of the wall were not visible and belonged to the

Fig. 50

Fig. 51

Fig. 52

Fig. 53

Fig. 54

Fig. 55

foundation of the Wall. US 2012 is a very thick and packed whitish layer presenting a slope similar to the tell i.e. toward the east (. It can be assumed that its surface served as circulation floor during the erection of the building (altitude 2098,7-2098,3 m). It is covered by another thick greyish layer possibly of sedimentary nature (US 2021) (fig. 56).

To the North, the limited time devoted to the excavation of the area didn't allow to reach the foundation of Wall 2001. The stratigraphy is also more complex than south of the wall. Its north-eastern limit appear unclear. The outer face of the wall is harder to follow and a batch of mortar is found against it (US 2014, figs. 57-58).

A second wall comes abutting Wall 2001 perpendicularly in a SSW-NNE direction. Wall 2002 (width c. 50 cm) is preserved on 12 courses. Although using the same technic as Wall 2001 (small irregular fieldstone bonded together with earth) it is of lower facture (fig. 59).

At least two flagstone floors have been exposed north of Wall 2001 and east of Wall 2002 (US 2013, US 2011). US 2013 is badly preserved and appears irregular (alt. sup. 2098,05-2097,82 m, fig. 60). It is not sure if it functioned with Wall 2002, since the lower courses of Wall 2002 were not exposed. Therefore it may be contemporaneous or earlier. It seals a thick layer of backfill (US 2028) which lays on a dark layer of clay (US 2017). It is possible that US 2017 equals US 2016 south of Wall 2001 and that US 2028 served as a platform to level the ground inside a building, and hosting the foundation of Wall 2002, but limited time prevented to check this relationship.

Fig. 56

Fig. 57

Fig. 58

Fig. 59

Fig. 60

At some point, the floor level north of Wall 2001 was raised of c. 50 cm with a layer of whitish and compact soil (US 2005). In some places but not everywhere floor 2011 (alt. sup. 2098,25 m) was preserved on top of US 2005 (fig. 61). It clearly postdates the erection of wall 2002 and large potsherds were found lying on both US 2005 and floor 2011 (US 2003, figs. 62 and 63).

US 2015 in the eastern corner of the sounding correspond to a level of destruction or ruins, which naturally collapsed along the slope of the tell (fig. 64).

Later phases

Structures and layers postdating the monumental phase were exposed on both side of wall 2001. To the south, a large and deep pit was dug against the outer face of the wall through US 2021 (US 2020, c. 1 m deep, figs. 65 and 66). In the surface, a sort of edge wall was preserved on three courses, made of small irregular field-stones (US 2010) and it is possible but unsure that the contemporaneous circulation level was also covered by stones (fig. 67).

The pit presents a multi-layered fill. The first layer (US 2009-d, c. 70 cm thick) is composed of mixed layer containing numerous field stones and ashes (fig. 68). Then two layers of reddish burnt soil containing potsherds (US 2009-c and a) are separated by a 10 cm thick layer of ashes (US 2009-b). Inside the pit, the outer face of Wall 2001 was protected by flagstone and large potsherds (US 2017).

The pit structure was found covered by soil (US 2004) and what may belong to a badly preserved flagstone floor north and above wall 2001 (US 2030, fig. 69).

Datation and interpretation

First phase: The monumental building presents clear characteristics of so-called “Aksumite” architecture, namely its masonry type with recessed sections and string courses of stone slabs. Even the regular

Fig. 61

Fig. 62

Fig. 63

Fig. 64

Fig. 65

BILET TCHERKOS
2018
S2
US 2021

Fig. 66

BILET TCHERKOS
2018
S2
US 2010

Fig. 67

BILET TCHERKOS
2018
S2
US 2009

Fig. 68

BILET TCHERKOS
2018
S2
US 2001

Fig. 69

height of the sections (here 51 cm) appears very close to the standard module of 48 cm of the classical monumental Aksumite architecture (Braukâmper 2007). Close comparisons are offered by walls of residential units in Aksum or in Wakarida (Gajda et al. 2015 ; Benoist et al. 2016, figs. 70-77).

Despite these characteristics, and until the associated material has been studied, one need to be very cautious as regard to the dating of the building, since the chronological sequence of the "Aksumite millennium" is still debated (Phillipson 2008). Recent studies have also pointed out the lasting influence of Aksumite architectural style in later monumental buildings, especially in ecclesiastical monuments until the medieval period (Phillipson 2004).

At this stage the function of the monumental building from Area 2 remains unclear, and its plan needs to be investigated further. The stratigraphic sequence shows that several phases of occupation occurred before the abandon or dismantlement of the building, and material associated with the floors might provide dates for those occupations.

Fig. 70: Berik Audi, «palace»

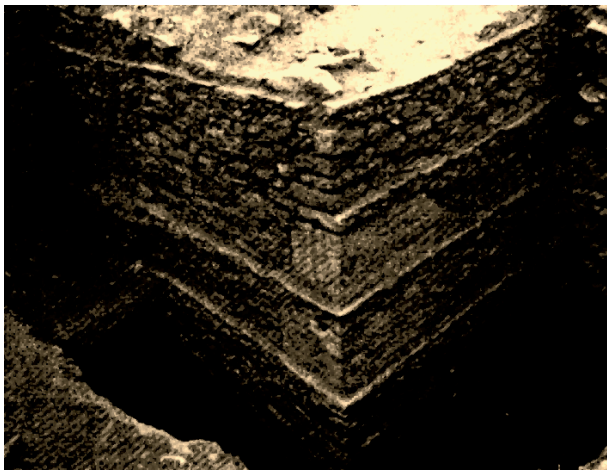


Fig. 71: King's grave at Aksum

Fig. 72: Parallel Piers fo the northern aisle in Arbaetu Ensesa church, Aksum (Agos 2011)

Fig. 73: Building D2, Wakarida (Dugast, Gadja 2013)

Fig. 74: Area 1, Wakarida (Dugast, Gadja 2013)

Fig. 75: Building D2, Wakarida (Dugast, Gadja 2013)

Fig. 76: Corner of a Monumental platform in Aksum (Chittick 1974)

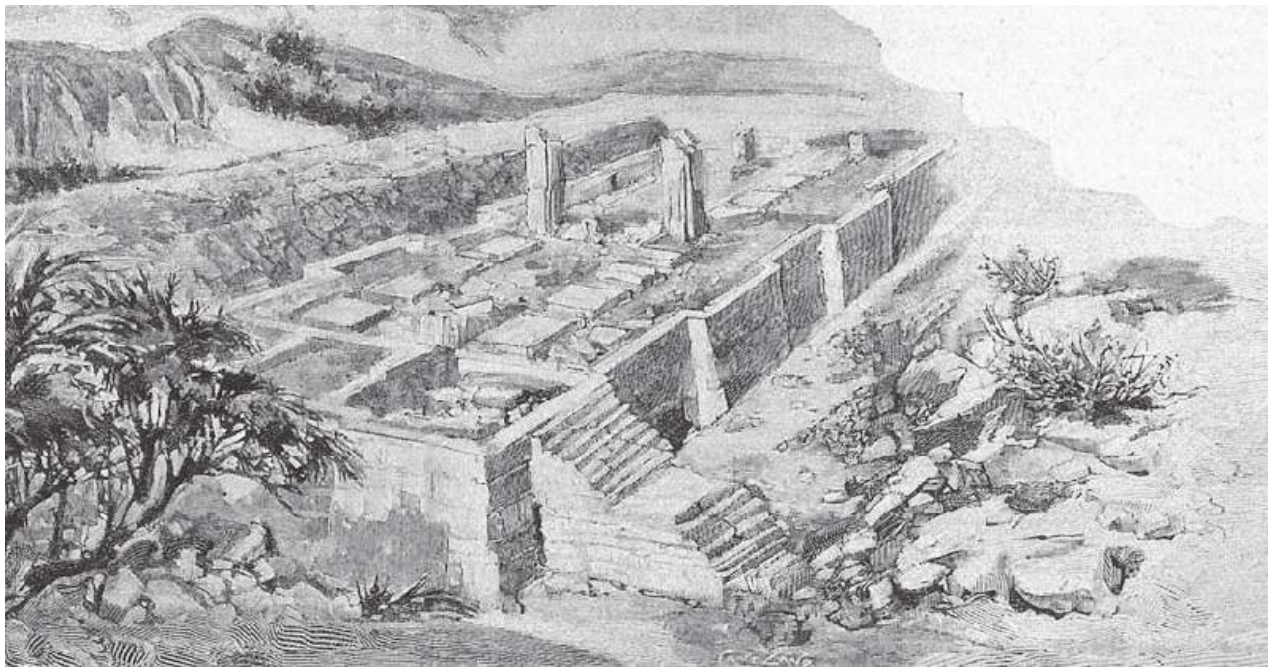


Fig. 77: Aggula Kirkos, general view of the site (Conti-Rossini 1928)

Later phases:

After the building ceased to be used, several arrangements were made in the area. The top of Wall 2001 obviously served as support for a firing structure, possibly a semi-buried oven or an open fire place. This fire place served several times before its abandon and potsherds used to protect the outer face of the wall or found in the burnt layers should be associated with this phase. It is not very clear yet how the area was eventually covered, and if a floor eventually sealed the remains. Ruins of nearby building seem to have collapsed along the slope toward the east. Natural sedimentation appears to be very thin.

AREA 3 : THE NORTHERN TERRACES AND THE "*QUBBA*" (pl. D: plan 4-1, Appendix 4)

Stratigraphy and structures

*Phase 1: A quadrangular building (*pl. E: *plan 4-2)*

The stone pile designated as a "Qubba" is formed by the ruin of a small building and basalt blocks deposited there by the farmers in order to clear their parcels (figs. 78-80). To the West, remains of the buildings have disappeared due to the establishment of a threshing floor (fig. 81).

After cleaning the structure, two walls were exposed. Wall 3005 is orientated W-E and is perpendicular to Wall 3004 orientated N-S, forming the north-eastern corner of the building (figs. 82-85). Both walls are very badly preserved above their foundations. Only four blocks of one courses were identified on W 3005. It suggests that the wall was built with small undressed but roughly rectangular blocks (c. 20x10cm) of local basalt bonded together with earth or light mortar. The width of the wall was no larger than 30 cm. It was founded with one course of raw basalt blocks laid in a slightly larger and shallow trench (US 3003 and 3004.). Both the width of the foundation and its depth suggest a limited elevation and a ground storey building. Potsherds belonging to a unique vessel have been collected in connection with the foundation of the building in the filling of the foundation trench along the northern and western walls of the building (US 3013 and 3014). Those sherds can be interpreted as a deliberate foundation deposit.

No specific entrance or threshold was preserved, and it is most likely to have been located on the western and southern missing sides of the building.Due to its state of preservation, it is impossible to reconstruct the extent of the building inner space or its roofing. However it should have been one of a relatively small size, each side not exceeding 4.5-5 meters. Such a space (c. 20m²) could have easily been covered by a small dome, even with dry stones.

After the completion of the cleaning, the inner floor of the building was reached, made of earth packed ground (US 3017). It was covered by the collapse and/or ruin of the building containing modern plastic and metal artefacts as well as fragmented vessels along the northern wall (US 3008, 3015 ; fig. 86). This material is most likely dated after the abandonment of the building, when its ruins were squatted by farmers or shepherds. The floor of the building (US 3017) was totally virgin of material, indicating the building was cleaned and emptied before its abandonment.

Two deeper soundings were opened transversally to walls 3004 and 3005, reaching the bedrock (US 3019) under a level of yellowish clay (US 3018). It can be assume that this area was not occupied prior to the erection of the building or that its erection destroyed any evidence related to an earlier occupation.

Phase 2: A circular house (pl. F: plan 4-3)

After the ruin or dismantlement of the square building, a circular house was built on its northern fringe. The house was not entirely excavated but its diameter can be reconstructed as c. 3,20-3,5 m providing and inner space of c. 10 m².

The outer wall of the house (Wall 3006) is irregularly preserved on two courses of stones arranged in two cladding rows of small irregular blocks of field stones, some of which may have been retrieved from the ruin of the square building. The total width of Wall 3006 is 45 cm. It is possible that the wall was entirely built of dry stones but also that Wall 3006 supported an elevation made of earth and wood.

Fig. 78: View of the Qubba from the North-East (March 2018)

Fig. 79: View of the Qubba from the South-West(March 2018)

Fig. 80: View of the Qubba from the North (March 2018)

Fig. 81: View of the Qubba from the North-East . Threshing Floor in the Background (March 2018)

Fig. 82: View of the Qubba from the south after surface cleaning (March 2018)

Fig. 83: View of the Qubba from the North-West looking at W3006

Fig. 84: View of the Qubba from the East while excavting W3004.
Inner space of the circular house in the Foreground

Fig. 85: View of the corner formed by W 3004 and 3005 looking from the North-East

Fig. 86: Pottery (us 3015) from the ruins of the quadrangular building (US 3008)

No entrance or threshold was located inside the sounding, possibly due to the bad preservation of the building, or because it was located outside the excavation limits. Inside the house, the level occupation level (US 3002) is characterized by a very dense layer of packed earth with a whitish surface (figs. 87 and 88). Several potsherds and charcoals were found lying on the floor. A nearly complete jar (US 3011) was found on the floor abutting the wall of the house to the West (figs. 89 and 90).

At least three structures were identified inside the house (fig. 91): 1) a fire place consisting of two elongated blocks retaining a thick layer of ashes (US 3009), 2) a platform or wall made of several flat basalt blocks and which may have supported a central pillar supporting the roof (US 3010, 3016) and 3) a large basalt block integrated to the house, the function is yet unknown.

To the West the house was installed on the square building, Wall 3006 covering part of Wall 3004 and indicating the house was built after the square building was dismantled (fig. 92-94).

At an unknown date, the house was also dismantled to the south, where only a few stones of Wall 3006 remain. In this area, floor 3002 is not preserved and a darker layer was found (US 3007). In the southern limit of the sounding, several blocks of basalt were found, possibly organised in rows orientated SW-NE (US 3012, fig. 95). This structure was not investigated further, but some faunal remains were found above it.

Fig. 87: View of the interior of the house looking from the West

Fig. 88: The house looking from the East

Fig. 89: Pottery 3011 abutting W3006

Fig. 90: Pottery 3011 abutting W3006

Fig. 91: Inner structures of the house note the fire place to the right

Fig. 92: The circular house installed on the eastern wall of the quadrangular building. Note the slight inclination of wall 3006

Fig. 93: The circular house installed on the eastern wall of the quadrangular building looking south

Fig. 94: Walls 3004 and 3006 looking north.
Note the hole corresponding to the foundation trench of Wall 3004

Fig. 95: Unidentified stone structure in the south eastern corner of Area 3 (US 3012) looking west

Datation

Phase 1: The only valuable dating material for phase 1 are the potsherds (US 3013 and 3014) related to the erection of the building itself.

Phase 2 can be dated by charcoals samples collected inside the housing unit. Those samples will provide dates for the pottery associated with the charcoals and should be regarded as contemporary to the last period of use of the house.

Comparisons and interpretation

Phase 1: It is difficult to assess whether the quadrangular building is indeed the one described by Conti Rossini as a "Qubba". If so, it could well have been related to the cemetery, overlooking it from the south.

Phase 2: Circular houses are very common in Ethiopia from ancient time until today and not only in Tigray. The most widespread type, called tukul have a conical roof supported by a central pillar and sometime by poles outside (Braukâmper 2007). Several examples were identified and sometimes excavated further south dating from the medieval and modern period, notably in Fäqi Däbbis (Poissonnier et al. 2011) and in Mesḥala Māryām (Lotti et al. 2012).

The relatively small dimensions of the house in Area 3 and its lack of internal division would best fit to an individual lodging, for a poor family or rather for a single adult or a widow. Inner arrangements clearly indicate the domestic function of the building. It could have served for storing and cooking food and offered a rudimentary shelter for the night. It is not clear whether the nearby structure were related to the house, maybe as an outside kitchen or for outdoor activities such as butchering.

SURVEYS AND EPIGRAPHIC FINDINGS

Fieldwork conducted in Bilet in December 2018 also gave the opportunity to carry out prospections with two objectives:

1. to increase the corpus of Arabic inscriptions coming from Bilet by looking for stelae or fragments of stele in reuse. As a reminder, during the survey conducted in the area in March 2018, 18 stelae or fragments of stele were found in reuse among stone alignments along fields and paths, in addition to three stelae found *in situ*.
2. to identify unknown ancient Muslim settlements in Eastern Tigray that might have been linked to Bilet.

New epigraphic findings from Bilet

Epigraphic findings in the area of Bilet in December 2018 have not been as numerous as they were during the first prospections conducted in March 2018. Three fragments of stele, with few letters visible, have been found in the vicinity of Sector 1. They are numbered by order of finding in continuity with the stelae previously found (B0011 to B0021):

B 022 (fig. 96). Fragment of stele on basalt stone found in a heap of stones immediately to the North of Sector 1.

GPS coordinates: lat= 13.487720 lon= 39.554520

Dimensions: Height: 8-13 cm. Width: 3-9 cm. Thickness: 4-5 cm

Comments: this fragment comes from the same stele than B 11, a fragment found in March 2018, and partly completes the original artefact.

Fig. 96

B 023 (fig. 97). Fragment of stele on limestone found in reuse in stone aligment along the path located 30 m. south of Sector 1.

GPS coordinates: lat= 13.487233 lon= 39.554756

Dimensions: Height: 11-13 cm. Width: 16 cm. Thickness: 4-4.5 cm

Fig. 97

B 025 (fig. 98). Fragment of stele on limestone found in reuse in stone alignment about 200 m. South-East of Sector 1.

GPS coordinates: lat= 13.4866663 lon= 39.5558294

Dimensions: Height: 13 cm. Width: 8-9 cm. Thickness: 3 cm

Fig. 98

In addition to these three fragments, a complete albeit damaged stele on basalt stone has been found in situ during excavations, as part of a tomb surface marker (US 1052, tomb F1501) in the South-West area of Sector 1. This important finding gives for the first time evidence of the stele's installation in the tomb's building. According to the Arabic inscription, the stele dates back to the year 431 AH. (1039-1040 CE).

B 024 (figs. 99-100). Complete stele on basalt stone found during excavations of Sector 1.

GPS coordinates: lat= 13.4876161 lon= 39.5543607

Dimensions: Height: 41 cm. Width: 23-31 cm. Thickness: 14-19 cm

Fig. 99

Fig. 100

The 4 stelae, or fragments of stele, found in December 2018 in Bilet area were moved on 18 December 2018 to the storages of the Tourism and Culture Office of Tigray (Mekelle) under the supervision of Guesh Tsehaye (archaeological expert, Tourism and Culture Office of Tigray) and Yared Assefa (archaeological expert, ARCCH). On the same day, the 21 stelae, or fragments of stele, found in March 2018 in Bilet, preserved in the meantime in the precints of the Church of K^{w}iḥa Kirkos according to instructions of Goitom Besrat (head of Kwiḥa kebele), were also moved to the storages of the Tourism and Culture Office of Tigray. Wood shelves were previously crafted under the supervision of Guesh Tsehaye, with the financial support of the mission, to store the stones in the storages of the Tourism and Culture Office of Tigray (Mekelle) (figs. 101-102).

Fig.101

Fig.102

Surveys in the area of Arra (Adigudem district, Tigray)

Information suggesting the presence of archaeological remains of an ancient Muslim community in the village of Arra (30 km. south of Kwiḥa, district of Adigudem, Eastern Tigray, see fig. 103 : aerial view of Arra) have been provided to the team by Prof. Fesseha Abraham (Addis Ababa University) while attending the presentation of Bilet Mission during a workshop held on 29 November 2018 at the French Centre for Ethiopian Studies (CFEE, Addis, Ababa). Thanks to this valuable insight, prospections have been conducted in the village of Arra and in its area on two occasions.

On 12 December 2018, a first visit was paid to the village of Arra in attendance of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, imām of Adigudem; of Yāsin Aḥmad, ʿAbd al-Qādir Kuhlay and ʿAbd al-Qādir Ṣāliḥ Kahsay, representatives of Adigudem Muslim community; and finally, of Muḥammad ʿAlī Kahsay, substitute of the imām of Adigudem for Arra Muslim community. Team members present were the following: Guesh Tsehaye (Tourism and Culture Office of Tigray), Deresse Ayenachew (Debre Berhan University), Fesseha Berhe (PhD candidate, Mekelle University), Bertrand Hirsch and Julien Loiseau.

Fig.103: Aerial view of Arra, the Muslim cemetery in the middle

The team visited the ancient mosque of Arra, abandoned since the late 1980's and the building of a new and larger mosque (fig. 104). The prayer hall is currently divided in two rooms by a stone wall. The qibla wall and its miḥrāb can be seen from the top of the mosque as a result of the partial collapse of the roof (fig. 105). The place is still considered by the Muslim community as a revered one. According to the local shaykhs, ancient stones with Arabic inscriptions used to be stored in its precints and displayed during Muslim festivals. No stele was to be found during the visit.

The same day, Muḥammad ʿAlī Kahsay, substitute of the imām of Adigudem for Arra Muslim community, displayed to the team an Arabic funerary stele preserved in his home and supposed to come, according to his testimony, from Arra Muslim cemetery. According to the Arabic inscription, it dates back to the year 564 AH. (1169 CE). This artefact opens the serie of Arra funerary inscriptions (A):

Fig.104: Arra ancient mosque's front and entrance

Fig.105: The miḥrāb seen from the top of the mosque. GPS Coordinates 13°15'19"N 39°34'43"E

A 001 (fig. 106). Complete stele on limestone, supposed to come from Arra Muslim cemetery, currently preserved in Muḥammad ʿAlī Kahsay's home.

Dimensions: Height: 37 cm. Width: 23-29 cm. Thickness: 9-4 cm

Fig.106

On 16 December 2018, a second visit was paid to the village of Arra and its neighborhood in attendance of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, imām of Adigudem and Muḥammad ʿAlī Kahsay, his substitute for Arra Muslim community. Team members present were the following: Guesh Tsehaye (Tourism and Culture Office of Tigray), Yared Assefa (ARCCH), Deresse Ayenachew (Debre Berhan University), Hiluf Berhe (Mekelle University, department of Archaeology), Fesseha Berhe (PhD candidate, Mekelle University), Simon Dorso, Yves Gleize, David Ollivier and Julien Loiseau.

A second visit was paid to the ancient mosque of Arra. No stele was to be found, once again, in its vicinity, but a fragment of stele was brought to the mosque by Muḥammad ʿAlī Kahsay

A 002 (fig. 107). Fragment of stele on limestone, supposed to come from Arra Muslim cemetery, currently preserved in Muḥammad ʿAlī Kahsay's home. Text is partly erased

Dimensions: Height: 16 cm. Width: 27 cm. Thickness: 8 cm

The visit of the present Muslim cemetery of Arra has proved to be most informative. Located east of Arra, beneath the village and along a wadi, the cemetery takes place in the same kind of environment than did Bilet cemetery (figs. 108a-b, 109). Recent tombs display the same kind of stone surface marker than did the tombs excavated in Bilet. In absence of any evidence, beside the stelae A 01 and A 02 that are supposed to come from the same place, no datation of the cemetery can be provided. However, one can hypothesize than the ancient Muslim cemetery of Arra has been used up to now, with or without interruption, by the local Muslim community. Indeed, the way in which Muslim tomb's surface markers have been built in Eastern Tigray since the 11th century seems to have been vernacular.

Fig.107

Fig.108a: Arra Muslim cemetery along the wadi

Fig.108b: Muslim tombs' current surface markers

Fig.109: Meida Zelegat cemetery seen from the cliff

Meida Zelegat

The same day, following the indications of Muḥammad ʿAlī Kahsay and in attendance of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, the team surveyed an ancient Muslim cemetery in a place called Meida Zelegat, located three km. north-east of Arra, at the foot of a cliff, in the vicinity of a railway construction site. Coordinates: 13.26.614 latitude, 39.60.677 longitude (figs. 109, 110-111).

Fig.110

Fig.111

The survey of Meida Zelegat cemetery resulted in the finding of 8 Arabic funerary stelae, or fragments of stele (fig. 112). They open the serie of Meida Zelegat funerary inscriptions (MZ). According to its Arabic inscription, one of these stelae (MZ 07) dates back to the year 657 H. (1259 CE), whereas the latest stelae found in Bilet date back to the middle of the 12th century. After study in situ, the 8 stelae have been moved to the mosque of Adigudem under the supervision of Guesh Tsehaye (Tourism and Culture Office of Tigray) and Yared Assefa (ARCCH), following instructions of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir.

Fig.112

MZ 001 (fig. 113). Fragment of stele on basalt stone.

Dimensions: Height: 16 cm. Width: 16 cm. Thickness: 3 cm

Fig.113

MZ 002 (fig. 114). Fragment of stele on limestone.

Dimensions: Height: 10 cm. Width: 10 cm. Thickness: 1 cm

Fig.114

MZ 003 (fig. 115). Fragment of stele on limestone.

Dimensions: Height: 4 cm. Width: 3,5 cm. Thickness: 0,5 cm

Fig.115

MZ 004 (fig. 116). Complete stele on basalt stone.

Dimensions: Height: 34 cm. Width: 18 cm. Thickness: 5,5 cm

Fig.116

MZ 005 (fig. 117). Complete stele on basalt stone adorned with Solomon's seals.

Dimensions: Height: 45 cm. Width: 17-29 cm. Thickness: 6 cm

Fig.117

MZ 006 (fig. 118). Complete stele on basalt stone.

Dimensions: Height: 42,5 cm. Width: 11-26,5 cm. Thickness: 5,5 cm

Fig.118

MZ 007 (fig. 119). Complete stele on basalt stone.

Dimensions: Height: 24 cm. Width: 22 cm. Thickness: 2,5 cm

Fig.119

MZ 008 (fig. 120). Fragment of stele on basalt stone.

Dimensions: Height: 11,5 cm. Width: 12-15,5 cm. Thickness: 2 cm

Fig.120

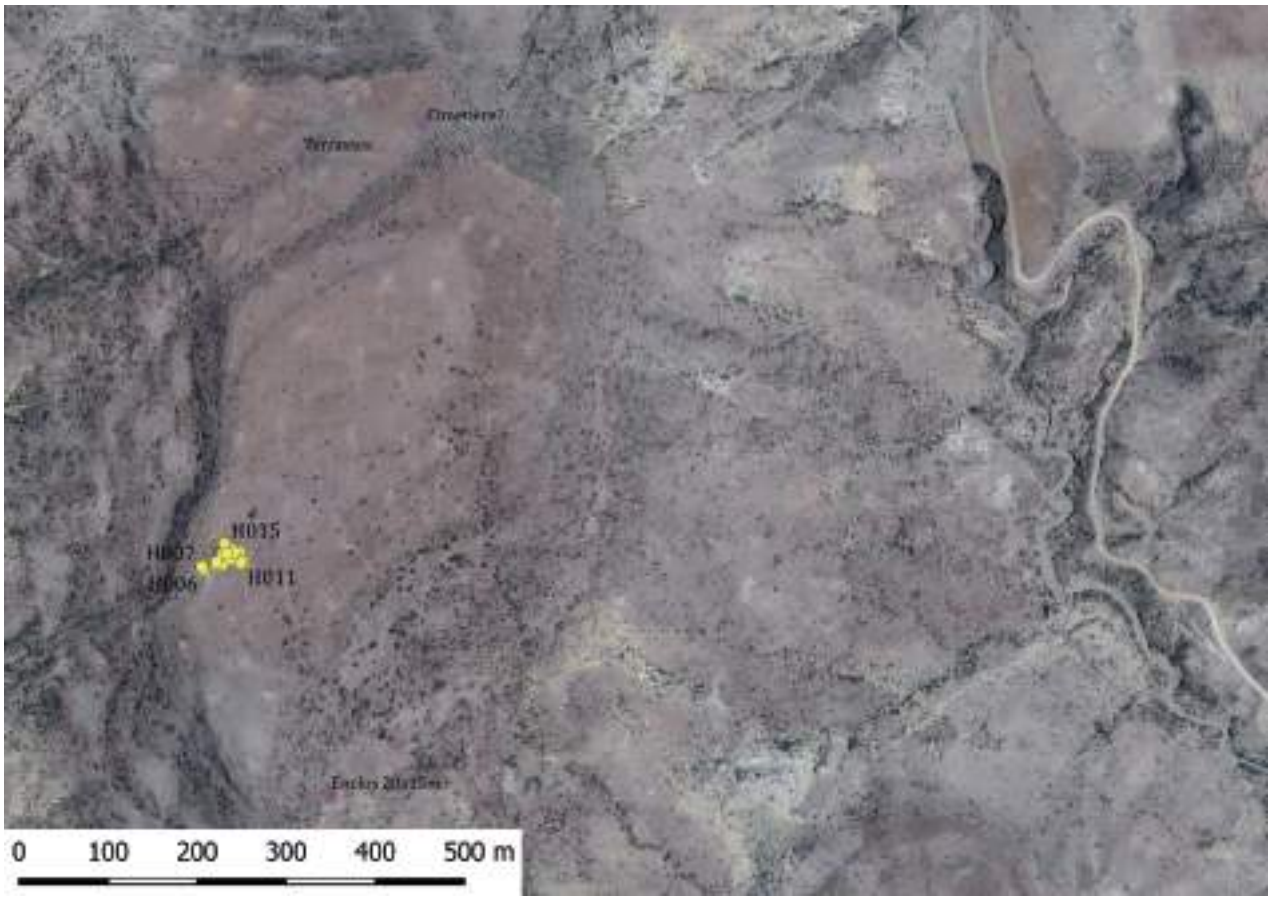


Fig.121

Fig.122: Ḥabera Muslim cemetery

Fig.123: The cemetery, with the village of Arra in the background

Ḥabera

The same day, 16 December 2018, following the indications of Muḥammad ʿAlī Kahsay and in attendance of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, the team surveyed another ancient Muslim cemetery in a place called Ḥabera, located on a plateau two km. north-east of Arra, one km. south-west of Meida Zelegat. Coordinates: 13.25.840 latitude, 39.60.073 longitude (fig. 121, 122 and 123).

The survey of Ḥabera cemetery resulted in the finding of 17 Arabic funerary stelae, or fragments of stele (fig. 124). They open the serie of Ḥabera funerary inscriptions (Ḥ). After study, and following instructions of Shaykh ʿAbd al-Raḥman ʿAbd al-Qādir, the stelae remain in situ.

Fig.124

Ḥ 001 (fig. 125). Complete stele on basalt stone.

Dimensions: Height: 40 cm. Width: 29 cm. Thickness: 10 cm

Fig.125

Ḥ 002 (fig. 126). Complete stele on basalt stone.

Dimensions: Height: 53 cm. Width: 32 cm. Thickness: 8 cm

Fig.126

Ḥ 003 (fig. 127). Complete stele on basalt stone.

Dimensions: Height: 46 cm. Width: 22 cm. Thickness: 11 cm

Fig.127

Ḥ 004 (fig. 128). Fragment of stele on limestone.

Dimensions: Height: 7-20 cm. Width: 28,5 cm. Thickness: 5 cm

Fig.128

Ḥ 005 (fig. 129). Complete stele on basalt stone.

Dimensions: Height: 33 cm. Width: 21,5 cm. Thickness: 7 cm

Fig.129

Ḥ 006 (fig. 130). Complete stele on basalt stone.

Dimensions: Height: 45 cm. Width: 37 cm. Thickness: 5,5 cm

Fig.130

Ḥ 007 (fig. 131). Fragment of stele on limestone.

Dimensions: Width: 3-14 cm

Fig.131

Ḥ 008 (fig. 132). Complete stele on basalt stone.

Dimensions: Height: 38,5 cm. Width: 12-23-35 cm.

Fig.132

Ḥ 009 (fig. 133). Fragment of stele on limestone.

Dimensions: Height: 32,5 cm. Width: 10-20-27 cm. Thickness: 5 cm

Fig.133

Ḥ 010 (fig. 134). Fragment of stele on limestone partly buried.

Dimensions: Height (visible): 25 cm. Width: 26,5 cm. Thickness: 4,5 cm

Fig.134

Ḥ 011 (fig. 135). Fragment of stele on limestone.

Dimensions: Height: 21 cm. Width: 15,5 cm. Thickness: 4 cm

Fig.135

Ḥ 012 (fig. 136). Fragment of stele on limestone partly buried.

Dimensions: Height (visible): 26 cm. Width (visible): 8,5 cm. Thickness: 4 cm

Fig.136

Ḥ 013 (fig. 137). Complete stele on basalt stone partly buried.

Dimensions: Height (visible): 30 cm. Width (visible): 19 cm. Thickness (visible): 3

Fig.137

Ḥ 014 (fig. 138). Fragment of stele on limestone.

Dimensions: Height: 12 cm. Width: 16 cm. Thickness: 4,5 cm

Fig.138

Ḥ 015 (fig. 139). Fragment of stele on limestone.

Dimensions: Height: 8 cm. Width: 19,5 cm. Thickness: 7 cm

Fig.139

Ḥ 016 (fig. 140). Complete stele on basalt stone partly buried.

Dimensions: Height: 39 cm. Width: 43 cm. Thickness: 3

Fig.140

Ḥ 017 (fig. 141). Fragment of stele on basalt stone.

Dimensions: Height: 29 cm. Width: 24 cm. Thickness: 2

Fig.141

The three ancient Muslim cemeteries of Arra, Meida Zelegat and Ḥabera, were unknown to the scientific community prior to our investigations. Their Arabic funerary inscriptions (27 items documented to date) attest the existence of several Muslim communities in the same neighborhood, at least during the 12th-13th centuries (fig. 142). However, the settlements related to these three cemeteries are still to be identified, with the probable exception of Arra if one assume that the modern village is located on the same place than the medieval settlement (fig. 143). Be that as it may be, the presence of several Muslim communities in this area of Eastern Tigray has most likely to be related to the North-South route leading from the Red Sea shore to the heart of the Zagwé Christian kingdom. Note that the archaeological site of Bilet was located about 30 km North on the same route. Their presence in the neighborhood of Arra has also to do with the vicinity of Nazret Maryam, a medieval site associated to the residency of the Ethiopian church metropolites at the time of the Zagwé kingdom.

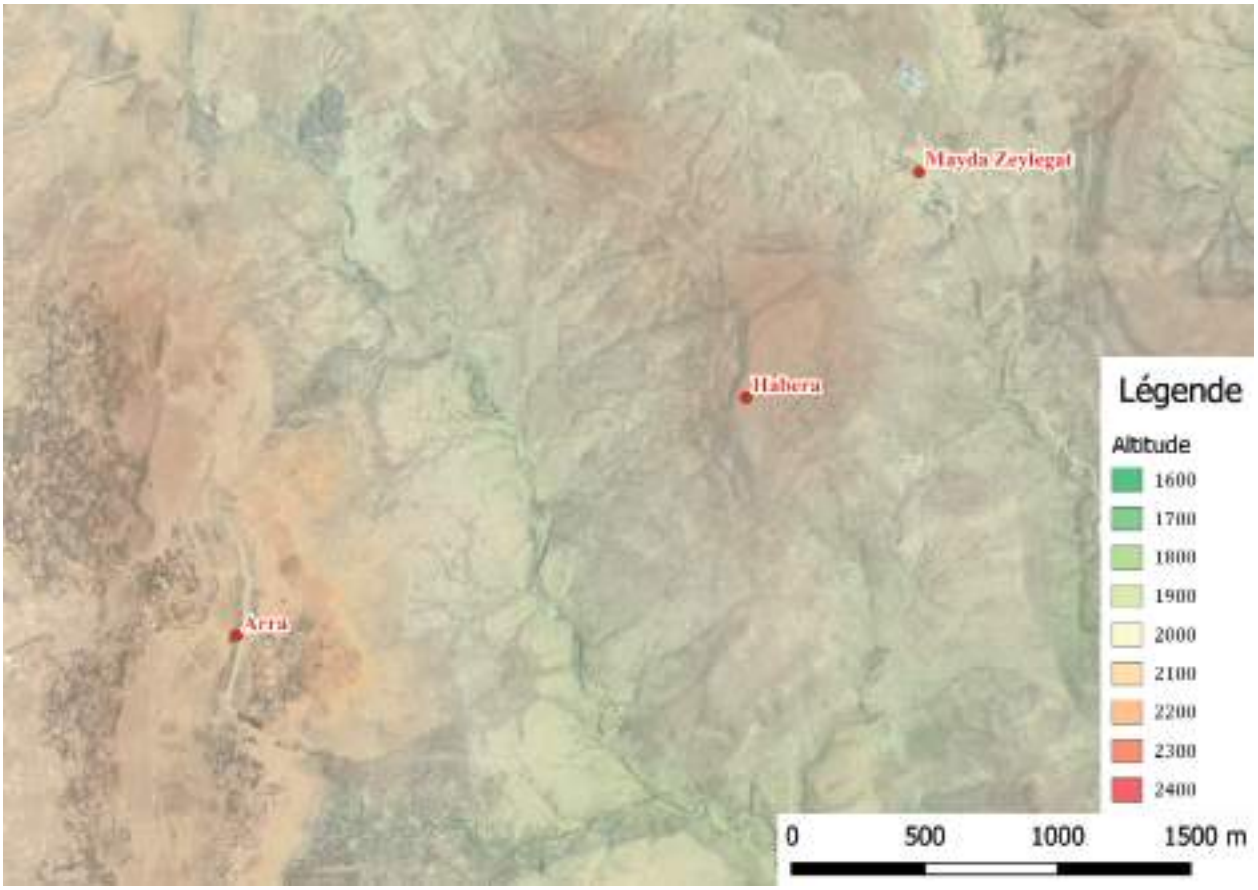


Fig.142

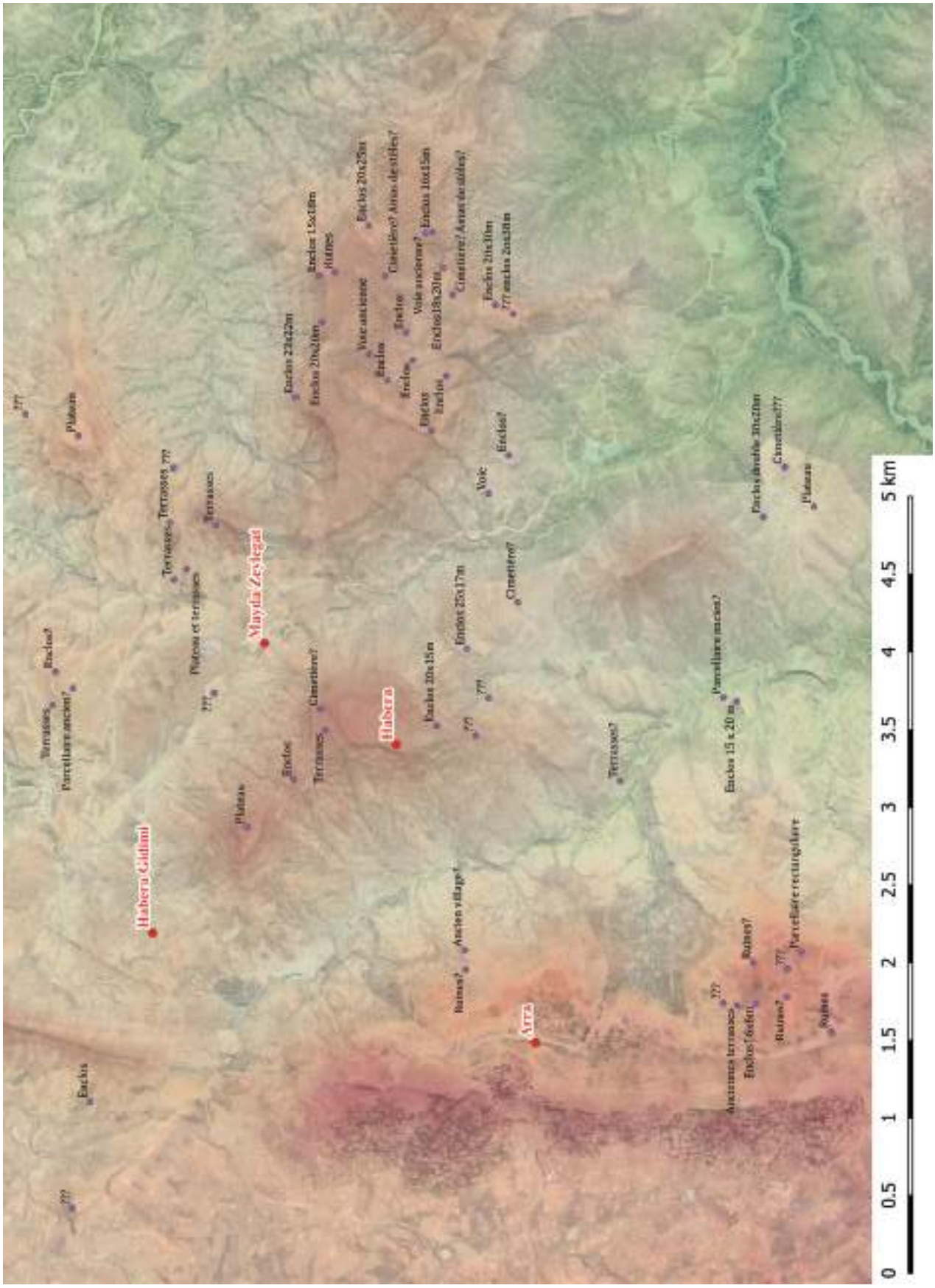

Habera Gidimi
Mayda Zeylegat
Habera
Arra
0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 km

Fig.143

GENERAL CONCLUSIONS

The first campaign of the Ethiopian-French mission on Bilet medieval cemetery and its surroundings took place from the 1st to the 20th December 2018. It confirms several hypothesis raised by the survey of March 2018 and opens promising avenues of research.

The Muslim cemetery from which comes the largest corpus of medieval Arabic inscriptions known for Ethiopia (47, including 25 stelae or fragments of stele found by the mission in 2018) has been definitively identified. Soundings opened during the campaign in Area 1 made possible the discovery and excavation of 8 funerary substructures, one of them adorned with a complete funerary stelae, along with a wall that might have enclosed some graves. However, only one burial has been discovered so far, leading to the conclusion that most of graves were at some point plundered. Excavations and soundings in Area 1 have brought important data on funerary architecture of the Muslim community of Bilet and a preliminary assessment of the cemetery's extension.

Excavations conducted in Areas 2 & 3 have produced provisional results only, waiting for 14C datation of samples and further investigations. In Area 2, a monumental wall has been partly exposed, along with postdating structures. No interpretation of these remains is possible for now. But these first discoveries point out a long and complex occupation of the tell of Kʷiḥa Kirkos, whose chronology is awaiting further investigations. In Area 3, clearance and excavation of the ruined structure can confirm for now neither the building form nor its functions. But it makes possible to identify a housing unit postdating the dismantled building and waiting for 14C datation.

Finally, survey of the area, and of previously unknown ancient Muslim cemeteries located about 30 km south, allows a better understanding of Bilet's medieval environment and opens promising avenues of research by providing comparative data about funerary architecture and new corpus of Arabic inscriptions.

RESEARCH PROSPECTS AND FUTURE CAMPAIGNS

The results achieved by the first campaign of the Ethiopian-French mission on Bilet medieval cemetery and its surroundings are promising and call for further investigations.

The extension of Bilet Muslim cemetery has still to be assessed by new soundings beyond Area 1. The question remains to know if most of its graves have been plundered, and when, or if some of them have been left undisturbed, opening the possibility to bring additional funerary and anthropological data.
The occupation of K^{w}iḥa Kirkos' tell and its chronology have still to be assessed by the full excavation of the monumental wall briefly exposed during the campaign, and by several new soundings in the area. The question remains to know if the tell was or not settled and inhabited at the same time that the Muslim cemetery was in use.

The discovery and survey of three previously unknown Muslim cemeteries (in Arra, Meida Zelgat and Ḥabera) call for a systematic survey of southern Enderta in order to place Bilet in its proper medieval context.

For all these reasons, the Ethiopian-French on Bilet plans to submit to the ARCCH two different projects for the coming year: a survey mission in southern Enderta led by Amelie Chekroun (CNRS) and a second campaign on Bilet cemetery and its surroundings led by Julien Loiseau (Aix-Marseille University).

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APPENDIXES

APPENDIX 1: *Listing US (*Area 1*)*

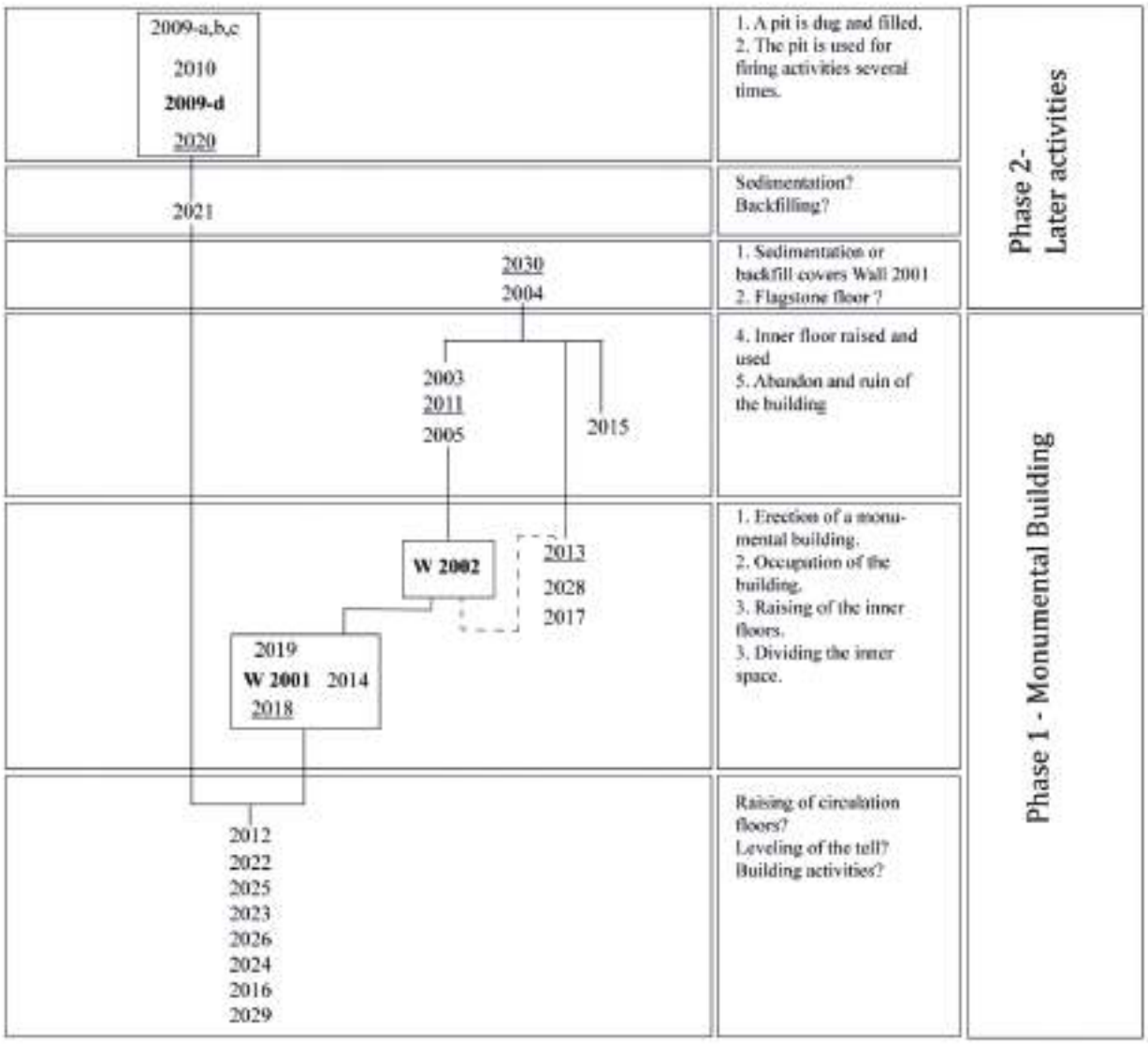
N° US	**N° Fait**	**Nature de l'US**
1001		couche de surface -terre agricole labourée
1002		couche compacte de cailloutis ocre/jaune
1003		niveau de blocs de pierres en limite nord du sondage 1
1004	F1005	comblement d'une tranchée moderne
1005	F1005	creusement d'une perturbation moderne
1006	F1068	plateforme rectangulaire orientée E/O
1007		niveau blanc crayeux contre l'us 1006
1008	F1008	creusement de la sépulture
1009	F1008	squelette en dépôt primaire
1010	F1008	comblement de la sépulture
1011	F1008	dalles de couverture de la sépulture
1012		encaissant de la sépulture F1008
1013	F1068	structure semi-circulaire composée de gros blocs de basalte
1014	F1051	stèle B24 à l'extrémité orientale de la structure
1015		substrat rocheux fracturé en petites dallettes
1016	F1008	dépôt secondaire d'ossements dans la sépulture
1017	F1017	creusement de la sépulture
1018	F1017	squelette en dépôt primaire (absent)
1019	F1017	comblement de la sépulture
1020	F1017	dalles de couverture de la sépulture
1021	F1017	parois latérales de la structure rectangulaires
1022	F1035	blocs de surface dans une perturbation moderne
1023	F1017	comblement inférieur de la sépulture
1024	F1035	comblement blanc de la perturbation moderne
1025		dalles à plat au fond de la fosse de pillage de F1068

1026		remblai sous 1003 à l'est du mur F1028
1027	F1028	creusement de la tranchée de fondation du mur
1028	F1028	fondation et élévation du mur
1029	F1028	comblement de la tranchée us 1027
1030		céramique entre F1017 et F1028
1031	F1060	assise de blocs quadrangulaires (à l'angle SO du sondage 1)
1032		niveau argileux homogène sous us 1002
1033		niveau de marne blanc crayeux
1034		lambeau de couche de pierres conservé dans l'angle sud-est du sondage 1
1035	F1035	creusement d'une perturbation moderne dans la partie sud
1036	F1035	comblement argileux sur les blocs us 1024
1037	F1035	comblement hétérogène argileux blanc
1038		massif de blocs et dallettes sur blocs us 1013
1039		alignement de blocs (vestige d'une structure funéraire?)
1040		blocs à l'est de us 1039
1041		remblai conre la courbe du mur F1028 (au sud de 1026)
1042	F1051	céramique à l'angle Sud-Est de F1051
1043	F1051	céramique à l'angle Sud-Ouest de F1051
1044		céramique à l'est de F1017
1045		argile brune compacte
1046	F1046	creusement (sous mur 1028)
1047	F1046	comblement
1048	F1051	céramique à l'est de la stèle
1049	F1051	céramique au sud de F1051
1050		«niveau de circulation» avec céramiques au nord de F1054
1051	F1051	creusement de la structure
1052	F1051	substructure rectangulaire
1053	F1051	couronne de blocs en basalte

1054	F1054	creusement de la structure
1055	F1054	substructure rectangulaire
1056		couche de dallettes à plat entre F1051 et F1054
1057		blocs de basalte à l'ouest de F1054
1058	F1058	creusement de la structure
1059	F1058	substructure rectangulaire
1060	F1060	creusement de la structure
1061		couche de démolition et d'effondrement au nord du sondage
1062		niveau marne blanchâtre au sud de F1051
1063	F1051	vase en céramique à l'angle sud-est de F1051
1064	F1051	sédiment dans le vase 1063
1065		substructure rectangulaire ? à l'angle sud-ouest du sondage
1066		dalles de substrat dans l'angle sud-ouest du sondage
1067		niveau recouvrant F1060 (présence de quelques tessons)
1068	F1068	creusement originel (non visible)
1069	F1068	comblement de la fosse de pillage
1070	F1068?	blocs de basalte hors emprise
1071	F1068	creusment de la fosse de pillage
1072		substrat sous le banc marneux fracturé us 1015
1073	F1068	comblement originel de la structure
1074		couche argilo-organique sous us 1050
1075		niveau de circulation avec de rares de dalles à plat
1076	F1051	couche sédimentaire devant la stèle avec quelques tessons
1077	F1054	couche de blocs de pierres pris dans un sédiment argilieux au sommet de la substructure
1078	F1054	couche indurée sous us 1077
1079	F1080	niveau dans le comblement de F1080 avec quelques tessons
1080	F1080	creusement
1081	F1080	substructure rectangulaire

1082		concentration de mobilier à l'est de F1080
1083	F1051	comblement entre la couronne de blocs et la substructure sur un niveau de dallettes
1084		nettoyage à l'ouest de F1054 (céramique et ossements)
1085		ensemble de pierres plates le long du mur F1028 (partie sud): dallage?
1086	F1054	niveau sous la substructure de F1054, présence de tessons de céramique
1087		alignement de blocs à l'est de F1008 (vestige d'une structure funéraire?)
1088		alignement de blocs à l'est de F1008 (vestige d'une structure funéraire?)
1089		mandibule d'ovin-caprin sous les blocs effondrés de F1017
1090	F1051	creusement de la fosse de pillage
1091	F1051	comblement de la fosse de pillage
1092		dallage sous us 1056
1093		remblai du démantellement du bedrock
1094	F1017	creusement de la fosse de pillage
1095		niveau de dallettes contre la paroi sud de F1080
1096	F1080	creusement de la fosse de pillage
1097	F1054	creusement de la fosse de pillage
1098		creusement de la perturbation au nord-ouest
1099		Céramique du point topgraphique 105

APPENDIX 2: *Harris Matrix (*Area 2*)*

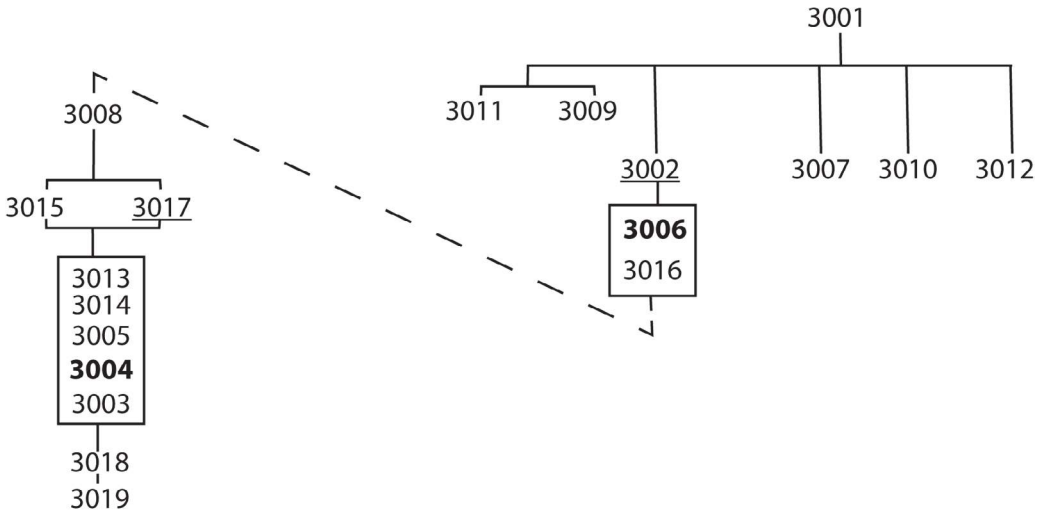


APPENDIX 3: *Listing US (*Area 2*)*

N° US	N° Fait	Nature de l'US	Notes
2001	2001	Mur orienté Est-Ouest, pendage Est	
2002		Mur orienté Nord-Sud	
2003		Céramique en place sur 2011	
2004		Passe arbitraire, décapage de surface à l'ouest de 2002	
2005		Niveau blanchâtre induré au nord de 2001	
2006		Décapage au sud de 2001	
2007		Décapage au nord de 2001	
2008	2001	Ressaut du mur 2001 au sud (forme un angle)	
2009	2009	Comblement fosse 2020 (distinguer 3 niveaux)	Prélèvements pour datations C14
2010	2009	Niveau de pierres sur 2021. Aménagement semi-circulaire en surface de 2009	
2011		Niveau de pierres au nord du sondage et contre 2001, à l'est contre 2002	
2012		Niveau blanc induré sous 2021 au sud de 2001, occupation	
2013		Niveau de dallettes sous 2005 au nord de 2001	
2014	2001	Couche de mortier en limite nord-est du sondage vers le nord	
2015		Effondrement e, limite nord-est du sondage	
2016		Niveau d'argile brun sombre accueillant fondation de 2001	
2017	2009	Aménagement de dallettes contre 2001 au sud en relation avec 2009	
2018	2001	Tranchée de fondation du mur 2001 – creusement	
2019	2001	Comblement de la tranchée de fondation du mur 2001	

2020	2009	Creusement de la fosse comblé par 2009	
2021		Niveau gris, remblai, creusé par 2020	
2022		Niveau blanc crayeux c. 15 cm d'épaisseur sous 2012 – occupation	
2023		Niveau blanc crayeux c. 5 cm d'épaisseur sous 2025 – occupation	
2024		Niveau blanc crayeux c. 3 cm d'épaisseur sous 2026 – occupation	Charbon, cendres, obsidienne
2025		Niveau gris limoneux, homogène (remblai sous 2022)	
2026		Niveau gris limoneux, homogène (remblai sous 2023)	
2027		Niveau blanc crayeux induré contenant du mortier sous 2028	
2028		Niveau limoneux gris/brun sous 2023 et sur 2027	
2029		Niveau limoneux gris sous 2024 sur 2016	
2030		Reliquat de dallage sur 2004?	

APPENDIX 4: *Harris Matrix (*Area 3*)*



APPENDIX 5: *Listing US (*Area 3*)*

N° US	N° Fait	Nature de l'US	Notes
3001		Couche de surface – terre agricole	
3002		Niveau blanc et induré à l'est de 3006 (espace intérieur)	Sacs céram. 301, 302 er 303 (voir plan)
3003	3004	Creusement tranchée de fondation	
3004	3004	Blocs de fondation débordante	
3005	3004	Mur nord du bâtiment quadrangulaire	
3006	3006	Aménagement semi-circulaire conservé sur 2 assises	
3007		Niveau indéterminé au sud-est du secteur	
3008	3008	Ruine et effondrement du bâtiment 3004	Mobilier important toute période confondue
3009		Foyer	
3010		Aménagement de blocs quadrangulaires	
3011		Céramique brisée en place contre 3006 et sur 3002	Prél. Charbon n° 300 002. Céram. à restaurer.
3012		Concentration de blocs de blocs de basalte en limite SE du sondage	

3013	3004	Céramique dans 3004 – voir 3014	Céram. à restaurer avec 3014
3014	3004	Céramique dans 3004 – voir 3013	Céram. à restaurer avec 3013
3015		Céramique contre mur NS du bât., à l'intérieur sous 3008	Prél. Charbon n° 300 001. Céram. à restaurer
3016	3006	Aménagement de blocs de basalte en limite E du Sond., mur intérieur de la structure circulaire	
3017		Niveau induré sous la ruine du bât. 3004, vierge de blocs	
3018		Niveau d'argile jaune-ocre , vierge sur 3019	
3019		Sol géologique - Bedrock	

APPENDIX 6: *ARRCH Research Permit*

የኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ
የባህልና ቱሪዝም ሚኒስቴር
የቅርስ ጥናትና ጥበቃ ባለስልጣን
Federal Democratic Republic of Ethiopia
Ministry of Culture & Tourism
Authority of Research & Conservation of Cultural Heritage

ቁጥር Ref.No. 08/RC-8-2/007
ቀን Date: 18 SEP 2018

Dr. Julien Loiseau
Aix-Marseille University
Email:amelie.CHEKROUN@univ-amu.fr
France

Subject: 2018 Field Research Permit.

Dear Dr. Julien Loiseau

The Cultural Heritage Directorate of the Authority for Research and Conservation of Cultural Heritage has received your application to conduct field research on Archaeological Excavation at Bilet's Medieval Cemetery and its surroundings, Tigray regional state, Ethiopia.

The Directorate has carefully evaluated your permit application and approved your request to conduct field work from 1st December to 20th of December 2018.

We kindly inform you that the newly approved Cultural Heritage Research Permit Directive no.14/2006 will be effective as of last field season (2009 E.C.). We, therefore, would like to inform you that Archaeological Excavation at Bilet's Medieval Cemetery and its surroundings is active for one year with annual renewal.

We remain cooperative for the success of your project planned in 2018 field season.

With regards,

Demerew Dagne

Cultural Heritage Research Directorate Director

CC:

Director-General, ARCCH

ስ/ቁ +251 11 154 00 44
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ኢ-ሜይል / E-mail / :- crcch@ethionet.et
ዌብ ሳይት / web site: www.arcch.gov.et

መልስ በሚጽፉልን ጊዜ እባክዎን የሸን ደብዳቤ ቁጥር ይጥቀሱ
Please Quote Our Ref. No. When Replying

APPENDIX 7: *ARRCH Permit for Samples Exportation*

በኢትዮጵያ ፌደራላዊ ዲሞክራሲያዊ ሪፐብሊክ
በባህልና ቱሪዝም ሚኒስቴር
የቅርስ ጥናትና ጥበቃ ባለስልጣን
Federal Democratic Republic of Ethiopia
Ministry of Culture & Tourism
Authority of Research & Conservation of
Cultural Heritage

ቁጥር Ref.No. 11/64-8.3/036
ቀን Date: 12 ታህሳስ 2011

በኢትዮጵያቅርስናጥናምርምርክባለስልጣን
የኢዲስአበባኤርፖርትቅርንጫፍ ጽ/ቤት
ለመንገደኞችማዝየሥራሂደት
አዲስአበባ

ጉዳዩ፡- **የናሙናፈቃድንይመለከታል**

በመስሪያ ቤታችን ፈቃድ ሰጭነት ጥናትና ምርምራቸውን የሚያካሂዱት Dr. Julien Louseaus በ ትግራይ ክልላዊ መንግስት በዜሓ ክፍሰ ከተማ ብሰት ተብሎ በሚጠራ መካነ-ቅርስ አካባቢ የአርኪኦሎጂካል ጥናት እና ምርምር እያካሄዱ ይገኛሉ፡፡በመሆኑም በዚህ አመት በመስክ ስራ ያሰባሰቧቸዉን የእንስሳት አጥንት ስባሪ ፣ የሰው አጥንት ስባሪ ፣ ሴድመንት እና የክሰል ናሙና እንዲሁም የሸክላ ስባሪ ናሙና ሰተጨማሪ ላይንሳዊ ምርምር ወደ ፈረንሳይ አገር ለመውሰድ ጠይቀዋል፡፡

በዚህም መሠረት የተፈቀደው ናሙና በእንድ መካከለኛ ካርቶን የታሸገና የቅርስ ጥናትና ጥበቃ ባለስልጣን ማህተም የታተመበት መሆኑን እያረጋገጥን ናሙናው በDr. Simon Dorso በኩል ወደ ፈረናሳይ አገር ማውጣት እንዲችሉ የተለመደ ትብብራችሁን እንድታደርጉሳቸው እንጠይቃለን፡፡

ከሰላምታጋር

እንዲያውቁት

- ለዋናው ዳይሬክተር ጽ/ቤት
  በቅርስ ጥናትና ጥበቃ ባለስልጣን

ግልባጭ(CC)

- Dr. Simon Dorso

ስልክ Tel.No. +251 11 154 00 44 / +251 11 154 00 54
ፋክስ / Fax / +251 11 154 00 33
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ኢ-ሜይል / E-mail / :- ercch@ethionet.et
ዌብ ሳይት / web site: www.arcch.gov.et

ሥልስ በሚጽፉልን ጊዜ እባክሥን የኛን ደብዳቤ ቁጥር ይጥቀሱ
Please Quote Our Ref. No. When Replying

APPENDIX 8: *Mekelle Office Introductory Letter*

ትግራይ፣ መቦቆል ስልጣኔ
Tigrai: Cradle of Civilization

ክልላዊ መንግስት ትግራይ ቢሮ ባህልን ቱሪዝምን
National Regional state of Tigrai
Culture and Tourism Bureau

ቁፅሪ/Ref.No 759/55

ዕለት/Date 20/03/11

ናብ ምምሕዳር ክ/ከ ማይጨው

ክኢሉ

ጉዳይ፡- ንተግራመርቲ ትሕብብር ስራሕ ምግባር ይምልከት

ብDr.Julien Loiseau ዝምራሕ ጉጅለ ፅንዓትን ምርምርን 'Archaeological Excavation at Bilet's Medieval Cemeetery and its suroundings' ብዝብል ርእሲ ኣብዚ ዓመት ካብ ታሕሳስ 01/2018 ክሳብ ታሕሳስ 20/2018 ዓ/ም/ፈ ኣብ ወረዳ እንድርታ ቢሊት ተባሂሉ ኣብ ዝስመ ቦታን ከባቢኡን ስራሕቲ ፅንዓትን ምርምርን ኣሰቲ ኣርኪኦሎጅን ዳህሳስን ክኸይዱ እየም። ናይቲ ጉጅለ ፅንዓትን ምርምርን አባላት:-

No.	Name
1	Dr. Julien Loiseau
2	Dr.Yves Gleize
3	Dr.Bertrand Hirsch
4	Dr.Amelie Chekroun
5	Dr. Helen Reveillas
6	Dr. Camille Vanhove
7	Dr. Siomon Dorso
8	Ato Yohannes G/bslassie
9	Ato David Oliver
10	Ato Yared Assefa ARCCH

ዝተባህሉ ኽይናም ኣብ ሳዕሲ ዝተጠቕሰ ግዜን ቦታን ብናይ ቢሮና በዓል ሞያ ኣርኪኦሎጂ ዝኾኑ ኣይተ ኦፅሽ ፀሃየ ሙተሓባበርነት ይንቃሳቐሱ ስለ ዘለው ዝምለከተኩም ኣካላት ምትሕብባር ክትገብርሉም እንዳተሓሳሰብና ንዝግበረሉም ምትሕብባር ኣቀዲምና ነመስግን።

ምስ ሰላምታ!

ዘነው ሓለፍነ ዝርዝሩን
ምክትል ሓላፊ ቢሮ

ቅዳሕ

- ንDr. Julien Loiseau
- ንምምሕዳር ዞባ ማይጨው መሮሉ
- ንምምሕዳር ጣብያ_____
- ንቤትፅሕፈት ባህልን ቱሪዝምን ክ/ከ/ማይጨው
- ንኣይተ ኦፅሽ ፀሃየ መሮሉ

ኣድራሻ መቐለ ትግራይ ኢትዮጵያ
Address: Mekelle, Tigrai, Ethiopia
ስልኪ
Tel: 0344409360
0344402028
0344414990
ፋክስ
Fax: 034 440 1032
ፒ.ኦ.ቦክስ
P.O.Box: 124
ድሕረ-ገፅ
Website: www.tigraitourism.com
ኢ-መይል
E-mail: tigrai.tourism@ethionet.et

APPENDIX 9: *Mekelle Office Permit for Export*

ትግራይ፣ የሥልጣኔ መነሻ
Tigrai: Cradle of Civilization

በትግራይ ብ/ክ/መንግስት የባህልና ቱሪዝም ቢሮ
National Regional state of Tigrai
Culture and Tourism Bureau

ቁጥር/Ref.No. 941/37

ቀን/Date 10/04/11

ለ ቅርስ ጥናትና ጥበቃ ባለ ስልጣን

የቅርስ ማሰባሰብ ፣ ማደራጀትና ላቦራቶሪ ኣገልግሎት ዳሬክቶሬት

<u>አዲስ ኣበባ ፣ ኢትዮጵያ</u>

ጉዳዩ፡ - <u>የቻርኮል ፣ የአፈር(sediment) ፣ የእንስሳት እና የሰው አጥንት ናሙናዎች ወደ ውጭ ኣገር ማስወጣት እንዲሁም የሸክላ ፣ ሼል፣የብረት የእንስሳ እና የሰውአጥንት ወደ ቅርስ ጥናት እና ጥበቃ ባስልጣን ላበራቶሪ ለተጨማሪ ጥናት የሚውሉ እርቲፋክቶች ይመለከታል</u>

በርእሰ ጉዳዩ ለመጥቀስ እንደ ተሞክረ በDr.Julien Loiseau የሚመራ የጥናትና ምርምር በድን 'Archaeological Excavation at Bilet's Medieval Cemeetery and its suroundings' በሚል ርእስ በዚህ አመት ከ ታሕሳስ 01/2018 እስከ ታሕሳስ 20/2018 እ.እ.አ በኩሓ ክፍለ ከተማ ብለት ተብሎ በሚጠራ ቦታ እና አከባቢ የአርኪእዮሎጂ ጥናትና ምርምር ተደርጎዋል።

ስለ ሀገም ላይ የተጠቀሰ የጥናትና ምርምር ቡድን ለአውዳሚ ትንተናዊ ጥናት (Destructive analysis) የሚውሉ (6)ባግ የእንስሳ ኣጥንት፣ (5) ባግ የሰውአጥንት ፣(1)ባግ አፈር ሳምፕል፣(10)ባግ የከሰል ሳምፕልስ ከ ብለት እንዲሁም ለቅርስጥናትና ጥበቃ ላበራቶሪ ክፍል ለተጨማሪ ጥናት የሚካሄድባቸው (82) ባግ የጥንት ሸክላ (1)ባግ ሼል (48) ባግ የሰውአጥንት(2) ባግ የእንስሳ ኣጥንት እና (1) ባግ የብረት ቅሪት እና (1) ባግ የሸሸክላ ወደ ውጭ ኣገር በአጣቃላይ 157 ባግስ የአርኪእዮሎጂ ናሙና ለጥናቱ ማሟያ በሚል ወደ ፈረንሳይ ኣገር ለማስወጣት እና ወደ ቅርስ ጥናትና ጥበቃ ለመውሰድ እ.ኤ.አ በታህሳስ 18/2018 ዓ/ም/ፈ እና ቅርስጥናትና ጥበቃ ባለስልጣን በደብዳቤ ቁጥር 08/6ለ-8-2/014 ለቢሮአችን በጻፉት ደብዳቤ መሰረት ይህንን የድጋፍ ደብዳቤ የፃፍንላቸው ስለሆነ አስፈላጊትብብር እንዲደረግላቸው እንጠይቃለን።

ከዚህም ደብዳቤ ጋር የአርኪእዮሎጂካል ናሙናዎች ዝርዝር የያዘውን 4ገፅ አባሪ እድርገን ልከናል ፡

NB - ከላይ የተጠቀሱ ቅርሶች እና ናሙናዎች ከመቸለ ወደ አዲስ አበባ በመኪና ታርጋ ቁጥር 15 - 055 ንብረትነቱ የፈረንሳይ በኢትዮጵያ የጥናት ማእከል በሆነ መኪና በ አቶ አማረ ስጦታው በሚሽከርከር የሚያለፍ መሆኑ እንገልፃለን።

ከሰላምታ ጋር

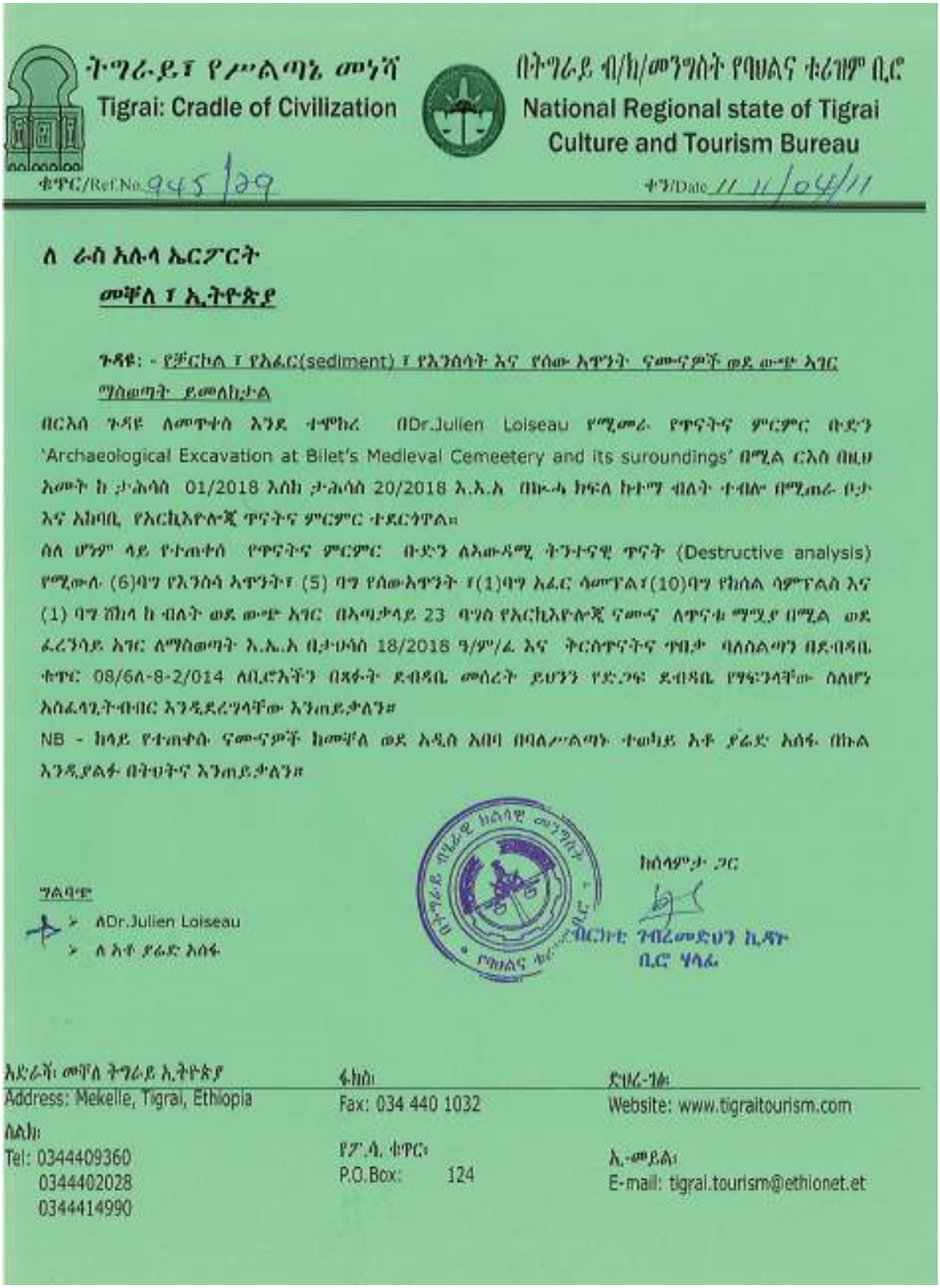
ስርኮቲ ገብረመድህን ኪዳኑ
ቢሮ ሃላፊ

ግልባጭ

- ለDr.Julien Loiseau
- ለ አቶ ያሬድ አሰፋ
- ለአቶ አማረ ስጦታው

ኣድራሻ፡ መቐለ ትግራይ ኢትዮጵያ	ፋክስ፡	ድህረ-ገፅ፡
Address: Mekelle, Tigrai, Ethiopia	Fax: 034 440 1032	Website: www.tigraitourism.com
ስልክ፡	የፖ.ሳ. ቁጥር፡	ኢ-መይል፡
Tel: 0344409360 0344402028 0344414990	P.O.Box: 124	E-mail: tigrai.tourism@ethionet.et

APPENDIX 10: *Mekelle Office Permit for Destructive Analysis*



ትግራይ፣ የሥልጣኔ መነሻ
Tigrai: Cradle of Civilization

በትግራይ ብ/ክ/መንግስት የባህልና ቱሪዝም ቢሮ
National Regional state of Tigrai
Culture and Tourism Bureau

ቁጥር/Ref.No 945/29

ቀን/Date 11/11/04/11

ለ ራስ አሉላ ኤርፖርት

መቐለ ፣ ኢትዮጵያ

ጉዳዩ: - የቻርኮል ፣ የአፈር(sediment) ፣ የእንሰሳት እና የሰው አጥንት ናሙናዎች ወደ ውጭ አገር ማስወጣት ይመለከታል

በርእሰ ጉዳዩ ለመጥቀስ እንደ ተሞከረ በDr.Julien Loiseau የሚመራ የጥናትና ምርምር ቡድን 'Archaeological Excavation at Bilet's Medieval Cemeetery and its suroundings' በሚል ርእስ በዚህ አመት ከ ታህሳስ 01/2018 እስከ ታህሳስ 20/2018 እ.አ.አ በኩሓ ክፍለ ኩተማ ብለት ተብሎ በሚጠራ ቦታ እና አከባቢ የአርኪአዮሎጂ ጥናትና ምርምር ተደርጎዋል።

ሰለ ሆነም ላይ የተጠቀሰ የጥናትና ምርምር ቡድን ለአውዳሚ ትንተናዊ ጥናት (Destructive analysis) የሚውሉ (6)ጣ የእንስሳ አጥንት፣ (5) ጣ የሰውአጥንት ፣(1)ጣ አፈር ሳምፕል፣(10)ጣ የክሰል ሳምፕልስ እና (1) ጣ ሽክላ ከ ብለት ወደ ውጭ አገር በአጣቃላይ 23 ጥሀስ የአርኪአዮሎጂ ናሙና ለጥናቱ ማሟያ በሚል ወደ ፈረንሳይ አገር ለማስወጣት እ.አ.አ በታህሳስ 18/2018 ዓ/ም/ፈ እና ትርሰጥናትና ጥበቃ ባለስልጣን በደብዳቤ ቁጥር 08/6ለ-8-2/014 ለቢሮአችን በጻፉት ደብዳቤ መሰረት ይህንን የድጋፍ ደብዳቤ የሚፍንላቸው ስለሆነ አስፈላጊትብብር እንዲደረግላቸው እንጠይቃለን።

NB - ከላይ የተጠቀሱ ናሙናዎች ከመቐለ ወደ አዲስ አበባ በባለሥልጣኑ ተወካይ አቶ ያሬድ አሰፋ በኩል እንዲያልፉ በትህትና እንጠይቃለን።

ከሰላምታ ጋር

ዳይሬክተር ገብረመድህን ኪዳኑ
ቢሮ ሃላፊ

ግልባጭ
- ለDr.Julien Loiseau
- ለ አቶ ያሬድ አሰፋ

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BILET 2018

Artifacts and Remains of humans and animals to be studied at ARCCH lab facility

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
1	B."Tcherkos" AREA I		Ceramics	4
2	B."Tcherkos" AREA I		Ceramics	2
2	Prospections Nord Vallée		Ceramics	1
3	B."Tcherkos" AREA III		Ceramics	9
4	B."Tcherkos" AREA IV		Ceramics	6
5	B."Tcherkos" S2	2006	Ceramics	2
5	B."Tcherkos" S2	2009	Ceramics	1
5	B."Tcherkos" S2	Burnt layer	Ceramics	1
5	B."Tcherkos" S2	2003	Ceramics	1
6	S3	3011	Ceramics	1
6	S3	3015	Ceramics	1
6	S3	3014	Ceramics	4
6	S3	3004	Ceramics	1
6	S3	3008	Ceramics	4
6	S3	3001	Ceramics	2
6	S3	3002	Ceramics	3
6	S3	3007	Ceramics	1
6	S3	3013	Ceramics	1
6	S3	3006	Ceramics	1
6	S3	Niv. Surface mur Nord	Ceramics/Bones	1
6	S3	3016	Ceramics	1
7	Cemetery S1	1001	Ceramics	6
7	Cemetery S1	1043	Ceramics	1
7	Cemetery S1	1019	Ceramics	2
7	Cemetery S1	1084	Ceramics	1
7	Cemetery S1	1013	Ceramics	1
7	Cemetery S1	1042	Ceramics	1
7	Cemetery S1	1023	Ceramics	1
7	Cemetery S1	1026	Ceramics	1
7	Cemetery S1	1081	Ceramics	1
7	Cemetery S1	1083	Ceramics	1
7	Cemetery S1	1050	Ceramics	1
7	Cemetery S1	1061	Ceramics	3
7	Cemetery S1	1076	Ceramics	1
7	Cemetery S1	1074	Ceramics	1
7	Cemetery S1	1050 (est)	Ceramics	1
7	Cemetery S1	1079	Ceramics	1
7	Cemetery S1	1078	Ceramics	1
7	Cemetery S1	1063	Ceramics	1
7	Cemetery S1	1044	Ceramics	1
7	Cemetery S1	1049	Ceramics	1
7	Cemetery S1	1050 (ouest)	Ceramics	1
7	Cemetery S1	1001 (ceram. En place au sud de B24)	Ceramics	1
7	Cemetery S1	1067	Ceramics	1
7	Cemetery S1	1048	Ceramics	1
7	Cemetery S1	sous blocs de F1	Ceramics	1

BILET 2018

Artifacts and Remains of humans and animals to be studied at ARCCH lab facility

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
1	B."Tcherkos" AREA I		Ceramics	4
2	B."Tcherkos" AREA I		Ceramics	2
2	Prospections Nord Vallée		Ceramics	1
3	B."Tcherkos" AREA III		Ceramics	9
4	B."Tcherkos" AREA IV		Ceramics	6
5	B."Tcherkos" S2	2006	Ceramics	2
5	B."Tcherkos" S2	2009	Ceramics	1
5	B."Tcherkos" S2	Burnt layer	Ceramics	1
5	B."Tcherkos" S2	2003	Ceramics	1
6	S3	3011	Ceramics	1
6	S3	3015	Ceramics	1
6	S3	3014	Ceramics	4
6	S3	3004	Ceramics	1
6	S3	3008	Ceramics	4
6	S3	3001	Ceramics	2
6	S3	3002	Ceramics	3
6	S3	3007	Ceramics	1
6	S3	3013	Ceramics	1
6	S3	3006	Ceramics	1
6	S3	Niv. Surface mur Nord	Ceramics/Bones	1
6	S3	3016	Ceramics	1
7	Cemetery S1	1001	Ceramics	6
7	Cemetery S1	1043	Ceramics	1
7	Cemetery S1	1019	Ceramics	2
7	Cemetery S1	1084	Ceramics	1
7	Cemetery S1	1013	Ceramics	1
7	Cemetery S1	1042	Ceramics	1
7	Cemetery S1	1023	Ceramics	1
7	Cemetery S1	1026	Ceramics	1
7	Cemetery S1	1081	Ceramics	1
7	Cemetery S1	1083	Ceramics	1
7	Cemetery S1	1050	Ceramics	1
7	Cemetery S1	1061	Ceramics	3
7	Cemetery S1	1076	Ceramics	1
7	Cemetery S1	1074	Ceramics	1
7	Cemetery S1	1050 (est)	Ceramics	1
7	Cemetery S1	1079	Ceramics	1
7	Cemetery S1	1078	Ceramics	1
7	Cemetery S1	1063	Ceramics	1
7	Cemetery S1	1044	Ceramics	1
7	Cemetery S1	1049	Ceramics	1
7	Cemetery S1	1050 (ouest)	Ceramics	1
7	Cemetery S1	1001 (ceram. En place au sud de 824)	Ceramics	1
7	Cemetery S1	1067	Ceramics	1
7	Cemetery S1	1048	Ceramics	1
7	Cemetery S1	sous blocs de F1	Ceramics	1

Shell

8	Cemetery S1	1001	Shells	1

Human Remains

9	Berme route eglise		human remains	2
9	Cemetery S1	1001	human remains	1
9	Cemetery S1	1009	human remains	45

Animal bones

5	D.'Tcherkos' S2	2008	Animal bones	1
6	S3	3008	Animal bones	1

Metal

8	Cemetery S1	1041	Metal	1

APPENDIX 11: *List of Samples*

Destructive analysis samples

Animal Bones

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
8	Cemetery S1	1023	Animal bones	1
8	Cemetery S1	1001	Animal bones	2
8	Cemetery S1	1089	Animal bones	1
8	Cemetery S1	1019	Animal bones	1
6	S3	3008	Animal bones	1

Human Remain samples

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
9	Cemetery S1	1009-sample A-E	human remain	5

Sediments

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
8	Cemetery S1	1064	Sediment	1

Charcoals samples

BOX	Site/Area	Stratigraphical unit (US)	Nature	Number of bag
8	Cemetery S1	1007	Charcoal	1
8	Cemetery S1	1019	Charcoal	2
8	Cemetery S1	1023	Charcoal	1
8	S3	3015	Charcoal	1
8	S3	3011	Charcoal	1
8	S2	mur	Charcoal	1
8	Cemetery S1	est stele B24	Charcoal	1
8	Cemetery S1	sud-est stele B24	Charcoal	1
8	B."Tcherkos" S2	wall-charcoal	Charcoal	1

Export to France by loan

BOX	Site/Area	Stratigra	Nature	Number of bag
8	Cemetery S1	1041	Islamic ceramic	1