



HAL
open science

Aksoum (Ethiopia) : an inquiry into the state of documentation and preservation of the archaeological and heritage sites and monuments

Hiluf Berhe Woldeyohannes

► **To cite this version:**

Hiluf Berhe Woldeyohannes. Aksoum (Ethiopia) : an inquiry into the state of documentation and preservation of the archaeological and heritage sites and monuments. Archaeology and Prehistory. Université Toulouse le Mirail - Toulouse II, 2015. English. NNT : 2015TOU20126 . tel-01341824

HAL Id: tel-01341824

<https://theses.hal.science/tel-01341824v1>

Submitted on 4 Jul 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



THÈSE

En vue de l'obtention du

DOCTORAT DE L'UNIVERSITÉ DE TOULOUSE

Délivré par :

Université Toulouse - Jean Jaurès

Présentée et soutenue par :
Hiluf Berhe Woldeyohannes

le lundi 7 décembre 2015

Titre :

AKSUM (ETHIOPIA): AN INQUIRY INTO THE STATE OF DOCUMENTATION AND
PRESERVATION OF THE ARCHAEOLOGICAL AND HERITAGE SITES AND
MONUMENTS

École doctorale et discipline ou spécialité :

ED TESC : Anthropologie sociale et historique

Unité de recherche :

UMR 5608 TRACES

Directeur/trice(s) de Thèse :

François-Xavier Fauvelle, Directeur de Recherche, CNRS (TRACES - UT2J)

Jury :

Claire Bosc-Tiessé, Chargée de Recherche, CNRS (IMAF - Université de Paris I), Examinatrice
Deresse Ayenachew, Associate Professor (Debre Berhan University, Ethiopia), Rapporteur

Florent Hautefeuille, MCF Habilité (TRACES - UT2J), Examineur

Bertrand Hirsch, Professeur (Université de Paris I Panthéon-Sorbonne), Rapporteur

ለእናቴ እና ለርብቃ ሕሉፍ

To My Mother and Rebqa Hiluf

A handwritten signature in black ink, appearing to be the name 'Hiluf' written in a stylized, cursive script.

Université Fédérale



Toulouse Midi-Pyrénées

**AKSUM (ETHIOPIA): AN INQUIRY INTO THE STATE OF
DOCUMENTATION AND PRESERVATION OF THE
ARCHAEOLOGICAL AND HERITAGE SITES AND MONUMENTS**

BY:

HILUF BERHE WOLDEYOHANNES

DOCTORAL SCHOOL: TESC (TEMPS, ESPACES, SOCIÉTÉS, ET CULTURES)

SPECIALITY: ARCHAEOLOGY

RESEARCH UNIT: UMR 5608 TRACES (TRAVAUX ET RECHERCHES

ARCHÉOLOGIQUES SUR LES CULTURES, LES ESPACES ET LES
SOCIÉTÉS)

**DISSERTATION SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR
THE DOCTORATE DEGREE IN ARCHAEOLOGY, UNIVERSITY OF TOULOUSE
JEAN-JAURÉS**

7TH DECEMBER 2015

DECLARATION

This thesis is my own work, that has not previously been published or presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

ACKNOWLEDGEMENTS

My sincere gratitude goes to the French Embassy in Ethiopia for my PhD study in France. I enjoyed and benefited from the scholarship. I was provided round-trip air ticket every year. I thank the French Center for Ethiopian Studies (CFEE) in Addis Abeba, and Toulouse University for funding for my field work. I would like to extend my gratitude to Aksum University for guaranteeing my job in the university as an academic staff during my study leave for the last four years.

My deepest gratitude goes to my research supervisor Dr. Francois-Xavier Fauvelle-Aymar. His efforts to train me as an archaeologist began in 2009 when the office he directed at CFEE, sponsored me to participate in an excavation in France from August 15 to September 15, 2009. He was instrumental in arranging my scholarship for my PhD study and for my admission to Toulouse University. His comments and suggestions of the thesis drafts throughout my thesis work were constructive. I was honored and fortunate to have him as a research supervisor.

I would like to express my deep gratitude to my father Berhe Woldeyohannes(priest), my mother Tinsae Hagos, my brothers Haftom Berhe, Ashenafi Berhe, and Woldeyohannes Berhe, my sisters Berhane Berhe, Akeza Berhe, Fitaw Berhe and Harfe Berhe for their love and unreserved financial, material and moral support throughout my studies from bachelor through doctorate degrees. To be who I am today all began with my family support. To my family, I owe everything to my life. I cannot thank my parents, brothers and sisters enough. I am also very much indebted to my grandmother, aunt, uncles, and all my relatives for their overall support.

I am deeply indebted to Professor John McK Camp II and Professor Elizabeth Fisher for their contributions to my training in field archaeology and cultural heritage management. My acquaintance with them began in early 2008 at Aksum during their visit to Aksum. They didn't hesitate to invite me to Greece for visit in June 2008. That was the beginning of my travel outside Ethiopia to see what the other world looks like. They also invited and sponsored me to visit the US in 2010. Their effort to train me in field archaeology continued in 2011 and 2014 in Greece. I have benefited immensely from my visits to different sites in Greece and USA, and archaeological excavations in Thebes and Athens.

To the family of *Ato* Teklay Mawcha in Aksum, Aradech Desalegn, Melat Teklay, Lidya Teklay and Michaele Teklay, I owe a lot for their love, hospitality and unreserved support for the last four years. I cannot thank them enough on paper for everything they did to me. They always treated me as their brother and father, and best friend. We shared unforgettable experiences.

Many friends and colleagues have contributed throughout my doctoral research. Many thanks to Elizabeth Fisher, John Mck Camp II, Andrew Henry, Laura Gawlinski, Jacke Phillips and others for proof-reading and editing different chapters and sections of the thesis, and Bertrand Poissonnier for his comments and suggestions of part of the draft. My French friends, Francois Bon, excavation director during my field excavation in 2009 in France and director of our doctoral school, Marina Redondo, a friend since 2009 and who helped me settle myself and introduced me to Toulouse during my first arrival in October 2011 for my doctoral studies, Ethiopian friends in Toulouse Alihayat Ali and Tizita Nesibu for their wholehearted support and friendship, and other French students and Ethiopian community in Toulouse are warmly acknowledged.

My colleague at Aksum University, Berhan Teka and, my friend and colleague Bantalem Tadesse share my heartfelt thanks for their material contribution to my thesis and friendship. Many thanks to Berhanu Tadesse, my good friend, for his vital help, encouragement and excellent hospitality. Heartfelt thanks should go to all my friends who encouraged and welcomed me whenever I needed most their help and advice.

Last, but not least, I would like to express my indebtedness to my colleagues in the Culture and Tourism Office (my former office), Aksum, for their company and friendship, for their assistance during my fieldwork to Aksum, and for providing access for me to the archives in the office.

ABSTRACT

Aksum is the capital of ancient Aksumite Kingdom and one of the most important archaeological site in Ethiopia. It has been registered on World Heritage List in 1980. Its archaeological and cultural heritage continues to be a victim of urbanization, development, erosion and deposition. Despite increased awareness and issues within the field of archaeology, the destruction of archaeological and cultural heritage sites of Aksum has been staggering. Although considered as an outstanding universal heritage site, very little focused cultural heritage management has been undertaken in Aksum. All archaeological excavations conducted thus far in Aksum focused on unearthing elite tombs and palaces. Both acts of destruction are relevant to current research on the cultural heritage management aspect in Aksum in general.

This research provides an analysis of the destruction of the archaeological and heritage sites and monuments in Aksum based on ancient documents, archaeological excavations and field observation. It examines the extent the sites have been excavated, documented and preserved. Three sites have been selected for case study for the present research. The research revealed that the archaeological and heritage sites in Aksum have been deeply affected by urbanization in general. Evidently, the absence of integrated development planning by the municipality, lack of professionals in the field of archaeology and lack of public education have contributed significantly to the loss of the archaeological record. This thesis attempts to evaluate the current state of documentation and preservation of the cultural heritage resource in Aksum.

Key words: Documentation, preservation, landscape archaeology, cultural heritage management, excavation, monuments, archaeological and cultural sites.

LIST OF ACRONYMS

AkU = Aksum University

ARCCH = Authority for Research and Conservation of Cultural Heritage

BIEA = British Institute in Eastern Africa

CFEE = Centre Français des Etudes Ethiopiennes

CHM = Cultural Heritage Management

DAE = Deutsch Aksum-Expedition

ECHP = Ethiopian Cultural Heritage Project

EEF/AkU = Ethiopian Exploration Foundation/Aksum University

EIA = Ethiopian Institute of Archaeology

ESTDP = Ethiopian Sustainable Tourism Development Project

ETB = Ethiopian Birr

GA = Gudguad Agazen

GIS = Geographical Information Systems

GSF = Gudit Stelae Field

HAMA = Hamburg Archaeological Mission to Axum

ICOMOS = International Council on Monuments and Sites

IUO/BU = Istituto Universitario Orientale/ Boston University

LIL = Learning and Innovation Loan

MSF = Main Stelae Field

MSP = Main Stelae Park

NRSAf = National Regional State of Afar

NRSAm = National Regional State of Amhara

NRSH = National Regional State of Hareri

NRST = National Regional State of Tigray

NUPI = National Urban Planning Institute

OAZ = Ona Enda Aboi Zewge

ON = Ona Negest

QA = Qelqel Asba

SNNPR = Southern Nations, Nationalities and Peoples Region

SP = Stelae Park

TE = Tikul Emni

TPLF = Tigray Peoples' Liberation Front

UNESCO = United Nations Educational, Scientific and Cultural Organization

USAID = United States Agency for International Development

WHC = World Heritage Committee

WHL = World Heritage List

WHS = World Heritage Site

TABLE OF CONTENTS

List of Figures	xxii
List of Maps	xxvii
List of Tables	xxviii
List of Appendixes	xix

CHAPTER ONE

INTRODUCTION TO THE RESEARCH	1
1.1 Introduction.....	1
1.2 Context and Problem	3
1.3 Objective, Significance, Scope and, Limitation of the Research.....	4
1.4 Documentation and preservation: a theoretical synopsis.....	7

CHAPTER TWO

GEOGRAPHICAL SETTING AND HISTORICAL SURVEY OF AKSUM AND AKSUMITE KINGDOM	12
2.1 A geographical summary	12
2.2 History of the Aksumite Kingdom: origin and development.....	13
2.3 The Decline of the Aksumite Kingdom	32
2.4 The status of Aksum after the 7 th century AD	35

CHAPTER THREE

HISTORY OF LITERARY DOCUMENTATION OF AKSUM AND ITS MONUMENTS	39
---	----

3.1 Introduction.....	39
3.2 The works of Cosmas.....	40
3.3 <i>Liber Aksumae</i> (Book of Aksum).....	44
3.4 Francisco Alvares.....	61
3.5 Pedro Paez.....	72
3.6 Manoel de Almeida.....	72
3.7 James Bruce	76
3.8 Henry Salt	78
3.9 Theodore Bent.....	86

CHAPTER FOUR

BRIEF HISTORY OF ARCHAEOLOGICAL EXCAVATIONS AT AKSUM ...	91
4.1 Introduction.....	91
4.2 The excavation at the Grave of Menelik I	94
4.3 The DAE excavations	95
4.3.1 Enda Michael Efoy	97
4.3.2 Enda Sem'on.....	99
4.3.3 Ta'aka Maryam.....	100
4.3.4 Grave of Menelik I.....	101
4.3.5 Ruin A.....	103
4.3.6 Ruin B	103
4.3.7 Ruin C	104
4.3.8 Ruin D	104
4.3.9 Ruins E and F.....	104
4.3.10 Statue Base.....	104
4.3.11 Tombs of Kaleb and Gebre Mesqel	105
4.3.12 Stone thrones.....	107

4.3.13 Northern stelae field.....	109
4.3.14 Southeast stelae field.....	109
4.3.15 Western stelae field.....	109
4.3.16 Tomb of Nefas Mewcha.....	110
4.3.17 Maryam Tsion Church	110
4.3.18 Inscriptions.....	111
4.3.19 Miscellaneous works of the DAE	111
4.4 Archaeological excavations and survey during the Italian occupation of 1930s.....	113
4.5 The Ethiopian Institute of Archaeology (EIA) excavations	115
4.5.1 Central area	116
4.5.1.1 Main stelae group.....	116
4.5.1.2 Church enclosure	120
4.5.2 Southeast stelae field.....	122
4.5.3 North area.....	124
4.5.3 West area.....	124
4.6. The British Institute in Eastern Africa (BIEA) excavations from 1972-74	128
4.6.1 Kaleb site	128
4.6.2 Northern stelae field.....	129
4.6.3 Hawelti site	131
4.6.4 Enda Sem'on site	132
4.6.5 IW site.....	133
4.6.6 May Lahlah site.....	133
4.6.7 GSF	133
4.6.8 The Tomb of Brick Arches	135
4.6.9 Tomb of False Door	136
4.6.10 Nefas Mewcha	138

4.6.11 The Stelae Park (SP)	138
4.6.12 Gobo Dura Rock shelter.....	140
4.7 Archaeology at Aksum during the revolution period (1974-1991)	142
4.8 The 1993-7 BIEA excavations.....	142
4.8.1 Tomb of Brick Arches	143
4.8.2 Stela 2 site excavations	145
4.8.3 The Mausoleum	147
4.8.4 GSF	148
4.8.5 D site at Kidane Mehret	148
4.8.6 K site in Maleke Aksum.....	150
4.8.7 Anqar Ba“ahiti rock shelter	151
4.8.8 Ba“ahiti Nebait.....	151
4.9 The works of Istituto Universitario Orientale (IUO) and Boston University (BU) 1993-2002	152
4.10 Excavations by Authority for Research and Conservation of Cultural Heritage (ARCCH)	155
4.11 The works of Hamburg Archaeological Mission to Axum (HAMS)	157
4.12 Excavations by the Ethiopian Cultural Heritage Project	159
4.13 Excavations by Aksum University (AkU)	161
4.14 Excavations by Ethiopian Exploration Foundation and Aksum University (EEF/AkU)	161

CHAPTER FIVE

DESCRIPTION, ANALYSIS AND INTERPRETATION OF THE CHANGES ON THE ARCHAEOLOGICAL AND HERITAGE LANDSCAPE AND MONUMENTS AT AKSUM: CASE STUDY OF THREE SELECTED SITES	167
5.1 Introduction.....	167
5.2 The May Hejja Archaeological Site.....	170

5.2.1 Ancient written documents, maps, photographs and legend.....	171
5.2.2 The DAE archaeological records	178
5.2.3 The Heritage and Archaeological landscape during the Italian occupation	182
5.2.4 The Archaeological landscape and monuments during the 1950s.....	185
5.2.5 Landscaping and re-erecting stelae at the MSF during early 1960s	187
5.2.6 The landscape and stelae during the 1970s BIEA excavations.....	188
5.2.7 The landscape and stelae during the 1990s	190
5.2.8 The landscape of the May Hejja archaeological area post-1997 BIEA excavations to present.....	192
5.2.9 Reconstruction of the ancient landscape based on archaeological and geo-archaeological results	200
5.3 The site of Tombs of Kaleb and Gebre Mesqel: changes in the landscape based on ancient documents, archaeological excavations and field observation	206
5.3.1 Ancient literary documents	206
5.3.2 Archaeological excavations	208
5.3.2.1 The DAE	209
5.3.2.1.1 The superstructure of the tombs.....	209
5.3.2.1.2 The terrace walls	211
5.3.2.1.3 The steps	211
5.3.2.1.4 The entrances to the tombs	212
5.3.2.1.5 The courtyards	212
5.3.2.1.6 The tomb of Kaleb	212
5.3.2.1.7 The tomb of Gebre Mesqel	212
5.3.2.2 BIEA	213
5.3.2.3 HAMA	214
5.3.2.4 Aksum University, Department of Archaeology	214
5.3.3 The site of Kaleb and Gebre Mesqel at present	215

5.4 The site of stone thrones: changes on the landscape and the thrones based on ancient documents and field work	217
5.4.1 Ancient literary documents and legend.....	218
5.4.2 The DAE and subsequent research	222
5.4.3 Present condition of the thrones and pillars, and their landscape	228
5.4.4 Detail description of the thrones, pillars, and their associated features.....	230
5.5 Agents for the change of archaeological landscape, monuments and structures	240
5.5.1 Human factors	240
5.5.2 Natural factors.....	243

CHAPTER SIX

ARCHAEOLOGICAL AND CULTURAL HERITAGE MANAGEMENT AND THE QUESTION OF HERITAGE OWNERSHIP IN AKSUM	246
6.1 Introduction.....	246
6.2 Cultural Resource Management: an overview	247
6.3 Cultural Heritage Management (CHM) in Aksum World Heritage Property.....	250
6.4 Heritage types in Aksum	262
6.5 Heritage ownership and protection mandate in Aksum	263
6.6 Tourism promotion or heritage preservation? The question of priority	269

CHAPTER SEVEN

DISCUSSION AND CONCLUSION	276
Appendix 4.1.....	283
Appendix 5.1.	296
References.....	297

LIST OF FIGURES

Fig. 3.1 Sketch of the city of Adulis	43
Fig. 3.2 Water wells near Dungur palace	48
Fig. 3.3 Water well closed with granite stones slabs brought from the ancient ruins of Aksum ..	49
Fig. 3.4 Ruined structure of Arba'etu Ensesa church at Guanga Edaga east of Abreha we Atsbeha School	51
Fig. 3.5 Plan of Mausoleum	52
Fig. 3.6 Aksumite coins and rondel	56
Fig. 3.7 Stone throne at the outer enclosure of the Cathedral of St. Maryam Tsion (Menagesha area)	64
Fig. 3.8 Location of the market during the Italian occupation in the 1930s	65
Fig. 3.9 Partial view of Alvares' water tank from northwest	68
Fig. 3.10 Illustration of Ezana inscription with the Greek script	83
Fig. 3.11 (a) Stela 7 with the relief of "house"; two stone thrones at the church enclosure and throne 9; base plate of stela 4; and base of column	84
Fig. 3.11 (b) View of Aksum Maryam Tsion from west as illustrated by Salt in 1805	84
Fig. 3.12 (a) View of stela 3 from south-west	85
Fig. 3.12 (b) View of stela 3 and the church of Maryam Tsion from north-east	85
Fig. 3.12 (c) Closer view of stela 3 as seen in 1805	85
Fig. 4.1 (a) Ground plan of Enda Michael	98
Fig. 4.1 (b) Reconstructed plan of Enda Michael	98
Fig. 4.2 Cornerstones of the southwestern corner of the southeastern tower of Enda Michael Efoy	99
Fig. 4.3 Plan of Enda Sem'on	100

Fig. 4.4 Ground plan of Ta'aka Maryam.....	102
Fig. 4.5 Reconstructed plan of Grave of Menelik I.....	103
Fig. 4.6 Plan of the superstructures of Kaleb and Gebre Mesqel as discovered in 1906 by the DAE	106
Fig. 4.7 The excavation of wall M1, viewed from east	117
Fig. 4.8 Contenson's excavation between stela 1, wall M1, and Nefas Mawcha	120
Fig. 4.9 Plan of three levels of the construction of Aksum Maryam Tsion church.....	123
Fig. 4.10 (a) Ground plan of Dungur palace	127
Fig. 4.10 (b) Reconstructed plan of Dungur palace	127
Fig. 4.11 Horseshoe-shaped brick doorways of the Tomb of Brick Arches.....	136
Fig. 4.12 (a) Plan of the underground Tomb of False Door	137
Fig. 4.12 (b) Entrance to the sarcophagus room the Tomb of False Door	137
Fig. 4.13 Chittick's excavation of Stelae Park	141
Fig. 4.14 General plan of Tomb of Brick Arches.....	144
Fig. 4.15 (a) Portal monumental doorway on the east of the Mausoleum.....	147
Fig. 4.15 (b) Interior view of the Mausoleum from east	147
Fig. 4.16 Circular structure in the middle of a ruined structure on Biete Giorgis, possibly granary.....	153
Fig. 4.17 "Original location of Stela 2: section AB (SS0-NNE).....	156
Fig. 4.18 Ruined Aksumite palace at Enda Azay excavated by HAMA from January through March, 2003	158
Fig. 4.19 Steps and drainage in area S at Ta'aka Maryam re-exposed by EEF/AkU in 2014....	162
Fig. 4.20 Plan of the excavated areas at Ta'aka Maryam by EEF/AkU in 2014.....	162
Fig. 5.1 Plan of the Mausoleum	172
Fig. 5.2 Bruce's illustration of stela 3.....	174
Fig. 5.3 Top of stela 5 as photographed by Bent in 1893, fallen on the stream bed	176
Fig. 5.4 Stela 1 in 1893.....	177
Fig. 5.5 Stela 3 photographed by Bent in 1893	177

Fig. 5.6 Stela 1 photographed in 1906.....	179
Fig. 5.7 Stela 3 and its surrounding in 1906, view from northeast s	179
Fig. 5.8 Plan of northern stelae field	180
Fig. 5.9 Section of stela 3 and its surrounding	180
Fig. 5.10 May Shum water reservoir (left) in 1906 before it was reinforced with cement, and Gheleb Emni stelae field (right).....	181
Fig. 5.11 Aerial photograph of stela 3 and its surrounding in 1930s.....	183
Fig. 5.12 Comparison of the condition of stela 3 between 1805 and 1974	185
Fig. 5.13 Aerial view of the Stelae Park and its surrounding in the early1950s	186
Fig. 5.14 Excavations in the stela 1 and Nefas Mawcha area	187
Fig. 5.15 The steps east of stela 3 as originally exposed by Doresse	187
Fig. 5.16 A reconstruction of the SP with the stelae, underground tombs, terrace walls, and steps at lower right corner	188
Fig. 5.17 The SP during 1970s	189
Fig. 5.18 BIEA excavations during the 1990s on the stela 2 site	190
Fig. 5.19 Plan of the SP showing the distribution of the stelae and limit of the park	191
Fig. 5.20 May Hejja Archaeological area	194
Fig. 5.21 May Hejja archaeological area	194
Fig. 5.22 (a) Apex of stela 5 photographed in 1893 by Bent, view from north.....	195
Fig. 5.22 (b) Apex of stela 5 photographed in 1906 by DAE, view from west	195
Fig. 5.23 Two fragments of stela 5	196
Fig. 5.24 SP between 2005 and 2007	198
Fig. 5.25 General view of the SP from east during the re-erection of stela 2 in 2008.....	199
Fig. 5.26 Closer view of stelae 2 and 3 from southeast during re-erection of stela 2 in 2008	199
Fig. 5.27 Sites in the old town before and after relocation of residents	201
Fig. 5.28 Sketch of ancient Aksum before the erection of the church and expansion of settlement into the stelae area	205
Fig. 5.29 Section drawing of the SP	205

Fig. 5.30 Chittick’s compressed section of the SP	206
Fig. 5.31 Excavation at the tombs of Kaleb and Gebre Mesqel	210
Fig. 5.32 The column and a stepped column-base at the tombs of Kaleb and Gebre Mesqel.....	210
Fig. 5.33 Plan of the tombs of Kaleb and Gebre Mesqel.....	210
Fig. 5.34 The tombs of Kaleb and Gebre Mesqel and their surrounding today	213
Fig. 5.35 Plan of the superstructures and the BIEA trenches	214
Fig. 5.36 The joined column-base and pillar now standing at the Ezana Park, a column-base in <i>situ</i> as photographed in 1906.....	216
Fig. 5.37 The tombs of Kaleb and Gebre Mesqel, view from southwest.....	217
Fig. 5.38 Plan of the king’s and bishop’s thrones.....	219
Fig. 5.39 Plan of the judges’ thrones	220
Fig. 5.40 Ge,,ez inscription on a judge’s throne	221
Fig. 5.41 The King’s throne and its pillars	222
Fig. 5.42 The king’s and bishop’s thrones, with the judges’ thrones behind them	224
Fig. 5.43 The judges’ thrones; view from east.....	224
Fig. 5.44 The bishop’s and king’s throne, view from north.....	224
Fig. 5.45 The bishop’s and king’s thrones; view from northwest	225
Fig. 5.46 Aerial view of the thrones site in the 1930s	227
Fig. 5.47 Aerial view of the thrones in early 1950s.....	227
Fig. 5.48 The stone thrones during 1990s	228
Fig. 5.49 The thrones site in 2010, view from east.....	229
Fig. 5.50 The thrones, view from west	229
Fig. 5.51 The trees provide good shade for the people during mass prayers; the thrones serve as comfortable seats in the shade	230
Fig. 5.52 King’s throne originally in the center no longer visible	231
Fig. 5.53 Throne 3, view from west.....	232
Fig. 5.54 Throne 4, view from east.....	232
Fig. 5.55 Throne 5, view from north	233
Fig. 5.56 Throne 6; this throne retained its three cornerstones	233

Fig. 5.57 Throne 7	234
Fig. 5.58 Throne 9, view from south	235
Fig. 5.59 Throne 14	237
Fig. 5.60 Throne 15	237
Fig. 5.61 The pillars at the King’s throne, facing east.....	239
Fig. 5.62 Pillar 5, facing north.....	239
Fig. 5.63 Pillar 6, top view	239
Fig. 5.64 A possible reconstructed throne showing the steps, pillars, basal stone, seat block, side and back rests, and canopy	242
Fig. 5.65 Schematic representation of reburial of Pillar 1 between 1840 and 2014.....	245
Fig. 5.66 King’s and Bishop’s thrones in 1906 and 2012.....	245
Fig. 6.1 The tomb of Brick Arches	255
Fig. 6.2 The new archaeological museum	256
Fig. 6.3 The new Church Museum building.....	260
Fig. 6.4 View of the Maryam Tsion church area from May Koho before and after the construction of the new church museum building	261
Fig. 6.5 The oval-shaped object and the object with “xm” letters.....	266

LIST OF MAPS

Map 2.1 Location of Aksum	14
Map 2.2 Location and distribution of Daʿamat period sites in the present Tigray Regional Administration State and Eritrea.....	18
Map 2.3 Location and distribution of Aksumite period sites in the present Tigray Regional Administration State and Eritrea	27
Map 3.1 The location of old town of Aksum, its quarters and the three palaces remains as seen in 1906 by the DAE	47
Map 3.2 Plan of Alvaresʼ water tank, the masonry wall, and stone thrones at the foot of May Koho hill based on Alvaresʼ description	67
Map 3.3 Plan of Aksum in 1805 by Henry Salt.	82
Map 4.1 Location of the stone thrones.....	108
Map 4.2 IUO/BU archaeological research project on top of Biete Giorgis hill	154
Map 4.3 Location of sites and other landmarks in the town	165
Map 4.4 Location of sites outside the main town center.....	166
Map 6.1 Archaeological map of Aksum	252

LIST OF TABLES

Table 2.1 Summary of terminological frameworks of the “pre-Aksumite”, Aksumite and post-Aksumite periods	24
Table 4.1 Category of major sites by zone in Aksum and its vicinity mentioned in chapter 4...163	
Table 4.2 Chart depicting the number of sites in each zone as classified in table 4.1.	164
Table 6.1 Cultural and Natural Sites of Ethiopia on WHL	249
Table 6.2 Chart summarizing the classification of Cultural Heritage	264

LIST OF APPENDIXES

Appendix 4.1 Chronological summary of sites excavated, cleared and recorded from 1905 to
2014 in Aksum and its vicinity mentioned in chapter 4283

Appendix 5.1 An updated inventory of the thrones and pillars in the church enclosure.296

CHAPTER ONE

INTRODUCTION TO THE RESEARCH

This chapter introduces to the background of the research, objective, scope, methodology, and limitation of the present study. It also attempts to give a synopsis on theory of Cultural Heritage Management in general.

1.1 Introduction

The Aksumite kingdom was one of the powerful kingdoms of ancient world; it based its capital at Aksum. The Persian philosopher Mani (quoted in Munro-Hay 1991) considered the Aksumite kingdom one of four great world powers alongside Rome, Persia, and China. Historical documents began to mention Aksumite kingdom since the 1st century AD. The Egyptian monk Cosmas (Cosmas, ed. McCrindle, 1929) left us his account of the kingdom in the 6th century AD with its port at Adulis. Information about the kingdom beginning from about the 3rd century AD, however, largely comes from archaeological evidence. The kingdom reached its zenith during the reign of king Kaleb in the 6th century AD.

This ancient kingdom of African civilization is possibly the least known to the outside scholars. European missionaries and travelers visited Aksum only since the early 16th century AD and wrote their observations about the extant remains and monuments of the kingdom at Aksum. The works of James Bruce, Henry Salt and Theodore Bent in the 18th and 19th century, respectively, have stirred up interest in Aksumite studies. This was ensued by the first scientific archaeological excavation in Aksum in 1906, during which the Deutsch Aksum-Expedition (DAE) cleared large number of sites in Aksum and documented the ancient monumental buildings, inscriptions, stone thrones, obelisks, and the general topography of Aksum extant and uncovered as of 1906. Although the result was published in German language in four volumes, it has remained the monumental work on Aksum as the town has dramatically changed during the last ten decades.

No further archaeological research was conducted until 1939 when Italian colonial archeologists continued excavation in the old town of Aksum. Following the expulsion of Italy from Ethiopia in the 1941, the Imperial Ethiopian government invested in large scale archaeological

excavations in Aksum with the help of French experts. This project continued from the early 1950s to the 1970s with the objective of reconstructing the culture history and chronology of the Aksumite kingdom. Their archaeological works have remained incompletely published; those preliminary reports were all in French. Though still in French language, the excavation of Dungur palace by Anfray from 1966-8 has only recently been published (Anfray, 2012) after more than four decades.

The British Institute in Eastern Africa (BIEA) further intensified the study of Aksumite chronology during their 1972-4 and 1993-7 excavations. The projects explored large area of the town-center and, in the outskirts by which domestic and cemetery sites were largely investigated. The complete publication of the works of the former mission was interrupted by the death of Neville Chittick in 1984, whose results were later published by Munro-Hay in 1989 (Munro-Hay, 1989). The results of the BIEA project of 1993-7 were finally published in 2000 in two volumes (Phillipson, 2000). A joint project of the Istituto Universitario Orientale (Naples University, Italy) and Boston University (USA), commonly abbreviated IUO/BU, investigated from 1993 to 2002 On top of Biete Giorgis hill. The Hamburg Archeological Mission to Axum (HAMA) began an excavation to the north of Aksum center in 2000. The main objective of this project was to construct the transitions from pre-Christianity to Christianity of Aksumite kingdom in Aksum. Other excavations carried out in Aksum by local institutions were mainly as part of preventive or rescue archaeology.

This research attempts to investigate and document the nature and deposition sequence of the remains, and the transformation of the archaeological landscape, with a special focus at three selected sites: the stone thrones in the church enclosure, the May Hejja archaeological site, and the Tombs of Kaleb and Gebre Mesqel. No excavation has been carried out by the researcher; rather it is based on review of ancient documentary sources, previous archaeological excavations by different projects, and field walking for personal observation on the current state of each site and feature, the subjects in the research. In order to see the gap in heritage documentation and preservation between the excavation periods and present, the researcher has visited each site every year and documented the changes as much as possible. Previous experience while working in the Culture and Tourism Office of Aksum has greatly helped in identifying the problems and

challenges to the heritage management in Aksum in general. It is, therefore, hoped that this study will be a significant contribution to our understanding of the state of heritage documentation and preservation in Aksum, and encourage interest on the topic when one wishes to study further on sites in Aksum and elsewhere. It can awaken the responsible government offices and the general public in Aksum on the current status of Aksum World Heritage Site in terms of documentation and preservation of Aksum archaeological and heritage sites and monuments.

This thesis is organized in seven chapters. Chapter One deals with the introductory part, which includes the statement of the problem, objective, significance, methodology, scope and limitations and theoretical summary on documentation and preservation of cultural heritage in general. Chapter Two introduces the geographical setting and historical background of Aksum and Aksumite kingdom. Chapter Three deals with the history of literary documentation of Aksum and its monuments; this chapter provides detail presentation of ancient documents starting from the works of Cosmas in the 6th century AD to the works of Theodore Bent in 1893, all of which deal with description of Aksum and its monuments. Chapter Four presents the history of all archaeological excavations carried out in Aksum from 1906 to 2014. This chapter documents the history of excavations from published books, articles, reports, and personal participation in some of the excavation projects since 2002. It updates on the state of each site during the post-excavation period. Chapter Five is devoted to description, analysis and interpretation of the changes on the archaeological and heritage landscape and monuments in Aksum based on ancient literary documents of travelers, archaeological excavations and, field work. Chapter Six attempts to scrutinize archaeological and cultural heritage management aspect and heritage ownership in Aksum. It tries to point out the prevailing problems of heritage management and preservation and the gap in the heritage proclamation of the nation. The last and conclusive chapter, *i.e.*, Chapter Seven, deals with discussion of the present research result and provides framework for future consideration on cultural heritage management at Aksum in general.

1.2 Context and problem

At Aksum, all the excavation projects focused on unearthing elite structures in the center of the town. The excavated sites, particularly those excavated prior to 1991, were left open without

conservation works and most of them were occupied and obscured by settlement in the 20th century. On top of this, the publications were incomplete, and those published were in non-Ethiopian languages, mainly in German, French, Italian and Russian which are not accessible to English-speaking scholars; publications of the archaeological excavations, if completed at all, were not made in the languages of Ethiopia, and the publications have never been available within Ethiopia¹. No proper documentation and monitoring of all the excavations and excavated sites has been made so far. The sites were left open being exposed to natural and cultural (human) hazards. The conservation of the structures, monuments, and the general landscape was ignored. Later proper research excavations were not possible because of the total damage of most of the sites in Aksum and its surroundings as well as problem of source, and access to documents, on previous excavation works. These have created bottlenecked problems to study the excavated sites and further research on Aksumite archaeology and heritage management in general.

The excavated sites have not been revisited to update their general condition in the post-excavation period. The town is expanding rapidly before the archaeological sites are properly documented and heritage buffer zone defined. The absence of resident archaeologist in Aksum who could be responsible for the safeguarding of heritage and carry on continuous inventory and documentation work is another gap in the cultural heritage management at Aksum.

1.3 Objective, Significance, Scope, and Limitations of the Research

The present research area and topic was selected for three main reasons. Firstly, Aksum has very special place in the history of ancient Ethiopia. The town today has immense concentration of archaeological and heritage sites which deserve protection and preservation to be transferred to posterity. Aksum is one of top tourist destination towns in Ethiopia. Since 1906, Aksum attracted many international archaeological missions. Thus by conducting an intensive survey on the previous archaeological research work at and around Aksum helps us to understand about the depth and breadth of research done in Aksum. Secondly, the study of this subject enables to see the extent to which the sites were excavated and documented in the published literature, as well

¹ Reports published in the *Annales d'Ethiopie* have always been available in the French Center for Ethiopian Studies library, Addis Abeba; all the archaeological excavations reports are in French language.

as the destruction they have been subjected to due to various factors. An inventory and monitoring of sites that have been investigated since 1906 is very paramount issue to see the extent the heritage resource diminishes as a result of human and natural agents. Thirdly, the present research seeks to point out the potential threats and challenges to the heritage management in Aksum in general, and builds a theoretical framework for future management and conservation mechanisms of the heritage resource.

Aksum was placed in UNESCO World Heritage List in 1980 for its outstanding universal value; the present study tries to examine the state of the heritage documentation and preservation in Aksum. Ancient documents since the 6th century work of Cosmas up to Theodore Bent in 1893 have described the ancient town and its major obelisks, depicting what the settlement pattern and the topography looked like. The town then expanded dramatically since the mid-1930s during which new town plan with modern roads has appeared. The present research tries to investigate and document all the changes that took place over time in the landscape and the impacts on the archaeological and heritage sites and monuments.

All available publications on Aksum have been evaluated to compare and contrast the transformation of sites and the general archaeological and heritage landscape in Aksum. The research makes an attempt to revisit the excavated sites to assess their present state. Another major town planning took place in the 1960s when grid roads were developed all passing through the archaeological sites. None of the town development schemes that took place over time has documented and preserved the heritage property. The present research attempts to see the extent the heritage resource is impacted as a result of settlement and town development. It also seeks to investigate the heritage management practice in Aksum as a World Heritage Site.

The change on the archaeological landscape will be evaluated based on previous archaeological and geo-archaeological researches. This will enable us to recognize and to rectify the consequences, and thereby identify appropriate solutions as future enquiry. In some of the sites no information could be retrieved from any literature or oral history on the landscape transformation. Thus, the present research tries to put the maximum effort to analyze and reconstruct how a certain site would have looked like in the past. The rapid disappearance of the archaeological and heritage landscape and monuments in the three selected sites is quantified in

detail; such would help to see how rapidly the heritage resource is diminishing and that cultural heritage management is neglected.

The division of heritage resource in Aksum will be discussed in detail. Construction developments ongoing in the main archaeological site and their ramifications on the monuments and the general archaeological and heritage landscape will be evaluated. A detailed discussion of the problem of heritage management in Aksum that led to the warning of the UNESCO to include Aksum into the World Heritage Endangered List is presented. The research attempts to address the responsibility of different government and non-government bodies towards the heritage resource management in Aksum to help save and preserve the heritage for posterity and economic development through tourism.

The evaluation of the previous work also helps to put together the literature in this thesis so as to make it available and easily accessible to local researchers. By putting all available material in this thesis, including those published in French, the present study will ease the reading and future research on Aksumite Archaeology in general. It is also hoped that the present study will be a contribution to the regional and federal heritage agencies as well as the town administration to understand the general condition of the heritage in Aksum so that they would be inspired to take a lead in the heritage documentation and conservation in collaboration with national academic higher institutions. It will be used as a document to start with for future researches on similar topic in Aksum and elsewhere in the country.

The present study focuses its investigation on three main selected Aksumite sites. It attempts to make a comprehensive analysis of the previous materials available in English, French, Italian and German languages in order to see the development and transformations of the archaeological landscape and the heritage sites from ancient to the present. These sites (the Stone Thrones in the church enclosure, the May Hejja Stelae Site, and the Tombs of Kaleb and Gebre Mesqel) have caught the attention of many travelers and archaeologists from the 16th century AD to the present. As a result, fairly adequate data for background information is available to work on these aforementioned sites. The selection of these sites for the present study is also dictated by the fact that they are less inhabited currently and that they have represented three different types of sites: stelae site, tombs and structures site, and stone thrones (“coronation”) site.

Apart from descriptive and archaeological excavation works on the sites, the absence of extant research on documentation and preservation of archaeological and heritage landscape and cultural heritage management makes the present study difficult and limited. Using the present research as a point of departure, therefore, a lot more needs to be done on the rest of the sites of the town in the future.

1.4 Documentation and preservation: a theoretical synopsis

In the ancient sites of classical Greece, China and Pharaonic Egypt and Rome, rulers protected their past sites and monuments, but these were only unconscious attempts of heritage management. In Europe, appreciation and learning about the values of the past began during the Renaissance period. Surveying and recording of sites continued from that time forward throughout Europe which contributed to the modern heritage preservation movement (Cleere, accessible at: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>).

The history of modern heritage management goes back to the early 18th century. Its development was associated with the concern for safeguarding the past from further destruction. Such public interests gradually got the attention of central authorities which led to the establishment of national heritage protection offices and the drafting of legal frameworks. In the Netherlands, this started in the early first quarter of 19th century with the establishment of National Museum of Antiquities, whose appointed director was later involved in the documentation and inventory of archaeological sites. This was followed by the emergence of regional organizations which were actively involved on research, documentation and preservation of archaeological sites. In the late 19th century, heritage policy appeared at national level in Netherlands (Willems, 2000). There are, however, countries which had heritage proclamation since 17th centuries (Swedish Royal Proclamation, 1666, Kingdom of Naples, 1738, Greece, 1834). In the rest of Europe, heritage legislation appeared towards the end of 19th century AD (Cleere, <http://www.eolss.net/Eolss-sampleAllChapter.aspx>).

The issue of cultural heritage management in general is a global concern today due to the continuous threat of heritage from both natural and man-made causes. In most developed countries, such as the countries of Europe and the United States, the concern for documentation

and preservation of the archaeological resources has increased especially since the 1970s. Archaeology profession now tends to focus on preservation of the past due to imminent threats. Since the mid-1980s, abundant literature has been made available about general cultural heritage management – an indication of growing concern and awareness about archaeological sites management (Willems, 1998).

The post-WWII period witnessed a dramatic change in the attitude of governments towards heritage management. Cultural heritage resource was more threatened than ever before due to the massive construction program post-WWII. This even partly affected developing nations (Cleere, <http://www.eolss.net/Eolss-sampleAllChapter.aspx>). Towards the African Year of Independence (1960) African nations were engaged in investments in big projects such as roads, health institutions, town and city expansions, hydroelectric installations, and communication systems. Such constructions increasingly threatened and destroyed archaeological sites before any documentation activities were carried out (Kankpeyeng and DeCorse, 2004).

The documentation of cultural heritage is of paramount importance in cultural heritage management. Everything, from small artifact to large monumental structures must be documented before they are damaged. During documentation, every aspect of the heritage needs to be detailed, such as “architectural, artistic, historical, scientific and social” parameters (Patias and Santana, 2011).

The identification and documentation of sites before destruction is a first step in heritage preservation and research. Archaeological sites are often hidden in sub-surface, most of them still unknown, and therefore difficult to protect. To take measures toward heritage preservation, archaeologists need to have adequate information about a certain site’s type, location, dimension and condition. Such information could be retrieved from legend, surface survey (field walking) and sub-surface detectors. But the quickest and lowest cost method is the field walking reconnaissance method. The significance of documentation could be put as follows:

“The first and most important step in the conservation of any cultural site is to collect and analyze information about its physical history and present condition. Documentation plays a critical role as a tool for decision making, particularly in

relation to the often insurmountable deterioration problems that affect cultural sites. Confronted by these threats, the limitations of many physical conservation interventions are apparent, though often only after ineffective interventions have been made. The main aim of documentation should be to provide information that can forestall such mistaken interventions in the future by identifying, if possible, exact sequences and rates of decay over time, thus helping to establish what can and cannot be safely treated in the long term” (Rickerby, 1997: 62).

Documentation is a preventive measure before the cultural heritage is endangered as a result of natural and anthropogenic causes. Timely documentation is very essential; as cultural heritage resource is an irreplaceable resource, documentation should not be too late. The documentation of an archeological site “allows an immediate, reasonable, and rationally argued response when any policy is formed that may endanger it” (Prott, 1993: 10).

Sometimes the question of what to preserve becomes an issue between heritage managers and political authorities. We may not be able to save every piece of piece of artifact that is scattered everywhere; a representative sample of the “material archaeological heritage of all recognized periods” should be preserved in order to hedge “against future shifts of ideological paradigm by preserving for future society a diverse archaeological resource from which significant heritage can be selected” and to insure “archaeological knowledge against the development of techniques of research able to make use of data of no apparent value in the present day” (Wenban-Smith, 1995: 144). In the assessment of a site’s significance to estimate its value, in-depth knowledge of its overall aspect – material content, social history and architectural history must be thoroughly understood to make a reasonable decision about its preservation in general. The significant site should be also helpful in understanding the past, giving lessons to present, and serving as a valuable to future generations.

English heritage proclamation has set some criteria on which heritage sites are worthy of preservation: “extent of survival; current condition; rarity; representativity; either through diversity or because of one important attribute; importance of the period to which the monument dates; fragility; connection to other monuments, or group value; potential to contribute to our

information, understanding and appreciation; extent of documentation enhancing the monument's significance" (Greene and Moore, 2010: 297). The identification and documentation of an archaeological site is an important step to the characterization and preservation of the heritage. This paves the way for an effective cultural heritage management.

Conflicts over archaeological and heritage sites arise as well in decisions about whether they should be preserved or excavated. In North America, Native Indians challenged archaeologists that their cultural and archeological sites must be preserved, an argument against archaeologists who wish to excavate them in search of new information. Some such sites have no archaeological traces as they are linked to Tribal public gatherings or ritual centers used since ancient or recent times. "Their continued existence is thus important to Indians, and they often have far-reaching cultural values" (Winter, 1980: 123).

Our cultural heritage is constantly threatened before appropriate documentation and preservation measures are completed. The threats to cultural heritage may vary from country to country and from site to site. The common ones are, however, development of big infrastructures such as road construction, urbanization and town planning, dam construction, industrialization, rural settlement expansion, agricultural developments etc. For example, the site of Abu Simbel in Egypt, famous for its complex temples and monuments, was to be submerged forever during the construction of Aswan High Dam in the beginning of 1960s. The intervention of UNESCO to save this universal heritage later led to the development of a UNESCO convention in 1972 on the protection of sites of outstanding universal value (Prott, 1993). A large percentage of excavations carried out between 1960s and 1980s was to save sites that were about to be destroyed by development activities. The last few decades witnessed the destruction of more sites "than in the rest of human history" (Grant *et al.*, 2008). The high demand for antiquities in the West has dramatically worsened the vandalism of archaeological sites in the Latin America. Similarly, war in Bosnia, Afghanistan and Iraq created a market for heritage smugglers. Despite the presence of international conventions on the prohibitions of heritage trafficking, archaeological sites are still illegally dug and antiquities smuggled to, mainly, the west and Japan (Grant *et al.*, 2008; Parks *et al.*, 2006).

On the other hand, in some ancient historical sites, the development of tourism has caused problem of preservation on already identified sites. Scholars argue that even if a site has been already documented, uncontrolled tourist flow erodes the heritage. Developments following tourism access to a certain site may put the heritage resource itself in danger and disfigure the surrounding landscape. A program of cultural heritage preservation is an essential need after documentation. Preservation in this case includes not only the heritage itself but also its associated and surrounding landscape. At the Petra, Jordan, archaeological site, for example, Akasheh (2012, 133) pointed out:

“In the 1980s, only two hotels were known in Petra, the Government Rest House and the Forum. Both were built in a discrete manner using stone that fitted reasonably well with the natural environment. In the early 1990s, several new and modern hotels started cropping up on the Al Taybeh Road. They directly overlooked the Petra site and some of them could be seen directly from the archaeological site again infringing on the natural and geologic beauty of the site.”

The theory of documentation and preservation is an almost unknown practice in Aksum. Despite the rich archaeological and cultural heritage of Aksum, documentation and preservation has been and continues to be a neglected practice. All previous archaeological excavations in Aksum have largely been involved in unearthing known elite structures. As will be shown in Chapters Three through Six, Aksum archaeological and heritage sites suffered from absence of documentation and preservation. The present research will point out the need for documentation and preservation, including management and monitoring practices during post-excavation periods.

CHAPTER 2

GEOGRAPHICAL SETTING AND HISTORICAL SURVEY OF AKSUM AND AKSUMITE KINGDOM

“...we have erected statues..., one of gold, one of silver, and three others of brass, to his glory” (King Ezana’s inscription in Greek, Sabean and Ge’ez scripts, erected in Aksum).

2.1 A geographical summary

The modern nation of Ethiopia is located in the east Africa bordered by Djibouti, Somalia, Kenya, South Sudan, Sudan, and Eritrea (*map 2.1*). Since 1991 it has become a land-locked country when Eritrea seceded after the protracted civil war which lasted for over twenty years. The ancient geographical region, which is the main concern of this study, includes present day Eritrea, most of Tigray province, and parts of Gonder. Although the ancient territorial demarcation of the Aksumite Kingdom is just conjectural, archaeological evidence suggests that this region represented the ancient civilization of the Aksumite Kingdom (Anfray, 1970; Conti Rossini 1931; Munro-Hay, 1993, 1991).

This great Aksumite Kingdom, which flourished during the first seven centuries of our era, was centered in Aksum (Munro-Hay, 1991; Fattovich, 1994). Today, Aksum is small town, not even the capital of the province of Tigray – the northernmost region of the country. However, although Aksum has diminished to such lower status in modern times, its past glory occupies the greatest place in the history, archaeology and legend of the country. Aksum was the capital of Aksumite kings, and today the holiest place for the Ethiopian Orthodox Christians. It is traditionally believed that Aksum was the capital city of the queen of Sheba, and the resting place of the True Ark of Covenant – the original stone tablets on which God inscribed the Ten Commandments and gave to Moses at Mount Sinai. A text in Munro-Hay (1991: 9) calls Aksum the “royal throne of the kings of Zion, mother of all lands, pride of the entire universe, jewel of kings”.

The topography in which the ancient Aksumite kingdom lies is characterized by diverse geographical features ranging from high mountains to lowlands (Mesfin, 1972). The lowlands are found in the east, west and northwest. With the highest mountain of Ras Dashen in north Gonder rising to a height of 4620m and, one of the lowest depression in the world found in the present Afar region measuring around 120m below sea level, the ancient region of the kingdom is bisected by three great rivers – Blue Nile (Abay), Tekeze and Mereb. Most of the rivers flow through deep gorges draining into the Mediterranean Sea and Indian Ocean (Mesfin, 1969). Climate is controlled by the variation in altitude. The highlands have a temperate climate while the lowlands are hot and dry. The geology of Tigray region in which Aksum is situated, is the result of volcanic activity with a topography generally ranging between 1000 and 3100m in altitude (Ethiopian Mapping Agency, 1988). The geographical situation of the region has a variety of environments that created conducive climate for grazing and crop growing. In such cases, it contributed to the development of complex societies in the long history of the region (Kobishchanov, 1979; Pankhurst, 1997, 1961; Connah, 1987).

2.2 History of the Aksumite Kingdom: Origin and development

There has been long debate and ambiguity on the origin of an indigenous Ethiopian state and the role of contacts with the western part of the South Arabian domain. Such debates and ambiguities arose partly from lack of sufficient data and from biased interpretation of the available archaeological and epigraphic sources. Those early interpretations mainly focused on the theory that external contacts, with the opposite regions of the southern Arabic Peninsula across the Red Sea, were the main constituting factors for Ethiopian cultural and technological origins and achievements (*e.g.* Conti Rossini, 1928; Phillipson, 2009a; Fattovich, 2004).

It has been suggested that migrants from Southwestern Arabia settled in the highlands of Tigray and Eritrea during the 1st millennium BC and intermingled with the local inhabitants. Gradually Semitic immigrants imposed their elaborated culture of architecture, agricultural techniques, writing and worship on the inhabitants (Conti Rossini, 1928). The result of such contact has been called an Ethio-Sabean state, identified with the specific name of a state known as Da‘amat (the vocalized form of D‘MT) that emerged in northern Ethiopia and central Eritrea (Fattovich and Bard, 2001; Contenson, 1981; Anfray 1968, 1967). The name Da‘amat – representing a kingdom



Map 2.1 Location of Aksum (Drawing: Hiluf Berhe, 2015).

– was widely attested in inscriptions at several places in Tigray dated from about the middle of the 1st millennium BC (Munro-Hay, 1991; see also Gajda and Yohannes, 2009; Leeman, 2009; Drewes and Schneider, 1991; Phillipson, 2009a).

It seems that these earlier views were influenced not only by the cultural similarity on both sides of the Red Sea region but also by the occurrence of southwestern Arabian material culture predating those of Ethio-Sabeans in Ethiopia (Pirenne, 1956; Beek 1967). The existence of cultural contacts between the two regions is inevitable especially due to their geographical setting. At the Straits of Bab el-Mandeb, Ethiopia and the southwestern Arabia are separated only by about 20 km (Dubois, 2003). This narrow passage has probably been used from the most ancient times up to present for shipping between Persian Gulf, Red Sea, Indian Ocean and the Arabian Sea. Apart from this, the geography of the two regions on both sides of the Red Sea coast share a similar environment mainly identified by the identical rainfall, flora and fauna (Beek, 1967).

The beginning of the contact between Ethiopia and southwestern Arabia has generally been accepted as dating to between 10th and 5th centuries BC (*e.g.* Beek, 1967; Fattovich, 2004; Munro-Hay, 1991); this range tells us that the conclusions were just speculative and do not show clear evidence for the date of the contact. Archaeological research is an ongoing process and never stops at one point with just first findings. It is disproportionate to conclude from one side, as this may also be considered bias in interpretation. Most scholars on the contacts between ancient Ethiopia and southwestern Arabia have viewed them from the perspective of the Sabeans domination on Ethiopia in terms of civilization if not political influence.

For the early dates proposed for the contact between Ethiopia and southwestern Arabia, archaeological evidence is lacking on both regions. Similarly, no epigraphic source in southwestern Arabia indicates the migration of Sabeans people to Ethiopia (Curtis, 2004; Beek, 1967; Leeman, 2009). Despite the fact that the monumental architecture and script use in south Arabia are much earlier than those in Ethiopia (Robin and Maignet, 1998), most of the views that the ancient Ethiopian civilization is the result of southern Arabians seem to have been developed from an overlooked research by archaeologists and historians instead of considering the indigenous cultural developments at the lower strata in Ethiopia (Phillips, 2004). The presumed

Sabean influences on Ethiopia are exhibited in script, elaborate architecture, statuary, and belief system. Such materials have shown a tremendous resemblance with materials in southwestern Arabia (Contenson, 1981). These remarkable resemblances in the cultures of the two regions have long since been identified in many sites in Ethiopia and south Arabia. The influences were mainly on the elite society and all appeared suddenly at some big centers like in Yeha (Contenson, 1981; Conti Rossini, 1928; Robin and Maigret, 1998). Obviously these resemblances would have led scholars to the conclusion that contacts have occurred between the two sides of the Red Sea region (Fattovich 1989; Schneider, 1978, 1976a, 1976b; DiBlasi, 2005).

The South Arabian elements appeared suddenly during the middle of 1st millennium BC; but the rulers were evidently local. Yeha, Addi Gelamo and Hawlti-Melazo were generally identified as large elite sites of the “Pre-Aksumite”¹ period (Phillipson, 1998; Curtis, 2004), while Fattovich (1990) has generally reported the existence of some ninety Da‘amat sites in present Tigray and Eritrea. Recent archaeological excavations and surveys have extended our knowledge of the existence of other potential Da‘amat sites with south Arabian elements (*e.g.* Hiluf Berhe, 2011, 2009; Gajda, *et al.*, 2009; Wolf and Nowotnick, 2010). Yeha, believed to be a major centre of the Da‘amat kingdom (Anfray, 1990; Conti Rossini, 1928; Fattovich, 1990; Phillipson, 1998), and situated some 50km northeast of Aksum, is identified by the presence of a standing but roofless temple, ruins of a palace structure, rock-cut tombs, many stones bearing Sabean inscriptions, and art works. The temple of Yeha was also generally assumed to have exhibited similarity in masonry work and form with temples in south Arabia. Similarly, the monolithic pillars found at Grat Be‘al Gebri (Yeha), Kaskese (Eritrea) and Hawlti-Melazo (about 12 km southeast of

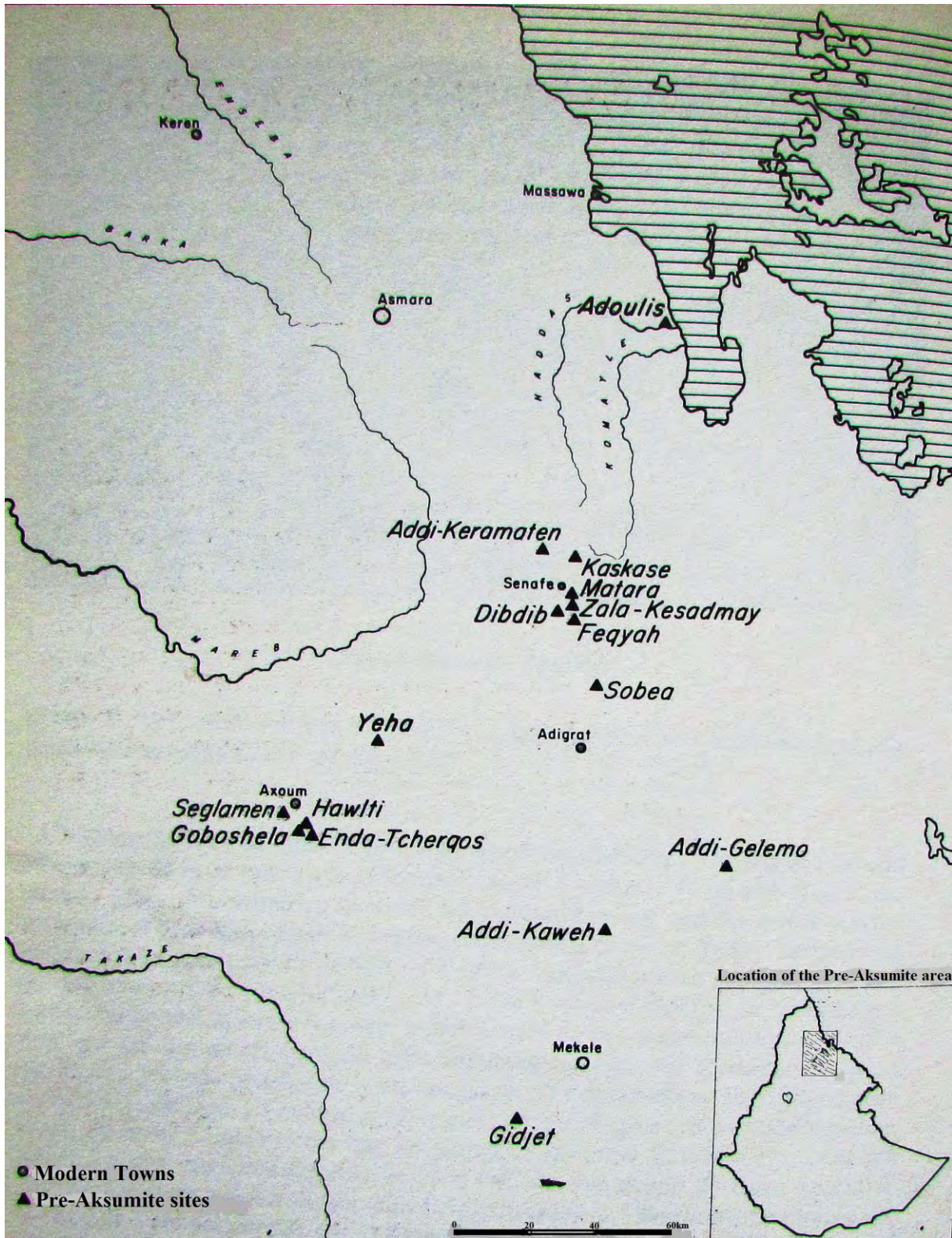
¹The material culture of communities during the “pre-Aksumite period”, which exhibited similar feature to those in south Arabia, has generally been termed as “Ethio-Sabean”(Anfray, 1968; Contenson, 1981; Fattovich, 1990). These characteristics are assumed to be the identity of the “Ethio-Sabean”, though their existence is limited only to the elite centers in Tigray and Eritrea (see also Curtis, 2009; Bard, *et al.*, 2000). The period “pre-Aksumite”, however, lacks its bottom strata of chronological boundary besides its limitation of geographical distribution (see also Phillipson, 2009a: 257-258; Finneran, 2007: 117-118). On the other hand, another intermediate period between “pre-Aksumite” and Aksumite is termed as “proto-Aksumite” ranging from about ca.400-100 BC (Bard and Fattovich, 1995, 1993; Fattovich and Bard, 1994). Here the name “Da‘amat” period instead of “pre-Aksumite” will be used throughout as has also been proposed by Phillipson (2009a) and Finneran (2007). This D‘MT name appears in many of the inscriptions discovered within the present Tigray (Phillipson, 2009a: 266) confirming that the capital of this D‘MT kingdom was most probably Yeha. The ruler is heard declaring himself as the king of D‘MT (*e.g.* Gajda and Yohannes, 2009; Phillipson, 2009a) which is no doubt that the name D‘MT represents a certain kingdom.

Aksum) resemble the monumental temple near Marib, called the Awam temple (south Arabia) (Curtis, 2004).

As can be understood from the above discussion, almost all researches have focused exclusively on the elite centers, and were attributed to the South Arabian people for the genesis and development of Daʿamat civilization. These were only superficial and do not represent the general non-elite society and its material culture. If the immigrations were on large scale (as believed by Conti Rossini, 1928), then, the Sabeans would have influenced the general culture of the society as well; but when the contacts were on small scale (as thought by Anfray, 1990, 1967; Fattovich, 1989) the influence has remained only among the elite society.

The previously established assumptions that south Arabians had influenced the Ethiopians for the rise and development of the civilization were reversely argued. Pirenne (1988) for example argued that the cultural expansion did not take place from Yemen to Ethiopia, but conversely, from Ethiopia to Yemen. This theory accepts the presence of Sabeans in Ethiopia whose reason of entering Ethiopia was differently postulated. These Sabeans would have then left for Yemen taking with them the technique of architecture and writing system which they had mastered in Ethiopia. On the other hand, Isaac and Felder (1988) postulate that cultural developments may have occurred concurrently on both sides of the Red Sea region. Similar dating of some monuments falling in the 5th century BC in Ethiopia and South Arabia on the basis of palaeographical study (Munro-Hay, 1991), and the contemporaneous dating of between 7th-5th centuries BC of the Yeha Great Temple and some of South Arabian Temples (Robin and Maigret, 1998) may strengthen the view of Isaac and Felder.

It has been believed by some scholars (*e.g.* Fattovich, 2004) that the Sabeans had also influenced the Daʿamat state by means of direct political control. Some inscriptions from Daʿamat sites of Ethiopia may, however, help to disprove this notion. The translation of an inscription on an incense burner from Addi Akaweh relates that a king known as *Rd'm* was “King of Daʿamat, its East and its West, its Sabaeans and its immigrants, its Red and its Dark” (Gajda and Yohannes, 2009: 52). It can evidently be deduced from this inscription that the Sabeans had no political control over Ethiopians, and even rather it seems that the land of Saba and its people was under the control of the king of Daʿamat, as the phrases “its East”, “its Sabaeans...”, and “its Red” are



Map 2.2 Location and distribution of Da'amat period sites in the present Tigray Regional Administration State and Eritrea (after Anfray, 2012: 16).

most likely referring to the people of South Arabians and Sabeans across the Red Sea region. So far, there is no proof of south Arabian political domination on the Ethiopians (Munro-Hay, 1991).

From the translation of the inscription, the phrase “its immigrants” must be considered cautiously, since other inscriptions from Gobo Shela and Yeha (*e.g.* RIÉ 26, 27, and 39; Schneider, 2003 in Phillipson, 2009a) which mention the employment of Sabean architects and masons, would help to confirm the former view that there were few Sabeans residing west of the Red Sea. This idea can also be reinforced by the fact that the “influence over the kingdom of D’MT is a phenomenon of limited overlying „vener“, apparently „political“ rather than „cultural“ in force and nature, recognizable and distinguishable only amongst certain elements within an otherwise wholly indigenous culture” (Phillips, 2004: 84). Had the Sabeans been living among the general public for long time, the result of their influence would have also been appeared everywhere or at least within a defined geographical area but among ordinary society. Thus the existence of few Sabean elements in a few elite sites (Munro-Hay, 1991) suggests that there were no Sabean immigrants or colonizers (Keall, 2004) but the elite could have either copied these elements from Sabeans for political reasons (if we accept the justification of Phillips, 2004), or would have employed architects and masons as can be understood from the inscriptions RIÉ 26, 27, and 39.

Ethiopia, a cradle for prehistoric cultures, could have continued without interruption until the civilization of Ethiopian Da’amat and Aksumite period. The vastly increased researches on Ethiopian archaeology in the past few decades have added significantly to the knowledge of the existence of an earlier indigenous civilization in the Ethiopian region (see Phillips, 2004; Curtis, 2004; Fattovich, 2009, 2004). This knowledge in turn provided a framework within which the indigenous civilization among the earlier small community residing in Eritrea and Tigray can be reconsidered and interpreted.

More recent archaeological research has demonstrated that indigenous cultural developments were well established by early communities identified mainly by their domestic subsistence economy and technology, high degree of socio-political organization as well as some art works since at least the beginning of the 1st millennium BC (Finneran, 1998; Curtis, 2004; Boardman

and Phillipson, 2000; Boardman, 2000; Fattovich 1990, 1989). The study of the subsistence economy and the lithic tools of the ordinary society helped reconstruct the indigenous cultural history in Tigray and Eritrea. This has been usually underrepresented in archaeological research and literature (L. Phillipson, 2009a). The previous assumption that wheat and barley were introduced to Ethiopia during the first millennium BC from south Arabia (Conti Rossini, 1928) is now disproved by the expanded studies of palaeobotanical material.

Although detailed studies on plant domestication and agricultural practices in the northern highland plateau of Ethiopia had been poor, it is now proved that there was long history of indigenous agricultural origin. The region is now found to be a center of origin for certain crops endemic to Ethiopia such as tef (*Eragrostis teff*) and noog (*Guizotia abyssinica*). In addition, crops assumed to have originated in the Near East have an even longer history – cultivated with local agricultural techniques and even genetically diversified in Ethiopia (Brandt, 1984; Phillipson, 1993; Harlan, 1992, 1982, 1969; Ehret 1980; Vavilov 1951, 1926).

It is appropriate to consider the legacy of Punt for the continued existence of communities with developed socio-political organization in the present Eritrea and Tigray regions and the origin of indigenous culture. Egyptian sources state that Egyptian Pharaohs had very strong relationship with the land of Punt since the first-quarter of the 3rd millennium BC during which records of Ethiopian products are available in Egypt (Pankhurst, 1997, 1961). Contacts with the Land of Punt were continued throughout the fifth Dynasty during King Sehure (c. 2458-2446 BC) which lists the products from the Land of Punt. But the most illustrative record of Punt comes from the period of Queen Hatshepsut (1473 -1458 B.C) from her temple at Deir el-Bahri (Phillips, 1997; Pankhurst, 1997, 1961; Munro-Hay, 1991; O'Connor, 1982).

Expeditions to the Land of Punt to get frankincense and other natural resources were made first by land (south from Egypt following the Nile) and later by sea (south, following the Red Sea). The travels to the Land of Punt by sea involved a huge number of vessels which carried many different products from Punt. The harbor for Egyptian vessels in Egypt after crossing the eastern desert has been discovered recently at Wadi Gawasis on the Red Sea coast (Fattovich and Bard, 2007). It is, however, probably due to scant archaeological research thus far that the center of ancient Punt has not yet been located. Most convincingly, the origin of ancient centers

discovered in Eritrea and Tigray predating the period identified with material cultures with affinities in south Arabia (e.g. Curtis, 2004; Phillips, 2004), must be linked to the Puntite state (Munro-Hay, 1991). Puntites were also seen as being involved in trade with Egypt and possessed their own vessels. They also carried back to their land manufactured goods from Egypt (Pankhurst, 1997; O'Connor, 1982). People during the Puntite period seem to have been involved in commercial activities along the adjacent coasts of the Red Sea while still supplying enormous natural products to the Egyptian traders (Sleeswyk, 1983, in Munro-Hay, 1991). No port on the Ethiopian Red Sea coast is exactly located dating back to the Puntite period²; but the discovery of a stela written in Greek language and belonging to Ptolemy III Eurgetes (246-221 BC) at the port Adulis (Pankhurst, 1997; Phillips, 1997; Beeston, 1980) may tell us that the missing link from the Puntite period is either due to a bias of archaeological preservation or less archaeological research which we would hope to be rectified in the future.

The period immediately preceding the rise of Aksumite Kingdom and after the decline of Da'amat Kingdom is generally a missing link which Munro-Hay (1991) called "Dark Age". Other terminological frameworks have been designated for this period by different authors as "intermediate" and "late pre-Aksumite" period (Anfray, 1968; Michels, 2005; *table 2.1*), but the time span varies greatly among the different periods. So far, there is no conclusive evidence for the decline of Da'amat kingdom. On the other hand, the transition from Da'amat to the Aksumite kingdom still remains vague. It is, however, highlighted that after the fall of the major Da'amat kingdom, there were still petty states in Eritrea and around Aksum centered in Kidane Mehret, Medogue, Biete Giorgis and probably others around Aksum (Contenson, 1961; Fattovich, 2004; Phillips, 2004; Curtis, 2004).

The shift was generally conceived to have taken place westward to the plateau of Aksum. The cause for the decline and collapse of Da'amat is argued by some scholars as due to the disintegration of Sabeian trade states and the eventual fall of Red Sea commerce under the Ptolemaic Egypt by the 4th century BC. Such changes could have curtailed the socio-historical

² This period can now be generally understood ranging between 3rd millennium BC and the Twenty-sixth Dynasty (664 -525 B.C.). The Persian king, Darius also mentioned Punt in his inscription 486-5 BC when he controlled Egypt. Thus our knowledge about ancient Punt comes from Egypt recorded on bas-reliefs and inscriptions dating from as early as first-quarter of 3rd millennium BC to the 5th century BC (Pankhurst, 1997; Phillips, 1997; Munro-Hay, 1991).

and economical prestige of the Daʿamat. In addition to the above mentioned reasons, the growing power of Meroe in Nubia by the 4th century BC and eventual control of the Nile River area have possibly established a trade contact with the plateau of Aksum region (DiBlasi, 2005; Connah, 1987; Phillipson, 1998; Finneran, 2007).

After about 400 BC no known site near Yeha reveals monumental inscriptions, elite buildings and sculptural art as were famous during the Yeha period prior to 400 BC (Anfray, 1990). Only few sites near Aksum, namely Hawlti, Melazo, Seglamen and Addi Ataro were found with small center and some Daʿamat period elements. All centers after the demise of Daʿamat state were governed by independent local rulers. This confirms the collapse of the Daʿamat state and absence of major administration center (Munro-Hay, 1993; Michels, 2005, 1988). Michels' 1974 Aksum-Yeha region survey recorded that many nucleated residential centers existed west of Aksum which later would have become incorporated into the Aksumite kingdom (Michels, 2005).

Recent archaeological excavation on top of Biete Giorgis confirmed that a polity existed that originated after the collapse of Daʿamat. The excavation further revealed that the occurrence of imported material and bronze seal demonstrated the power of the polity that later gave rise to Aksum by about mid 2nd century BC (Fattovich and Bard, 2001). Archaeological excavations carried out at Yeha itself hinted the possibility of destruction of Yeha by a conflagration, evidenced by the discovery of a vestiges of burned wood – timber wood possibly originally used for horizontal beam of the Grat Beʿal Gebri building (Schnelle, 2011; Anfray, 1972).

Later on, all the polities which continued to survive after the collapse of the Daʿamat state both in Eritrea and Tigray regions were finally engulfed by the Aksumite kingdom (Munro-Hay, 1991), whose archaeological evidence is usually identified by the name “Aksumite culture” (Fattovich, 2010).

The origins of Aksumite kingdom are still poorly understood due to the so far insufficient archaeological data. However, luckily enough, we have detailed information in present Eritrea and Ethiopia of this largest political entity. Many features of the Aksumite kingdom have their origin within the period of the kingdom, and still certain characteristics inherited from the earlier

civilization are observed mainly in religion and language (Munro-Hay, 1991; Conti Rossini 1928; Sergew 1972; Kobishchanov 1981, 1979; Anfray 1981; Fattovich and Bard, 2001; Fattovich, 2001; Sutton, 1989).

Recent excavations at the summit of Biete Giorgis have revealed that during the period preceding the presumed emergence of the Aksumite kingdom and after the decline of the Da'amat kingdom, there existed some petty states which had contacts with Ptolemaic Egypt, Upper Nubia and possibly southern Arabia, – evidence obtained from fragments of imported vessels and glass beads (Manzo, 2004, 1998; Fattovich, 2010, 2004). Recently available archaeological evidence demonstrates that the origin of Aksum can be dated to the mid-2nd century BC (Michels, 2005; Fattovich, 2010, 2004; Fattovich and Bard, 2001; Fattovich *et al.*, 2001; Bard *et al.*, 2000; Finneran, 2007; Phillipson, 2009a). The region of Aksum and its surroundings have been inhabited by communities since prehistoric times (Phillipson 1982, 1977; Finneran, 2007, 2000a, 2000b; L. Phillipson, 2009a, 2009b), and more recent habitation sites at Kidane Mehret and Biete Giorgis confirm this continuation until Aksum emerged as major center of the Aksumite Kingdom (Phillipson, 2000; Fattovich, 2010, 1989; Finneran, 2007; Phillips, 2004).

There is only speculation for the possible reason of the Aksumite choice of Aksum as a center in this place. Different scholars have put forward their idea that the environmental factor and strategic position can be considered as convincing hypotheses. The central plateau of Tigray encompassing Aksum is located in the fertile area suitable for food production. The surrounding region is also generally rich in natural resources (Manzo, 1999). Aksum itself lies at an altitude of 2100m above sea level which experiences a sub-tropical climate. The plain surrounding Aksum is known for its fertility even to this day where tef is highly produced without fallow. The fertility of the vertisols of this plain area has been categorized as top soil type in fertility (Michels, 2005; Butzer, 1981; Bard *et al.*, 2000). The plateau of the Aksum region is located far from the coastal areas and Aksum could have enjoyed this geographical location as a natural fortress. In addition to the environmental advantages, the site of Aksum seems to have been chosen for its convenience for trade routes. It is situated between the Nile, Adulis, Berbera (Somalia coast for incense) and the south for gold trade towards Sasu (Munro-Hay, 1991; Kobishchanov, 1979; Schoff, 1912; Fattovich, 2010; McCrindle, 1929). This location helped

Aksum exploit the natural resources like gold and others found further inland, and the incense-producing area of the Tekeze region.

Table 2.1 Summary of terminological frameworks of the “pre-Aksumite”, Aksumite and post-Aksumite periods.

	Anfray (1968)	Michels (2005)	Fattovich (various)	Phillipson (2000)
AD				
1000		?		
900	_____	↓ Late post-Aksumite	_____	
800		Early post-Aksumite	Post-Aksumite	Post-Aksumite ↑
700		_____	_____	_____
600	Aksumite period	Late Aksumite	Late Aksumite	Late Aksumite
500		_____	Middle Aksumite	_____
400			_____	Classical Aksumite
300		Early Aksumite		_____
200		_____	Classic Aksumite	
100			_____	Early Aksumite
0	_____	Late pre-Aksumite	Early Aksumite	_____
100	Intermediate period	_____	_____	
200				Proto-Aksumite
300	_____	Middle pre-Aksumite	Proto-Aksumite	_____
400	Ethio-Sabeen period	_____	_____	
500	_____	Early pre-Aksumite		Pre-Aksumite
600			Pre-Aksumite	
700		_____		
800			_____	_____
BC				

Whatever the reasons for the location of Aksum and the contributing factors for its origin, historical sources record a kingdom with its capital at Aksum since the 1st century AD. So far, the first known written document of the classical period, in which Aksum is mentioned, is the

Periplus of the Eritrean Sea – a document used as a guide-book for merchants and sailors around the Red Sea and the Indian Ocean. It was written in Greek by an anonymous author, probably Egyptian Greek (Schoff, 1912). According to this document, Aksum, also mentioned by the same document as “the metropolis of the Aksumites”, is located inland from the Red Sea coast eight days journey from the port Adulis. The ruler of the Aksumites is mentioned in the document by the name Zoscales – a powerful ruler and greedy man, who had good knowledge of Greek (Ibid). The date of the *Periplus of the Eritrean Sea* has been debated; it is most probably written in the year AD 60 based on the interpretation that Pliny the elder consulted the work of the Periplus around AD 77, and the name of Zoscales was included in the chronological list of Abyssinian kings as reigning during the second-half of the 1st century AD (Gardner, 1977; Salt, 1814; Schoff, 1912).

By the 1st century AD, according to the *Periplus of the Eritrean Sea*, the Aksumite kingdom had already been involved in international trade engaged on exporting and importing different products through the port Adulis. The ability of king Zoscales to speak Greek tells us something about the long history of international contact of Aksumite kingdom with the Hellenic world. It is hard to believe that Aksum originated and developed during the 1st century AD. We must give some time for the origin and consolidation of the kingdom before it became involved in international trade with its port at Adulis as witnessed by the *Periplus of the Eritrean Sea*. Adulis could have also been used as a port for local trade before it was used by the Aksumite Kingdom as its main port for international trade. The discovery of hippopotamus canines at “D” site (Phillipson, 2000; Cain, 2000) in Aksum proves that products made their way through Aksum to the Red Sea for trade long ago before the *Periplus of the Eritrean Sea* mentions similar items in the 1st century AD. The same document mentioned many items that the Aksumites imported through Adulis while exports were summed as ivory, tortoiseshell and rhinoceros-horn (Schoff, 1912). Similarly, Pliny the elder mentioned three other items among the exports of the Aksumites: hippopotamus-hides, apes and slaves (Rackham, 1947-56). Pliny adds that Adulis was the greatest town of traffic which hosted traders from different countries. Archaeological excavations at Adulis, on the other hand, have revealed Aksumite architectural remains and artifacts, which may demonstrate that Adulis could also have been a kingdom on its own (Fauvelle-Aymar, 2009).

The Aksumite kingdom was a highly expansionist state whose boundaries remained imprecise. It seems that the motivation for territorial expansion of the kingdom by war was to control areas rich in resources, as can be referred from the ancient writers (*e.g.* Page *et al.*, 1917; McCrindle, 1929) and to secure the trade route (McCrindle, 1929; Dewing, 1914). Aksumite territorial control was extended in different directions: over the Beja lands to the north, the Kasu and Noba areas to the northwest, and the Agaw to the south (Munro-Hay, 1991) and across the Red Sea over the western coast of the south Arabian lands (Robin, 1981). Though the highest concentration of Aksumite cultural traces has been discovered in the present Eritrea and Tigray regions, some reported sites indicate that Aksumite traces to the southeast existed as far as Enderta (Conti Rossini, 1931) and even Wello (Fauvelle-Aymar *et al.*, 2011; Anfray, 1970).

The period between the end of 2nd and beginning of 4th century AD is probably the earliest known Aksumite period for which abundant written records of Aksumite military conquest to the west and east are available. According to stone inscriptions, the Aksumite armies were sent across the Red Sea to southwestern Arabia by the end of the 2nd century AD. There, an inscription recorded in Sabean script and language mentions an Aksumite king named GDRT, vocalized as Gadarat (Munro-Hay, 1991). Their military intervention in southwestern Arabia had both territorial and strategic benefits (Dewing, 1914). Sabean inscriptions from southwestern Arabia report that the Aksumite kings had first made a military intervention allying themselves with Saba in the latter's war against Himyar. Himyar was then defeated by the united forces, but the latter's alliance seems to have lasted short as Aksumite kingdom launched a military attack on Saba itself by breaking the former military treaty. As a result Aksumite kingdom subdued the territories of both Saba and Himyar, and set up its garrison in southwest Arabia with its city at Zafar (Robin, 1989, 1981; Caquot, 1965); thus the Aksumite kingdom increased its export trade and politico-military importance. This was the period during which the kingdom reached “a new zenith in its power” (Munro-Hay, 1991: 72-3). Recently, Some Himyarite coins were discovered in Aksum which tell of the relationship between Aksum and South Arabia dating even probably



Map 2.3 Location and distribution of Aksumite period sites in the present Tigray Regional Administration State and Eritrea (after Anfray, 2012: 115).

to the 1st century AD based on the estimated date of issuance of the coins (Breton and Munro-Hay, 2002). However, the reliability remains questionable as they were found in the hands of individuals in the town, out of archaeological provenance.

A Ge'ez³ inscription of King Ezana from Aksum (Littmann *et al.*, 1913, IV: no. 11) points to a military invasion of the Aksumite kingdom on Noba and Kasu in the confluence of Nile and Tekeze rivers during the 4th century AD (Bernand *et al.*, 1991, I; Munro-Hay, 1991; Conti Rossini, 1928; Shinnie, 1996, 1978a, 1967; Adams 1977). Another inscription in Greek relating the military campaign of Aksumite kingdom on Meroe has been discovered in Meroe itself. The attribution of this inscription is not certainly known due to serious damages which eliminated the name of the person but most probably belongs to King Ezana before his conversion to Christianity (Bersina, 1984; Hagg, 1984; Munro-Hay, 1991; Kobishchanov, 1979). On the inscription, the king proclaims himself as king of Aksum and the Himyarites which tells us that the Aksumite kingdom seems to have still controlled the entire south Arabian population of the Himyarite territory (Bernand, 2000).

The Aksumite military conquest is also illuminated by the most informative inscription of Adulis known as *Monumentum Adulitanum* – a designation by Henry Salt for the first time in 1814 (Fauvelle-Aymar, 2009), which Cosmas copied in the 6th century AD (McCrinkle, 1929). The anonymous sovereign author of the inscription declares that he has carried out many military campaigns in different directions: to the 'mountains of difficult access and covered with snow (probably referring to Semien high mountains)' (Pankhurst, 1997); to the west as far as the territories bordering Egypt; to the southeast he subdued the barbarous people residing in the frankincense country; to the east across the Sea to the land of Arabia after which he made both the land and sea trade routes safe. The inscription mentions „Samene people who live beyond the Nile in inaccessible mountains covered with snow...“; but Semien mountains are found before the Nile river; thus Tekeze river is proposed as a right candidate, since the Semien mountains, the highest peak in Ethiopia, are found beyond Tekeze river (Fauvelle-Aymar, 2009).

³ The earliest known unvocalized Ge'ez inscription on monumental stone dates from the late 3rd or early 4th century AD. It is the root for the present Tigrigna and Amharic languages spoken in the most-northern and northwestern part of Ethiopia. They both also use same script as Ge'ez. It's today liturgical language of the Ethiopian Orthodox Church.

By the 3rd Century AD, the fame of the power of Aksumite kingdom had already reached the Middle East. The Persian religious leader, Mani, who lived between AD 216 and 276, mentioned the Aksumite kingdom as one of the four great powers of the contemporary world: the kingdom of Persia, the kingdom of Rome, the kingdom of the Aksumites, and the kingdom of the Chinese (Polotsky, 1940).

The 4th century AD during the reign of King Ezana is a remarkable point in the history of the Aksumite Kingdom. The period witnessed the introduction of Christianity, the appearance of two types of coinage – with Christian and pre-Christian symbols, and the availability of abundant royal inscriptions of King Ezana (DAE, 4,6,7,9,10,11) (Littmann *et al.*, 1913, IV; Munro-Hay, 1991; Finneran, 2007; Phillipson, 1998; Kobishchanov, 1979). Two of the most famous inscriptions of Ezana in Greek, Sabean and Ge'ez scripts are found in Aksum at the northern and eastern gates of the ancient town, which record the details of Ezana's war campaigns, particularly against the Bejas. In the inscriptions he declares himself as the King of Aksum, Kasu, Beja, the Ethiopians, Tiyamo, the Himyarites, Raeidan, and the Sabaeans (Bernand, 2000, 1982; Bernand *et al.*, 1991, II).

The growing importance of international trade of the Aksumite kingdom was demonstrated by the issuance of coinage by the second-half of the 3rd century AD. Before the minting of Aksumite coins, Roman, Kushana and south Arabian coins were in circulation for international trade. Such coins were also in use by the Aksumite kingdom (Munro-Hay, 1991; Kobishchanov, 1979; Contenson, 1963) and the kingdom was probably influenced by the south Arabian (Dembski, 1988) and Roman coinage (Mattingly, 1952) to mint its own currency starting from about AD 270. Indian gold coins of Kushan Kings, dated to about the earlier 3rd century AD, have been discovered in Debre Damo monastery which confirm the trade relationship between the Aksumite Kingdom and India and the use of Indian coins by the Aksumites (Mordini, 1967; Pankhurst, 1974). The minting of coins had political significance; in the ancient world the Romans, Persians and Kushan emperors minted gold coins. Only sovereign, powerful and rich states were able to mint their own coin in gold. The Aksumite kingdom was then the fourth state to mint its own coins in gold, silver and copper (Kobishchanov, 1979). It was “...the only African state in ancient times, outside the Roman dependencies, to issue its own national coinage” (Munro-Hay, 1991: 180). The Aksumite coins were circulating in international trade. A few

coins have been discovered in Jerusalem, Caesarea, Aqaba, Hebron, Tiberias, and Yemen (Hahn, 2000; Barkay, 1981; Meshorer, 1965-66; Anfray, 1991:19, note) though the discovery of Aksumite coins in the latter was probably related to the occupation by King Kaleb (Hahn, 2000). The Aksumite kingdom officially converted to Christianity in the first half of the 4th century AD through Frumentius after he was consecrated by St. Athanasius, Patriarch of Alexandria, as the first bishop of the Kingdom. During the early 6th century AD the new faith was further carried on among the general public and monastic life was introduced by the Nine⁴ Saints who arrived from the Byzantine Empire toward the end of the 5th century AD (Sergew, 1972; Munro-Hay, 1991; Pankhurst, 1997, 1961; Phillipson, 2004). The most primary material evidence for the chronology of Christianity on coins and stone inscriptions is found in Aksum attributed to King Ezana. They bore the Christian phraseology and symbols (Schneider, 1976c).

Information from inscriptions and other sources for the period between Ezana and Kaleb is scarce; the sources of information for this period are coins and Roman-Byzantine authors who visited the Aksumite kingdom. The issuing of coins in gold, silver and bronze was still maintained while the foreign authors recorded that Adulis was a port through which many merchants traveled to the Indian ocean which confirms that the kingdom was active in international trade through its port Adulis. It was only with the advent of Kaleb to power that sources of information from stone inscriptions appeared again in addition to coins and references in Roman-Byzantine authors (Kobishchanov, 1979; Munro-Hay, 1991).

The Aksumite garrison in south Arabia was further intensified during the reign of Kaleb during the first-half of the 6th century AD with the expansion of Christianity. Christian churches were even established at the Himyarite capital called Zafar, and a viceroy to the Aksumite king was appointed there. Kaleb made two punitive war campaigns against the local ruler Dhu Nuwas who was persecuting the Christians in Himyarite. Kaleb was able to mobilize war ships for his expedition. Though the first expeditions led by the king himself were successful in defeating and

⁴ The Ethiopian Orthodox Church believes that these Nine Saints (*Abune Liqanos, Abune Pentelewon, Abune Gerima, Abune Aftse, Abune Aregawi, Abune Tshama, Abune Yem'ata, Abune Allef and Abune Guba*) translated the bible from Greek into the vernacular language – Ge'ez; preached the general public about the new faith, and established monasteries and monastic life. These Saints are believed to have lived in Aksum during which they learned the Ethiopian language (Ge'ez) for some years before their dispersal to different parts of Tigray. Today there are nine monasteries dedicated to each of the saints, some of them located on rocky mountains to which accessibility is with great difficulty.

finally killing the ruler – Dhu Nuwas, later campaigns under commanders of the king failed to subdue the local rulers. A great crisis occurred to the Christians at Zafar and Nagran where many Christians were massacred brutally (Yule, 2013; Yule *et al.*, 2007; Christides, 1972; Dewing, 1914; Beek, 1967). The protracted war between the Aksumites and South Arabians gradually led to the decline of access of the Aksumite kingdom to the trade route to India and Byzantine Empire. The request of the Byzantine Empire to ally with the Aksumite kingdom against the Himyarites was not implemented but only ships were supplied by the Byzantines. The Aksumite kingdom bore all the burdens of subduing the south Arabians, and it must have required huge amounts of resources to put down the repeated rebellions (Kobishchanov, 1979).

The power of the post-Kaleb period of the Aksumite kingdom was very weak; the Aksumite kingdom began declining both economically and politically. Coins not only declined in quantity but also in type; the type of coin minted during the period under discussion was bronze and few of silver but gold was debased since its importance in international trade is now blocked by the Persians and the rising south Arabians. It seems that subsequently the birth of Mohammed the prophet was the culminating stage for the occupation of south Arabia by the Aksumite kingdom as the region was soon afterwards totally recovered under the followers of the new Muslim faith. Access by sea to the Byzantine world was cut-off and the inland route to Egypt was also insecure due to the Bejas and Nubians in the present north of Eritrea and Sudan, respectively (Conti Rossini, 1928; Beek, 1967; Kobishchanov, 1979; Munro-Hay, 1991). It seems that the kingdom finally abandoned minting coins by the first-half of the 7th century AD – the last coins being identified with the name Armah (Hahn, 2000; Munro-Hay, 1984; Munro-Hay and Juel-Jensen 1995). For these reasons, the Aksumite kingdom ceased to be an important figure in the international trade and political scene.

During its golden age period between late 3rd and 6th centuries AD (Phillipson, 2004; Pankhurst, 1997) the Aksumite kingdom reached its greatest prosperity. Its material evidence revealed in the capital and other ancient centers indicates that the kingdom enjoyed high prosperity, and probably possessed high technology during the time to exploit resources and conquer its rivals. The monolithic monuments of Aksum – huge stelae carved out of a single granite rock, the ruins of palaces, underground tombs, and ruins of churches in Aksum are clear testimony for the technological prosperity and organization of the Aksumite kingdom. Cosmas, during his stay at

Adulis in the early 6th century AD, described (possibly he got information from merchants or the local ruler in Adulis, but also see chapter three for another hypothesis) a palace of four storeys in Aksum (Schoff, 1912) which Pankhurst (1997) thinks was probably the palace of Michael Efoy, later reconstructed by the DAE (Littmann *et al.*, 1913, II). Though it may have been largely restricted to the clergy and elite class of Aksumite society, literacy was maintained in three languages – Sabean, Greek and Ge‘ez as evidenced from stone inscriptions and coins.

2.3 The Decline of the Aksumite Kingdom

There is no clear-cut information about the proximate causes for the decline of the Aksumite kingdom, which began in the early 6th century AD as discussed above. Evidence for political upheaval includes the shift of the capital city to the still unrevealed center until it appeared at Lalibela – the center of the Zagwe Dynasty. The political period between Aksum and Lalibela has remained unknown as the later is now considered to have appeared by the mid-12th century AD according to contemporary sources of the Alexandrian Metropolitan and accounts of Ge‘ez documents (Munro-Hay, 1997). However, an archaeological method applied on Lalibela to provide an outline of the sequence of the churches in terms of function and architecture has pointed out that an earlier sequence existed, visible in terms of both architecture and function (Bosc-Tiessé *et al.*, 2014; Fauvelle-Aymar *et al.*, 2010). This would probably answer the enduring quest for the missing link between Aksum and Lalibela: the site could have served as political center before its modification into gigantic rock-cut churches.

Wherever the capital was centered after Aksum, several possible reasons for the decline of the Aksumite kingdom are postulated. The westward expansion of the Persians during the late 6th century AD may have driven the Aksumites out of their south Arabian possessions (Sutton, 1989; Munro-Hay, 1991). Consequently, the Arabian coast of the Red Sea came under the control of the Persians. Access to international trade for the Aksumite kingdom by sea was curtailed (Conti Rossini, 1928) while the land route to Egypt fell into the hands of hostile groups of people who had previously been subject to the Aksumites (Pankhurst, 1997; Munro-Hay, 1991). The loss of the Aksumite kingdom’s control over its southwest Arabian military colonies and subsequently over the maritime trade must have brought about serious economic, military, and political decline, contributing to the breakup of the Aksumite kingdom.

The Aksumite kingdom lost access to raw materials, such as gold and salt, which were among the most important sources of revenue for the kingdom from international trade. Additionally, the loss of previously conquered territories meant the loss of tribute, and this must have had its role in the decline of the economy of the kingdom by the 7th century AD. The royal inscriptions in Aksum attest to the importance of tribute to the Aksumite kingdom from newly conquered territories⁵ (Munro-Hay, 1991; Phillipson, 2004).

When the Aksumite kingdom became cut off from the international trade and lost the income from tributes, it could no longer maintain the large army which had subdued rivals and conquered strategic territories. The loss of revenues from the export trade and tribute no doubt crippled the kingdom to be militarily left weak, exposed to both external pressures and internal rivalries. For instance, the Aksumites were unable to halt the invasion of the restless Beja tribes from the north (Sergew Hableselassie, 1972).

The Aksumite kingdom may possibly have also suffered from the plague epidemic that started in Egypt around 541 AD, and soon spread eastward to Byzantium. The plague was disastrous, with deaths of 5000 to 10,000 people per day reported (Dewing, 1914: 451ff). Other primary sources, such as epigraphic evidences, Byzantium, Syriac and Greek textual sources, Arab and Ethiopian oral and textual sources relate the origin of a pestilence in the first-half of the 6th century AD and its recurrence. Although the sources indicated a varied geography of origin of the pestilence, some of them even suggested Ethiopia, as well as its environs, like Sudan. Wherever its origin was, the plague killed sizable Aksumite population in south Arabia during the reign of the Viceroy of King Kaleb, Abraha. Then the Aksumites in South Arabia might have carried the disease to Aksum thereby transmitting it among the general population (Yohannes Gebreselassie, 2011). There are no sources, however, which report the plague in Aksum, but if the Aksumite kingdom was affected by the epidemic, then it is an additional factor for the failure of the kingdom to control the south Arabian territories successfully, and the demise of the civilization. The decrease in the number of Aksumite population (Phillipson, 2004) may be due to the outbreak of plague. Military defections added to the decrease in the Aksumite population.

⁵ For example, the inscription of *Monumentum Adulitanum*, DAE 8, Meroe inscription (Munro-Hay, 1991: 222-232)

Another possible factor, though not primary, for the decline of Aksumite kingdom was the expansion of Islam during the first-half of the 7th century. It probably further aggravated the existing problems by occupying the Dahlak Islands (Sergew Hableselassie, 1972; Tadesse Tamrat, 1977). The expansion of Islam to Egypt, Palestine, and then its gradual expansion southward from Egypt contributed to the isolation of the Aksumite kingdom from the outside world, within the ripple sea of Islam. Not only the Aksumite trade was totally hampered but also its territory shrunk. Added to this, increasing piracy along the Arabian coast and the Muslims attacks on Adulis substantially weakened the Aksumite kingdom (Conti Rossini, 1928).

Evidences for some ecological changes were observed in the ancient capital of the kingdom. The clearance of trees on the hills around the city whether for charcoal or for farmland caused erosion and aggravated agricultural problem (Butzer, 1981). The area of Aksum and its vicinity has been under progressive human pressure on the vegetation and the land. Towards the beginning of the second-half of the 1st millennium AD, the carrying capacity of the environment was less because of demographic increase, deforestation, exhaustive soil, and soil erosion (Bard *et al.*, 2000). A recent study in Aksum archaeological area from plough marks confirmed that erosion has prevailed where up to 79cm plough mark height is recorded (Ciampalini *et al.*, 2008). The curiosity on the history of eco-environment in Tigray in particular in northern Ethiopia in general has attracted many researches dealing with the Paleoenvironment studies and its contribution to the rise and demise of states. Such paleoenvironmental studies have reinforced that the Tigray plateau was highly deforested that caused land degradation and soil erosion (Tsige Gebru *et al.*, 2009; Darbyshire *et al.*, 2003; Berakhi *et al.*, 1998). According to Procopius (ed. Dewing, 1914) the military expeditions of King Kaleb against the South Arabian local ruler mobilized a huge army but after the mission was over, the majority of the army refused to go back home country and preferred to settle in South Arabia, since the land there was so rich. This may confirm the severe ecological change in Aksum and its environ.

Not least, another issue is the problem of the power shift from Kaleb to his successor. A contemporary source tells us that Kaleb has retired to a monastery near the capital city of the kingdom after being consecrated as a monk (Christides, 1972; Schlumberger, 1886). If we accept its truth, the legend asserts that King Kaleb retired to the monastery of *Abune* Pentelewon, which still stands to the present day near Aksum, after he was consecrated as monk by *Abune*

Pentelewon. The legend goes on to say that Kaleb had not assigned an heir to the throne and thus a power vacuum was created during the resultant struggle for power.

Archaeological evidence for the decline of the Aksumite kingdom is provided by coins. The last coins were minted from copper and inscribed in Ge'ez showing that their circulation was for the local market. The mottoes that appeared on the coins became totally changed from previous time: "Mercy and Peace to the People" – probably indicating that the prevailing condition of the kingdom and its people was getting worse (Munro-Hay, 1991). Even these copper coins seem to have deteriorated in quality and finally the minting of coinage ended entirely by the first-half of the 7th century AD as the thus far known evidence indicates.

Towards the end of the 7th century AD, *The History of the Patriarchs* could be considered as one important source about the situation of the kingdom. It is recorded that Isaac, the Alexandrian patriarch (686-9 AD), sent letters to both the kings of Nubia and Ethiopia urging them to make an agreement. But it is not clear whether this is to mean that they were fighting each other (Shinnie, 1978b) or they should form an alliance as Christian states to defend the rapidly expanding Muslim conquest. It seems, however, clear that the kingdom was under threat from many factors.

But when some literary documents appeared since the second-half of the 9th century AD by Arab writers, it seems clear that the Aksumite kingdom still survived and was located in the present highland areas of Eritrea and Tigray (Tadesse Tamrat, 1977) although the Aksumites faced challenges from different directions as discussed above.

2.4 The status of Aksum after the 7th century AD

The period between 7th and 12th centuries is poorly understood until a new center appeared at Lalibela. The picture for this period is further confused by the relatively untrustworthy sources (Tadesse Tamrat, 1977, 1972), comprising books of different periods, such as the *Book of Aksum* (Conti Rossini, 1910), *Kebre Negest* (Budge, 2000) and *Synaxarium* (Budge, 1928). Among external sources worth-mentioning are the historical accounts of Arabs during the 9th through 13th centuries (Vantini, 1975). It is not certainly known whether there was immediate power shift from the Aksumites to the Zagwe dynasty, and whether Aksum ceased to be a capital after the 7th

century. So far, no other center that could be considered a seat for a king is identified before Lalibela. Thus it appears that there is still a need for research to fill in the gap between Aksum and Lalibela.

According to Munro-Hay (1991) Aksum was no more a capital city by around the mid-7th century AD although its ecclesiastical importance continued to the present. On the other hand, the Arab historian Al Yaqubi, writing in 872 – the so far available earliest written source after the decline of the Aksumite kingdom, tells us that the *najashi* (king) of the kingdom was still a ruler of extensive domain with many important cities and received tribute from his subject local rulers. He goes on to say that the capital of this *najashi* is called Kubar. The territory of the realm stretched as far as the Red Sea coast and included the Dahlak islands there. Al Yaqubi's description is important in that it informs us the trade relationship between the *najashi* of Habashat (Aksumites) and the Yamani king, with Dahlak as the main outlet for this trade (Vantini, 1975; Tadesse Tamrat, 1977). Kubar is still an unidentifiable name (Munro-Hay, 1991; Kobishchanov, 1979; Pankhurst, 1961) but Conti Rossini (1928) believed that this may be a distorted name for Aksum.

The Arab sources of the 9th century AD could be largely reliable while other Arab sources written late after 9th century about the kingdom are comprised of repeated story and their strength for piecing together the history of the period under discussion is not without question (Tadesse Tamrat, 1977; Munro-Hay, 1991).

At Aksum, a stone inscription of the period in discussion records of a military conquests made by a certain ruler named *Hatsani* Daniel. This inscription, the only reliable information about this period from archaeological sources, was recorded as DAE 12, 13, and 14, and is located on the eastern gate of the ancient town of Aksum. At the time of *Hatsani* Daniel, Aksum was invaded by people from Wolqayt⁶, but the attackers were repulsed, killed and their booty captured by Daniel. The inscription also relates that *Hatsani* Daniel fought against another *Hatsani*, Karuray, and many other tribes. The inscription also tells us that the power of the Aksumite king was weakened and confined to Aksum while the power of defending enemy was in the hands of the

⁶ Today the people of Wolqayt are found in the present western part of Tigray Regional State Administration, close to the northern border of Amhara Regional State Administration.

ruler (Munro-Hay, 1991; Munro-Hay and Nosnitsin, 2003: I; Bernard *et al.*, 1991, I and II, R1É 193 and 194). Based on epigraphic and linguistic grounds, the inscription can be dated to the 9th century AD (Littmann *et al.*, 1913; Sergew, 1972; Schneider, 1988). From the inscription of *Hatsani* Daniel, we can infer that nothing was changed as regarding the capital but the power seems to have been instable.

Legend relates the final and serious destruction of Aksum to the legendary Queen of Gudit. When she arrived in Aksum, she sacked the city, overthrew the obelisks, burnt churches, killed priests, and the then reigning king was forced to leave the city with the Ark of the Covenant. She is believed to have reigned for forty years. This legend could partially be confirmed from the records of the Arab historian Ibn Hawqal, writing in the 970s or 980s, about the account of the queen, who observed a woman ruling over the kingdom (Kramer and Wiet, 1964 in Munro-Hay, 1991; Tadesse Tamrat, 1977). Another important source about the attack of the queen on the Aksumite kingdom is available from the biographers of the Alexandrian Patriarchs during the late 10th century AD. It is reported that the Ethiopian king had displeased the Alexandrian patriarch and thus the church had been left without a Patriarch for nearly seven decades due to the refusal of the Alexandrian church to ordain and send a patriarch to Ethiopia. When the king sent a request for a patriarch, he is said to have mentioned the attacks he had suffered from a pagan queen. He had been unable to repulse this pagan attack (Shinnie, 1978b; Tadesse Tamrat, 1977). Thus Aksum was probably still a capital of the weakened kingdom until at least the late-10th century AD.

Aksum, however, maintained its ecclesiastical importance ever since due to the church of Aksum Tsion Maryam. Aksum even existed without changing its name (Phillipson, 2004). During the medieval period, the Ethiopian kings felt the need to legitimize their line of the Solomonic dynasty. Thus Zera Yaqob (r. 1434-1468) was the first king to renew the coronation ceremony at Aksum according to the tradition of the ancient Aksumite kings (Hirsch and Fauvelle-Aymar, 2001; Finneran, 2007). The *Liber Aksumae* (Conti Rossini, 1910) recorded that this tradition has continued until the reign of Sertse Dengel (r. 1563-1597). The coronation of King Susenyos (r. 1607-1632) held on 18th March 1608, was recorded by Pedro Pa,ez after the eyewitness of the Portuguese captain Joao Gabriel. The later Ethiopian kings who claimed themselves as

descendants of the Solomonic dynasty made Aksum the site of their ceremonial coronation to exploit its ancient glory of religion and history (Munro-Hay, 1991).

The absence of archaeological evidence in Aksum that dates after the 7th century AD (Munro-Hay, 1991) could be discerned as due to uneven coverage of the archaeological research, or could be evidence that the economy and socio-political power of the Aksumites had seriously declined. Probably the kings had built and lived in simple houses which do not survive in the archaeological record, since the construction of costly and elaborate palaces as in the former times required both political stability and the large-scale mobilization of human resources.

CHAPTER THREE

HISTORY OF LITERARY DOCUMENTATION OF AKSUM AND ITS MONUMENTS

“It [*Aksum*] is situated on the edge of very broad meadows in a gap where they come in between two hills. Today it is a place of about a hundred inhabitants. Everywhere there ruins are to be seen, not of walls, towers, and splendid palaces, but of many houses of stone and mud which show that the town was formerly very large” (Manoel de Almeida, eds. Beckingham and Huntingford, 1954: 90).

3.1 Introduction: The earliest information about Ethiopia could be credited to the Egyptians when they recorded the region's resource and trade contact with Punt since the 3rd millennium BC. (Phillips, 1997; Pankhurst, 1997, 1961). Following the Egyptians, the ancient Greeks, Romans, and other explorers and missionaries made historical descriptions of ancient Ethiopia motivated by the search for the far kingdom located south of Egypt and west of the Red Sea. Later travelers were also more stimulated by the former works about the kingdom. Since the opening of our new era, many travelers, merchants and missionaries have described the Aksumite kingdom as the result of trade contact along the Red Sea (Page, 1917; Schoff, 1912). In the 6th century AD, the kingdom was described as most powerful on the African coast of the Red Sea region whose capital – Aksum, was also functioning as trade center and seat of the kingdom with fascinating palace towers (Cosmas, ed. McCrindle, 1929; Christides, 1972). *The Book of Aksum* (in the Middle Ages, discussed below) has recorded an inventory of monuments and the ruined churches in Aksum (Conti Rossini, 1910). This book is the only known earliest local source about the documentation of the monuments and churches in Aksum.

Later in the 16th century, Portuguese missionaries and soldiers entered the country with the aim of assisting Ethiopia during the war against Ahmad b. Ibrahim al-Gazi (b. ci. 1506, d. ci. 1543), commonly known as Ahmed Gagn (left handed) (Muth, 2003). The missionaries produced a wide description of the history of the country and the people, as well as a detailed narrative of the city of Aksum and its monuments shortly before Ahmed Gagn invaded it in AD 1535 (Beckingham and Huntingford, 1961). In the aftermath of the closed-door policy of king Fasiledes that lasted for about a century from 1632, travellers notably James Bruce (1790),

Viscount Valentia (1809), Henry Salt (1814), Bent (1893) have left us important descriptions of the city of Aksum and its ruined structures, monuments and Maryam Tsion church. The works of such travellers and missionaries have stimulated later scholars to be involved in the archaeological research at Aksum in particular and in the northern part of the country in general.

These early literary documentation works on Aksum and its archaeological sites have served as a springboard for later archaeological researches on Aksumite Archaeology. Their information on the archaeological sites and landscape, and the structures of Aksum which have subsequently obscured and altered due to human and natural factors, was very helpful in understanding what has been lost and what is extant since then. The following is a detailed discussion of each of those early works on the documentation of Aksumite archaeological sites, structures and the landscape.

3.2 THE WORK OF COSMAS

Cosmas Indicopleustes, the Egyptian monk, traveled to the Red Sea coast during the early 6th century AD. In his book, *The Christian Topography* (Cosmas, ed. McCrindle, 1929: 55), Cosmas explains that he was at the Red Sea coast of the present Eritrean region at the particular place called Adulis during the early years of the reign of the Roman Emperor Justinus (r. 518-527), and during which the Aksumite king, mentioned by Cosmas as Elesbaan (referring to Elle Atsbeha or Kaleb), was preparing to make a war campaign against the rebellious leader of the Himyarites in south Arabia. Cosmas had described the geography of the area, the trade contact between Ethiopians, Indians, Persians, Alexandrians and the Himyarites particularly mentioning Adulis as the principal meeting point for traders from different areas. He has also described the most eastern part of Ethiopia (around Berbera and Cape Guardafui) which is renowned as an important source of frankincense – traded to Adulis, the land of Himyarites, India and Persia (Ibid: 51).

Furthermore, Cosmas gives us an account of the bartering system of gold in Sasu¹. The Aksumite

¹ Cosmas erroneously described the geography of Sasu as near to the coast of Indian Ocean close by the region of the source of frankincense. The Adulis inscription (Cosmas, ed. McCrindle, 1929: 65) tells that the king had conquered Sasu and Ethiopia which formed the western boundary of his dominion. Another hint from Cosmas which helps to argue about the geography of Sasu is that, the Aksumite king had sent his caravan to Sasu through the governor of the Agew (Ibid: 52). Today Agew people are found east and west of Lake Tana – in Lasta and Awi zones, respectively. Thus the location of Sasu is possibly near Lake Tana (which Cosmas most likely misunderstood as ocean). Munro-Hay (1991:174) places Sasu some 200km to the south-south-west of Lake Tana. The exact

king sends his caravan to the gold field of Sasu through the protection of the governor of Agew to get gold. Gold was exchanged for meat, salt, and iron. Most of Cosmas' sources come from merchants who had been to those areas and partly from his own observation. This information is important for the knowledge on how and from where the Aksumites had obtained gold in addition to other gold fields in the present Tigray and Eritrea (Kobishchanov, 1979: 136). Objects of gold material were discovered in Aksum² and the royal inscription of king Ezana narrates that statues made of gold, silver and bronze were erected at Aksum for the god Ares (Munro-Hay, 1991: 224-5, DAE 4; Bernand, 2000: 6).

From the description of Cosmas about the live and dead animals in the Aksumite territory, it appears that he had visited Aksum and seen a four-towered royal palace; he goes on: "In Ethiopia I once saw a live rhinoceros while I was standing at a far distance, and I saw also the skin of a dead one stuffed with chaff, standing in the royal palace, and so I have been able to draw him accurately" (Cosmas, ed. McCrindle, 1929: 359). Cosmas continues: "I have seen four brazen figures of him (*Unicorn animal*) set up in the four-towered palace of the king of Ethiopia. From these figures I have been able to draw him..." (Ibid: 360-361). This description is based on first-hand information and possibly travelled as far south as the gold trading route of Sasu for he told us that the information about the gold trading expedition to Sasu comes partly from his own observation. In Kirwan's (1972: 170) opinion, Cosmas "...must have gained admittance to the palace for he made a drawing of a stuffed rhinoceros which he saw there". Unfortunately no drawing of the then reigning king nor the palace he saw is included in his work except sketches of the animals, the Adulis throne, the stela of Ptolemy III Euergetes and the city of Adulis. This building which Cosmas had described as "four-towered palace" was possibly what is called today the ruined palace of Enda Michael Efoy³ (Pankhurst, 1961) located at the center of the old town of Aksum. It was later reconstructed by Daniel Krencker (Litmann *et al.*, 1913, II) and Buxton and Matthews (1974).

In addition to the above discussed description, one of the most credited works of Cosmas in the

geographical location of Sasu is still awaiting future research.

² For details, see Phillipson, 2000, vols. I and II; Munro-Hay, 1991, 1989; Kobishchanov, 1979.

³ Today only big corner stones at three corners of the palace are visible, the rest being obscured by recent settlement. In 2003 the Hamburg Archaeological Mission to Axum (HAMA) re-exposed some of the corners and side walls of the palace but then refilled as they were inside private compounds (for history of excavation, see chapter 4).

preservation of information related to archaeological documentation is the recording and full description of the Adulis throne and Ptolemy's stela, both of which were inscribed with Greek script⁴. These materials have subsequently been obscured and the search is continuing to discover them though still in vain. Fortunately, however, thanks to the knowledge of the Aksumite king who ordered the governor of Adulis – named Asbas – to ask Cosmas to copy and send him the inscription on the throne and the stela, and the careful, committed, and genuine work of Cosmas, the full information on the throne and the stela are preserved to this day.

Cosmas tells that when he was asked by Asbas to copy the inscription, he did so with his companion monk named Menas and submitted one copy to Asbas while keeping one copy for himself with the objective that the content of the inscription may contribute to the understanding of the “...country, its inhabitants, and the distances of the several places” (Cosmas, ed. McCrindle, 1929: 56) mentioned in the inscription. Had Cosmas had not kept a copy for himself, the whole evidence of the subject under discussion would have completely been lost. So far there is no information whether the copy given to Asbas survives or not. The inscriptions both on the throne and the stela have greatly helped our knowledge about the resources, commercial activities, political situation of the period, the territorial extent of the kingdom, the power of the subjugator who erected this throne, the relationship between the Ptolemy and the Ethiopians, and the sovereignty of the realm. The inscription of Ptolemy III Euergetes recounts that he had subdued the whole region of Asia with the assistance of fleet of Troglodaites and Ethiopian elephants for his war campaign. But there is no information why Ptolemy erected or left this inscribed stela in the Aksumite territory. The inscription of Ptolemy even does not make any mention of Adulis (Fauvelle-Aymar, 2009).

The documentation work of Cosmas was not limited to the copying of the inscriptions both on the throne and stela; he also recorded the material type from which the throne and the stela were made, their overall size, their location, and their form in a detailed drawing (*fig. 3.1*).

⁴ For full content of the inscription, see Bernand, 2000: 33-34; Cosmas, ed. McCrindle, 1929:59-60; Munro-Hay, 1991:222-3;

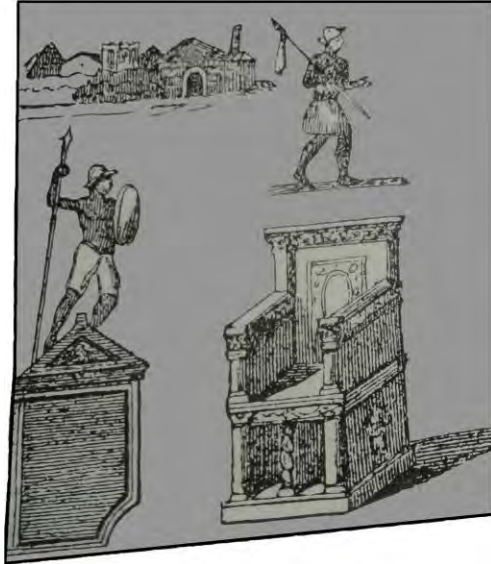


Fig. 3.1 Sketch of the city of Adulis (top, left); an Ethiopian leaving Adulis for Aksum (top, right); the stela of Ptolemy III Euergetes (bottom, left); and the Adulis throne (bottom, right) (Redrawing: Hiluf Berhe, 2015, after Cosmas, ed. McCrindle, 1929).

According to the description of Cosmas, the throne and the stela were erected at the western entrance to Adulis from Aksum – the former itself being situated some 3.2 km off from the Red Sea shore. The throne measures about two and half (? height, length or width) cubits in the shape of “Bishop's throne”. Carved out of a single white marble, the throne had five pillars which support the armrest, the seat and the back. The fifth pillar at the middle was specially carved in the spiral form. On the other hand, the stela located behind the throne, found fallen and broken at one side of the base, was made of marble stone, with height measuring three cubits. The shape of the main body of the stela was flat and rectangular with its top in the shape of a quadrangle tapering toward the topmost, and on which was mounted statue of a man holding shield and spear.

Thus the earliest known documented archaeological evidence and that still survived to this day is the work of Cosmas in Adulis in the early 6th century A.D. He had copied and documented the inscription with the intention that he and his succeeding generations will be able to get knowledge of the country, the general population, and the distance and detail information of the subject territories both mentioned in the inscription of the throne. Cosmas’ work helped to reconstruct that the stone thrones in Aksum whose sides rests and backs are missing could have been bearing inscriptions like that of the Adulis throne. Cosmas’ glimpse of four-towered palace and stuffed animals in Aksum confirms the vivid life of the Aksumite kingdom during the early 6th century AD.

3.3 *LIBER AKSUMAE* (BOOK OF AKSUM)

James Bruce had procured many books from the prince of Showa – Amha Eyesus, while Ras Michael Sehul – the governor of Tigray, gave him a book, which Bruce called *Chronicle of Axum* (Bruce, 1790, I: 501). Conti Rossini (1910) later edited, translated into French and published by the name *Liber Aksumae* which contained three categories (Hirsch and Fauvelle-Aymar, 2001). These three categories of *Liber Aksumae* of Conti-Rossini, each subdivided into several sections, are categorized under: the city and the cathedral of Aksum; acts of royal donations to Aksum St. Mary TSION church; and documents of historical and legal. In Aksum, the clergy do not cite this book as “*Liber Aksumae*” (Book of Aksum). Bruce had possibly named it after the content of the book which begins with history of foundation of Aksum and its monuments, the foundation of the church of St. Mary TSION by kings Abreha and Atsbeha, and the donations to the same church made by Ethiopian kings from the time of Abreha and Atsbeha through the late 19th century AD. I have here also employed the name *Liber Aksumae* throughout this work to maintain consistency with the publication of Conti Rossini, since the first two sections of the publication are the main concern of this chapter.

Fixing the date of the *Liber Aksumae* is very important for this chapter in order to understand, as described in the *Liber Aksumae*, the condition of Aksum and its heritage during a certain period. The dating of *Liber Aksumae* is uncertain and we can only hypothesize based on the different narratives included in the text. Beckingham and Huntingford (1961: 521-25) have included an English translation of the two sections of category I of *Liber Aksumae* under a title: “A seventeenth-century Ethiopian description of Aksum”. The *Liber Aksumae* mentions four Ethiopian kings of the medieval period namely – Zer’a Yaqob (r. 1434-1468), Be’ede Maryam (r. 1468-1478), Lebne Dengel (r. 1508-1540) and Sertse Dengel (r. 1563-1597) who have renewed and promulgated the regulation of entry into Aksum and ordained the honors of their forefathers (Conti-Rossini, 1910: 4-5).

The whole content of the *Liber Aksumae* was not written at the same time; rather many texts were added over many centuries. On one page of this book, for example, a precise date of 1824 is given during which such a specific topic was written. Since king Zer’a Yaqob is the first king to be mentioned in the book, we may be inclined to suppose that king Zer’a Yaqob may have first

initiated the compilation of the text in the *Liber Aksumae*. According to Hirsch and Fauvel-Aymar (2001) the ideological objective of Zer'a Yaqob in Aksum was to legitimate his link to the Christian political history of Aksum as a Christian king and reign over the Christian kingdom with coronation in, and recognition from, the Aksum St. Mary Zion. If this is accepted, then it is very likely that king Zer'a Yaqob may have ordered the compilation of the first section of category I which describes the history of foundation of Aksum, its ruined churches, underground tombs ("houses" in *Liber Aksumae*), and the inventory of monuments and springs to glorify what his ancestors have done in Aksum as Christian kings, and so that the medieval period Ethiopian kings would reconsider the forgotten city and its history.

On the other hand the detailed description of the main church of Aksum Tsion Maryam remained to be the topic of section II of category I. Here there is no clear indication whether the description was made before Ahmed Gragn destroyed the church in 1535 or during the aftermath. However, from the last phrase of this section, which reads "...the world is a sleep and a shadow. Nothing is added: rather (all) is diminished" (Beckingham and Huntingford, 1961: 525) seems that the writer feels sad about the forgotten glory of Aksum. Munro-Hay (2005) argues that the dating of this description may refer to the ruined church of Aksum Tsion Maryam by Ahmed Gragn in 1535. Here it should be noticed that had the text been written after the destruction of 1535, it would have described the war and state of the destruction. In addition to this, the writer could have mentioned the church⁵ which was built after the destruction and later replaced by the present cathedral – which king Fasiledes of Gonder built in the early 17th century AD. Thus most possible dating of this section falls in the pre-1535.

The *Liber Aksumae* of Conti Rossini starts with the narrative of the foundation of the ancient city of Aksum. According to this text the city was first founded at Mezber where the tomb of Etiopis, son of Kush – son of Kam, is located⁶. The city was then transferred to Asba⁷ by queen of Sheba, also called Azeb. For the third time, the city was built by Abreha and Atsbeha where the

⁵ This church was described, though scantily, by Manoel de Almeida as presented below (see also Beckingham and Huntingford (eds.), 1954: 82-96.

⁶ Today the tomb of Etiopis and Mezber are different places, the former located at the western edge of the old town, and the latter some 2km far to the north of the old town.

⁷ Located north-west of the old town, it is today identified by the presence of a stela and slabs. Here at Asba, a test excavation has been carried out in 2002 by the Istituto Universitario Orientale/Boston University (IUO/BU). The test excavation revealed ancient remains of wall structure.

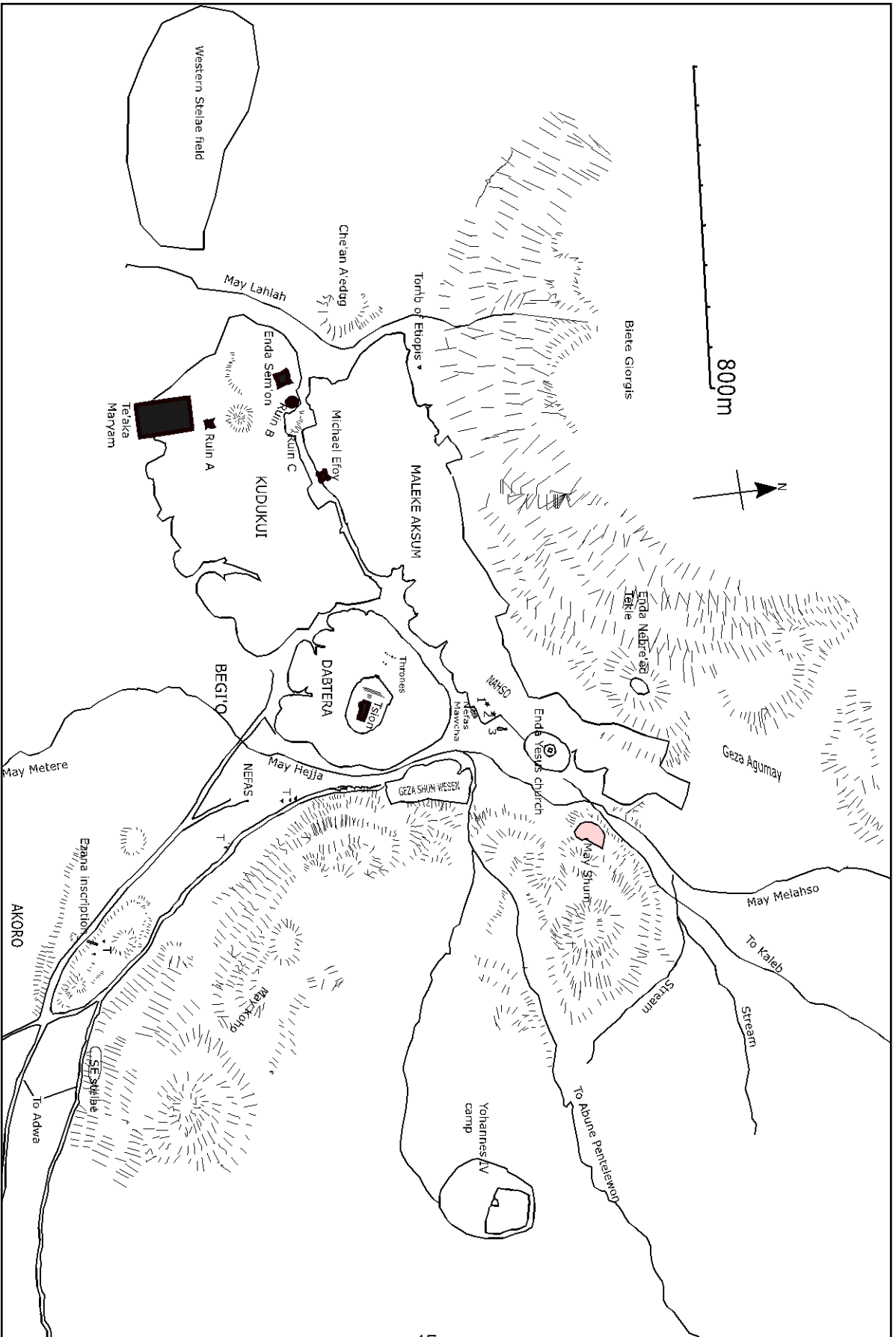
sanctuary of the cathedral of Aksum is still located.

The ancient record of the foundation of Aksum city in this document helped greatly for later archaeological search to confirm the chronology. Fattovich *et al.* (2000: 84) assert that the traditions told to this day about the topography of Aksum are found to be the same as those recorded in the *Liber Aksumae*. The authors also confirmed that the archaeological sequence for settlement centers is Mezber→Asba→Aksum. However, this does not mean that the legends were all true whether the center was at the places mentioned above or not. The acknowledgement to the legend is that all the places have been at least able to reveal remains of ancient structures, not to mention the size of the settlement centers.

Liber Aksumae also documented the legend about the construction of the cathedral of Maryam Tsion. It narrates that the construction was challenging to the kings Abreha and Atsbeha because of a great lake. Then these just kings are said to have climbed to a mountain called *Mekyedi Egze 'ene*⁸, and prayed there so that God might reveal and tell them where to build the sanctuary. As a result, the Lord is believed to have descended and stood between them; and filled up the lake with earth where the remains of the ancient church is visible today. Finally, a column of light was said to have stood above the earth as guide, where the kings then built the sanctuary. Today, only the remains of this ancient cathedral is clearly noticeable after archaeological excavation revealed during the late 1950s (discussed in chapter 4).

Unless this tradition could have been partly exaggerated, the location of the ancient cathedral might have been a flooded area as it is located at the western bank of May Hejja stream (*map 3.1*). The tank of the so-called Queen of Sheba's bath, also known as Mai Shum (water of the chief), may had also flooded it. Mai Shum gets its source from a run-off from the hills of north and east side of May Koho and the southern side of *Abune Liqanos*. Steps cut into the rock above it give access to the main reservoir of Mai Shum. The reservoir also gets water from an ancient well located in the middle of the main reservoir which can be seen when the reservoir dries. The Holy water of *Aba Metae* in the present *Abune Aregawi* church might have significantly added to the volume of the flood down to the May Hejja stream.

⁸ Literally, pathway of Our Lord; this may refer to the hill of May Koho – located to the east of the old town of Aksum.



Map 3.1 The location of old town of Aksum, its quarters and the three palaces remains as seen in 1906 by the DAE. The cathedral Tsiyon in Dabtera quarter is located in the valley of May Heja stream. Note also that tomb of Etyopis is at the western corner of the old town just at the foot of Biete Giorgis hill. The names capitalized (for example, AKORO) indicate quarters of the old town. On the map, the southeast stone thrones are labeled with letter "T"; the location of the three largest carved stelae are indicated with 1, 2, 3 near Nefas Mawcha (Redrawing: Hiluf Berhe, 2015, after Litmann, *et al.*, 1913, D).

The *Liber Aksumae* also tells about an inventory of water springs in Aksum. According to this text, there were seventy-two sources of water, most probably referring to the water wells found in private compounds. It is possible to say that the ancient city of Aksum got its water supply from individual water wells besides the common water tank – Mai Shum, which the town inhabitants use to this day as their water supply. Since there is no perennial river within Aksum and its vicinity that flows to the town itself, the only means of water supply for the inhabitants in the past may have been the private water wells. The abundance of such water wells was also confirmed by Alvares during his visit to Aksum in 1520 which he explained them as “...very good wells of water, of [very beautiful] worked masonry...” (Beckingham & Huntingford, 1961: 155). Today, however, almost all the wells are closed or refilled with stones and earth as they are no longer in use due to the supply of pipe water by the municipality and /or due to the fact that the wells have become so filthy, full of water worms and insects, as can also be confirmed from travelers’ accounts (for example, Pearce, 1831) who witnessed that the people do not clean the wells. However, three wells just within less than fifty meters to the west of Dungur palace are still used as drink water for animals, despite their uncleanness, and to water plants (*fig. 3.2*).



Fig.3.2 Water wells near Dungur palace. Notice some of the water wells so filthy, full of seaweeds (photo: Hiluf Berhe, 21/03/2009)

The inventory of obelisks in Aksum by the *Liber Aksumae* was another contribution in the documentation. According to this document, there were fifty-eight obelisks some fallen and others standing. This inventory was probably made mainly in the main stelae field, where the largest stelae are located, and around the Enda Yesus church wherein stelae number six forms the northern limit of the decorated obelisks. Today, data shows that the actual number of obelisks in Aksum found in three main categories, namely: northern, western, and south-eastern stelae fields, exceeds five hundred (Litmann, *et al.*, 1913; Phillipson, 1997; Munro-Hay, 1989). One important fact can be extracted from the description of *Liber Aksumae* that some obelisks have already been fallen in the 15th century. The *Liber Aksumae* is the first known ancient document on the inventory of large number of obelisks. Later travelers like Father Francisco Alvares and



Fig. 3.3 Water well closed with granite stones slabs brought from the ancient ruins of Aksum. This is found near the northern limit of the ruined Ta'aka Maryam palace complex (photo: Hiluf Berhe, 23/07/2012).

Manoel de Almeida have put smaller figure and incomplete count of the obelisks. Alvares states that he has seen more than thirty of the non-decorated and three large decorated obelisks (Beckingham and Huntingford, 1961). Manoel de Almeida on the other hand puts the figure as twenty standing and seven or eight fallen (Beckingham and Huntingford, 1954).

One of the most noteworthy inventories made by the *Liber Aksumae* is the documentation on the ancient churches of Aksum. No other source mentions them in detail but the *Liber Aksumae*. Eleven churches are mentioned in the document (the cathedral of St. Mary Tsion is not included

in this list) some of which have not so far been identified archaeologically; some are identified⁹ by their remains and one is still standing. The document not only inventoried the churches but also indicated their location within the different quarters of the old city of Aksum. Their names are hence presented as follows:

1. Micha'el Efoy, in the quarter of Maleke Aksum
2. Gebez Ta'aka, in the quarter of Wolde Kuduki
3. Simon in Maye Sema'et, in the quarter of Wolde Akoro, Sodo (?)
4. Me'eraf, tomb of the mother of *Abba* Samuel
5. Biete Maryam, in the quarter of Wolde Nefas
6. Biete Arba'etu Ensesa (the Four Celestial Animals), in the quarter of Wolde Mebhi
7. Biete Micha'el in Mekyedi Egze'ene, in the quarter of Wolde Nefas
8. Biete *Abba* Amoni of Nahso, in the quarter of Maleke Aksum
9. Biete Denagel in Enda Tsiray, in the quarter of Dabtera
10. Biete Megdelawit in Enda Gual Menday, in the quarter of Dabtera
11. Biete Arba'etu Ensesa, in the quarter of Dabtera

Michael Efoy and Gebez Ta'aka were cleared and their plans reconstructed in 1906 by the DAE (Littmann *et al.*, 1913; *map 3.1*) though it appears that the ruined structures rather indicate these were palaces. However, future archaeological investigations may reveal remains of the churches nearby the palaces. Me'eraf of Sodo, located east of the road that leads to the cathedral of Aksum Tsion Maryam from the south-east direction just where the south-eastern thrones are, is the most recently excavated structure in 2006 after which a large Aksumite church building was discovered dated to between 6th and 7th centuries AD (Tekle Hagos, 2008). In 1974, Michels also confirmed the presence of a structure in this site (Michels, 2005). In 2001 the researcher collected legend about the site that there was a church dedicated to the Arba'etu Ensesa. When, in the past, the area was covered with dense forest, it was so risky for women to go to church at night time and as a result the church was transferred to the present Arba'etu Ensesa in the quarter of Dabtera where it still stands. Another Arba'etu Ensesa church may have been standing at the Dabtera quarter according to the list indicated on number 11. It is in this church that we have rock-cut underground tombs of pre-Christian period.

⁹ Arba'etu Ensesa, Micha'el Efoy, and Ta'aka Maryam.



Fig 3.4 Ruined structure of Arba'etu Ensesa church at Guanga Edaga east of Abreha we Atsbeha school on the right side of the road that leads to the church of Maryam Tsion. Excavated by Tekle Hagos in 2006 and funded by the Ethiopian Cultural Heritage Project, this church remains is today well protected with steel roofing (photo: Hiluf Berhe, 17/02/2008).

Liber Aksumae also described about an underground room found at the foot of a great stela; this was documented as a great “house” with four corners. According to this book, at these four corners are four other “houses”: the first facing east goes as far as Mai Shum; the other facing west goes as far as Enda Tseray; the third facing north reaches as far as Nahso; and the fourth facing south reaches as far as the church [Maryam Tsion]. The description continues that if people enter with light, wind blows off the light and becomes dark. As the name explains, this description of underground “house” is most likely relating to what is today called Nefas Mawcha (Nefas Mawcha – literally a place where wind blows out) in the main stelae park with unfinished largest dolmen. The DAE drew its plan (Littmann *et al.*, 1913, II), and the first excavation was carried out in 1954, 1955, 1956 and 1957 under the auspices of the Ethiopian Institute of Archaeology directed by J. Doresse, P. Pironin, J. Leclant, and Henri de Contenson, respectively (Leclant, 1959; Contenson, 1959). On the other hand, the Mausoleum could also be candidate for this description as it has ten rooms with a long central chamber and three shaft holes (Chittick, 1974). From the central shaft hole, one can see to four directions: north, south, east and west as described in the *Liber Aksumae*. It could possibly be assumed that the central shaft hole may have been open at the time of writing of the *Liber Aksumae*, through which people could look down into the underground rooms. One may also suggest that the *Liber Aksumae* could have had this information from legend; but the description is in the form of first-hand knowledge. Thus in terms of location and description of the four “houses” found in different directions, the Mausoleum is more expounding as it is located under the great stela (stela 1) while the Nefas Mawcha is located where the top section of this great stela rests. The plan of Nefas Mawcha doesn't exactly fit for the description in the *Liber Aksumae* (fig. 3.5).

The book also recorded about a footprint of Our Lord according to which was found on one of the rocks on May Koho hill (Conti Rossini, 1910: 4). The book added that the footprint was in existence until the writing of the document. Today however, this has become legend although the residents still confidently say that there is a footprint of Our Lord; but in reality this footprint doesn't exist – either destroyed or it is not truth at all. No one dares to show its location to confirm what is told about this footprint. It is most likely an apocryphal story or this could mean the Mekyedi Egze'ene – ancient steps cut into the rock on the northwestern side of May Koho leading up to the top of the hill (see also Littmann *et al.*, 1913, II: 70; Valentia, 1809).

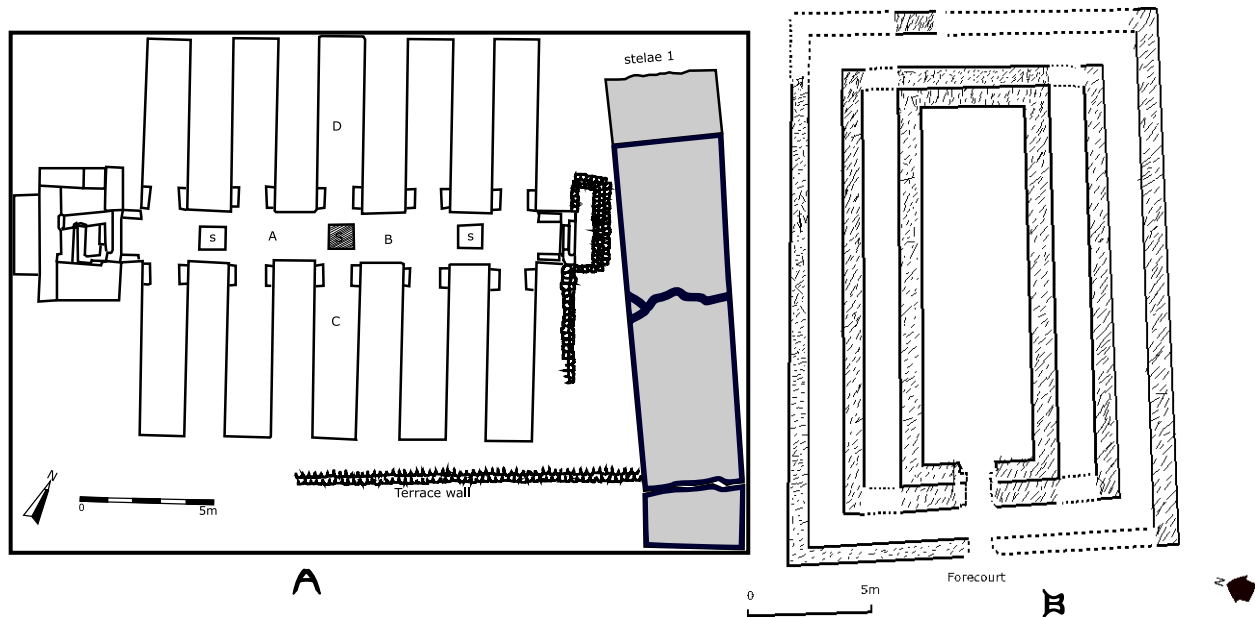


Fig. 3.5 Plan of Mausoleum (A) and Nefas Mawcha (B). In the plan of Mausoleum, there are three shaft holes (S). The central shaft (shaded) may have been open, as discussed earlier, enabling people to see to the directions of A, B, C, and D as the shaft is directly on the corridor of the two rooms (C and D). The area along which the shaft holes are and that runs east-west is the chamber. The main entrance to this underground Mausoleum marked by granite portal is located at the eastern end of the chamber. Stela 1 fell on SSE direction. Excavation revealed that the Mausoleum has ten rooms and continues to the west with another portal. The plan of Nefas Mawcha indicates that the entrance is only at the west, the whole room being covered by large block (dolmen). The rooms in the Nefas Mawcha are all located to the east of the entrance (Redrawing: Hiluf Berhe, 2015, after Phillipson, 2000, I; and Munro-Hay, 1989, respectively).

One most untraceable story recorded in the *Liber Aksumae* is the story of 12 stones of different colors. It continues: “...the first is the stone of Kaleb; the second, the stone of Maya Bazo; the third, the stone of Nahso; the fourth, the stone of Mezber; the fifth, stone of Aksum; the sixth, the

stone of Me'eraf; the seventh, the stone of Wagra Samarat; the eighth is the stone of Maye Kuakueha; the ninth is the Tsewa Berenna; the tenth is the stone of Rom; the eleventh is the black slabs; the twelve is the white slabs"¹⁰ (Ibid: 4). Furthermore, gold, silver and pearl were mentioned in the book as "precious". It was recorded in this book that there were people who say in Aksum it rained gold, silver and pearl for eight days and eight nights. The latter legend seems miraculous.

So far there is no clue as to what these twelve stones of different colors might be. They cannot be the stone thrones as they are, but one, of granite stone; only one (base of throne number 14) is coarse sandstone. The description is mentioning a place where these different colors of stones are located. But what could be these stones? Could these be stones bearing inscriptions? Or stone thrones? So far the only traceable site with stone thrones and inscriptions is Me'eraf – where stone throne numbers 21-25 are located; the three script Ezana inscription, currently at Ezana park, was also standing at Me'eraf before the Italians relocated it in 1937 (Monneret de Villard, 1938; Littmann *et al.*, 1913, IV; Salt, 1809). But Hirsch and Fauvelle-Aymar (2001) suggested that these twelve stones could be of good material quality brought from different parts of Tigray and used for the construction of Aksumite buildings. *Liber Aksumae* gives a clue that for the reconstruction of the cathedral of Aksum, different areas of Tigray were assigned to bring different materials: Adet would cook and bake clay bricks; Zangui would bring stone bells; Emba Seneyti would bring black slabs; Ger'arlta would bring stone called Rome; and Wemberta would bring cedar wood...(Conti Rossini, 1910: 11).

The figure "12 stones of different colors" is very ambiguous; if the stones were for construction in Aksum as Hirsch and Fauvelle-Aymar (2001) suggested, then the number of stones would be unknown and would have meant 12 kinds of stones of different color brought from different parts of Tigray. Another suggestion is that at the time of the reconstruction of the cathedral these 12 stones could have already been in the places mentioned above. There cannot be conclusive statement that these stones do not exist or is just mere legend, as still the ancient city and its vicinity is left largely unexplored. Thus the description about these twelve stones with regard to their location in Aksum and color would be a point of interest for future research.

¹⁰ Translation from French

We also find another interesting story of an object mentioned in *Liber Aksumae*. According to this document, the object was round shaped, flat copper bearing a portrait of the head of John the Baptist on the obverse and a cross on the back side. It was also believed, according to this book, that the rain caused it fall on the ground when it rained for three days and three nights during the time of king Wedem¹¹ (Conti Rossini, 1910: 4). In order to suggest what this object might be, the focus on few clues from this description will be helpful: the portrait of the head of John the Baptist, representation of cross on the backside, and that rain caused the object fall on the ground. Finally, though least helpful, is that the period was during the time of king Wedem.

There are no archaeological evidences with name of John the Baptist. However, one possible (though not the only) suggestion is that this description is possibly relating to the Aksumite coins. The coins are evidently found with the bust of the king on obverse and the cross on the reverse¹². Coins of pre-Christian period are very rare as Christianity was introduced (4th century AD) not so late after the beginning of minting of coins in Aksum (3rd century AD) (Munro-Hay, 1991). John the Baptist is also one of the icons of Orthodox Christianity whose annual commemorative day is also the new year of Ethiopian Orthodox Christians (Ethiopian calendar). The Orthodox Church recognizes John the Baptist as one of the martyrs of the faith who was beheaded by King Herod. Thus it is not surprising if people associate John the Baptist with the Christian coins and not with the pre-Christian ones, for the history that John's head has been beheaded is in the mind of Christians. The inhabitants of Aksum still call the coins *re'esi* Yohannes (head of John) in the Tigrigna language; it is so compelling to consider that this is a misnaming of the beheaded St. John the Baptist, whose life and act is narrated in the Bible, to the bust of Aksumite kings stamped on the coins (*fig. 3.6*).

The other clue is the rain which caused the object fall on the ground. As time goes, oral traditions usually leave out the truth while still keeping some. Sometimes they are exaggerated and rumored to glorify the history or surprise the folk with miracle. As regard to this object, the clue "rain" is important. The coins in Aksum lands are mainly found buried; but during raining

¹¹ This is possibly Anbessa Wedem, believed to be the last king of Aksum who reigned before and after the Gudit war (Finneran, 2007). In *Liber Aksumae*, he is mentioned as one of the three Aksumite kings (Abreha and Atsbeha, Gebre Mesqel and Anbessa Wedem) who donated fief to the cathedral of Aksum (C. Rossini, 1910: 20-23).

¹² For details and further information on Aksumite coins, see Munro-Hay, S.C.H. (1984). *The Coinage of Aksum*. New Delhi; Munro-Hay, S.C.H and Juel-Jensen, B. (1995). *Aksumite Coinage*. London.

period, the rain caused the coin detach from the soil and as the soil is washed away from the body of the coins, the people easily recognize them. Even today, it is common scene in Aksum and its vicinity that people go to the farm lands in search of coins immediately after rain. This has also been recorded by Francisco Alvares during the early 16th century AD (discussed in this chapter). At present, the motive of collecting coins is to sell them to tourists and souvenir shop owners as well as to gold smith. From the description of *Liber Aksumae* on this context we can infer that Aksumite coins were being collected since ancient times though their final destination would have been the gold smith shops. The number of Aksumite coins collected for at least the last six centuries based on the date of the *Liber Aksumae* would be so large.

Others have suggested differently with regard to the object. Hirsch and Fauvelle-Aymar (2001), have suggested that the object under discussion could have been something of Christian object that had strong attachment to the people. But it is not easy to trace such object among the ecclesiastical treasures of the church. They even suggested that the rondel, a round disc made of brass, whose only partial fragments has been discovered in the Tomb of Brick Arches (Phillipson, 2000, I: 97-100) would possibly fit the description in the *Liber Aksumae*. The rondel is a round object with human face at the center and Ge'ez letters around. Based on the form of the letters, Roger Schneider suggested a date in the second-half of 3rd century AD. Judging from its shape and size, as well as some hole marks around it, Phillipson suggested that it could have been fixed at the apex of one of the decorated stelae in Aksum (Ibid) on which some pegs, and holes for pegs, are still evident. However, no sign of cross is found on the rondel as it predates the introduction of Christianity. The tomb in which the rondel was found is dated to between 3rd and 4th centuries AD. No Christian symbol was discovered in this tomb (Ibid: 128-29). Although there is no ascertaining absolute confidence to disprove, for the justifications discussed above, reliance on the rondel as good candidate fitting to the description in *Liber Aksumae* seems very disputable.

The *Liber Aksumae* has simply put the number of thrones at Meftaye Hatsin (today specifically known as Godef Maryam or Menagesha) in the following way: “There are nine thrones of Nine Saints; and three other thrones: the first is of king Kaleb; the second is of Gebre Mesqel, his son;

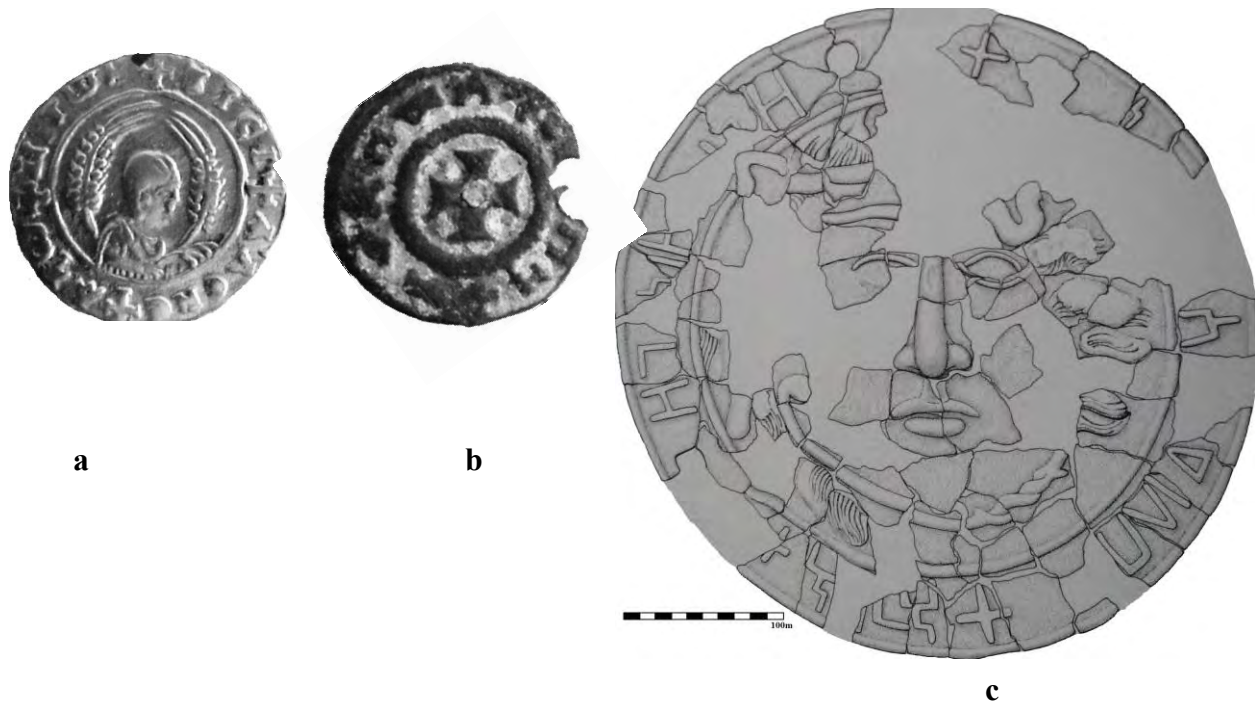


Fig. 3.6 Aksumite coins (a, b, not to scale) and rondel (c). Note the bust and cross on the coins. The rondel was reconstructed after the fragments discovered in the tomb of Brick Arches (coins photo: Hiluf Berhe, May 2011; rondel reconstruction adapted from Phillipson, 2000, I: 100).

and the third is of Ker Iyefareh; in all twelve thrones”¹³ (Conti Rossini, 1910: 5). The inventory seems incomplete compared to the actual number of the stone thrones at this site, which are 15 (see chapter 4 for detail). It is not clear also which throne belongs to whom from among the twelve thrones. The extant thrones today in this church enclosure are actually found on two groupings: in the first group, located close to the gate of the inner church enclosure, are two thrones, known as bishop’s throne and king’s throne. The second group of thrones is located northwest of the first group. The second group is further classified into two lines: the longest line consists of eleven thrones while on the second line there are two thrones. The second group thrones are commonly known as judges’ Thrones.

Two double thrones of the second group are each counted as one. There is no absolute evidence why the number of thrones in the *Liber Aksumae* is only twelve. We can only suggest that, since there are historical evidences for the coronation of medieval period Ethiopian kings at Aksum (e.g. Munro-Hay, 1991), some of the thrones could have been added later by different reigning

¹³ Translation from French

kings after the *Liber Aksumae* was written. The 16th century traveler Father Francisco Alvares has also counted “twelve chairs” (Alvares, ed. Beckingham and Hantingford, 1961). Alvares didn’t provide us with detail information whether he personally counted the thrones or just received the information (since we have the same figure as in the *Liber Aksumae*) from the residents. But in 1906, the DAE produced detail drawings and photographs of two thrones in the first group and thirteen thrones in the second group (Phillipson, 1997: 123-137), totally fifteen thrones.

Another point which the *Liber Aksumae* failed to record is whether the thrones were still intact with their complete chairs or not. Today there are twenty-five known thrones in Aksum scattered in the church enclosure and on the right side of the road that leads to the old cathedral along the foot of May Koho hill.

May Kirah (spelt in *Liber Aksumae* as Kirwah; located north of Aksum about 2 kilometers) is mentioned in the *Liber Aksumae* as the meeting place of St. Yared¹⁴ of Aksum, Abba Heryakos – bishop of Behnesa, and Abba Labhawi – the Syrian, both believed to have been sent to this place by Our Lady Mary, Mother of God. The book further narrates that here they sat together and the latter two persons were ordered by Our Lady Mary to give St. Yared the Praise (*Wudase*) and the liturgy. The book continues stating that these Just persons stayed with St. Yared three days and three nights teaching him, and returned to their countries in peace (Conti Rossini, 1910: 5).

According to the Ethiopian Orthodox Church, St. Yared was born in Aksum towards the close of 5th century AD. Unsuccessful in his Church education, he left the school and went to May Kirah. There was a big tree, and St. Yared made it his home for several years. He is believed to have spent years praying until God's miracle was revealed to him. The liturgy and Praise of St. Mary were revealed to St. Yared, and thus he composed the writings and Orthodox Church hymns which are in use by the Church to this day without any change. Today May Kirah is a sacred place; a *beles* (fig) tree stands at the site; there is also water spring just at the foot of the tree. It is, therefore, a Christian heritage that deserves protection and promotion as sacred site.

¹⁴ St. Yared is a legendary Saint who is believed to have composed the liturgical hymn of the Ethiopian Orthodox Church. Lived in the 6th century AD contemporary of King Gebre Mesqel, St. Yared wrote many books that the Church mainly depends on to present day. In the 6th century, it is said that St. Yared was chanting in front of King Gebre Mesqel; the king, being highly impressed by the chant of St. Yared, pierced his spear on St. Yared's foot and both the king and the Saint never noticed what was going on the Saint's foot.

Still archaeologically unconfirmed but interesting historical description of an object is the *berete eben*¹⁵ described in the *Liber Aksumae* (Conti Rossini, 1910: 5). Its location is described as “near a throne”, and its name and fame was known even in Jerusalem. The *Liber Aksumae* described the shape of this object that it is “completely round like a shield; at the center, it is red and round like a dish”. This object could have served as sign of recognition and symbol of the identity of Aksum (Hirsch and Fauvelle-Aymar, 2001). According to the *Liber Aksumae*, when someone travels to Jerusalem, they ask him: “where is your country”? Then if he says he is from Aksum, they ask him if he knows the *berete eben*. But if he says “I don't know”, they say to him, “you are not an Aksumite” (Conti Rossini, 1910: 5). This implies that the fame of the *berete eben* reached Jerusalem. But according to a priest in Aksum, the *berete eben* is one of the most precious heritage believed to have been used for carving all the monuments in Aksum, and which is still hidden somewhere in Aksum. Sometimes the material used to carve all the monuments is locally known as *ebne admas*. It is clear that so far no object that has been used for carving the monuments is discovered. The clue that it is located near a throne is interesting; we know the location of the existing thrones in Aksum and almost in all the thrones no excavation has been carried out. It is appropriate to assume that the location of the object, described as “near the thrones” may refer to those thrones in the church enclosure due to their continued function, and better protection by the church as well as their proximity to the main stelae and other monumental buildings. Hirsch and Fauvelle-Aymar (2001: 90) have also raised a possible suggestion that the scholars in Aksum could have been inspired to write about their city – Aksum, after Ezekiel's description of the future Temple of Jerusalem and who mentioned Berota, as one of the cities along the borders of Israel. Archaeology may reveal this historical description by carrying out excavations on the thrones in the church enclosure, assuming that all the thrones are in their original position.

Another description of sites by *Liber Aksumae* is the famous tombs of kings Kaleb and Gebre Mesqel. It tells us that there:

“...are the houses of Kaleb and his son Gebre Mesqel, built in the heart of the ground with stone pillars; it is seen from outside to this day. It is said that inside is full of gold and pearl. There are persons who say ‘we have seen with our own eyes

¹⁵ Literally, stone as hard as iron or metal; *beret* (spelt *berota* in *Liber Aksumae*) means iron; *eben* means stone.

pearls coming out through holes on pushing grass inside'. One of its gates is Aksum, and the other Matara. Another house similar to this is found at the foot of obelisk, with a number of gates to the right and left, to the west and east" (Ibid: 5-6).

From this description, there is no doubt that tombs were full of precious grave goods and must have been looted continually because of the information that tombs are full of "gold". The description fits to the tombs of Kaleb and Gebre Mesqel, respectively, based on the legends told to this day and the general ground plan on the ground. The obelisk mentioned here is perhaps referring to the column (now at Ezana Garden, discussed in chapter 5) originally on top of the tomb of Gebre Mesqel.

Liber Aksum also has described that the location of the tomb of Etiopis, the eponymous "father of the Ethiopians, son of the son of Kam, after whom Ethiopia is named", is at Mezber, in the quarter of Melake Aksum. It continues telling us that "there was an obelisk standing as high as the height of a man, but today it is ruined. Now they want to erect a big stone there like in the past times. If, during the evening, they throw dung there, they find that it has become ash by the morning; so that if they throw down rags they are burnt" (Ibid, 6). This legend is partly still alive in Aksum: they say in the past it was possible to see fire at a raised ground but when people approach the place, the fire disappears from sight. They also say that if people stand at the place and bump the ground or hop on it, they can hear a sound of hollow thing implying that there is a vacuum space in the underground. Although, according to the present legend, the location of Mezber and the tomb of Etiopis are not at same place, there seems to be one central truth according to the description that there was an obelisk standing there. This is probably relating to one of the statues erected by king Ezana as recorded in his royal inscription and whose statue base was discovered by the DAE in 1906 (see Phillipson, 1997). This statue was standing on a high ground near the so called tomb of Etiopis. It could have been looted or buried in the high mound where the statue base was found.

The imprint of a shadow of *Abba Selama's* (revealer of light) cross at Ba'eti Barya (*cave of a slave*) is described in the *Liber Aksumae*. It says that when *Abba Selama* rested and sat very close by the stone, the shadow of his cross became printed (drawn) on the stone (Conti-Rossini, 1910: 6). The name Ba'eti Barya could have changed through time into Ba'eti *Abba Selama* as it is

called today. This cave is located north of the Dungur palace on the southern slope of Bieta Giorgis hill among big rocks facing south. Guards of the Dungur palace say that there is an engraving of the cross of *Abba Selama* in this cave. However, it is not possible to differentiate the original one from many recent drawings of a cross by local residents.

Section II, category I of *Liber Aksumae* solely deals with the description of the cathedral of Aksum Maryam Tsion. The description goes on like this:

“We haven’t found the foundation beyond 15 cubit (*emet*¹⁶). The pavement is raised by 9 cubits from the earth until the gate of Maryam Tsion. The thickness of the wall is 7 cubits, and 125 cubits long from east to west; and the length from north to south is 92 cubit. Its height from ground to the vault is 32 cubit. There are 30 brick columns and 32 stone columns, in all 62. There are 4 shutters of doors on wood, 4 in the outside facing west and 4 from inside. In the chamber is one; in the north side, one; in the south side, one; in the Bieta Giorgis, one; in the Bieta Yohannes, one; in the treasury, two; in the Bieta Gerbriel, two; in the house of the community, one; in the Bieta Mary Magdalene, one; in all 20 shutters. There are also 461 shutters of cedar. There are 168 windows. The *menkorakur*¹⁷ (wheels) are 780 in number. The *qeste demena*¹⁸ (rainbow) are ten in number; the *re’ese hibey*¹⁹ (monkey heads) are 3815; and the meshrebi may (water spouts) are 91” (Ibid, 7).

The measurement of the church in *Liber Aksumae* is recorded in detail: its windows, doors and architectural form such as the monkey heads, the arches and the wheels. During the reconstruction of the ruined structure, the DAE, and Buxton and Matthews found the figures for the overall dimensions of the church (125 cubits long and 92 cubits wide) given in the *Liber*

¹⁶ *Emet*, also called *kurnae*, in Tigrigna language, is the length from elbow to fingertip. In ancient times and still in rural Ethiopia, people use *emet* or *kurnae* as a unit of linear measure. Beckingham and Huntigord (1961:525, note 2) suggested that Aksumite cubit is equal to about 46 centimeters.

¹⁷ This probably refers to hinge, still common technique in most churches in rural areas of Ethiopia for wooden doors.

¹⁸ This refers to windows or doors with arch shape

¹⁹ Literally, baboon's head; this refers to the projecting ends of wooden ceiling or on windows and doors, only due to their resemblance when seen from a distance. See also Phillipson, 2012, 1997; Munro-Hay, 1989.

Aksumae to be accurate (Phillipson, 1997: 169-178; Buxton and Matthews, 1974: 66-76, figs. 19-31). In the attempt to reconstruct some parts of the church such as upper structures, Bieta Medhane'alem and Bieta Amanuel of Lalibela rock hewn churches as well as Debre Damo monastery were used as references, since these mentioned churches could have copied most of their forms from the ancient cathedral of Aksum Maryam Tsion (Buxton and Matthews, 1974). As indicated in the *Liber Aksumae*, the overall dimension of the ancient church is found to be 42.5 x 60 meters while its height is estimated to be 15.5 meters. The thickness of the wall (3.4 meters - though varies at different parts) and the height of the podium (4.3 meters) was found to be very likely same as the figure put by *Liber Aksumae* (Ibid, 67).

In general the *Liber Aksumae* is the first local source to have described sites and documented the history of Aksum in the medieval period. It adds a lot to the picture of Aksum's topography before the medieval period. The document also indicated that archaeology in Aksum has to do a lot in the documentation and reconstruction of the long forgotten history and glory of Aksumite kingdom and the search for the buried city of ancient Aksum.

3.4 FRANCISCO ALVARES

Francisco Alvares is the first European to have described Aksum in so much detail and accuracy in 1520. His description about the heritage before it was sacked by Ahmed Gragn some fifteen years later is so accurate. Alvares' work is not only being of a detailed but also its dating is precisely known (he was in Aksum in AD 1520). The documentation by Alvares encompassed almost every aspect of the heritage of Aksum in 1520 – the church, houses, monuments, thrones, water wells, and underground tombs. The topography of Aksum in 1520 is clear from Alvares' description.

Alvares starts his description of Aksum with the history of Queen of Sheba and Queen Candace. He relates that their capital was Aksum itself. He even recounts the journey of Queen of Sheba to visit king Solomon of Jerusalem, that she had a son from him – called Menelik – the founder of the Aksumite kingdom and who brought the Ark of the Covenant with him from Jerusalem. Here Alvares tells from legend that Queen Candace, who became the first Christian through her eunuch, caused all her kingdom to become Christian and also built very noble church, named St.

Mary of Tsion, the first church in Ethiopia²⁰ (Alvares, eds. Beckingham and Huntingford, 1961, I).

His description of the church of Aksum St. Mary Tsion was totally based on his eyewitness. He goes on:

“...This church is very large; it has five aisles of good width and of great length, vaulted above, and all the vaults closed, the ceiling and sides all painted. Below, the body of the church is well worked with handsome cut stone; it has seven chapels, all with their backs to the east, and their altars well ornamented. It has a choir after our fashion, except that it is low, and they reach the vaulted roof with their heads; and the choir is also over the vault, and they do not use it. This church has a very large circuit, paved with flagstones like the lids of tombs. This consists of a very high wall and it is not covered over like those of the other churches, but it is left open. This church has a large enclosure, and it is also surrounded by another larger enclosure, like the enclosing wall of a large town or city. Within this enclosure are handsome groups of one storey buildings, and all spout out their water by strong figures of lions and dogs of stone²¹. Inside this large enclosure there are two mansions, one on the right hand and the other on the left, which belong to two rectors of the church; and the other houses are of canons and monks. In the large enclosure, at the gate nearest to the church, there is a large ruin, built in a square, which in other times was a house, and it has at each corner a big stone pillar, squared and worked [very tall, with various carvings. Letters

²⁰ This contradicts with the legend recorded by *Liber Aksumae* on the history of construction of the first church in Aksum. Legend has it that the first church built by Abreha and Atsbeha in the first half of 4th century AD was first destroyed by a legendary queen Gudit (also known as Esato in Amhara and Gaewa among the Afar people) in the 9th or 10th century AD. King Anbesa Wedem then rebuilt it on the previous foundation after his return from where he has been hiding himself together with the Ark of the Covenant. This church, seen by Alvares in 1520, was again destroyed in 1535 by Ahmed Gagn. This magnificent church had never been set up again like the former one. As can be understood from Almeida's description (detail follows) written about 1628, there was a church of stone and mud, thatched, built among earlier ruined structure whose walls were visible during his visit to Aksum. This fact tells us that there was a simple church building until it was replaced by the huge building built by king Fasiledes of Gonder in the first half of the 17th century and which is still standing. This latter church is built some twenty meters away to the south of the remains of the ancient church, and is built on a much raised platform.

²¹ Such water spouts with figurine of lion's head were also observed later by Bent and the DAE. Today there are many of such figurines in the Aksum Archaeological Museum and Stelae Park. Some are also still in *situ* in the Dungur palace. No dog figurine is so far discovered; thus it may refer to the same lion figurines.

can be seen cut in them, but they are not understood, and it is not known in what language they are. Many such epitaphs are found]. This house is called Ambasabete, and which means house of lions (Alvares, eds. Beckingham and Huntingford, 1961, I: 151).

Alvares described the stone thrones at the Menagesha area in the present outer enclosure and the information is more detailed than that in the *Liber Aksumae*. Alvares, in his book, put it like this:

“...Before the gate of this great enclosure there is a large court, and in it a large tree, which they call Pharaoh's fig tree, and at each end of it there are some very new-looking pedestals of masonry well worked, laid down. Only where they reach the foot of the fig tree, they are injured by the roots, which raise them up. There are, on top of these pedestals, twelve²² stone chairs [arranged in order, one after the other] as well made with stone as though they were of wood, with their seats and rests for the feet. They are not made out of the block, but each one from its own stone and separate piece. They say these belong to the twelve judges who at this time serve in the court of the Prester John” (Alvares, eds. Beckingham and Huntingford, 1961, I: 153-155).

Today these stone thrones are left with only pedestals and bases but no side and back rest nor foot rest survived. Round most of the stone thrones, remains of blocks with holes which were once supporting pillars are still visible. Round the king's throne are still standing four pillars *in situ*. It is believed that these pillars were supporting a vault to shelter the person sitting on the throne (Phillipson, 1997). It is apparent, from Alvares' description that the thrones were without any side and back rests in AD 1520. It is then possible to suggest that they could have been destroyed through time following the decline of the kingdom and when eventually Aksum ceased as political center. One can also guess that Alvares could have been dependent on informants for the number of the thrones rather than counting down what is on the ground. Today these throne pedestals and bases are suffering from negligence, as can be discussed elsewhere in one of the following chapters; large trees are grown among the thrones and expand their size and roots from time to time thereby causing damage on the pedestals and bases. Alvares had observed a large

²² This figure is the same as that recorded by the *Liber Aksumae*; but Alvares was informed that these thrones belonged to twelve judges, while the *Liber Aksumae* said nine of them belong to the Nine Saints, the others to Kaleb, Gebre Mesqel and Ker Iyefareh.



Fig. 3.7 Stone throne at the outer enclosure of the Cathedral of St. Maryam TSION (Menagesha area) (Photo: Hiluf Berhe, 28/09/2014).

tree whose roots were lifting the thrones up; similar problem to the thrones is still apparent today. The present tree is also at the same place as where the large tree had been standing in 1520 as can be evidenced from a dry stem still standing there²³.

We are also informed from Alvares' description of Aksum that outside the enclosure of the Aksum church of Maryam TSION the size of the town was reasonably large with very good houses to which no other place compared. He has also observed many wells of water of very good masonry work. Alvares mentioned figurines of lions, dogs and birds²⁴ which he saw in the town (Alvares, eds. Beckingham and Huntingford, 1961, I: 155).

Alvares described that behind the church of Aksum Maryam TSION, there was a water reservoir at the foot of a hill, near a market place. He gives a clue that around this water tank were many other stone thrones like those in the enclosure of the church (Ibid, 155). According to this reference, Alvares is possibly referring to a water reservoir other than Mai Shum (Munro-Hay, 1991: 112), since he gives additional clues that this water tank was located near a market place, and nearby were stone thrones. We know until present that other groups of stone thrones are

²³ The trees were probably intentionally planted by the inhabitants as the former died out. Today also, as the trees between the thrones are very old and nearly dry, another large growing *warka* tree is planted; the people possibly wanted to maintain the history of the growing of *warka* tree at this specific site.

²⁴ Alvares didn't make clear what these figurines of dogs and birds were for; their general size and location is also unknown. So far, no figurine of such animals is discovered in Aksum.

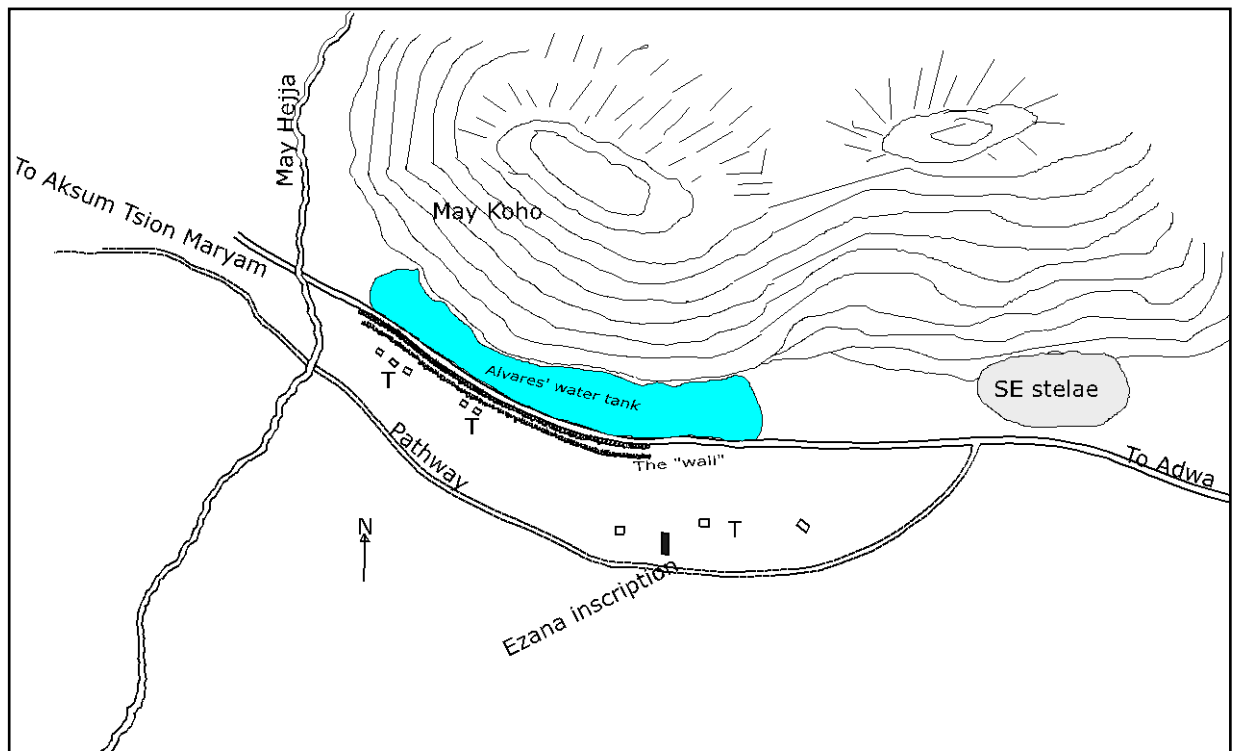
sacred enclosure,...where the peasants “...held their stalls on and around the ancient stone monuments...”(Bent, 1896: 169). These “ancient stone monuments” “below the hill” according to Bent may refer to the stone thrones found below the May Koho hill. A photo and a map from the 1930s also show that the market was at or near the aforementioned site (*fig. 3.8*).

Just northeast of Guanga Edaga and west of the so-called Tomb of Bazen, there was a large water retaining area which, until recent years, has been quite swampy. Since the last five years, a new hotel enterprise is expanding its construction projects to drain out this water. This swampy area stretches until the opposite of the church of Maryam Tsion. A survey, combined with historical documents, revealed that the lower part of May Koho hill has been artificially cut to create large water reservoir that stretched from opposite the church of Maryam Tsion to the west of Bazen tomb. In order to maintain the water, a retaining wall-like structure has been formed. It resembles man made wall, but was deliberately designed in such way to retain the water from flowing to the fields.

To Alvares, this natural wall seemed a masonry work, which he described as: “...a very handsome tank [or lake of spring water] of masonry, [at the foot of hillock where is now a market] and upon this masonry are as many other chairs of stone such as those in the enclosure of the church” (Beckingham and Huntingford, 1961: 156). Alvares’ masonry wall was also described by Bruce as “a wall of red marble”. At the beginning of the 19th century AD, Salt carefully examined this natural formation wall and has described as:

‘...line of regular rock, in part resembling a rough wall, which is probably the same that Bruce has described as a wall of red marble surmounted by pedestals,...We were not however able in any portion of it to trace the workmanship of art. It seemed to be a regular stratum of rock left by nature, as I have often before seen, forming the very base of the hill. It is of loose, soft, chalky nature; but the influence of the air, and the mosses growing up on it, have formed a reddish coat on the surface. It is very irregular in its measurement, in some places being twelve feet high, and in others not two, and is from ten to five feet across. There is no appearance of pedestals upon it, but a little to the south are lying five pedestals or altars...which are at present evidently removed from their proper situations’ (Valentia, 1809: 96).

This line of wall-like rocks was used as a path as evidenced from DAE's and Salt's maps. The thrones observed by Alvares and Salt, are not on top of the wall-like rock but DAE thrones numbers 19 and 20 are just at foot of the rock while thrones 16, 17 and 18 are on a slope but also at the foot of the rock. At present, this water retaining area and wall-like rock are obscured by the forestation program – as the result of which many trees have grown up and covered the area, settlement, the Aksumite Heritage Foundation Library, the prison center, and the Aksum water



Map. 3.2: Plan of Alvares' water tank, the masonry wall, and stone thrones at the foot of May Koho hill based on Alvares' description (the letter T stands for Thrones). The road along the "wall" is no more functional since the Italian occupation due to the construction of buildings and as a result of construction of modern road along the Ezana inscription. The inscription was relocated to the Ezana Park (Drawing: Hiluf Berhe, 2015, after Valentia, 1809; Alveres' description, eds. Beckingham and Huntingford, 1961; and other data).

supply and construction enterprises. As a consequence, it was not possible to take any measurement of the overall size to confirm Salt's measurement and update with new data.

Between the two groups of thrones on this area (throne numbers 16 to 18 and 19 to 20) residents have cut the ancient wall-like rock in order to create an access way to the ancient water tank area



Fig. 3.9 Partial view of Alvares' water tank from northwest. The water is usually absorbed by different trees and shrubs, especially the eucalyptus trees (Photo: Hiluf Berhe, 02/10/2014).

near which they built some houses. The water tank has still water although less volume due to the growth of eucalyptus trees, bushes and much other vegetation. The people have also constructed a small canal to drain out the water to the direction of May Metere (*see map 3.1*). It is, therefore, very likely that Alvares' water tank of the 1520 corresponds to this area. It is also possible to think that the water could have been clean, since it directly comes down from the rocky slope of May Koho hill (*map. 3.2*).

During Alvares' visit to Aksum, the town was located between two hills (Biete Giorgis and Mai Koho) north of the plain. He has observed that the rest of this plain (obviously to the southeast and west of Tsion Maryam church) was full of ruins, including the thrones, and pillars bearing inscriptions (of unknown language) (Beckingham and Huntingford, 1961, 155).

Another major category of Alvares' description is the Aksum obelisks that are located north of the town. He classified them as those standing up and those lying on the ground. The obelisks, according to Alvares' observation are:

“...very large and beautiful, and worked with beautiful designs, among which is one raised upon another, and worked like an altar stone, except that it is of very great size, and it is set in the other as if enchased. This raised stone is 64

covados²⁵ in length, and six wide; and the sides are three covados wide. It is very straight and well worked, made with arcades below, as far as a head made like a half moon; and the side which has this half moon is towards the south. There appear in it five nails, which do not show more on account of the rust;...And that it may not be asked how so high a stone could be measured, I have already said how it was all in arcades as far as the foot of the half moon, and these are all of one size; and we measured those we could reach to, and by those reckoned up the others, and we found sixty covados, and we gave four to the half moon, although it would be more, and so it made sixty-four covados. This very long stone, on its south side, where the nails in the half moon are, has, at the height of man, the form of a portal carved in the stone itself, with a bolt and a lock, as if it were shut up. The stone on which it is set up is a covado thick, and is well worked; it is placed on other large stones, and surrounded by other smaller stones, and no man can tell how much of it enters the other stone, or if it reaches to the ground. [Near these] there are endless other stones raised above the ground [, very beautiful] and very well worked [; it seemed as if they had been brought there to be put to use, like the others that are so big and are standing up]; some of them will be quite forty covados long, and others thirty. There are more than thirty of these stones, and they have no patterns on them; most of them have large inscriptions²⁶,....There are two of these stones, very large and beautiful, with designs of large arcades, and tracery of good size, which are lying on the ground entire, and one of them is broken into three pieces²⁷, and each of these exceeds eighty covados, and is ten covados in width. Close to them are stones, in which these had been intended to be, or had been enched, which were bored and very well worked” (Ibid, 155-158).

²⁵ Covado is equivalent to 27 inches (Munro-Hay, 1991: 113).

²⁶ It is very doubtful that the rough obelisks had inscriptions. Alvares has probably mistaken the chisel marks on the rough obelisks as inscriptions. It is very common to hear in Aksum and elsewhere in the remote monasteries that scratches are perceived as inscriptions and tend to reason out that they are unreadable, since they are written in Hebrew language. On the other hand, if we accept Alvares’ description as truth, then we can say that there were more inscriptions in 1520 than subsequent periods whose number could have been decreased due to human and natural factors.

²⁷ This possibly refers to stela number 2, which was looted by the Italians in 1937, and was returned home in 2005. Finally it was re-erected in 2008 on its original place.

It appears that Alvares has not counted all the obelisks but only those found in the stelae park. From his description he presents unfixed number of stelae – “more than thirty”, and three of the largest stelae (obviously stelae 1, 2, and 3). The overall size of these three largest stelae described in Alvares’ book exceeded the actual size.

Further to the north-east of the town, Alvares described about two underground houses (undoubtedly these are the tombs of kings Kaleb and Gebre Mesqel, located about 1.9 km far from the church of Maryam Tsion). He had entered the underground tombs as can be understood from his description. He described their architectural style in the following way:

“These houses are not vaulted, but of a very good straight masonry, both the walls and the roof. The blocks are free on the outside. The walls may be 12 covados high; the blocks are set in the walls so close one to the other, that it all looks like one stone [for the joins are not seen]....In the doorways are holes for the bars and for the sockets for the doors” (Beckingham and Huntingford, 1961: 158).

According to Alvares’ observation, in one of the rooms of the underground tombs, there existed two²⁸ very large chests (the sarcophagi), “...each one four covados in length, and one and a half broad, and as much in overall height, and in the upper of the inner side are hollowed at the edge, as though they had lids of stone, as the chests are also of stone” (Ibid, 158-159). This is relating to the tomb of Gebre Mesqel, but the reason why Alvares mentioned only two of the stone sarcophagi is that the third (not possible to guess which one) sarcophagus might have been covered with earth, or he simply undermined the broken one if it was already damaged during the 1520.

“In the other house, which is broader, has only got a portico and one room. From the entrance of one house to that of the other will be a distance of a game of Manqual²⁹ and above them is a field” (Ibid, 159). This description is not clear; if Alvares is referring to the tomb of Kaleb, then he might have overrated the size of the room which by no means could be larger than that of Gebre Mesqel. In fact there are three rooms in the tomb of Kaleb rather than one. It could be suggested that two of the rooms might have been filled up with sediment; if so, then Alvares

²⁸ They are actually three and one of them is broken into four pieces.

²⁹ A game somewhat resembling skittles (Beckingham and Huntingford, 1961, note 3: 159).

could have seen the portico of the main entrance to the tomb and one room inside. Alvares also seemed to have reached the other underground tomb through an underground tunnel; today, however, no tunnel is visible at all except that there are more rooms in the tomb of Gebre Mesqel (totally five) and three in the tomb of Kaleb. One important part of Alvares' description of these underground tombs, however, is that they were already open before the 16th century AD and thus their treasures may have been robbed prior to the 1520. From the description, it is very clear that no structure was visible on surface above the underground tombs.

After rain, according to Alvares, people (women and men, children and boys) came out to look for gold, during which he himself also participated although unlucky to find any. This is undoubtedly to refer to the collecting of Aksumite gold coins after rain as coins become exposed by the rain, which is still very common scene in Aksum, as was discussed earlier in this chapter. It is very important to note here that the beginning of tradition of coin collecting in Aksum and its vicinity has long history.

Alvares also described churches on top of Biete Giorgis, *Abba Liqanos* and *Abba Pentelewon* as well as the now disappeared church of Michael Efoy in the Melake Aksum quarter. On the west edge of the top of the plateau (Biete Giorgis) Alvares tells there was large plain area of vineyards where both black and white grapevine were produced. By standing on the southern edge of this hill overlooking the western quarter of the old town of Aksum, Alvares wrote: "...there is a very handsome building; it is a tower of very fine masonry; and much of this tower is ruined (from ages), and with its masonry a church of St. Michael has been built..." (Ibid, 161). It appears very likely that the large part of the tower of Michale Efoy (as it is called today, and which was probably seen by Cosmas, as discussed in the preceding section) was visible in 1520 before it is entirely destroyed, only some corner stone of which are today visible above ground. From the description of Alvares, however, a church of St. Michael seems to have been standing in 1520, possibly built after the tower whose masonry was reused by the church. Then the church could have been destroyed by the devastating war of Ahmad Gragn, which reminds archaeology to work a lot to reveal the obscured glory of Aksum.

Alvares' record of the churches of *Abba Liqanos* and *Abba Pentelewon* is very useful to know their condition in the 16th century AD. He described that on the east [of Aksum] on top of a peak

was found the church of *Abba* Liqanos. To the east of this church on another peak was located the church of *Abba* Pentelewon ascended by three-hundred steps. Surrounding it was a very steep cliff and on top around the church building there was very narrow space (Ibid, 161-162). The later description refers to the monastery of *Abba* Pentelewon where still we have small building at the peak of a small hill. The space between the church building and the edge of the sheer cliff is not more than two meters; the steps are still in place.

3.5 PEDRO PAEZ

Pedro Paez was one of the 17th century visitors to Aksum who arrived in Ethiopia in 1603. One of the contributions of Paez on the documentation of Aksum is the detailed description of the coronation of king Susenyos at Aksum on 18 March 1608. He received this information from the eyewitness of Joao Gabriel, captain of the Portuguese in Ethiopia. Paez tells that the coronation ceremony was accompanied by large number of both infantry and cavalry soldiers (Munro-Hay, 1991: 22-23, 161). This description on the coronation ceremony helps us gain a good picture of the coronation process and ceremony of ancient Aksumite kings at Aksum. One thing might have taken place during coronations of the medieval period Ethiopian kings after the Aksumite kings, that the thrones might have been displaced or changed their position when later kings held their coronations on the ancient thrones. Paez has also prepared a drawing of the tomb of Kaleb with three rooms (Monneret de Villard, 1938: 68), while Alvares reported that there was only one room. If, as suggested earlier, the other rooms missing in Alvares' description were covered with earth, then it is not possible to think that they could have been exposed during subsequent periods by erosion effect. Rather, the possibility could be that the inhabitants may have cleared what could have been in the rooms and left them exposed and visible to later visitors.

3.6 MANOEL DE ALMEIDA

Manoel de Almeida was in Ethiopia for nine years from 1624 to 1633. He begins his description of Aksum with the ancient history that Aksum is an ancient place – the seat and court of Queen of Sheba. He adds that Aksum has served as the seat of Aksumite emperors for many generations, and during his visit, Abyssinian emperors were crowned in Aksum (Almeida, eds. Beckingham and Huntingford, 1954). Almeida describes the geographical setting of Aksum, its

distance from Fremona (the Jesuit camp in Adwa where there was a beautiful church but later destroyed, whose ruin is still visible) and its latitudinal coordinates. His description of Aksum is very important that it is one of the best descriptions and documentations after the devastation by Ahmed Grag in AD 1535.

During Almeida's visit, Aksum was occupied by about one-hundred inhabitants. The former glory of the town described by Alvares before the war of 1535 is now diminished after the destruction. Almeida observed in the town that "Everywhere there ruins are to be seen, not of walls, towers and splendid palaces, but of many houses of stone and mud which show that the town was formerly large" (Ibid, 90). There is no doubt that the number of inhabitants and the town size may have decreased after it was sacked by Ahmed Grag in 1535. The former elegant church of Maryam Tsion described by Alvares no more existed during Almeida's visit to Aksum. Instead, he has seen a "...church of stone and mud, thatched,...built amid the ruins and the walls of another, ancient one, the walls of which are still visible..."(Ibid, 90). It can certainly be understood that a simple church was built on the ruins of the former church after the war until it was replaced by the present rectangular church which king Fasiledes built in the first half of the 17th century AD.

The size of the former church based on what was visible at the time was described by Almeida as a church with five aisles and measured 50 x 22 meters of length and width, respectively, which is much smaller than what Alvares has observed (60 x 42.5 meters). Almeida also tells that the enclosure of the church was very big wall of stone and had "...very handsome courtyard paved with large, well cut stones, ending, on the side where the church is, in a flight of eight or nine steps, also made of large cut stones. At the top is a platform of ten or twelve *covados* in the space before the facade and principal door of the church" (Ibid, 90). The position of the church in relation to the destroyed former church has remained untraceable; but, since Almeida was able to see the aisles of the former church, the eastern section of the former church may have been unoccupied by any building. According to the reconstruction of this church by DAE, the aisles were found on the eastern end of the church. Almeida also speaks of large flights of steps. According to Orthodox Church, the main gate of a church is always from west while the holiest room is on the eastern end of the church for rectangular-shaped and at the most center for circular-shaped church building. From this history, it could be suggested that the small church

which Almeida described may have been on the western end of the former destroyed church.

Almeida, however, gives us a very poor description of the thrones located in the outer church enclosure. He reports that there were “five or six big pedestals of black stone”. He also counted four standing columns of 10 or 12 spans³⁰ high round the king’s throne (Ibid, 90). Almeida does not seem to have been interested about the thrones for detailed investigation and description. He further ignored to record the number of thrones as enumerated by his predecessors. Thus the information on the thrones from Almeida is not an updated, but rather, is confusing. At some point he recalls Alvares’ description that the thrones were almost intact and there were 12 stone chairs as counted by Alvares during the early 16th century AD. But during his visit, Almeida neither confirmed nor refuted Alvares’ report on the number of the thrones.

Almeida also included a very short description of the obelisks at Aksum. He has described that there were about twenty standing and seven or eight lying on the ground broken into many pieces (Ibid, 91). It has been discussed elsewhere in the preceding section that the *Liber Aksumae* has counted fifty-eight, and Alvares said there were more than thirty-three obelisks. But Almeida’s count is even much less. This may not be due to a decrease in the number of the stelae after *Liber Aksumae*, but most possibly either Almeida made the counting from a distance while focusing on the stelae found nearby the church area (main stelae field) or many of them could have been obscured by settlement. In this case, a hypothesis that the inhabitants might have concentrated around the church and the great carved stelae after the destruction by Ahmed Gragn would be plausible, justified somewhere in chapter five.

Almeida’s description of the “tallest of those standing” (stela 3) stela is perfect; its height,

“...if measured by its shadow, is a hundred and four spans. Its width at the base is ten spans. It becomes thinner as it goes up, like a pyramid, but it is not square; it has two sides broader and two narrower, than the other two. It is carved as though in small panels, each of which is like a square of two spans. This is the style of all those that have this carving, which are the taller ones” (Ibid, 91).

His observation that the other carved stelae lying on the ground are bigger than the largest

³⁰ A span is the space from the thumb to the end of the little finger when extended, which is equivalent to 9 inches; hence the height of the standing columns is roughly 2.28 or 2.75 meters

standing is correct, though his estimation of their height to be “over two-hundred spans” is exaggerated. He added that others whose height range from 30 to 40 spans are rough and unshaped (Ibid, 91).

Almeida also described that “A bombard shot away...” from the largest stelae (main stelae park) was a stone inscription of almost man’s height with Greek and Latin letters (Ibid, 91). But he was not able to identify in what language it was, nor did he indicate the direction of this monumental inscription from the largest stelae.

Following Almeida, there were other Portuguese visitors during the 17th century: Emmanuel Barrades, Alfonso Mendes, and Balthasar Telles. Their contribution to the literary documentation of Aksum is, however, less significant as some of them focused on the general history, and Telles’ work almost repeats the work of Almeida. Barrades relatively describes better about Aksum and its heritage. He described the monuments as ‘*very large and notable majesty*’ and ‘*high and beautiful columns and pyramids*’, (undoubtedly the stelae). He also mentions inscriptions with “letters on one side in ‘Amharic’ of an ancient style, and on the other letters which appeared to be Greek or Latin”. In addition to these, Barrades described the stone thrones and the tombs of Kaleb and Gebre Mesqel (Munro-Hay, 1991: 23; Monneret de Villard, 1938). It appears that Barrades has seen one of Ezana’s inscriptions with three scripts (Ge‘ez, Greek and Sabeen). But he failed to mention specific location and direction of the inscription. As the Ezana inscription, which is today at the Ezana park, has been on the edge of a pathway until it was relocated in 1937 from its original place, Barrades’ description of an inscription might refer to this (*see maps 3.1 and 3.2 for original location*).

Alfonso Mendes, who arrived in 1625 in Ethiopia, summarized his description of Aksum as:

‘and the place where she “(the Queen of Sheba)” had her court still exists today, with monuments of remarkable magnificence, as well as the town where they say she was born and which still today preserves her name, the land being called Saba by the Abyssinians, all of which I saw and traversed on several occasions’ (quoted in Munro-Hay, 1991: 23).

3.7 JAMES BRUCE

The Scottish explorer James Bruce arrived in Ethiopia in 1769 and reached at Axum on 18 January 1770. Of his five volume publications entitled *Travels to discover the source of the Nile in the years 1768, 1769, 1770, 1771, 1772 and 1773*, published in 1790, Bruce devoted a few pages for the description of Aksum and its antiquities.

During his brief stay at Aksum, he saw forty obelisks in one square (evidently in the main stelae park), all carved out of one piece of granite stone, and without any inscription. Among the obelisks Bruce described that three are largest decorated obelisks, and two of them, larger than the tallest standing, are found fallen. He illustrated the largest standing stele (stela 3) with geometrical elevation; though this illustration lacks accuracy, as Munro-Hay (1991: 24) put, it "...does give an impression of the stelae". The position of the stela 3 – that it faces south direction and is on vertical position, and that it has representations of lock and bolt on its door, is also described (Bruce, 1790, III: 129).

Bruce generally counted one hundred and thirty-three pedestals whose tops were seen with marks where statues once stood. He also assured that he saw "two figures" of dogs still in their place. He commented that though most of the statues could have been of granites, some seemed to him to have been in metal (Ibid, 130). Unfortunately, Bruce failed to give us a detailed location of these pedestals as their number is greater than those previously reported by Portuguese visitors and the *Liber Aksumae* as well as the present actual number. It is also not clear whether these figures of dogs, mentioned by Bruce, are the water spouts with figures of lion which are still preserved at Aksum. However, the description on the general number of pedestals is very important clue for future archaeological search at Aksum.

The present building of the church of Aksum Maryam Tsion, which is believed to have been built by king Fasiledes and dedicated in AD 1655 (Munro-Hay, 1991: 21), was described by Bruce as "...a mean, small building, very ill kept and full of pigeons dung". Bruce described the raised podium where the present building of the church stands as remain of an ancient temple with two "magnificent flight steps" of each reasonably very wide. In the outer enclosure, Bruce describes the existence of "...three small square enclosures, all of granite, with small octagon pillars in the

angles... on the top of which formerly were small images of the dog-star, probably of metal. Upon a stone, in the middle of one of these, the king sits, and is crowned...; and below it where he naturally places his feet, is a large oblong slab like a hearth, which is not of granite, but of free stone.” This description relates to the king’s throne and the pillars round it. Here at the king’s throne, Bruce tells he has found an (? Greek) inscription badly damaged but he tried to reconstruct it as **ΠΤΟΛΕΜΑΙΟΥ ΕΥΕΡΓΕΤΟΥ ΒΑΣΙΛΕΩΣ** (king Ptolemy Euergetes), (Bruce, 1790, III: 132).

This was later refuted by Salt; he is of opinion that Bruce may have not found it on the king’s throne, it may be the same inscription that Salt found on one of the judges’ thrones, but Bruce could have falsely converted it into Greek, for Salt couldn’t find any trace of it in the king’s throne and believed that the area may not have been affected during the short interval periods between 1770 and 1805 – the years Bruce and Salt visited Aksum, respectively. Today there is no confirming evidence about the existence of this inscription with Greek characters. It is also not clear how it got here in Aksum. Bruce didn’t give any explanation about its origin and connection to the Aksumite history. If Bruce’s record is true, could this fragment of inscription with an Egyptian king’s title and Greek characters be part of the monumental inscription of Ptolemy III Euergetes of Adulis that Cosmas saw and copied during the 6th century AD? Although it is immature hypothesis without any picture of what this fragment looked like (since Bruce didn’t provide any sketch of it), it would inspire future archaeology on the search for, and interpretation of, this fragment.

During his visit to Aksum in 1770, Bruce estimated the number of houses in Aksum to be about six hundred. He added that the town was watered by a stream that flows into a water reservoir and that had a fountain near where the main obelisks are found (Ibid, 132). The latter description is poorly understood; the reservoir could possibly be the May Shum while the “fountain” of Bruce may refer to the well found at the center of the same reservoir. But it is not clear which stream he is referring to. As will be discussed, Henry Salt sketched that a stream had its source at May Shum. Alvares also described that a water tank then was at the foot of May Koho hill. Thus these pictures may help to guess Bruce’s poor description that the stream might had its source at the well in May Shum and flowed into the Alvares’ water tank.

Most of the descriptions of Bruce are very poorly presented and mixed-up. Neither the remains in Aksum nor the town itself is accurately described. Phillipson (1998: 28) commented on Bruce's visit to Aksum as "...producing a disappointingly cursory and manifestly inaccurate account of what he saw". Finneran (2007: 26) adds that Bruce's work published in 1790 "...is a mass of poor observation and often prejudice". Even some of his descriptions seem to be totally unreliable, and oddly attributed all Aksumite works to Egyptians. Though, however, his work stimulated Europeans on Aksum antiquities that he was soon followed by other European explorers and visitors such as Henry Salt.

3.8 HENRY SALT

The beginning of the 19th century AD was a turning point in the documentation and description of Aksum and its antiquities when the British traveler Henry Salt visited it twice – in 1805 and 1809. He was in Ethiopia first in 1805 accompanying Viscount Valentia as a secretary and draftsman, and again in 1809 as British envoy. During his stay in Aksum, Salt left us excellent lithographs of the largest standing stela, the church of Aksum Maryam Tsion, the rock cut steps and unfinished cave of May Koho hill, the stone thrones, the famous Ezana inscription, and other features of the town. He also produced a map of Aksum and its vicinity showing the location of the southeastern and main stelae groups, the church, the stone thrones, Mai Shum water reservoir, rock cut steps and cave, the location of the surrounding hills, and the tombs of Kaleb and Gebre Mesqel. His work was then published in 1814 and he had also contributed one chapter in volume three of Valentia's publication of 1809.

His first description was about the tombs of Kaleb and Gebre Mesqel. Salt tells us that his voyage from Adwa to Aksum took place from the north of the town and thus this route brought him first to the aforementioned tombs. He said that the tombs (which he called them caves) oriented east-west, are located on a hill. A large granite slab used as a cover for one of these tombs was found to have measured about 2.65 x 3.56 meters. He had even entered the tomb of Gebre Mesqel, though almost closed as the result of the earth that filled it. Here he described that the doorway is very beautifully built; in a room there were three 'plain tombs'³¹ with covers but the center one. The cover of the center was seen broken and displaced (Valentia, 1809, III). This

³¹ These are the three coffin boxes carved of granite stone and are well fashioned.

description of the coffin boxes during the early 19th century is very interesting that today we have three of them without any cover although marks at the top edge indicate that they had covers. This description of Salt is also completely different from what Alvares described during the early 16th century as discussed above.

Salt has precisely documented the stelae in the form of illustration rather than being interested with their number. His three popular lithographs of the largest standing stela (stela 3) are very informative about the general view around the stela as well. One illustrated with a view from north-east (*fig. 3.12, b*) shows the stela number three, nearby it some medium-sized stelae in leaning position and a big tree, and further south-south-east is seen Aksum Maryam Tsion church at a raised platform. Another illustration of the stela from south-west (*fig. 3.12, a*) shows stelae one, two, and three, other small stelae behind stela number three to the north-east direction, the hill above May Shum and Biete Giorgis to the north-east and north-west directions, respectively, a big tree, and huts to the north and north-west of the stela. The third lithograph (*fig. 3.12, c*) shows the close-up view of stela three, and a big tree around which three other stelae are partially visible. Of the decorated ones, Salt has counted seven largest stelae which are “...all ornamented nearly on the same manner as the one now standing; the smallest³² is thirty-six feet long, but the dimensions of the largest considerably exceed the erect one”. On the opposite side of the water reservoir, the existence of great number of undecorated stelae, fallen on ground, is described (*Ibid*, 181).

The southeastern stelae group is also described for the first time by Salt with perfect direction and accuracy. He reported that the standing stela there is about six meters high and there were fourteen stelae more to the east of this standing stela but all lying on the ground. Salt completely overturned the work of Bruce with the illustration of the largest standing stela (stela 3) and the location of the southeastern stelae.

Salt described the church of Aksum Maryam Tsion as no less than twelve meters in height, the colonnade in the western side of the church being supported by four large columns built of small stones and covered with white plaster. Salt adds that ‘...the church, which Bruce has most

³² This refers to DAE stela number 7 which is decorated with relief of “house” on one side and column with capital on the other. Today it is found fallen lying on top of stela number 36.

unjustly depreciated, since, when compared with all others in Tigre, it has no rival (except Chelicut)³³ with respect to size, richness, nor sanctity' (Ibid, 87-8). According to Salt's observation, the church was accessed by two flights of steps from the western direction; '...the lower flights consist of twelve steps, one-hundred and eighty feet in length, and the upper one of eight steps, thirty-six feet in length, with an interval of sixteen feet between the two flights: from the uppermost step to the church porch is thirty-eight feet' (Ibid, 96). He has measured the church to be one-hundred and eleven feet long and fifty-one feet wide (Ibid, 90) (*fig. 3.11, b*).

The stone thrones (though their number unidentified) were well described, illustrated and located on Salt's map of Aksum. Salt tells that the judges' thrones were found 'scattered about different directions'. On his ground plan (*marked C, map 3.3*) the thrones were arranged in two main lines, while three thrones were out of the line, a total of twelve thrones. Today there are thirteen although one of them is very short probably due to burial by sediment. It is not clear whether the thirteenth was brought here after Salt or has been obscured by earth. Salt's sketch of these thrones to be twelve throws light back to the works of *Liber Aksumae* and Alvares who reported that there were twelve thrones. These latter works were probably excluding the king's and bishop's thrones. On one of these thrones, Salt has found a short Ge'ez inscription³⁴ highly defaced that posed him difficulty of deciphering it.

On the other hand, the existence of remain of a structure is for the first time reported by Salt which he described to have been located south-west of the south-eastern stelae group (marked A on the plan). Salt described this as '...large stones of granite regularly cut, piled two and two, and placed at regular distances, evidently appear to have formed part of the foundations of some ancient edifice'. Some one-hundred and eighty meters south of this mentioned place, Salt was shown, in a compound of house, a structure which he believed to be an entrance to a subterranean building (Ibid, 180). Unfortunately today this feature doesn't exist on surface as it may have either been totally destroyed or overlaid by later settlements.

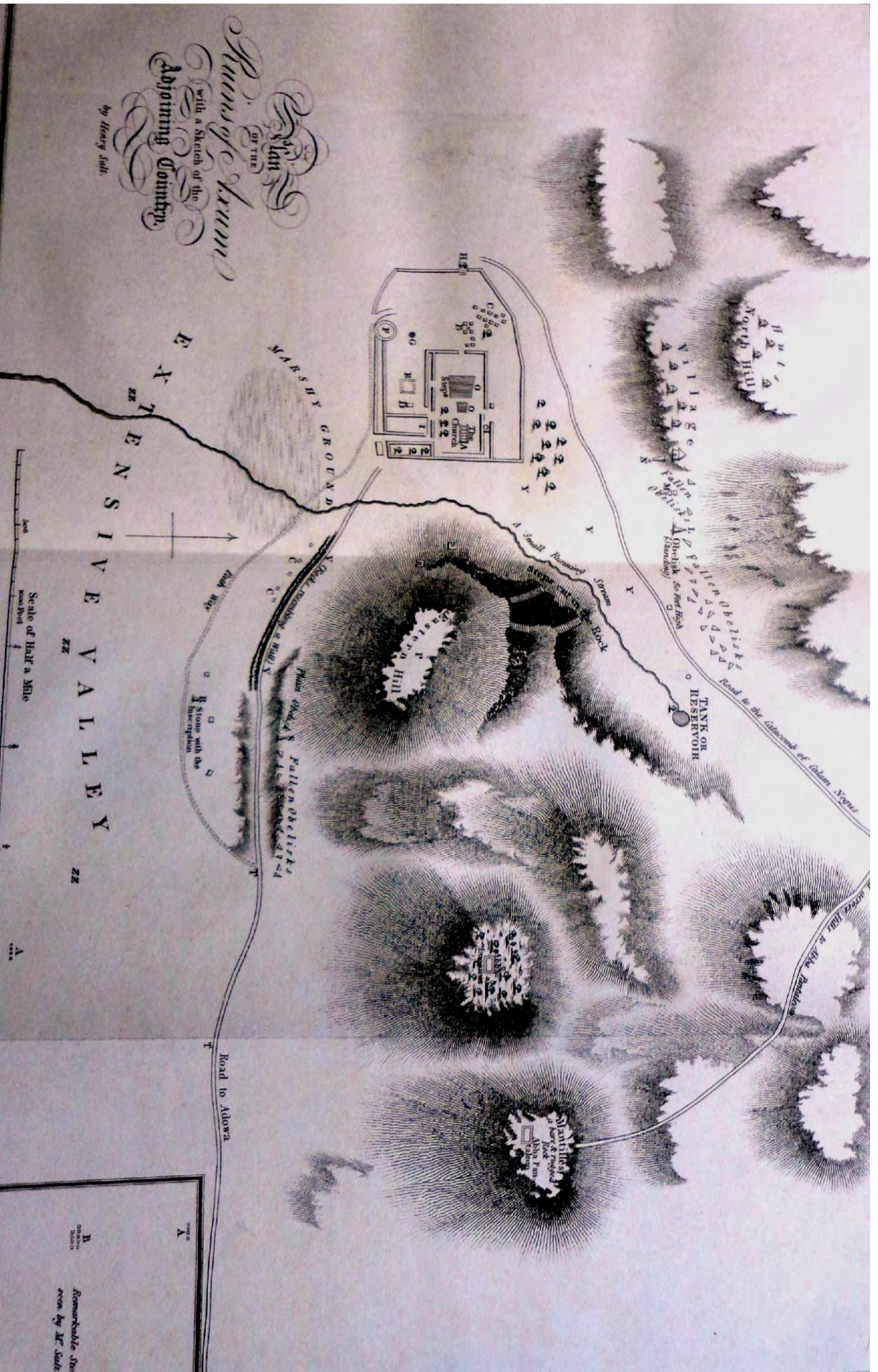
The rock cut steps and cave at the northern and north-western slope of May Koho, respectively,

³³ The church in Cheleqot is called Selassie (Trinity) Cheleqot. Cheleqot, located south of Mekelle, was the seat of *Ras Wolde Selassie*, governor of Tigray during early 19th century.

³⁴ This is still visible on DAE throne number 7. It is highly defaced as the result of people sitting and stepping on it. It was copied and deciphered by the DAE in 1906 (see chapter 5 for detail).

are carefully sketched in their location on Salt's map of Aksum. From the map, it appears that there must have been numerous steps, which since have decreased and defaced due to the quarry activities there today. On the other hand, two rock cut caves are visible on the map of Salt which so far was known only one. Hydrologically, the water reservoir of May Shum was the source of a stream flowing southward passing east of the church of Maryam Tsion, where past the church forms a marshy area and still further to the south was a very extensive valley (*map 3.3*). Today there is a clue near the present market area that this area was marshy and formed a shallow valley.

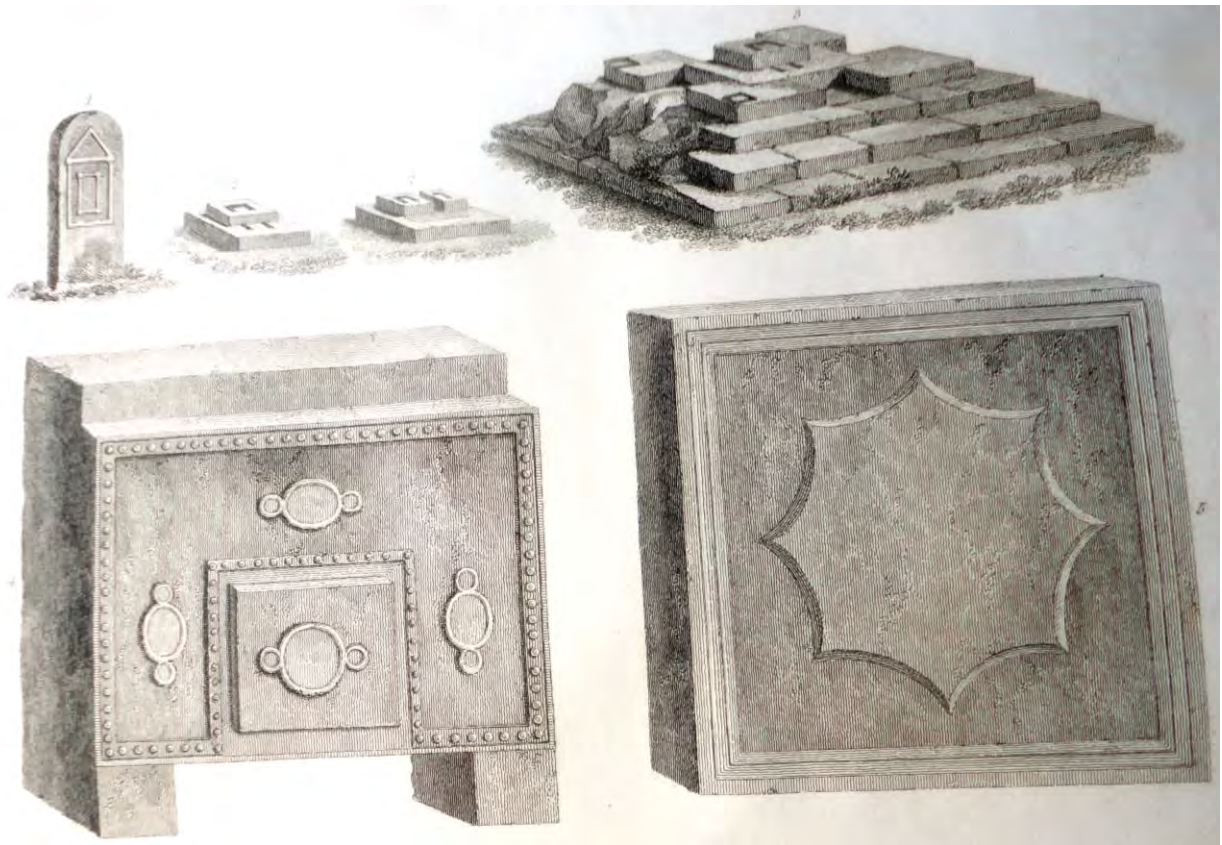
One of the most exhaustively described and documented work by Salt is on the famous three script inscription of king Ezana. Salt never simply described the existence of this inscription like the visitors and explorers before him, but he thoroughly examined it, carefully traced the letters, illustrated the stone with its inscription, and translated the Greek version into English. Salt tells that, since the inscription has been badly exposed to rain and sun, much of the text on the exposed side was unrecognizable; even the characters on the more protected side, as the result of its leaning position to the north, were captured after repeated checking and reading until it gives him some sense of meaning. Located on the right side of the south-eastern entrance to the ancient town, this monumental inscription was standing to a height of about 2.4 meters, 1.06 meters long and 0.3 meters wide. Salt even has carried out an excavation of some forty-five centimeter deep to expose the bottom lines of the inscription. In addition to this, Salt recorded and translated an inscription that still stands at the western side of the 17th century church of Maryam Tsion (on the left side when approaching the church from the flight of steps from west (Salt, 1814). Had the Ezana inscription been lost subsequently, Salt's detail documentation would have been the only credited work like that of Cosmas for the Adulis inscription.



Map 3.3 Plan of Aksum in 1805 by Henry Salt. Letters stand for: A= structure seen by Salt; B= king's throne; C= stone thrones; H= western gate of the outer church enclosure; L= standing stela (DAE 3); M= fallen stela (DAE 1); N= fallen stela (DAE 2); O= Flights of steps of the church; P= summit of May Koho hill; R= Ezana inscription; S= standing stela at the Bazem tomb area; T= The road from/to Adwa; V= the wall-like rock; Y= valley; Z= valley (adapted from Valentia, 1809, III).



Fig. 3.10 Illustration of Ezana inscription with the Greek script. Salt tells that he has dug about forty-five centimeter deep to expose the lower lines of the inscription. Today this monumental inscription stands at the Ezana Park since 1937 (adapted from Salt, 1814).



(a)



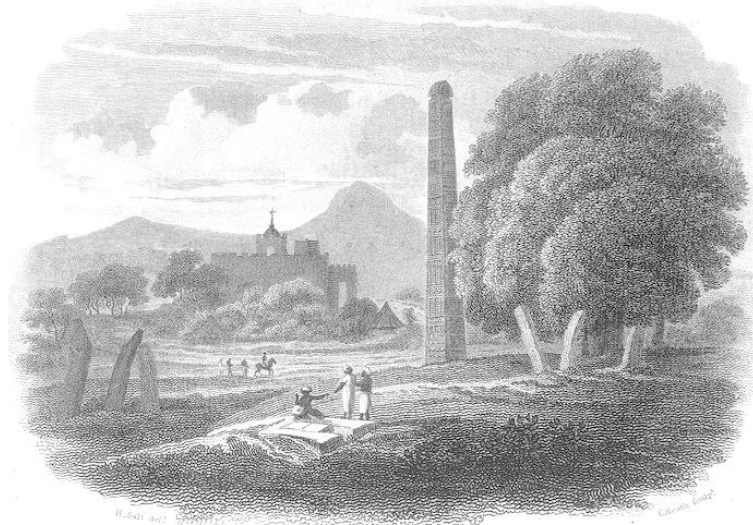
Fig. 3.11 (a) Stela 7 with the relief of “house” (top, left); two stone thrones at the church enclosure (top, center) and throne 9 (top, right); base plate of stela 4 (lower, left); and base of column (lower, right) (adapted from Salt, 1814); (b) view of Aksum Maryam Tsion from west as illustrated by Salt in 1805. Behind the church at the background stands the hill of May Koho while the standing stela of the south-east stela field can be seen at the right lower edge of the hill (adapted from Valentia, 1809).

(b)

(a)



(b)



(c)



Fig. 3.12: (a) view of stela 3 from south-west. Stelae one and two are visible on the foreground (lower, left corner). To the right side of the big tree are some stelae on leaning position; right side on the background is the hill above May Shum water reservoir. The background on the left side can be seen the hill of Biete Giorgis. Notice also the huts on the hillside to the left side of the stela and the big tree; (b) View of stela 3 and the church of Maryam Tsion from north-east; some rough stelae on leaning position (lower, left corner and in front of the big tree) can be seen. The stela on which the seated people are seen is most probably stela 31; (c) closer view of stela 3 as seen in 1805. The big tree was no longer extant when the DAE arrived at Aksum in 1906 (adapted from Salt, 1814).

3.9 THEODORE BENT

Following Henry Salt, a considerable number of European travelers have visited Aksum and left us accounts of their observations. Noteworthy examples include Nathaniel Pearce, Ruppell (1830s), Lefevbre (1840s), Ferret and Galinier (1840s), and Von Heuglin (1860s) (Phillipson, 1998). The Napier expedition, which had entered the country with the objective of relieving British prisoners at Meqdela detained by King Tewodros of Ethiopia in 1867, had carried out some excavations in Agulae and Adulis, but was not allowed to visit Aksum and thus made no account of it (Munro-Hay, 1989).

Toward the close of the 19th century, however, another traveler with great passion and scholastic interest, Theodor Bent, visited Aksum in 1893 and produced detailed work on Aksum and its antiquities. He spent ten days at Aksum accompanied by his wife, supporting his descriptions and documentation of Aksum with excellent illustrations and the first photographs of the antiquities (Bent, 1896).

The stelae, according to Bent, were found grouped at three separate areas: on the plain area, on the south-eastern, and up the valley (of May Hejja). He also divided their type into highly finished and decorated, and unhewn rough stones. He also found some fallen on the ground and some still standing. Overall, he reported more than fifty standing in all the stelae fields mentioned above; as the fallen ones were hidden among ruins and buried in the ground, Bent tells that counting them formally would take long time and would be a tedious search (Ibid).

The largest standing stela (stela 3) was described by Bent as the largest of all those standing, with a height of 18.28 meters, and width (at the base) of 2.61 meters. Bent has beautifully illustrated this stela from its back and photographed from its front side (both backside illustration and front side photograph are the first of their kind). Its base plate, having four bowls carved out of it, is also illustrated in detail and was measured to be 3.47 x 4.21 meters. Still larger than this standing obelisk was recorded by Bent to have been found fallen and broken in large fragments located in an adjoining garden of the house³⁵ of *Ras Alula*. The extreme front width of one of these fallen large stelae (Bent did not exactly indicate, but may refer to stela 1) was measured by

³⁵ This is no longer extant (see chapter 5 for detail history).

Bent to be 3.87 meters. He also photographed the fragments of the lower and top of stela 1 and 5. The latter was found fallen in the stream, and Bent adds that he was able to confirm that the holes on the stela for metal plaques were not cross as supposed to be by the Jesuits. He has also described about two non-decorated stelae marked by rounded and pointed tops. The one with a rounded top is described to have a flat altar base (Ibid). Their position in reference to stela 3 is not indicated, but judging from his photograph of stela 3 together with two other non-decorated stelae on page 184/185, this may possibly refer to the right and left (stelae 21 and 19), respectively, when viewed from front side of stela 3.

Another stela which got the attention of Bent was the stela 7. Its height was measured to be 8.48 meters and its width at its base 1.98 meters. Bent removed some soil to expose the buried body of the stela. Finally he produced a very detail illustration of the stela with its relief of a “house” and a column (Ibid: 188).

Bent photographed the church of Aksum Maryam Tsion from the west and described that it stood on a high area of a probably ruin of an ancient temple. He adds that he was able to observe many fragments built into the church which would have been reused from the former church destroyed by Gagn. Its roof was described to be flat and has battlements and a bell-tower. Bent also thought that the stone for the flight of steps on the western side of the church had probably been brought from another earlier structure (Ibid: 162-5). He also recorded other ancient objects collected in this church yard, such as two figures of lion's head, which he believed were used as water spouts in former times but during his visit were simply displayed for decoration; a fragment of the top of a stela with windows and two lances³⁶; and other finely worked stone slabs (Ibid: 192-3). Besides this, Bent recorded a small round church where all men and women worshiped, and it was a church for the baptismal of children. Bent tells that the stone-bowl wherein the children were baptized bore a Ge'ez “inscription round it” (Ibid: 168). This round church may refer to Arba'etu Ensesa church which was later enlarged; children's baptism still takes place in the same church.

Bent was probably less interested in the pedestals in the coronation area of the outer enclosure of

³⁶ This fragment, commonly known as “stela of lances”, was identified to be the upper section of stela 4 (Plant, 1985: 215).

the church of Aksum Maryam Tsion. He simply reported that there were twelve pedestals in a row which he thought were probably originally used as bases for metal statues. Here he reported the presence of a Ge'ez inscription though in a bad state of preservation – undoubtedly the inscription which Salt recorded and tried to interpret as discussed earlier. Apart from the twelve pedestals, Bent scantily described that there were, “before the porch leading into the inner enclosure”, columns amongst which was also found a stone slab “probably supposed to be the throne on which the emperors of Abyssinia are crowned” (Ibid: 192). This latter description refers to the king’s throne round which are standing four columns. The bishop’s throne is not included in his description.

Further north of the town about 1.9km, Bent reported that he had visited tombs called by the people as tombs of Kaleb. Here what he has observed as the existence of three chamber rooms, is correct; while nearby it in another tomb³⁷ he has described that there were stone coffins in one chamber room, “...and in the rocks around are cut several tombs...”(Ibid: 194). Although the latter description corresponds to Gebre Mesqel’s tomb, Bent supposed that the rooms around the main room with coffins were cut into a rock. Most likely, as the rooms are always dark, Bent might have been unable to differentiate between carved and built feature.

To the west³⁸ of Aksum, Bent documented an engraving of a lioness on a big granite boulder at the hillside of Gobo Dura. Bent tells us that as the line of the engraving was so faint that it could not be identified for a photograph, so he thickened the lines with charcoal. This engraving of lioness, according to Bent, measured to be 3.25 meters long from the tail to the nose. Just in front of it few centimeters from the nose, was recorded the presence of a “circular disc with rays, probably intended to indicate the sun...”³⁹. At Gobo Dura, Bent also recognized some big flakes and stressed that the monolithic stelae found in the town were quarried from there (Ibid: 195-6). He was the first traveler to record the existence of several sites outside the center and to notice that Gobo Dura is the quarry site for the obelisks in the town.

Bent’s another achievement, unlike his predecessors, in the description and documentation of

³⁷ This is commonly called the tomb of Gebre Mesqel, son and successor of king Kaleb.

³⁸ Bent (1896:195) erroneously put it as north-west.

³⁹ This is definitely a cross within a circle.

Aksum and its heritage is that he conducted a survey and described some new sites surrounding the town center. One of these new sites was found “...up the valley, beyond the line of the monoliths...” where there were seen “...foundations of several ancient buildings, huge blocks of stones carefully cut and placed together without mortar...”(Ibid: 193). This description most likely refers to the site of Kidane Mehret just north of May Shum water reservoir, which was excavated by the BIEA, directed by David Phillipson from 1993-7 (Phillipson, 2000, 2 volumes). Before BIEA excavated the site, Michels had already recorded it during his survey in 1974 (Michels, 2005). Although the site was refilled after excavation and farmers continued cultivating on the fields, some structures are still visible on the western edge of the site exposed by erosion. The road to the tombs of Kaleb and Gebre Mesqel passes through this site. Although the present road to the tombs follows the same way as that shown on Salt’s map, Salt didn’t mark the presence of any structure there. It is possible to suggest, therefore, that much of the structures we see today could have been exposed after Salt’s visit and already visible during Bent’s visit.

To the west of the town near the western stelae field, Bent reported that there was a large mound which he thought might be a tomb. He even wished to excavate it but the prevailing unstable situations⁴⁰ prevented him from doing so (Ibid: 195). This mound possibly refers to the Dungur palace which was excavated by Anfray from 1966-68. Anfray’s report shows that before the excavation, the palace was marked by mound with flat top (Anfray, 2012). Apart from these, in the center of the town, Bent described that there were “...mounds and rubbish heaps...” within the outer enclosure of the church of Aksum Maryam Tsion. Today this area is called Godef Maryam (Godef in Tigrigna language means rubbish). It is believed that after the church of Maryam Tsion was burnt by Ahmed Gragh, the ash and other burnt material was damped here and formed heap. Today, however, the heap is cleared away and only the name survived (discussed in chapter 5). For fear of the sacredness of the area, Bent never dared to carry out an excavation within the enclosure.

The water reservoir (May Shum) was also described in Bent’s work as a great tank and very ancient, so evident that there exist rock-cut steps leading to this reservoir. He has also reported

⁴⁰ During his stay in Aksum in 1893, Bent reported that Ethiopians were already on campaign against the Italians who were then preparing their logistic to cross the Mereb River and invade Ethiopia. Bent was then advised to leave Ethiopia for Eritrea; consequently he left Adwa together with an Italian consul in Adwa.

that there were many other rock-cut steps and paths leading up to the hill above⁴¹ (Bent, 1896: 193).

Bent described ruins of ancient buildings “...with large stone foundations,...structures of considerable size...”, found to the west edge of the town on the plain (Ibid, 195). Here the geographical description “west edge of the town” clearly indicates that Bent’s description relates to the structures close to the May Lahlah stream which came to be known as Puglisi’s “villa” after Puglisi excavated thereon in 1939 (Puglisi, 1941).

Bent’s other focus during his visit to Aksum was on the inscription of king Ezana found at the south-eastern entrance of the ancient town. He made impression of the text on both sides of the stone, and Muller translated it. Muller proved that the inscription is a bilingual, rather than trilingual as presumed by Bent. According to Muller the back side of the Greek text is all in Sabean script of latest form. A second inscription of Sabean script containing twenty-nine lines was described by Bent and all its text was copied by impression. Muller has dated this inscription as falling in the period after the famous Ezana inscription and before the two Ge‘ez inscriptions (discussed below) based on the justifications of absence of Greek translations of this script, abandonment of older Sabean characters, and the adoption of Ge‘ez script in the later Ge‘ez inscriptions. On the other hand, though the inscription was found to have been fragmented, and thus created difficulty for proper dating, there is, according to Muller, a possibility that the inscription might have been erected by Ela Amida, father of king Ezana (Muller, 1896: 231-254).

Bent described two more Ge‘ez inscriptions and took their impressions. The first of them (Muller, no. 1) was one of the three inscriptions discovered by Henry Salt in 1805 near the Ezana inscription. It was later copied by Ruppell in 1833 and d'Abbadie in 1838 and 1842. The second inscription (Muller, no. 4) has also been copied by Ruppell and d'Abbadie. Both inscriptions being in Ge‘ez script, the second inscription has fifty-two lines. According to Muller, both these inscriptions, although some characters missing, belong to the famous king Ezana (Ibid: 256-270).

⁴¹ This is not clear whether he mean the hill above the water reservoir (May Shum) or May Koho; many rock-cut steps lead to the top of the latter, but the rock-cut steps in the former do not reach the top of the hill.

CHAPTER FOUR

BRIEF HISTORY OF ARCHAEOLOGICAL EXCAVATIONS AT AKSUM

4.1 INTRODUCTION: In the preceding chapter, it has been discussed that ancient explorers, travelers, visitors and missionaries had contributed in the description and documentation of Aksum and its heritage. Of these records, Bruce (1790), Salt (1814) and Bent (1896), who illustrated the monument and other features in the town, were particularly noteworthy. Beyond description and documentation, Salt had even conducted, although unsystematically, the first archaeological excavation when he cleared the lower part of the three script Ezana inscription in order to expose the buried part of the inscription on the stone (Salt, 1814). With this, we can certainly say archaeological excavation had its first step in Aksum by Henry Salt in 1805 (Munro-Hay, 1991; Phillipson, 2012). Such works had contributed to the popularization of Aksum and its antiquity in Europe and opened a gate for the flow of later researchers to Aksum (Munro-Hay, 1991, 1989; Finneran, 2007; Fattovich, 2001).

The works of ancient travelers, visitors, explorers and missionaries were simple description and documentation without further interpretation on the origin of the monuments, political and economic history of the kingdom, and the town of Aksum. However, since the outset of the 20th century, particularly with the beginning of the scientific archaeological expedition by German team in 1906, archaeological research studies aimed at interpretation and reconstruction of the culture-history and chronology of Da’amat and Aksumite states (Kassaye, 1994; DiBlasi, 2005). Although Aksum witnessed the longest history in the archaeological research in Ethiopia, the nature of the development of archaeological research on Aksum and its heritage could be categorized into three main phases: “exploratory, (1520-1900), descriptive (1900-1950) and interpretative (1950 – present)” (Fattovich, 2001). Following the ancient records, two key steps have dramatically changed the scale of the archaeological research at Aksum: the DAE project of 1906 and, the establishment of the Ethiopian Institute of Archaeology (EIA) in 1952 (Michels, 1979).

The DAE, directed by Enno Littmann, was the first scientific and well organized research team composed of multidisciplinary professionals that arrived in Aksum in AD 1906. The team carried out a systematic clearing for illustration, planning, drawing, and photographing. The result was

published in 1913 in four volumes and remained the most monumental work for all subsequent archaeological research works at Aksum (Munro-Hay, 1989; Phillipson, 1998).

Following the DAE, there was a research gap at Aksum due to the turmoil of the First and Second World Wars. It was only in the late 1930s that colonial archaeologists appeared. During the Italian occupation of Ethiopia from 1935-1941 for an attempt of colonization, Puglisi carried out some excavations on the western outskirts of the old town (Chittick, 1974), and Monneret de Villard, who came to Aksum for the arrangement of the removal of stela 2 to Rome, conducted a topographical study of Aksum (Monneret de Villard, 1938; Phillipson, 1998; Munro-Hay, 1989). The expulsion of Italy from Ethiopia in 1942 was also followed by some years of research gap. A turning point in the archaeological research of Aksum then came in 1952 when the government of Ethiopia established the EIA, assisted by the French government on the provision of experts. All excavations were sponsored by the Ethiopian Imperial Government while the excavation and direction of the work was under French experts¹. An archaeological research at Aksum directed by the French experts lasted from 1954 to the early 1970s. The preliminary reports of the research was then published in *Annales d'Ethiopie* whose first publication appeared in 1955 and continued intermittently for some decades, which has now become an annual journal (Kebbede and Leclant, 1955; Caquot and Leclant, 1956; Phillipson, 1998; Munro-Hay, 1989; Michels, 1979).

From 1972-74 just before the outbreak of Ethiopian revolution, the BIEA, directed by Neville Chittick, undertook an archaeological expedition thereby opening many trenches in the main stelae group, Geza Agumai, Gudit Stelae Field (GSF)² and around the Tombs of Kaleb and Gebre Mesqel (Chittick, 1974; Munro-Hay, 1989). In 1974, an impact assessment has been conducted at a site where the state planned construction of Yeha hotel (Eric Godet, e-mail comm., July 9/2014). However, the outbreak of a revolution in Ethiopia in 1974 soon curtailed this project. Consequently, a protracted civil war between the military government and Tigray People's Liberation Front (TPLF) that lasted from 1975 to 1991 in Tigray completely discouraged international archaeological researchers from entering Aksum until it was resumed again in 1993

¹ The French experts who excavated and directed the EIA mission in Aksum from 1954 to 1974 are Jean Doriesse, Francis Anfray, Henri de Contenson, J. Pirenne, Jean Leclant, Eric Godet and Richard Wilding.

² Also called Western Stelae field (see map 3.1).

by two prominent projects: the BIEA and the IUO/BU.

BIEA resumed its archaeological research in 1993, this time directed by David W. Phillipson, to complete the works of Neville Chittick. During five years of excavation from 1993-97, this project opened many new sites including the “Domestic site of Kidane Mehret”, located north of May Shum water reservoir (Phillipson, 2000, 1994). On the other hand, the IUO/BU, directed by Rodolfo Fattovich and Kathryn Bard, respectively, centered its research on the top of Biete Giorgis which formerly has been identified by Lanfranco Ricci in 1974 immediately before the outbreak of the revolution (Bard and Fattovich, 1993; Fattovich, 1995; Fattovich *et al.*, 2001). The excavation on Biete Giorgis continued well until 2002; preliminary reports of each excavation season appeared regularly on *Nyame Akuma* and intermittently on *Rassegna di Studi Etiopici*, although the later are always in Italian language.

In 1998 the Authority for Research and Conservation of Cultural Heritage (ARCCH), first led by Yonas Beyene and later by Tekle Hagos, took up the previous work of Phillipson at stela 2 site. As the negotiations on the return of stela 2 from Italy were still undergoing, the preparation of the site was of paramount issue. During the later excavation, Bertrand Poissonnier, from French Center for Ethiopian Studies (CFEE), Addis Abeba, became involved as a technical advisor. In 1999, at the request of the Ethiopian government, Poissonnier led another team for the same mission. He excavated deep beneath the foundation of the stela and even synthesized the installation and collapse of the same stela. Though, work was interrupted due to the war between Ethiopia and Eritrea (Poissonnier, 2012).

ARCCH carried out another excavation in December 2000 in order to assess the archaeological potential of Enda Azay Wondimhunegn site, north of Michael Efoy site, before any development activity takes place on the site. Directed by Tekle Hagos, the team was composed of French experts of different discipline (discussed in the following sections) (Tekle Hagos, 2000).

HAMA, directed by the late Helmut Ziegert, was a German team from Hamburg University that started its research further to the north of the town at May Melahso and Berik Awdi, the latter about five-hundred meters north of the Tombs of Kaleb and Gebre Mesqel (Ziegert, 2001). The mission had later shifted its attention to the center of the town at Enda Azay Wondimhunegn and

Dungur palace, and then to the Tombs of Kaleb and Gebre Mesqel.

The Ethiopian Cultural Heritage Project (ECHP), directed by Tekle Hagos, conducted some test excavations in 2005 in the area of the present new Aksum Archaeological Museum, and full-scale excavation at Guangua Edaga – where the southeastern throne bases are located. In the latter site, the excavation exposed a ruin of ancient church structure (Tekle Hagos, 2008).

In January 2013, the Department of Archaeology of Aksum University conducted a rescue excavation 18m north of the Tombs of Kaleb and Gebre Mesqel following the fracture of a massive slab by vehicle. The adjacent area was also surveyed, by which many other cruciform and regular pit graves were identified (Walker *et al.*, 2013).

The most recent excavation in Aksum is a joint project of Aksum University and Ethiopia Exploration Foundation (Korea). Directed by SeJin Koh, this project opened some trenches at the main Ta'aka Maryam palace from February 17 through March 15/2014, with the aim of re-opening the sites and applying heritage management with scientific methodology. As the sites have already been assessed and drawn by the DAE, the present project goes deep beyond the DAE stratigraphic level (Koh, 2014). The project is anticipated to resume its excavation by the end of 2015.

The Following is a presentation of archaeological expeditions in Aksum conducted since the beginning of the 20th century to the present. Maps 4.2 and 4.3 summarize the location and distribution of sites mentioned in the chapter.

4.2 THE EXCAVATION AT THE GRAVE OF MENELIK I

Although a famous legend exists in Aksum about king Menelik I, son of king Solomon of Jerusalem and Queen of Sheba, as the founder of the Solomonic dynasty and who is believed to have brought the True Ark of the Covenant to Aksum from Jerusalem (Munro-Hay, 1991; Budge, 2000; Finneran, 2007; Phillipson, 1998, note 155), his residential center and burial area is still archaeologically unconfirmed. At the western side of the town of Aksum, about 3km from the church of Aksum Maryam Tsion, and east of the northern end of Gobo Dura hill, lays a ruined structure on a plain, locally known as Grave of Menelik I.

An unsystematic excavation had been carried out at this site in 1904/1905 under the direction of the then governor and *Nebure'ed* of Aksum, *Dejjazmach* Gebreselassie Baryagaber, after orders from Emperor Menelik II to excavate it. This order was passed after the visit of Dr. Rosen to the site who arranged for the expedition of the DAE 1906 under Enno Littmann. The governor was said to have told the DAE team later in 1906 that the excavation has revealed the bones³ of Menelik I, and was removed to the church of Aksum Maryam Tsion church under great religious ceremony. This unsystematic excavation greatly damaged the ruined structure; upon the arrival of the DAE in 1906, the governor approached the team and requested to carry out further excavation on the same site. The DAE then accepted this request and intensively excavated the site only to see the complete ground plan (*fig. 4.5*) (Phillipson, 1997: 89-92). Since the site is regarded as sacred, the people had probably conducted this unsystematic excavation before it was “destroyed” by the foreigners – expected to arrive in Aksum soon after the visit of Dr. Rosen. No record of the excavation by the local people is available except that of DAE’s report, and legend in Aksum.

4.3 THE DAE EXCAVATIONS

The DAE, led by Enno Littmann and assisted by Daniel Krencker and Theoedor von Lupke, arrived in Aksum on 12 January 1906 and stayed for eighty-four days. The team was composed of experts in paleography, ethnography, archaeology, architecture, technical drawing, photography, and mapping (Michels, 1979; Phillipson, 1998). The excavation by DAE, which focused on clearing structures for planning, drawing and photographing, and revealing partially buried stelae, was the first detailed, comprehensive, and accurate work on Aksum archaeology, and all information was elaborately published in four volumes in 1913 in German language. This work of the DAE in Aksum remained to be “...the foundation of all the later work” (Chittick, 1974: 159; Finneran, 2007). All subsequent researches in Aksum until the major excavation of BIEA in the 1970s were conducted on the sites already identified and recorded by DAE. The DAE has made plans and drawings, photographed all cleared features and artifacts, and conducted extensive survey in and around Aksum. Phillipson (2009b: 75) expressed the work of

³ It is still believed by the clergy of the town that the bones of Menelik I, sealed in wooden box, is found in the treasure room in the ground floor of the building of the Ark of Covenant. Although it is not possible for the general public to examine or visit the relic because of its sanctity, the researcher has seen nothing related to this story in the said treasure room during the inventory of the Church treasures in 2002.

DAE as “...the first major field research...”, while the publication of the DAE was appreciated in Munro-Hay’s (1988: 89) book as “...the last major book on Aksumite Archaeology...”, on which the BIEA itself has also depended for plans and drawings.

The architectural reconstruction of church of Aksum Maryam Tsion and Enda Michael palace were fully based on Krencker’s drawing of 1906 that Buxton and Matthews (1974: 53) acknowledged as “genius”. Phillipson (1997: 2) adds that all drawings by Krencker, particularly the stelae and throne bases, are of best quality for which no improvement of architectural drawing has been made by later experts, and have been, and still are, only reproduced. The only error detected in the work of DAE was its failure to recognize the ‘stela of Lances’, now in the precinct of the church of Aksum Maryam Tsion, as part of stela 4. This has only been correctly reconstructed by the BIEA during the 1972-1974 excavations (Chittick, 1974; Phillipson, 1997: 162).

The expedition meticulously worked on palace structures, stelae, inscriptions, thrones bases and coins. Inscriptions in Ge’ez, Greek, and Sabean were translated; Enno Littmann, as a linguist, developed an interest on the inscriptions of monumental stones and coins. Such large coverage along with sketch maps generated valuable information and steered later scholars to carry out archaeological research at Aksum. The DAE work is worthy not only because of its precision but also of its enormous breadth, since much of what has been recorded is subsequently damaged, looted, displaced and/or reburied. Among the factors which accelerated such problems were the Italian occupation of 1936-41 and the expansion of the town. The Italians removed many features from their original places, such as that of the famous inscription of Ezana, and damaged ancient remains of structures, such as the palace of Ta’aka Maryam, during road construction (Phillipson, 1998; Monneret de Villard, 1938).

On the other hand, most part of the old town was occupied after 1906 as the result of which features were removed, overlaid by new houses, and reused for construction purpose. The excavation by the DAE team was less impeded as most of the recorded palace structures were unoccupied, and Geza Agumai – where the northern stelae field is found, was only partially occupied. This helped the team produce accurate drawings and plans, and clear photographs. Thus the publication of DAE is the only complete reference about the great palace structures and

other features that have subsequently been lost and displaced.

The following discusses separately all the sites and features which the DAE excavated and recorded in 1906 (*maps 4.2 and 4.3*). Unless another citation is otherwise indicated, this summary is based on the book entitled *The Monuments of Aksum, 1997*, which is a partial translation and annotation of the DAE publication by David W. Phillipson.

4.3.1 Enda Michael Efoy: clearing this elite structure took place from 5 to 15 February and 5 to 17 March 1906. The site of Enda Michael was not fully occupied in 1906 and thus excavations, plan drawing, and photographing were easy for the DAE team thereby increasing the accuracy and certainty of the overall layout of the structure. By then much of the wall, less than 1m below the surface, was well preserved; the wall was recessed at every side, and finely-dressed, large blocks were used for corners. This ruined structure was square in shape measuring 27 x 27 meters. On the north-west and south-east of the structure were found large steps which the DAE thought were the main entrances of the palace. Based on these features, Krencker reconstructed the palace on his plan drawing as a four towered building with four storeys.

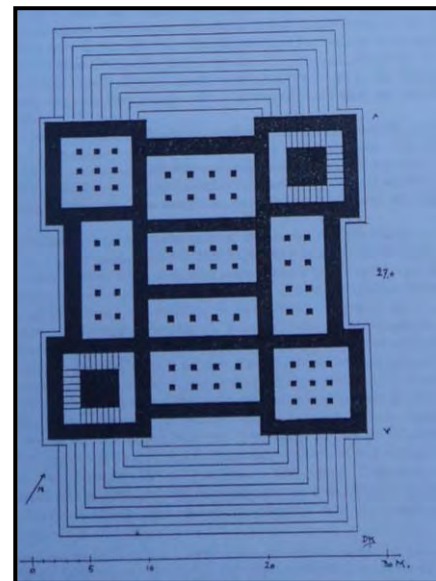
Enda Michael, located at the center of western half of the then modern town of Aksum, was named after St. Michael church believed to have been standing in the same place or nearby it. The terrain was sloping to the south – as the foundations of the wall were found to be 10 to 15cm below the surface in the north and 0.5m to 1m in the south. Some cornerstones in the southern half were visible above the surface⁴ in 1906. Of the twelve outer corners of the palace, only the north-east corner of the north-east tower was not excavated by the DAE due to the presence of a hut immediately on that corner. Those corners on the southern wall were wholly uncovered while the rest were exposed only partially. On the northern side, at the center of the wall were found six steps which were remains of flight steps, originally totaling about ten, leading to the central floor of the building. The steps were 80cm high. On the other hand, on the southern side of the wall, in between the western and eastern towers, some steps and slabs for floor pavements were found in a bad state of preservation due to construction of latter building. The DAE team believed that the presence of paved floor may indicate the existence of room for entrance. The

⁴ The south-east corner of the south-west tower is still visible on the edge of the road; the rest portion of the ruin is completely overlaid by modern houses (*figs. 4.1 and 4.2*).

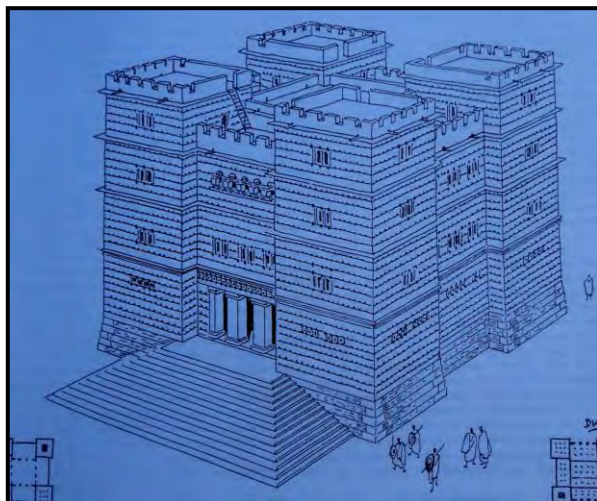
stones were found at 3.55m and 7m away from the wall of the palace building, further confirming to the team that there were flights of steps on this side as well.

The northern half of Enda Michael building yielded that 10cm to 20cm below the floor were stone blocks that originally served as base of pillars, with all sides measuring 53cm in size and having 30cm to 40cm of thickness. On the south side, at the middle of the outer wall, eight foundation walls for pillar support were found. Further in the east and west rooms, other eight squared column-support were found. The north room was relatively better preserved in which all mortar and column foundations were found intact. In each room were eight column foundations. The central rooms varied in size and thus had a different number of columns: the northern one was found with seven column foundations out of eight while the southern one was found with four columns. On the other hand, the corner rooms revealed traces of foundations for column support: nine each in the north-west and south-east corner rooms. In the rest of the rooms, traces for staircases were recognized.

Fig. 4.1 Ground and reconstructed plan of Enda Michael; (a) ground plan; (b) reconstructed drawing. Each side of the tower and the wall connecting them measures 9m, hence 27m x 27m large (adapted from Littmann *et al.*, 1913, II: 107, 109).



(a)



(b)



Fig. 4.2 cornerstones of the southwestern corner of the southeastern tower of Enda Michael Efoy. The top part (above the dotted line, follow arrow) was, and still is, visible above the present surface level. The corners were re-checked by HAMA project in 2003 during which eight of the twelve corners were found. The rest were obscured by houses built directly on the corners. Note the rebated side (recess) wall on the middle cornerstone. The cornerstones rested on another foundation wall built of small granite stones (Photo: Hiluf Berhe, 2003).

4.3.2 Enda Sem'on: This ruined structure is found in the quarter of Melake Aksum. The DAE had also faced some problems here by the overbuilt of new houses which impeded quick excavation. However, the DAE checked all corners and revealed two corner blocks. Its overall plan and orientation was found to have resembled that of Enda Michael but not identical. On the south side, remains of seven flights of steps built of large slabs were found measuring 1.1m deep, 22cm high and 8m of breadth. Sample excavation on the north side also revealed a step of 67cm wide and 30cm high.

The DAE excavation revealed five rooms, the eastern wing being very large supported by twenty-eight pillars. Entrance rooms, corridors and corner rooms situated behind the corridor were also recorded. In this ruin structure, many foundations of pillar-bases were found. In some rooms, particularly in the central room, foundations of earlier walls probably for pillar-bases were discovered. Architecturally, Enda Sem'on was built of finely dressed big blocks at the corners and recessed at the middle built of small stones. All side walls were rebated.

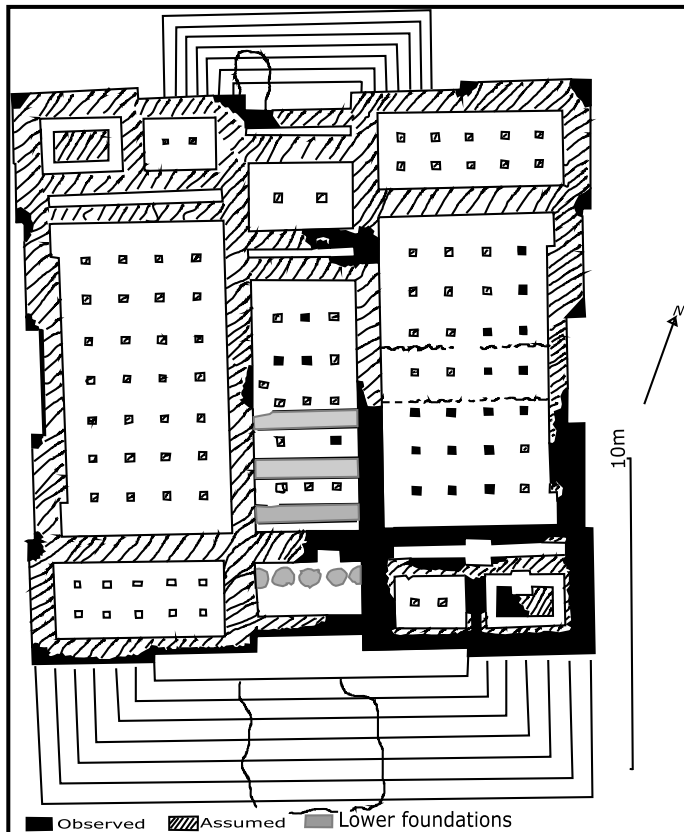


Fig. 4.3 Plan of Enda Sem'on (Drawing: Hiluf Berhe, 2015, after Phillipson, 1997: 99).

4.3.3 Ta'aka Maryam: located at the south-west outskirts of the old town of Aksum, Ta'aka Maryam is the largest palace recorded so far measuring 80m x 120m. During the clearance from 26 February to 4 April, 1906, the progress of the DAE was impeded by the presence of about forty huts on the central and eastern side of the palace ruins. However, it was the best record and the only document we have as the palace ruin was subsequently affected during the Aksum-Shire road construction by the Italians in 1937 which passes through the middle of the palace structure (Fattovich *et al.*, 2000).

Although Ta'aka Maryam was assumed to be surrounded by large complex walls, the DAE recognized a central building with two flights of steps leading up to the building from north and south. This central building was reconstructed and appeared to be similar in architectural style to those of Enda Michael and Enda Sem'on. The DAE designated the inner compound of the palace as central yard, north yard and front yard, while the building divisions of the palace was designated as central building, north-west corner building, north-east corner building, north wing, south wing, central wing, and side wing (*fig. 4.4*). The main entrance to the palace was,

assumed by the DAE, located on the west and east of the front yard. The central building measured 24m x 24m; the north yard, 27.5m x 43m, while the south wing measured 21m from north to south. The complex was found to be full of beautiful stepped pillar-bases, well dressed cornerstones, pillar-bases for portico, flat slabs for floor and court pavement, and stepped bases.

The palace was not built on a flat area; the DAE discovered evidence of steps leading down to the front yard from central yard, and that the south side was built four meters high of eight steps suggesting that the palace was built on terraced area. The central building itself was built on separate foundations of four steps about two meters higher than the surrounding area of the central and north yards. The whole complex was surrounded by buildings of recessed wall most of which were concentrated in the south, north-east and north-west corner buildings. A channel (*fig. 4.20*) was discovered to drain water from the central yard to outside. A portico of 2.16m deep and 7.2m wide was discovered with two steps and three pillar-bases *in situ*. Based on the shape of the pillar-bases for the portico, the DAE team suggested that the pillars were wood.

4.3.4 Grave of Menelik I: As discussed above, this site has been excavated by the governor and *Nebure'ed* of Aksum immediately before the arrival of the DAE. The DAE, upon the request of the governor, again carried out an excavation from 26 February to 10 March 1906. Coins were reported to have been discovered here during the excavation by the governor but sent to the Emperor before any documentation was made. The Grave of Menelik I was built of very small stones of simple wall without the use of cornerstone like those palaces in the center of the town.

The building measured 13.2m x 12.7m and had rooms with recessed wall. On the other hand, the excavation of DAE has also revealed that three lateral rooms on the east side were built over the main older building. The DAE team was told by the governor that the bones of Menelik I was removed from a room located at the center of the building. Some steps leading to different rooms of the building were found though in bad state of preservation. It appeared to the DAE team that the main entrance of the building was from the east; and a pack of stones 2.2m wide and 6m long oriented east-west was found on the east side of the building.

The DAE reported that no find was discovered in the building except one strange stone slab

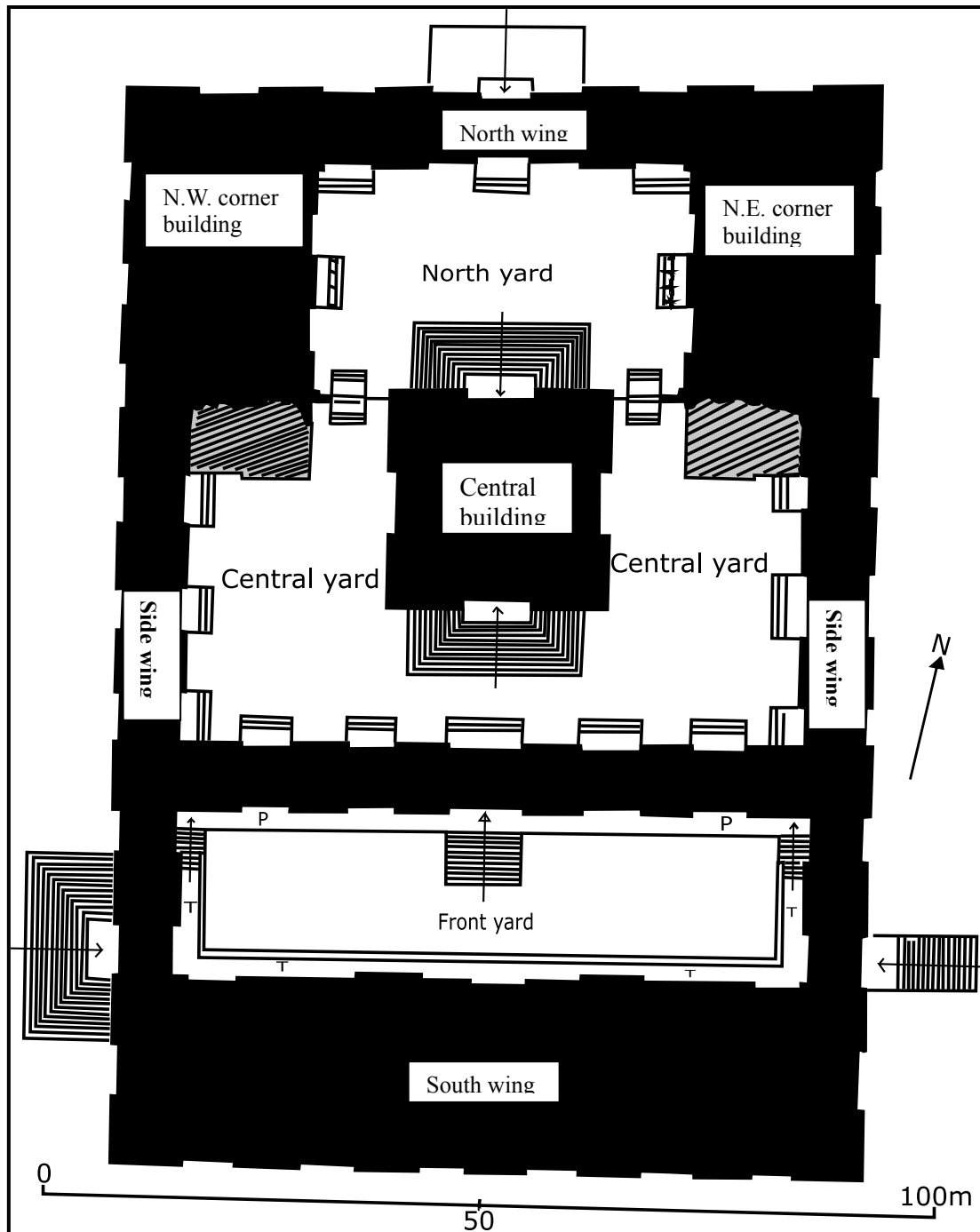


Fig. 4.4 Ground plan of Ta'aka Maryam. Walkway was discovered at (P) while the steps (T) lead up to this walkway (Drawing: Hiluf Berhe, 2015, after Littmann *et al.*, 1913, II: 113).

bearing four holes at its four corners which the team thought was probably a stand for a *tabot*. This was found in the east side of the building (*fig.4.5*); the holes measured 20cm deep and 10cm wide in diameter. The team also believed that if the information of the governor could be trusted,

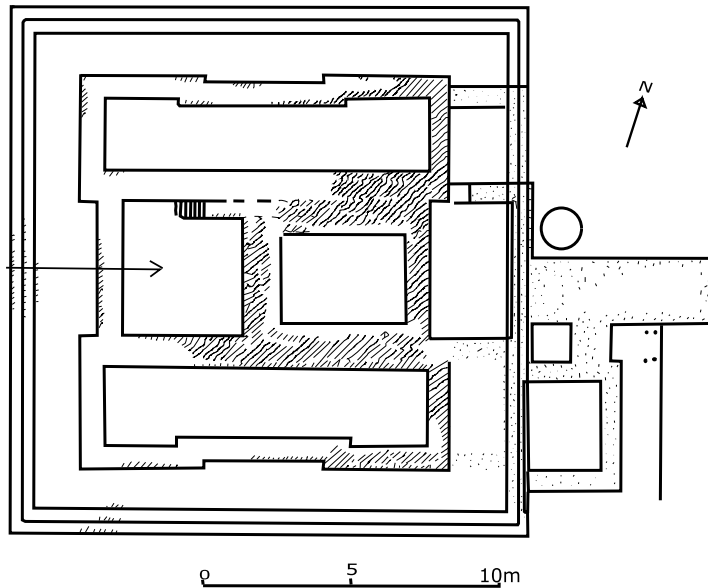


Fig. 4.5 Reconstructed plan of Grave of Menelik I. Note: the four small holes are visible on the eastern side of the plan, to the left of the line (Drawing: Hiluf Berhe, 2015, after Littmann *et al.*, 1913, II: 134).

then on top of this tomb could have been built a shrine like the one on the Tombs of Kaleb and Gebre Mesqel. Today, the tomb of Menelik I has completely disappeared as the result of removal of the stone by the town people for construction.

4.3.5 Ruin A: North of Ta'aka Maryam just after crossing the road, the DAE found another ruin of a palace designated "Ruin A" (*maps 3.1 and 4.2*). It is located on a higher ground; at the south and east side of this ruin the DAE carried out excavations by which a stepped cornerstone of the wall was found. In the south-west corner, six big stepped cornerstones forming the foundation of the building were revealed. A fragment of pillar was also found in this ruin. Wall plaster was found still in place, while discovered remains of steps and stone pavements led the DAE team to the assumption that another latter building had overlaid the ancient one. Excavations at the east side added some data which led the team to assume that the building might have been destroyed by fire. Further excavation of the ruin was impeded by modern houses built over the ruin.

4.3.6 Ruin B: This area was recorded to have been located east of Enda Sem'on on a mound full of stone debris. Over this pile a modern house has been built which hindered the DAE from conducting full investigation of the site. The DAE recorded three big cornerstones by then visible at the south-east side protruding out from the pile. The DAE also reported that one of the cornerstones bore very strange marks unseen anywhere else whose flat top was believed

to have been used as base of pillar.

4.3.7 Ruin C: The DAE has also discovered another ruin located between Enda Sem'on and Enda Michael, which was labeled as "ruin C". Here only "two or three stones" of a corner were recorded to have been still in their original position.

4.3.8 Ruin D: This ruin is located at Che'anadug, at the foot of the hill of Biete Giorgis along a stream called May Lahlah. It seems that the DAE has not conducted excavation on this ruin but recorded an already exposed wall by the gully erosion measuring 15m long and 3m high. According to the DAE report the exposed wall was marked by a six-stepped wall and in the middle had a recess. It was also recorded that the wall suffered great damage from erosion due to lack of corner stone.

4.3.9 Ruins E and F: The DAE located the existence of ruins on the southern edge of the top of Biete Giorgis hill overlooking the western outskirts of the old town of Aksum. Located west of the stream of May Lahlah at its upper course, the DAE designated these ruins as "Ruin E" and "Ruin "F"⁵.

4.3.10 Statue Base: The DAE came across another ruin which was designated as "Hill of Ruins", located south of "Ruin B". Topographically, this hill is the highest place of the town. It was at the northern side of this hill that the DAE revealed a base⁶ with holes for feet of huge statue, and its foundation. The holes measured 5cm in depth and 92cm in length. The parallel orientation of the holes to each other implied to the DAE team that the statue was standing upright position. The size of the holes for the feet being 92cm long gave the DAE a hint that the overall size of the statue could have been as tall as 5m. Although the DAE team suspected that there may be sacred remains beneath the mound, no further excavation was conducted for unknown reasons.

The famous three script inscription of Ezana (DAE, IV: 4-7) (Munro-Hay, 1991: 224-5) speaks that Ezana had erected statues one in gold, one in silver and three in brass for the glory of his god, Ares . So far neither statue of metal nor other traces has been discovered in Aksum except

⁵ These were later excavated by Ricci (see under section 4.6 in this chapter).

⁶ This is no longer extant.

the statue base mentioned above. This is the only evidence for the proof of what has been mentioned on the inscription of Ezana.

4.3.11 Tombs of Kaleb and Gebre Mesqel: to the north of the town at the so-called Tombs of Kaleb and Gebre Mesqel, the DAE carried out an excavation from 15 January to 17 March 1906. The excavation revealed two remains of large buildings built immediately over each of the underground tombs. They are parallel to each other and oriented east-west. The northern one designated “K” measured 13m x 32.5m, while the southern building designated “G” measured 14m x 35m. They are 12.5m apart and are similar to each other. Like the palace buildings in the center of the town as discussed above, the buildings of “K” and “G” also exhibited stepped foundation walls, big finely smoothed cornerstones, and recessed walls. As the topography was sloppy on which the buildings rest, they were leveled by terraced walls. Thus terracing was recorded on the rear side of the buildings, on the front side, and further on the west outside the buildings.

The DAE has also uncovered a lower courtyard⁷ (*fig. 4.6 c*) from which steps⁸ leading to the entrances of the tombs on the left and right diverged (*fig. 4.6 (a) and (b)*). Above this lower courtyard, other seven steps leading to the central courtyard between the two buildings were found. The two buildings had open colonnades facing each other. In each building, rooms for staircases were recorded, located at the western edge over looking the lower courtyard. Each of the buildings had three aisles and one apse with two rectangular rooms on either side. At the center was one big pillared room in each case under which the underground burial chambers are found. Other important discoveries of DAE at the site was a stepped pillar-base⁹ originally on the southern side of the “K” building; an octagonal pillar¹⁰ broken into two pieces, originally at the northern colonnade of the “G” building; and three holes in the big room of the “G” building cut onto the pavement slabs, which the DAE assumed was probably for something with four leg on which a *tabot* was placed. According to the DAE, the floors of the buildings were fully paved

⁷ No pavement is seen on this courtyard today.

⁸ These are no longer extant. The front walls are today reconstructed. Entry to the tombs of Kaleb and Gebre Mesqel is from south and north, respectively, across the western edge of the central courtyard.

⁹ This is no longer present on the site. As will be discussed under chapter 5, this pillar-base is possibly the one now at the Ezana Park inversely mounted on a pillar.

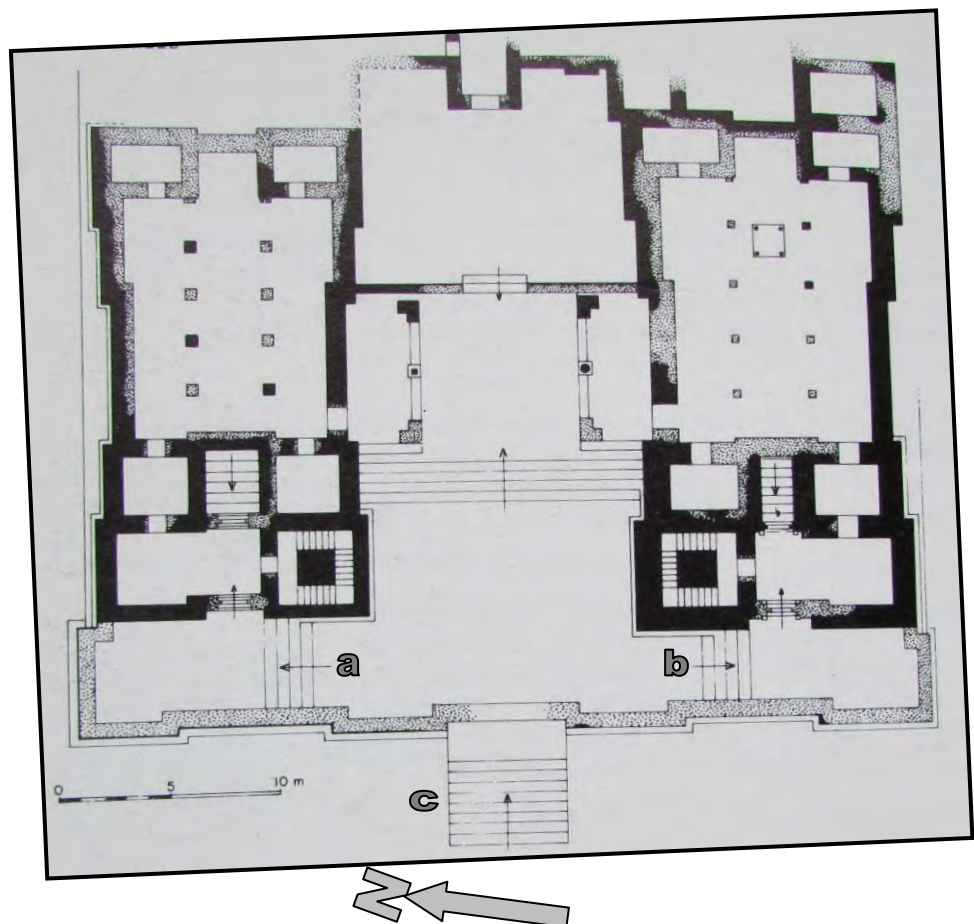
¹⁰ This pillar is undoubtedly the one now standing at the Ezana park restored and re-erected there by the Italians in the 1930s, discussed under chapter 5.

with stone slabs.

To the east of the buildings at the eastern lower terrace, the DAE conducted some excavations but was left incomplete. It was also reported that north of the outer terrace wall was a room entered from west. Besides the excavation, the DAE produced very detailed and accurate plan drawings and photographs of the buildings, the courtyards, steps, the pillar, and a stepped column-base; as well as plan and section drawings of the underground tombs with detailed description, accuracy and professionalism.

Although the underground tombs are still *in situ* since the ancient descriptions by *Liber Aksumae* and Alvares, the buildings and their terrace walls, and the courtyards have been destroyed after the DAE; others have been restored with complete changes to their original form during the subsequent excavation and restoration works.

Fig. 4.6 Plan of the superstructures of Kaleb (north) and Gebre Mesqel (south) as discovered in 1906 by the DAE (after Anfray, 1990: 98).



4.3.12 Stone thrones: the DAE recorded twenty-six thrones found scattered at different sites in the town and its vicinity. Fifteen of them are located in the outer enclosure of the church of Maryam Tsion, ten others at the foot of May Koho hill just east of the road leading to the church of Maryam Tsion from south-east, and one was located further north of the town east of the road leading to the Tombs of Kaleb and Gebre Mesqel. All the stone thrones are designated by the DAE from 1 to 26, the designation by which they are still identified.

The DAE photographed, sketched and drew both plan and section of all the stone thrones. The first group of the thrones in the church compound was also identified by the DAE as judges' thrones, king's throne and bishop's throne. The king's throne was designated as throne 1, the bishop's throne as number 2, and the judges' thrones were designated from 3 to 13 starting from south-west to north-east for the main row and 14 to 15 for the second row. Thrones 16 to 20 are located at the western foot of May Koho hill north of the original position of the three script Ezana inscription. Throne 21 to 25 are all located east of the original position of the aforementioned inscription, while throne 26¹¹ was located north of the town east of the road leading to the Tombs of Kaleb and Gebre Mesqel.

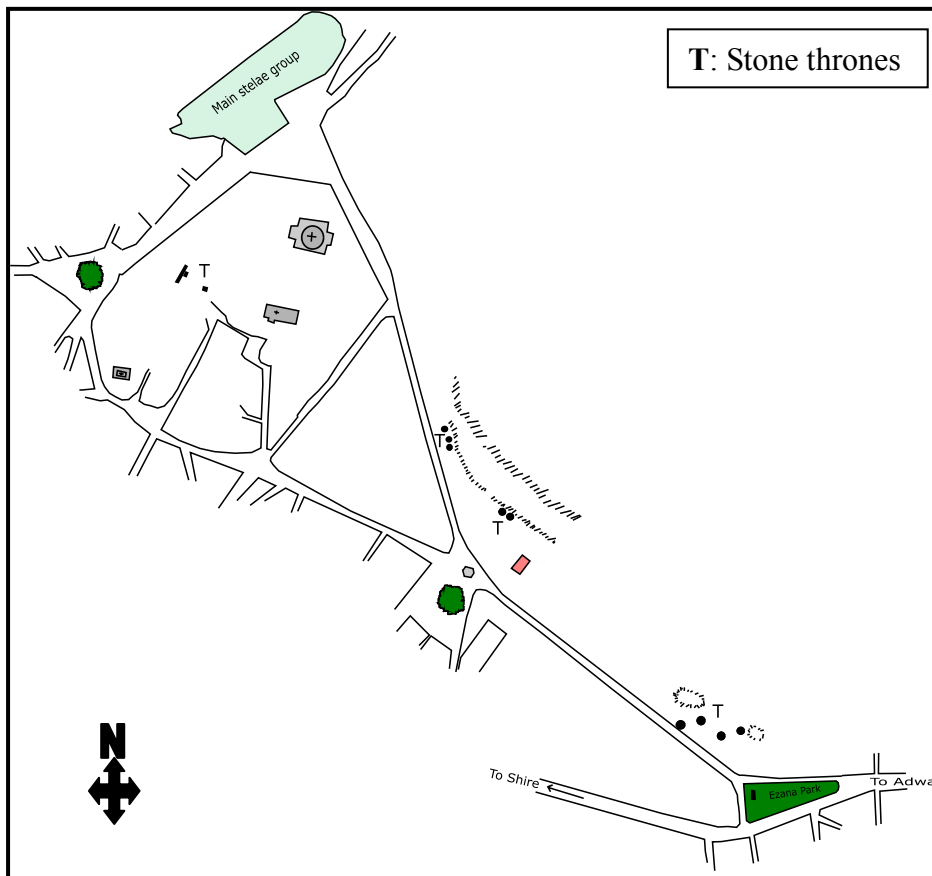
Excavation at the thrones in the church compound was not possible due to the sacredness of the area. But detail examinations have been made. Particularly the photographs and plan drawings provided by the DAE are of immense value for all later comparisons on what has been going on the thrones. Records of the DAE on the thrones including their surrounding landscape also clearly showed the position and layout of the thrones and nature of the topography around them. All dimensions (width, height, depth of the seats and groves of back and side rests) of the seats, base and pillars of the thrones are also meticulously measured.

Another achievement of the work of the DAE on the thrones was the attempt to reconstruct what the original thrones might have looked-like. This was done with the help of the remains of pillar-bases still visible on the judges' thrones, the still standing pillars at the king's throne, and the sketch of Cosmas of the Adulis throne. The only missing sample was the vault of the throne. The team also made great effort in associating which inscription might have belonged to which

¹¹ No subsequent research has updated the status of this throne. Phillipson also confirms that it has not been possible to indicate the existence of this throne (Phillipson, 1997: 149, n. 223).

throne after the Adulis inscription and Ezana inscription DAE 4 and 11 that thrones had inscriptions on their back and side rests. This was done by comparison of the size of a stone bearing inscription and the size of a seat of a throne.

From 15 to 20 January 1906 the DAE team devoted its work on examining the thrones near the Ezana inscription. Here five thrones were recorded, and conducted excavation at the throne number 23 by which foundations, and seat of the throne bearing inscription, was revealed. The rest were found on the surface and detailed recordings of photograph and plan drawings were done by the team.



Map 4.1 Location of the stone thrones. The black point at the Ezana Park is Ezana’s stone inscription. The two squares with big trees (center and left on plan) are called Daero Piazza and Daero Ella, respectively (Drawing: Hiluf Berhe, May, 2015).

4.3.13 Northern stelae field: one of the greatest achievements of the DAE team in Aksum was the record on the stelae. The DAE designated three main stelae groups: the northern, western and south-eastern stelae fields. Northern stelae field of DAE extends from the main stelae group where the largest stelae are located, to the northernmost stelae area in Geza Agumai. The team recorded seventy-eight¹² stelae in this stelae group and on some of them carried out whole or partial excavation to reveal buried stelae. Particularly the seven decorated stelae were drawn in very detail, and photographed. The drawing and reconstruction of the stelae by the team was the first and last work as no subsequent researchers are able to update it. The location and distribution of each of the stelae was indicated on plan, and all sketched. Full measurement was also made on the stelae numbers 1 to 21.

Recording stelae 1 and 2 was challenging for the DAE as huts were built over them; nevertheless, the team produced an accurate measurement and reconstruction. Excavation was conducted on stela 6 to reveal any associated graves. It also cleared around the stela itself for drawing and photographing. Stela 4 was also another stela where excavation was carried out by which the apex of the stela (now in the Ezana Park), was discovered. Minor excavations were also carried out on stelae 1, 7, and 31 to clear partially covered parts for drawing and photographing.

4.3.14 South-east stelae field: this stelae field was among those recorded by DAE. Here the DAE recorded only four stelae designated from 1 to 4; the largest in this stelae field and still standing, is designated stela 1. The team reported that there were many other stelae smaller in size measuring less than 1.3m and undressed¹³. The four stelae were sketched, and stela 1 was photographed.

4.3.15 Western stelae field: at this stelae field (today commonly known as Gudit Stelae Field) the DAE never carried out an excavation. Here, the DAE recorded forty-four stelae presenting their state of position and measurement above surface for those then standing.

¹² DAE stela 15 is, however, fragment of stela 2 which was then lying at Nefas Mawcha. Since then the fragment has been moved to the precinct of the church of Maryam Tsion. The BIEA has also designated this fragment as “stela number 100” during the 1972-4 excavation (Plant, 1985; Munro-Hay, 1989; Phillipson, 1997).

¹³ DAE stela 2 of this stelae group is now standing at Ezana Park, possibly brought there by the Italians. One stela is also standing in the compound of the former Axum Touring Hotel – about hundred meters south-east of the same stelae field. So far, there is no information the whereabouts of the other stelae from this stelae field.

Although there are over two hundred stelae in this field, they could have been buried in the ground during the DAE expedition in 1906 due to the farming activity as continues today. However, the DAE has indicated all the recorded stelae in this field with sketches and plan drawing, and photographs which helps to avoid repetition during subsequent researches.

4.3.16 Tomb of Nefas Mewcha: between 15 January and 10 February 1906 the DAE team devoted its excavation and recording at the Nefas Mawcha. Here excavation was carried out at the west and south side of the gigantic block thereby revealing buried blocks believed to be part of the blocks forming rows to support the gigantic block. Besides this, the DAE made a detailed record of Nefas Mawcha with photographs; section, plan and reconstruction drawings. Every block here, including the size of the passage to the underground room, was thoroughly measured.

4.3.17 Maryam Tsion church: The DAE carried out detail investigation in the precinct of Maryam Tsion church without any excavation as the sacredness of the church prohibited the team to do so. According to the DAE, the podium on which the 17th century cathedral stood is ancient where a shrine could have once stood. This was very evident for the DAE by observing materials some built into the church building and others laid on the precinct. On the other hand, fragments of pillars and capitals as well as other blocks found scattered in the precinct were assumed by the DAE to have been moved from other buildings as they have nothing to do where the cathedral is.

The DAE has illustrated the church of Maryam Tsion with detailed plan and section drawing, as well as photographed the different sides of the building and its terrace wall. The plan of the church was so detailed and elaborate that it included all the terrace and inner enclosure walls, the building itself, the bell-towers, the flights of steps, and plans of other four rectangular buildings to the north of the church. Besides, the DAE produced reconstruction plans of the ancient church of Maryam Tsion destroyed by Ahmed Gagn in 1535. The team also used the description of Alvares who had visited and described the church in 1520 shortly before its destruction. The description of the church of Maryam Tsion by the DAE gives a complete picture to make comparisons to this day.

Within the precinct of this church, the DAE has recorded two thrones, one located at the western side and the other at the eastern side of the 17th century cathedral building. The throne on the western side contained a small seat and large round-shaped foot-plate. The other throne was, according to DAE, set up with pillar-base from Ta'aka Maryam palace while the stones for the side were pillar stumps. The top section of the terrace wall of the church formed the back side of the throne. A decorated fragment built into the entrance hall of the church was found by Von Lupke which he thought was piece of the back side of a throne. He photographed it and made detailed drawing. The fragment contained designs of leaf and vine. In the same place, Lupke found a fragment of pillar with decoration of leaves, fruit and cross which he suggested was a fragment of a pillar supporting a vault for a throne.

Outside the church precinct, the DAE found another pillar in the Godef Maryam in about 30m south-west of the king's throne. Pillars believed to have belonged to St. Yared were also recorded – illustrated with plan drawing, and described. Located outside the outer enclosure of the church of Maryam Tsion, they were two small pillars – the bigger measuring 51cm in diameter and 31cm in height.

4.3.18 Inscriptions: The DAE recorded about twenty-six inscriptions in Aksum, *Abba* Pentelewon and *Abba* Liqanos. The DAE has copied, photographed and translated all the inscriptions. Three of the inscriptions were discovered at *Abba* Pentelewon, one at the church of *Abba* Liqanos and the rest in Aksum. The most important of them which yielded great information about the past history of Aksum were DAE inscriptions 4, and 6 to 14. The rest of those from Aksum were mere graffiti ranging from two to five words. DAE inscriptions 4, 6, and 7 refer to the three script Ezana inscription which the DAE designated each script with separate number.

4.3.19 Miscellaneous works of the DAE: apart from the main features in the center of the town and its vicinity, the DAE has recorded May Shum water reservoir with photographs, plan drawings, measurements and complete description. In the plan drawing, the water reservoir is shown with two long rows of steps cut in the rock itself leading from south to north, and other vertical steps leading from the reservoir up to the top of the hill after crossing the horizontal

steps. At the south, access to the reservoir is provided with built steps¹⁴.

Further south of the May Shum, on the north-western side of May Koho hill, and facing the main stelae group, were recorded other rock-cut steps. Here the DAE made only detailed drawing and description. The DAE plan drawing showed that two lines of rock cut-steps lead up to the top of the hill, the northern line having four levels of steps and making their way further to the monastery of *Abba* Liqanos. The southern rock-cut steps have two levels of steps which lead to the Mekyedi Egze'ene – at the summit of the hill of May Koho from where view of the town is clear and according to the DAE, where remains of an ancient church was visible¹⁵.

South of the May Koho rock-cut steps, at the steep rock face of the hill, the DAE has recorded unfinished rock-cut tomb¹⁶ with plan, section and profile drawing, and photographed. It also recorded all the unfinished rooms and the overall dimension of the rock-cut tomb in great detail.

Further west of the town of Aksum, the DAE has recorded the lioness of Gobo Dura with photographs. This engraving of a lioness on a big rock was measured to be 3.27m from the tail to the tip of the nose. The DAE has also attempted to interpret the meaning and comparative dating of this engraving. It also reached the conclusion, based on the nature of carving, that the cross engraved 50cm away in front of the head of the lioness, was of later age.

To the north-west of Aksum opposite the hill of Biete Giorgis, at a place called Addi Tsehafi¹⁷, the DAE recorded rock-cut tanks called fruit presses. At this place two rock-cut fruit presses were recorded. The largest was recorded to be with two shallow and one deep bowls, with some holes in the shape of lion's head. The DAE provided detailed plans, section drawings, and photographs of this fruit press tank in addition to the detailed description and interpretation about the function in comparison with Syrian wine. About 2km south of this fruit press was found another fruit press containing two bowls cut out of a single rock. Though neither photographs nor

¹⁴ These built steps and the edge of the whole reservoir, except at the north side, has since been rebuilt with cement there by enlarging the size of the reservoir. The rock-cut steps on the side of the hill are still visible.

¹⁵ No remains of church at this summit of the hill can be seen today; there is rather a cross carved on the rock though it is almost faded due to weathering by nature and people. The rock-cut steps of May Koho are endangered by the quarrying activity and disfigured by the expansion of Yeha Hotel.

¹⁶ Legend has it that this was began by *Abba* Libanos intended for rock-cut church. But when *Abba* Libanos was not happy about the people of Aksum, he left it incomplete and went to Dereqa – about 10km south of Aksum and carved there a church out of a rock. Today there is a rock-cut church at Dereqa dedicated to *Abba* Libanos.

¹⁷ In many sources this place name is misspelled as “Ashafi”

plans were produced for the latter, the DAE described that this fruit press is rectangular in shape, with the northern bigger and the southern smaller; at the center was a hole connecting the two.

Between the sites of the two fruit presses, in a church ruin, a rectangular bowl of 12cm deep and 1.89m x 1.22m large was discovered. Plans and descriptions of this bowl by the DAE show that it was broken into two at the bottom base and there were marks for metal clamps to fix the two pieces together. The DAE also discovered a stone slab next to the southern fruit press. Its top was worked smooth and bore four joint holes.

To the north-east of Aksum, the monastery of *Abba* Pentelewon caught the attention of the DAE team. During the DAE investigation at the monastery, there was a small building standing at the summit of the peak. The DAE recorded traces of an ancient temple from which remains of walls and inscriptions were discovered. Many slabs – some of them bearing holes of unknown function, were recorded. About twenty steps built of ancient stone slabs give access to this peak. The DAE reported that there were many slabs of finely worked reddish sandstone which the then building has re-used in most parts and some were also used for the upper steps.

Two stones bearing Sabean and Greek inscriptions¹⁸ were found built into the church on the western and eastern sides, respectively. According to Littmann, the Sabean inscription was the oldest of all found in the country, and the Greek inscription spoke of the dedication of the ancient shrine there to the god Ares. Among other recorded objects in this monastery by the DAE were a small stone slab with palm leaf, stone bowl then used for baptism, an alabaster slab whose back was smoothly worked, water spout in the shape of lion's head, and a fragment of red sandstone slab with relief of crosses and holes. Plan drawing of the peak and its foot together with its associated cultural and natural features, and the movable objects, was provided by the DAE along with a photograph of a partial view of the church and remains of an ancient wall.

4.4 ARCHAEOLOGICAL EXCAVATIONS AND SURVEY DURING THE ITALIAN OCCUPATION OF 1930s.

Archaeological research at Aksum was discontinued after the DAE in 1906 until it was resumed

¹⁸ They are now housed in the museum of Maryam Tsion church.

during the Italian occupation in the 1930s. During this period two notable Italians exploited the opportunity of dealing with archaeological excavation and survey when Italy was in occupation of Ethiopia from 1936-41. These were: Monneret de Villard and Salvatore M. Puglisi (Fattovich *et al.*, 2000; Munro-Hay, 1989; Phillipson, 1998).

Monneret de Villard was in Aksum in 1937 to arrange for the removal of the second largest stela of Aksum (stela 2) to Rome. However, he conducted a noteworthy archaeological survey dealing with the first geo-archaeological investigation, and updated the topographic map of Aksum after the DAE. By that time in 1937, the town of Aksum had grown larger than it was in 1906. The geo-archaeological survey of Monneret de Vaillard was also important because it inspired scholars such as Karl Butzer to resume in the early 1970s (Michels, 1979). The geo-archaeological observations of Monneret de Villard yielded the identification of two major soil accumulations of erosion: one phase of the accumulation predating the erection of the great Aksum obelisks at May Hejja, and the second accumulation took place in the late post-Aksumite period. Monneret de Villard recorded that in the western part of the ancient town, remains were found buried circa 4m below the modern surface remarking that this sector of the ancient town was built at a very lower slope than it was in the 1937 (Monneret de Vaillard, 1938: 8)

Monneret de Villard also recorded and described a mound at the southeast zone near the former position of the inscription of Ezana, and the water reservoir of May Shum. He has also attempted to see the change of the townscape of Aksum between present day and ancient based on ancient documents, including the *Liber Aksumae*. During his presence at Aksum in 1937, Monneret de Villard has recorded the process of destruction on monuments and sites by the Italian military during road constructions (Ibid, 1938). He also included, in the appendix of his book, all ancient documents or their specific topic related to Aksum.

Another Italian archaeologist, Salvatore Puglisi, was in Aksum in 1939 for an archaeological excavation and survey. His survey resulted in the record of the existence of lithic tools in Gobo Dura, remains of ancient structures in Dungur, Grave of Menelik I, and GSF. The greatest achievement of his work was, however, the excavation in the western edge of the old town. Here at an area called Addi Kelte, Puglisi carried out an excavation and discovered a palace ruin located west of the May Lahlah stream, north of the Aksum-Shire road, south of Biete Giorgis

hill (Puglisi, 1946, 1941). The palace ruin was similar in style to, but smaller than, Dungur palace excavated by Anfray from 1966 to 68 (Anfray, 2012; Munro-Hay, 1989).

Architecturally, Puglisi's palace was built of rebated wall from outside; side walls were recessed, while corners were built of small masonry wall compared to those at Ta'aka Maryam, Enda Michael, Enda Sem'on, etc. Puglisi's excavation revealed a large ruined building of 15m square in size, containing nine rooms and circular built column-bases in some of the central rooms. One of the best achievements of Puglisi's work was his attempt to record the stratigraphic sondages for the first time (Puglisi, 1941).

In this excavation Puglisi recorded seven levels: the first level of 2.6m - 3.0m deep was the bottom level found lying directly on the natural bed predating the building. This level contained lithic tools and some pottery. The second level ranged from 2.2m – 2.6m and still predated the building. Here too, lithic tools and pottery were discovered; animal bones and charcoal were also discovered which led Puglisi to suggest that this was an occupation level. Overlying this level, which ranged between 1.7m and 2.2m, marked the construction of the building, and pottery still similar to those in the preceding levels existed. The next level was from 1.4m to 1.7m. This level contained bone, charcoal, undecorated pottery and, large vessels. The level 1.0m-1.4m was found to be full of large vessels *in situ* and stone debris of the structure. In the level 0.6m – 1.0m vessels *in situ* were also discovered. Another important discovery in this level was a silver coin of Ebanā at 0.6m depth, dated to 5th century AD, and another coin, at 0.8m depth, of king Ouazebas of late 4th or early 5th century. The top level was ranged from surface to 0.6m; stones and some coarse pottery were recorded (Munro-Hay, 1989: 30).

Puglisi also opened some excavation units at the May Hejja area where he recorded five levels (Michels, 1979). Further to the south-east of the Aksum Maryam Tsion church where the present Daero Piazza square is located, Puglisi is said to have found rock-cut tombs of up to five meters deep, and some walls also recorded (Fattovich *et al.*, 2000).

4.5 THE ETHIOPIAN INSTITUTE OF ARCHAEOLOGY (EIA) EXCAVATIONS

A decade and half elapsed without any archaeological excavations in Aksum after Puglisi until the EIA launched its first excavations in 1954 though the institute was established two years

earlier. All the excavations carried out by the EIA from 1954-72 were published in French language; hence their access to Ethiopians has been very negligible due to this language barrier. An attempt is, therefore, made here to present more detailed compilation of the works to ease the access to Ethiopian and other researchers and readers.

4.5.1 Central area: this area is split into main stelae group and church enclosure excavation sites.

4.5.1.1 Main Stelae Group: The first excavation of the institute under the direction of Jean Doresse was conducted in 1954 by Jean Doresse, accompanied by Kebede Mikael and André Caquot, during which trenches were opened immediately west of the giant fallen stela 1 and of the Nefas Mewcha. Some coins and potsherds were discovered in this sector of excavation (Leclant, 1959; Anfray, 1990; Kebede and Leclant, 1955; Caquot and Leclant, 1956). East of stela 3, Doresse has also cleared the top part of the roof slabs of the Tomb of Brick Arches¹⁹, and exposed five steps immediately west of its entrance. These steps that run north-south between the eastern face of the terrace wall M1²⁰ and western face of the wall of the entrance to the Tomb of Brick Arches, lead up to the platform of the main stelae area. They are 0.20m high, 0.40m deep and 3.20m wide (Leclant, 1959).

In 1955, Pironin directed the EIA's second season of excavation in Aksum. During this season of excavation, the focus was on the west and south-west of the giant stela 1 and Nefas Mawcha. Some clearing was also carried out to the east of the platform of stela 3. A long wall, designated by the archaeologists M1, running east-west for a length of 114 meters and overlaid across by the giant stela 1, was partially exposed by Pironin (Caquot and Leclant, 1956; Leclant, 1959).

In 1956 the archaeological research of the EIA was resumed under the direction of Jean Leclant. The work continued in the previously explored areas by Pironin in the west of the giant stela 1, south-west of the Nefas Mawcha and east of the platform of stela 3. Particularly in the west and south-west of stela 1 and the Nefas Mawcha, respectively, the focus of the work was to descend deep on the already opened trenches by Pironin in 1955 (Leclant, 1959). The great terrace wall M1 with a southerly facade was fully exposed, traced for 114 meters long, aligned almost

¹⁹ Doresse didn't recognize the tomb of Brick Arches; it was the BIEA which located and partially excavated during the 1972-74 excavation under the direction of Chittick. It was fully excavated during the 1993-97 BIEA project under Phillipson (Chittick, 1974; Phillipson, 2000, I).

²⁰ In later excavations by the BIEA, this wall is designated "east wall" (Munro-Hay, 1989: 28).

straight east-west until it turns north a little further east of stela 3 where it extends for about 16.8 meters. This terrace wall mainly supported the platform of the three giant stelae (stelae 1-3). Built of small granite stones in the Aksumite construction style, the terrace wall M1 has rebated wall of 60cm-75cm high. At the east corner of M1, another terrace wall of higher level, designated M'1 was revealed two meters away to the north of M1 and oriented east-west parallel to M1 (Caquot and Leclant, 1956). M'1 was built of re-entrants having 40cm deep at about 10m intervals on average. This wall was generally traced for 40m until it became unclear whether it is ruined, turned north or just stopped there. M1 was found highly damaged; at parts where it survived well, the wall was revealed built of four stages of rebates with a total height of about 3m. Further to the east, Leclant cleared the area of stela 4 (Leclant, 1959).

Several discoveries were reported from the sector west of stela 1, south-west of Nefas Mawcha and south of M1. The excavation proved that M1 was built on sterile yellowish clay soil. 8m to 15m south of M1 was found a compacted area with irregular stones, 0.80m deep and run parallel to M1. At 9.30m south of M1 another line of wall with dressed north face, rough south face, flattened top, and running parallel to M1 was found surmounted by another wall, designated by the archaeologists M2. Beyond M2, the excavation revealed a less compacted area mixed with

Fig. 4.7 The excavation of wall M1, viewed from east (adapted from Leclant, 1959).



soil. West of the monumental slab of Nefas Mawcha was discovered wall M3, which is 2.30m wide, 1.75m deep, and extending for 7.65m west of the monumental slab of Nefas Mawcha. Further south of M3 at about 1.4m far was located another wall designated M4. At 40m south of M1, wall M5 was located aligned parallel to M1 (Leclant, 1959).

The report of Leclant (1959) also recorded that during the course of the excavation, seventeen burials full of human skeleton were uncovered mainly in the west of stela 1 and south-west of Nefas Mawcha (Leclant, 1959). Pironin also discovered human-headed clay *terra cottas* near the monumental slab of Nefas Mawcha. Other plentiful collections of pottery, usually in broken state, vases and bowls with incised decoration of vertical lines crossed by horizontal lines, v-shaped lines ending at a big single line going round the neck, diamond-shaped lines, and large, deeply-incised points were discovered in the sector under discussion (Caquot and Leclant, 1956; Anfray, 1965).

The following season, in 1957 from early January to early April for twelve weeks, the EIA continued its archaeological research in the main stelae group, this time under the supervision of Henri de Contenson (Contenson, 1959). Assisted by Gezaw Hailemariam and Georges Cayla (topographer and photographer of the mission), Contenson's excavation focused on the area south of M1, north of Nefas Mawcha monumental slab, east of the giant stela 1, and west of the pile of rubble from the 1955-1956 excavations at the east of Nefas Mawcha (*fig. 4.8*). This area of excavation measured 40m east-west and 38 meters north-south. On the other hand, Contenson opened few trenches to the west of stela 1 between walls M1 and M2 thinking that the previous excavations have not reached the bottom level of the surface. For the first time, the method of grid system was laid out by Contenson during this excavation season. Contenson divided the grids into squares of five meters, and units were labeled with capital letters A-H from west to east while north-south was labeled A1, A2...B1, B2,...and so on. Square units A and B were laid west of stela 1, unit C was laid immediately below stela 1, while the rest units were laid east of stela 1. Contenson followed the 1955 and 1956 excavations for the datum point located at the northwest corner of the Nefas Mawcha monumental slab (Leclant, 1959).

Vertically, Contenson divided his excavation into three levels, each containing several layers.

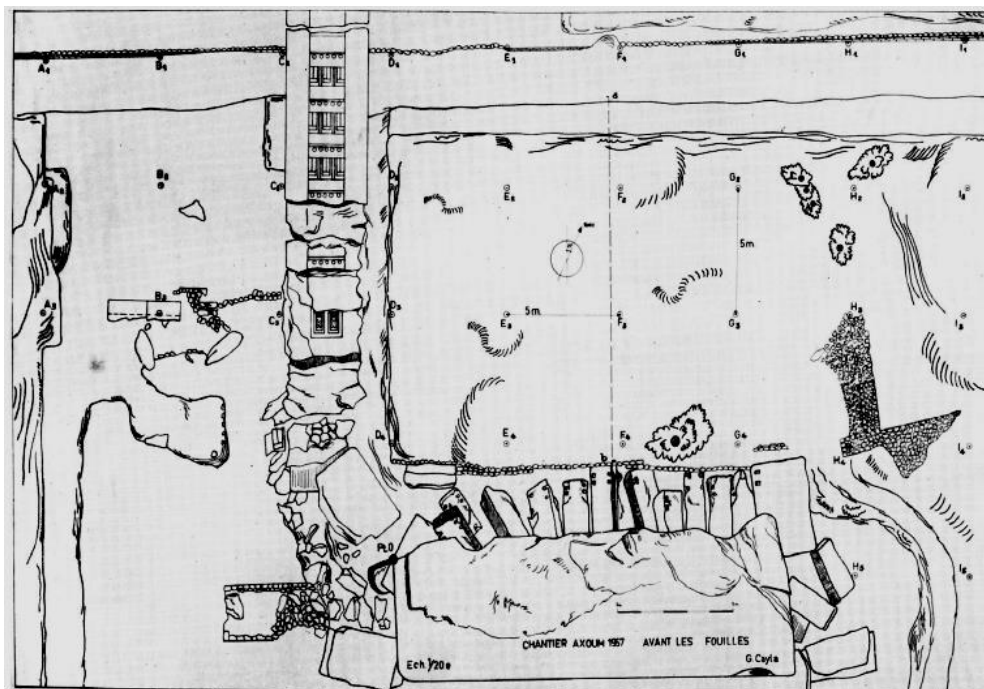
Level I: This level comprised layers six and seven. This is the earliest level which rises from

1.10m deep in the A, B units to 0.3m deep in H1 in the east. This is generally marked by yellow clay on which many structures, including walls M1 and M9 rested. The wall M9, which extends for 17m from square units E-H, is found 2.0m to 2.2m away south of wall M1 and is 1m wide and 1.5m high. In layer seven of this level, many blocks of stones, fragments of red pottery, a pottery with decoration of disc and crescent, crescent-shaped ear-ring of bronze, flint scrapper of yellow color, pieces of glass, and bronze nails were discovered. Layer six was virtually sterile soil fill on top of wall M2 and between walls M1 and M9. Contenson thought that this sterile layer represents either period of abandonment of the site or an attempt of artificial leveling, marking the end of the use of walls M2 and M9.

Level II: This level is composed of layers three to five. It is represented by the discovery of rich assemblages: human-headed jars, figurine of bird in clay, pottery with cross incision, clay models of house with Aksumite windows, bowls made of clay, fragment of bracelet, gilded bronze plaque inlaid with glass. In addition, thirty-five Christian bronze coins were discovered in this level between 0.70m and 1.50m depth, attributed to Kaleb, Ouasebas, Wazena, Hataz, Armah and other anonymous kings. A fragment of stela 1 was revealed from this level which Contenson thought might have been sunk as the result of the impact of collapse on soft soils. Based on the coinage assemblage, Contenson proposed a dating for this level to fall between the 5th and 8th centuries AD.

Level III: This level is the topmost with layers of one and two. It is marked by stone debris fallen from the terrace wall M1, remains of recent buildings, and brown, white and red soils. The largest concentration of this level was the presence of seventy-five burials of recent period which are the continuation of the western sector previously discovered by Pironin (Leclant, 1959). Only in two of the burials, Contenson found objects – an iron axe in one burial and a finger-ring in another. No significant dating assemblage was discovered from this level; however, based on the presence of a Turkish-origin hexagonal red glass bead, Contenson suggested that this level could have been used as cemetery area in the 17th century after it has been abandoned for a long period (Contenson, 1959).

Fig. 4.8 Contenson's excavation between stela 1, wall M1, and Nefas Mawcha (the central area on the right side) (adapted from Leclant, 1959).



4.5.1.2 Church enclosure: In the enclosure of the church of Maryam Tsion, just north of the 17th century cathedral, Doresse opened some trenches in 1954 (Caquot and Leclant, 1956; Michels, 1979). In the same site, Leclant carried out some clearing works with the fear that ongoing construction of a new church would destroy the site before systematic archaeological investigations were conducted. As a result, some walls similar to the old Aksumite buildings were revealed by the excavation (Caquot and Leclant, 1956).

Between 08 January and 12 March, 1958, Contenson, in collaboration with Gezaw Hailemariam, continued excavation in the same site that Doresse had started in 1954 (Contenson, 1963). Contenson's area of excavation covered 50m x 20m east-west and north-south, respectively. The report of the excavation indicated that the virgin soil was reached between 4.5m and 5.5m deep. Contenson's result indicated that he has discovered three levels of construction of the church: two Aksumite levels and one post-Aksumite level, all based on architectural style, coinage and pottery assemblages.

The earliest level, with thickness of about 50cm, was found consisting of dark-brown soil with stones, charcoal and cattle bones. In addition to these, ten pre-Christian bronze coins of three Aksumite kings, namely Ousanas (2 coins), Wazeb (2 coins) and Ezana (3 coins) were found in

this level. According to Contenson, the first two kings reigned during the late 3rd or early 4th century AD while Ezana's coins were dated to the early 4th century AD before his conversion to Christianity. Pottery found here was burnished red, black or gray. At this level, a well-built wall was found which has rebated and recessed wall. Contenson doubted this site could have been occupied since early Aksumite times as the coins of Endybis and Aphilas were missing from this site; though, he adds, this site could have had public buildings (Ibid).

Contenson exposed a second level of construction overlying the first level – with pre-Christian coins. At this level about four-hundred coins of Christian kings were discovered some of which were made of silver. The coins were grouped into four and dated to between end of 4th and 8th centuries AD²¹. The second level was found entirely covered with buildings, which Contenson grouped into two phases based on architectural styles.

The first architectural phase was dated to between ends of 4th and 6th centuries AD (Contenson, 1963). According to Contenson, the stratigraphic study of coins suggests that this phase began shortly after the conversion to Christianity in the second-half of the 4th century AD and lasted until the reign of Ioel, in the late 6th century AD. This level was reported to have been constructed with Aksumite feature of a stepped wall of about 45cm high while corners were reinforced with large blocks, each having the height of the stepped wall. Such cornerstones were mainly visible at the north-west edge of the ruined structure. Another feature of this phase was the discovery of drainage system leading from rooms and courts to the exterior.

The second architectural phase, dated to between 7th and 10th centuries AD (Contenson, 1963) was marked by a series of re-arrangements of the feature of the architecture and the buildings were small built of small stones. Great use of irregular slabs was also another characteristic of this architectural phase. A monumental staircase which Contenson has only partially cleared, occupied the south-west corner of the site. Using the collected coins, Contenson dated such changes to have taken place during the decline of the Aksumite kingdom from the 7th century AD.

At the second level, different pottery of local and imported was reported by Contenson. Pottery

²¹ The chronology of coinage has been revised as archaeological research progressed in Aksum (see Munro-Hay, 1991, 1989, 1984)

with typical Aksumite decoration such as vertical and horizontal incisions, as well as cross were abundantly discovered during the course of excavation. Among the imported pottery, the common one was a white ribbed amphora. Many other *terra cotta* objects were also discovered in this site.

The third level, dated to post-Aksumite period, was marked by black or gray pottery with incised decoration, and recent burials covered with stone slabs. Here a statue of human head on black basalt was also discovered (Contenson, 1963).

In 1962, under the auspices of the EIA, a small excavation was conducted by Anfray from March 22 to April 5, 1962 at the ancient remains of the church of Maryam Tsion previously excavated by Contenson in 1958 (Munro-Hay, 1989; Anfray *et al.*, 1965). The excavation of Anfray focused on the western part of the structure. Anfray found that the building of level II of Contenson extended towards the west whose main entrance, built of monumental staircase, was also from the west. In this excavated sector, Anfray collected several pottery – some of them decorated with a cross, and sixty-three coins (Anfray *et al.*, 1965). No further detail report of the work has been published.

4.5.2 Southeast Stelae Field: at this site, Doresse excavated an underground, subterranean and shaft tombs. The underground tomb is cut in the soft rock and is accessed by seventeen rock-cut adits. The subterranean tombs, some of them left unfinished, are nine in number cut in a rock at the foot of May Koho hill. All the tombs were, however, found empty and thus no evidence was discovered to ascertain their dating (Doresse, 1956; Phillipson, 1997: 193-4). No complete report of this 1954 excavation of Doresse has been published (Fattovich *et al.*, 2000: 36; Phillipson, 1997: 193-4), and thus the information and knowledge about the excavated sites remains poorly understood. Today according to local legend in Aksum this tomb is commonly known as the “Tomb of Bazen²²”, although there is no justification and concrete

²² The legendary king Bazen was believed to have reigned for seventeen years – eight years before the birth of Jesus Christ and nine years after. Tradition also depicts him as the one who tried to go to Bethlehem. On his way to Bethlehem, king Bazen is said to have climbed to a peak in present Eritrea and prayed unto God. When Christianity was officially introduced to Aksum in the 4th century AD, a monastery was established at the peak, named Monastery of Debre Bizen, named after the name of the king. The monastery stands to this day; but the pronunciation of the name seems to have been changed through time. Today at the 17th century cathedral of Aksum Maryam Tsion church there is a granite stone inscription bearing the same name in Ge‘ez, which reads ‘This is the sepulchral stone of Bazen’. There is no clear-cut date as to when this inscription was carved, but it has been there at

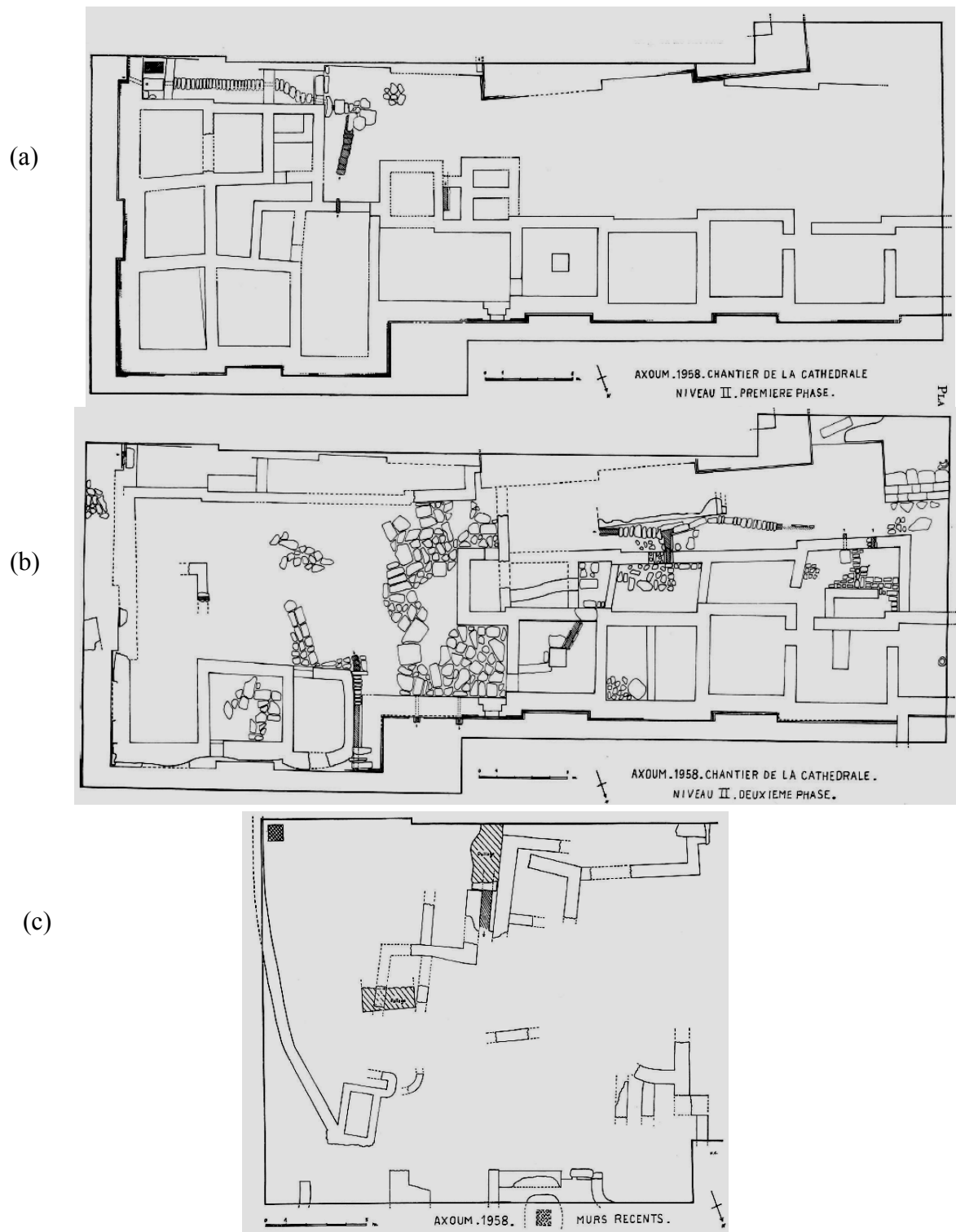


Fig. 4.9 Plan of three levels of the construction of Aksum Maryam TSION church; (a) first (bottom) level, (b) second (middle) level, (c) 3rd (upper, post-Aksumite period) level (adapted from Contenson, 1963).

least since 1805 AD, since Henry Salt had copied it.

evidence why it is attributed to Bazen.

4.5.3 North area: Further north near the tombs of Kaleb and Gebre Mesqel, a site on top of a hill called Addi Guatiya, Contenson excavated a cruciform shaft tomb from 07 to 16 April 1958 after it was spotted by Gezaw Hailemaryam (Contenson, 1963). The underground tomb was built of big granite blocks similar to those in the tomb of Kaleb. The shaft tomb has four passages to four directions (oriented north-south, east-west) with a length of 0.75m, while the central shaft tomb was 2m wide. The southern burial room measured 2m east-west by 1.5m north-south; the rest have almost identical size: 2.50m east-west by 2m north-south. The whole shaft tomb measured 8.50m east-west by 7m north-south. Though the depth of the shaft tomb varies as it rests on big bed rocks, in places it reached 3.60m. The vault was covered with big flat granite slabs. Contenson's report indicated that the tomb was found empty except few ancient potsherds (Ibid).

In January 1958, Contenson collected some pottery from Geza Agumai near the church of Enda Yesus. Among the collected pottery were a cylindrical cup and a globular bowl. Contenson suggested that the decoration style of these pottery belonged to the pre-Christian period of Aksum thereby indicating that the area north of Aksum had been densely inhabited (Ibid).

At the lower slope of north-east of the hill of Biete Giorgis and north of Geza Agumai, at a site called Me'elan Debbas, Contenson conducted two days of test excavation from 30 to 31 January 1958 during which he collected some pottery on poor condition and which he thought could belong to a collapsed tomb. A bowl with handles and decoration of horizontal lines, and a globular jar decorated with a pair of small nipples were discovered (Ibid). On the north side of the aforementioned site, Contenson discovered a small round block bearing unvocalized Ge'ez inscription of three lines, and each line containing four letters.

4.5.4 West area: About 5km to the west of the town of Aksum, Contenson excavated an Aksumite building from February 10 to March 6, 1958 (Contenson, 1961). Contenson exposed an Aksumite classic building in its architectural feature with dimension of the main building 12.65m north-south by 10.80m east-west. The building exhibited features of recesses of 20cm deep on each facade while angles were reinforced by four bastions. Many features of the building were still intact when Contenson excavated it; thresholds, steps, pavements and facades

were clearly visible. Contenson also reported that the whole building can be divided into main and annex building, the later found to the west of the main building.

During the course of excavation, Contenson collected fourteen bronze coins, mainly belonging to those kings of Ioel, Armah and Hataz of the Christian period. He also collected black bowl pottery with decoration of incision, another bowl with decoration of the cross, basalt mortar, as well as a small glass bead. Based on the coinage assemblage, Contenson proposed a dating for the building to between 7th and 8th centuries AD – the period during which the building was also abandoned. Contenson interpreted that the whole appearance and content of the building doesn't seem to be a private building; rather the presence of raised thresholds, water tank at the very center of the building, a slab oriented north and used as an altar or a base for altar, bench possibly for receiving offerings, the presence of standing but rough stelae, and two rooms – which Contenson recorded as one more accessible consisting of two corridors, and another sacred, elevated and with difficult access, indicated that the building was a Christian sanctuary. Though, Contenson remarked that the existence of stelae near the Christian building is not paralleled by any Christian worshiping site in Ethiopia which is the custom of the pre-Christian period as in the case of Yeha temple – where a rough stela, together with a small sacrificial altar, stands in front of the temple.

Anfray excavated at a site called Dungur²³ at the western outskirts of the town for three consecutive seasons from 1966 to 1968 (Michels, 1979; Munro-Hay, 1989; Anfray, 2012, 1990, 1968). Located north of the GSF and south of the hill of Biete Giorgis, Dungur palace was fully excavated during the seasons of 1966, 1967, and 1968 by which a complex structure measuring 57m x 56.50m was revealed. In 1966 the excavation was carried out from January to March, and in 1967 from May to June, for a total of five months (Anfray, 2012, 1990, 1968). Anfray discovered about forty rooms in this ruined palace, four court yards, and a central separate building with three entrances from west, south, and east – the latter with triple flights of steps built of seven monumental steps of granite stones. The whole mansion has two entrances – one from east and another from south, the eastern one as the principal entrance. The south entrance

²³ The area west of May Lahlah stream, south of Biete Giorgis hill, and north of the GSF is locally known as Dungur, a Tigrigna word for stone debris. This area is full of stones from ancient ruined buildings. Anfray, then, adapted this local name to his excavation site.

has double flights of steps facing west and east. In one of the rooms to the west of the central building, Anfray discovered three ovens built of red bricks (Anfray, 2012).

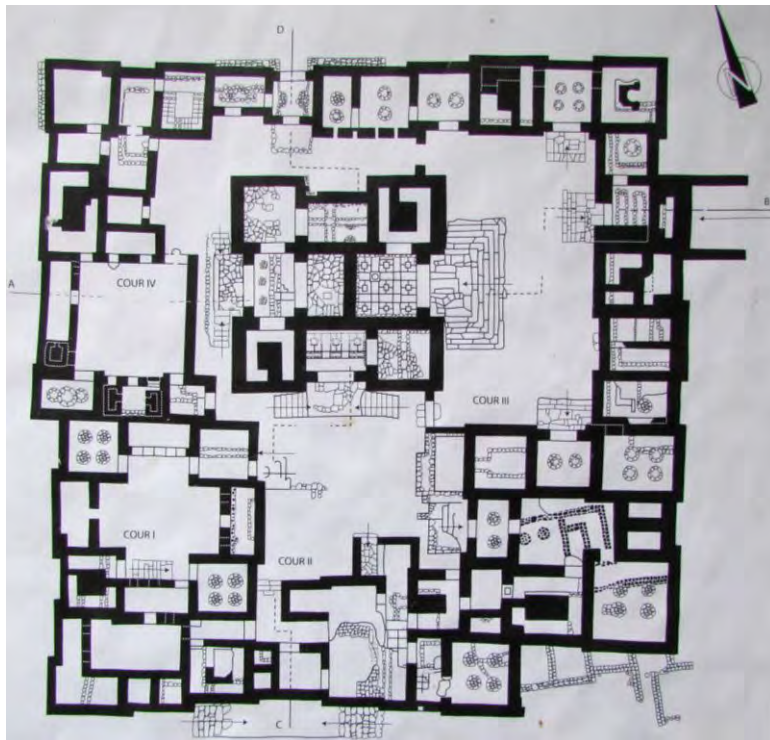
In some rooms, including the central building, Anfray also discovered round-shaped remains of built pillar-bases with a flat stone slab on top, which Anfray thought were possibly supporting either monolith stone or wooden pillar. In some rooms such pillar-bases built of small masonry were found up to four. According to Anfray, the mansion was built in Aksumite architectural features with recesses and rebates on all walls, while the central building has large cornerstones. Anfray (1968) recorded that the surviving wall measured from 2m to 3m high and even up to 5m high in the western walls. Although Anfray reflected on his worries about the precision of the dating of this mansion, he estimated that it falls between 6th and 7th and even probably 8th centuries AD based on the architectural features, the nature of objects found during the course of excavation (ceramic and coins), and the situation of its location being at the western periphery area. Anfray also supposed, based on different soil layers, that this edifice could have been inhabited by four or five generations. According to Anfray, the Dungur mansion could have served as an elite residence castle.

In the mansion, some water spots are still visible intact at the western entrance of the central building and the southern facade wall of the main mansion. Drainage systems are also clearly traced – one leading out through the southern wall (labeled A) and another through the western wall that originates from the central building (labeled D) (*fig. 4.10, a*). In the central building, there are small stone slabs which were possibly used as bases for stone or wooden pillars. The monumental steps of the eastern entrance of the central building exhibits the incorporation of different stones such as roughly worked long slab and base of stela, which could have been brought from the nearby GSF.

Today in Aksum this mansion is commonly known as the “palace of Queen of Sheba”, converted immediately after it was excavated (Munro-Hay, 1989; Chittick, 1974: 192, n. 28). No source before the excavation in 1966-1968 referred to this mansion as “palace of Queen of Sheba”; even Anfray himself never mentioned this legend. It is, therefore, a fabric of post-excavation which now is becoming almost popular legend even in Ethiopia in general. This mansion is the best preserved in Aksum; a protective wall has since its excavation been built and a guard assigned

for day time.

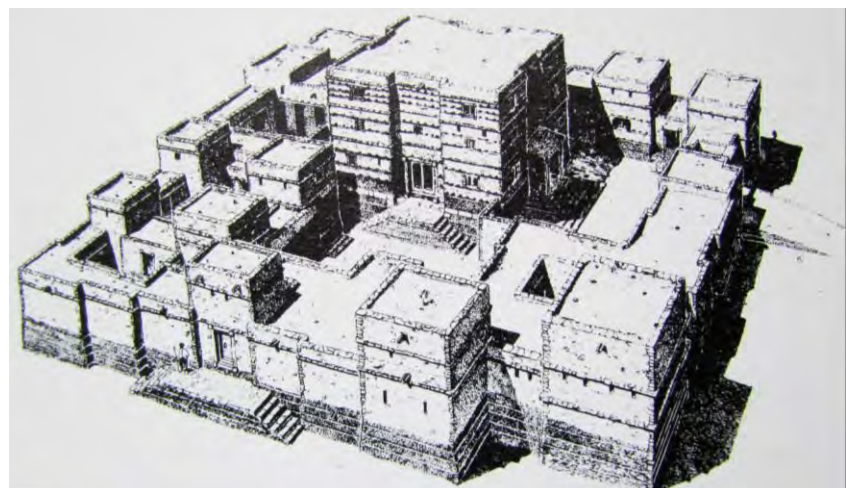
Anfray has also opened some test trenches to the north, north-east and east of the Dungur mansion where accumulation of rubble is observed. All these test excavations proved the existence of ruins of buildings with Aksumite architectural features (Anfray, 2012; Michels, 1979). Walls, bowl with inscription, and pottery of Aksumite type, all from this test excavation, were dated to the 4th century AD (Anfray, 2012; Munro-Hay, 1989).



(a)

Fig 4.10 Plan (a) and reconstruction (b) of Dungur palace (adapted from Anfray, 1990: 102-3).

(b)



4.6 THE BRITISH INSTITUTE IN EASTERN AFRICA (BIEA) EXCAVATIONS FROM 1972-74

After the EIA, the first archaeological mission to work in Aksum was the BIEA. It was directed by Neville Chittick, and conducted a large scale archaeological excavation at many sectors of the town. After a quick visit to Aksum and small test excavation in the northwestern side of the main stela group in 1972, Chittick continued the work in 1973 and 1974 intensively and extensively, each year from mid-January to early May (Chittick, 1974). The result of all the excavations has been made available with detailed photos, maps, drawings and illustrations in the publications of Chittick (1974) and Munro-Hay (1989). In addition to his preliminary report of the 1974, Chittick was writing his final report but passed away in 1984 before publishing his book. Since then, the book was brought to its final content and publication by Munro-Hay in 1989. In the following discussion, therefore, the summary is mainly based on the publication of Munro-Hay due to its detailed and inclusion of additional material from Chittick's excavation. It is, by far, much more detailed than that of Chittick's preliminary report of 1974.

Chittick opened several trenches around the tombs of Kaleb and Gebre Mesqel; at the northern stela group around Geza Agumai, Gheleb Emni²⁴ and Enda Yesus – all associated with stela; north of the main stela group between the modern north wall of the stela park and the foot of Biete Giorgis hill; at the platform of the stela park itself and adjacent sectors such as the Nefas Mawcha, Tomb of False Door, a shaft tomb west of the Tomb of False Door, a Brick vaulted structure east of the Tomb of False Door, the Tomb of Brick Arches, west of the Mausoleum at the western end of wall M1; GSF; Addi Kelte area in the west near the DAE palace of Enda Sem'on; and May Lahlah stream-bed. Each of the excavated area and its results is summarized below.

4.6.1 Kaleb site: at the tombs of Kaleb and Gebre Mesqel, Chittick opened four trenches. This site was designated KAL. The first trench KAL I and KAL Ia was opened to the east of the superstructure of Kaleb measuring 21m x 4m and oriented close to SW-NE. Six rooms with rebated Aksumite wall structure were partially revealed by the excavation at depth of between 3.3m and 3.7m. Varied local pottery, few glass fragments, potsherds of imported

²⁴In many sources, including Munro-Hay's 1989 publication, this site is commonly misspelled as "Ghele Emmi". The correct spelling for the name of the area, "Gheleb Emni" is used throughout this work.

amphorae, iron knife, copper nails, a stone ear-plug, coins of Ioel, and so on were collected from this trench. These artifacts led Chittick to suppose that the earliest construction was dated to early 5th century AD, then the building being abandoned by late 6th century AD, and a possible continuation of occupation of the site until the 7th century AD.

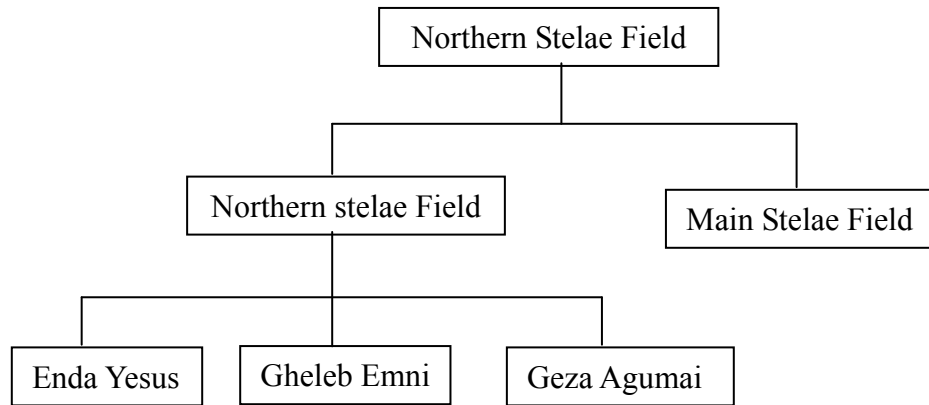
KAL II was located south of the superstructure of Gebre Mesqel. The excavation revealed a rebated wall running parallel to the wall of the tomb of Gebre Mesqel.

KAL III was located outside the tombs of Kaleb and Gebre Mesqel about 95m north-north-west of the north-west corner of Kaleb superstructure. Here Chittick discovered an underground shaft tomb with three chambers flanked to south, east and west. This tomb, with 1m square size of shaft, was built of small stones while the chambers were cut from the rock. Each of the gates to the chambers was found sealed by stone slab. The chambers were filled with burials, including the central chamber. Stone slabs from the roof of the tomb were found at 2.2m to 2.6m below the modern surface level, which Chittick interpreted that the tomb was disturbed.

The fourth trench, KAL IV was located north of the tomb of Kaleb about 58m from the north-west and 56m from the north-east corners. The size of this trench was 2.1m x 2.2m and was dug to the depth of 2.4m. The report indicated that some mixed local pottery, fragments of glass and a lamp in coarse red Aksumite ware were collected from this trench.

4.6.2 Northern Stelae Field: the stelae field to the north of the church of Maryam Tsion, which is commonly called May Hejja stelae field to distinguish it from the Western Stelae Field (GSF) and Southeastern Stelae Field (Tomb of Bazen area), was further divided by Chittick into two main groups: Northern Stelae Field – the area encompassing between stela 4 and the northernmost stelae at Geza Agumai, and MSF – the area west of the southern gate of Enda Yesus church where the three largest stelae 1, 2, and 3 are located. Chittick further classified the Northern Stelae Field into Enda Yessus, Gheleb Emni and Geza Agumai stelae fields, after the local names for each of the site²⁵.

²⁵ For location of each site and the stelae, see Chittick, 1974: fig. 2; Munro-Hay, 1989: 34-40, figs. 4.1-4.7



At Geza Agumai, Chittick opened five trenches and designated them GA I, GA II, GA III, GA IV and GA V each of which was excavated against stelae numbers 71, 77, 73, 67, and 69, respectively. He found the trench GA I much disturbed with intruded materials of later period. The bed rock of this trench was reached at a depth of 3.7m. At the bottom layer of this trench, Chittick found some coarse red Aksumite ware pottery which led him to date the site earlier than the deposits of the 4th century Tomb of Brick Arches. Chittick recorded that the site was covered by very thick deposits and found 2.2m of the 4.2m stela buried in the ground.

At GA II, Chittick outlined six levels; in the first two levels, he found modern period materials, and in levels three and four were found human heads from a pot, and red Aksumite ware similar to 4th century materials from the Tomb of Brick Arches. The sixth level was excavated to see the end of the stela; accordingly, he found the length of the stela to be 5.2m, only 80cm of which was visible above surface.

Against stela 73, Chittick opened trench GA III and excavated it to the depth of 7.7m. At 5.4m depth, he found bones, while walls were revealed at 7.7m deep. Based on the collected materials from this trench, such as glass fragments, he proposed a date of 1st century AD. From the same trench, Chittick collected pottery fragments, which he analyzed were similar to 4th century materials collected from the Tomb of Brick Arches.

Chittick laid out a fourth trench, GA IV; at 1.36m below the modern surface level, he uncovered a base-plate of stela 67 fitted to it. He collected glass fragments, red Aksumite ware with decoration and painting, and found a wall at about 3.1m depth. In this trench, the excavation revealed a completely buried stela, designated stela 139 by the BIEA. Chittick laid out trench GA

V on the southern side of stela 69. His report indicated no detail from this trench.

The other site of the northern stelae field is Gheleb Emni. It is located between Geza Agumai and Enda Yesus, all located on the western bank of the Mai Hejja stream. The BIEA project opened only a single trench at Gheleb Emni between stelae 40 and 41, immediately north of the decorated stela 6. Three levels were recognized in this trench, and on the side of stela 41 stone packing was uncovered. Red and undecorated pottery was collected from this trench in large quantity. On the other hand, the excavation collected red ware of some decorated from the side of stela 40. In the third level, four house models of red Aksumite pottery type were discovered. The sterile soil in this trench was reached at 1.8m depth.

Enda Yesus site is located between the southern gate of the church of Enda Yesus and stela 6. The excavation of BIEA laid out four trenches all associated with stelae, and the site was designated EY. The first trench, EY I, was opened around stela 32; the excavation revealed a granite block, stone rubbles and some sherds at the top levels. It was also reported that the pottery from this trench was red Aksumite ware, including 'classical decoration and shapes'. Chittick laid out trench numbers EY II and EY IV to excavate an access to the underside of stela 7 in order to fully expose the relief of a column engraved on the same stela.

Further north, Chittick laid out trench number EY III at the base of stela 6. Base-plate of the stela with 'a central Kylix-shaped cup and guilloche pattern border' was discovered at depths between 1.3m and 2.1m. The excavation also revealed stone rubble which, Chittick interpreted that it had existed before the erection of the stela.

4.6.3 Hawelti site: This site is located between the northern fence wall of the MSF and the hill of Biete Giorgis. Here Chittick opened two trenches in order to investigate the stratigraphy. He laid out two L-shaped trenches of 1.5m x 5m. In the first trench, which he designated HAW I, Chittick recognized eight levels. Some sherds similar to materials found in 3rd to 4th century Tombs of GSF and Brick Arches were collected. Chittick recorded the presence of crude wall and, clay and ash in most of the levels until the excavation was stopped at 5m depth. In his second trench, HAW II, Chittick discovered crude and red Aksumite ware in most of the levels of the trench.

From evidences revealed by his excavation, Chittick remarked that trees on the hillside of Bieta Giorgis were cut down during the Early Aksumite period followed by the cultivation of the hillside and house constructions on the slopes. He further analyzed that such human activities caused soil erosion of the hillside to be accumulated on the lower area. Based on pottery analysis from his excavation, Chittick proposed that the accumulation of colluvium ceased before the Late Aksumite period. He observed another layer of accumulation of colluvium in this area that took place in the last one century or so.

4.6.4 Enda Sem'on site: The BIEA has conducted some test excavations in the western suburb of the ancient town of Aksum at the place called Addi Kelte. This is located north-east and east of the Ta'aka Maryam and Enda Sem'on, respectively. Chittick's objective of conducting the test excavation here was to investigate the stratigraphy. At the site of Enda Sem'on, designated by Chittick as ES, five trenches were laid out which resulted in the discovery of large structure. Although the trenches were far apart from each other, Chittick was optimistic that the rooms and walls revealed in each of the trench may belong to one large building. His report indicated that the structure has contained rebated and recessed walls with several instances of timber slots, column bases, paved courts, many rooms, doorways, dressed cornerstones and drainage systems.

Chittick opened trenches, designated ES I to ES V, and in each trench he recorded different cultural levels. His excavation in this site revealed a large quantity of artifacts, including red and brown Aksumite wares, imported fragments of amphorae, copper, iron, glass fragments, soapstone, stone flake, flints, quartz, obsidian, iron hooks, part of stone mortar, brick fragments, iron slag, charcoal, bone, shell, ivory and bone objects, attachments for hanging lamp, pottery cross and cones, pottery with incised cross motifs, copper nails, three complete pots – one of them dated to the 4th century AD due to its resemblances to pottery from the Tomb of Brick Arches of same date. In addition, coins of Ebana of mid-5th century, late 6th century coin of Hataz and three of Ioel, late 4th century of Ouazebas, a silver coin issued in the late 4th century, nine bronze coins of the late 6th/early 7th centuries, Anonymous coin AE 2 of 5th century were discovered in the ES trenches. According to Chittick, the discovery of such coins and pottery helped him to date the building to between late 4th and early 7th centuries AD, occupied until the period of Hataz.

4.6.5 IW site: Chittick laid out four trenches with designation IW I to IW IV at 125m north of Ta'aka Maryam and south-east of Enda Sem'on. Chittick assumed that this structure could be part of an extended outer wing of the DAE palace of Enda Sem'on. His excavation here revealed a large burnt structure. A charcoal was also found which Chittick believed could be either from fallen tree or beam of the building. This was dated C-14 to the first two centuries AD. According to Chittick the structure was built of rebated and stepped walls, and beam and 'monkey-head' construction were recorded at many instances. Chittick remarked that in many trenches at IW site, fragile and loose nature of the structure due to the burning hampered his excavation.

Like in ES site, several varieties of artifacts were collected from the IW site: iron objects, yellow glass, red and brown Aksumite ware pottery, bricks, bronze fragments, iron nails, iron knife-blade, glass, bone, crystal fragment, bronze ring, bead, copper, imported sherds, a coin of Armah of late 6th or early 7th century, a coin of Anonymous AE 1 class and Anonymous AE 2 type first issued in the early 5th century, and so on. Based on the discovery of coins, the building appeared to Chittick to have been destroyed in the late 6th or early 7th centuries AD.

4.6.6 May Lahlah site: This is located at the western bank of May Lahlah stream opposite the Tomb of Etiopis. Chittick opened two trenches here but found only a coin of Ioel and some glasses.

4.6.7 GSF: This is the site of stelae at the western outskirts of the town in a plain field just south of the mansion of Dungur excavated by Francis Anfray. The road to Shire passes between the Dungur mansion and GSF. The DAE referred to this site as Western Stelae Field, and inventoried and numbered the stelae visible by then on surface. The BIEA project referred to this site as Gudit Stelae Field and the numeration of stelae by the DAE is also retained.

Chittick laid out ten trenches at GSF, designated GT, close-by individual stela to confirm the dating of erection and function of the stelae and any of their associated structures in the underground.

GT I: Chittick laid out this trench at the eastern side of the stelae field on the south side of the foot of stela 1. He categorized the trench into several levels based on the vertical change of

deposition of cultural material. Among the finds from this trench were brown, gray and red Aksumite ware pottery, iron fragments, glass, copper fragments, iron spear-head, copper split pin, painted vessels, painted heads, foot washer, and so on.

GT II: Chittick opened this trench against stelae 19, 20, and 21. In most of the upper levels of these trenches, he uncovered coarse black, black and brown burnished, red, orange-red, pink ware pottery, pottery head, post-Aksumite beaker, glass, iron, copper/bronze objects, bead, pottery bird, and so on. As he dug down into other levels, he came across pits, shafts and chambers in which he uncovered human teeth, jaw fragments, and other complete pots embedded in walls. Based on a glass from the tomb, Chittick dated the tomb to around the middle of the 3rd century AD.

GT III: Chittick laid out this trench at the western extreme of the stelae field, westward from the foot of stela 6, and exposed an embankment wall of the field. Other objects such as light gray, red orange and red Aksumite ware pottery were found.

GT IV: Chittick opened this trench with the aim to reveal the overall dimension and layout of stela 6. He found it to have been broken into three pieces and its base-plates were also found one overlying and the other underlying it. Among other small finds from this trench were bronze plate, glass, iron objects, bricks, pottery head fragments, coarsely tempered red ware, and some gray and dark-red sherds.

GT V: The expedition checked at the foot of stela 3 with this trench number. The excavation revealed a wall oriented east-west and exposed on its north facade, a deep pit with dressed granite slab on it, and other small finds like copper rivet, fragments of shale, red, brown, and gray Aksumite ware sherds and two head fragments.

GT VI: Chittick opened this trench against stela 4 and appeared to him that the stela fell before the process of erection was completed. He recorded from this trench very few objects, such as Anonymous AE 1 coin, bronze fragments, copper rim, iron knife, and few sherds.

GT VII: Chittick's excavation of this trench at the side of stela 9 did not yield much interesting finds except that he found the traces of two pits (though he thought that one of them may be a

stela pit) and an iron bar.

GT VIII: Chittick opened this trench to expose the broken end of stela 1. He exposed the broken end after removing the topsoil to a depth of 80cm.

GT IX: Near the base of stela 6, Chittick laid out this trench to see whether the wall in GT III continues to this new trench or not. Finally he exposed two walls running parallel, which he thought were continuations of walls from GT III.

GT X: His last trench in this field was opened at the eastern sector of the field north of GT VIII to test whether the original position of stela 1 was there. But the absence of any feature in the trench proved to him that the original position of stela 1 is at GT I.

4.6.8 The Tomb of Brick Arches: it has been discussed in the preceding section that the top section of the entrance to the Tomb of Brick Arches was first cleared by Doresse in 1954. Then in 1973-74, the BIEA's archaeological exploration in the MSF included many sectors mentioned above, one of which was the Tomb of Brick Arches. This is located east of stela 3 on a lower ground surrounded by terrace walls to the west and north which formed the higher platform of the stela field (*fig. 4.13*).

Chittick designated this area as DA after its first excavator – Doresse. Chittick's excavation at the Tomb of Brick Arches first cleared the roof slabs of the entrance of the tomb and then the stairway. He found seven granite roof slabs *in situ* at the south central, and one at the north end of the roofing. He fully cleared the stairway, and side walls of the stairway were revealed, the western wall being significantly damaged. The tomb was accessed by eighteen steps and three landings. Chittick further excavated the interior part of the tomb by which he discovered doorways of horseshoe-shaped arches of burnt red bricks. The doorways lead to antechambers cut in the rock. Three main chamber rooms were revealed by the excavation, each accessed by arched, brick doorways (*figs. 4.11, 4.14*).

Chittick collected about 300 labeled objects from this tomb, including glass, copper, decorated and non-decorated red Aksumite ware pottery, a silver amulet case, metal work, ivory, gold glass bead, wood, leather, human skull and so on. He also collected charcoal from one of the chambers radiocarbon dated to the 3rd or first-half of 4th century AD.



(a)

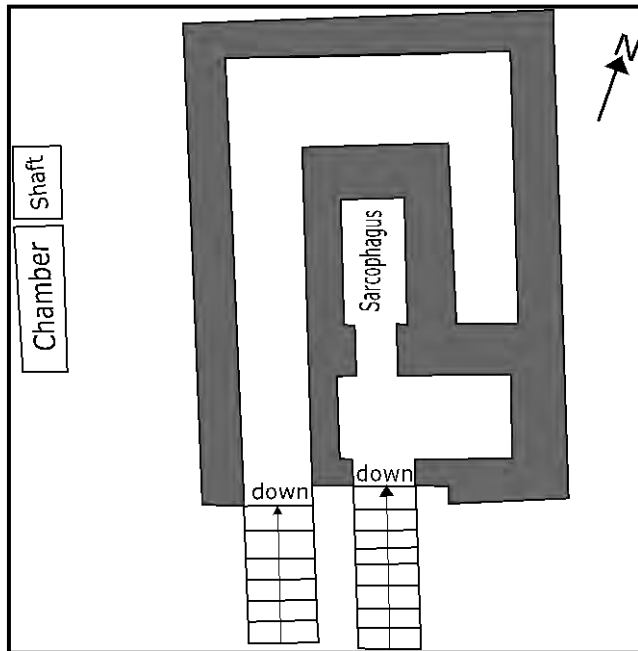


(b)

Fig. 4.11 Horseshoe-shaped brick doorways of the Tomb of Brick Arches. (a) The first doorway of the tomb; (b) closer view of the second doorway of the tomb visible behind the first doorway in (a) (Photo: Hiluf Berhe, 20/08/2008)

4.6.9 Tomb of False Door: at the western end of the MSF (*fig. 4.13*) lays what is called the Tomb of False Door. This was so called after the presence of a carved granite stone with an imitation of door similar to those on the three great stelae 1-3. Before this was excavated in 1973-74 by the BIEA expedition, the carved stone was first exposed in 1965 when a bulldozer was leveling the area for a new road passing to houses located north of the tomb. Since then until it was excavated, it was partially visible on the road (Munro-Hay, 1989).

Chittick laid out about thirty-nine trenches at the area of the Tomb of False Door and its adjacent structures, such as the shaft tomb to the west and the Brick Vaulted Structure to the east. He designated these trenches THA in 1973 and THC in 1974. The excavation of Chittick brought to light the Tomb of False Door with an antechamber, a burial chamber, a large room going round the burial chamber and ending against the eastern end of the antechamber, a courtyard paved with stone slabs, and a superstructure on top of the tomb with clearly visible traces of wall; a shaft tomb; and a Brick Vaulted Structure. The tomb is accessed by staircases of finely dressed granite stones. According to Chittick's report, the tomb was found empty ascribed to robbing in



(a)



(b)

Fig. 4.12 The Tomb of False Door. (a) Plan of the underground tomb; not to scale; (b) entrance to the sarcophagus room (Drawing, Hiluf Berhe, 2015; photo: Hiluf Berhe, May 2011).

ancient times (*fig. 4.12*).

Chittick found this Tomb of False Door highly damaged at many parts, including the removal of a roof slab, part of the courtyard pavement and the tomb structure. As a result the tomb was found empty except some objects which Chittick interpreted them as on secondary deposition rested there due to a wash down from Biete Giorgis hill. Such objects included red Aksumite ware, coarse gray Aksumite ware, amphorae sherd, coins of Anonymous AE 1 type, glass, stone tools, cowrie shell, brick fragment and so on. Due to the absence of any sign of cross and other indicative materials, Chittick thought that the tomb could belong to the pre-Christian period.

Immediately west of the Tomb of False Door, Chittick excavated a shaft tomb. He left it unfinished but recorded that this tomb was also completely robbed in ancient times. To the east of the Tomb of False Door, he discovered a Brick Vaulted Structure. He also left this unfinished after excavating a small portion of it. He exposed an Aksumite wall type with recesses and rebates within which were also found horseshoe-shaped and round brick arches. Chittick's excavation confirmed that the Brick Vaulted Structure and the Mausoleum are not connected.

At the western end of the terrace wall M1, the BIEA expedition laid out four trenches designated as PW after the first excavator around that area – Pironin. It has been discussed elsewhere in this chapter that the terrace wall M1 was traced for a length of about 114m by the French archaeologists. The BIEA's aim of excavation was thus to check if the wall continues further west beyond what the French have recorded. Chittick finally found out that the wall disappeared after a total length of about 120m. Chittick did not check out whether the wall turns north or just finished there.

4.6.10 Nefas Mewcha: The BIEA expedition laid out several trenches (designated NM), at this giant structure with the objective of checking Krencher's theory on the construction. Chittick cleared the whole structure and was able to reconstruct this underground tomb to have been contained of central chamber and two ambulatory chambers. He also found the tomb completely filled up with deposits from washed-in and, traced activities of robbery evidenced by the missing of some slabs. Chittick recorded that some stones at the north-western side of the northern chamber have been pushed down as the result of the fall of stela 1 (*fig. 3.5, B*).

Chittick collected some objects from an undisturbed context of this tomb, such as fragment of clay figurine, pottery house-model, bronze nails, glass inlay, copper and gold foil. Although he was not able to find evidence for precise dating, he thought that the tomb possibly belonged to the 3rd century AD.

4.6.11 The Stelae Park (SP): within the MSF, Chittick excavated the SP which comprised the area bounded by the terrace wall M1 to the south, the Tomb of Brick Arches to the east, the church of Enda Yesus to the northeast, the Tomb of False Door to the west, and the modern fence wall to the north and northwest (*fig. 4.13*). He designated the trenches at the SP as ST. Chittick's interest for laying out the first test trench in 1972 was to find out dating evidence for the stelae. He subsequently extended his excavation by which he finally discovered tunnels, shaft tombs, buried stelae, and located the underground tombs of the Mausoleum and East Tomb, the former being entered and planned after partial clearing.

Chittick's first test excavation in 1972 in the SP was carried out against stela 102 and stela 103²⁶.

²⁶ The numeration of stelae from 1-78 was made by the DAE, and 100-141 by the BIEA during the 1972-74

The BIEA excavations during the 1973-74 laid out about 25 trenches most of which were opened against stelae. Most of the trenches were concentrated north of stela 3. Chittick found many stelae buried but upright standing in the underground – the base of some of which was reached at 3.50m below the present surface level. Close by most of the investigated stelae he also came across pits. Chittick's excavation at the SP revealed three shaft tombs comprising many chambers. Tunnels connected the chambers of each shaft tomb. On the other hand the expedition discovered robbers' tunnels.

West of stela 1, Chittick opened an underground tomb which he designated Mausoleum. He indicated in his plan, after partial clearance, that it has ten antechambers and long central chamber oriented east-west measuring 16m by 2m. Three shaft holes were also indicated while at its eastern end was found the main entrance with dressed monumental door way (*fig. 3.5, A*).

Chittick indicated that the trenches at the Stelae Park were at most cases disturbed due to deposition of washed-in from the hill of Biete Giorgis and recent movements during the 1960s when an attempt has been made by *Ras Mengesha Seyoum*, the then regional governor, to set up the SP and re-erect fallen stelae. However, Chittick collected some objects from the bottom levels, including red, brown, and gray Aksumite ware pottery; coins of Anonymous AE 2 type, Hataz type 2, Ioel, Ezana of pagan type, Wazena; foot washer, pottery head, painted and decorated pottery, painted crosses in black color, fragments of ostrich egg shell, bronze ibex figurine, glass, stove fragment, beads, iron, copper objects, bird head in pottery, gold link, bronze relief plaque, beaker in pottery, and iron knife. In many trenches Chittick discovered human bones and graves which he interpreted were of a recent period. Some of the objects found in the SP indicated Chittick a dating to between 4th to 6th century AD though he remarked that their original deposition is highly debatable.

Another achievement of the BIEA expedition was the attempt of the reconstruction of stela 4 and the inventory of the stelae including those unearthed by the excavation. About fourteen stelae were discovered by the BIEA in the SP which have not been recorded by the DAE possibly obscured by houses, and others being buried in the ground. The inhabitants in the SP were relocated during the 1960s and landscaping of the SP was subsequently done.

expedition.

4.6.12 Gobo Dura Rock shelter: about 3km to the west of Aksum, the BIEA conducted a test excavation on rock shelter at the slope of the southern side of Gobo Dura hill. This rock shelter, excavated under the supervision of David Phillipson, yielded a pre-historic record with abundant lithic assemblages from a lower phase dating to as early as 10,000 BC. In the upper phase, animal bones and seeds were collected dated to the early 1st millennium BC (Phillipson, 1977).

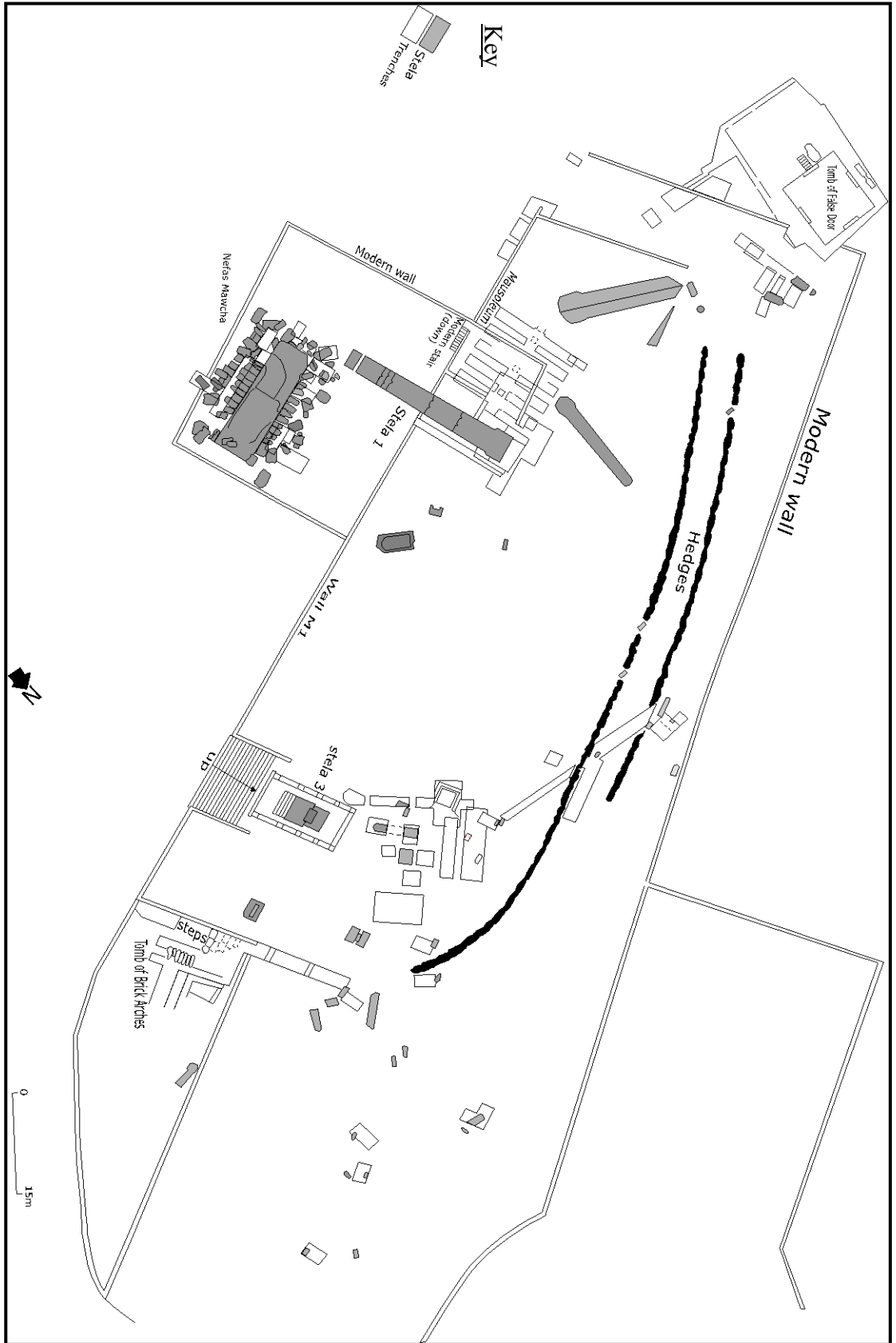


Fig. 4.13 Chittick's excavation of Stelae Park. The shaft tomb and brick vaulted structure are located west and east of the Tomb of False Door, respectively (Drawing: Hiluf Berhe, 2015, after Munro-Hay, 1989, 34-5)

4.7 ARCHAEOLOGY AT AKSUM DURING THE REVOLUTION PERIOD (1974-1991)

Other brief archaeological excavations have been carried out in Aksum in 1974. At the southern edge of the top of Biete Giorgis, the DAE ruins “E” and “F” were excavated by an Italian archaeologist, Ricci, in 1974. Here two basilica Aksumite churches were uncovered with recessed wall and smoothly dressed big cornerstones. He also conducted a survey on the top of the same hill and recorded the existence of residential settlement and evidence of stelae quarrying located to the north-west of the ruins (Ricci, 1990, 1974; Ricci and Fattovich, 1988). During the same year, Joseph Michels, from United States of America, conducted a detailed archaeological survey between Aksum and Yeha with the objective of illustrating the settlement pattern. The area surveyed was about 500km square. As a result, he recorded over 250 Da’amat and Aksumite period sites (Michels, 2005, 1988, 1979). The last archaeological investigation of the 1970s in Aksum was carried out by Richard Wilding and Eric Godet in the mid 1970s as part of a rescue excavation where the state-owned Yeha hotel²⁷ was to be built at the north-west slope of the hill of May Koho at the opposite side of the MSF. However, the result of the rescue excavation was never published²⁸.

4.8 THE 1993-97 BIEA EXCAVATIONS

As noted above, the 1970s archaeological excavations were curtailed by the revolution that erupted during the end of 1974 and the civil war that began by the beginning of 1975. Not only international archaeological missions to Aksum were suspended, but also the EIA withered. When the new party took power in 1991 and restored peace and order, foreign-based archaeological researches resumed in 1993 at Aksum.

The BIEA, under the direction of David Phillipson, was the first and one of the largest archaeological research projects of the post-1991 era which began its extensive excavation in

²⁷ In 2009, this hotel was leased to private entrepreneur.

²⁸ Eric Godet submitted a report of the excavation to the Ministry of Culture. Chittick also participated for few weeks in the excavation during which he discovered glassmaking furnace and provided a sketch of it. Later Godet sent the document to Munro-Hay with the anticipation that it will appear in the 1989 edition of Chittick’s work. But for unknown reason, it never appeared on the book and in any other publication (Eric Godet, e-mail received on July 09, 2014).

Aksum in 1993 with a five year plan as a resumption of the 1972-74 BIEA project (Phillipson, 1994).

During the five seasons (1993-1997), the BIEA conducted extensive excavations at Mausoleum and adjacent area (excavated from 1993-1995), the Tomb of Brick Arches (from 1993-1996), East Tomb (in 1993), D site at Kidane Mehret (from 1994-1996), GSF (from 1994-1996), K site in Maleke Aksum (1996), Stela 2 site (1994 and 1997), below Yeha Hotel (1994), near Tomb of Bazen (1995), opposite Ghenet Hotel (1995), Anqar Ba'ahti rock-shelter (1996), May Lahlah bridge near Tomb of Etiopis (1997), and Ba'ahti Nebait rock-shelter (1997). The project also conducted survey of the old cathedral of Aksum Maryam Tsion (1994) and a record of the ancient stela quarries at Gobo Dura (1997). Although preliminary reports of each excavation season have been published in different journals and magazines, the summary here is taken from the final publication of the project which appeared in 2000 in two volumes (Phillipson, 2000, vols. I and II).

The 1993 BIEA project commenced its work in the MSF mainly at the Tomb of Brick Arches, Mausoleum, East Tomb and the original position of stela 2.

The BIEA project carried out a survey of 10km radius from Aksum town excluding the top of Biete Giorgis hill where a separate project was undertaken by the IUO/BU (discussed below) from 1993-2002. In terms of specialists, the project was composed of lithic specialist, ceramist, archaeobotanist, archaeozoologist, osteologist, quarries specialist, object conservator, glass/beads specialist, surveyor, conservation architect, and draftsman. The locally employed workforce of the project was respectively, 65, 84, 91, 107, and 70 from 1993 to 1997. The following is a brief of each excavated site by the BIEA project.

4.8.1 Tomb of Brick Arches: This tomb, which the BIEA had earlier opened in 1973-74 as has been discussed, was re-opened in 1993 by the BIEA and excavated the four chambers which were found between 9.5m and 10m deep from the modern surface level (*Fig. 4.14*). During the 1993 BIEA excavation of this tomb, only the three chambers (A, B, and D) were completely excavated; Phillipson informs us that chamber C was not re-opened as the Tigray authorities were afraid that its excavation might be a risk to the stability of stela 3.

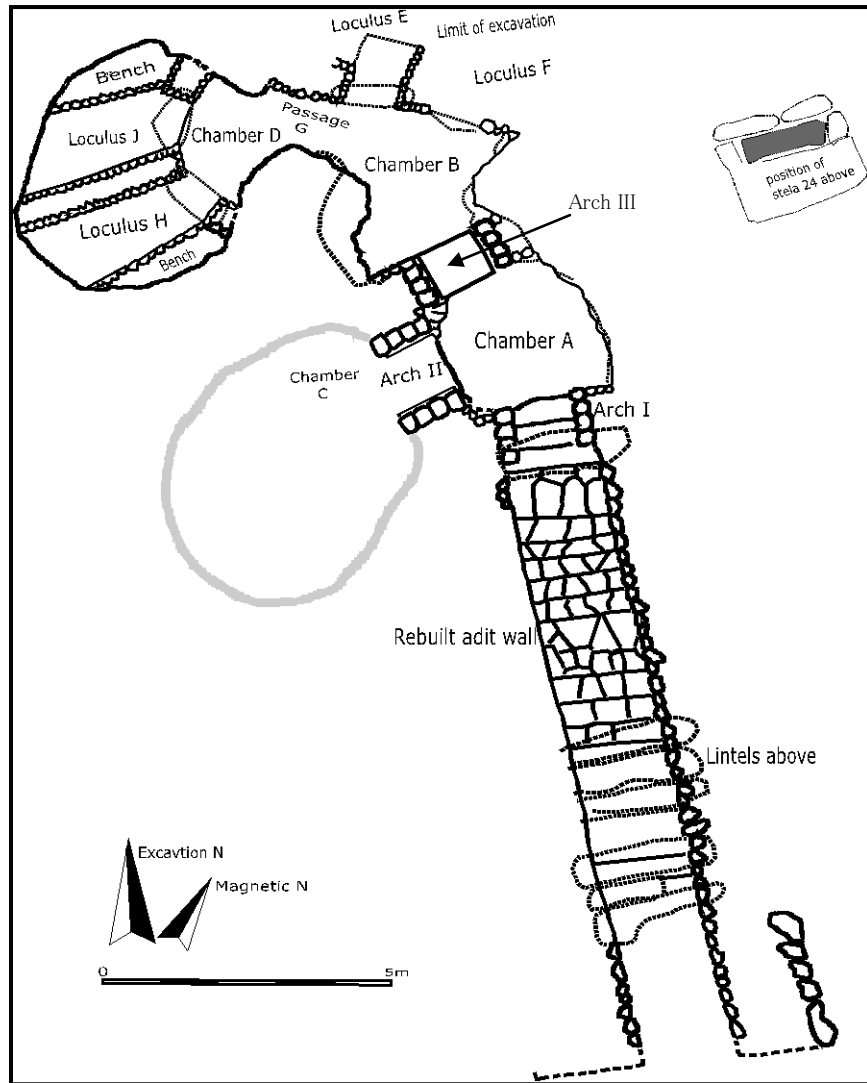


Fig. 4.14 General plan of Tomb of Brick Arches. “Chamber C was not accurately surveyed”. For photo of the doorways of this tomb, see fig. 4.7 (Drawing: Hiluf Berhe, 2015, after Phillipson, 2000, I: 32).

The expedition recorded that the Tomb of Brick Arches was found to be the richest tomb in terms of objects left behind after it was robbed in antiquity. The excavation revealed quite a large number of objects from rooms which have not been reached and recognized by the BIEA excavation in 1973-74. A pit measuring 0.92m x 0.68m, and 0.30m deep, which was not noticed by the 1974 BIEA excavation, was uncovered between Arches II and III full of copper alloy fragments weighing 38kg. The project recorded that the date of the copper alloy from a charcoal contained in it was 1705±45 and 1655±40 bp. On the other hand a sample of burnt bone from this tomb has yielded a radiocarbon date of 1925±50 bp. Among other major finds of the tomb

collected by the expedition included a large spearhead; over one hundred intact or fragmentary ivory plaques; beautifully decorated ivory throne component with relief of grapes; large quantity of pottery intact and fragmented; wood remains and about 199 nails and tacks; iron objects; fragments of gold and silver; foot-washer basins; yoked animal model basins; foot-ring pots; human-headed jars; bird-shaped vessel; over one thousand glasses of various colors; fragmented globe; 1139 beads of different size, color and type; copper alloy mirror; rondel, made of brass and measuring 38cm in diameter with a relief of human face at the center (*fig. 3.6 (c)*); glass goblet; human skull; complete jars; numerous metals, *etc.*

The excavation revealed that the largest number of objects were discovered from chamber B. Phillipson interpreted that the discovery of only few fragments of gold and silver in this tomb was an implication that the tomb was robbed focusing on the valuable items such as gold and silver. He also suggested that a robbery activity in the tomb was recognized by the disorderly thrown away door blocking and the disturbance and movement of artifacts within the tomb. On the other side, Phillipson noted that the absence of coins, imported materials (with exceptions of few glass and beads), animal bones, food debris, flaked stone artifacts, and agricultural tools may reflect that the tomb was interred with the body of persons on high status. He adds that all the uncovered objects from the tomb “could be regarded as purely grave goods...which also reflected the status and activities of those who were interred there”. In addition to this, “the pottery from the tomb was made especially to serve a funerary purpose”.

4.8.2 Stela 2 site excavations: The 1993 BIEA expedition was involved on ascertaining the original position of stela 2 before it was re-erected as negotiations were ongoing between Ethiopia and Italy on the restitution of the stela which had been taken to Rome in 1937. Preliminary excavation on this site was first carried out in 1994 after delineating a 10m by 10m area of excavation. According to the expedition this excavation was mainly conducted upon the request of Ethiopian authorities to check the exact former position of stela 2. Accordingly, in 1994 the excavation cleared the top layer and revealed an extensive disturbance from the 20th century activities such as demolishing the domestic houses which have been built in the area, and the landscaping of the stela park in the 1960s. During the excavation, the team clearly observed substantial disturbances occurred as the result of the removal of the stela in 1937.

Once the original position of stela 2 has been located, the BIEA 1994 excavation in this area did not continue further into the bottom layers. Such objective was rescheduled for the 1997 excavation. The expedition recorded that as excavation continued deep, loosely packed stone rubble mixed with 20th century objects were uncovered. In the excavated area an intact base-plate which measured 2.02m x 1.54m was brought to light which was believed to have belonged to stela 12. Deeper in the ground, a large stone slab was uncovered at depth of between 2.2m and 2.4m which, according to Phillipson's suggestion, was used as a base of the socket for stela 2. A fragment of stela 2 in three pieces was discovered during the 1997 excavation. The 1997 BIEA excavation resulted in the discovery of subterranean structure of 6m wide and extending beyond the excavation limit both in the northern and southern edges. It appeared clear to the archaeologists that the stela "had formerly stood directly over the northern end of the substructure" (Ibid, I: 143).

Furthermore, the excavation revealed a rock-cut shaft defined by remains of Aksumite walls. It was found at 7.65m depth from the modern surface level. Robbing activities were observed during the excavation evidenced from robbers' tunnels. Phillipson suggested that an ancient trench on the south side of the stela had been dug to intentionally destabilize the stela which finally could have caused its destruction at some distant time. He also confirmed from the results of the excavation that the three largest stelae were erected on straight line, stela 2 being 31.5m and 26m far from stela 1 and stela 3, respectively.

Based on the typological analysis of some pottery from the original deposits of the substructure and the shaft, Phillipson recorded a date of the 3rd and 4th centuries AD. On the other hand, pottery from secondary context deposits was dated to Late Aksumite, post-Aksumite and 20th century AD. Based on the evidences revealed by the excavation, the expedition finally remarked that any attempt to re-erect the stela would cause destruction to associated archaeological materials, and would also hamper future investigations around and beneath the stela²⁹. This was suggested as a response to the Ethiopian authorities' request to the project to ascertain whether it would be safe to re-erect the stela on its original position or not.

²⁹ At the time of the BIEA expedition to Aksum from 1993-1997, negotiation between Ethiopia and Italy was hot issue on the restitution of stela 2. Thorough surveys on the strength and underground composition of the area around the original position of stela 2 have been conducted before the stela was erected. Finally this was successfully accomplished without any major risk although it affected stela 3 to be tilted some 0.9 degrees more.

4.8.3 The Mausoleum: This tomb was re-entered in 1993 by the BIEA expedition and excavation continued from 1993 to 1995. During these consecutive excavation seasons, the expedition completely excavated the central chamber and four side chambers while others were partially cleared. The excavation revealed a built arch at the western end of the main Mausoleum (i.e., another western portal leading to another unexcavated chamber west of the main Mausoleum), and seventeen dressed massive slabs covering the roof of the chamber of the Mausoleum. This Mausoleum was recorded to be 5.9m deep from the modern surface level. The expedition also recorded that the side chambers were between 6.3m and 6.6m long and between 1.7m and 1.9m wide, with an entrance of each side chamber built of bricks in arch shape (*fig. 4.15*).

Although the expedition found the tomb to have been totally robbed and all remains in disturbed deposition, it collected charcoal which was radiocarbon dated to 1745±30 bp. Objects collected during the 1993-1995 excavation from untrusted order of deposition due to robber activities include metal and shell, fragments of colored glass inlay, copper alloy nails, iron spearhead, glass beads, human-headed jars, coin of Armah (of 7th century), gold fragments, silver items, iron objects, pottery fragments, very few flake stones, human bones and teeth.



Fig. 4.15 The Mausoleum today; (a) portal monumental doorway on the east; (b) view of the interior from east. Note: the natural light enters through the shaft holes. At the background, the western portal monumental doorway leading to another yet unexcavated underground structure can be seen (photo: Hiluf Berhe, May 2011).

East of the Mausoleum and still immediately east of the fallen stela 1, the BIEA opened the East Tomb which, as explained above, has been located by the BIEA during the 1972-1974 expedition. During the 1993 excavation of this tomb, the team encountered difficulty of continuing excavation after only 2.4m of distance was excavated from the entrance; it was reported that the tomb was in bad condition of preservation which may cause danger during excavation. This tomb was found at a depth of 6.4m from the modern surface level, and was reported to have been less disturbed as compared with the Mausoleum. For the reason mentioned above, the BIEA quit the excavation in this tomb and, therefore, the overall extent and plan of the tomb remained unknown. From the excavated area of the tomb, the expedition collected artifacts from original deposition, such as jars, a pedestal vessel, bowls, basins, glass fragments, fragments of gold foils, copper alloy nails and iron tang.

4.8.4 GSF: This was excavated from 1994-1996 by opening three trenches, two at the north and one at the west side of the field. The expedition opened the trenches here to “evaluate the hypothesis that the GSF represented the burial ground of the middle/or lower strata of Aksumite society” (Ibid, I: 226). In one of the trenches, the excavation revealed a stone platform and four steps leading down to it. A wall, preserved to a height of 1.3m, was found here with a single rebate. In another trench, two pit graves were recorded. Human skeletal material was found associated with potsherds, glass beads and iron; while a human skull was found associated with glass and pottery fragments, glass beads and iron knife. Based on charcoal samples collected from human burials, two dating results were recorded by the expedition – lower strata dated to 1825 ± 40 bp and higher strata to 1780 ± 40 bp.

From the evidences revealed by the excavation, Phillipson suggested some conclusions: it appeared to him that some stelae in this field were erected as grave markers; the graves were marked by pits, where as built and rock-cut tombs were uncommon. He also interpreted that the GSF could have served as burial place for wealthy members but non-elite Aksumite society. Finally Phillipson put the chronology of the field to earlier than those burials at the MSF in the town, the GSF being dated to between the 2nd and 3rd centuries AD.

4.8.5 D site at Kidane Mehret (Phillipson, 2000, II): This is located north of the town, about 1km from the MSF, and east of the road that leads to the tombs of Kaleb and Gebre

Mesqel. The site gently slopes down to south and, nearby it but immediately west of the road is found the monumental inscription of Ezana exposed by farmers in 1981.

One of the largest investigated sites by the project was the D site of Kidane Mehret. This was excavated from 1994-1996. The expedition's objective of investigating this site was in order to get a site with domestic occupation belonging to the ordinary Aksumite society for an understanding of the everyday living condition and economic practices by such society. The excavation revealed two different components of occupation: a Da'amat period settlement dated to between 800-400 BC and a Late-Aksumite period settlement dated to between late 5th and early 8th centuries AD. The two phases of settlement were found to have been separated by abandonment of the site for long period of time. It was recorded, based on different reliable evidences, that the site was occupied by a food processing society.

The expedition opened about twenty-three trenches on both sides of the road, the major discoveries being recorded from trenches to the east of the road. At the settlement of Late-Aksumite period, two distinct structures were observed – a short-lived elite structure with monumental steps, and lower-status structure. The site yielded evidence of cultivation and livestock: wheat, barley and tef were collected while cattle was recorded to be the principal livestock. In addition to this, *in situ* grindstone was discovered as a good evidence for food-processing activities.

Imported vessels, vessels bearing inscriptions and crosses, fragments of glass, glass beads, stone beads, fragments of gold foil, iron, ivory, copper alloy, clay stamp-seals, five stone seals – some of them bearing cross and letters, coins of Ioel, Hataz, Gersem and Armah, grindstones, fragments of cotton textile, charred plant remains (domesticated and wild), animal bones, human skeletal remains, and so on were collected from the site.

Phillipson concluded that the subsistence economy during the pre-Aksumite period continued to the Late-Aksumite period and all the way to the present time. He added that the D site at Kidane Mehret was abandoned by about the 8th century AD and never been occupied subsequently³⁰.

³⁰ Today the site is used for cultivation of cereals mainly tef, wheat, and barley.

4.8.6 K site in Maleke Aksum: at the foot of the south side of Bieta Giorgis hill, and west of the church of Maryam Tsion about 600m, the expedition conducted an exploratory excavation in 1996 on four trenches at a site designated “K”. This site was located within the built area of the ancient town as opposed to the “D” site which is a peripheral area. The exploratory excavation at “K” site revealed remains of Aksumite buildings, pottery, glass, metal, slag, ash and charcoal layers, baked clay hearth, coins of Hataz, 6th century coins of Ioel and Wazena, beads (of glass, stone and clay), copper alloy cosmetic instruments, and imported vessels. It was reported that evidence from this site was dated to between the late 5th and late 6th centuries AD. A charcoal sample recovered from the site was radiocarbon dated to 1585± 50 and 1590 ± 50 bp.

According to Phillipson, the site was abandoned by the early 7th century AD. He was convinced according to the evidence from the site that “K” site was a manufacturing and residential site occupied by a middle-rank population. A comparative analysis between the sites K and D indicated that the former was located at the center of the town with an economic activity largely based on industrial, and the latter, located at the peripheral area of the town, based on the production and processing of food

The BIEA expedition has, other than its plan, also explored sites at different areas in the town at the request of the Ethiopian authorities to check whether the sites contain archaeological features or not before being affected by any development activity. One such site was the site designated as “P”. This was located below the Yeha hotel, at the eastern bank of the May Hejja stream³¹. The expedition excavated five test trenches here in 1994 which finally resulted in the absence of any archaeological significance.

Another site where the expedition conducted test excavation in 1995 was located east of the then Health center (which now is demolished and where large private building is under construction), opposite of Ghenet Hotel. This site was designated H. The report indicated that three test trenches of 1m square each were laid out in a private compound. Here again no archaeological

³¹ This site is owned by the Orthodox Church, and a building has since been built, known as Menbere Patriark (residence of the patriarch). Although the patriarch’s residence and office is located in Addis Abeba, the Menbere Partriark is a guesthouse for the Patriarch during his visits to Aksum, such as for the festivals of Palm Sunday and Hidar Tsion.

significance that would be detrimental to any development activity was discovered. During the same season, a site designated X, located about 30m south of the Tomb of Bazen and 70m east of Ezana garden, was explored on five test trenches of each 1m square. However, it was reported that at about 0.5m bed rock was reached without any archaeological significance.

In 1997, in response to residents' report about an exposed slab at the bed of May Lahlah stream close by the Tomb of Etiopis, the expedition cleared the area around the slab. As this slab was found at the bottom of retaining wall of track way that crosses the stream to the west of the town, it was reported that the slab could have been brought here to stabilize the track way, and was left where it was. This site was designated L.

4.8.7 Anqar Ba'ahti rock shelter: To the east of the town about 5km from the church of Maryam Tsion, at a site known as Anqar Ba'ahti, the expedition excavated on a pre-historic rock shelter in 1996. The excavation revealed lithics of blade industry, Da'amat and Aksumite period potsherd, and intruded faunal and floral remains.

4.8.8 Ba'ahti Nebait: another pre-historic rock shelter site was excavated by the expedition in 1997 at Ba'ahti Nebait. It is located west of the town of Aksum, at the foot of south-west side of Biete Giorgis hill. The excavation revealed blade industry dated to 10th millennium BP, microliths, and pottery of thin coarse ware.

Besides the extensive excavations from 1993-1997, the BIEA expedition also conducted a detailed survey, recorded and sketched major quarry sites and inventoried the worked blocks within each quarry site. At Gobo Dura hill, the expedition recorded five quarry sites and one at Addi Tsehafi. In addition to this, the expedition conducted a detailed survey with the aim of tracing the possible ancient route for the transportation of the giant stelae erected at Aksum, and a site of working place of the stelae where the people could have minimized the unnecessary weight of the stelae. Accordingly, it was reported that the possible route from Gobo Dura to Aksum could have been located along the eastern foot of Gobo Dura right up to the north-eastern point of the same hill and then followed east direction across the plain south of Biete Giorgis hill to the stelae park in the town.

4.9 THE WORKS OF ISTITUTO UNIVERSITARIO ORIENTALE (IUO) AND BOSTON UNIVERSITY (BU) 1993-2002

Another post-1991 archaeological research project that conducted extensive excavation on the top of Biete Giorgis hill was the joint project of IUO and BU directed by Rodolfo Fattovich and Kathryn Bard, respectively (Bard and Fattovich, 1993). This project carried out an excavation for nine seasons from 1993 to 2002 with one season (*i.e.*, 1999) interruption because of the outbreak of a war between Ethiopia and Eritrea in May 1998 (Fattovich *et al.*, 2001). Researches in paleoethnobotany, archaeozoology, geology, geomorphology, ethnography, ethnoarchaeology, ethnohistory, and mapping were also included as part of the project (Fattovich *et al.*, 2000).

The IUO/BU archaeological investigations on top of Biete Giorgis were carried out between May and June every year for one month on average. The preliminary archaeological report of each excavation season was published in *Nyame Akuma* and *Rassegna di Studi Etiopici*, the latter in Italian language. The following summary of the archaeological excavation of the IUO/BU is, therefore, summarized from Bard and Fattovich, 1993; Fattovich, 1995; Bard and Fattovich, 1995; Bard *et al.*, 1996; Bard and Fattovich, 1997; Bard *et al.*, 1998; Fattovich *et al.*, 2001; Bard *et al.*, 2001; Bard *et al.*, 2002 (see also bibliography).

The IUO/BU archaeological expedition has fully investigated the top of Biete Giorgis during nine excavation seasons from 1993 to 2002. The whole site was also surveyed; as a result, from a landscape survey, the expedition identified different man-made features which included agricultural terraces and fields, cisterns, dams, roads and paths. On the other hand, the expedition recorded four types of sites: rock-shelters, open sites, stelae quarries, and sites with rock inscriptions. Residential structures were discovered to the south-west and north side of the hill of Biete Giorgis at Ona Negest (ON), Qelqel Asba (QA), Tikul Emni (TE), and Gudguad Agazen (GA); while at the central sector of the hill at a place called Ona Enda Aboi Zewge (OAZ) many rock-cut tombs and stelae were recorded.

The expedition excavated over sixteen rock-cut tombs although the archaeologists assumed that there could be between 2000 and 3000 burials. At the central sector, the expedition also reported over one-hundred roughly hewn stelae with rounded tops. Here one very strange stela was what

the archaeologists called a “double stela”, with a total length of 9.3m. The expedition made some archaeological investigations around the stelae where tombs were discovered associated with them. The rock-cut tombs were over 3m deep below the present surface level and many of them were identified to have many chambers. It was also reported that few of the tombs were found with human bones and artifacts. This central sector was thought to be the main cemetery of Bieta Giorgis site used for several centuries.

Structures at ON, GA, QA, and TE were found at very low height and exhibited a rebated wall of Aksumite architectural feature. At QA, the excavation revealed a round, plastered feature in the center of the structure (*fig. 4.16*) which the archaeologists suggested that its purpose could be a storage rather than water reservoir. In most of the excavated structures, remains of different objects were discovered suggesting that they were residential buildings.

During the nine excavation seasons, the expedition collected a large and varied amount of objects from the site of Bieta Giorgis. Among such finds included: black-topped red ware sherds of fine fabric, large sherds and bowls, five whole red ware pots, small cups, imported wares of Mediterranean origins, sherds of Late-Meroitic wares, sherds of imported glass vessels, sherds of imported amphorae from Upper Egypt, Late-Roman/Byzantine glass fragments dating from the 1st to 6th centuries AD, sherds of Late-Roman ribbed wine amphorae, lithics, brick fragments and charcoal, orange ware with orange paste, brick-red ware with a red paste, small bronze bracelet, bronze artifacts, a model axe and a large bracelet, clear glass beads with gold foil, carnelian beads, fragments of glass vessels, model axes in iron, beads of colored glass, human teeth,

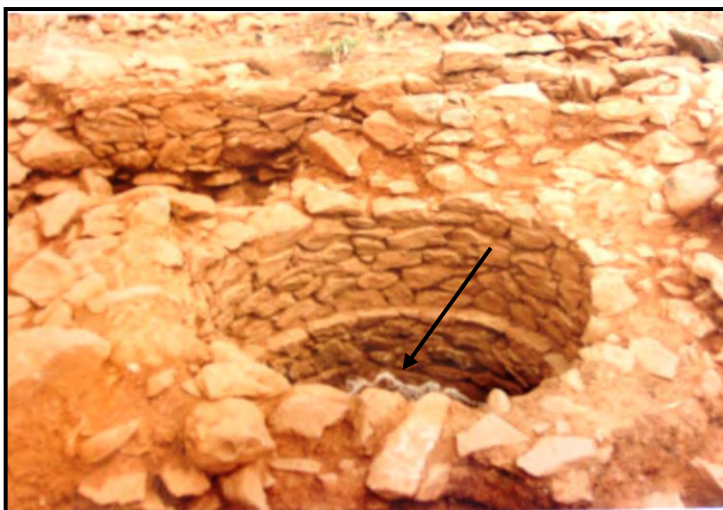


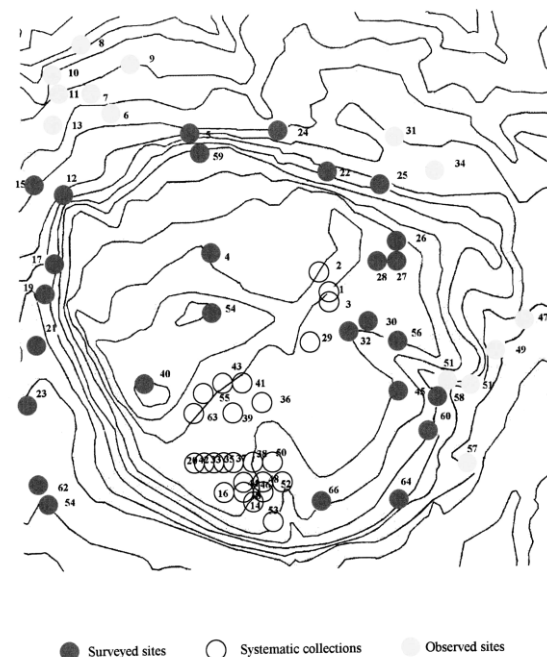
Fig. 4.16 Circular structure in the middle of a ruined structure on Bieta Giorgis, possibly granary. Notice the plastering (follow the arrow) which survived only at the lower level of the structure (photo: Hiluf Berhe, 2002).

grinding stones, coins of Kaleb and Armah, a short, and unvocalized Ge'ez inscription of one word recorded on a stela. From one of the excavated tombs, 236 glass beads were collected, which according to the archaeologists, were most likely produced in Egypt in the 2nd to 1st centuries B.C.

The IUO/BU expedition has also conducted research on paleoethnobotany and archaeozoology. Analysis of collected faunal remains indicated that the dominant animal was domesticated cattle. Goat and sheep were also identified from a large number of bones. On the other hand, flotation techniques from different excavation units have yielded large number of samples of emmer wheat (*Triticum dicoccum*), free-threshing wheat (*Triticum durum/aestivum*), hulled barley (*Hordeum vulgare*), tef (*Eragrostis teff*) and flax (*Linum usitatissimum*), as well as legumes and grape seed (*Vitis vulgare*) dated to between 90 BC and 700 AD.

The expedition's analysis of ceramics, coins, imported objects, and architectural features of the tombs and structures gave the result that the site of Biete Giorgis was occupied since the Da'amat period (5th century BC) and continued up until the early 7th century AD. The cemetery area was also thought to have been first used during the 1st millennium BC and was still used in the early Aksumite period (2nd – 4th centuries AD). It was also ascertained that the tombs and stelae at Biete Giorgis site dated to the 1st century BC or earlier were much earlier than those tombs and stelae in the town of Aksum.

Map 4.2 IUO/BU archaeological research project on top of Biete Giorgis hill (adapted from Fattovich *et al.* (2000). "IUO/BU joint archaeological expedition at Bieta Giyorgis (Aksum, Ethiopia): 2000 field season". Technical report to CRCCH, Addis Abeba. Napels-Boston, 2000).



4.10 EXCAVATIONS BY AUTHORITY FOR RESEARCH AND CONSERVATION OF CULTURAL HERITAGE (ARCCH)

A team from ARCCH, led by Yonas Beyene, carried out excavation in January 1998 to finalize the preparation for the re-erection of stela 2 – then in Rome. As mentioned above, this stela 2 site has been excavated by Phillipson to confirm the exact location of the stela and prepare the ground for the re-erection. Assisted by an engineer, Tadele Betul, the team removed stones so as to continue excavating deep. In the same year, in October 1998, another team from ARCCH under the direction of Tekle Hagos, and Bertrand Poissonnier from CFEE, Addis Abeba, as an advisor, carried out excavation on the same site. The intended objective was not attained during this mission (Poissonnier, 2012).

In 1999, excavation on stela 2 site continued, this time under the direction of Poissonnier. The mission also documented the installation and collapse of stela 2 in ancient time. Although the mission was interrupted by war, it had progressed a lot in revealing the underground layout. While excavating deep, Poissonnier reached bedrock on which the bottom built structure supporting the stela rested. In addition, two pits were discovered, more than 7m deep below the present surface level. Although the pits were found to have been robbed in ancient times, the team collected objects, like a glass bead, fragments of imported glass and pottery containers and a variety of metal objects. Based on stratigraphical analysis, Poissonnier believed that the pits possibly postdate the erection of stela 2 (Ibid).

From November 2 to 28/2000, a team led by Tekle Hagos, from ARCCH, and experts³² from CFEE, conducted a test excavation at Enda Azay. The objective of this mission was to check the site whether any significant archaeological site exists or not before any development construction takes place there. The team opened six trenches, some of them 1m x 30m large and, excavated to the depth of up to 3m below the present surface level (Tekle Hagos, 2000).

The test excavation resulted in the discovery of a ruined Aksumite building at 1m depth from the

³² They were John Phillip Delaxa (archaeologist), Allan Whitman (Ceramist), Liyo Yoyo (Topographer), Bertrand Poissonnier (archaeologist), Albert Hiss (Geophysict), Patrice Berjer (Geophysict). According to the report, the expenses of daily laborers for the last weeks were financed by Yoyo and Delaxa (Tekle Hagos, 2000). HAMA again excavated this site in 2003, during which, the researcher has participated through the excavation season as representative of the Culture and Tourism office and trainee.

present surface level. The team also came across five steps surrounded by Aksumite walls to north, south, west and northeast directions. The steps were found at 1.7m deep from surface level. Among other finds were iron slag, bricks, beads, glass fragment, coins, lion figurine on red limestone, and a stone bowl with two handles (Ibid).

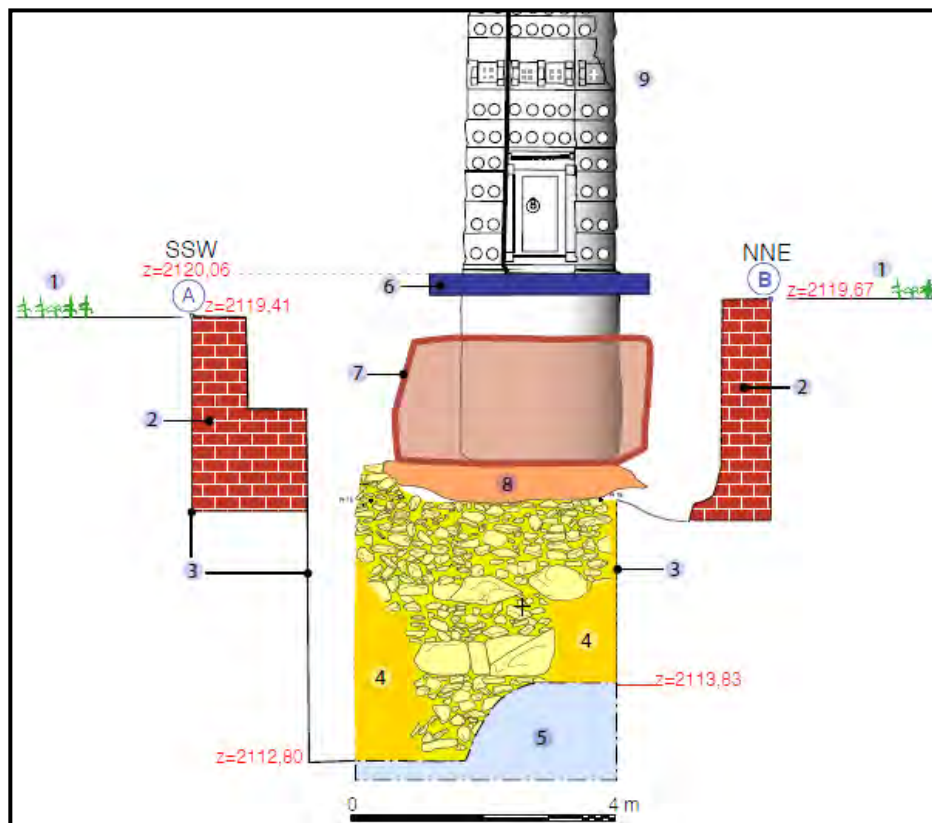


Fig. 4.17 “Original location of Stela 2: section AB (SS0-NNE). 1: Current ground level; 2: contemporary support wall; 3: boundary of the excavation; 4: not detailed; 5: resistant substrate; 6: base plate; 7: wedge slab; 8:”footing slab”; 9: Stela 2 redrawn (after Littmann *et al.*, 1913; the altitudes are given in metres above sea-level; topography: L. Fadin, CFEE; drawing: J.-M. Bryand and B. Poissonnier, CFEE; synthesis: B. Poissonnier, CFEE)” (Poissonnier, 2012: 66) (modified after Poissonnier, 2012).

4.11 THE WORKS OF HAMBURG ARCHAEOLOGICAL MISSION TO AXUM (HAMA)

The HAMA project began its archaeological excavation in 2000 at May Melahso at the foot of the eastern side of Biete Giorgis hill, and at Berik Awdi – north of the Tombs of Kaleb and Gebre Mesqel, under the direction of the late Helmut Ziegert.

The 2000 season archaeological excavation at May Melahso revealed a large building complex. During the same season through 2002, excavations carried out at Berik Awdi yielded much information (Ziegert, 2002, 2001; Wendowski and Ziegert, 2003). At Berik Awdi, two phases of monumental palace buildings were discovered – a first phase palace containing a royal grave, evidences of pre-Christian human sacrifices, and remnants of a Christian church. The site was reused during the Christian period during which a church was built over the royal grave. The entrance of the church was found to have been built of monumental staircases and contained a baptistery basin (Wendowski and Ziegert, 2003).

A second phase palace at Berik Awdi survived to a height of 4m below the modern surface level and exhibited an Aksumite rebated wall. The excavations at Berik Awdi during the 2001 and 2002 seasons yielded important information concerning metal smelting and fabrication. Here a 1m heap of iron slag was discovered on the surface; a copper ore, and smelted iron poured on the ground was also revealed by the excavation. It was hypothesized that the site of Berik Awdi was first abandoned during the pre-Christian period and the people moved to the town of Aksum where they constructed the first church and palace in the present Aksum Maryam Tsion church compound (Wendowski and Ziegert, 2003).

In 2003, the project opened trenches at the center of the town west of the church of Maryam Tsion at a site called Enda Azay³³. This was an open site where stone rubble from ancient ruins could still be seen on the surface. Excavation here was carried out for about three months as the result of which a ruined large Aksumite building with a recessed and rebated wall was uncovered. It survived to a height of about 2m below the present surface level. Artifacts were

³³ The researcher was involved in the excavations of Berik Awdi during the 2002 season and at Enda Azay in 2003 as antiquity officer of the Aksum Culture and Tourism office. Information about HAMA's excavation of 2003 is thus based on the researcher's participation and personal note.

collected from this site though publication of the excavation is still unavailable.

In 2008 the HAMA project conducted some test excavations at the Dungur palace with the objective of investigating an earlier structure below the structure excavated by Francis Anfray. Such test trenches were mainly laid out at the courtyard east of the central building, and some other trenches northeast corner of the Dungur palace immediately outside the fence wall, east of the present watching tower. Some earlier wall structures were revealed below the Aksumite building of Anfray's mansion (Ziegert, per. Comm. during on-site explanation, February, 2008; personal observation). Again no publication is still accessible for this excavation.

The excavations of HAMA project was continuing with interruptions; after some years of discontinuity the project carried out an excavation in 2010 at the Tombs of Kaleb and Gebre



(a)

(b)

Fig. 4.18 Ruined Aksumite palace at Enda Azay excavated by HAMA from January through March, 2003. This structure is about 2 meter high in the underground. Once the excavation season (2003) was completed, the structure was refilled back with earth and stones (photo: Hiluf Berhe, 2003).

Mesqel. Immediately to the east of the tomb of Gebre Mesqel, a shaft tomb was uncovered with burial (?) rooms located to the east and west of the shaft. The rooms are built of granite stones and are low in height. Although there was a plan to continue the excavation in April 2013, it was interrupted because of the untimely death of Helmut Ziegert on 30 March 2013.

4.12 EXCAVATIONS BY THE ETHIOPIAN CULTURAL HERITAGE PROJECT³⁴

The first excavation of the ECHP under the direction of Tekle Hagos was conducted at a site located north of the northern wall of the MSF, in the compound of the residence of *Dejjazmach* Gebreselassie Baryagaber. This excavation was initiated as an impact assessment to check the site for its archaeological significance before its destruction by the new Aksum Archaeological Museum to be built there. The test excavation was carried out between June 5 and July 15/2005 as the construction of the new museum was planned to be started in November 2005 (Tekle Hagos, 2008).

During the brief period of excavation, Tekle opened six trenches – all 4m x 1m large – and designated them as “HAW” to match with the designation of trenches by Chittick in the same area during the 1972-74 BIEA excavations. Tekle’s excavation revealed the presence of rock-cut underground tombs buried at least 4m below the modern surface level whose age were estimated to fall in the 3rd century AD. Four out of the six opened trenches were reported to have contained rock-cut tombs, in some of the trenches being found more than one rock-cut tomb (Ibid). Tekle’s excavation also pointed out that in some of the trenches roughly worked stelae associated with tombs were discovered. He found some of them fallen while others on standing position but buried at least 2m below the modern surface level.

Abundant artifacts of varied types, dated to between the 3rd and 4th centuries AD were collected from the trenches and the tombs, including local and imported pottery sherds with varied pattern and colors, human and animal bones, beads of different types and colors, iron knife, iron dagger, iron spearheads, human teeth, glass fragments, and bronze bracelets (Ibid).

In the same compound, Tekle cleared up and exposed some buried stelae where they were afterwards re-erected in the area. His excavation confirmed the existence of archaeological features and material in the deep underground where the new museum was planned to be constructed. Tekle then recommended the possibility of constructing the new museum around the excavated trenches instead of directly on the trenches where archaeological features were

³⁴ This was huge project with financial loan from the World Bank for Aksum, Gonder, Lalibela and Harer World Heritage Sites. The proposal was to work on heritage conservation and site management, training of personnel on the field, training of artisans and development of community-based tourism in each of the World Heritage Sites.

uncovered (Ibid)³⁵.

At the southeastern thrones around the original position of the stone inscription of king Ezana, the ECHP excavated the mound at Guangua Edaga whose existence has formerly been recorded (Littman *et al.*, 1913; Monneret de Villard, 1938; Michels, 2005). After two consecutive excavations in 2006 and 2007 between February and March each year, Tekle exposed a ruin of large Aksumite church (*fig. 3.4*) that measured 26m x 13m (Tekle Hagos, 2008). This ruin of an Aksumite church was called Arba'etu Ensesa. The excavation on this ruined structure was carried out with the objectives of identifying the ruin, to establish a relationship between the ruin and the stone thrones, and to justify a proposal by EHCP on fencing the site. The site was then excavated to a depth of 2.5m below the present surface level and revealed such large ruined structure of an ancient church (Ibid).

The church was built of rebated wall with finely dressed cornerstones from outside, and contained eight rooms and eight piers. The rooms were reported to have been in different sizes and used for different functions; one room was built particularly deep in the ground accessed by seven staircases, which Tekle interpreted as a treasure room. Some artifacts were collected from the ruined structure, including glasses, metals, coins, beads, grinding stones, polishing stones, bricks, bronze cross, iron fragments, metal nails, bones of domestic animals, lithic artifacts, local and imported pottery sherds. Comparisons based on the artifact typology and architecture of the Aksumite churches produced dating of the church to between the mid-6th and 7th centuries AD (Ibid).

On the same site, the project conducted some clearance works on the site of throne 23. This throne was made of two separate stones and both the throne-base and the seat contained Ge'ez inscription which the DAE designated as inscription 12, 13 and 14. The throne-base was split into two and each piece was designated inscription number 12 and 13, while the seat was

³⁵ Recent observations on the result of the excavated test trenches of Tekle and the newly built Aksum Archaeological Museum could be added here. Tekle's proposition did not save the underground rock-cut tombs from destruction as a consequence of the construction of the new museum. The new museum was constructed soon after the test excavation was completed, and some of the trenches were incorporated inside the museum display room. The trenches were left open so that tourists would be able to see from atop. As the western wall of the museum building rested on the edge of the trenches, the trenches became at risk: the earth on the western side of the trenches fell down, and the trenches are subsequently completely backfilled.

designated inscription 14 (Phillipson, 1997). The seat has since been obscured in the ground by deposits until it was cleared up and fully exposed again by the EHCP in February 2006 (Tekle Hagos, 2008). In the post excavation, the throne was fully sheltered by newly constructed house by the same project. A large shelter of metal sheet was also constructed to shelter the excavated church of Arba'etu Ensesa. Both are now open to the public while a short fence around the whole site was built to keep children and animals away.

4.13 EXCAVATIONS BY AKSUM UNIVERSITY (AkU)

In January 2013, AkU received a report that an opening was exposed after a vehicle broke a large stone slab 18 meters directly north of the tombs of Kaleb and Gebre Mesqel. Following this, a rescue excavation was conducted by the Department of Archaeology, by which a cruciform shaft tomb was uncovered. Subterranean burial chambers were discovered in this tomb. This was cut in the volcanic tuff bedrock. To the northwest and northeast of this shaft tomb, other tombs were partially cleared up and left for further excavation program. East of the northeastern corner of the Kaleb and Gebre Mesqel tombs fence wall, immediately south of the pathway to *Abba* Liqanos, the team exposed a monumental staircase that possibly leads to an elite structure on the platform above it (Walker *et al.*, 2013).

4.14 EXCAVATIONS BY ETHIOPIA EXPLORATION FOUNDATION AND AKSUM UNIVERSITY (EEF/AkU)

This is a joint project of EEF (Korea) and AkU that began the first season of excavation at Ta'aka Maryam ruined palace. The objective is to re-expose the previously cleared and planned ruined palaces by DAE, so as to contribute to heritage management and the promotion of Aksum's heritage endowment for international tourism. The site of Ta'aka Maryam has been completely overlaid by houses after 1906. Only recently, the Culture and Tourism office relocated the people and all houses demolished in order to prepare the site for excavation and heritage management. Fence wall was built round the whole site.

At the western edge of Ta'aka Maryam, the project opened three areas, designated C, S, and W (*fig. 4.21*). Within these were laid out seven squared trenches. The excavation was carried out from February 17 through March 15, 2014. Accordingly, structures began to appear after 30cm

of excavation down from the present surface level. At area S, steps (two complete, and a third step partially missing), and a drainage carved out of granite stone were revealed. Possibly in their original context, Endybis silver coin, and two other bronze coins came to light (Koh, 2014).

In area C, recent wall structures and rooms built at different periods, ash pits, brick structures and small finds were discovered. This area is entirely found to be from recent period (Ibid). Perhaps, the ancient structure is located deep below this recent structure.

Area W was also marred by modern period constructions. Different periods of walls, paved floor, and rooms were revealed indicating that the site has undergone immense destruction as the result of continued settlement on it (Ibid).



Fig. 4.19 Steps and drainage in area S at Ta'aka Maryam re-exposed by EEF/AkU in 2014 (view from north) (photo: Hiluf Berhe, 27/09/2014).

Fig. 4.20 plan of the excavated areas at Ta'aka Maryam by EEF/AkU in 2014 (adapted from Koh, 2014)

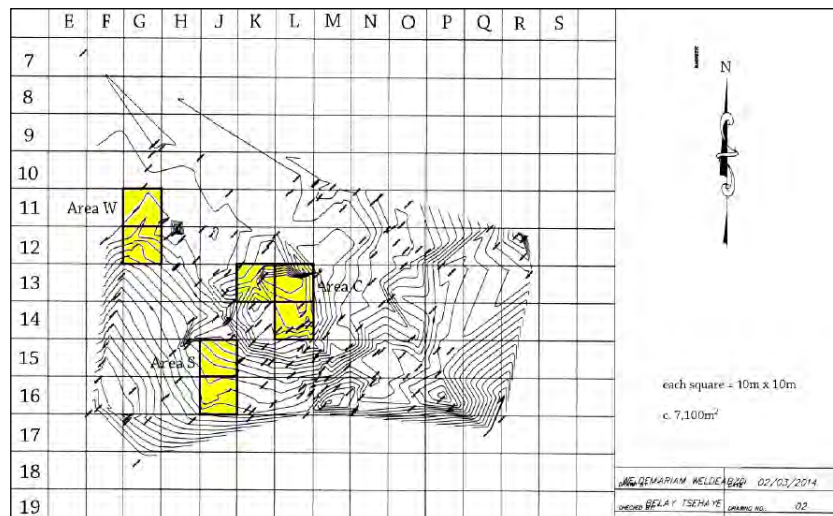


Table 4.1 Category of major sites by zone in Aksum and its vicinity mentioned in chapter 4.

Zone	Site	Note	Zone	Site name	Note
West	Grave of Menelik I Dungur palace Gudit Stelae Field Addi Kelte Gual Gobo Dura site Lioness of Gobo Dura Gobo Dura stelae quarry site Gobo Dura rock shelter Ba'ahati Neba'et Gual Gobo Dura site	Sites west of May Lahlah stream	Biete Giorgis	Ruins E and F Ona Negest Ona Enda Aboi Zewge Tikul Emni Gudguad Agazen, Qelqel Asba.	
Southeast	Thrones 16-25 Daero square Ezana stone inscription Guangua Edaga Tomb of Bazen Southeast stelae field Ezana Park* Abune Pentelewon monastery Anqar Ba'eti	Sites E and SE of May Hejja and May Metere stream	North	Enda Yesus stelae field Gheleb Emni stelae field Geza Agumai stelae field May Shum water reservoir and rock-cut steps May Koho rock-cut steps May Koho rock-cut tomb Kidane Mehret "D" site Ezana stone inscription Addi Guatiya Tombs of Kaleb and Gebre Mesqel Me'elan Debas Berik Awdi May Melahso Addi Tsehafi	
Central	Ta'aka Maryam Enda Michael Enda Sem'on Ruin A Ruin B Ruin C Ruin D Hill of ruins Hawelti site Nefas Mawcha The Mausoleum "K" site at Maleke Aksum Tomb of False Door Tomb of Brick Arches Stone thrones 1-15 Enda Azay Wondimhunegn Tomb of Etyopis Main stelae field Church of Maryam Tsion Enda Yesus church Dejj. Gebreselassie compound				

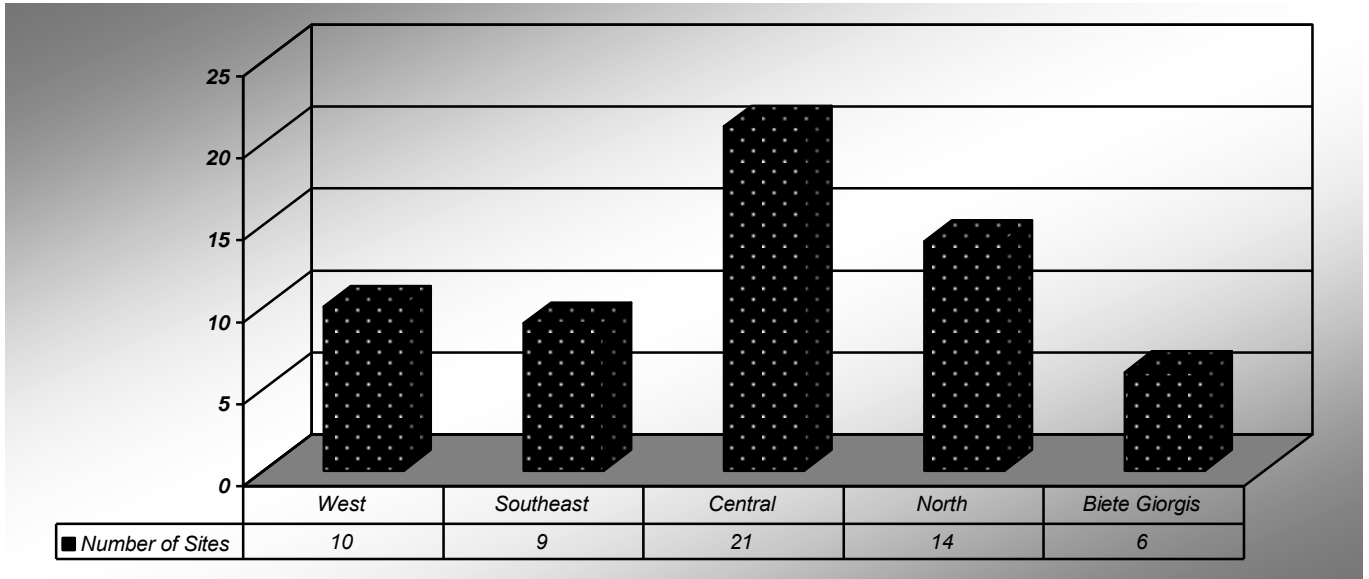
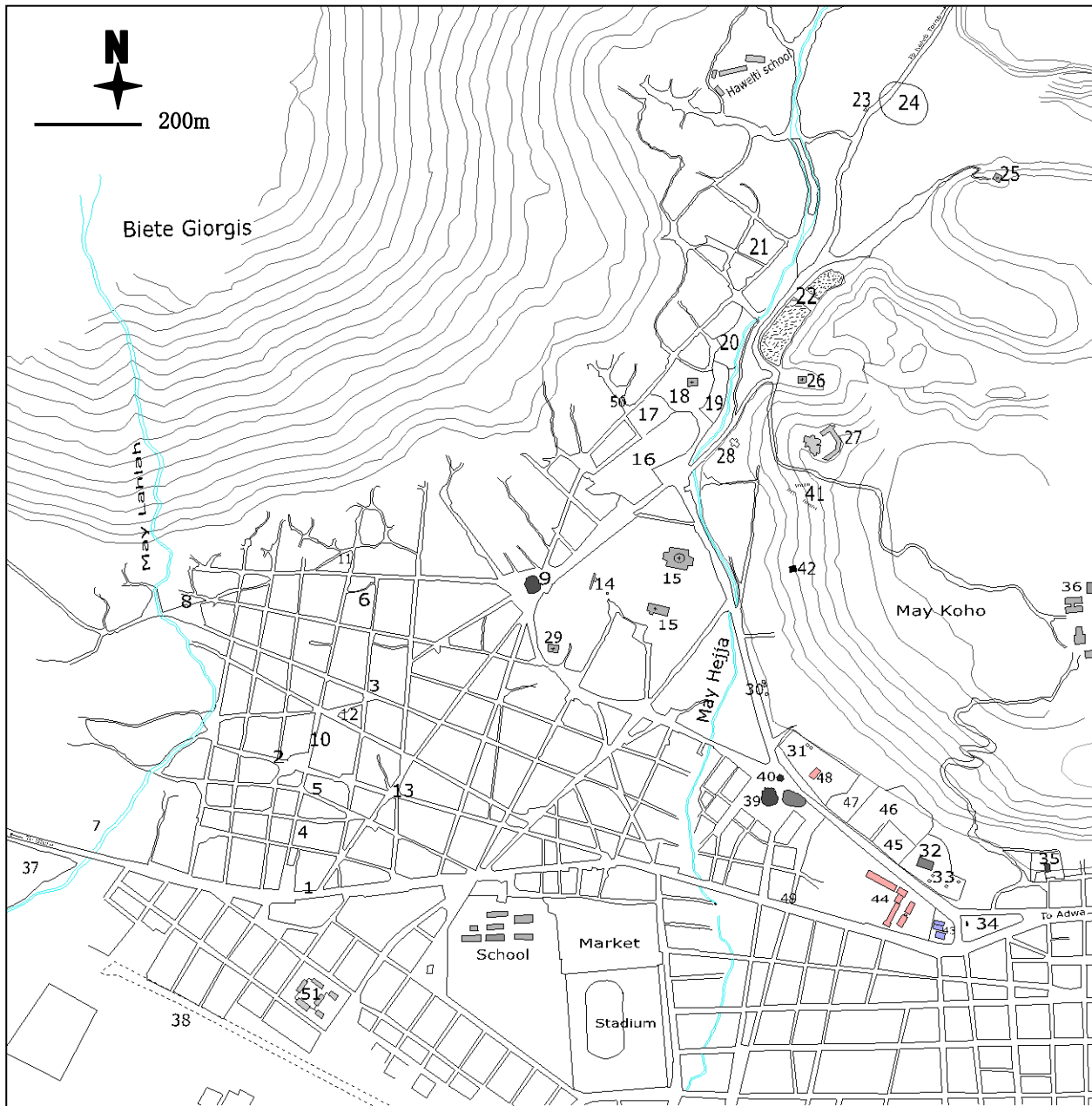
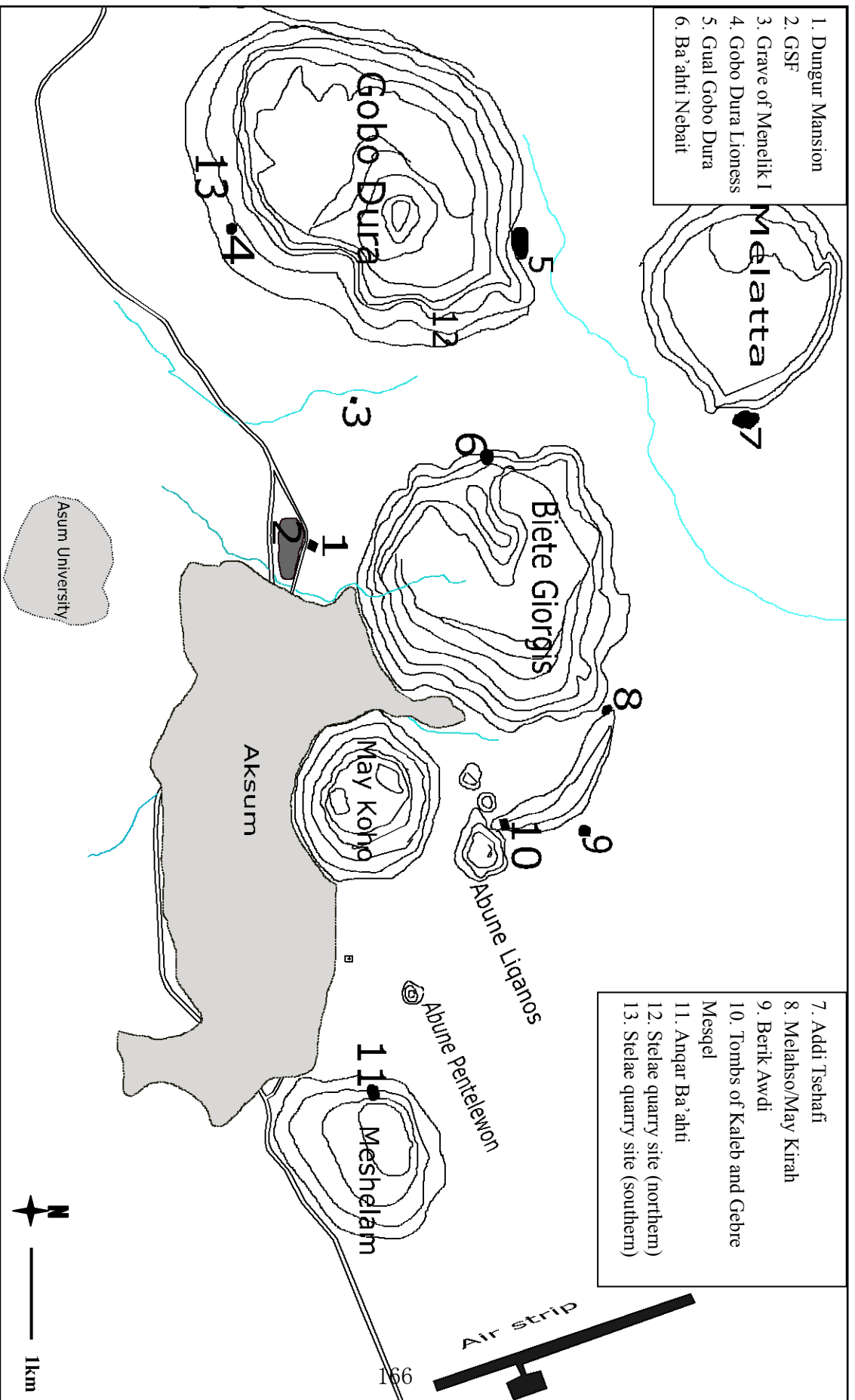


Table 4.2 Chart depicting the number of sites in each zone as classified in table 4.1.



<ol style="list-style-type: none"> 1. Ta'aka Maryam 2. Enda Sem'on 3. Enda Michael 4. DAE building A 5. IW sites (BIEA, 1974). 6. Enda Azay Wondimhunegn 7. Puglisi's site 8. Tomb of Etiopis 9. Daero Ella square/St. Yared pillar 10. DAE building B 11. K site 12. DAE building C 13. ES site (BIEA, 1974) 14. Stone thrones 15. Maryam Tsion church 16. Stelae Park 17. <i>Dejja</i>. Gebreselassie compound 18. Enda Yesus church 	<ol style="list-style-type: none"> 19. Enda Yesus stelae group 20. Gheleb Emni stelae group 21. Geza Agumai Stelae group 22. May Shum 23. Ezana stone inscription 24. D site Kidane Mehret 25. Kidane Mehret church 26. Abune Aregawi church 27. Yeha hotel 28. Patriarch's residence/ P site 29. Arba'etu Ensesa church 30. Stone thrones (nos. 16-18) 31. Stone thrones (nos. 19-20) 32. Guangua Edaga ruined church 33. Stone thrones (nos. 21-5) 34. Ezana Park 35. Tomb of Bazan/SE stelae field 36. May Koho Business College 	<ol style="list-style-type: none"> 37. GSF 38. Old airstrip 39. Daero Piazza 40. Modern fountain 41. May Koho rock-cut steps 42. Unfinished rock-cut tomb 43. Tele. Office 44. Abreha we Atsbeha school 45. Water enterprise office 46. Police office & Prison center 47. Justice office 48. Axumite Heritage Foundation library 49. H site 50. HAW site 51. Health Center
--	---	---

Map 4.3 Location of sites and other landmarks in the town (Drawing: Hiluf Berhe, June 2015).



Map 4.4 Location of sites outside the main town center. The town size is the latest (2015) with a new highway road passing along the current southern limit of the town (Drawing: Hiluf Berhe, 10/06/2015).

CHAPTER FIVE

DESCRIPTION, ANALYSIS AND INTERPRETATION OF THE CHANGES ON THE ARCHAEOLOGICAL AND HERITAGE LANDSCAPE AND MONUMENTS AT AKSUM: CASE STUDY OF THREE SELECTED SITES.

“Because of combined natural and cultural factors the archaeological area of Aksum is the result of a long process of landscape modification on a regional scale, and deposition formation on a site scale, and thus requires careful preservation. The entire area is also exposed to environmental hazard that must be carefully investigated to assure a proper management of the archaeological resources” (Fattovich *et al.*, 2000: 45).

5.1 Introduction: The general Landscape changes constantly through natural-transforms and human-transforms, whether these occur gradually or precipitously (Aston, 2002). Landscape change is a continuous process but very gradual; some landscapes are shaped by nature when humans abandon them, while others are dominantly shaped by man. Their result is then often seen in landscape pattern (Küster, 2004).

Landscape is a general term that may include different features of a given space, such as historical geography, cultural ecology, settlement patterns, regional and environmental archaeology. Recently, however, this approach has become a more specific discipline, commonly termed “landscape archaeology”. This new approach was widely used in Britain, and to some extent in North America (Grzymski, 2004). The social and cultural product of landscape is “a pictorial way of representing, structuring or symbolizing surroundings”. It is also “a way of seeing projected onto the land and having its own techniques and compositional forms; a restrictive way of seeing that diminishes alternative modes of experiencing our relations with nature” (Cosgrove 1984: 269). The study of landscape archaeology enables us to see the multilayered human occupation in a given space; it always deals with a visual construct (Porteous, 1990: 4). Humans have influenced their surrounding landscape during their interaction with the environment; landscape archaeology also studies such variables of human-environment interaction (Ingold, 1993).

The definition of landscape archaeology differs among different scholars (Hu, 2011). Some scholars define it more specifically relating to the physical landscape, while others define it holistically. Probably the most all-encompassing definition of landscape has been forwarded by Shanks:

“...landscape is a syncretic field. The space of landscape is at once cultural and natural, connecting values, modes of perception and representation, experiences, artifacts, histories, natural histories, dreams, identities, narratives, memories in networks of cultural ecology. ...landscape is a multitemporal and complicated, folded cultural topology” (Shanks, 2001: 293).

In their definition, some scholars see landscape as quantifiable, while others see it as qualitative (Tilly, 1994: 14). Recently, many literatures have appeared on the theory and practice of landscape archaeology, whose popularity has attracted the use of different methodologies, such as Geographical Information Systems (GIS) (Hu, 2011; Grzymiski, 2004).

Landscape archaeology critically observes what lies beyond a site. Humans have interacted with their landscape, and thus some traces are left on the site. Landscape archaeology thinks of the successive layers of human settlement in a given site holistically (Johnson, 2005: 116). The layer of landscape revealing the history of human occupation can also be defined as:

“a document that has been written on and erased over and over again; and it is the business of the field archaeologist to decipher it. The features concerned are of course the roads and field boundaries, the woods, the farms and other habitations, and all the other products of human labor; these are the letters and words inscribed on the land. But it is not easy to read them because, whereas the vellum document was seldom wiped clean more than once or twice, the land has been subjected to continual change throughout the ages” (Crawford, 1953: 51).

Landscape reflects temporal change. As a result, its preservation and continuous restoration is an essential part of archeological study. The cumulative effect of its neglect may seriously result in the instability of structures and monuments in particular and the composite landscape in general (Grant *et al.*, 2008; Küster, 2004).

Relatively large-scale survey projects carried out in Tigray with the objective of understanding the settlement pattern of early communities and distribution of sites were those Axum-Yeha Region (Michels, 2005), Eastern Tigray (D'Andrea *et al.*, 2008), and Western Tigray (Finneran, 2005).

However, more specific researches targeting the investigation of landscape archaeology have been carried out on top of Biete Giorgis hill (northwest of Aksum) and at Lalibela. In the former place, the IUO/BU has investigated the “ancient land use pattern” (Fattovich *et al.*, 2000: 41). In Lalibela, a recent archaeological landscape investigation seems to have answered the search for the occupational history of Lalibela. The research revealed that a wall existed before the carving of the monolithic churches of Lalibela. The wall was found overlaid by a spoil heap of two phases clearly separated by soil deposit. The authors added:

“While in numerous places we cannot distinguish what was there before, there remain certain “anomalies” or superimpositions that correspond to the last marks left by the previous carving phases which enable us to affirm that the site of Lalibela never ceased to evolve through time. The apparently logical and simple observation that the Lalibela of today does not resemble the site as it would have been in the 13th, 16th or early 20th centuries is an essential step in the construction of our methodology. We are not dealing with a site that was occupied only during a single period and was then abandoned. The occupation was continuous and the adaptation of the spaces was therefore also continuous. In addition, the struggle to preserve the monuments has been a constant concern, as is reflected by numerous redevelopments, particularly the deepening of courtyards and trenches” (Bosc-Tiessé *et al.*, 2014: 143).

At Aksum, the investigation in archaeological landscape is still unknown practice (Fattovich *et al.*, 2000: 41); excavations there have been largely involved in unearthing known elite structures (Phillipson, 2000, I). The Aksum archaeological landscape is comprised of different components, such as settlement patterns, ceremonial and worship centers, burial and cemetery areas, ancient and modern pathways, modern vehicular roads, small streams, cisterns and wells, and agricultural terraces and fields. All these are the results of temporal change, and reflect land-use

patterns at least for the last two millennia by successive generations. However, no attempt has so far been made to study the history of archaeological landscape of Aksumite archaeology, except that of the IUO/BU that conducted landscape investigation at the top of Biete Giorgis (Fattovich *et al.*, 2000: 41).

The archaeological area of Aksum is the result of a long process of modification due to natural and cultural factors, including archaeological excavations. Its continuous recording and description is indispensable, since natural and cultural changes are inevitable (Phillipson, 1997).

This chapter gives a detailed description, discussion and analysis of changes in the archaeological landscape, monuments and associated features that have occurred since the remote past. It is not easy to imagine and reconstruct what the modified landscape looked like, but an attempt will be made as a springboard for future research on the same topic and area. Data for this study is mainly extracted from old accounts (descriptions, maps, sketches, photographs), archaeological excavations carried out by different archaeological projects at different periods, current fieldwork and personal observation by the present author during the last eight years of work experience in the town.

This case study focuses on three selected sites with the conjecture that great change could have occurred to such sites due to their location and rich content of cultural remains such as in tombs; these selected sites also represent different archaeological features – stelae and cemetery sites, cemetery and palace or church sites, and coronation sites. We have great deal of sources for these sites, such as ancient literary documents, legends, and archaeological and geo-archaeological studies helpful for recording and description. Although ancient literary sources exist for each site, no archaeological excavation has been carried out on the coronation site as it is located within the sacred enclosure of the church of Maryam Tsion. This study attempts to provide qualitative and quantitative analyses of the results.

5.2 The May Hejja Archaeological Site: The landscape complex of the May Hejja archaeological area ranges from a small stream, scattered and rows of trees, the church area, rows of monuments, a cemetery area, a settlement area and a cistern, to a hill on the opposite side of the MSF. For reasons of time and space, this section excludes the cistern of May Shum and the hill of May Koho. The grouping of the May Hejja archaeological area into MSF, Enda

Yesus, Gheleb Emni, and Geza Agumai is adapted from Chittick (Chittick, 1974; Munro-Hay, 1989).

5.2.1 Ancient written documents, maps, photographs and legend: One ancient written document about Aksum recording the inventory of stelae and other archaeological remains as well as the church of Maryam Tsion is the *Liber Aksumae* (Conti Rossini, 1910: 1). It is not possible to clearly understand how the ancient landscape of the MSF might have looked like during the 15th century AD, when this document is believed to have been written. This document tells us that there were 58 stelae – some lying on the ground and others still standing. Although this inventory is not supported by maps or detailed descriptions of the location and arrangement of the stelae¹, it helps greatly to have an impression of their condition during the 15th century AD. We can infer from the description that destruction of stelae had already occurred by that time.

Based on the description in the *Liber Aksumae*, archaeologists can sketch the stelae to envision their possible appearance and condition. Those standing during the 15th century could have fallen subsequently and movement of monuments could have been very minimal, but it is unimaginable that those already fallen during the period under discussion would have been re-erected subsequently, except some (discussed below) in the mid-20th century. We are unsure whether the MSF was protected as a stelae field or occupied by inhabitants².

The document also gives the description of an underground “house” (? tomb), stating that a great “house” is located at the base of the great but broken obelisk. The document informs us that the great “house” has four corners leading to four different directions and at each corner are also four other great “houses” (Ibid, 4) (see chapter 3 for detail). This most likely refers to the recently excavated underground tomb found at the base of the great stela (stela 1) first located and

¹ The document refers to an obelisk as “...great obelisk which is broken...” (Conti Rossini, 1910: 4). This possibly refers to the great obelisk (stela 1), discussed in this section.

² It is very logical to say that the burials discovered around the Nefas Mawcha could belong to Muslim people killed during Ahmed Gragn’s war in 1535, since it is not customary to bury Orthodox Christians outside a church graveyard. If the assumption is true, then it appears that the MSF may have been unoccupied because, had it been (as clearly seen during the early 20th century), people would not have been buried there. Thus, occupation could have taken place some generations after the 1535 war. Photographs by the DAE show that the Nefas Mawcha area (where the burials are located) was used for fence walls and gatehouses while the houses were built on the platform. Jacke Phillips suggested that the burials probably date between 15th and 19th centuries, ceasing to be used as cemetery before the end of 19th century (Phillipson, 2000, II: 519). Detail interpretation is presented in the following sections to support the idea that MSF was already occupied in 1893.

partially cleared by Chittick (Chittick, 1974; Munro-hay, 1989) and then fully excavated by BIEA during the 1990s (Phillipson, 2000: I, 165-93). This underground tomb, called the Mausoleum (Chittick, 1974:180), has long central corridor, and five rooms either side of the main ‘corridor’ oriented NNW-SSE (*chapter 3: 13-4; fig. 3.5*).

This description by the *Liber Aksumae* is most possibly based on an existing legend; had it been open during the 15th century, then Alvares would have visited and described it during his visit to Aksum in 1520. Thus the description is not informative about the physical landscape of the area around the Mausoleum.

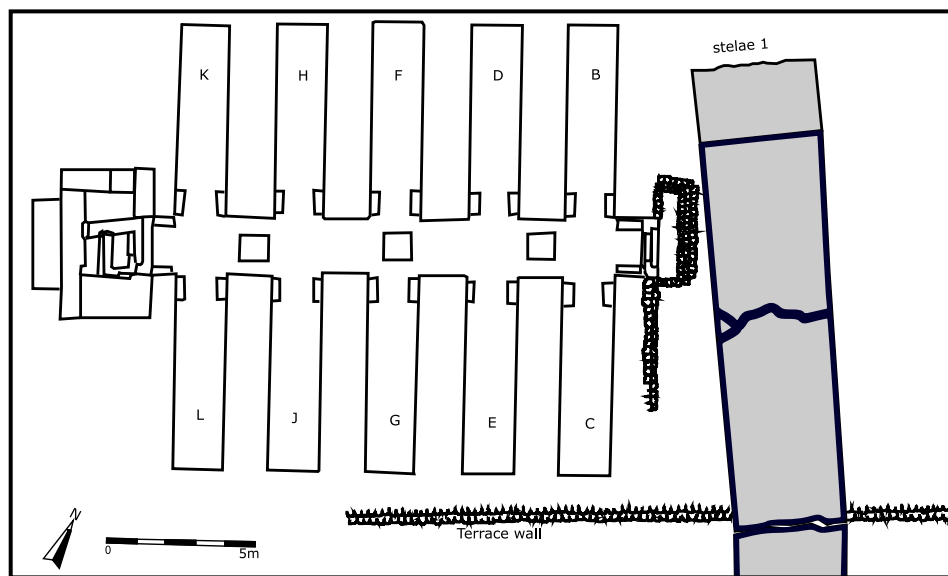


Fig. 5.1 Plan of the Mausoleum; the three squares at the center are shaft holes; the rooms are labeled with letters. The reference to the rooms is adapted from Phillipson (Drawing: Hiluf Berhe, 2015, after Phillipson, 2000, I: 165).

Liber Aksumae mentions no other structures in the May Hejja archaeological area. Even the church of Enda Yesus is not included in the *Liber Aksumae*'s list of churches. Therefore, it seems that the church must have been built afterwards. On the other hand, underground tombs discovered in the MSF (*op. cit.* Chittick, 1974; Munro-Hay, 1989; Phillipson, 2000: I) could have been totally obscured by soil deposition from the hill of Biete Giorgis.

An account of the stelae also was made by Father Francisco Alvares in 1520 (Alvares, ed. Beckingham and Huntingford, 1961: 155-8). Alvares' description of the stelae mainly focused on the architectural style and size of the largest three stelae (*Ibid*). He recorded that there were

over 30 other stelae when he was at Aksum, and three largest were carved and decorated. Alvares recorded that most stelae, and particularly stelae 1 and 2, were lying on the ground. This description of the largest stelae during the specific year 1520 provides a perfect picture of how such stelae appeared in early 16th century.

Although Alvares records only a small number of stelae, his description that some stelae lay on the ground and a few still stood confirms that their destruction is not solely a recent phenomena, but rather already had occurred before 1520. On the other hand, Alvares never mentioned other structures in the May Hejja stelae field. Thus this does not help to provide a clear picture of how the landscape of the MSF surrounding the stelae appeared in 1520.

A century after Alvares, Manoel de Almeida visited Aksum during his stay in Ethiopia from 1624-1633. Almeida presents us with a much smaller count of stelae than his predecessors. He recorded some 20 stelae standing and “seven or eight” broken and lying on the ground (Almeida, ed. Beckingham and Huntingford, 1954: 91). Although Almeida’s figure on standing stelae is very précised than the preceding documents recorded, it is not clear whether they were all located in the May Hejja archaeological area or his count includes stelae from the southeastern and western (GSF) stelae fields. If the count includes only the former, then he may have visited the entire archaeological area of May Hejja which may not have been covered by houses during his visit. According to the DAE, and as updated by the BIEA in the 1970s, the number of standing stelae of May Hejja archaeological area is 27 (Littmann *et al.*, 1913: II, 1-43; Plant, 1985: 215-20; Munro-Hay, 1989: 340-6).

Almeida also confirmed Alvares’ record of the condition of the largest stelae that they were fallen and broken into pieces. His record, though still too brief, gives an idea of the distribution and condition of the stelae in the May Hejja archaeological area as can be seen today. Almost all the standing stelae recorded by DAE were found to be in a similar condition (but two have fallen since then) by the 1970s’ BIEA project. Those updated by the BIEA during the 1970s were revealed by excavation, and others have been obscured by houses and fence wall; almost all discovered by the BIEA lay on ground (Plant, 1985: 215-20; Munro-Hay, 1989: 340-6; Phillipson, 1997: 11-59).

James Bruce, the Scottish explorer, was another traveler who visited Aksum in January 1770 (Bruce, 1790, III). His contribution to the understanding of the archaeological landscape of the May Hejja area is very poor. Bruce recorded that he has seen 40 obelisks in a square in front of the church of Maryam Tsion; no additional information is given about their condition and their surrounding landscape, except that the two largest carved stelae were lying on the ground. His illustration of the third largest stela (stela 3) was even illustrated without its surrounding landscape and stelae.

Henry Salt, a British traveler, was in Aksum in 1805 and 1809 (Valentia, 1809, III; Salt, 1814). His record of the archaeological area of May Hejja was the earliest to include both illustrations and a plan. His inventory of the stelae was limited to the first seven decorated stelae, and although he did not describe them, he produced three lithographs of the third largest stela (stela 3) and its surrounding landscape as viewed from three different directions (*fig. 3.12*).

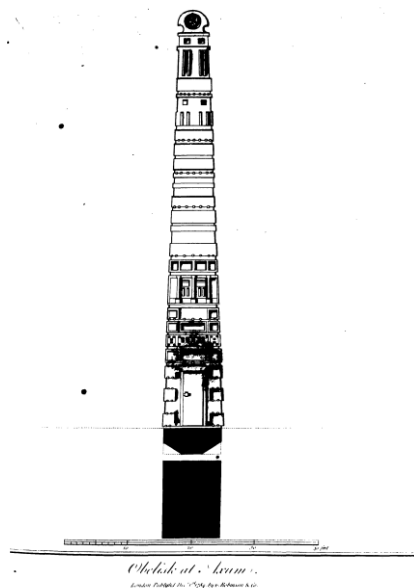


Fig. 5.2 Bruce's illustration of stela 3 (adapted from Bruce, 1790: 130/1)

From Salt's illustration and map, the landscape of the May Hejja archaeological area included the stelae, the May Hejja stream, a path to the tombs of Kaleb and Gebremesqel, and the May Shum reservoir (*map 3.3*). From illustration (*fig. 3.12: a*), viewed from the southwest, it appears clear that the May Hejja archaeological site was then free of houses and the present church of

Enda Yesus. The stelae area was dominated by a big *warka*³ tree which is seen right beside the largest carved standing stela (stela 3). The stelae north of stela 3 are visible both erect and leaning. In the foreground of illustration, stelae 1 and 2 are visible lying on the ground, but no houses are can be seen on or around them.

The illustration also shows that the area dominated by the stelae was relatively flat in AD 1805. Houses were extant on the hillside of Biete Giorgis, north-west of the May Hejja stelae area. On the other hand, the May Hejja stream that today passes close by the stelae near the Enda Yesus church and erodes their bases may have been a recent development. On Salt's map, the then small stream springing from the May Shum reservoir also was further east of the May Hejja stelae field. When the stream possibly was completely blocked afterwards and when the reservoir was enlarged in recently⁴ (Munro-Hay, 1991: 106; Phillipson, 1997: 159, note 244), the force of the resulting flood must have created a new stream between the stelae area and the reservoir. A photograph of the May Hejja area taken by DAE in 1906 (Phillipson, 1997, figs. 11,14, 22,72,75) shows that the beginning of the stream was forming a very shallow path. On both Salt's illustration and DAE's photographs, the May Hejja area along the stream was bare and relatively flat.

Illustration (b), with a view from the northeast to the church of Maryam Tsion (left, center), shows that the stela on which people are standing (foreground) is most likely stela 5, since stelae 33-35 are visible on the foreground, left edge of the illustration. If this is so, then the illustration confirms that the church of Enda Yesus was not extant by then, and that the stelae area around the present same church was free of any built feature.

The archaeological landscape of May Hejja changed considerably sometime between AD 1805 and 1893 – the latter being the year when Theodore Bent visited Aksum (Bent, 1896). Bent stayed in Aksum for ten days recording and documenting its antiquities. His description, illustrations, and photography of the archaeological area help greatly to understand changes in the landscape after AD 1805.

³ This is very large tree indigenous to Ethiopia and whose perimeter of stem reaches up to 20 meters. It has largely expanding branches, big leaves and edible fruit liked by both humans and animals (especially monkeys and birds). It grows abundantly at altitudes between 2000 and 2300 meters above sea level.

⁴ DAE photographs from 1906 show that the wall of the reservoir was built of dry masonry, but subsequently it was plastered with cement.

Bent's 1893 record shows that the stream that once sprung from the May Shum reservoir as recorded in 1805 by Salt had already changed its course. Bent tells us that the stream was flowing close by the stelae and he even opines that soil erosion caused by the stream could have been the reason for the fall of some stelae along its bank. According to Bent's record, the top part of stela 5 (*fig.5.3*) already had fallen into the stream (Ibid, 190). Thus it appears plausible that sometime after AD 1805 the stream of May Hejja gained another source of water and changed its course.

The MSF was already occupied by houses before AD 1893, including that of *Ras Alula*⁵ (Ibid, 187). Houses were already built west of stela 3 sometime after AD 1805. Bent's photographic record shows that walls have been built beside and on top of stela 1 (*fig. 5.4*). Bent ornately described *Ras Alula*'s house as built just beside stela 2.



Fig. 5.3 Top of stela 5 as photographed by Bent in 1893, fallen on the stream bed. Note: the stream was still shallow and the stela fragment was still fully visible compared to its recent condition, as discussed in the following section. The slope of the stream bank behind the stela to the left was gentle and the mainstream bed with rocks and seated people behind the stela was comparatively leveled (adapted from Bent, 1896:189).

⁵ *Ras Alula* was the renowned Ethiopian hero of the 19th century who is also nicknamed the “General of Africa”. He fought in many battles for Ethiopian independence against the Egyptians, Sudanese Mahdists, and Italians. After the greatest victory of Adwa in March 1/1896, *Ras Alula* was wounded in the fight against *Ras Hagos* in Shire and died in February 1897.



Fig. 5.4 Stela 1 in 1893: (a) top view of the lower part with the portal of the false door; (b) side view of the mid-part. Walls seen on this photograph existed until 1906, when it was photographed by the DAE team, discussed in the following section (adapted from Bent, 1896: 187,191).

On the other hand, Bent's photograph of stela 3 shows that the big *warka* tree illustrated by Salt in 1805 no longer existed in 1893. It could have been intentionally cut down or fallen naturally within the 85 years between 1809 (during Salt's second visit to Aksum, when he produced another illustration of the stela) and 1893. Unfortunately, the effect of this *warka* tree on the stelae when it fell down is not recorded.



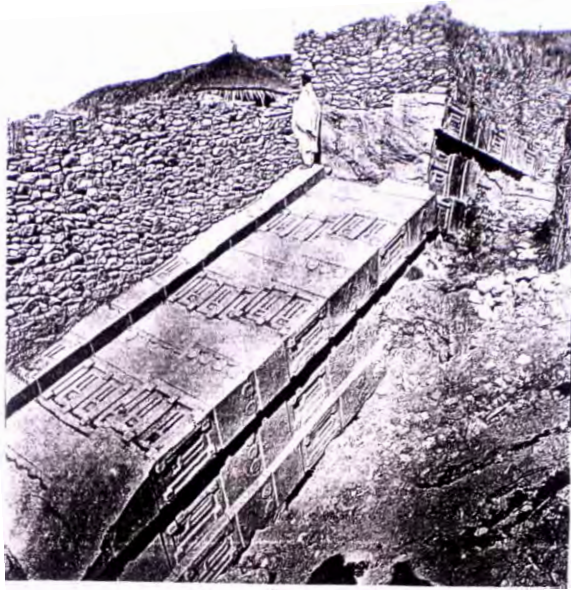
Fig. 5.5 Stela 3 photographed by Bent in 1893. Note: the area surrounding the stela is clear of any tree and house; for comparison, see *fig. 3.12 (a), (b)* (adapted from Bent, 1896).

Bent's general description of the stelae in the May Hejja archaeological area provides additional data for understanding the landscape and condition of the stelae at that time. According to his record most of the stelae, once in open fields during Salt's visit, were hidden amongst buildings and some also buried in the ground, which made counting them difficult. It appears evident that many houses were built in the MSF around Enda Yesus church, Gheleb Emni and Geza Agumai after Salt's visit.

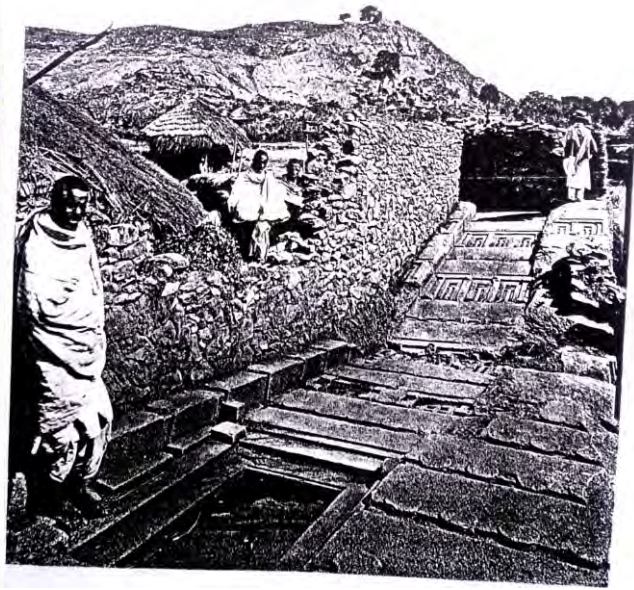
5.2.2 The DAE archaeological records: in 1906, the DAE made the major record of the May Hejja archaeological area (in terms of photography, measured reconstructions of the stelae, drawings and maps) (Littman *et al.*, 1913: II; Phillipson, 1997). The position, appearance and condition of each stela enumerated by the team was drawn, sketched, photographed and mapped. The team also made clearances around some stelae⁶. Most importantly, their panorama of the town in general and of the May Hejja archaeological area in particular provided very accurate and detailed information about the landscape and townscape of Aksum at that time.

To start with, description and photographs of the MSF by the DAE in 1906 indicated that houses were still dominating the area west of stela 3, as had already been described by Bent some thirteen years earlier. The team photographed and sketched many stelae partly obscured by houses. Only the immediate surrounding area of stela 3 and the area to its east and northeast had been spared from any construction. Stela 3 was separated by high walls from houses built on and beside stela 1 and stela 2 as well as by a large building and by the church of Enda Yesus located to its west, north, and northeast, respectively (*fig. 5.8*). Walls built on stela 1 and beside stela 2 seen by Bent were also seen by the DAE team in 1906.

⁶ For example, stelae 4, 6, 7, and 31 (see, respectively, Phillipson, 1997: figs. 22 and 24, 14, 56 and 58, and 72).



(a)



(b)

Fig. 5.6 Stela 1 photographed in 1906; (a) wall built on and beside stela 1; (b) top view of lower and second part; view from southeast and northwest, respectively (adapted from Krencker, 1913, II).



Fig. 5.7 Stela 3 and its surrounding in 1906, view from northeast (adapted from Phillipson, 1997: 26, fig. 29)

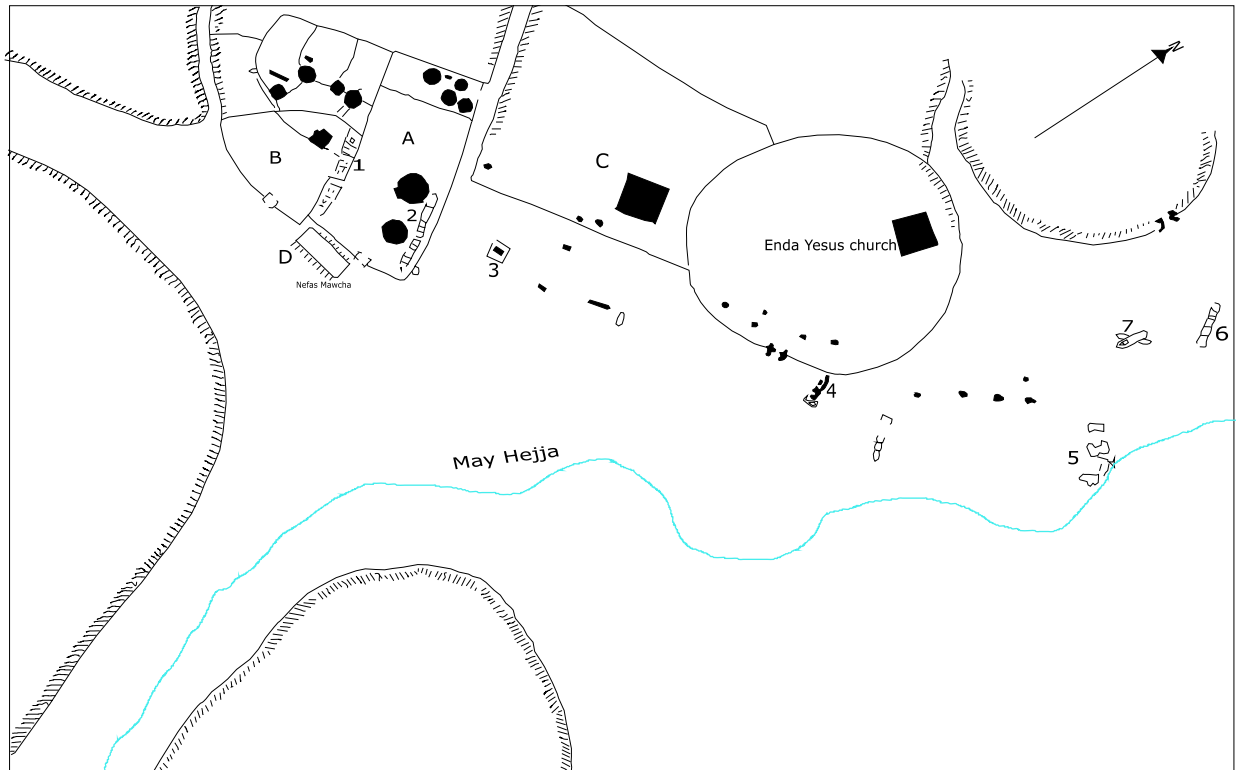


Fig. 5.8 Plan of northern stela field. Numbers 1 to 7 indicate the carved stela. Notice the wall separating stela 2 and stela 3. Stela 3 and some other small stela were scattered outside the enclosures indicated with letters A and C (Drawing: Hiluf Berhe, 2015, after Krencker, 1906, II: 6).

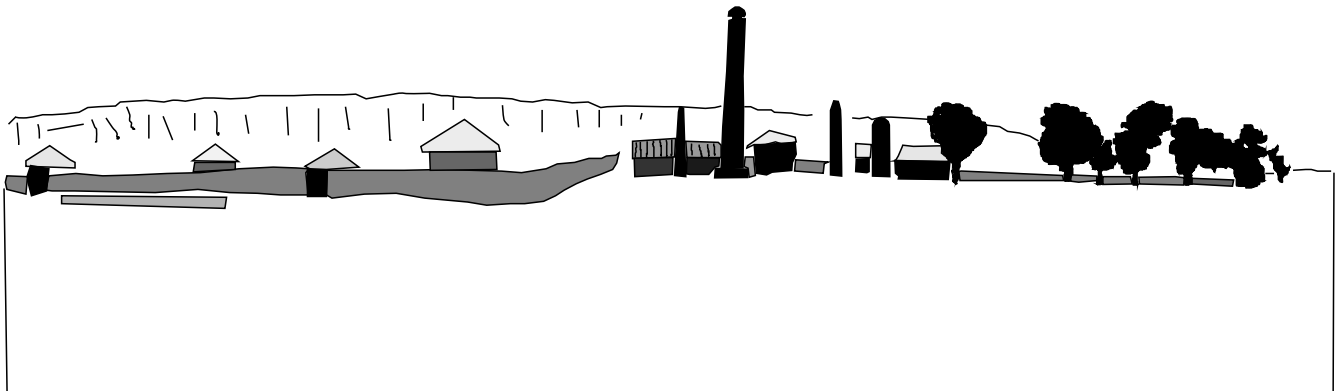


Fig. 5.9 Section of stela 3 and its surrounding. In front of the houses on the left foreground is Nefas Mawcha. The two gatehouses on the left side lead to enclosures A and B. The wall on the right side close by the trees is the fence wall of the church of Enda Yesus (Drawing: Hiluf Berhe, 23/06/2015).

The DAE team sketched and photographed the church of Enda Yesus, but was not mentioned before by other travelers. Although Bent was the last visitor to Aksum in the 19th century, his record of Aksum does not mention the church. It is hard to suppose that the church was not

extant during his visit, because the trees in the churchyard, seen in the DAE photographs, do not look like less than thirteen years old. Local history in Aksum, however, records that the church of Enda Yesus was erected during the reign of Emperor Yohannes IV (r. 1872-1889).

As the DAE photographs show, the area east of stela 3 throughout the Geza Agumai stelae field was treeless. The May Hejja stream was clearly seen running east of the Gheleb Emni stelae field. Stelae 6 and 7 were then free of houses and trees, but since then houses have been built just beside them. Photographs of the DAE also show that houses were round and had thatched roofs. According to the photographs and maps of DAE, the stelae field at Geza Agumai was not entirely occupied by settlement. It seems that more houses have been built at the present northern limit of the town and along the right bank of May Hejja stream since 1906.

By then (*i.e.*, 1906) the source of the May Hejja stream may have been the slopes of Addi Guatiya (northeast of May Shum) and eastern side of Biete Giorgis hill. The water reservoir of May Shum, which once was a source for a stream as mapped by Salt in 1805, was seen in 1906 totally blocked by an earth and masonry wall. The area between this water reservoir and Gheleb Emni stelae field was tree-less as photographs from 1906 show; the stream of May Hejja is shown flowing between the reservoir and the stelae (*fig. 5.10*). May Shum water reservoir was later reinforced with cement to stop water loss through the masonry wall and the earth.



Fig. 5.10 May Shum water reservoir (left) in 1906 before it was reinforced with cement, and Gheleb Emni stelae field (right). Stela 3 and the church of Enda Yesus are visible in the center background. The area between May Shum and the stelae field was still free of houses and tree-less in 1906. Notice the gentle slope and the stream bed of May Hejja east of the stelae (After Phillipson, 1997, figs. 22 and 157).

Photographs from 1906 show that few years before the arrival of the DAE, erosion around stela 5 may have been intense. The erosion was later aggravated between 1906 and 1960s until an attempt to control erosion was made towards the end of the latter year (Phillipson, 1997). The apex of stela 5 was still above the ground in 1906. Similarly, the photographs show that the area from Geza Shum Wossen all the way up the May Melahso along the May Hejja stream was free of houses, and tree-less.

5.2.3 The heritage and archaeological landscape during the Italian occupation: the archaeological area of Aksum in general and the archaeological landscape under discussion in particular suffered another change in 1937 due to the presence of Italians. New roads have been built over archaeological sites, monuments were displaced from their original positions and many archaeological features were destroyed, including the ruined palace of Ta'aka Maryam when the Italians built the Aksum-Shire road by cutting through the ruined structure (Monneret de Villard, 1938: 4, 6; Fattovich *et al.*, 2000: 46). The major known change in the MSF was the removal of stela 2 to Rome in 1937 (Fattovich *et al.*, 2000: 47). Not only was the stela itself removed, but in the process of arranging the stela for removal and transport many houses and other features surrounding it may have been cleared away without documentation.

The 1937 topographic map of Monneret de Villard and a photograph believed to be from the mid-1930s show that the landscape of the MSF has been re-aligned since 1906: houses in the MSF, as shown on topographic map and photographs of the 1906, had still separate compound surrounded by high fence wall but some houses were built after 1906 east and north of stela 3. A pathway passing immediately west of stela 3, and another further west of stela 1 are visible on Monneret de Villard's map and a photograph of the 1930s, unchanged from 1906. The photograph from the 1930s shows a small house at the southwestern corner of the fence wall of a vast compound (*fig. 5.8, enclosure C*) with a large house at its eastern corner and a one-storeyed house attached to the middle of its southern wall⁷. To the east of stelae 20 and 21, other houses could be seen which do not exist on the photographs of 1906, and a tree is clearly visible obscuring stela 21.

⁷ Based on the location and architecture, this is most possibly the present restored *tukul*, called *Dejjazmach Gebreselassie* house, which, since the establishment of the SP in the 1960s, has become outside the northern fence wall of the MSF.

No further detail information can be interpreted about any change on the archaeological landscape of the rest of the May Hejja archaeological area during the 1930s, and the topographic map of Monneret de Villard appears to show little difference from that of the 1906 topographic map of DAE.



Fig. 5.11 Aerial photograph of stela 3 and its surrounding in 1930s. The houses and the tree east of stela 3 were not extant in 1906. The big house to the left of stela 3 is most likely Ras Alula's house, described by Bent. Nefas Mawcha can be seen at the foreground in front of the gatehouse (source: available at: http://www.ebay.it/itm/Axum-gli-Obelisch-Axum-Obelisks-Guerra-dEtiopia-1935-36-Ethiopian-war-/201368957890?pt=LH_DefaultDomain_101&has h=item2ee28673c2 (accessed on 16/06/2014).

We are almost ignorant of the condition of the May Hejja archaeological area due to lack of data between 1937 and 1954; the later date was the beginning of EIA excavations under the supervision of French archaeologists. Before excavations began by the EIA, the first available photo is that of Jean Doresse taken from the air with the help of the Archaeology Section and Imperial Ethiopian Air Force (Doresse, 1956: 44-45). The aerial photo clearly shows that the houses west and southwest of stela 3 have been cleared away except one big house left at the northwest corner of the stelae field, and another small house north of stela 1 (*fig. 5.12*). The pathways and fence walls mentioned earlier in this section were still extant. A documentary film⁸ of the site aired in 19 September 1959 also revealed that even during the process of excavation in the Nefas Mawcha and stela 1 area, the area between stela 1 and stela 3 was used for cultivation⁹.

Doresse's photograph shows that the area southeast of stela 3 was still open and clear, but one development is visible in this photo: that many trees grew larger during the course of nearly fifty

⁸ I am grateful to Bertrand Poissonnier for this video, which is almost unknown.

⁹ Reportage sur les fouilles archéologiques du site d'Aksoum, antique royaume chrétien d'Ethiopie et sur le palais de Gondar, capitale des empereurs d'Ethiopie au 17ème siècle. Producteur ou co-producteur: RADIODIFFUSION TELEVISION FRANCAISE, directed in 19 September 1959; available at: <http://www.ina.fr/video/CPF86642672>

years between 1906 and 1954. The *warka* tree is visible on Doresse's photo partly covering stela 21. This tree is the same species to, and grew on the same place where the big *warka* tree seen in the lithograph of Salt (*fig. 3.12 (a) and (c)*) had grown partly covering the same stela. The tree on Doresse's photograph appears to have grown between stelae 21 and 24. The photographs and sketches of Bent and DAE in 1893 and 1906, respectively, show no tree between these stelae.

Other trees also grew larger northeast and west of stela 1, shown on Doresse's photograph. No concrete evidence exists when and by whom the houses, shown in the 1906 photograph of DAE, have been cleared away. Elders in Aksum say the houses were demolished by the order of *Dejjazmach* Gebreselassie Baryagaber soon after the DAE team left Aksum, while others say they were demolished by the order of *Ras Mengesha Seyoum* during the early 1950s shortly before the EIA excavations began. It is clear, however, from the photographs that the houses were demolished during the period after the mid 1930s and before 1954 (*cf. fig. 5.11 and 5.13*). Although it is very unfortunate that no concrete information is available on how and when stela 34 fell which was seen erect in 1906 on a photograph by DAE, Doresse's photograph also shows that it most likely still stood in the early 1950s. During the 1972-74 archaeological excavations, the BIEA had found this stela already fallen (Plant, 1985: 217) as it is still today. The stela most likely fell during the period between late 1950s and before 1972 with the decorated side uppermost.

Some twenty years later, a photograph taken in 1974 (*fig. 5.12 (e)*) shows that the tree (*fig. 5.13: A*) seen during the 1950s has been removed but many other trees grew to the west, southwest, and southeast of stela 1; north of stela 3; and east of the Tomb of Brick Arches (*fig. 5.13*).

The churchyard wall of Enda Yesus was re-aligned after 1906, most likely during the 1960s when the SP was set up by *Ras Mengesha Seyoum*. According to the description of DAE, some stelae (for example, stelae 4, 27 and 28) were located within the churchyard. Stela 4 was partly in the churchyard and partly outside and overlaid by the wall (Phillipson, 1997: 22, 51). After the wall has been re-aligned, these above mentioned stelae are now located within the SP. Today stela 4 is entirely outside but very close to the fence wall of the church and falls in the category of Enda Yesus Stelae Field. Stelae 27 and 28 are today found within the SP.

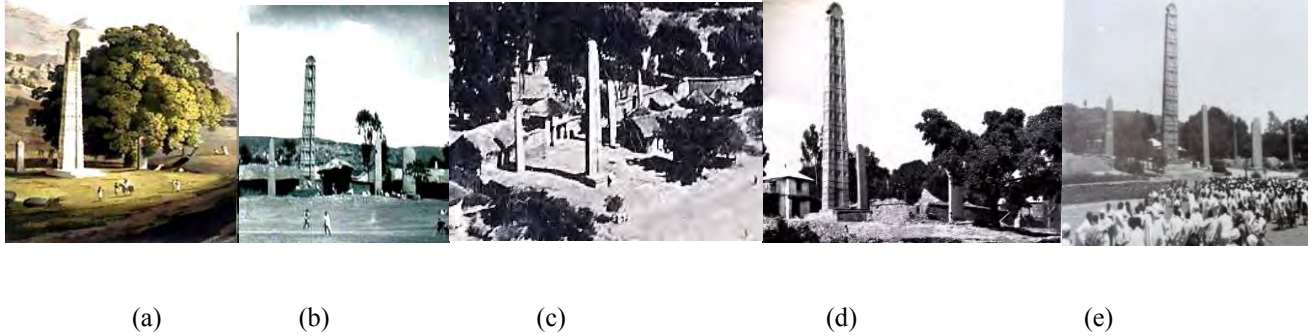


Fig. 5.12 Comparison of the condition of stela 3 between 1805 and 1974; (a) Lithograph of stela 3 in 1805. Stela 21 is visible partly covered by the big *warka* tree; (b) Stela 3 in 1906, photographed by DAE. Stela 21 is standing to the right of stela 3; the tree is no longer extant; (c) aerial photograph taken by Italians during the 1930s. Notice the houses north and east of stela 3, and a tree again grew obscuring stela 21; (d) stela 21, visible to the right of stela 3 partly covered by the *warka* tree in the early 1950s photographed by Doresse; (e) in this photograph, taken by Munro-Hay in March 1974, the *warka* tree seen on pictures (c) and (d) has already been removed. Stela 21 is clearly visible.

5.2.4 The archaeological landscape and monuments during the 1950s

As discussed in the preceding section, the first major archaeological excavation in the MSF was conducted by the EIA under the direction of French experts in 1954-1957 (*op. cit.* Leclant, 1959; Anfray, 1990; Kebede and Leclant, 1955; Caquot and Leclant, 1956; Contenson, 1959). The first was conducted by Jean Doresse in 1954 east of stela 3. He cleared the top part of the entrance of the Tomb of Brick Arches and exposed five steps west of the tomb's entrance (Leclant, 1959). Another season of excavation exposed the long M1 terrace wall aligned east-west and extending about 114 m. south of the line of stela 1 (Caquot and Leclant, 1956; Leclant, 1959).

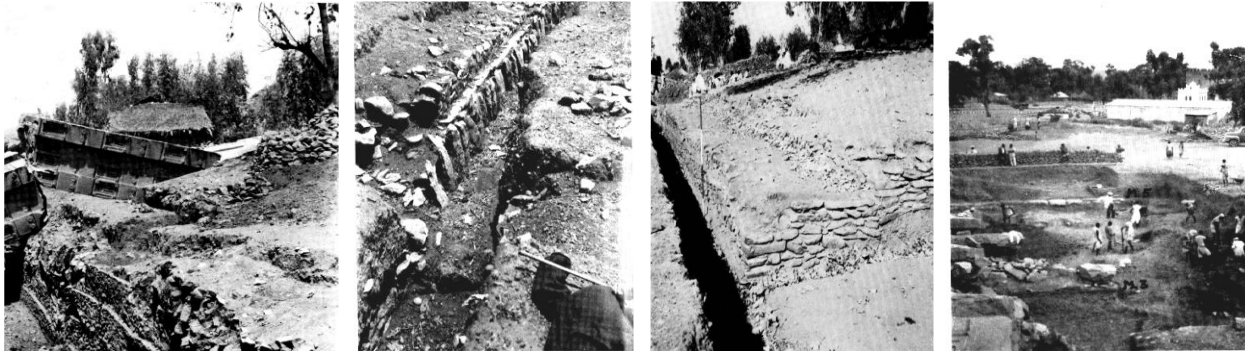
As excavation continued, another wall – M'1 was discovered north of M1. During the 1957 excavation around the Nefas Mawcha and east and west of the fallen stela 1, other short walls and a cemetery of human skeletons was discovered (Leclant, 1959). Such excavations greatly altered the landscape around stela 1 and Nefas Mawcha; all overburden soil in the Nefas Mawcha area was removed, and the terrace walls M1, M'1 and M2 were exposed, completely changing the appearance of the landscape. After terrace wall M1 was fully exposed by the EIA, two levels of platforms were created there, one above the terrace wall with the main stela group and another below the terrace wall with the Nefas Mawcha area, thereby transforming the gentle slope into a terraced landform (*fig. 5.14*).

As a result of these excavations, the earlier landscape was totally altered, with soil removed, new



Fig. 5.13 Aerial view of the Stelae Park and its surrounding in the early 1950s. Notice the *warka* tree (A) and the wall (B), to the right and left side of stela 3, respectively. Another wall to the left of stela 1 and large trees (D and G) were still visible in the 1950s. Northwest of the Ne'fas Mawcha (C) a hut and tree are visible. Further west corner of the stelae park (E) a large building stands. (F) indicates a pathway that was later closed when erosion exposed the top part of the Tomb of False Door that subsequently was excavated by Chittick in 1973-74 (after Doresse, 1956: 44-45).

structures exposed, huts and trees cleared away, and above all the terrace wall created an entirely different aspect from the former appearance of the landscape. This excavation most probably exposed the original aspect of the area.



(a)

(b)

(c)

(d)

Fig. 5.14 Excavations in the stela 1 and Nefas Mawcha area; (a) partial view of wall M1 and stela 1, view from east; (b) in the Nefas Mawcha area with stones erected vertically; (c) wall M1 and eastwall, view from east; (d) Nefas Mawcha area where abundant walls were exposed (after Leclant, 1959: planches V, IX, VI, VII, respectively).



Fig. 5.15 The steps east of stela 3 as originally exposed by Doresse. Only one of these steps survived during the 1974 BIEA excavations (adapted from Phillipson, 2000, II: 481).

5.2.5 Landscaping and re-erecting stelae at the MSF during early 1960s. The EIA excavations in the 1950s may have instigated the regional governors to develop a SP so as to make attractive and protect the heritage from further damage through human and natural processes. It was reported that the landscaping of the SP during the 1960s was conducted on the

orders of the then Governor-General of Tigray, *Ras Mengesha Seyoum*. Some stelae have also been re-erected at this time. On the other hand, the top part of the Tomb of False Door was exposed by a bulldozer while grading a road (*fig. 5.13: F*). This originally lay just on the road outside the western wall of the SP (Chittick, 1974: 162, 175, 180; Munro-Hay, 1989: 104; Phillipson, 2000, I: 140, 150; 1997: 10, 186 n.207). This may be why the Tomb of False Door was not reported by the DAE in 1906 and the EIA in the 1950s.

Another change that took place in the 1960s was the re-erection of a stone originally believed to have been one of the shaft covers of the Mausoleum, and that the original square hole had been extended either side along the length. It was re-erected upright on top of the Mausoleum and remains to this day. The base of stela 3 has been reinforced with concrete, and short but fence-like concrete work placed round it. A series of concrete steps was placed in front of the same stela, from the lower surface right up to its base. All these appear in the 1970s BIEA plan, but not in the 1950s EIA photographs or Doress's aerial photo (*see fig. 4.13*).

5.2.6 The landscape and stelae during the 1970s BIEA excavations

In 1972 the BIEA began excavations in the MSF and continued for two more seasons in 1973 and 1974. This project unearthed a large area of the SP and exposed many stelae that have been buried in the ground. It also fully opened the Tomb of False Door, discovered the Mausoleum, East Tomb and the Tomb of Brick Arches (*op. cit.* Chittick, 1974; Munro-Hay, 1989: 47-120). They also exposed a retaining wall north of the Tomb of Brick Arches. The landscape east of stela 3 was then totally changed from flat surface to a complex arrangement of walls, tomb entrance, and the surviving steps of its adit.

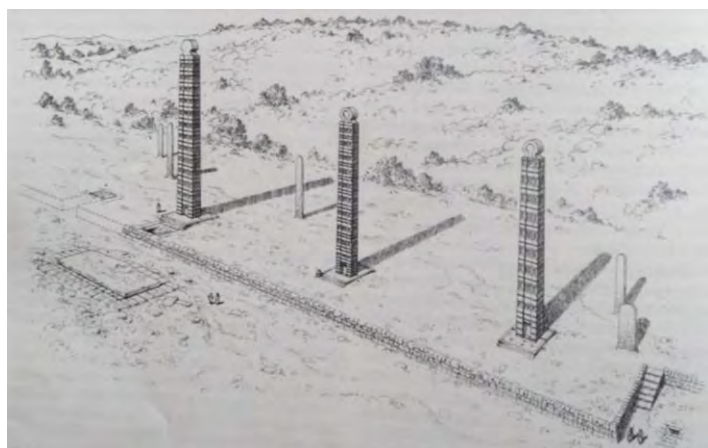


Fig. 5.16 A reconstruction of the SP with the stelae, underground tombs, terrace walls, and steps at lower right corner, shown in *fig. 5.15*. Note: the decreasing order of size of the stelae is from left to right (adapted from Phillipson, 2000, II: 478).

The 1972-74 BIEA excavations greatly enlarged our knowledge of the ground below the present surface level of the SP, while exposure of the underground tombs greatly changed the appearance of its pre-1972 archaeological landscape.

A new plan of the SP (*fig. 4.13*) was provided by the BIEA project; the western edge of the plan clearly shows that the western wall of the SP was located east of the present Tomb of the False Door. It appears, according to the plan, that after the 1950s EIA excavations, *Ras Mengesha Seyoum* could have exerted much effort in re-aligning the fence wall of the SP such as the northern wall in front of *Dejjazmach Gebreselassie Baryagaber's* house, the southwest enclosure of *Enda Yesus* church (northeast corner on the plan), establishing a new fence wall for the *Nefas Mawcha* area, western side of the SP, and demolishing the remaining houses in the SP. Nonetheless, photographs of by the BIEA indicate that many trees still remained within the SP area in the early 1970s.



Fig. 5.17 The SP during 1970s. Trees can be seen east, west and north of stela 3. The wall on the east side that turns north was built in the post-EIA excavations, perhaps during the establishment of the SP (adapted from Munro-Hay, 1989: 15).

According to the BIEA plan and photo (*figs. 4.13 and 5.17*), a new fence wall must also have been built at the eastern edge of the SP after the EIA excavations. The wall was not found in the EIA excavation, nor did it exist earlier; it is, therefore, reasonable to say that this fence wall must have been built between 1957 when the EIA last excavated in the SP and 1972 when the BIEA excavations began. The 1970s BIEA plan of the SP clearly shows that the appearance of the landscape had totally changed since the 1950s. Although many trenches were opened by the BIEA in the MSF during the 1970s, most were backfilled except the Mausoleum, Tomb of False

Door, and Tomb of Brick Arches. Their plan was the first detailed work on the layout of the SP and its features. It has greatly aided in comparing all the changes that took place in the SP before, during and after the 1970s.

5.2.7 The landscape and stelae during the 1990s

The BIEA excavations of 1993-97 under the direction of David W. Phillipson made some minor changes to the SP landscape. No attempt is made in this section to repeat and emulate details of the excavation which has already been discussed in the preceding chapter. The project excavated the Tomb of Brick Arches after some restoration and conservation work¹⁰. A shelter, roofed with metal sheet and barred adit entrance, was then constructed to protect the tomb from rain.

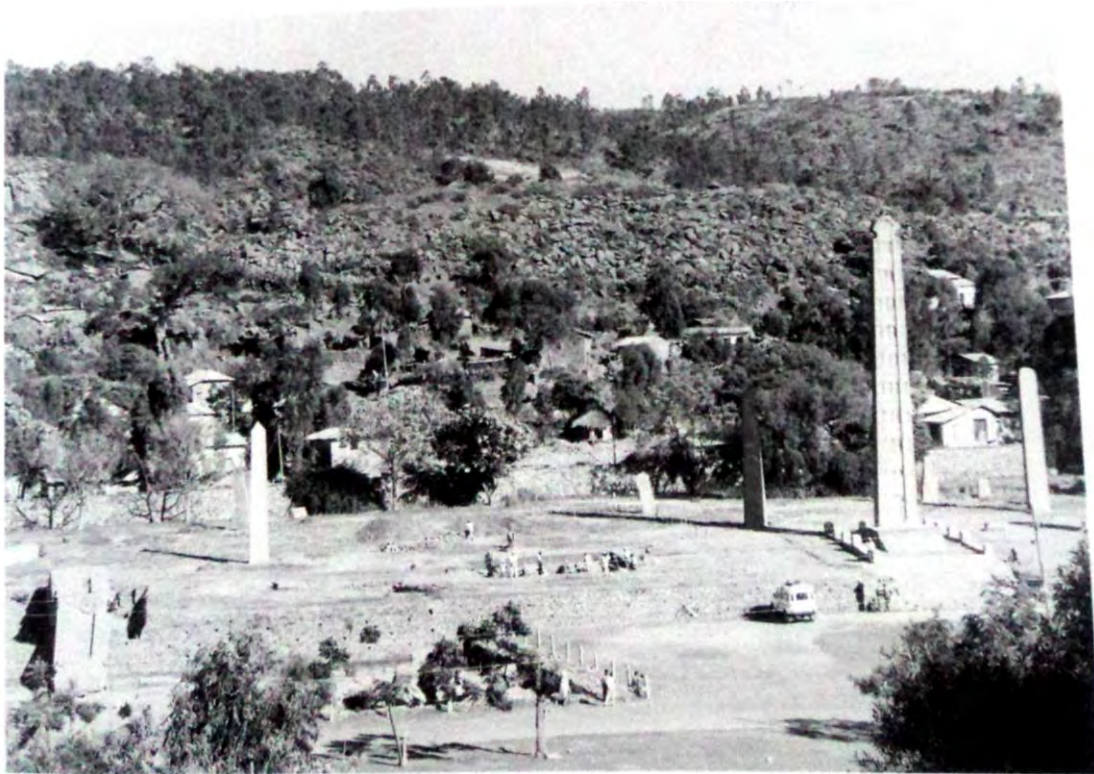


Fig. 5.18 BIEA excavations during the 1990s on the stela 2 site (center foreground) (after Phillipson, 2000, I: 27, fig. 19).

¹⁰ Chamber C was left for future investigation, while E and F were unsafe to excavate and were abandoned (*fig. 4.14*).

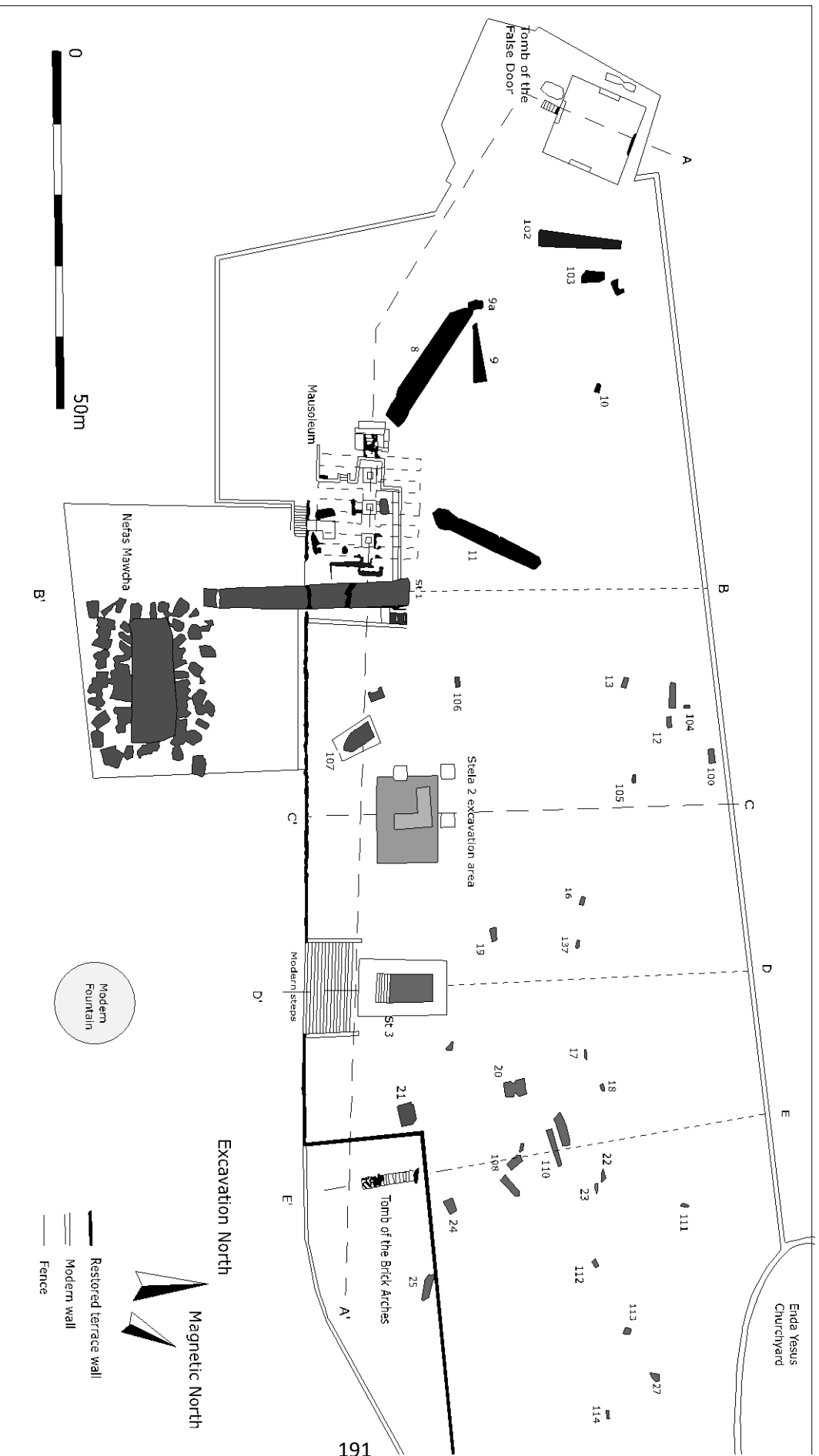


Fig. 5.19 Plan of the SP showing the distribution of the stelae and limit of the park (Drawing: Hiluf Berhe, June 2015, after Phillipson, 2000, I: 28, fig. 20).

The project also excavated the original place of stela 2 in 1993, 1994 and 1997, and left it exposed where the stela (then in Rome) would later be re-erected upon its return (Phillipson, 2000, I: 139-156). The landscape of the SP, therefore, included such a large excavated area between 1993 and 2008 – the latter date when stela 2 was finally re-erected. The site was covered with a corrugated sheet metal shelter after the 1998 excavation until it was removed in 2007 (*fig. 5.19*).

The Mausoleum was another landmark re-excavated by the BIEA in 1993-95 (*Ibid*, 165-193). By this excavation, a large area of the Mausoleum was cleared and a vertical entrance accessed by wooden ladder opened slightly west of the lower part of stela 1. This entrance was covered by a metal roof to protect the tomb from rain and erosion. The western entrance to the Mausoleum and its three shaft holes also were opened and then separately covered with a small metal and glass roof.

The post-1970s plan of the SP prepared by David Phillipson (*fig. 5.19*) shows that the western fence wall of the SP aligned east of the Tomb of False Door visible in the 1970s plan (*fig. 4.13*) had been expanded further west to incorporate the Tomb of False Door. Although omitted in the plan, photographs in the 1990s show many trees existed between rows of stelae and the northern fence wall of the SP. No major changes were made to the form of fence wall and boundary of the SP after the 1997 BIEA excavations ended, except a small space west of Nefas Mawcha.

5.2.8 The landscape of the May Hejja archaeological area post-1997 BIEA excavations to present

One of the changes made in the SP was the installation of a huge shelter for the Tomb of False Door in 2000. This shelter, a metal roof and posts, is open on all sides to let in air and natural light and fully covers the Tomb of False Door and its courtyard. Excavations by ARCCH in 1998 and 1999 on the site of stela 2 (Poissonnier, 2012) made very few changes to the overall external appearance following the BIEA excavations. The site of stela 2 was then covered with a shelter until it was removed in 2007 to prepare the ground for re-erection of the same stela.

The researcher¹¹ made some changes in the SP in late 2004 and early 2005, i.e., sweeping away many of the living and dried trees north of the rows of stelae. These were very old trees, shrubs, and climbing trees totally disfiguring the view of the stelae and obstructing visitor movement. Such trees had neither historical nor archaeological significance to the site. Obviously they must have been planted recently but the Culture and Tourism Office (Aksum) officials always resisted any attempt to cut down such trees, and still challenged and opposed their clearance in 2004/2005. Only trees along the north-eastern side of the SP are preserved, since all are olive trees thought to belong to the church of Enda Yesus. Although the fence wall has been re-aligned, the trees and some stelae are located within the compound of the SP. Such trees are left protected to this day not because they are sacred trees themselves, but because they belong to a sacred place – the church.

From 2003 onwards, some changes took place on the archaeological landscape of May Hejja archaeological area generally. This was the year when the ECHP began its conservation and renovation work on archaeological sites in Aksum. Formerly the Enda Yesus and Gheleb Emni stelae sites had been separately fenced with barbed wire and iron posts. A pathway used to walk along the southeastern side of the fence wall of SP, followed the right bank of the May Hejja stream, then turns north between Enda Yesus and Gheleb Emni stelae sites past stela 35 and immediately west of stela 7. Formerly this track also passed between the two fragments of stela 34 (*fig. 5.20*).

The project re-aligned the fence of the Enda Yesus and Gheleb Emni stelae sites and regrouped them within a single fenced enclosure, replacing the earlier barbed wire fence with a fence wall. The pathway formerly passing between the two stelae sites was blocked and re-directed to the left bank of the May Hejja stream, then turning north behind the Gheleb Emni stelae site where a small bridge was constructed. A new walkway was then paved with cobblestone for tourists, beginning at the SP, crossing its eastern fence wall via a small gate. It then crosses the pathway to the Enda Yesus church entrance before entering the stelae site of Enda Yesus and continues south of stela 4 and stela 34 to the stelae site of Gheleb Emni and ending at its northeastern fence wall (*fig. 5.21*).

¹¹ From July 2004 to September 2005 the researcher worked as expert in Heritage protection and conservation in Aksum Culture and Tourism Office, Aksum.

Fig. 5.20 May Hejja Archaeological area; (1) Enda Yesus stelae field; (2) Gheleb Emni stelae field. Notice the pathway passing between the two stelae fields (Drawing: Hiluf Berhe, 24/06/2015).

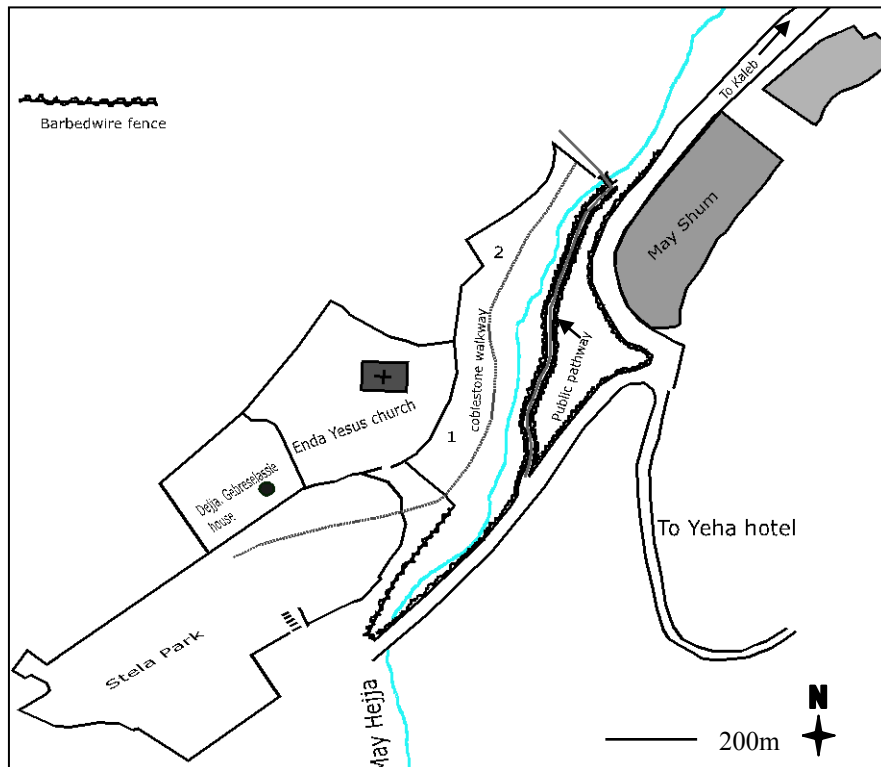
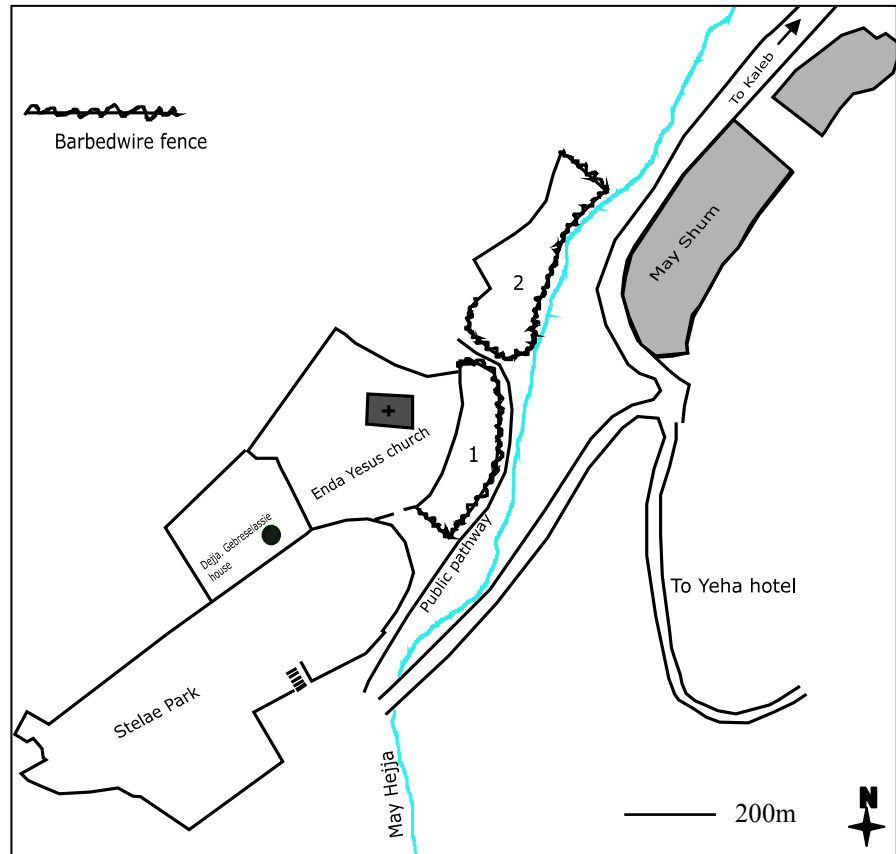


Fig. 5.21 May Hejja archaeological area; the two stelae fields indicated in *fig. 5.20* are merged together after the public pathway was redirected to the left bank of May Hejja. The left bank of May Hejja was then planted trees and protected (Drawing: Hiluf Berhe, 25/06/2015).

The municipality fenced the area left of the road leading to the tombs of Kaleb and Gebre Mesqel with barbed wire, although a pathway passes through this protected area along the left bank of the May Hejja stream (*fig. 5.21*). Both banks of the stream and the area beginning at the bridge, on the left side of the road near the southeast fence wall of the SP until the May Shum reservoir, was planted shrubs, trees, and grass. It is a protected area since 2003, and the trees have now grown larger to totally block the view of the Enda Yesus and Gheleb Emni stelaie sites. The ECHP had built a diversion canal to avoid the river from flowing directly on the two fragments of stela 5 which lie on the stream bed, but the sifted deposit gradually covered the fragments. As the stream increased in depth and enlarged in width, the fragments were buried by the deposit and grass over the past 12 years. Ill-advised attempts to re-excavate the fragments by Culture and Tourism Office personnel have found no significant solution except to clear the deposit away to temporarily expose it. The diversion canal also proved to be useless; as a consequence, the river now flows over the two fragments. From time to time, stream erosion along the banks during intense flooding has finally caused the fragments to go deep into the stream bed (*fig. 5.23*).

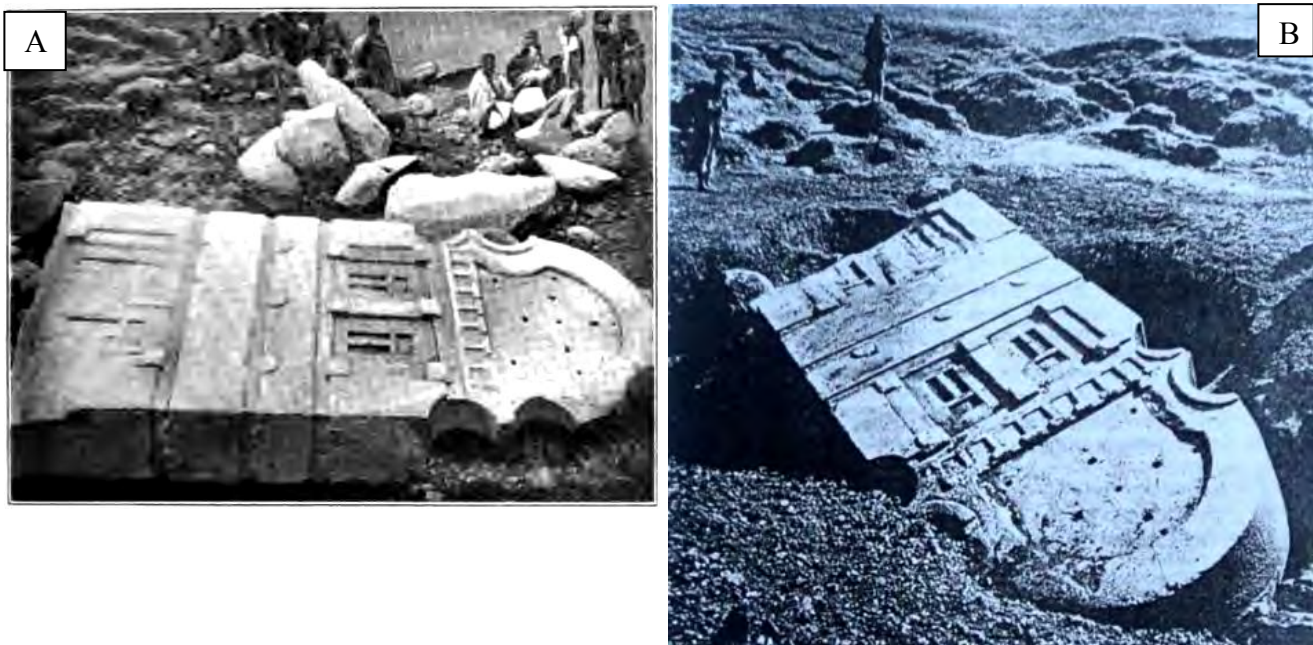


Fig. 5.22 Apex of stela 5; (A) photographed in 1893 by Bent, view from north (after Bent, 1893: 189); (B) photographed in 1906 by DAE, view from west ((Littmann *et al.*, 1913, II: 17, fig. 33). Note: the stream bed was very shallow on both images.



Fig. 5.23 Two fragments of stela 5; (A) the middle part of the stela (follow arrow) was almost perpendicular to the stream bed in 1906, i.e., it had not fallen yet on the stream bed in 1906 (after Littmann *et al.*, 1913, II: 17); (B) in early 2000s, the middle part of the stela has already come down of the slope and completely rested on the stream bed (after Fattovich, n.d); (C) and (D) photographed in July 2008, the two fragments were covered by deposit as the result of intense flooding (photo: Hiluf Berhe, 2008); (E) and (F), photographed in September 2014, the stream bank is eroded, the stream enlarged due to intense flooding; although diversion canal was constructed, it did not save the fragments from flooding. The trees on either banks of the stream grew large, and the surrounding area is now completely forested. The fragments are now drowning in the stream bed as erosion and flooding are intense. The fragments have now touched each other when the middle part is pushed down the stream bed (photo: Hiluf Berhe, 2014).

A new archaeological museum was built by the ECHP just north of the northern fence wall of the SP in 2005. Its southern entrance was created by cutting the SP fence wall, and it also has a second entrance to its north. The view of the stelae is now completely changed by the shining building of this museum standing behind them. The project also created a new tourist entrance for the Mausoleum tomb by cutting through the M1 wall on its south side. The Mausoleum's shaft holes also were covered with glass shelter to protect it from rain and allow light to its interior. Since 2005 the Mausoleum is open to visitors.

The ECHP has built a small ticket office near the tree indicated as G (*fig. 5.24*). Since April 2005 – when stela 2 returned to Aksum, temporary shelters of corrugated metal sheeting were built in front of the SP for its fragments (*fig. 5.24: C and D*), and later a storeroom has been built to house contractor's equipment for re-erection of stela 2 (E). The earlier entrance to the SP with many concrete steps in front of stela 3 was then closed and new temporary entrance created near the ticket office. In 2007, a temporary fence of corrugated metal sheeting was erected around the site of stela 2 and stela 3 during preparation for the ground foundation for the re-erection of stela 2.

While the re-erection of stela 2 was in progress, stela 3 was then tied and stretched with strong iron poles, to avoid any risk of shaking as the result of vibration from the big erection machinery brought to raise the fragments of stela 2. Very high scaffolding was built round the site of stela 2 for its erection. In July 2008, re-erection was successfully accomplished, and an inauguration ceremony was colorfully and cheerfully celebrated in Aksum on August 3, 2008 in the presence of the Late *Abune* Paulos, then Patriarch of Ethiopian Orthodox Church, the Late Meles Zenawi, then Prime Minister of Ethiopia, and other high government officials.

Re-erection of stela 2, standing 26m west of stela 3, has again changed the appearance of the SP landscape in July 2008. Stela 3 has remained tied and stretched to the time of writing the present thesis. The scaffolding, temporary fence around stela 2 and temporary shelters in front of the SP were dismantled and cleared away in 2009. A strong overnight wind that felled the non-

indigenous tree¹² (fig. 5.24 G) southwest of the SP now allows an unobstructed view particularly to the Tomb of False Door.

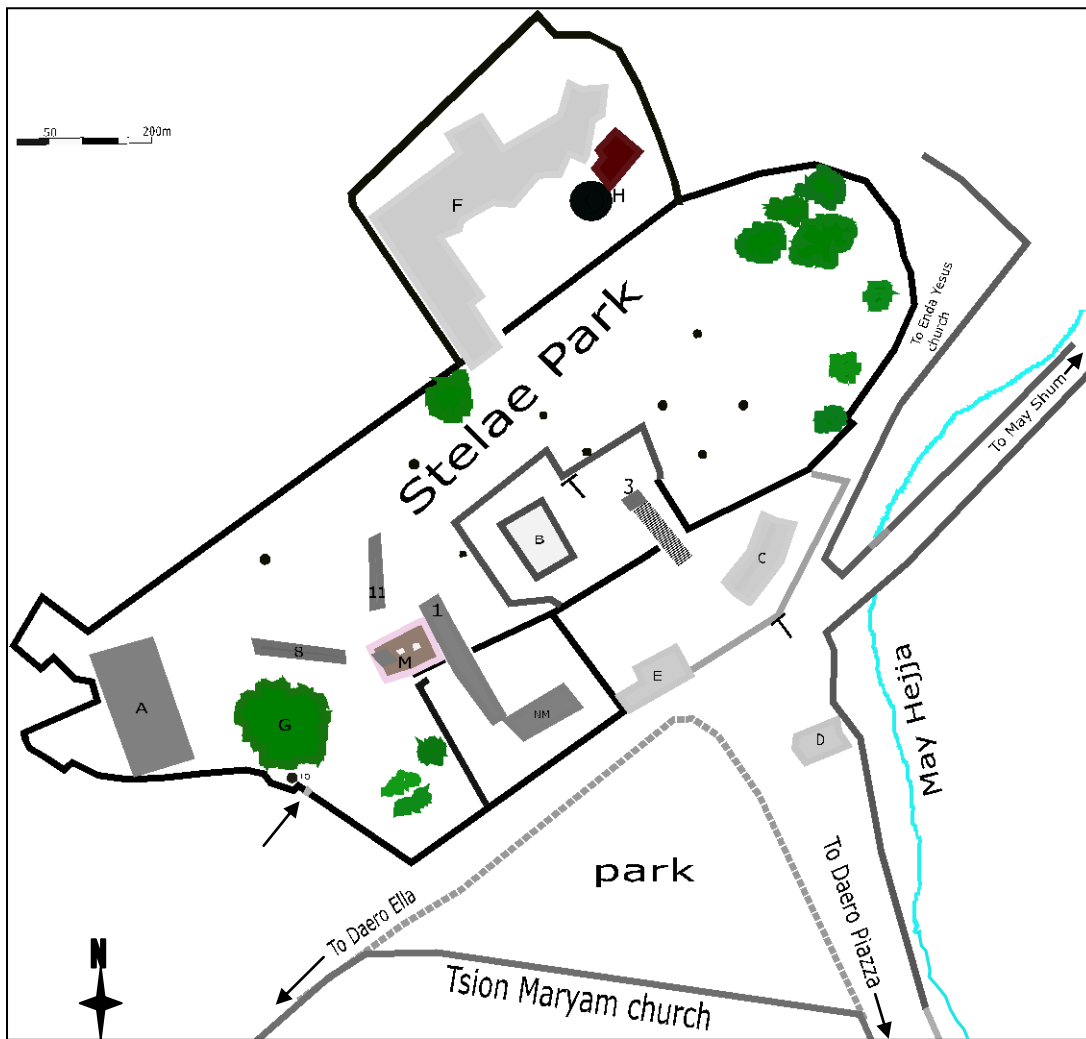


Fig. 5.24 SP between 2005 and 2007. A: Tomb of False Door shelter; B: stela 2 site shelter; C: shelter for the two parts of stela 2 before erection; D: shelter for the lower part of stela 2; E: store house of the contractor; F: new archaeological museum building; G: big tree, now no longer extant since 2012; H: *Dejja*. Gebreselassie house; NM: Nefas Mawcha; T: Temporary fence during the stela 2 erection; TO: Ticket Office; M: Mausoleum; 1: stela 1; 3: stela 3; 8: stela 8; 11: stela 11; the black dots indicate distribution of stelae, while on the northeast are olive trees which belong to the church of Enda Yesus. Note: the temporary entrance to the SP is located near the tree “G” (follow arrow). The main entrance, which is now closed due to the instability of stela 3, is along the steps in front of stela 3. The park on the foreground has been abandoned since 2007 and all the trees removed (Drawing: Hiluf Berhe, 25/06/2015).

¹² I am grateful to *Ato* Berhane Gebrewahid, site guard, for information about the incident on the tree. It was, however, so sad to hear that *Ato* Berhane passed away in 2012. He has always stood proudly in patriotic Ethiopian style in front of stela 3 in his white cultural dress, hat adorned with the red, yellow and green of the Ethiopian flag, leather cartridge belt running from his waist to his opposite shoulder and then turning onto his back to be fastened again at his waist, and his Kalashnikov with a very small Ethiopian flag at its mouth. He always caught the visitor’s eye to be photographed, and indeed has always demonstrated the traditional and cultural military style of past Ethiopians.



Fig. 5.25 General view of the SP from east during the re-erection of stela 2 in 2008. Notice the temporary fence that encircled stela 2, stela 3, and the crane (Photo: Hiluf Berhe, July 2008).



Fig. 5.26 Closer view of stelae 2 and 3 from southeast during re-erection of stela 2 in 2008 (Photo: Hiluf Berhe, August 2008).

Further north at Geza Agumai stela site, the ECHP is working to relocate residents to a place free of archaeological significance. An extensive area of the site already has been cleared after residents were compensated from the UNESCO budget financed to relocate residents occupying the main archaeological area of the town, chiefly at Geza Agumai, Geza Shum Wossen, around Ta'aka Maryam, Enda Michael Efoy, Enda Sem'on and Melake Aksum. This relocation scheme was not, however, easily managed due to residents' complaints of unfair and insufficient compensation. The issue remains ongoing for this reason, except some people who view the site's significance for the general public positively and prefer a new location with well-established modern infrastructures such as water pump, paved road, and electricity services and ample space available as compensation.

5.2.9 Reconstruction of the ancient landscape based on archaeological and geo-archaeological results.

The transformations in the now buried ancient archaeological landscape of the SP can be reconstructed based on archaeological studies. Archaeology could be the best means (and of course the only discipline) for studying the superposition of different layers of the ancient platforms in the SP with which we do not have direct physical contact. Such changes layered below ground surface can only be viewed through the mirror of archaeology.

Archaeological and geo-archaeological studies have brought to light layers of soil accumulation beneath the present surface of the SP. The first person to notice the existence of such layered soil deposition of different periods was Monneret de Villard (Monneret de Villard, 1938:7-8). He recorded two major soil accumulations occurring along the May Hejja archaeological area, the bottom layer predating the erection of the great carved stela and the second layer dated to the post-stela erection period. Such early and initial observation of the geo-archaeology of the May Hejja archaeological area was later studied by Butzer in 1973, with additional sample data from Chittick's excavation of 1972-1974 (Butzer, 1981:478).

Butzer again recognized two episodes of soil erosion. The first aggradations occurred between 100 and 350 AD, leaving up to two meters of soil accumulation. The level of the lower valley



Fig. 5.27 Sites in the old town before and after relocation of residents; (a) and (b) sites of Ta'aka Maryam, Enda Sem'on and DAE ruin A; (c) and (d), center in black line, is Geza Agumai stela field. Note: in the right foreground on image (b) buildings within square line are shelters constructed by Aksum University, department of Archaeology following the excavation of early 2014 (source: Google image).

between Biete Giorgis and May Koho consequently was raised, and the first church of Maryam Tsion was built atop this soil deposit during the 4th century AD due to unusually heavy rains and flooding. The second flooding period occurred between AD 650 and 800, when the hillslopes were washed even more heavily and exposed rocks. He also observed another soil deposit some

2 m. thick at the foot of Biete Giorgis hill. Debris from ruined houses had washed down and accumulated over the archaeological area below the hillslope (Butzer, 1982:35).

Archaeological excavations also confirm the existence of this soil accumulation due to erosion from the Biete Giorgis hillside. Chittick encountered a deposit of 2.5m to 4 m. thick in the SP and 4m to 4.5 m. thick at the HAW site located between the MSF and Biete Giorgis hill (Chittick, 1974:164,191). Excavations at the site of stela 2 revealed that its foundation structure had been packed to a thickness of 4.5 m. from the modern surface, cutting through loose deposits. Here also, pit graves having a vertical shaft were discovered to a total depth of about 7 m. below the present surface level (Phillipson, 2000: I, 139-156; Poissonnier, 2012: 62-68). Recent excavations in the compound of the present Archaeological Museum revealed rock-cut tombs and rough monolithic stelae up to 4.8 and 3.9 m. deep, respectively, below the present surface level (Tekle Hagos, 2008: 91-95). Such excavations allow interpretation of how the ancient landscape of the MSF may have appeared.

The Mausoleum was also found with five phases of deposition spanning from ancient to recent times (Phillipson, 2000, I: 180-3), indicating continuous soil erosion from Biete Giorgis hill. In addition to the archaeological record, contemporary observation confirms soil from the slope of Biete Giorgis accumulates whenever it rains in Aksum, although the degree of erosion varies due to the settlement just below the hillslope, a reforestation program here since the late 1970s, the numerous rocks on the slope exposed after the loam eroded down, and the construction of modern drainage systems to prevent water from running directly into the MSF.

It appears, based on both archaeological and geo-archaeological results, that different phases of stelae erection can be recognized, and thus different landscape forms and layers exist in the MSF. Chittick found buried stelae below the present surface level, some found completely buried but still erect (Chittick, 1974: 166, fig. 5). In the compound of the present Archaeological Museum, excavation also has revealed buried rough stelae, some fallen and others still erect (Tekle Hagos, 2008: 91-95). Retaining walls have been recorded in the MSF itself that may have been built to level the irregular platform of a natural bedrock layer below the present surface level. Some stelae were erected atop the bedrock and later became buried by sediment. Further retaining walls subsequently were constructed and other stelae erected again, thereby forming another surface level. These lateral stelae also were buried. The final activity in the MSF

sequence was the erection of the giant carved stelae and construction of the terrace wall M1 to their south (Chittick, 1974: 166; Butzer, 1981: 481-2, fig. 4).

The giant carved stelae may have been erected by digging into the deposit washed down from Biete Giorgis hill. Such holes must have then been filled with stone rubble to stabilize the platform where these stelae would be erected. According to Butzer's synthesis of this landform:

“The original surface was deeply rotted bedrock, mantled with an unknown thickness of soil.... The B horizon, probably a non-calcareous brown clay loam, was stripped off to form part of a complex of artificial terraces during Early Axumite times (A.D. 100-350). Variable concentrations of local rock rubble, much of it partly decomposed, were first mixed into the artificial fills...and a number of short, rough-hewn stelae then set on top of these low, 1.5-m terraces. Eventually, a level, built-up surface, as much as 2m thick, had been created in the western part of Stela Park. Tall, plain but dressed stelae, associated with base plates hollowed out for offerings, were set on this surface. Later still, large masses of rocky fill, derived from fresh, angular quarry rock, were piled up behind walls over 3m high. The largest decorated stelae were prominently mounted on top of these. Then, thick masses of brown vertisolic clay were trapped in front or behind these foundation structures, where they are mixed with dispersed rock rubble” (Butzer, 1981: 481-2).

Pit graves and shaft tombs found in the MSF were cut through the bedrock to a depth of 8 m. below the present surface level (Chittick, 1974: 169). On the other hand, the later complex constructed tombs such as Mausoleum and Tomb of False Door were built by cutting through these earlier deposits and their bottom level stopped at the bedrock. The former is 5.9 m. below the present surface level (Phillipson, 2000, I: 170). The Tomb of Brick Arches partly comprises a constructed wall at the entrances with the chamber rooms cut into the rock to a total depth of between 9.5 and 10 m. below present surface level (Ibid, 31).

The possibility of an ancient platform with the earliest stelae existing below the present SP platform also is supported by the typological evolution for the stelae and by C-14 dating. Excavations by Chittick in 1972-4 and Tekle Hagos in 2005 within the SP and museum compound, respectively, have recovered new information on the existence of deeply buried rough stelae, underground shaft tombs and pit graves (Chittick, 1974: 169-172; Tekle Hagos, 2008: 91-95). At

Geza Agumai, too, Chittick's excavations revealed that stelae were buried deep in the ground up to 2 m. below present surface level. Of the total 4.2 m. height of stela 71, for example, 2.2 m. was found buried below the ground. A pit beside stela 73 was dug to the depth of 7.7 m., from which bone was collected at 5.4 m. depth and walls discovered at the depth of 7.7 m. A 1st century AD glass fragment was collected here (Munro-Hay, 1989: 47, 50).

The stelae generally rough and/or undressed and small in size are identified as the earliest type, and collectively dated to the Proto-Aksumite period (4th - late 1st century BC) (Fattovich and Bard, 2001: 4; Bard *et al.*, 2000: 77; Fattovich, 1987: 47; Chittick, 1974: 166). Ancient traditions of pit graves and shaft tombs also have been documented in Yeha (Anfray, 1963), on top of Biete Giorgis (Fattovich and Bard, 2001: 15), and in the church of the Four Celestial Animals at Aksum (Fattovich *et al.*, 2000: 52-3). The rough stelae, and the pit and shaft tombs, found in the MSF also could be categorized as the earliest type (Munro-Hay, 1989: 47) of the largest and carved stelae, and the built complex underground tombs of the Mausoleum, False Door and Brick Arches.

Chittick had collected five samples for C14 laboratory analysis, four from lower deposits from SP trenches and the fifth from a tomb beneath them. The result for trench XXIIA was 30-50 AD \pm 50. Another sample from an accumulated deposit produced a much later date, 390 AD \pm 40. The earliest date corresponds to the earliest platform during which the earliest stelae in this field could have been erected and the shaft tombs cut. The latter date generally corresponds to the erection of the giant carved stelae (Chittick, 1976: 180).

It appears, therefore, that according to the archaeological and geo-archaeological results the landscape of the SP has changed greatly throughout the ancient periods, the earliest platform being buried up to 4 m. below the present surface level. In the past, the MSF extended right up to the foot of Biete Giorgis hill and stretched further north to the Geza Agumai stela field. No evidence for ancient settlement was recorded in the stela field, except the remains of walls undoubtedly from the 19th century AD (Chittick, 1974: 164; Tekle Hagos, 2008: 87-105). This indicates that the ancient settlement area of the town was located west and further northeast (D site at Kidane Mehret) of the stela field. As has been discussed in the preceding section, few huts already were extant just above the stela field on the eastern hillside of Biete Giorgis, as

indicated on Salt's 1805 map of Aksum (*map 3.3; fig. 3.12 (a)*), but during the late 19th century settlement expansion invaded the entire site of the stelae field, as recorded by Bent in 1893 and

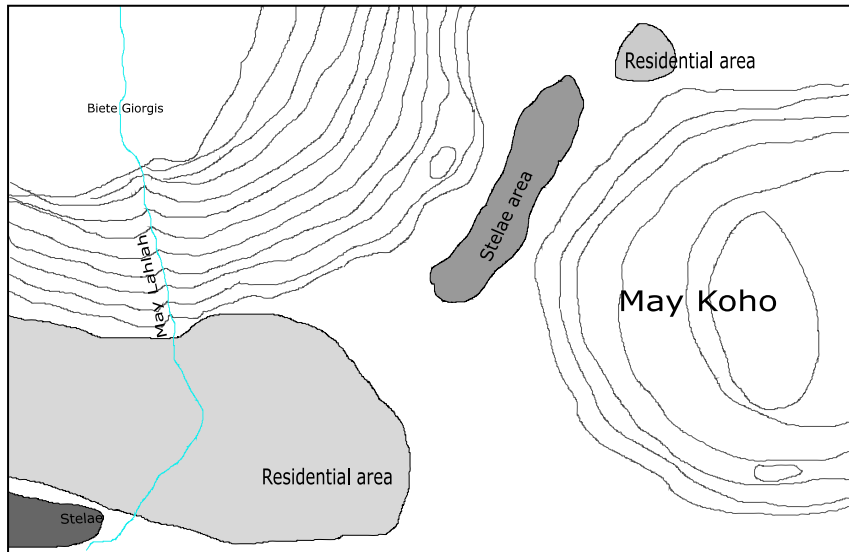


Fig. 5.28 Sketch of ancient Aksum before the erection of the church and expansion of settlement into the stelae area. Here it is assumed that May Hejja stream was created after the medieval period (Drawing: Hiluf Berhe, 24/06/2015).

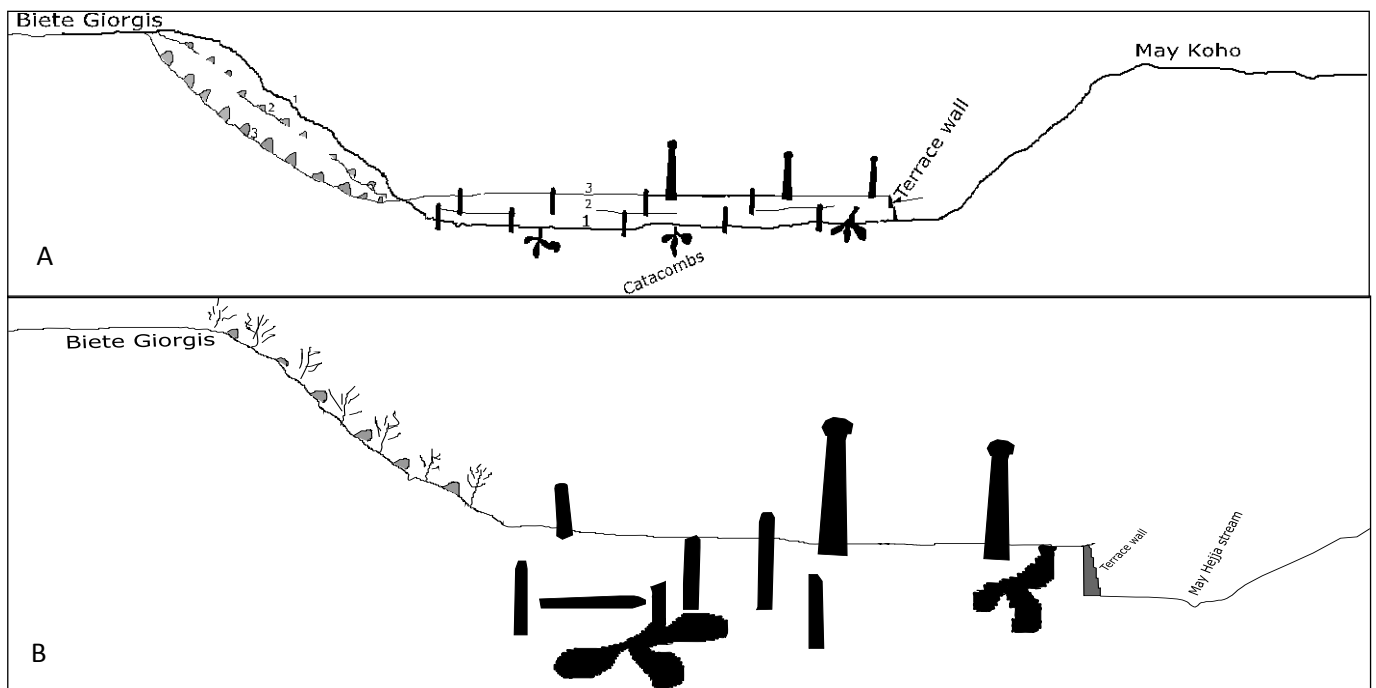


Fig. 5.29 Section drawing of the SP. (A) The SP with three levels of stelae erection in the valley between Biete Giorgis and May Koho hills. All the loam was washed down the hillslope. This loam was then deposited on the lower ground, where the stelae are. When hillslope 1 was washed down and rocks exposed (hillslope 2) as a consequence of soil erosion, the loam buried the earliest stelae group in the field. On the right side of the stelae field, retaining walls have been built to level the field for the second phase stelae erection. Hillslope 2 was again washed down that resulted in further exposing the rocks in hillslope 3; this soil was carried down the stelae field and buried the second phase stelae (level 2). Then an Aksumite wall was built as a retaining wall; on this level, the last stelae – the giant carved, were erected on top of the first two phases of stelae erection. (B) Section of the SP. Note: some stelae were found erect and others fallen below the present surface level by the 1970s BIEA excavations. May Hejja stream bed is becoming deeper and wider east of the stelae group. After this stream to the right is the hillslope of May Koho hill (Drawing: Hiluf Berhe, June 2015, not to scale).

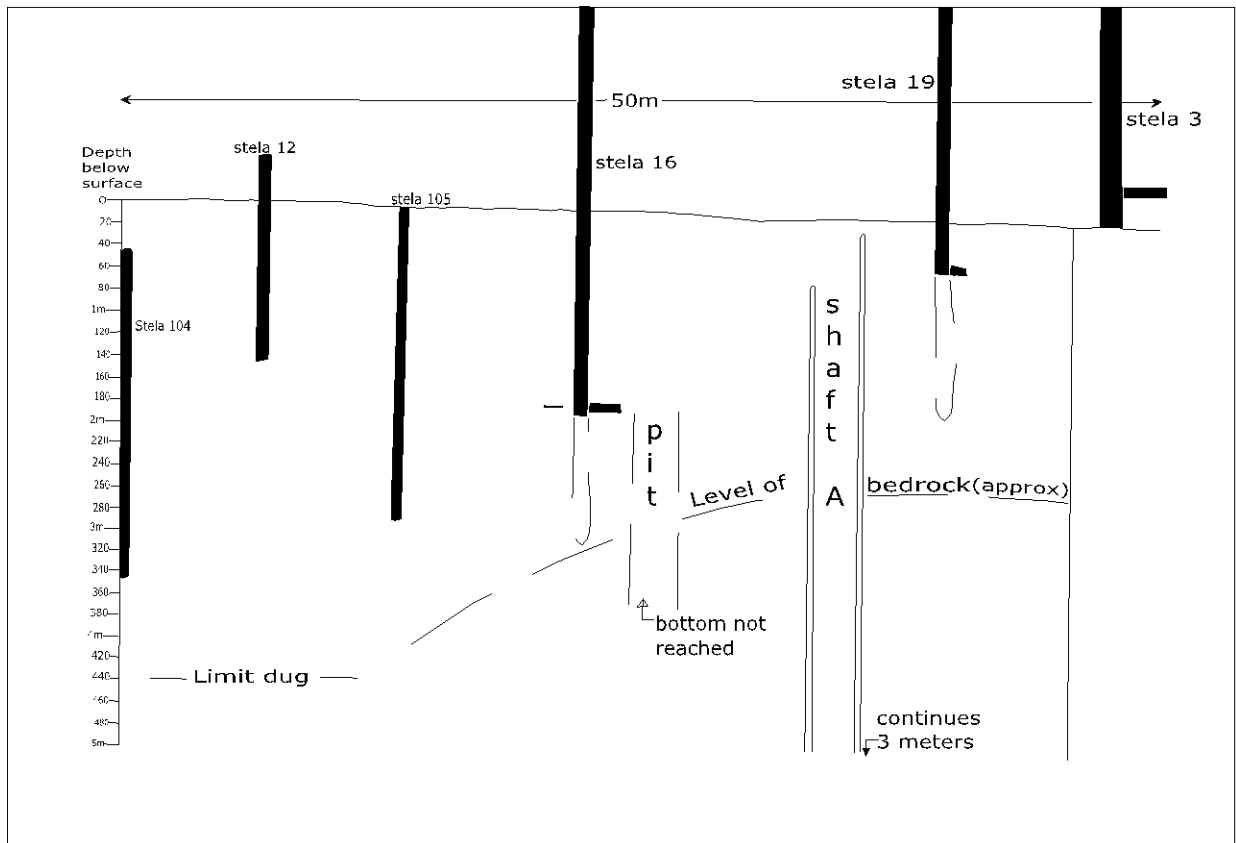


Fig. 5.30 Chittick's compressed section of the SP (Drawing: Hiluf Berhe, June 2015, after Chittick, 1974: 167, fig. 5)

the DAE in 1906, both supported with photographs.

5.3 The site of Tombs of Kaleb and Gebre Mesqel: changes in the landscape based on ancient documents, archaeological excavations, and field observation

5.3.1 Ancient literary documents: The so-called Tombs of Kaleb and Gebre Mesqel are located at the southeastern end of a ridge that divides the Tekeze and Mereb drainage systems (Butzer, 1981: 478), some 1.9 km from the church of Maryam Tsion of Aksum. The hills of *Aba Liqanos* and *Addi Guatiya* are located, respectively, east and west of the tombs (*map 4.3*). The mountains northwards in the present Eritrean territory and northeast to Adwa are clearly visible from these tombs. The site, situated on high ground outside the ancient town centre of Aksum, may have been chosen for such strategic reasons. As briefly discussed in Chapter 3, these tombs have been described in many ancient sources.

However, the descriptions have focused just on their interiors and failed to describe the external appearance of the landscape. The first information about the tombs comes from the *Liber Aksumae*, which informs us that these tombs already were known, and a legend recounting their content and richness already existed. However, according to this document (Conti Rossini, 1910: 5-6) the tombs apparently were not frequently entered by people, but it also tells us nothing about the exterior landscape or details of their internal forms and contents. Nonetheless, we can deduce that they were partly opened and accessible. The lack of information on their exterior may confirm that the area was covered by earth and no structure was visible at that time. Thus the contribution of this document to an understanding of details of their surrounding landscape is very limited.

The second available document about the tombs is that of Alvares (Alvares, ed. Beckingham and Huntingford, 1961). He visited and entered the tombs, and elaborately described both the internal form and content of the tombs (see Chapter 3).

Alvares described the tombs' exterior as "above (them is) a field" (Ibid, 159). It makes sense that the tombs could have been covered by soil downwash as a consequence of an eastward run-off from the hill of *Aba Liqanos* just above them. Since Alvares mentioned no structure above the tombs but just a field, we can confidently conclude that all the terrace walls, ruined structures, steps and courtyard visible today were by then covered by earth.

Paez sketched the tomb of Kaleb in the early 17th century, as depicting three rooms (Monneret de Villard, 1938: 68) exactly as they are today, but no information about the outer landscape was provided. There is no available information how Paez became able to see the full size and layout of the three rooms that helped him draw the plan, since previous documents say the tombs were at least partially filled with earth.

In 1805, Salt also plainly confirmed the underground tomb had three tombs, *i.e.*, the stone coffin boxes in the so-called tomb of Gebre Mesqel, was filled with earth and that had difficulty creeping into the tomb due to the earth. At the very heart of the tomb, Salt clearly saw the portal door of the central room and the three stone coffin boxes within it (Valentia, 1809: III, 82). Salt was also silent about the exterior landscape of the tombs, corroborating Alvares' description.

Lefebvre visited the underground tombs and left a short description. He had entered both tombs and reportedly saw three chambers in each underground tomb. He described the top of one tomb (based on his description of the interior, most likely of Kaleb) as a large platform of 25 x 15 m. where there were ruins around¹³ (Lefebvre, 1845-51:433) and it appears from his description that granite stones visibly cluttered this platform. He might have been more curious about the scattered stones on the platform than his predecessors who mentioned nothing; or such stones could have been exposed by natural or human agents after the last visitor before him.

Bent was the last 19th century visitor to Aksum, visiting the tombs in 1893 and leaving his impressions. He entered the so-called Tomb of Kaleb, describing its approach as a “sloping” passageway and saw three chamber rooms of equal size (Bent, 1896:194). The word “sloping” again confirms that its access was most likely covered by earth obscuring the steps built of huge granite stones.

Both Salt and Bent were silent on the condition of the exterior of the tombs. Salt even called the tombs “caves” since, due to the earth fill, they appeared to him as if dug into the ground. This helps to judge that the area outside the tombs was just a field with no other visible remarkable structure. As is true today on fields just outside the fence wall, the ancient field atop the tombs may possibly have been used for cultivation.

5.3.2 Archaeological excavations

Archaeological excavations have been conducted at the site of the Tombs of Kaleb and Gebre Mesqel at different periods. Such excavations are very important for the reconstruction and documentation of their original construction, associated structures and related landscape. They were recorded by professionals, their work being supported by photography, detail sketches and drawings. They are chronologically presented below.

¹³ According to the DAE (discussed in the next section of this chapter) a few large granite blocks jutted from the ground around the entrance to the tomb of Kaleb. These may have been the stones seen by Lefebvre. The rest of the platform was found by the DAE totally covered by earth.

5.3.2.1 The DAE

This is the first archaeological mission to clear the bulky overburden of the tombs and produced a large quantity of photographs, sketches, and plan and section drawings. For simplicity of discussion and easier comprehension, each feature is discussed separately.

5.3.2.1.1 The superstructure of the tombs: The DAE photographs and plans show that the entire superstructure was covered by earth, with the tomb entrances being open. Only the granite blocks around the tomb entrances protruding from the ground would have been visible in 1906, as also had been observed by Lefebvre in the early 1840s. The team cleared the entire overburden and, as discussed in Chapter 4, two superstructures designated “K” for Kaleb and “G” for Gebre Mesqel were discovered (Phillipson, 1997: 73-88). The area appears to have been covered by earth over 1.5 m. thick, since a column base well over 1.5 m. high and still erect at that time also was completely buried by the deposit (*fig. 5.33*).

The DAE exposed foundation walls on the east and west sides of both superstructures above the underground tombs, and on the south and north sides for “G” and “K”, respectively. The wall was built of re-entrants and rebated with large smoothly-worked granite blocks at the corners and then adjoined by a wall of small stones. The northern foundation wall for “K” was found ruined, with cornerstones lying on the ground¹⁴, while that of “G” was in good condition. The cornerstones of four steps at the southwestern corner of the foundation wall for “K” were found *in situ*, but the small-stoned wall was in ruins¹⁵. The floor of both the “G” and “K” superstructures was stone-paved¹⁶, and both had colonnades facing each other. These colonnades rose two¹⁷ steps from the courtyard floor. A stepped column-base¹⁸ was found at the edge of the colonnade of “K” while a pillar¹⁹, broken and the upper part lying on the ground, was recovered at the edge of the colonnade of “G” (*figs. 5.33 and 5.34*).

¹⁴ This wall has now been rebuilt following its original position and architectural style.

¹⁵ This is also since rebuilt with the cornerstones in their original place.

¹⁶ Only some of those at “G” survive today, but the floor of “K” is totally disfigured as a result of the stone rubble and soil covering it. Whether the pavement slabs were removed or are still below the rubble and soil has not been ascertained.

¹⁷ Both steps at “G” but only one at “K” still survive.

¹⁸ This is no longer present. It is probably the one in the Ezana Park fixed on top of a column (discussed below).

¹⁹ This pillar is undoubtedly that re-erected by the Italians in the Ezana Park during the 1930s (*fig. 5.37*).



Fig. 5.31 Excavation at the tombs of Kaleb and Gebre Mesqel; the steps lead to the central courtyard from west. Note: the cornerstone (follow arrow) was partly exposed before the excavation; this was probably one of the stones described by Lefebvre then protruded (after Phillipson, 1997: 73, fig. 94).

Fig 5.32 The column (center) and a stepped column-base (right foreground) (after Phillipson, 1997: 83, fig. 109)

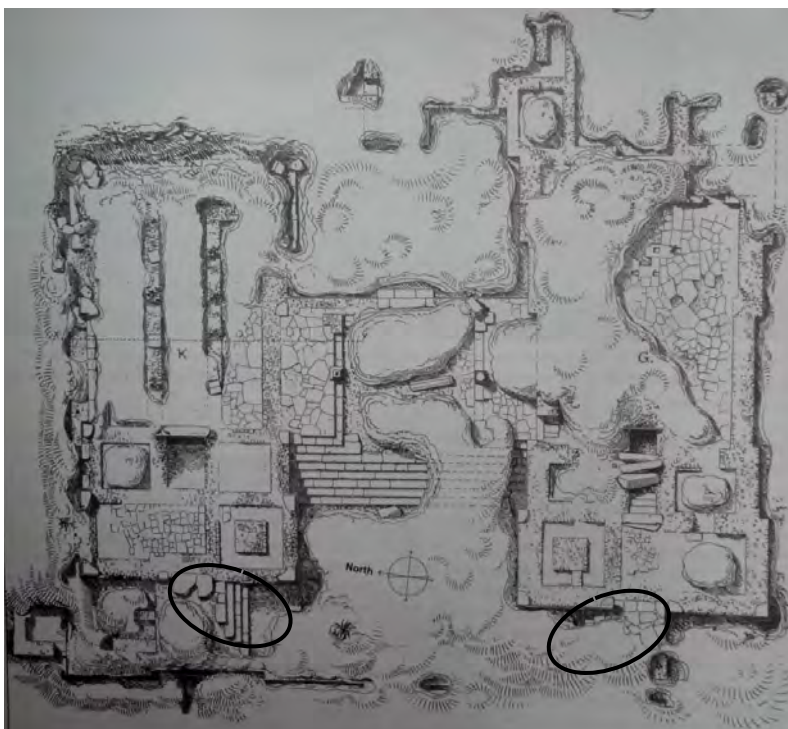


Fig. 5.33 Plan of the tombs of Kaleb and Gebre Mesqel. The original steps (in circle on left and right foreground) leading to the underground tombs are no longer extant. Note: the broken column and a column-base are visible east of the steps leading up to the central courtyard (center) (after Phillipson, 1997: 75, fig. 97).

Three stone beams discovered at the entrance to the tomb of Gebre Mesqel were originally used for roofing, but then were displaced to atop the staircase. As it appears clear from the DAE plan (*fig. 5.34*), these stone beams may have rested atop the staircases and thus entry most likely was behind them to the east. Alternatively, these underground tombs may have remained partly open although the staircases may have been covered by earth. Thus the entrance to the underground tomb of Gebre Mesqel may have been through a narrow tunnel just below the displaced roofing slabs. The descriptions of both Salt and Bent confirm that entry to the tombs was not without difficulty due to the earth infill.

In the middle of the main building of both superstructures, the DAE found two rows of four pillar bases. The eastern side of the superstructures included many smaller rooms built of small stones, which the DAE left without completing excavations (*see fig. 4.6 for plan after excavation*).

5.3.2.1.2 The terrace walls: The DAE excavation exposed a terrace wall²⁰ constructed on the western side, as the area west and north slopes somewhat. It was originally built in Aksumite architectural style with re-entrants and recessed outside. This wall was connected to the northwest and southwest corners of “K” and “G”, respectively. On the eastern side of both superstructures, the southern side of “G” and the northern side of “K”, this wall also served as a foundation and terrace wall for the main buildings. In the case of “K”, the northern side of the wall rested on a short straight masonry terrace wall. The DAE reports also indicate that a room entered from the west was discovered north of northwestern corner of the outer terrace wall.

5.3.2.1.3 The steps: The DAE exposed seven steps²¹ leading from the west up to a courtyard between the two superstructures, extending horizontally as far as the walls. The steps were constructed of smooth granite stones and sprang from a lower courtyard. The top of the steps is level with a central stone slab-paved courtyard. They also discovered two²² other steps leading up to the same courtyard from the east (*fig. 5.34*)

²⁰ Today this wall is entirely rebuilt, now appearing like a simple fence wall detached from the northwestern and southwestern corners of “K” and “G”, respectively. The southern side of this wall is extended south of the southern wall of “G”.

²¹ Some stones have been removed since, but all steps still survive.

²² Five steps are visible today.

5.3.2.1.4 The entrances to the tombs: The DAE also discovered separate exterior entrance steps²³ to the tombs. They sprung from the lower courtyard at the west. From this courtyard, the steps diverge north and south to the tomb of Kaleb and Gebre Mesqel, respectively. Four steps to the tomb of Kaleb lead to a small courtyard paved with flat stone slabs in front of the tomb entrance. The steps to the tomb of Gebre Mesqel, built at the centre of the western wall of the superstructure, lead directly up to the tomb across the paved courtyard in front of it. The steps to the latter tomb face north and lead to a small courtyard paved with stone slabs in front of the tomb entrance. Both exterior steps of the tombs were built between the western terrace wall and the western walls of their respective superstructures (*fig. 5.34*).

5.3.2.1.5 The courtyards: The DAE team exposed three courtyards: one paved courtyard at the centre between the colonnades of the superstructures and two others, unpaved, on the lower ground east and west of it. The DAE also hypothesised the existence of exterior steps leading up to the western courtyard through the western terrace wall.

5.3.2.1.6 The tomb of Kaleb: The DAE recorded that the underground tomb was found without threshold and upper staircases. Inside, the lintels in the central and northern chamber rooms were found cracked. As earlier, they noted each chamber had a threshold, but their floors lacked stone slabs. The rest of the tomb was well preserved.

5.3.2.1.7 The tomb of Gebre Mesqel: According to the DAE record, only the top four of the 19 steps were exposed, the rest being covered by earth. The top three stone beams of the roof also were found displaced and had fallen in disorder near the tomb threshold. The DAE then cleared out the earth infill to expose five chambers, three on the east side and two on the west. Inside the central chamber (opposite the steps), they found three empty and lidless sarcophagi, the southernmost in four fragments. The southern chamber of the eastern group also was filled in with earth and rubble, with crosses engraved on one wall. The team also recorded the other chambers but did not mention another sarcophagus in the southern chamber room of the western

²³ This entire entrance no longer exists today. The present entrance to each tomb is from the top of the seventh step across the courtyard. No trace of the original entrance steps remained. The western wall of each superstructure has been rebuilt by deforming the original shape of the wall. The northwestern corner of the terrace wall also has been demolished and is now fenced with barbed wire and iron poles. The entrance to the compound also is through this modern fence.

group. Presumably it was covered by earth as it actually was found below the room's threshold level.

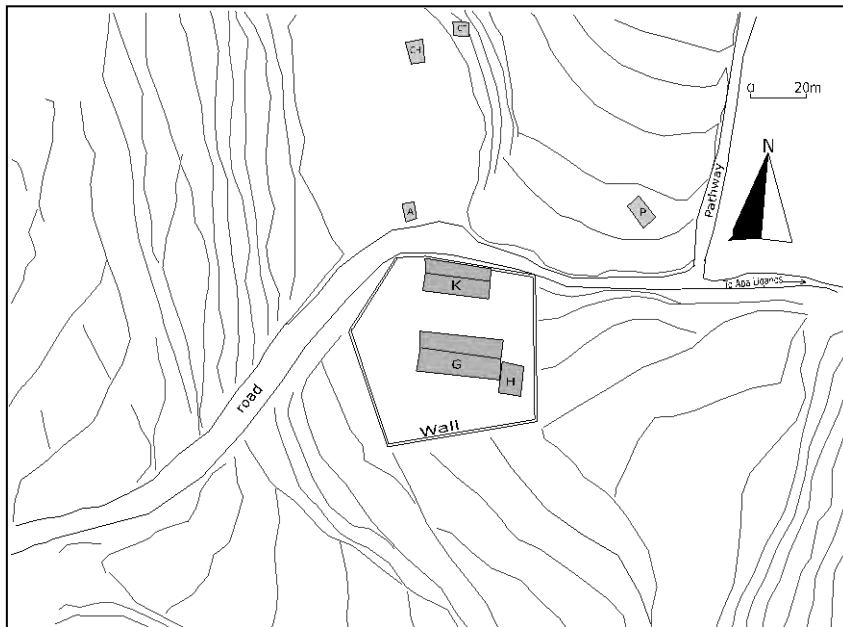


Fig. 5.34 The tombs of Kaleb and Gebre Mesqel and their surrounding today. G: Gebre Mesqel; K: Kaleb; H: HAMA excavation; A: Aksum University excavation; GH: site guard house; CT: Cruciform tomb; P: peasant house. All are covered by shelter. The surrounding area contour indicates the terraces of fields. Arrow indicates the entrance to the compound of the tombs. The wall is modern (Drawing: Hiluf Berhe, 24/06/2015).

5.3.2.2 BIEA

Although the BIEA had carried out excavations within and outside the tomb enclosures, this section focuses only on the interior excavation. The BIEA opened a long almost SW-NE trench east of the superstructure above Kaleb's tomb that partially exposed six rooms (Munro-Hay, 1989: 43). Their topmost surface reportedly was filled with earth dumped by the DAE in 1906, above rubble and earth that may have been a building that had collapsed in antiquity (Ibid). Another trench was opened immediately south of the southern wall of the Gebre Mesqel superstructure (Ibid).

The BIEA plans (*fig. 5.36*) relate their trenches to the main tomb superstructures, but they lack details of the general landscape and the condition of the superstructures. On the other hand, the plan indicates the entrance steps of the Gebre Mesqel tomb but without explaining whether the steps as recorded by DAE in 1906 still existed in 1973, or re-drawn only from the DAE plan (Munro-Hay, 1989: 42-7; Chittick, 1974:193-4). Some BIEA photographs (Munro-Hay, 1991, *fig. 30*) show five steps leading up to the central courtyard from the east whereas, as mentioned above, the DAE exposed only two steps. The BIEA did not open a trench in this area in 1973, yet

its photographs show five so the circumstances are unclear. Thus the BIEA excavations do not elucidate the underground tombs, their superstructures or their surrounding features at that time.

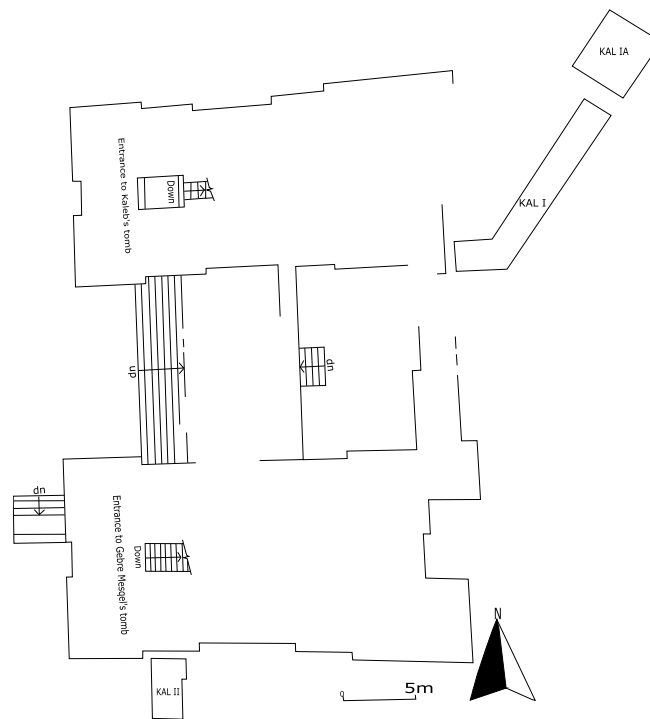


Fig. 5.35 Plan of the superstructures and the BIEA trenches (Drawing: Hiluf Berhe, June 2015, after Munro-Hay, 1989: 42, fig. 5.1)

5.3.2.3 HAMA

HAMA discovered a shaft tomb at the easternmost side of the superstructure above the tomb of Gebre Mesqel (*fig. 5.35*). It was then left open since excavation was in progress, but a shelter was built over the tomb to protect it from rain. This shelter is smaller than the shelter over the superstructures (discussed below). The HAMA excavations changed the previous landscape of the area, in that this area was full of small open rooms.

5.3.2.4 Aksum University, Department of Archaeology

Eighteen meters north of the northern wall of the Kaleb superstructure (*fig. 5.35*), a low shelter roofed with metal sheet covers a cruciform shaft tomb excavated by Aksum University, Department of Archaeology as part of rescue excavations after a vehicle broke a large stone slab originally covering the shaft tomb (Walker *et al.*, 2013). The shelter is low and completely

sealed the tomb entrance to withstand strong winds and prevent people and animals from entering.

5.3.3 The site of Kaleb and Gebre Mesqel at present: The site of the tombs of Kaleb and Gebre Mesqel has completely transformed its appearance over the period of available recorded evidence. A new fence wall (51.63m (north side), 60.3m (east side), 54.7m (south side), 40.8m (southwest side), and 32m (northwest side)) now surrounds the tombs. The original northern Aksumite terrace wall recorded by DAE is no longer extant, and the present fence wall extends further south, east and west. The original northern wall of the superstructure above Kaleb's tomb still functions as the original wall of the superstructure and the fence wall.

Many small rooms are visible east of both superstructures²⁴, with only a few accessible. The western sides of both superstructures have been rebuilt²⁵, with the original entrance steps to both tombs now built with a re-entrant wall. Access to the tombs is across the topmost step of the western steps leading up to the central courtyard. Stones at the northern side of the topmost two steps of these western steps are now missing, although they were in position when first exposed by the DAE (*fig. 5.32*), and some stone slabs in the central courtyard have been removed since 1906. The floor of the superstructure above Kaleb's tomb is entirely unpaved, while some stone slabs remain in place that of Gebre Mesqel.

The present barbed wire and iron pole fence between the northwestern corner of Kaleb superstructure and the northern side of the fence wall includes the main compound entrance. Between the western side of the superstructures and the western fence wall is a wide flat platform.

A noteworthy feature discovered and photographed by the DAE, which has since disappeared, is the six-stepped column-base originally at the southern edge of the colonnade of Kaleb's superstructure (*figs. 5.32-5.34*). This column-base very likely is now in the Ezana Park, turned

²⁴ The excavator of these rooms is unknown, possibly unrecorded. During the 1973 BIEA excavation, Chittick himself remarked "there are extensive and substantial buildings on the east and perhaps southern side of the Kaleb structure, whose excavation would be a major undertaking (Chittick, 1974: 194)". This confirms the rooms were exposed after 1973.

²⁵ Restoration works had been carried out on the superstructures of Kaleb and Gebre Mesqel; however, concrete information is unavailable.

upside down and placed atop the pillar from Gebre Mesqel's superstructure (fig. 5.37). However, the Italians probably cut off its topmost sixth step in order to widen its mouth to fit the top of the pillar, as it now has only five steps. This argument is supported by DAE photographs showing two corners of the stepped column-base damaged (northwest and northeast corners as seen *in situ* (fig. 5.33). The present stepped column-base atop the Ezana Park pillar also has two damaged corners (fig. 5.37 (a)), confirming it most likely is the same column-base.

The pillar has six sides but the stepped column-base has only four, confirming that the pillar and stepped column-base now joined together do not originally have same purpose and history.

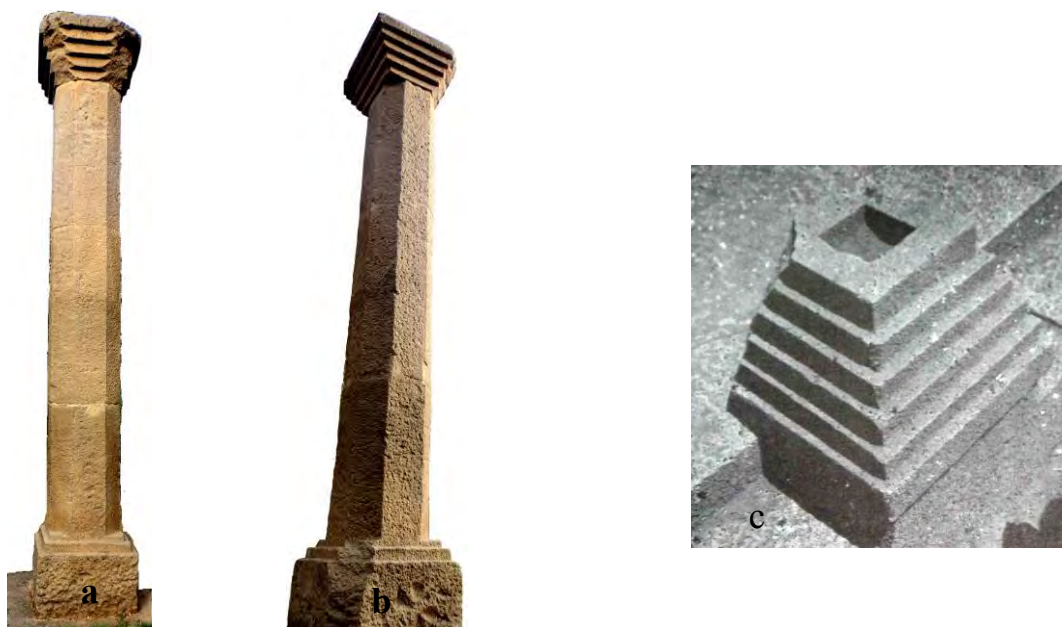


Fig. 5.36 (a) The joined column-base and pillar now standing at the Ezana Park, showing the damaged edges of the column-base; (b) The column-base turned upside down, showing the undamaged side; (c) the column-base *in situ* as photographed in 1906. Note: the pillar was originally broken into three pieces (compare the restored one with the *in situ* in fig. 5.33 (Photo: (a) and (b) Hiluf Berhe, May 2011; (c) after Phillipson, 1997: 85, fig. 112).

Inside the underground tombs, mortar walls recently were added to support the cracked lintels in the tomb of Kaleb, each at the centre of all three room entrances, so that entering each room is now difficult. A roughly worked sarcophagus carved out of single granite rock remains in the southern chamber room of the western group in the tomb of Gebre Mesqel. This is very rarely mentioned in the literature, perhaps due to its burial by deposit as it is found lower than the level of the threshold of the same chamber room.

The tombs and their overlying superstructures are now covered by two separate shelters of sheet metal roofing and iron poles (*fig. 5.38*). They rest on the floors and edges of the superstructures, installed without excavating into the ground. Each pole is bolted, and welded where necessary. Metal water spouts direct all the water from the roof beyond the superstructure walls.

Outside the current enclosure, the ancient room located and exposed by DAE immediately north of the northwestern corner of the Kaleb superstructure is no longer extant. However, archaeological features to the north and east of the enclosure are still clearly visible, including cruciform shaft tombs, elite structures, walls, and a hole possibly leading to an underground tomb.



Fig. 5.37 The tombs of Kaleb and Gebre Mesqel, view from southwest (Photo: Hiluf Berhe, May 2011).

5.4 The site of stone thrones: changes on the landscape and the thrones based on ancient documents and observation

As has already been discussed under Chapter 4, the stone thrones are scattered within the outer enclosure of the Maryam Tsion cathedral and along the western side of the hill of May Koho. The present chapter will focus discussion on the stone thrones in the church enclosure to see the effect of human and natural processes upon them. They may have withstood human activity, as they are located within a church enclosure. All inferences for this analysis are based on

descriptions, sketches and drawings of ancient travelers, and photographs, as excavation is totally forbidden due to the “sacredness” of the site.

5.4.1 Ancient literary documents and legend: Ancient literary documents have enumerated the stone thrones found within the outer church enclosure without further description of their status and surrounding landscape. *Liber Aksumae*, the document assumed to be the earliest, mentioned 12 thrones (Conti Rossini, 1910: 5) but never described their condition and the surrounding area. Alvares repeated the same number in 1520 and called the seat blocks “stone chairs”. He observed that a large tree grew among the throne pedestals and at some points its roots caused the pedestals to rise (Alvares, ed. Beckingham and Huntingford, 1961: I, 153-5). According to Alvares, the pedestals were then in rows lined one after another. He provides no further information about their surrounding landscape, but his expressions “large court” and “the size of the town outside the enclosure” may fairly indicate that the area around the stone thrones was an open court free of houses as opposed to later periods, and all settlement may have been located outside the church enclosure during his visit.

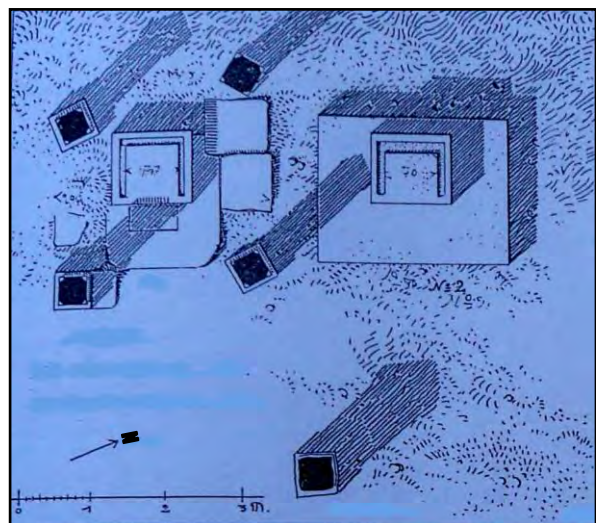
Alvares’ successors, such as Almeida and Bruce (Almeida, ed. Beckingham and Huntingford, 1954: 90; Bruce, 1790: III, 132) mentioned the presence of stone pillars standing round a pedestal stone, but both descriptions of the stone thrones are poor compared to the *Liber Aksumae* and Alvares. Almeida (Ibid, 90) reported that there were “five or six big pedestals” of stone, even though he knew Alvares had reported 12 stone thrones so perhaps he only included the large thrones. On the other hand, he is the first to mention the standing pillars around the King’s throne in writing. Why the *Liber Aksumae* and Alvares both failed to mention these pillars is unknown. A possible hypothesis is that the King’s throne and Bishop’s throne were erected later by kings such as Serse Dengel (r.1563-1597) and Susenyos (r.1607-1632), who were crowned at Aksum after Alvares’ visit.

Bruce’s report mentioned nothing of the 12 thrones other than their existence. Evidence for the condition of their surrounding landscape during the 15th through 18th centuries is blurred, as neither Almeida nor Bruce described it.

During his visit in 1805, Henry Salt produced the first sketch map of Aksum including the location and alignment of the stone thrones (Valentia, 1809: III, 78-83). Salt's sketch (*map 3.3*) indicated that the judges' thrones were aligned SW-NE direction. A total of 12 thrones were arranged in two rows, although the second-to-last throne at the northeastern end of the western row is out of line farther northwest. Two thrones are shown on the eastern row (Valentia, 1809: III, 90). The King's throne and Bishop's throne are perfectly indicated, together with their surrounding pillars, four for the King's throne and two others as they remain today. On Salt's map also includes a large tree east of the thrones near the eastern row. It is uncertain if this is the same tree described by Alvares in 1520, since visitors to Aksum between 1520 and 1805 did not mention such a tree.

Salt he also depicts no other features around the thrones, such as houses and other trees. Thus we cannot conclude what the landscape of the thrones and their surrounding area may have looked like at that time. We now have two rows of thrones of Judges' thrones, the second row on the east being comprised of two thrones. Salt informs us that he has seen some remains (?) scattered around the King's throne (Ibid, 90) without further describing them, their concentrations, distribution and exact location with respect to each other and the King's throne. Only the large features, the King's throne and the four standing pillars around it, are included on his map. No other remains are now visible around the King's throne except the four standing pillars, although the DAE also sketched two large and two small slabs immediately north and south of the King's throne, respectively (*fig. 5.39*).

Fig. 5.38 Plan of the king's and bishop's thrones (after Littmann *et al.*, 1913, II: 50)



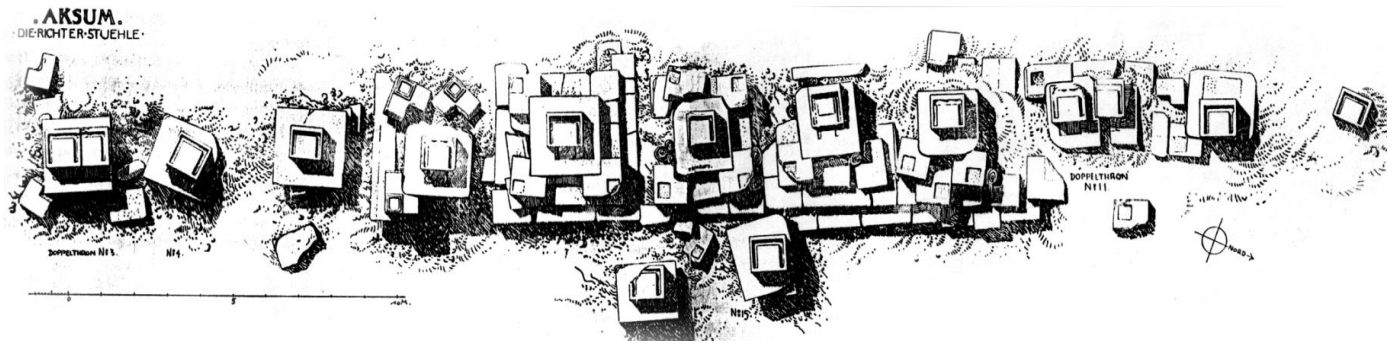


Fig. 5.39 Plan of the judges' thrones. The numbering given by the DAE is from left to right. In front of the main row of thrones are thrones 14 and 15. Note: on the right edge is throne 13 which is at present completely buried by deposit (after Phillipson, 1997: 130-1, fig. 180).

Salt found short Ge 'ez inscription (*fig. 5.41 (a)*) on one of the judges' thrones²⁶. On the other hand, he also confirmed that the Greek inscription, which Bruce reported found on the King's throne (Bruce, 1790: III, 132), was no longer extant (Valentia, 1809: III, 90). This inscription could have either been covered by earth (if it was engraved on the basal stone of the throne) or looted (if it was on small stone slab).

In the early 1840s, Lefebvre left some records of the stone thrones, supported with a drawing. Lefebvre observed the existence of four stones set at the corners of the basal stones of the thrones recessed to receive pillars, adding that three thrones were then intact²⁷. He also noticed an inscription on one throne, without copying its content. Lefebvre described the King's throne as having four pillars around the corners and the Bishop's throne with a single pillar (Lefebvre, 1845-54: III, 431), but does not give a clear picture of their surrounding area. However, his drawing of the King's throne and its four pillars is very helpful to know their appearance in the 1840s, and their subsequent burial by deposit over the last 170 years.

On Lefebvre's drawing, the King's throne is seen with its basal stone and four corner pillars. The Bishop's throne, with its beautifully carved basal stone, is visible in the foreground to the right of the pillars. Just in front of the trees at the right side is a partial view of the rows of Judges'

²⁶ Salt found it on one of the Judges' thrones, but did not identify which one. He also tried to restore and translate the text, but this includes too many errors either due to the poor clarity of the characters or a limited knowledge of Ge'ez. The DAE later copied and translated it. The inscription is found on the basal stone of Throne 7, but is now badly defaced due to human activities.

²⁷ This vague explanation does not indicate the specific thrones, and what "intact" may imply.

ኔሮኔ|ፆዋተገህዝጸዋወዘዋ|ሐ ሐ ሐ
አገዘ.እ|ወሐሀኒ

(a)

ΠΤΟΛΕΜΑΙΟΥ ΕΒΕΡΓΕΤΟΥ
ΒΑΣΙΛΕΩΣ

(b)

አኔደዋተገህዝጸዋወዘዋ|ሐ ሐ ሐ
አገዘ.እ|ወሐሀኒ

አኔ | ዳዊት | ግብጽዊ | ዘፀሐፍክዋ |
አግዘ.አ | መሐረኒ

(c)



(d)

Fig. 5.40 (a) The Ge'ez inscription found and copied by Salt with some attempts to reconstruct it (after Valentia, 1809: III, 91); (b) The Greek inscription found at the King's stone throne by Poncet and Bruce (after Bruce, 1790: III, 132); (c) The inscription first seen by Salt (a) and later mentioned by Lefebvre, and copied by the DAE (after Littmann *et al.*, 1913: IV, inscription no.19); (d) the inscription at present (photo: Hiluf Berhe, 28/09/2014).

thrones. The hut at the centre in the background is the gatehouse²⁸ of the outer enclosure of Maryam Tsion cathedral. Lefebvre's drawing of the King's throne and its pillars indicates that both were still clearly visible in the 1840s, although it should be noted that they already were partly buried, as their bases appear to be partly below the surface.

Lefebvre's drawing also demonstrates that the area immediately surrounding the thrones in both directions was not a built upon, as opposed to later photos (see below) with visible buildings there. Although it is very uncertain, the heap of earth visible on the left side of the thrones may be the historic ash at Godef Maryam (discussed above) dumped there from the burnt church of Maryam Tsion. As will be discussed later, the landscape of the thrones and pillars again is entirely different today. The King's throne is now completely buried, as is much of the lower

²⁸ This gatehouse is still in place, but a corrugated metal sheet has replaced its roof.

part of the pillars, and only the topmost squared seat block of the Bishop's throne is partially visible.

Bent provides no information on the condition of the thrones themselves or their landscape. He, like his predecessors, of course also saw a defaced Ge'ez inscription on one of the thrones. When Yohannes IV (r. 1872-1889) celebrated his coronation at Aksum in 1872, some alterations may have been made on the stone thrones for the coronation ceremony. Bent's arrival at Aksum in 1893 was so perfectly timed for documenting any possible alterations to the thrones since Lefebvre's visit, had he fully described them, but his description, photograph and drawing are all on a single page of his notebook.



Fig. 5.41 The King's throne and its pillars (adapted from Lefebvre, 1845-54: III).

5.4.2 The DAE and subsequent research:

The DAE provided the first relatively detailed description of the thrones, their condition and especially their surrounding landscape, as their 1906 photographs and drawings illustrate. No previous data presenting the exact arrangement of the Judges' thrones, their status and the nature of their surrounding landscape is known. Their photograph (*fig. 5.44*), and detailed plan and section drawings (*fig. 5.40*), shows the thrones as one long line of 11 thrones and a second line having only two thrones east of the long line, both aligned SW-NE direction.

Every throne has disintegrated due to a lengthy period of human and natural processes (discussed below). Only the seat block and basal stone remain intact to this day, while the associated cornerstones, steps and other slabs are dismantled. The photograph (*fig. 5.44*) shows that trees grew between thrones 8 to 11. The area immediately north and northwest of the thrones was occupied by housing. The photograph also shows that the thrones were less buried than today. Thus it seems the thrones continuously reburied rather than through continuous erosion or exposure.

The King's throne and Bishop's throne are located southeast of the Judges' thrones. Another standing pillar, of sandstone, is found southeast of the Bishop's throne, and another very short erect stone jutting from the ground is south of this pillar (*fig. 5.43*). It appears that the sandstone pillar may not belong, as it is located far from the corner of the thrones. Another feature suggestively had existed between the sandstone pillar and the short stone, which may have been buried in the remote past.

The DAE photographs show that the King's throne and the Bishop's throne were not entirely buried in 1906. Much of the basal stone of the King's throne was visible at that time, while its seat block was fully visible. Other slabs north of this throne also fitted into the side of its basal stone. The basal stone protruded about 85 cm in front of the seat block but its base, behind this basal stone, was not visible. The DAE assumed that more steps may have been buried below the basal stone. A large portion of the Bishop's throne was above the ground in 1906, with its basal stone 36 cm thick (Phillipson, 1997: 129).

In 1906, the DAE measured the square pillar bases as 50.5 x 50.5cm in cross section. Another narrower shaft above it measured 38 x 38 cm. All four pillar corners have concave bevels, and its top is flat. The base of the northwestern pillar is not visible in the DAE photograph (*fig. 5.45*), nor in Lefebvre's drawing. Therefore, the pillar either originally had no base or was covered by earth. No description of the short rough stone (*fig. 5.43*) southeast of the pillars is available, but it is labeled on Salt's 1805 map and, although photographed in 1906 by the DAE, they provided no measurements.

Houses surrounded by high fence walls (*figs. 5.45 and 5.46*) were located south and northeast of



Fig. 5.42 The king's and bishop's thrones, with the judges' thrones behind them. Note: houses can be seen on the background (adapted from Phillipson, 1997: 125, fig. 169).

Fig. 5.43 The judges' thrones; view from east. Notice the big tree grown on the right edge covering thrones mainly thrones 8 – 11 (photo: adapted from Phillipson, 1997: 169, fig. 170).



Fig. 5.44 The bishop's and king's throne, view from north. Houses can be seen on the background, while a gatehouse to the inner enclosure is visible on the left edge. Note: the throne with basal and seat block on the foreground is the bishop's throne. Compare this with recent pictures below (photo: adapted from Phillipson, 1997: 126, fig. 171).



Fig. 5.45 The bishop's and king's thrones; view from northwest. The gatehouse and the cathedral are visible on the center background, while houses are visible on the left and right of the thrones (photo: adapted from Phillipson, 1997: 126, fig. 172).

the King's and Bishop's thrones. Although the date of the earliest settlement within the church enclosure is unclear, Bent tells us that he and his wife stayed in a hut within the outer enclosure. Bent added that he visited the bishop, who lived within the enclosure, but his wife Mabel was not allowed since it is a monastery, and that the bishop never leaves unless some political issues oblige him to be present²⁹ (Bent, 1896: 154-60). The bishop clearly lived within the inner enclosure, and thus both the inner and outer enclosures already were occupied in 1893, as later photographs (discussed below) also demonstrate. The inner enclosure gatehouse visible behind the thrones (*fig. 5.46*) already had been mentioned by Alvares in 1520, and still remains.

The DAE photographs and drawings also show a small mound at Godef Maryam, southwest of the King's throne and Bishop's throne. Some also show that the outer enclosure was fully settled by people (*fig. 5.47*). A photograph, taken by Doresse in the 1950s (*fig. 5.48*), shows that almost

²⁹ The bishop most likely was residing within the inner enclosure, where women are not allowed to enter. Today, the *Nubreid* resides near the southern gate within the outer enclosure.

all houses where the new church would be built³⁰ already had been demolished, but some ruins are still visible. Houses southwest of the thrones site and others west of the Judges' thrones still existed in the 1950s. On the other hand, large trees also can be seen immediately north of the King's throne and Bishop's throne, as well as near and west of the Judges' thrones. The photograph also shows another large tree also is visible southwest of the thrones site.

Despite the increased archaeological research in Aksum, documentation of the thrones has been neglected after the DAE. Subsequent modern archaeological research focused on excavation around the elite structures and the church area, the latter only considering impact assessment while planning construction of the new Maryam Tsion cathedral.

A photograph, possibly taken between 1993 and 1997 by David Phillipson (*fig. 5.49*) shows that northwest of the Judges' thrones is clear except for some small trees, but large trees can be seen growing amongst the thrones. The King's throne and the Bishop's throne were deeply buried. Only the top of the seat block of the King's throne is visible, while the basal stone of the Bishop's throne completely buried. The same photograph shows that the pillars on the right facing the church's gate, are buried as far as the top of their base, and the entire shaft of the northwest pillar is completely buried while that of the northeast is half-buried. Only the top of the small erect stone seen in DAE photograph is visible.

³⁰ The new Maryam Tsion church was built by Emperor Haileselassie I (r.1930-1974). Its foundation stone was laid in 1952 and, after 12 years of construction, it was formally inaugurated in 1965 in the presence of Emperor Haileselassie I and Queen Elizabeth II of England.



Fig. 5.46 Aerial view of the thrones site (in circle, right center) in the 1930s. The surrounding area of the sites was completely a built up area (Photo: available at: http://www.ebay.it/itm/Axum-Veduta-Aerea-Aerial-View-1935-36-Fotografia-Originale-Original/190826514657?pt=Fotografie_e_Stampe&hash=item2c6e2588e1).

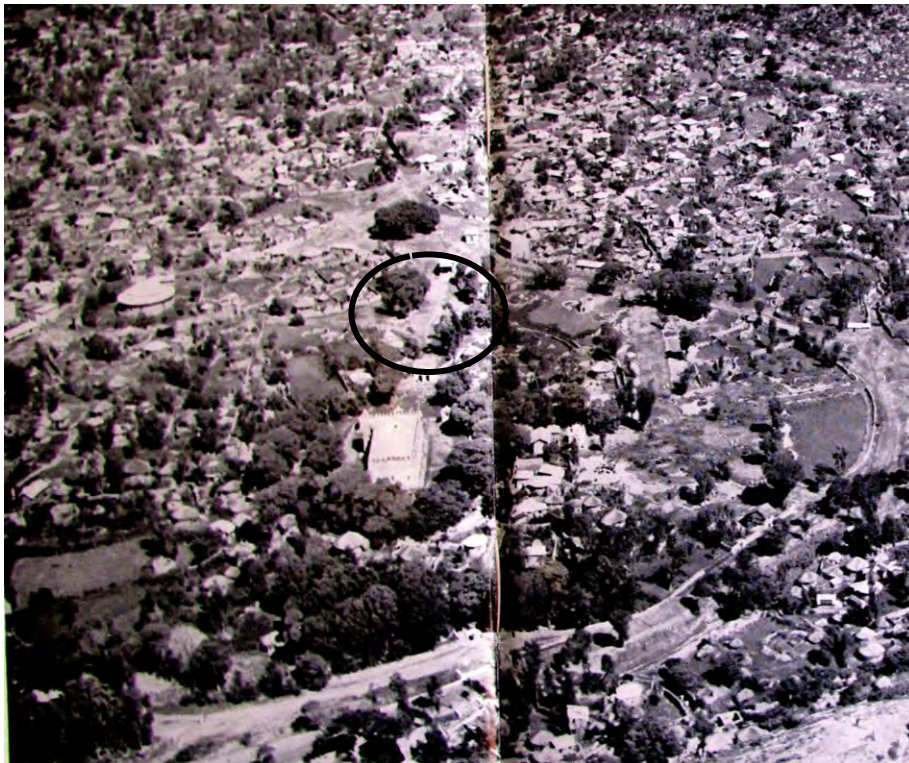


Fig. 5.47 Aerial view of the thrones site (in circle, center) in early 1950s (Photo: after Doresse, 1956: 44-5).



Fig. 5.48 The stone thrones during 1990s; (A) the king's and judge's thrones. Note: only the top of king's throne is visible, while the basal of the bishop's throne has completely disappeared. The short pillar behind the pillars is visible; (B) the main row of the judges' thrones, view from southwest; (C) a tree amid the judges' thrones (photo: after Phillipson, 2003: 52).

5.4.3 Present condition of the thrones and pillars, and their landscape: Today the landscape of the stone thrones is much disfigured by human and nature processes. The Judges' thrones are used daily as seating by people during mass prayers, as they are shaded by the large trees. Trees growing amidst the thrones have disintegrated the blocks, and others have been raised by their roots. The area immediately northwest of the Judges' thrones was fenced with wood in 2010 to protect newly planted trees, where some homeless people also live in a kind of tent of rag clothes and plastics (*fig. 5.50*).

The Church has recently built a circular small stone masonry wall immediately in front of the Judges' thrones at the supposed sacred place of the Godef Maryam, and erected an iron



Fig. 5.49 The thrones site in 2010, view from east; note: the king's throne (follow arrow and circle) had already disappeared in 2010 (Photo: Berhan Teka, 2010).

candlestick within. A wooden fence south of it protects a living tree from animals and people (*fig. 5.51*). In a photo of 2014 (*fig. 5.52*) the fence immediately west of the Judges' thrones was removed, since the trees have grown tall enough to avoid from being eaten by animals and cut easily by children. The wooden fence for the tree in front of the thrones has been replaced with short wooden poles, painted blue and nailed with horizontal wooden beams. The number and size of the trees around and on the thrones has substantially increased.



Fig. 5.50 The thrones, view from west. The wooden circle fence in front of the pillars (right background) is now replaced with wooden pole and painted blue (Photo: Berhan Teka, 2010).

Fig. 5.51 The trees provide good shade for the people during mass prayers; the thrones serve as comfortable seats in the shade. Notice the circular masonry wall, and blue-painted fence on the foreground (photo: Hiluf Berhe, 28/09/2014).



The King's throne and Bishop's throne have been reburied by deposition, when compared with earlier photographs at different times. The King's throne now is completely obscured by deposits. The seat block of the Bishop's throne is still visible although much of it has been buried since 1906. The pillar bases around the King's throne, still visible in the 1990s, are now completely buried on fig. 5.50. The top of the small erect stone is still visible southeast of them.

The new Saint Yared Theological School building now stands about 50 m. south of the thrones site. The historic Godef Maryam is no longer extant and the area is now paved with concrete. The entire area surrounding the thrones site is filled with large trees and provides good shade for people, so the thrones are used as a playground and resting places, and for religious ceremonies.

5.4.4 Brief description of the thrones, pillars, and their associated features

Fifteen thrones are found within the Maryam Tsion cathedral compound, with Thrones 3-13 in one long line while Thrones 14-15 form another line in front of it and thrones 1-2 are farther east next to each other. The thrones are totally neglected and disordered. Although their location is stable, reburial by deposits, human activity and tree growth have caused great damage. A recent (September 2014) detailed description of the thrones and pillars is presented here.

Throne 1: The King's throne; now totally obscured by earth together with the base and other slabs around it. Its pillars round it are, however, still in place.

Throne 2: The Bishop's throne; only 28 cm of the total height³¹ of the seat block is visible now, the rest being buried in the ground. Its original seat block and base had been entirely visible a century ago (*op. cit.* Phillipson, 1998: 128-9).



Fig. 5.52 King's throne originally in the center (circle), is no longer visible. Only top of the seat block of Bishop's throne on the foreground is visible; view from north. The food stuff on the seat block was left by the pilgrims for birds. A truck can be seen on the background (photo: Hiluf Berhe, April 2012).

Throne 3: This is the southwestern of the long row of the thrones. It has double seat blocks sharing one huge piece of basal stone. Three stones with worked inner angles to fit to the edge of the basal stone are still visible on three corners of the basal stone but are disordered; the fourth, on the northwest corner, is missing. The throne inclines towards the south resting most of its weight on the southeastern cornerstone. These cornerstones are L-shaped but exhibit no depression to support a pillar (*see fig. 5.40*). The basal stone seems to have been supported by roughly worked granite stone, now visible on its northern side. The throne is raised above the ground, partly resting on the ground and partly on its southern cornerstone. Its underside surface is rough, implying that it had stood on an earthen surface or on steps.

³¹ DAE recorded 42 cm as the height of the seat block (Phillipson, 1998:128).

In front of the seat blocks is a large shallow depression cut into the basal stone, possibly intended for footrests for both thrones. Although now very defaced, it measures 35 x 148 x 0.5 cm, and is positioned 30 cm from the left and right sides and 40 cm from the front of the basal stone. This throne therefore may originally not have had a canopy, as none of the cornerstones reveals a pillar support.



Fig. 5.53 Throne 3, view from west (photo: Berhan Teka, 2010).

Throne 4: Only its seat block and base now survive. It rests entirely on the surface, with no visible indication of other steps below ground unless excavation is carried out. Footrests are positioned in front of the seat block, as with most thrones.



Fig. 5.54 Throne 4, view from east (photo: Berhan Teka, 2010).

Throne 5: The seat block, basal stone and grooves for footrests survive. It rises 50cm above ground and rests on one front cornerstone that originally had been used as a pillar support, and on two small blocks in the northwest corner positioned one above the other. The cornerstone and the other blocks were pushed underneath the throne. The cornerstone may have been moved from Throne 6, because its shape and size is identical to those of throne 6. A fourth cornerstone is missing from Throne 6, which implies that the one at Throne 5 belongs to Throne 6. If so, then Throne 5 has no cornerstones and thus would have had no pillar for a canopy.



Fig. 5.55 Throne 5, view from north (photo: Hiluf Berhe, September 2014)

Throne 6: Its seat block and basal stone survive. The southeastern cornerstone retains traces of a pillar support for a canopy. Two other cornerstones of similar shape and size are on the southwest and northwest corners, although 70 cm away from the throne itself. Another long granite block on its southern side is positioned east-west and originally part of a stair possibly brought from the ruined elite buildings. Its visible measurements are 4.06 x 64 x 36 cm. It is now reversed, as if detached from Throne 5 beside it. All of Throne 6 rests entirely on the ground, with traces for a footrest but local people have pounded two large deep depressions exactly where footrests should be positioned. Its basal stone is broken in two. Damage also is clearly visible on the edges of the back and southern side grooves.



Fig. 5.56 Throne 6; this throne retained its three cornerstones. The long slab originally part of a monumental stair is visible at the back (photo: Hiluf Berhe, September 2014).

Throne 7: Both seat block and basal stone are cut from a single granite block. This is the most elevated throne, retaining its most steps and three cornerstones in *situ* and marks for pillar support. Only the northwestern cornerstone is missing. Three main steps encircle three sides of the throne (the western side has only two), while the cornerstones and basal stone form the topmost step. A fourth ordinary step constructed of reused lateral blocks is visible at the front, one roughly worked and another with wide but shallow grooves shaped like a wide rectangular plate. Their shape clearly shows they were moved from elsewhere.

The cornerstone depressions for canopy pillars are cut deep into the block. These cornerstones are right-angled with a 34 x 36 x 5 cm depression at the outer angle. It has two traces of footrests, in front of which is a Ge'ez inscription, discussed elsewhere.

The throne has sustained some damage on the northern and front edges of the northern side groove of the seat block. The outer edges of the grooves for pillars on the cornerstones are also damaged. Another cause of damage to the throne is the growth of large tree at the northern edge immediately between Thrones 7 and 8, which has caused some blocks disintegrate from their original positions, and some blocks also have been raised above the ground by living tree roots.



Fig. 5.57 Throne 7. Left: front view from east (photo: Berhan Teka, 2010); right: view from north (photo: Hiluf Berhe, 28/09/2014).

Throne 8: Its seat block and basal stone remain, with all four cornerstones preserved. The cornerstones for pillars have been worked similar to Throne 7, measuring 34 x 34 x 10 cm. The throne is accessed by two steps on the front, now displaced from their original position by a large tree growing among the thrones. Little physical damage is visible, at the northern edge of the

side groove of the seat block, and the edges of three of the cornerstones, except the still intact northwestern corner.

In front of this throne are three cornerstones, one with a depression for pillar and the other two just smoothly worked. One of the latter is half broken. The cornerstone with the depression very likely may have been displaced from Throne 7 as its shape suggests and since one cornerstone of this throne is missing. The two L-shaped cornerstones may have been moved here from another throne and could be moved to their original position after detailed investigation and reconstruction work.

Throne 9: A seat block and basal stone cut from a single granite block. Only one cornerstone with a depression for a pillar has survived at its original position, fitting perfectly at the southeast corner of the throne. The northeastern cornerstone is visibly displaced by a large tree, whose only dry stem stands today. The throne is accessed by two steps, its basal stone and the cornerstone forming the topmost step. This step, however, either disappears at the back or been covered by earth. Two grooves for a footrest are still intact. It is supported by large blocks on the front and south sides, and northwest corner.

The seat block is damaged, except the back. Much the cornerstone is damaged, including the edge of the square pillar depression that measures 40 x 40 x 10cm.



Fig. 5.58 Throne 9, view from south. Dry stem can be seen on the background and foreground of the throne (photo: Hiluf Berhe, September 2014).

Throne 10: Preserved are the seat block, basal stone and two front cornerstones. It is accessed by two lines of steps at the front. The southeastern cornerstone has an intact pillar depression, measuring 42 x 43 x 9 cm. The northeastern cornerstone is badly defaced, with a circular depression created by the local people on the original squared depression. The original squared depression for a pillar measures 35 x 35 cm with a very shallow depth. The cornerstones are displaced from their original position. A large tree also has separated the throne from its steps and cornerstones. Other damage is visible at the southern, western and northern corners of the seat block.

Throne 11: Another double throne like Throne 3, except Throne 11 has two basal stones. The southern seat block and its basal stone are cut from a single block with an extended space on the basal stone to accommodate a second seat block. The northern seat block also rests partly on a separate basal stone and partly on a second basal stone so that both seat blocks fit together side by side. The southern throne has a footrest in front of the seat block measuring 67 x 33 x and only 4 cm, implying that another block was also placed on this large depression. For the second throne, the footrest includes the typical two grooves. Only the southwestern cornerstone is preserved on the throne. Its square pillar depression measured 40 x 40 x 5 cm. Another cornerstone with square pillar depression is located 170 cm away in front of the throne, although it may or may not belong to this or another throne.

This double throne rests on another block on its northern side, with more blocks lying on the ground north of it. The cornerstone depression has been rounded and deepened by the local people for lateral activities. The front cornerstone is only partially visible as it is covered by earth. Today the double throne is unstable, with several dispersed elements.

Throne 12: The seat block of this throne is visible only 20 cm above surface. Everything else presumably has been buried since 1906.

Throne 13: No trace of this throne is now visible. It is entirely below ground.

Throne 14: This throne is located on the second row in front of Thrones 7 and 8, with its seat block and basal stone still preserved. The basal stone is carved of coarse sandstone while the seat

block is granite. No other features such as a cornerstone, steps and support blocks are visible. The southwest corner of the seat block is partly damaged (*fig. 5.60*).



Fig. 5.59 Throne 14, view from west (photo: Hiluf Berhe, 28/09/2014)

Throne 15: This throne is north of Throne 14 on the same row, in front of Thrones 8 and 9, and consists of a seat block and basal stone. It is raised and then supported by an upright cornerstone on its front.



Fig. 5.60 Throne 15, view from west (photo: Hiluf Berhe, 28/09/2014).

Pillars: The DAE did not give number to the pillars, so the following enumeration is created for the present thesis, and independent of earlier records (*see fig. 5.62*)

Pillar 1: At the southeastern corner of king's throne: it stands 143 cm tall, with a concave bevel along the edge that extends 20 cm above ground level and 24 cm from the top. Its four sides each measure 25 cm, the bevels (grooves) are 10 cm in width. The pillar measures 39 x 39 cm at the top. It is the only pillar having an incised cross, on its top west side.

Pillar 2: At the southwestern corner. It stands 133 cm, with a top surface of 38 x 38 cm, and 24 cm on each side of the shaft itself. Corner bevelling begins 10 cm above ground level and 18 cm from the top, and has a width of 9.5 cm.

Pillar 3: At the northeastern corner. It stands 135 cm, with its bevel 10 cm above ground and 16 cm from its top. All four sides measure 25 cm, the top 39 x 39 cm, and the bevels 10 cm wide.

Pillar 4: At the northwestern corner. This is the shortest pillar, only 123 cm in height. The bottom of the beveling lies below the surface and 31 cm from the top. Its top itself measures 38 x 38 cm, and the shafts 10 cm.

Pillar 5: The isolated pillar east of the Bishop's throne, carved of fine (?Tekeze) sandstone. It is so far from both thrones and in such bad condition that it cannot be associated with any throne. It is 128 cm tall, although the shape is somewhat regular, with four sides differentially measuring 43, 45, 52 and 53 cm. Its top area also varies, measuring 38 cm north-south and 53 cm east-west, so actually is rectangular in section. This pillar now has a large crack some 2 cm wide generally aligned southwest-northeast. Due to the sandstone material, the entire pillar may be endangered by water entering into the crack.

Pillar 6: Another stone south of Pillar 5, presumably a pillar buried, with only its top part only 6 cm visible above ground. It is also carved out of fine sandstone, and measures 54 x 68 cm in section. The many small shallow holes which can now be visible on the top were made by boys for playing a traditional game, called *gebeta*. The proximity and similar material suggests Pillars 5 and 6 may have been erected to canopy over a common throne but obviously not the Bishop's throne. However, only excavation will confirm the overall size of Pillar 6 and the existence of other surrounding features.



Fig. 5.61 The pillars at the King's throne, facing east (photo: Hiluf Berhe, 29/09/2014).



Fig. 5.62 Pillar 5, facing north. Note, the crack can be seen at the center of the pillar running from top to bottom (Photo: Hiluf Berhe, 28/09/2014).



Fig. 5.63 Pillar 6, top view (photo: Hiluf Berhe, 28/09/2014)

5.5 Agents for the change of archaeological landscape, monuments and structures

As this study has revealed, changes in the archaeological landscape and heritage can be broadly divided into two types.

5.5.1 Human factors

The archaeological landscape and heritage has changed considerably through human activity such as settlement, agricultural activity, deliberate destruction (robbery), ignorance, negligence and scientific research. The archaeological landscape also has changed through both formation and destruction. While a generation leaves traces behind that later form an archaeological landscape, succeeding generations also destroy it and form another landscape with its own unique cultural traces. In Aksum, such change has occurred without proper documentation.

In the case of the tombs of Kaleb and Gebre Mesqel, the archaeological landscape has experienced a variety of changes, from built area with structures both above and below ground, robbery and destruction of the visible structures, burial by natural deposition, agricultural activity, excavation and removal of overburden, and reconstruction to parts of the ruined structure to re-landscaping and construction of huge shelters. No doubt much has been destroyed, changed position (*e.g.*, the terrace wall), stolen and moved elsewhere as it changed over several centuries. Many structures and artifacts outside the fence wall in the fields east of the site remain threatened by agricultural activity, confirming much remains to be excavated and protected here. As agricultural activities exposed structures and artefacts, people began to collect artefacts to sell and to loot worked stones for their private houses. These activities then encouraged them to deliberately dig illegally for more treasures elsewhere.

On the other hand, scientific excavation and conservation have both greatly contributed in reforming the original layout of the structures without proper documentation, even though they intended to stabilise the archaeological landscape and its heritage. Many fence walls have been created only recently, and have totally distorted the original terrace wall and entrances to the underground royal tombs.

The May Hejja archaeological landscape and its monuments have also been damaged and changed. As has already been discussed elsewhere in this chapter, the May Hejja archaeological area has been occupied by settlement that obscured, reused and destabilised the monuments. Such damage, due both to ignorance and deliberate action, involve worked monuments and stones for construction or household purposes. Many monuments in private compounds are in poor condition and others have been overlaid by roads and paths due to ignorant actions.

Particularly in the case of the MSF, recorded human activity used the site both as a cemetery and for house construction. Photographs demonstrate that stela 3 was used as public gathering space. stela 1 and 2 supported a high fence wall that in turn must have caused pressure on the underground tombs below. When people began to settle there, stela baseplates likely were removed for reuse as flooring and thresholds. In doing so, the stela could be destabilised and consequently even collapsed. Deliberate human activity has been recorded archaeologically in the toppling of stela 2 (Phillipson, 2000, I: 147) in the 6th century AD. Based on recent excavation and synthesis, Poissonnier (2012) argued that the stela was destabilized when robbers dug a hole beneath the basement structure of the stela in search of precious object, but not intended to topple the stela. Whatever the intention of the robbers was, the conclusion is that human factor caused great damage on the stela that finally led to its destruction. Removed to Rome in 1937, it was returned in 2005 and re-erected on its original (pre-sixth century toppling) position in 2008.

The underground robbers' tunnels must have had great impact, destabilising the ground on which the stela stood (*op. cit.* Chittick, 1974; Munro-Hay, 1989; Phillipson, 2000: I and II). Tomb robbery has resulted in an incomplete archaeological record. Later archaeological excavations (and destruction) have changed the MSF archaeological landscape entirely, revealing the terrace walls and underground tombs, new reconstruction work has been conducted and then formed a stable platform. New fence walls have been created and ancient ones realigned. The re-erection of a shaft cover above the Mausoleum and other stela in the MSF, and the damage done during an attempt to erect stela in the 1960s are also recent memories.

Residents were relocated from the northernmost stela field, while the eucalyptus forest remains³². Pathways have been re-directed and roads previously passing through the Geza Agumai area north of the town have been closed.

The site of stone thrones at the cathedral enclosure also has suffered continuous damage. The thrones themselves were exposed to human looting and destruction because they were always visible aboveground. All the thrones have disintegrated except for their basal stones and seat blocks, and all other features there also are highly disintegrated. As some traces indicate, the thrones originally had pillars, and probably side and back rests (*fig. 5.65*). Today, none of the thrones has a single side or backrest visible on the surface. Only the King's throne still has all four pillars intact. Such great losses obviously are due to human agency.

Most throne cornerstones are displaced, in most cases only three are now preserved while none survive on others, and all four survive only on Throne 8. It is unclear whether all thrones originally had their own pillars or re-used existing pillars removed from a previous throne. Some thrones lack any trace of step and cornerstone, retaining only the basal stone and seat block.

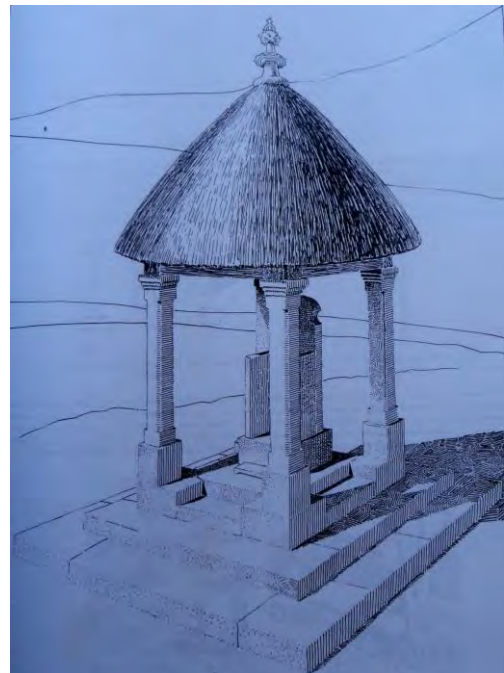


Fig. 5.64 A possible reconstructed throne showing the steps, pillars, basal stone, seat block, side and back rests, and canopy (after Littmann *et al.*, 1913, II: 63).

³² Eucalyptus tree was planted in Aksum during the Derg regime in the 1970s as part of the forestation program of that time. Since then, the northern stela fields and the hillslope of Biete Giorgis are covered with the aforementioned tree species. In the Geza Agumai stela field, there is no doubt that the trees could have caused damage on the stela and possibly on other underground structures due to the largely expanding roots.

Texts are thought to have been inscribed on now-lost throne sides and backrests (Fattovich *et al.*, 2000: 55). Many plaques found in Aksum and one in Matara were thought to originally belong to thrones (Phillipson, 1997: 123). This assumption was supported by the text inscribed on the white marble³³ throne as recorded at Adulis by Cosmas Indicopleustes in the 6th century (Fauvelle-Aymar, 2009). The famous inscription of King Ezana also mentions the erection of a throne (Littmann *et al.*, 1913: IV, inscriptions 10 and 11) implying that “inscribed plaques formed parts of such thrones” (Phillipson, 1997: 123).

Some features reveal that human processes have also affected the thrones in many other ways. Some pillar depressions on cornerstones have been subjected to pounding, enlarging and deepening the original depression. The edges of some cornerstones and seat blocks have broken off, the edges of some seat blocks defaced, and inscriptions lost or effaced. The basal stone of the Bishop’s throne likely has been turned “back-to-front” (Phillipson, 1997: 129), implying that throne movement and reuse have occurred from ancient times. Thrones and pillars have also been used as dumps for leftover food to feed birds (*fig. 5.53*). This is very common during the monthly St. Mary’s commemoration day.

The thrones site also serves as public gathering during every church service, with worshippers standing and sitting on the thrones, and women are taught the Gospel here as they are not allowed to enter the inner enclosure. Archaeological excavation at the thrones site hopefully may be permitted in the near future, to see what lies underneath and how the landscape evolved to present times. Excavation at the thrones site always has been prevented (Bent, 1896: 193; Phillipson, 1997: 129) because the area is so sacred. However, this is exacerbated by rigid church administration in general and the conservative attitude of the clergy at Aksum in particular, the latter always claiming that even the Patriarch has no power to force them to accept orders concerning Maryam Tsion church. Excavation was conducted in the 1950s immediately beside the church treasury, yet the thrones site is neither near a cemetery nor both cathedrals.

5.5.2 Natural factors: All sites discussed in this chapter have been subjected to natural processes, with continuously different stages in patterns of archaeological landscape change.

³³ Inscribed white marble stones are housed in the Aksum Archaeological Museum and the Aksum Tsion Maryam cathedral museum. Their origins need to be carefully examined to ascertain if they have any link to the thrones.

Recent landscape change by natural processes appears stable at the moment, in the case of the tombs of Kaleb and Gebre Mesqel and May Hejja, due to human intervention, especially conservation. However, the process remains active at the thrones site.

As this study reveals, and as discussed earlier in this chapter, the main natural process to continuously change the landscape is reburial by deposit. All sites under discussion have been subjected to reburial by deposition as the result of soil downwash from their respective slopes. Erosion and flooding has not, or minimally, exposed sites and heritage.

The Kaleb and Gebre Mesqel site was entirely covered by deposit from the hill above. Such deposition has been cleared away by excavation at different times. Excavations have cleared away the deposit to the structures' original floor level both above and below the surface. Study has revealed that the earliest site in the May Hejja archaeological area is up to 4m. below the present surface, and this has remained as the present surface (particularly in the MSF) comprising another layer of human activity that may never be cleared away like other deposits.

The thrones site is under continuous reburial due to negligence and ignorance. Photographic and illustrative evidence from the early 1840s shows that the lower levels of many thrones (mainly the King's throne and Bishop's throne and their pillars) have been covered by earth and the process still continues. In the early 17th century, Almeida guessed the height of the pillars as within 2.28-2.75 m. (Almeida, ed. Beckingham and Huntingford, 1954: 90). Unfortunately, no successive traveller or recent researcher has recorded their height to compare the frequent burials by deposition. Their present aboveground heights are 1.43m (Pillar 1), 1.33m (Pillar 2), 1.35m (Pillar 3), 1.23m (Pillar 4) and 1.28m (Pillar 5).

The DAE (Phillipson, 1997:129) records the pillar bases are cubic, measuring 50.5 cm, while the shafts above are 25cm. Today only small portion is visible of the shaft above the cuboid base visible on three of the pillars, with the height as cited above, so it is possible to obtain the total height covered by earth since 1906 although still excluding the portion already covered by earth at that time. DAE documentation (Littmann *et al.*, 1913, II: 50) indicates the pillars were 201 cm tall, meaning the ground level has risen about 77 cm since 1906 (*fig. 5.66*).

The King's throne and Bishop's throne pose a similar problem. The King's throne, now entirely covered by earth, was nearly 64 cm high in 1906. The Bishop's throne was 78 cm high, of which only 28 cm is visible today. The seat block of Throne 13 was visible in 1906, with a total height of 42 cm aboveground (Ibid, 49), but now is completely covered by earth. Its basal stone must have been buried before the DAE arrived in 1906, but some throne steps and cornerstones clearly visible in 1906 are now partly or entirely covered by earth.

Trees also have been identified as threats to the thrones. Although they seem to have been planted intentionally, the natural growth of their roots and stem is lifting up and disintegrating the thrones and their associated features.

It is, therefore, clear that the present Aksum is meters higher than the earliest ancient level, and that even the succeeding landscape is continuous being buried. It can be envisaged also that unless protective measures are taken to halt further human and natural actions on the heritage in general, the present landscape also will soon disappear.

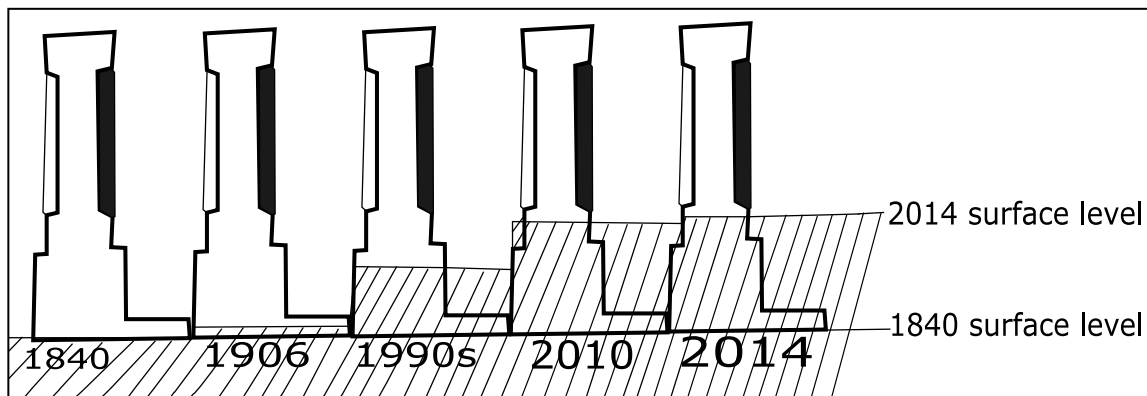


Fig. 5.65 Schematic representation of reburial of Pillar 1 between 1840 and 2014. All the shaded area above the 1840 surface level indicates the buried part since (Drawing: Hiluf Berhe, June, 2015).



Fig. 5.66 King's and Bishop's thrones in 1906 (left) (Phillipson, 1997) and 2012 (right) (Hiluf Berhe, 2012).

CHAPTER SIX

ARCHAEOLOGICAL AND CULTURAL HERITAGE MANAGEMENT AND THE QUESTION OF HERITAGE OWNERSHIP IN AKSUM

“The cultural and natural heritage is among the priceless and irreplaceable assets, not only of each nation, but of humanity as a whole. The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the peoples of the world. Parts of that heritage, because of their exceptional qualities, can be considered to be of “outstanding universal value” and as such worthy of special protection against the dangers which increasingly threaten them” (UNESCO Operational Guidelines, 2008: 2).

6.1 Introduction: Situated between two hills – Biete Giorgis and May Koho – Aksum is located in the Central Zonal administration of the National Regional State of Tigray. The old town of Aksum is mainly known for its monolithic giant stelae, underground monumental tombs built of granite, ruins of palaces, and stone thrones. As it was a major center of civilization and administration for the Aksumite kingdom, it is also believed to be the resting place of the Ark of the Covenant and home to the first church ever erected in Ethiopia. Thus it is an important town for ancient Ethiopian history and the Ethiopian Orthodox Church. As a result, Aksum was included on the World Heritage List (WHL) on 5 September 1980 during the fourth session of the UNESCO World Heritage Committee (WHC) held in Paris, France, 1-5 September 1980 (UNESCO, 1980). The immovable archaeological heritage at Aksum combined with the architecture and living history of the Church is now considered an outstanding universal value under criteria (i)¹ and (iv)².

¹ “represent a masterpiece of human creative genius” (UNESCO, 1972 World Heritage Convention).

² “be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history” (UNESCO, 1972 World Heritage Convention).

Despite such outstanding universal value, the site and its heritage have been, and still are, under continuous preservation and security risk as a result of poor management, the lack of a proper master plan, the absence of a defined heritage buffer zone, and the detrimental outlook of bureau officials towards young, trained professionals who could do proper site management, scientific documentation, and the presentation of finds in museums. UNESCO WHC reports show that Aksum was repeatedly recommended for an appraisal for the establishment of a buffer zone, a master plan, and proper management in compliance with the criteria and evaluation methods of the World Heritage Site (WHS).

In this chapter, the main problems concerning the preservation, conservation and management of the site and its heritage will be examined. The mandate of protecting this material heritage, both ecclesiastical and non-ecclesiastical, will be discussed. The administration of this site is by two different bodies and there is no clearly defined proclamation for authority of one over the other; how that situation impairs the sustainability of the heritage in particular, and the archaeological and cultural landscape in general, will be the focus of this chapter.

6.2 Cultural Resource Management³: an overview

Cultural resources are important components of archaeological sites and cultural landscapes that need special attention in order to ensure the sustainability of their scientific and historical value (Comer, 2012: 9). Cultural resources are also sources of national pride for a nation, while archaeology plays a crucial role in the making of a glorious and long history (Trigger, 1984) by digging out the deeply-buried history using scientific methods of excavation and interpretation (Tanyeri-Erdemir, 2006).

Africa has very few cultural sites on the WHL in light of its cultural diversity and size (Connah, 1998, 1987; Phillipson, 1993a). The main reasons for such under-representation and obstacles to heritage protection and management are a lack of awareness about heritage preservation, protracted civil wars, political instability, a lack of heritage policy and legislation, an absence of professionals trained in heritage management, a lack of funding, and the complicated nature of

³ “Cultural Heritage Resource refers to sites, structures, and remains of archaeological, paleontological, historical, religious, cultural, or aesthetic values” (Mabulla, 2000).

the UNESCO application for heritage registration on WHL. Although there have been some developments in the training of African heritage professionals in some African countries very recently, the number and skills are still inadequate to fulfill the needs of the diverse and numerous historic sites in Africa (Breen, 2007; Mabulla, 2000). Most African regions were mainly viewed as a fertile ground for research and exploration by Europeans and Westerners, but the preservation of historic sites for the future has been largely ignored (Breen, 2007). Even in this modern era, investing in heritage management is usually regarded as a low priority; at worst, the institutions that are supposed to take charge of the protection and management of priceless heritage are the weakest and lack influence (Mabulla, 2000).

Absence of a clearly defined statute, lack of space for storage and restoration of archaeological collections, and lack of trained heritage professionals and museum curators are also among the acute problems in Africa (Kibunja, 1997). In some countries, like Somalia, for example, cultural heritage resources are being destroyed because of the civil war that has lasted for more than two decades. It should be born in mind that cultural heritage that is unregistered and unprotected could even have added a significant amount to our knowledge about the ancient history of the eastern African coast (Mire, 2011).

UNESCO WHC reports during its 38th session in 2014 indicated that 39 percent of the ‘World Heritages in Danger’ are located in Africa (UNESCO, 2014). Threats to African heritage sites also stem from combined activities of humans and nature, such as road and factory construction, agricultural activities, erosion, flooding, and deforestation (UNESCO, 2003: 47). The boost in construction in Africa to catch up with the rest of the world is a major threat to cultural heritage resources. In addition, the careless development of tourism is greatly affecting African cultural heritage. In this case, the focus is usually to get the maximum amount of revenue from tourism without caring for the sustainability and long-term survival of cultural heritage resources. Similar consequences have been recorded in Jordan, where plans of doubling the tourism economy greatly damaged archaeological heritage at Petra (Comer, 2012: 174).

Lately, some countries have taken initiatives to protect and present their cultural heritage resources to the world community. Ethiopia is also showing some steps forward on the cultural heritage management very recently (Finneran, 2007: 265). However, compared to the long

history of archaeological excavation and the abundant number of sites, the move could be judged as very sluggish. It was in 2002 that Ethiopia launched its first higher education training program in cultural heritage management at Addis Abeba University (Worku Derara, 2010). This professional training was at the graduate level and admitted five students every year. In 2007, Aksum University launched its undergraduate program at the historic town of Aksum to relieve the acute problem of heritage professionals in Ethiopia. Two years later, this undergraduate training of heritage professionals was followed by Addis Abeba University while the graduate program still operates.

Ethiopia ratified the UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage on 6 July 1977 and has already registered nine (*table 6.1*) sites (one is a natural site) on the WHL since 1978. Ethiopia also has a heritage proclamation, the most recent revision being the heritage proclamation number 209/2000 (Negarit Gazeta, 2000). Despite the good move towards training heritage professionals in higher education to address the need of the country in the field, and the presence of a heritage proclamation, the structure of the culture and tourism office of the nation is a bottleneck for young graduates in the field of archaeology and heritage management. Culture and Tourism offices of the country have a demand for history, tourism, literature, and other fields while Archaeology and Heritage Management seems to be deliberately ignored to keep away the right professionals. As a result, the heritage resources of the country are still the least known and most poorly managed. The heritage proclamation is usually seen as ineffective without professionals to implement it.

Table 6.1 Cultural and Natural Sites of Ethiopia registered on WHL.

Site name	Location	Year registered	Criteria	Reference number
Lalibela Rock-hewn churches	NRSAm	1978	i, ii, iii	18
Semien National Park (<i>Natural heritage</i>)	NRSAm	1978	vii, x	9
Fasil Ghebbi, Gondar	NRSAm	1979	ii, iii	19
Aksum	NRST	1980	i, iv	15
Tiya	SNNPR	1980	i, iv	12
Lower Valley of Awash	NRSaf	1980	ii, iii, iv	10
Lower Valley of Omo	SNNPR	1980	iii, iv	17
Harer Jegol, the Fortified Historic Town	NRSH	2006	ii, iii, iv, v	1189rev
Konso Cultural Landscape	SNNPR	2011	iii, v	1333rev

(Source: <http://whc.unesco.org/en/statesparties/et> (accessed on 2/7/2015)).

6.3 Cultural Heritage Management (CHM) in Aksum World Heritage Property

Aksum has been the focus of international scientific archaeological research since the early 20th century, mainly from Europe. Those excavations have unearthed a large part of the ancient town, usually leaving the structures exposed to human and natural agents. The excavations of the early 1900s up until the 1950s have dedicated almost none of their resources for the conservation of heritage sites. It is clear that archaeological heritage is better preserved in the ground than after their exposure to a new environment. Thus archaeological excavation should not be a priority (Aalund, 1985: 36). Listing and documenting sites for better protection and planned excavation for research should be a prime focus; it should be born in mind, however, that sites which do not reveal any traces on surface can only be located through archaeological excavation. If excavation is inevitable for any reason, then any archaeological research project should incorporate the plan of conservation as part of the project. In Aksum, few large structures have been covered with protective shelters since the 1990s.

Ancient Aksum was totally overlaid by settlement mainly since the 1900s, which has obscured most of the archaeological sites. Settlements were concentrated around the church of Maryam Tsion and to its west while the remains of big palaces – Ta’aka Maryam, Enda Sem’on, and Michael Efoy – were still partially or wholly visible; on the other hand, the northernmost part of the stela field was totally free of settlement (Littmann *et al.*, 1913: I). In the subsequent period of settlement on such archaeological sites, it is obvious that remarkable archaeological remains must have been lost in the process of construction by digging into the ground for basements.

Even if Aksum were registered in the WHL in 1980, the problem of heritage management would still be there: it was registered without a buffer zone or a site management plan. UNESCO WHC documents indicated that repeated requests to the Ethiopian authorities to submit a master plan of a heritage site and buffer zone for Aksum were without success until 2013. In 2013 there was a small team composed of three experts – an archaeologist from Aksum University, a GIS expert from Tigray, and a lawyer from the Authority for Research and Conservation of Cultural Heritage (ARCCH) – working on an Aksum buffer zone and management plan. The result of such work is, however, still unavailable, and the archaeologist does not know anything about the

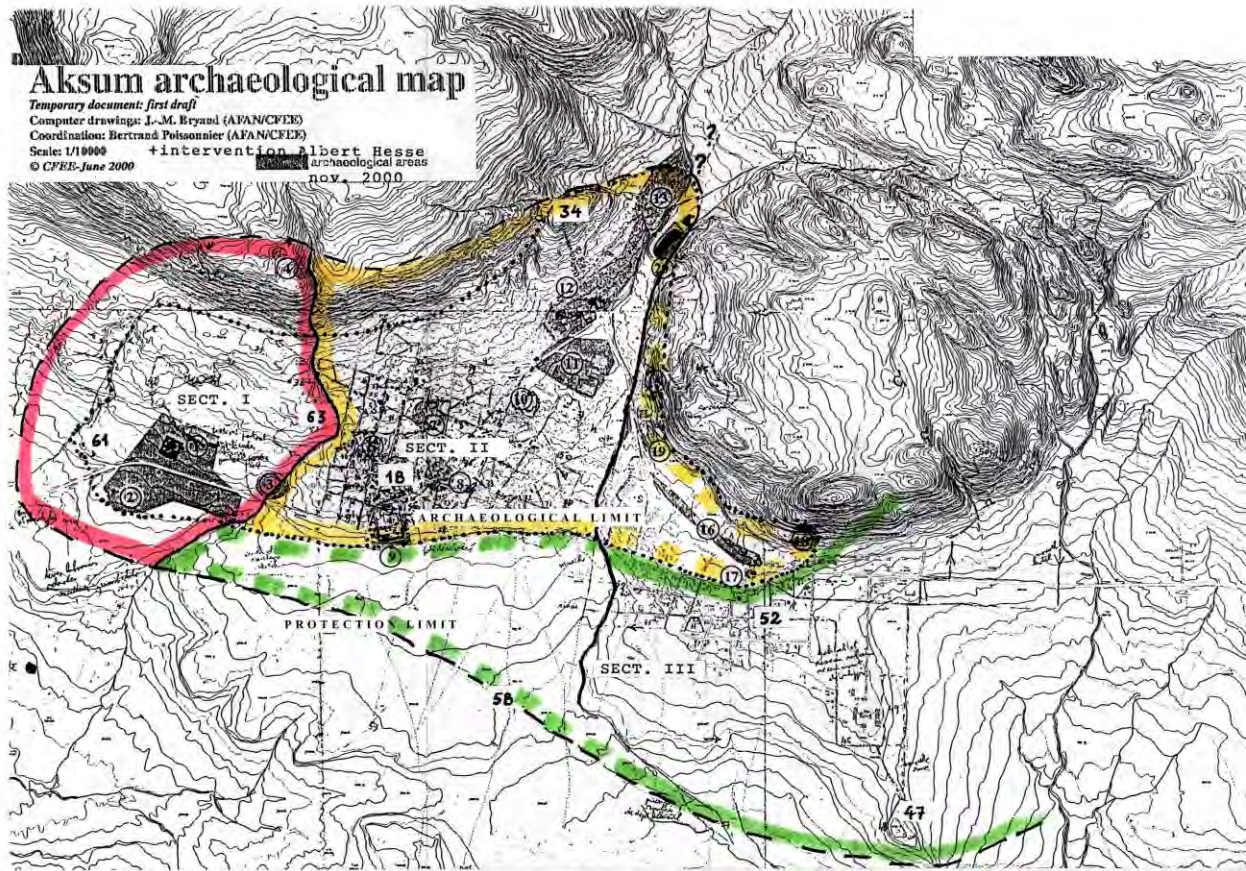
result of the assignment after the report was submitted (Berhan Teka, e-mail communication, December 2014).

On the other hand, in 2000 the National Urban Planning Institute (NUPI) has worked on Aksum master plan. As part of this project, NUPI requested CFEE to work on the archaeological aspect of the town. In response to this request, Bertrand Poissonnier and his colleagues carried out an intensive survey in Aksum in order to develop an archaeological map⁴. Accordingly, three archaeological zones have been outlined on a map. The first two sections (*map. 6.1*) are strict archaeological zones into which no construction would be allowed. Construction may be allowed within the third section; however, as the survey has indicated possible occurrence of archaeological sites (numbers 47, 52, and 58), the follow up of the heritage administration office was recommended. It is true that this map has contributed in prohibiting development activities in the old town (sections I and II on the map); nevertheless, as will be shown below, uncontrolled constructions are common today.

From early on, the UNESCO WHC has reminded the concerned Ethiopian bureau to carry out scientific documentation on the site, which is a basic pre-requisite to enhance the management and conservation plans (UNESCO, 1997: 51). In 1998 there was a mission by the World Heritage Center to make town heritage boundaries for conservation purposes, but it was soon suspended because of the Ethio-Eritrean war. In that same year, the Ethiopian Orthodox Church posed a major threat to the heritage site when it planned to construct a residence for the Patriarch just on the left bank of the May Hejja stream (UNESCO, 1999: 20-21). This was the result of the absence of a defined heritage boundary and poor communication among the municipality that allotted the land for the construction, the Culture and Tourism bureau, and the Orthodox Church. UNESCO WHC at its twenty-second session (UNESCO, 1998: 41) made a note about sending a letter to the Orthodox Church and the ARCCH with a suggestion to postpone the construction.

Problems with CHM in Aksum have become worse from time to time with the population increase and the high demand for more construction. UNESCO was aware of the prevailing

⁴ I am grateful to Poissonnier for this information. He was active participant of the project in developing the map, surveyed the sites, and conducted a test excavation (Poissonnier, email communication, 17/3/ 2015).



Map 6.1 Archaeological map of Aksum. Section I shows the western outskirts of the old town; section II indicates the built area of the old town under which lies remnant of the ancient Aksum. Section III is archaeological free zone but possible occurrences of sites located at 47, 52, and 58, thus protection measure is needed (© CFEE, kindly provided by Poissonnier).

problems in Aksum. The construction of the residence for the Patriarch was inevitably completed; during its visit to Aksum in April 2005, the UNESCO mission clearly identified the problems in Aksum such as “lack of conservation and Management Plans; uncontrolled constructions; lack of documentation and equipment; lack of interpretation and presentation and; lack of the demarcation of the site” (UNESCO, 2005: 47). UNESCO, at this session, urged the government of Ethiopia to define and produce a map indicating the buffer and core zone of the WHS.

In its thirtieth Session held in Vilnius, Lithuania, 8-16 July 2006, UNESCO reiterated the problems that the Aksum WHS had. This time, the main task in Aksum for UNESCO and the

country was the re-erection of stela 2. It was greatly feared that the re-erection of stela 2 might put stela 3 at risk. As a consequence, much effort was focused on the engineering to minimize any risks; the Italian government allocated a reasonably large part of the budget – USD \$5.07 million – by the Italian Funds-in-Trust for the “Aksum Archaeological Site Improvement Project: Preparatory studies for the reinstallation of the Obelisk and capacity building for archaeological conservation - Phase 1”, “Reinstallation of the Obelisk - Phase 2” and “Consolidation of Stele III” (UNESCO, 2006: 98-100; 2013: 75). Despite such efforts, the stability of stela 3 was finally affected by the reinstallation of stela 2 and is now tilting 2.24 degrees (UNESCO, 2013: 75).

Every year, the UNESCO WHC has identified the main threats to the Aksum World Heritage property. At its thirty-second session held in Quebec City, Canada, 2-10 July 2008, the WHC noted the following problems:

- “a) Insufficient delimitation of this serial property;
- b) Lack of conservation and management plans;
- c) Lack of appropriate urban planning and building regulations;
- d) Lack of cartography documentation and equipment” (UNESCO, 2008b: 73).

On top of these serious existing problems, a new work of the World Bank funded project has posed a threat to the World Heritage property: a new museum was built behind the SP. The WHC has explained this threat thusly:

“... plans of the World Bank project shown to UNESCO in January 2006 were implemented with a change in the original design: the height of the museum entrance has been raised to two stories instead of the foreseen one storey; this is regrettable since the museum was built inside the Stelae Park. In addition, with increasing tourism, the location of the entrance in the back of the Stelae Park will transform the latter into a crossing area to access the museum” (Ibid: 74).

In the same report, the country was further reminded to work on the heritage buffer zone and a detailed road map of the heritage area to be submitted to the UNESCO WHC for examination at its thirty-third session in 2009.

At the thirty-fourth session held in Brazil from 25 July to 3 August 2010, UNESCO WHC had strongly stressed the aggravating problems at the Aksum World Heritage Site and the silence of the country in taking protective measures in Aksum. A joint World Heritage Centre/ICOMOS reactive monitoring mission had visited Aksum from 4-8 February 2010. From that visit, the mission identified more problems in addition to those already existing. The main ones reported by the mission to the WHC were “the need for the definition of boundaries, for a retrospective Statement of Outstanding Universal Value, for a Memorandum of Understanding on governance arrangements, for qualified staff, for planning controls, for a Management Plan, and to address the structural instability of Stele 3 and related rising water table issues” (UNESCO, 2010: 115). The mission also underlined that there would be a red signal on the Aksum WHS as a result of the uncontrolled encroachment and development, and in particular the planned construction of a museum by the Ethiopian Orthodox Church in the compound of the Aksum Maryam Tsion church. Such developments had never been reported in advance to the UNESCO WHC and construction was taking place within the property.

According to the UNESCO WHC report, the country was not active in taking immediate action in response to the repeated requests by the WHC. The country gave several reasons for its delay to take action: that it would work with Aksum University, lack of funding, lack of expertise, and that the country is waiting for a draft proclamation to protect the site to be adopted by Parliament (Ibid). It was also reported to the WHC that the rising water table in the Tomb of Brick Arches was related to the structural instability of stela 3, which was in turn affected by the stela 2 reinstallation works in 2008. This is, however, completely false: after the tomb was excavated in the 1990s by BIEA (*see chapter four*), the tomb had always been under threat from the rising water table. The researcher is a primary eyewitness for the fact that the rising water table was drained out by laborers every year during his four years of work from August 2001 to September 2005 as an expert in heritage protection and conservation in the Aksum Culture and Tourism Office. It can, therefore, be discerned here that the cause cannot be related to the instability of stela 3 after 2008. This is just a pretext of the authorities that shows their ignorance and underestimation of the reports about the problem years before 2008. Of course this problem of the rising water table in the Tomb of Brick Arches and the Tomb of Bazen has been regarded



Fig. 6.1 The tomb of Brick Arch: (A) water filled up to the level indicated with broken lines. A plastic tube visible in the water was used to drain out the water. (B) View from upper stairs towards the interior; here a wet area can be seen when rainwater entered through the entrance and leaked through the side wall (upper right corner). A plastic tube used to drain out the water can be seen on the stairs (photo: Hiluf Berhe, 18/8/2008).

by the authorities as minor. The researcher stresses here that the cause was rainwater entering directly through the entrance due to poor conservation works, and the rising ground water during the winter season due to its depth⁵. The incident of this problem after the 1990s BIEA excavations and the recurrence of the problem every winter season justify this observation.

UNESCO was so sorry about the newly built archaeological museum within the SP by the World Bank funded project. The problem of construction within the World Heritage property in Aksum doesn't come only from the residents, as will be discussed elsewhere, but also from the institutions (the Church and ARCCH) as well. Through 2010, UNESCO had already reported

⁵ Tekle Hagos (2008: 130) also observed that the water comes from underground during the rainy season. Some Ethiopian architects have suggested planting large trees near the tomb so that the roots can absorb the ground water permanently, but they did not consider that the roots also can penetrate into the structures and make them disintegrate. The tomb is also found 10 meters below the present surface level – so deep that only the roots of extremely large trees (such as *warka*) can reach the depth.

the problems of two completed constructions (the residence for the Patriarch and the Archaeological Museum) and the newly planned construction of a large museum by the Church. No measure was taken by UNESCO when all these constructions were carried out except it felt sorry.

At its thirty-fourth session in its closing discussion about Aksum, UNESCO underlined the urgent need to address, through the adoption of a law on urban planning, the exposure of the property to uncontrolled construction developments. It also requested the country further investigate the root causes of the rising water table in the Tomb of Brick Arches and reiterated the need to submit an appropriate map of the heritage property and a report on the state of conservation for the next session of UNESCO WHC (Ibid).



Fig. 6.2 The new archaeological museum, visible behind the stelae, and residence of the Patriarch, right corner; view from May Koho (Photo: Hiluf Berhe, 17/2/2009).

The threats to the Aksum WHS continued without being halted or minimized. Although the country submitted a map about a buffer zone, it was rejected by UNESCO at its 2012 session for failing to comply with the required format and level of detail by UNESCO. During this session, UNESCO also highlighted that the construction of the church museum continued and already had reached the first floor level. This four-storey museum was planned by an Italian architect. UNESCO had requested the submission of the plan for review during the 2010 session, but the plan was not submitted for review nor was the construction delayed. UNESCO still requested that the construction be halted until some revisions of the plan were made (UNESCO, 2012: 86).

During the 2012 UNESCO session, the country presented further reasons for the delay of the implementation of the above plans. Among others, excuses included the establishment of a site office in Aksum for management, the delay of the Parliament in endorsing the draft document on the legal protection for the Aksum WHS, further technical study in collaboration with national universities for the final solution of the rising water table in the Tomb of Brick Arches, and blaming the company that reinstalled stela 2 as responsible for the destabilization of stela 3 (Ibid, 2012). The country was again requested to consider and act accordingly in response to all the recommendations and information forwarded by UNESCO. The construction of the Church Museum was a major concern as it might negatively affect the World Heritage Site. In its statement to the nation, UNESCO requested and warned the:

“...State Party (*country*) to submit to the World Heritage Centre, by 1 February 2013, a detailed report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 37th session in 2013, with a view to considering, if the Orthodox Church Museum construction is not halted until the project is comprehensively assessed by a high level reactive monitoring mission, and until appropriate solutions to ensure that the Outstanding Universal Value of the property is fully preserved have been identified and agreed upon, **the possible inscription of the property on the List of World Heritage in Danger**” [*emphasis by UNESCO*] (Ibid: 88).

A joint committee of the WHC-ICOMOS mission visited Aksum from 20-27 January 2013 to inspect the conservation status of the Aksum World Heritage Property. The mission was mainly

there to evaluate the negative impacts of the construction of the Church Museum on the World Heritage property. In addition to this objective, the mission also had to check the existence of a management plan and delineated buffer zone for the Aksum World Heritage Property (Cummins *et al.*, 2013).

As the report indicated, it seems that the mission was wisely welcomed by the Church and government authorities with apologies from the Church and the office of the mayor of Aksum for the construction of the new Church Museum building without submitting a report to the UNESCO WHC due to their ignorance about paragraph 172⁶ of the UNESCO Operational Guidelines. Although the mission realized that no change had been made to the design of the new Church Museum, it considered its construction positively and had the opinion that the construction would not impair the view of the three church buildings of Aksum Maryam TSION nor would it have any impact on the World Heritage property. This was totally contrary to the previous reports of UNESCO WHC about the prevailing threat of the size of the Church Museum.

There is no doubt that the Church Museum will have a positive role in saving the ecclesiastical treasures in jeopardy today due to adverse space, poor management, and the lack of trained personnel in heritage protection and management. All treasures donated by believers and Ethiopian kings, as well as artefacts believed to have been brought to Aksum together with the Ark of the Covenant, are currently housed in the ground room of the small Chapel of the Ark of the Covenant. If properly utilized, the new Church Museum building could also be an excellent center for archives for researchers about the faith and the history of the Orthodox Church. As the State and the Church were also together (Tadesse Tamrat, 1972), the archives in the Aksum

⁶ UNESCO Operational Guidelines, paragraph 172 reads: “The World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the Secretariat, of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions which may affect the outstanding universal value of the property. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the outstanding universal value of the property is fully preserved” (UNESCO, 2008a: 45-46).

Maryam Tsion church will offer a great opportunity for national and international researchers to access information about the Church-State relationship in the past.

But should we put the older heritage at risk in order to build this new Church Museum for the aforementioned advantages? What would be the benefit of this new Church Museum after all if we negatively affect heritage, thereby causing chaos for heritage protection and sustainability? The researcher does not have any objection to the construction of the new Church Museum, but the actual size of the building, as opposed to the size that was claimed, shows the negligence of the authorities of the heritage protection bureaus to this World Heritage property. The ARCCH is officially mandated by law to take care of the heritage of the nation. The request of apologies by the Church authorities to the mission clearly shows that the ARCCH has not created awareness among the Church officials about the UNESCO rules and regulations for a World Heritage Site. It also means that the ARCCH does not follow up on any development plans and construction affecting the WHS, and there was and still is a lack of communication among ARCCH, the Orthodox Church, and the municipality about the protection of this World Heritage property.

The visit of the mission has also confirmed that there was a problem with a management plan and the lack of a buffer zone for the Aksum World Heritage property; they also observed the problem of the rising water table in the Tomb of Brick Arches and the destabilized stela 3. All these problems had been there for a few years prior to the visit of the mission in 2013, and particularly the lack of a defined boundary, buffer zone, and management plan for Aksum was reported immediately after the year of registration; however, none had been executed. Despite the threats to the Aksum World Heritage property as reported by UNESCO WHC, the mission report of 2013 concluded "...that there are no major threats to the property and therefore the conditions to place the property on the List of World Heritage in Danger have not been met" (Cummins *et al.*, 2013: n.p). This overlooked all the previous reports about the problems in Aksum that were still in place by the time the mission was in Aksum in 2013: the residence of the Patriarch was already built; the construction of the new Church Museum was progressing without any mitigation in the plan for the size of the building; stela 3 was still stretched with a temporary security system consisting of stabilizing cables to avoid further inclination; the rising water table in the Tomb of Brick Arches was still in place; the Archaeological Museum was

regrettably built without consulting the UNESCO WHC; the delineation of a heritage boundary and buffer zone was still incomplete; and uncontrolled construction developments were taking place in the main heritage center. For these and other human and natural reasons, the World Heritage property remains highly vulnerable.

Although UNESCO WHC recommended a minor revision to the size of the new Church Museum in order to avoid a visual impact on the ensemble of three church buildings of Aksum Maryam Tsion (UNESCO, 2013: 74), the construction has progressed according to the original design without any mitigation to the plan. This four-storey building (*fig. 6.3*) has now negatively affected the view of the churches, not only when standing closer to the new building, but also even from the top of the hill of May Koho. The rescue excavations on this site are also very controversial; the impact assessment made on the site allowed HAMA's simple drilling down to a depth of 4 meters on the western side and 2.5 meters on the eastern side. But as the building needs very deep foundations covering a large area, test excavations should have been carried out. Results of the drilling test of HAMA 2003⁷ show that the western side was filled with the dumped soil from Contenson's excavation of the ancient church of Maryam Tsion during the late



Fig. 6.3 The new Church Museum building; (top left) front view of plan of the new museum, and (top right) south side view (after Cummins *et al.*, 2013: n.p); (bottom left) front view of the constructed new museum, view from May Koho hill, and (bottom right) south side view (Photo: Hiluf Berhe, 28/09/2014). Note: the view of Chapel of the Ark of Covenant is already obscured by the new museum building. Only the top part of the 17th century Cathedral is still visible. One can also judge how the view of the whole surrounding area is negatively affected by this four-storey museum building.

⁷ The researcher participated in this drilling test as an antiquity officer and field trainee.

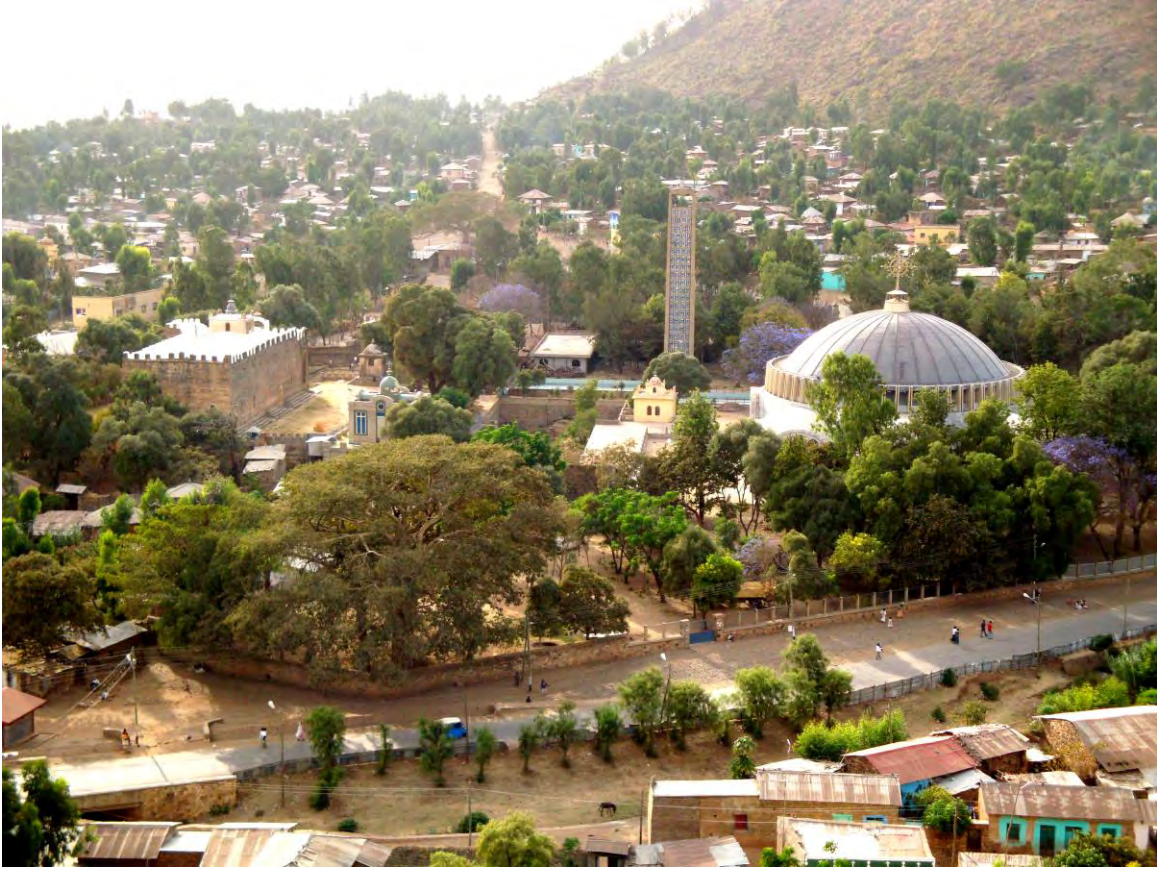


Fig. 6.4 View of the Maryam Tsion church area from May Koho; (top) before construction of the new church museum; (below) after the construction of the new church museum. Note: the warka tree visible on the foreground (top image) was removed (Photo: Hiluf Berhe, 2009, 2014, respectively).



1950s; while on the eastern side, the drilling indicated an undisturbed profile with the presence of ashes and deposits of the Mai Shum water basin.

The thirty-seventh session of UNESCO (2013) in its discussion on Aksum was concluded with requests to the country to submit a report if there were any changes in the plan of the new Church museum, especially a slight modification of its façade; to implement the management plan; work on the review of Aksum Master Plan in terms of heritage management; and to clarify urgently the heritage boundary and buffer zone and submit it to the WHC by 1 February 2015. At the time of writing and visit to the site in early October 2014, construction of the Church Museum was completed according to the original plan (*fig. 6.3 and 6.4*) without any mitigation as requested by UNESCO WHC. Unfortunately, no updated information is available about Aksum in the document of UNESCO WHC of the thirty-eighth session, held at Doha, Qatar, 15-25 June 2014.

6.4 Heritage types in Aksum

The heritage type found in Aksum is broadly categorized under cultural heritage according to the classification of “heritage” by UNESCO⁸. Its cultural heritage is further classified into tangible and intangible. Aksum is primarily known for its composition of cultural heritage. The objective of this sub-topic is not to deal in detail with the definition of cultural heritage; rather it is to discuss the heritage of Aksum under the control of the State and the Church. Accordingly there are two types of heritage in Aksum in terms of control and administration: ecclesiastical and secular heritage. Aksum is believed to be the holiest place for the Ethiopian Orthodox Church because it is where the first church was believed to have been built and is also believed to be the resting place of the Ark of the Covenant.

^{8c} – monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
– groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
– sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view” (Article1; UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage; Adopted by the General Conference at its seventeenth session Paris, 16 November 1972. 2005 Edition).

In the compound of the Aksum Maryam Tsion church, there are three church buildings still holding services; a fourth one is represented by the remains of the first church revealed by archaeological excavations as discussed in chapter four. The oldest of the three church buildings was built during the 17th century, the newest one completed in 1965 by Emperor Haileselassie I of Ethiopia (r. 1930 – 1974), and the third is the small Chapel of the Ark of the Covenant of 1945. The Church has housed a great number of liturgical objects and other memorial objects donated by individuals, local rulers, and emperors, as well as archaeological objects⁹. Among the objects in possession by the Church are parchment manuscripts. Currently all sorts of heritage found in the church compound – including objects discovered by fortuitous and archaeological excavations – is under the possession of the Church administration.

On the other hand, archaeological sites and monuments, burial places, remains of palaces and other buildings, stone inscriptions, archaeological museums, and any other cultural heritage outside the church compound is owned and administered by the State. A third category is the private houses located in the old town that contained typical Aksumite architecture. Such houses are worthy of protection and preservation with the help of the Culture and Tourism Office for their architectural representation of ancient Aksum. Although owned by individuals, the office intercedes with professional advice for the preservation of such old houses as living testimonies of the architecture of Aksum.

6.5 Heritage ownership and protection mandate in Aksum

The Heritage Proclamation number 209/2000 of Ethiopia states that “cultural heritage may be owned by the state or any person” (Article 14 (1)). Under sub-article 2 of same article, any cultural heritage discovered by exploration or excavation could be owned only by the State. Here the place of the ecclesiastical objects is not indicated; the State can own any cultural heritage discovered by excavation, exploration or even fortuitous, while individuals can own heritage inherited from their predecessors and deemed to be expressive of specific society in terms of historical context, architecture, art or tradition. The Church is a separate institute possessing most

⁹ The preservation and conservation status of the ecclesiastical heritage in Aksum is discussed in the following sub-topics.

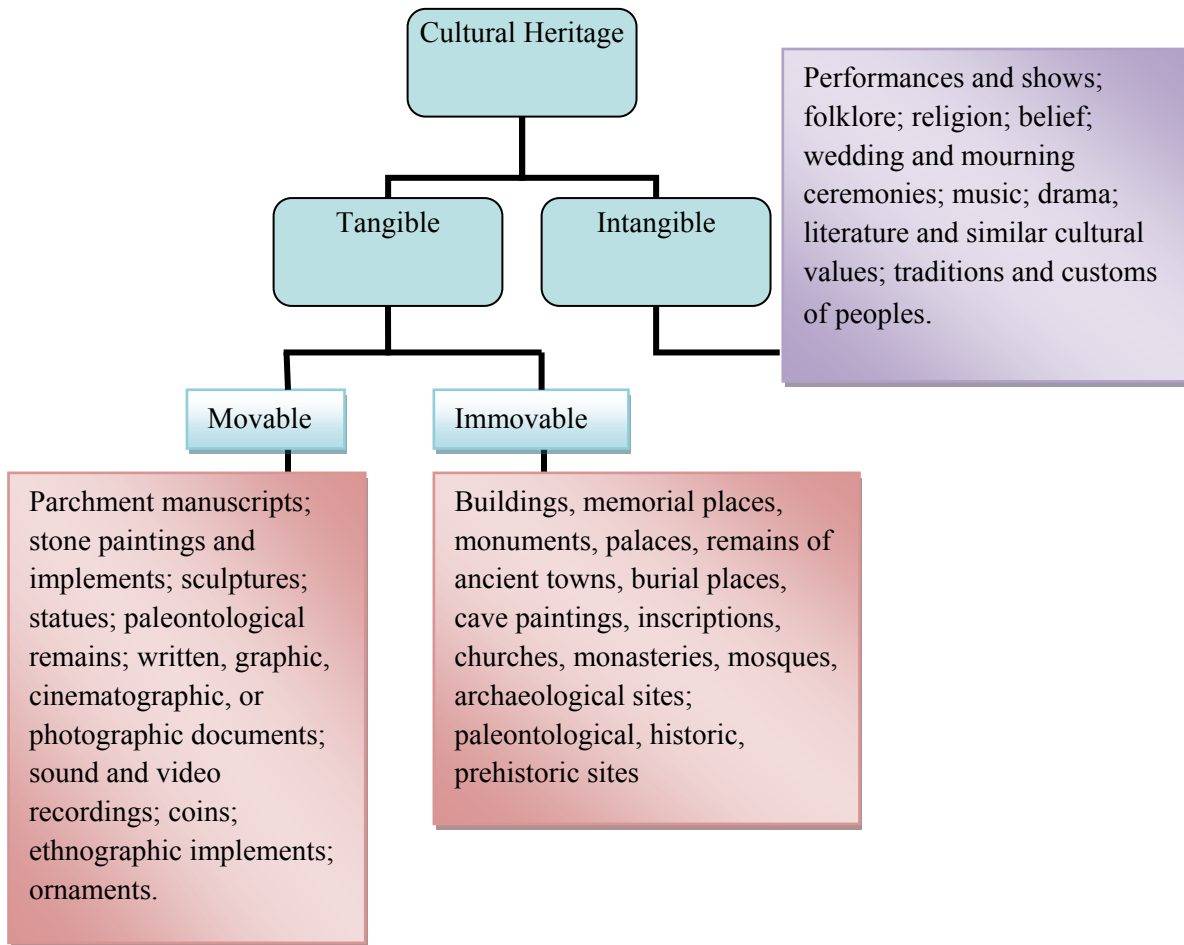


Table 6.2 Chart summarizing the classification of Cultural Heritage (compiled from the definition “Cultural Heritage” according to the Ethiopian Heritage proclamation number 209/2000).

important cultural heritage of the society, including parchment manuscripts which are found nowhere else. Such documents reflect the tradition and life of people making parchment, the story of the faith, miracles, and even history of kings and Church leaders; they are also among the earliest written narratives of Ethiopian history¹⁰.

Besides the ecclesiastical treasures, the Church buildings themselves are worthy of preservation for future generation because of their long history of construction, architecture, and the living

¹⁰ The earliest written evidences in Ethiopia are those stone inscriptions of Sabeian, Geez and Greek found in some ancient centers of the Aksumite and Da’amat kingdoms; but they narrate the wars of the ancient kings and their victory, the gods and offerings made to female deities. Their geographical distribution is also limited to the most northern part of Ethiopia (today Tigray and Eritrea).

service they render every day to believers. In the past periods, the only institute for the protection and preservation of such immense ecclesiastical treasures was the Church, and still is most responsible institute for the protection. Nevertheless, the growth of tourism and the effect of globalization (modern education) as well as the selfish desire of people for business is weakening the wealth of the Church. Although the property is common wealth and history of the humanity in general, the heritage proclamation of Ethiopia has a great gap in this regard.

The State has an annual budget to carry on heritage preservation, while the source of fund of the Church is generally the unpredictable donations (alms) from the society. The State is exclusively responsible for the heritage conservation.

The church of Aksum Maryam Tsion is one of the richest churches in Ethiopia in terms of heritage possession due to its long history and, for more than a millennia, according to legend, it was center of kings' coronation place. Crowns (of kings) and crosses made of gold, silver and bronze; parchment and paper manuscripts; clothes belonging to kings and royal family, and many other objects are stored in the underground room of the Chapel of the Ark of Covenant. Besides church objects, Aksum Maryam Tsion church has possessed many of stone inscriptions of Aksumite kings, and few objects discovered by archaeological excavation in 1993 at the top of Biete Giorgis.

The stone inscriptions ended up there when the former small archaeological museum was in the compound of the church in the early days of its construction in 1973. Since then, objects discovered by excavation, particularly the excavations of BIEA 1972-74, were housed in the aforementioned museum. According to informants, the entrance to the museum was from the west until another gate was opened from the east during later periods. When the new gate was opened, the former entrance to the museum was closed; as a consequence the museum came under the direct administration and control of the then Culture and Information office, but the Church kept some of the resourceful stone inscriptions. The objects from Biete Giorgis, around 140 crystal bead-like objects together with one object of oval shape, bigger in size (*fig. 6.5*) and, another object with letters "xm" (possibly a seal?) are under the custody of the guardian of the

Ark of Covenant. These objects were handed over to the Church to be kept in the most sacred and secret place – the Chapel of the Ark of Covenant, for their security.

Today, these archaeological objects are not accessible for any research as the Church is supposed to be separate from the State. The law of the heritage proclamation doesn't have any power to interfere unless the Church officials are willing to admit any formal request, despite the heritage proclamation number 209/2000 under article 43 (1 and 2) states that the authority has the right to enter “any place” for inspection where there is believed to be a cultural heritage. In reality, the



Fig. 6.5 The oval-shaped object (right) and the object with “xm” letters (left). The researcher had the chance to see them during the inventory of the Church treasures in 2002 (© Yedneqachew).

ARCCH, the authorized federal government institute, has faced problems to enter “any place” unless equipped with letters from the high Patriarch or when the Church authorities are easy going persons and willing to welcome any representative from the authority. So today there is no way of taking these objects out of the Church and make them available for research and tourism in the archaeological museum.

The gap in the heritage proclamation on the heritage ownership has generally affected the wellbeing of cultural heritage owned by the Church. The construction of the residence of the Patriarch and the new church museum without any permission from, and the knowledge of, the ARCCH are the results of this gap which in turn affected the whole Aksum World Heritage property. The Church appeals to the ARCCH generally when it needs professional and technical, as well as financial help with the justification of “historical building”, or “important cultural

heritage”, etc. Experiences tell that whenever there is a problem in the Church buildings in Aksum Maryam Tsion, the Church requests, in writing, to the Culture and Tourism local office in Aksum for any restoration works.

On the contrary, the Church itself is an obstacle to allow any person from the ARCCH or Culture and Tourism Office for follow up on the preservation situation of the cultural heritage without a request from the Church. The site of coronation area is one best example which is sadly in grave deterioration as the Church always prohibits any conservation or excavation works due to its “sacredness”.

The objects in the ground room of the Chapel of the Ark of Covenant are in jeopardy of adverse protection due to lack of space, lack of trained professional, and absence of regular follow-up about their wellbeing. The situation was exposed in 2002 during which a team of eight members formed by representatives from the Patriarch office, Addis Abeba (two persons); Culture and Tourism office of Aksum represented by the researcher; Police office of Aksum town (one person); the Diocese office of Aksum Maryam Tsion Church (two persons); and residents of Aksum town (two persons) inspected and inventoried. During the inventory, many of the objects were found badly damaged due to lack of space and air and, put one over the other. Some objects were also not found after the inventory of 1983 and 1998¹¹. The report of the inventory was spread among the residents of Aksum and, the priest was imprisoned. At the time of inventory, the inevitability of the construction of a new museum was highly recommended, after which, in November 2002, the Patriarch laid the foundation stone while he was in Aksum for the celebration of *Hidar* Maryam Tsion.

The heritage proclamation number 209/2000 under article 17(2) reads “The Authority shall register Cultural Heritage using codes appropriate for their custody and preservation”. If the Authority is mandated to protect, register and inventory Cultural Heritage, then this general term

¹¹ An inventory of the Church objects had been made in 1983 and 1998 by the Culture, Tourism and Information Bureau of National Regional State of Tigray. The researcher found the inventory document of 1983 messed in a store room among other old equipments and tools. It was then properly rearranged, filed and, now available as an archive in the Aksum Culture and Tourism Office. The inventory document of 1998 was used as best reference for the 2002 inventory mission.

“Cultural Heritage” includes the ecclesiastical objects and living worship places as well, as all are cultural heritage. But the right and power of the Authority in the case of registration and protection of the ecclesiastical heritage is still ambiguous. Practically the Authority interferes in the protection and conservation works of the ecclesiastical heritage if the Church accepts the “offer” or when the Church requests for same objective.

The cultural heritage ownership in Aksum is also complicated in the case of souvenir shops owners and, children selling objects to tourists on streets. It is common in Aksum to see boys selling ancient Aksumite coins to tourists on the streets claiming that they have found them by chance. During the rainy season, many young people in Aksum and its vicinity go out to the fields in search of ancient coins as the coins become exposed by the rain drop. There is no legal body then to stop these people from selling the coins to tourists. Nor were the tourists checked at airports for antiquities from taking such cultural heritage out of the country. Souvenir shops are also believed to be repository places for cultural heritage objects from neighboring villages acquired by illicit excavation or found by chance. An organized illicit excavation on archaeological site has been reported from Mai Adrasha (Finneran, 2007: 268-7; Asamerew *et al.*, 2002) near Shire Endasselassie, about 60 km west of Aksum.

Medebay-Welel, an Aksumite site some 12 km north of Aksum, was dug during daylight by villagers in search of archaeological objects to be supplied to souvenir shops. The site particularly where only potteries and coins were found, was entirely destroyed before any information was documented by professionals (Hiluf Berhe, 2004). The Pre-Aksumite site of Hawelti, some 10 km east of Aksum, is also victim of the antiquities black market in Aksum. Many people have privately possessed objects they discovered from the site during cultivation and even by organized illegal excavation (ECHP, 37: 2) and negotiate with any visitor to the site. This clearly shows that the people negotiate for better price with visitors to the site than supplying the objects to souvenir shops in Aksum.

The researcher has experienced that the souvenir shop owners in Aksum never allow a tourist guide or any employee from the Culture and Tourism Office to enter into their “innermost” room except the tourists who could buy “souvenir” objects. This trick of souvenir shop owners is a

common scene in many tourist destination archaeological sites in the most centers of ancient civilizations that souvenir shop owners keep original objects “out of view” of concerned employees and other visitors who could possibly disclose secrets of the shops (Comer, 2012: 181).

In 2005 a research has revealed that villagers around Aksum present objects acquired by chance or illicit excavation to souvenir shop owners in Aksum. Representatives from police office, local and district justice offices, and Aksum Yohannes IV Airport confessed that they do not have any idea about the heritage law for protection and the knowledge to differentiate between original cultural heritage and fake objects (Hiluf Berhe, 2005). This implies that those cultural heritages are taken out of Aksum due to lack of awareness and the selfish desire of businessmen. ARCCH is usually weak in working together with community and creating awareness about the meaning and significance of heritages and means of protection. Sometimes, people even negotiate with the Culture and Tourism office in Askum to be compensated if they point out the whereabouts of a cultural heritage object. Article 41 (1-4) of the heritage proclamation 209/2000 encourages people to ask for compensation. Any person discovering an object by chance is entitled by the Authority to be rewarded and, reimbursed for any expense if the person has spent money for the upkeep of the object. In this sense, ‘fortuitous discovery’ is very general one if the issue of financial reward has to be raised. Otherwise, it gives people a direction to acquire cultural heritage objects by illegal excavation in order to claim for financial compensation. This is the other way of official cultural heritage trafficking. It appears clear, from this discussion, that heritage is owned by the Sate, individuals and the Church in Aksum, but the heritage protection mandate is left to the ARCCH, though inefficient.

6.6 Tourism promotion or heritage protection? The question of priority

Tourism is a catalyst to economic and social benefit for a society. While cultural heritage resources are endowments, tourism is generally a consumer – although the profit from tourism is usually controlled by few entrepreneurs. The worst is its negative consequence on the cultural heritage resources: unmanaged tourism development damages the fragile archaeological sites. Archaeological resources are so fragile and nonrenewable; once any physical damage occurred

on the heritage resources, it is not possible to put the heritage back nor recover the original information (Comer, 2012: 12-16). If the driving motor for tourism is the Endowment, then the preservation of the Endowment should be a priority issue before planning any tourism development.

Apart from physical damage on the cultural heritage resources, despite a general economic growth, uncontrolled tourism development exposes the host community to diffused political and social change. The propaganda on tourism with a list of attraction potentials before paving the ground for the sustainability of the archaeological heritage, and without creating awareness among the society, easily erodes the archaeological heritage and the culture of the society, since tourism means exploiting the heritage resources (Cleere, 2012: vii-viii). Tourism has both negative and positive consequences on both the archaeological resources and the society.

One possible reason for some important tourist destination sites to prioritize on tourism development than heritage preservation is the problem of funding. International funding organizations have usually encouraged a loan for tourism development projects to augment the flow of capital; such developments, however, helped few individuals (businessmen) rise their capital while leaving the general community disadvantaged. Plans for doubling tourist numbers and revenue from tourism under “A strategic Approach to Doubling the Tourism Economy of Jordan, 2004-2010, funded by United States Agency for International Development (USAID) has damaged Petra archaeological heritage. The USAID’s fund was not concerned on heritage management; as a consequence the heritage resource of Petra received huge number of tourists that sadly irretrievably damaged the archaeological heritage (Comer, 2012: 174).

The issue of Aksum archaeological heritage is not different from that of Petra. In the previous sections of this chapter, it has been discussed that Aksum had even been warned of the possibility of inclusion in the “World Heritage in Danger” for failure of the country to have heritage management plan, heritage buffer zone and boundary. Among the main problems of the country to undertake proper heritage management was lack of fund and heritage professionals. On the contrary the World Bank has funded the country through the Learning and Innovation

Loan (LIL) in 2003 implemented by the Ministry of Culture and Tourism under a temporarily established office – ECHP. This fund was mainly for few sites, of which Aksum was one.

The project had four general components:

- “i). Site Planning and Conservation
- ii). Inventory and Documentation Development
- iii). Support for the development of Artisan Crafts, and
- iv). Support for Project Management”

The Aksum sub-component of this project began its preparation phase with short meetings and site assessments in Aksum in late 2003. Although the project was supposed to be a pilot project, it also hastily incorporated on the construction of the archaeological museum, the rehabilitation of the old house of *Ras Seyoum Mengesha*¹² as artisans’ training center, and the rehabilitation of the old house of *Dejjazmach Gebreselassie Baryagaber*¹³ (found in the compound of the present archaeological museum). The project, run by an international consultant company HYDEA, outlined some objectives which were minor tasks for a supposedly big project. The objectives mainly focused on “interpretation panels” and “identification/orientation/direction panels” (ECHP, 2007: 6). All the effort of this project was to design signage panels so as to ease the communication of information for tourists about sites (location, type) and also about post-visit entertainments and activities (shopping places, cafeteria).

The necessity of site interpretation was regarded as one of top priorities for tourism development in Aksum. In drive behind developing site interpretation was to bring the local community and the tourist together to share culture, ideas, aesthetics, etc by directing and encouraging the

¹² The quality of the rehabilitation work was irresponsibly carried out that soon the grass was blown away by wind, the whole compound turned to be play ground for children and even animals, and the intended objective failed as the people refused to be in group work in order to keep the secret of their art work. In Aksum, although products are displayed in shops and open markets, the technique of art is always private and secret carried out in individual houses. This house was again rehabilitated under second World Bank fund project (discussed in the following sections) with the objective of converting it into four star hotel.

¹³ This 19th century old house was rehabilitated with the objective of converting it into coffee house in the museum. But it was neither used for the intended objective nor responsibly rehabilitated. Soon again this house began to deteriorate; it is also rehabilitated in 2014 by a second World Bank Fund project.

tourists go around the old town and meet the community. In order to achieve this, the effort towards access to the sites was envisaged as most important. This would help the tourists admire the living culture and architecture of the society, and in turn would help the host community to create awareness that their culture deserves preservation (ECHP, 2007: 6-7).

The interpretation panels, in aluminum material, were supposed to include a photograph, drawing or sketch design of each of a palace remain or monuments and underground tombs. But not surprisingly, the question of where to put the signage panels is vague since most of the palace remains are completely occupied by later constructions. Furthermore, the information (text) on the signage panel is not more than just the name of the site or monument. There is a general argument in Aksum that if more details of the history of a site or monument are put on a brochure or signage panel, then tourists would not hire a guide which in turn encourages unemployment for guides in Aksum. In order to create job for guides, any detail information on brochure or signage panel is not supported, and thus the information remains hidden from the tourist only to be explained by the tour guide person.

In this way the idea of working toward site interpretation before presenting the sites properly is a total negligence toward the archaeological heritage resources. Preservation and conservation of the sites should have come first before any tourism development. Under this project, only minor activities have been carried out on the archaeological heritage, such as the survey and documentation of the archaeological sites, and clearance and maintenance on some underground tombs and stone thrones. The excavation on ancient church remains at Guanga Edaga (*fig. 3.4*) can be considered the best achievement of the project. The signage panels erected on the clearly visible archaeological sites are of poor quality, small in size, and whose purpose is already forgotten. The project terminated its duration without any significant change for the archaeological site and tourism development.

Aksum received another fund for tourism development in 2009 from National Regional State of Tigrai, implemented by Culture and Tourism Agency of Tigrai. The project was carried out on paper to develop a “Thematic Master plan for the Historic Town of Aksum”. The National Regional State of Tigrai had made an economic reform in 2007 by which tourism development was considered as a pivotal factor to achieve this goal. Aksum was then selected for a pilot

project. The project ambitiously planned to double tourist number in Aksum from 15,000 to 30,000 in 2009/2010. The project also targeted to boost tourist number in Aksum to 120,000 per year in four years from 2010. According to this project study, Aksum was planned to be center of attractions within a 100km radius. Aksum itself was planned to be five-day visit.

The master study plan proposed around twenty-five interpretation centers in Aksum with ten character areas worthy of visit. The renovation of *Enda Raesi* (i.e., Ras Seyoum Mengesha house) into four-star hotel, the upgrading of Yeha hotel, construction of new conference hall at the foot of May Koho hill, construction of refreshment centers, cafes, and restaurants in all part of the old town, children play ground and Botanical Garden, and amphitheatre on the foothill of May Koho with the stelae as backdrop are among the proposed plans of this project.

Following the “tourism development” projects in Aksum, many hotels have been constructed and are still under construction to accommodate the forecasted tourist flow. While carrying on such projects for tourism development, nothing is concerned about the archaeological heritage into which the tourists are to be directed. There is no management plan for the sustainability of the cultural heritage resources.

A second loan for Aksum from the World Bank, under a project name “Ethiopian Sustainable Tourism Development Project (ESTDP)”, is currently working to meet the objectives set out in the Master Plan project study. This five year project, with total fund of 6.5 million Ethiopian Birr (ETB) is on its final stage of duration¹⁴. This project also did not plan any regarding the archaeological and cultural heritage resources; instead, it is working on expansion and decoration of squares such as those two big *warka* tree squares, paving the squares and streets with cobblestone by removing the former asphalt; paving the area between the SP and Maryam Tsion church with cobblestone, and covering the May Hejja stream in front of the Maryam Tsion church with concrete cement. One of the interpretation centers in the office of Culture and Tourism and, restoration work on *Dejjazmach* Gebreselassie Baryagaber house are in progress.

¹⁴ Tewodros Abreham: Coordinator of the ESTDP Aksum Site Management Unit, personal communication; September 2014, Aksum.

Unfortunately, the archaeological heritage resource and, the old houses in the old town, are in desperation state. The old houses in the old town are deteriorating, because some of them are already abandoned as some owners preferred to shift to the new settlement quarters for better space and infrastructure while others are simply waiting without any rehabilitation work in anticipation of support from the Culture and Tourism Office due to their selection as “important cultural houses”. The houses represented a transitional culture and architecture between the present and the lost glory of Aksum. The old houses are living testimonies of the day-to-day life of Aksum people; they also housed several ethnographic objects that are not yet diffused with the modern objects. Therefore, the old houses already selected by the Culture and Tourism Office deserve conservation and protection before they fall apart completely as most of them are already abandoned and falling in ruin. Very few of them are luckily enough in good state as their owners have the financial capacity to maintain them and good awareness about their significance in teaching the life and architecture of Aksum to the present and future generation.

The ambitious “Tourism Development” projects, coupled with the establishment of Aksum University since 2007, have attracted many small business speculators especially bar and night clubs in the old quarter of the town. The effect of such businesses in the old town is that the houses were renewed and refurbished colorfully thereby disfiguring the former decent view and architecture of the area. As the old town is very poor in infrastructure, the lack of private and public toilets led people to use the streets for pee and excrement. The streets are so untidy to recommend tourists visit the old town before improving the area. Once the houses are well maintained and ensured their protection and sustainability and, the hygiene of the old town properly maintained, tourists will then be attracted to see the real life and architecture of Aksum people represented by the old town.

The SP, the northern stelae field, southeastern throne sites, Bazen tomb area, Guditi stelae field, the compound of Kaleb and Gebre Mesqel tombs, Dungur palace, and other structures are always covered with grass and weed during winter season; while there are huge projects for “Tourism Development” as has already been discussed earlier, the budget lacks when it comes to the Endowments. The growing grass and weed in the archaeological heritage sites creates humidity in the underground tombs, and when the rain water is retained by the grass and weeds for long

time, it leaks into the underground thereby making structures loose and weak from moisture. In some structures, like in those Dungur palace and Kaleb and Gebre Mesqel tombs, the coping is very poor; as a result rain water directly goes into the main wall. Every winter again weeds grow larger on the walls, and any attempt of removing them by hand after the rain season causes the structure to lose its mortar and gradually the wall becomes exposed to irreversible danger. The water inside the tombs of “Bazen” and Tomb of Brick Arches is persistent.

The main eye-catching heritage – the third largest standing stela is at risk mainly destabilized during the re-erection of stela 2 in 2008. Since then, stela 3 is still stretched with securing system cables to avoid further inclination and from eventual fall. The Italian government had funded for the consolidation of this stela, together with the re-erection of stela 2, with a total budget of USD 5.07 million. But once stela 2 was re-erected in 2008, the consolidation work on stela 3 was left unfinished as the Italian government rejected the extension of the project duration beyond the end of December 2009 (UNESCO, 2013: 75).

Almost the whole percentage of the archaeological and cultural heritage in Aksum is in disarray. Great attention with immediate and practical decision toward their sustainable protection is needed. The development of tourism before ensuring the protection and preservation of the Endowments would be short-term business. It is not that much difficult and costly to maintain and protect the heritage before falling in problem, but once the heritage is destroyed the issue would not be just about cost, rather it would be about the loss of identity: it cannot be possible to recover the heritage once destroyed, and would cause eternal regret.

CHAPTER SEVEN

DISCUSSION AND CONCLUSION

The destruction of archaeological sites occurs globally today, largely because of fast growing industrialization, accompanied by mega projects such as urbanization, hydroelectric installations, road construction, etc. These developments take place at a rapid pace thereby negatively impacting the archaeological heritage resources. The intervention to save cultural heritage resources has proceeded slowly in general for several reasons: insufficient financial and labor resources, lack of awareness, negligence, and absence of prior documentation practice. As a result, non-renewable archaeological resources are too often damaged, and “when material remains are destroyed, damaged, or removed from the context, the information that might have been produced through their proper analysis is lost forever” (Comer, 2012, 28).

Although there is a growing attention to the registration and preservation of international cultural heritage resources by UNESCO, its practicality is not yet fully realized. The promotion of World Heritage listed sites of outstanding universal significance may expose them to dangers linked with the consequences of tourism. The preservation of archaeological sites is essential to understand the beliefs, values and practices of past societies. Tangible material culture helps us understand the intangible; equally the intangible helps to piece together, and give form to, the tangible material culture. Properly preserved archaeological sites are sources of economic and social development. To foster the advantages of cultural heritage resources, their authenticity must be protected and preserved by establishing legislative measures and heritage site buffer zones.

While industrialization is unstoppable, archaeology professionals should, in collaboration with local residents, hasten to document and protect sites before development activities destroy them forever. It should be understood that an absence of visible archaeological traces on the surface of any particular site doesn't mean it has no archaeological significance, it is just not yet confirmed. Thus, whenever any development activity takes place on a site that looks non-archaeological when just viewed from the surface, archaeologists must keep an eye during construction to salvage information before destruction.

Destruction of archaeological sites is more evident in developing countries. This may be ascribed to several reasons: protracted civil war, lack of trained professionals in the field of heritage management, poverty, financial problems, and issues of national consensus are among the factors. The recent rapid increase in various constructions is detrimental to the heritage of humanity. Almost all world nations have drafted national legislations and many have ratified the UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage. Despite a global move towards heritage protection, heritage Proclamations and Acts are more often good ideas on paper rather than implemented programs. Almost always, therefore, the pace of construction surpasses the level of heritage protection.

As has been outlined in chapters five and six, Aksum, a designated World Heritage Site, is highly susceptible to several threats. The ancient site of Aksum is found below the modern settlement; it has already diminished in overall size due to the uncontrolled constructions and destruction of the ancient archaeological and cultural landscape. The landscape surrounding the largest standing stelae in the SP is largely crowded with new buildings and a reforestation program. The notion of heritage protection and preservation is an almost unknown practice; heritage administration is carried out by tradition rather than by professionals. Uncontrolled construction in the old town and surrounding the SP has negatively affected the ancient cultural landscape.

While the construction developments close by the visible archaeological sites in Aksum is a disappointing to the archaeology society, the archaeological community should be even more concerned about the potential damage to as yet unexcavated sites in Aksum. As the ancient town is found several meters below the modern settlement, the southern outskirts of the ancient town should not be considered free of any archaeological sites. Soil washed down the hill of Bieta Giorgis and May Koho may have covered the southern and southwestern part of the town. Fattovich *et al.* (2000: 47) noted that:

“The test excavations by Monneret de Villard and Puglisi in western Kuduku and Nefas areas, between May Qoho hill and the May Matare, revealed a sterile sediment, 3m to 4m thick, covering the archaeological remains. This suggests that buildings may be buried to the southwest and south of Aksum under meters of sediment, without any evidence on the surface. In particular, the *Liber Aksumae*

(Book of Aksum, 15th century) quotes two areas, Ahoro to the south of May Qoho and Farhaba, in the area of present old airport, where no evidence of an earlier occupation has been recorded. These areas might be quarters of the ancient capital city that are presently buried under meters of sediments”.

The present area of the old airport is today covered by big buildings of up to seven storeys tall. Yet no archaeological assessment has been carried out in the area. The absence of heritage preservation laws and professionals to protect the ancient town is another gap. The national heritage proclamation is lacking professionals to implement the protocols. ARCCH, the federally empowered office for the safeguarding of archaeological and cultural heritage and research, is still poorly organized. Its newly recruited young archaeology graduates are mainly there to facilitate administration of foreign projects and to serve as antiquity office representatives on such projects. They are not at liberty to spend the necessary time on heritage documentation, protection and preservation. In short they are not engaged in general heritage management.

The present research has tried to pinpoint the main factors threatening the Aksum archaeological and cultural heritage site. Both natural and anthropogenic factors have highly affected the sites under discussion. Destruction of the heritage resources is still taking place and almost no attempt is made to stop it, let alone assessing and documenting the invisible sites. Both those sites in the underground (as the result of uncontrolled construction and continued settlement) and on surface are highly vulnerable. The result of the research showed also the continuous loss of sites and features due to settlement expansion and lack of documentation. Many sites and obelisks recorded in the 1940s, 1970s and 1990s have already disappeared; the cultural heritage in general is vanishing and deteriorating, a proof that heritage preservation and management in Aksum is neglected. Sites and obelisks are in bad state of preservation. Yet the Culture and Tourism Office receives huge amount of fund for tourism development; this is totally a paradox: while the heritage endowment is vanishing and deteriorating, the focus of the above mentioned office is on tourism. Tourism is a consumer; it is a demand for resource. The supply resource is the archaeological and cultural heritage; thus the sustainability of the later is a priority and mandatory issue. A percentage of the fund for the Tourism Development Project should be redirected to site maintenance and site identification and protection.

Chapters three and five have demonstrated that the ancient cultural landscape has significantly disappeared and altered. Chapter four revealed that sites excavated since 1906 have undergone several transformations affected by nature and man. All excavated sites in the western quarter of the old town are completely overlaid by lateral settlement; settlements even today occupy excavated sites. The site of Enda Azay Wondimhunegn is a good example: this was excavated in 2003 by HAMA, but was then occupied hoping that an excavation project would continue and compensate them for being relocated. This is a common business in the old town in Aksum. A hiatus has occurred on the excavated sites because management and monitoring system on sites in the post-excavation period is unknown practice. As a consequence, the excavated sites and structures have fallen into ruin.

It is not surprising that cultural heritage management in Aksum is a neglected task; the office of Culture and Tourism is suffering from absence of true professionals (archaeologists). Cultural heritage management is not always a question of funds; it is first a question of professionals, concern and commitment. Some universities in the country are at present graduating many archaeologists who could work on public archaeology; on the contrary Culture and Tourism Offices all over the country are still suffering from lack of professionals.

In Tigray, where there is the highest concentration of archaeological sites, there are three universities: Aksum University in Aksum, Meqelle University in Meqelle, and Adigrat University in Adigrat. All of these above mentioned Universities have launched archaeology program; Aksum University was the first to launch a program in 2007. It means that there are abundant professionals in the country in general, and in Tigray in particular as most of the students who join the department are from Tigray. However, in the whole Tigray region, only one archaeology graduate with a degree in archaeology has been employed, and he was hired in Meqelle (not even in Aksum – the only World Heritage Site in Tigray).

Research has indicated that much more extensive work needs to be done for a more comprehensive understanding of what is going on in the sites outside the case studies for the present thesis. Intervention in assessment and heritage preservation measures is urgent. If the destruction continues at this pace, and the ancient resources are irrevocably damaged before they are documented, little to nothing will be left to transfer to posterity. Archaeological sites and

monuments are irreplaceable, sensitive and fragile and thus need continued care and preservation. Once their sustainability is ensured, they can be used for reconstructing history of the past society, building our identity and national unity. If properly promoted, they may also bring about economic development.

Excavation alone cannot guarantee the heritage preservation in Aksum. So far, the focus of all projects in Aksum was excavation, not documentation and preservation. Excavated sites hardly leave little advantage to succeeding generation. Sites should, as often as possible, be documented, preserved and transferred to posterity so that new generation can enjoy and learn from the untouched and well preserved sites. Succeeding generations will undoubtedly have different research methodologies and technologies to research archaeological sites. Therefore, the most ethical and responsible action is to preserve and save uncontaminated sites for generations to come. The priority task of every present generation must be documentation and preservation to save the cultural heritage resource from destruction by the rapid uncontrolled constructions and heritage vandalism.

Public archaeology should be actively practiced in Aksum and its surrounding areas in order to enhance the level of awareness of the general public. Educating the public can take place at different levels of schools (elementary, junior, and high school), universities, within the municipality, and through government offices. In addition, brochures and flyers must be produced in Tigrigna language and distributed to the public. These kinds of papers may have different form and category, *i.e.*, for children, adults, the educated and non-educated society. Archaeologists can broaden the level of knowledge of the general public about heritage management and involve the public in some professional heritage management tasks. It is not possible to achieve heritage management without the general public. Heritage resources are found on both public and private land, under state and private ownership. Thus no archaeological and heritage site is out of public sight. In this regard, Aksum University should work in collaboration with the Aksum Culture and Tourism Office, ARCCCH, the town municipality, and the general public by organizing public forums. Collaboration should also be sought with the UNESCO regional and international office, ICOMOS, and international projects towards salvaging, documenting, preserving and managing the universally significant heritage resource in Aksum.

Ideally the Aksum municipality, the Ethiopian Orthodox Church, and the Culture and Tourism Office should work together in any activity that might take place in the town. The municipality must develop the habit of informing the appropriate office responsible for safeguarding heritage resources in order to make an assessment before any damage occurs. In turn, the Culture and Tourism Office should be able to rely on Aksum University for technical assistance on any rescue, documentation, excavation, or heritage management in general. Rules and regulations during construction developments in the town in particular and in the nation in general should be developed. At present, no impact assessment can be made during any construction. The case of the construction of the four-storey new church museum in Aksum in the old town is a sad example. The Orthodox Church administration assumes that it is free to build any kind of building within the church's compound as long as it can afford it financially. But a distinction must be made according to where the church is located. If a church is located upon an ancient site, further construction must be limited and regulated to protect the authenticity and originality of an archaeological or heritage site.

The current structure of the Ministry of Culture and Tourism in the country would benefit from revision. The federal and regional offices of Culture and Tourism do not have archaeologists. Previously, this has been allowed on the grounds that there were no archaeologists in the nation. However, since the last one decade, Addis Abeba, Aksum, Debre Berhan, and Mekelle Universities have launched a Masters Degree program, followed by Aksum, Addis Abeba, Meqelle and Adigrat Universities in training at undergraduate degree program. Despite such progress in manpower training by the universities in the field of Archaeology and Heritage Management, offices of Culture and Tourism in the country in general couldn't exploit the opportunity. New graduates of the archaeology and heritage management programs at the nation's universities should be recruited by the Culture and Tourism department. We should work together as allies in documenting and preserving our irreplaceable cultural resources.

The Ethiopian Archaeologists and Paleontologists Association (EAPA) should lead actively in drafting rules and regulations on impact assessment and rescue archaeology in time of development plans. It should oversee the Ministry of Culture and Tourism Office, ARCCCH, and Urban and Town Planning Offices, Municipalities, and Urban and Rural Land Administration

Offices to make sure that an archaeological impact assessment is considered whenever any construction is planned. The cost for impact assessment should be covered by the developers on private property or by universities on public property, as the association is formed by archaeologists and paleontologists working in universities. The most important concern is to save the cultural heritage for the benefit of all humanity.

Appendix 4.1 Chronological summary of sites excavated, cleared and recorded from 1905 to 2014 in Aksum and its vicinity mentioned in chapter 4.

S.No	Year	Excavation project	Excavated/recorded site	Excavated by	Summary of finding	Reference	Note
1	1904/1905		<i>Dejjazmach</i> Gebreselassie Baryagaber, Nubre'ed of Aksum	Grave of Menelik I	Bones of Menelik I (unconfirmed)	Phillipson, 1997: 89-92;	
2	1906	Deutsche Aksum-Expedition	Littmann	Enda Michael	Wall structure, corner stones, bases of pillars (monolith and built), eight squared column-bases, traces for stair cases, large steps	Littmann <i>et al.</i> , 1913, II: 107-10; Phillipson, 1997: 94-7	Cleared, photographed, and ground plan drawn
			Littmann	Enda Sem'on	Corner stones, wall structure, foundations of pillar-bases, five rooms, ruined flights of steps.	Littmann <i>et al.</i> , 1913, II: 110-2; Phillipson, 1997: 98-102	Cleared, photographed, and ground plan drawn
			Littmann	Ta'aka Maryam	The whole palace structure exposed; flights of steps, stepped pillar-bases, portico, a channel, corner stones, slabs for pavement.	Littmann <i>et al.</i> , 1913, II: 112-9; Phillipson, 1997: 103-20	Cleared and photographed from 26 February to 4 April, 1906
			Littmann	Grave of Menelik I	Ruined building of 13.2m x 12.7m large; steps leading to different rooms; large slab with four holes; a pack of stones.	Littmann <i>et al.</i> , 1913, II: 134-6; Phillipson, 1997: 89-92	Cleared, photographed and plan drawn from 26 February to 10 March 1906
			Littman	Ruin A	Six stepped cornerstones, wall plaster, a fragment of pillar, steps and stone pavements.	Littmann <i>et al.</i> , 1913, II: 122-3; Phillipson, 1997: 120-1	Cleared, photographed, plan and section drawn
			Littman	Ruin B	Three big cornerstones at the south-east side protruding out from a pile	Littmann <i>et al.</i> , 1913, II: 123-4; Phillipson, 1997: 121-2	Plan drawn; not excavated
			Littman	Ruin C	Two or three stones of one corner	Littmann <i>et al.</i> , 1913, II: 124; Phillipson, 1997: 122	Not excavated, no plan drawn

			Lupke	Ruin D	A six stepped wall of 15m long and 3m high and recessed in the middle	Littmann <i>et al.</i> , 1913, II: 124; Phillipson, 1997: 122	Not excavated, photographed.
			Lupke	Ruins E and F	Ruins of churches with cornerstones	Littmann <i>et al.</i> , 1913, II: 125-7	Not excavated; topographic and plan drawn
			Krencker	Hill of ruins	Base with holes for statue, and its foundation. The holes measured 5cm in depth and 92cm in length	Littmann <i>et al.</i> , 1913, II: 44-5; Phillipson, 1997: 155-6	Partially cleared; photographed, and plan drawn
			Krencker	Tombs of Kaleb and Gebre Mesqel	Ruins of two buildings 12.5m apart and each measuring 14m x 35m and 13m x 32.5m; paved courtyard, and steps leading to it, a stepped pillar-base, an octagonal pillar, paved floors in the buildings, steps leading to the underground tombs from the west, and terrace walls of the tombs.	Littmann <i>et al.</i> , 1913, II: 127-34; Phillipson, 1997: 73-89	Excavated from 15 January to 17 March 1906; photographed, plan and section drawn.
			Krencker	Stone thrones	Recorded 26 stone thrones	Littmann <i>et al.</i> , 1913, II: 45-60; Phillipson, 1997: 123-49	Excavated at stone throne 23 and revealed the throne foundation, and a seat bearing Ge'ez inscription.
			Krencker	Stelae	Recorded 126 stelae in three locations; revealed the apex of stela 4, now at the Ezana Park	Littmann <i>et al.</i> , 1913, II: 1-43; Phillipson, 1997: 11-65	Cleared at 1, 6, 7, 31; sketched and photographed the stelae
			Krencker	Nefas Mawcha	Cleared west and south side	Littmann <i>et al.</i> , 1913, II: 94-5; Phillipson, 1997, 67-71	Cleared from 15 January to 10 February 1906 ; Photographed;

							plan and reconstruction drawn
			Krencker	Maryam Tsion church compound	Recorded some thrones and fragments of pillars; plan of the ruined ancient church of Tsion drawn	Littmann <i>et al.</i> , 1913, II, 62-7; Phillipson, 1997: 169-78	Photographed, plan drawn
			Littmann	Inscriptions	Recorded 26 inscriptions in and around Aksum	Littmann, 1913, IV:1.94;	Photographed, copied and translated.
			Lupke	May Shum water reservoir	Photographed, plan drawn	Littmann <i>et al.</i> , 1913, II: 70-3; Phillipson, 1997: 156-60	
			Lupke	May Koho rock-cut steps	Photographed, plan drawn	Littmann <i>et al.</i> , 1913, II: 69-71; Phillipson, 1997: 156	
			Lupke	Lioness of Gobo Dura	Photographed	Littmann <i>et al.</i> , 1913, II: 73-4; Phillipson, 1997: 160-2	
			Lupke	Addi Tsehafi	Recorded rock-cut tanks; discovered deep stone bowl of 12cm deep and 1.89m x 1.22m large.	Littmann <i>et al.</i> , 1913, II: 75-7; Phillipson, 1997: 162-5	Photographed, plan and section drawn
			Lupke	Abune Pentelewon monastery	Discovered traces of ancient temple; stone inscriptions of Sabeian and Greek script; a small stone slab with palm leaf; stone bowl for baptism; an alabaster slab, water spout in the shape of lion's head; and a fragment of red sandstone slab with relief of crosses and holes.	Littmann <i>et al.</i> , 1913, II: 90-4; Phillipson, 1997: 165-8	Photographed, plan drawn

3	1937		Monneret di Villard	May Hejja, western sector of the town, May Shum and mound at Guangua Edaga	Carried on geo-archaeological observation at May Hejja and western sector of the town; recorded a mound at Guangua Edaga and May Shum reservoir	Monneret de Vaillard, 1938; Fattovich, <i>et al.</i> , 2000a	Observed two phases of soil accumulation at May Hejja that took place pre- and post-erection of the giant stelae. No excavation was carried out.
	1939		Salvatore Puglisi	Addi Kelte, May Hejja and <i>daero</i> square	Discovered a palace ruin at Addi kelte; found rock-cut tombs at near daero square; recorded five levels at May Hejja; surveyed Gobo Dura, GSF, Dungur area, and Grave of Menelik I	Puglisi, 1941, 1946; Michels, 1979; Fattovich, <i>et al.</i> , 2000a	Recorded seven levels in the excavation of Addi Kelte palace
4	1954-72	EIA	Jean Doresse	Nefas Mawcha area; east of DAE stela 3; Tomb of Bazen; Tsion Maryam church compound	Coins, potsherd; slabs, steps; underground, subterranean and shaft tombs;	Caquot and Leclant, 1956; Michels, 1979 Doresse, 1956; Phillipson, 1997: 193-4; Leclant, 1959; Anfray, 1990; Kebede and Leclant, 1955	Excavated in 1954
			J. Pironin	Nefas Mawcha area; east of stela 3	Wall M1, 114m long; Human-headed clay <i>terra cotta</i>	Caquot and Leclant, 1956; Leclant, 1959	Excavated in 1955
			Jean Leclant	Nefas Mawcha area; east of stela 3; cleared DAE stela 4; Tsion Maryam church compound	16.8m long all east of stela 3; wall M'1 traced for 40m long north of M1; fully exposed wall M1; walls M2, M3, M4 and M5 in the Nefas Mawcha area; 17 burials full of human skeleton at Nefas Mawcha area; decorated pottery, vases and bowls.	Leclant, 1959; Caquot and Leclant, 1956; Caquot and Leclant, 1956; Anfray, 1965	Excavated in 1956

			Henri de Contenson	South of M1, north and east of Nefas Mawcha, west of stela 1;	bronze nails, flint scrapper of yellow color; pottery with decoration of disc and crescent; crescent-shaped ear-ring of bronze; pieces of glass; fragments of red pottery; thirty-five Christian bronze coins; human-headed jars; figurine of bird in clay; pottery with cross incision; clay models of house with Aksumite windows; bowls made of clay; fragment of bracelet, gilded bronze plaque inlaid with glass; finger-ring; iron of axe; seventy-five burials.	Contenson, 1959 Leclant, 1959	Early January to early April 1957 for twelve weeks; grid method applied for the first time
				Enclosure of the church of Maryam Tsion	Revealed ruined church of three levels of construction; pre-Christian bronze coins; Pottery burnished red, black or gray; pottery with vertical and horizontal incisions and cross; <i>terra cotta</i> objects; statue of human head on black basalt	Contenson, 1963	From 08 January to 12 March, 1958
				Addi Guatiya	cruciform shaft tomb	Contenson, 1963	07 to 16 April 1958
				Me'elan Debbas	Collapsed tomb; bowl with handles and decoration of horizontal lines, a globular jar decorated with a pair of small nipples	Contenson, 1963	30 to 31 January 1958
				Gual Gobo Dura site	Aksumite building 12.65m x 10.80m large; collected glass bead; black bowl pottery; basalt mortar; fourteen	Contenson, 1961	February 10 to March 6, 1958

					bronze coins		
			Francis Anfray	Tsion Maryam church enclosure	Exposed steps on the west of the ruined church; pottery; sixty-three coins	Anfray, et al., 1965	Excavated from March 22 to April 5, 1962
				Dungur palace	Palace complex of 57m x 56.50m large with forty rooms, four court yards, and a central separate building with three entrances from west, south, and east; built pillar-bases	Anfray, 2012, 1990, 1968	Excavated from 1966 to 1968
				Dungur area test excavation	ruins of Aksumite buildings	Anfray, 2012; Michels, 1979; Munro-Hay, 1989	Excavated during under same mission
5	1972-4	BIEA	Neville Chittick	Kaleb Site	Six rooms of Aksumite wall; coins of loel; pottery; glass fragments; imported amphorae; iron knife; copper nails; stone ear-plug; lamp; underground shaft tomb.	Munro-Hay, 1989	Opened four trenches within and outside the enclosure of the tombs.
				Geza Agumai	coarse red Aksumite ware pottery, bones, human heads, red Aksumite ware, walls, glass fragments	Munro-Hay, 1989	Excavated against stelae 69, 71, 77, 73, and 67, and recorded the buried part of stela.
				Gheleb Emni	stone packing, decorated and undecorated red ware,	Munro-Hay, 1989	Excavated between stelae 40 and 41
				Enda Yesus	Stone rubbles and red Aksumite ware,	Munro-Hay, 1989; Chittick, 1974	Opened four trenches at stelae 6, 7, and 32.
				Hawelti site	crude wall, ash, clay, red Aksumite ware	Munro-Hay, 1989; Chittick, 1974	Recognized eight levels and dug to the depth of 5m below surface level

				Enda Sem'on	Found large structure with indications of timber slots, column bases, paved courts, many rooms, doorways, dressed cornerstones and drainage systems; many artifacts including coins; the building was dated to between late 4 th and early 7 th c AD.	Munro-Hay, 1989; Chittick, 1974	Five trenches opened here, designated from ES I to ES V.
				IW site	Found large burnt structure; many artifacts including coins of different period; possibly destroyed late 6 th or early 7 th c AD.	Munro-Hay, 1989	Opened four trenches, designated from IW I to IW IV.
				May Lahlah	coin of Ioel, some glasses	Munro-Hay, 1989	Opened two trenches
				GSF	Brown gray and red Aksumite ware pottery, iron fragments, glass, copper fragments, iron spear-head, copper split pin, painted vessels, painted pottery heads, foot washer, post-Aksumite beaker, pottery bird; complete pots embedded in walls, bricks; bead, glass, iron, copper/bronze objects, bronze plate, iron knife; pits, shafts and chambers; human teeth, jaw fragments; coins iron knife.	Munro-Hay, 1989	Opened ten trenches, designated from GT I to GT X

				The Tomb of Brick Arches	Discovered underground tomb with doorways of horseshoe-shaped arches of burnt red bricks, antechambers cut in the rock; also collected glass, copper, pottery, a silver amulet case, metal work, ivory, gold, glass bead, wood, leather, human skull	Munro-Hay, 1989; Chittick, 1974	
				Tomb of False Door	The tomb with antechamber, burial chamber, storage room; paved courtyard; shaft tomb; Brick Vaulted Structure; objects on secondary context	Munro-Hay, 1989; Chittick, 1974	Laid out thirty-nine trenches
				Nefas Mawcha	Traced evidences of robbery tunnel, noticed the effect of the fall of stela 1, collected fragment of clay figurine, pottery house-model, bronze nails, glass inlay, copper, gold foil.	Munro-Hay, 1989; Chittick, 1974	Opened this tomb to further check the work of DAE
				Stelae Park	Discovered pits, shaft tombs, tunnels, buried stelae, Mausoleum, East Tomb, robbers' tunnels; red, brown and gray Aksumite ware pottery, coins of Anonymous AE 2 type, Hataz type 2, Ioel, Ezana of pagan type, Wazena, foot washer, pottery head, painted and decorated pottery, painted crosses in black color, fragments of ostrich egg	Munro-Hay, 1989; Chittick, 1974	Opened around 25 trenches most of them against stelae; all trenches were designated ST; discovered fourteen stelae which have not been recorded by DAE.

					shell, bronze ibex figurine, glass, stove fragment, beads, iron, copper objects, bird head in pottery, gold link, bronze relief plaque, beaker in pottery, iron knife.		
			David Phillipson	Gobo Dura rock-shelter	Prehistoric lithic assemblages from lower phase, and animal bones and seeds from upper phase.	Phillipson, 1977	The lithics dated to 10,000 BC, and the bone and seed to early 1 st millennium BC.
6	1993-7	BIEA	David Phillipson	Tomb of Brick Arches	Three chamber rooms; copper alloy of 38kg; spearhead; ivory throne component with relief of grapes; ivory plaques; pottery; wood remains; nails; tacks; iron objects; fragments of gold and silver; foot-washer basins; yoked animal model basins; foot-ring pots; human-headed jars; bird-shaped vessel; glasses of various colors; fragmented globe; 1139 beads; copper alloy mirror; rondel; complete jars; human skull; glass goblet.	Phillipson, 2000, I	This tomb is still closed although there were several attempts to open it to the public (see chapter 6 for the reasons).

				Stela 2 site excavations	Base-plate stela 12; large stone slab; fragment of stela 2; subterranean structure; rock-cut shaft; robbers' tunnels; Aksumite, post-Aksumite and 20 th c pottery; discovered that the stela was intentionally destabilized.	Phillipson, 2000, I	Traces of other activities, such as the Italians and the landscaping, were observed in the excavation strata.
				The Mausoleum	Further exposed central and side chambers (rooms); western portal doorway in damaged state; 17 roofing slabs; a few objects including one coin of Armah (7 th c AD)	Phillipson, 2000, I	
				GSF	Two pit graves; iron knife; Human skeletons and skull associated with potsherds, glass beads, iron nail, glass beads.	Phillipson, 2000, I	
				"D" site at Kidane Mehret	Da'amat and Aksumite period of occupation by food processing society; elite and lower-status structure of the Aksumite period. Evidences of cultivation and livestock, such as wheat, barley, tef, cattle; objects of varied type, including coins and objects bearing cross and letters; imported vessels.	Phillipson, 2000, II	

				“K” site at Melake Aksum	Aksumite period buildings and objects including coins; radiocarbon dated 4 th -5 th centuries AD, and abandoned by 7 th century AD. “K” site is an industrial site.	Phillipson, 2000, II	Imported vessels also recognized
				Anqar Ba’ahiti rock-shelter	Blade industry; Da’amat and Aksumite period pottery	Phillipson, 2000, I; Finneran, 1998, 2001	
				Ba’ahiti Nebait rock-shelter	Blade industry, pottery	Phillipson, 2000, I; Finneran, 2001, 1998	
7	1993-2002	IUO/BU	Rodolfo Fattovich and Kathryn Bard	Biete Giorgis	<ul style="list-style-type: none"> • Surveyed and recorded agricultural terraces and fields, cisterns, dams, roads and paths; • Recorded four types of sites: rock-shelters, rock inscriptions, stelae quarries and open sites • Excavated residential structures and tombs at Ona Negest, Ona Enda Aboi Zewge, Tikul Emni, Gudguad Agazen, and Qelqel Asba. • Discovered 16 rock-cut tombs, over 100 stelae, residential buildings, a round plastered hole inside a ruined structure, pottery of different period and origin, lithics, brick fragments, bronze objects, 236 glass beads, gold foil, model axe, traces of agriculture (domestic animal bones, domesticated plant 	Bard and Fattovich, 1993; Fattovich, 1995; Bard and Fattovich, 1995; Bard <i>et al.</i> , 1996; Bard and Fattovich, 1997; Bard <i>et al.</i> , 1998; Fattovich, <i>et al.</i> , 2000b; Bard <i>et al.</i> , 2001; Bard <i>et al.</i> , 2002.	The site of Biete Giorgis was occupied since the 5 th century BC and continued up until 7 th century AD. The stelae and tombs predate those at the town of Aksum.

					remains.		
8	1998-2000	ARCCH	Yonas Beyene	Stela 2 site	Excavated to locate the exact position; removed large stones to ease excavation.	Poissonnier, 2012	
			Tekle Hagos	Stela 2 site	Excavation continued on the same place with the same objective.	Poissonnier, 2012	
			Bertrand Poissonnier	Stela 2 site	Foundation structure; pit graves; glass bead, imported glass and pottery as well as metal object; synthesized the installation and collapse of stela 2.	Poissonnier, 2012	
			Tekle Hagos	Enda Azay	Ruined Aksumite building; five steps; iron slag, bricks, beads, glass fragment, coins, lion figurine on red limestone, a stone bowl with two handles.	Tekle Hagos, 2000	
9	2000-2012	HAMA	Helmut Ziegert	May Melahso	Ruined building	Ziegert, 2001, 2002; Wendowski and Ziegert, 2003.	
				Berik Audi	Two phases of monumental palace buildings – royal grave, remnant of Christian church; heap of iron slag; metal smelting and fabrication area; copper ore, smelted iron.	Ziegert, 2001, 2002; Wendowski and Ziegert, 2003.	
				Enda Azay	Ruined Aksumite building		Information is based on personal note taken during the excavation

				Dungur palace	Earlier wall structure below Anfray's mansion		On-site explanation by Helmut Ziegert, and personal observation
				Kaleb and Gebre Mesqel	Shaft and burial rooms		Shaft and burial rooms
10	2005-7	ECHP	Tekle Hagos	<i>Dejjazmatch</i> Gebreselassie compound	Four rock-cut underground tombs; deep buried stelae – some fallen and others on erect position; pottery sherds, beads, iron knife, iron dagger, iron spearheads, glass fragments, bronze bracelets, human and animal bones.	Tekle Hagos, 2008	
				Guangua Edaga	Ruined Aksumite church building; glasses, pottery sherds, coins, beads, grinding stones, polishing stones, bricks, bronze cross, iron fragments, metal nails, lithic artifacts, local metals, bones of domestic animals.	Tekle Hagos, 2008	
				Throne 23	Re-exposed the two pieces of the seat which was buried by deposition since after 1906	Tekle Hagos, 2008	DAE designated it inscription 12 and 13
11	2013	AkU	Walker <i>et al.</i>	Kaleb and Gebre Mesqel	Shaft tomb, monumental steps	Walker <i>et al.</i> , 2013	Unpublished report, in AkU
12	2014	EEF/AkU	Koh	Ta' aka Maryam	Steps, drainage, coins	Koh, 2014	Unpublished report, in AkU

Appendix 5.1: An updated inventory of the thrones and pillars in the church enclosure

Throne number	Basal stone	Seat block	Cornerstone /Pillar bases	Pillars	Steps	Note	
1 (king's throne)	buried*	buried*	buried*	4	none*	<ul style="list-style-type: none"> • DAE seat block, basal stone and pillar bases 	
2 (bishop's throne)	buried*	1	none*	1 (?)	none*	<p>It is unclear whether this pillar belongs to the Bishop's throne.</p> <ul style="list-style-type: none"> • DAE basal stone 	
3	1	2	3	none*	none*	One of two thrones with double seat blocks resting on a single basal stone. It is counted as a single throne.	
4	1	1	none*	none*	none*		
5	1	1	1	none*	none*	<ul style="list-style-type: none"> • The DAE recorded one more cornerstone lying in front of the throne 	
6	1	1	3	none*	none*		
7	1	1	3	none*	4	<p>It has four steps at the front, three on the north and south sides, and two on west side.</p> <ul style="list-style-type: none"> • DAE three steps on the front 	
8	1	1	4	none*	2	<ul style="list-style-type: none"> • DAE: three steps on the front 	
9	1	1	2	none*	2	<ul style="list-style-type: none"> • DAE: three steps on the front 	
10	1	1	2	none*	2	<ul style="list-style-type: none"> • DAE: three steps on the front, and four cornerstones 	
11	2	2	(?) 2	none*	none*		
12	buried*	1	none*	none*	none*	<ul style="list-style-type: none"> • DAE basal stone, one cornerstone 	
13	buried*	none*	none*	none*	none*	<ul style="list-style-type: none"> • DAE seat block 	
14	1	1	none*	none*	none*		
15	1	1	1	none*	none*		
Pillars							
Pillar number	Shaft to groove in cm	Top to groove in cm	Bevel groove width in cm	Top surface in cm	Four sides dimension in cm	Total height in cm	Note
1	20	24	10	39 x 39	each side 25	143	Southeastern pillar
2	10	18	9.5	38 x 38	each side 24	133	Southwestern pillar
3	10	16	10	39 x 39	each side 25	135	Northeastern pillar
4	buried*	31	10	38 x 38	each side 24	123	Northwestern pillar
5	-	16	-	38 x 53	45, 53, 52 and, 43	128	The sandstone pillar southeast of the Bishop's throne

*Not visible on the surface; only excavation can reveal the complete information on the thrones.

** Some features documented by the DAE and must have been covered by earth since.

REFERENCES

- Aalung, Flemming (1985). "Master Plan for the Preservation and Presentation of Cultural Heritage. Operational action for the safeguarding of the immovable cultural heritage and its reintegration into modern life". *Technical report RP/1984-1985/XI.1.4 of UNESCO to the Ethiopian Government, 28 June 1985*. Paris.
- Adams, W. Y. (1977). *Nubia: Corridor to Africa*. London.
- Akashah, Talal S. (2012). "The Environmental and Cultural Heritage Impact of Tourism Development in Petra–Jordan", in Comer, Douglas(ed.). *Tourism and Archaeological Heritage Management at Petra. Driver to Development or Destruction?* Pp.131-144.
- Anfray, Francis (2012). *Le site de Dongour, Axum, Ethiopie*. Hamburg.
- Anfray, Francis (1991). «Introduction», in : E. Bernand, *et al.* (1991). *Recueil des inscriptions de l'Ethiopie des periodes Pre-Axoumite et Axoumite. Academie des inscriptions et belles-lettres*, Tome 1, Paris. Pp. 19-64.
- Anfray, Francis (1990). *Les Anciens Éthiopiens: siècles d'histoire*. Paris: Armand Colin.
- Anfray, Francis (1981). "The Civilization of Aksum From the First to the Seventh Century", in G. Mokhtar (ed.) *UNESCO General History of Africa: Ancient Civilisations of Africa*, vol. 2: 362-380. Paris.
- Anfray, Francis (1972). "L' Archeologie d'Axoum en 1972". *Paideuma*, XVIII. Pp. 60-78.
- Anfray, Francis (1970). "Notes archéologiques", *Annales d'Éthiopie*, tome 8: 31-56.
- Anfray, Francis (1968). "Aspects de L'Archeologie Ethiopienne ". *Journal of African History*, 9(3): 345-366.
- Anfray, Francis (1967). "Matara," *Annales d'Ethiopie*, 7: 33-53.
- Anfray, Francis (1965). "Note sur quelques poteries axoumites". *Annales d'Ethiopie*, 6: 217-220.
- Anfray, Francis (1963). "Une champagne de fouilles a Yeha (Fevrier – Mars, 1960)". *Annales d'Ethiopie*, 5: 171-192.
- Anfray, Francis *et al.* (1965). "Chronique archéologique, 1960-1964". *Annales d'Ethiopie*, 6: 3-48.

- Asamerew Desie *et al.* (2002). "Combating the destruction of Ethiopia's archaeological heritage". *Antiquity*, 76: 955-6.
- Aston, Michael (2002). *Interpreting the Landscape: Landscape Archaeology and Local History*. London: Routledge.
- Bard, K. A. and Fattovich, R. (1997). "The 1997 B.U./I.U.O Excavations at Bieta Giyorgis, Aksum: A preliminary report". *Nyame Akuma*, 48: 22-28.
- Bard, K. A. and Fattovich, R. (1995). "The I.U.O/B.U. Excavation at Bieta Giyorgis (Aksum): An Interim Report". *Nyame Akuma*, 44: 25-27.
- Bard, K. A. and Fattovich, R. (1993). "The 1993 Excavations at Ona Enda Aboi Zague (Aksum, Tigray)". *Nyame Akuma*, 40: 14-17.
- Bard, K. A. *et al.* (2002). "The IUO/BU Archaeological Expedition at Bieta Giyorgis (Aksum), 2002 Field Season: A Preliminary Report". *Nyame Akuma*, 58: 2-6.
- Bard, K. A. *et al.* (2001). "The BUIIUO Joint Expedition at Bieta Giyorgis (Aksum, Ethiopia), 2001 Field Season: A Preliminary Report". *Nyame Akuma*, 56: 11-13.
- Bard, K. A. *et al.* (2000). "The Environmental History of Tigray (Northern Ethiopia) in the Middle and Late Holocene: A Preliminary Outline". *African Archaeological Review*, Vol. 17, No. 2. Pp. 65-86.
- Bard, K. A. *et al.* (1998). "The IUO and BU Archaeological Expedition at Bieta Giyorgis (Aksum): 1998 Field Season". *Nyame Akuma*, 50: 10-12.
- Bard, K. A. *et al.* (1996). "The B.U./I.U.O. Archaeological Excavations at Bieta Giyorghis (Aksum, Ethiopia): a preliminary report on the 1996 field season". *Nyame Akuma*, 46: 21-23.
- Barkay, R. (1981). "An Aksumite coin from Jerusalem", in *Israel Numismatic Journal*, V. Pp: 57-59.
- Beckingham C. F. & Huntingford, G. W. B. (1961) (eds.). *The Prester John of the Indies: A True Relation of the Lands of the Prester John being the narrative of the Portuguese Embassy to Ethiopia in 1520* written by Father Francisco Alvares. Cambridge: Hakluyt Society, (2 vols).
- Beckingham, C.F, and Huntingford, G.W.B (1954) (eds.). *Some Records of Ethiopia, 1593-1646, being extracts from The History of High Ethiopia or Abassia*, by Manoel de Almeida. London: Hakluyt Society.

- Beek, Gus W. van (1967). "Monuments of Axum in the Light of South Arabian Archeology". *Journal of the American Oriental Society*. Vol. 87, No. 2. (Apr. - Jun., 1967), pp. 113-122.
- Beeston, A. F. L. (1980). "The Authorship of the Adulis Throne Text". *Bulletin of the School of Oriental and African Studies*. University of London, Vol. 43, No. 3. pp. 453-458.
- Bent, Theodore (1896). *The Sacred city of the Ethiopians, being a record of travel and research in Abyssinia in 1893*. London.
- Berakhi, O. *et al.* (1998). "The Mai Maikden sedimentary sequence: a reference point for the environmental evolution of the Highlands of Northern Ethiopia". *Geomorphology*, 23: 127-138.
- Bernard, E. (2000). *Recueil des inscriptions de l'Éthiopie des périodes pré-Axoumite et Axoumite*. Tome III: Traductions et commentaire. Paris: Académie des inscriptions et belles-lettres.
- Bernard, E. (1982). "Nouvelles versions de la campagne du roi Ezana contre les Bedja". *Zeitschrift fur papyrologie und Epigraphik*, Band 45, pp. 105-114.
- Bernard, E. *et al.* (1991). *Recueil des inscriptions de l'Éthiopie des périodes pré-Axoumite et Axoumite*. Tome I: Les documents, with introduction by Francis Anfray. Paris: Académie des inscriptions et belles-lettres.
- Bernard, E. *et al.* (1991). *Recueil des inscriptions de l'Éthiopie des périodes pré-Axoumite et Axoumite*. Tome I: Les documents, with introduction by Francis Anfray. Paris: Académie des inscriptions et belles-lettres
- Bersina, S.Ya. (1984). "An inscription of King of Axumites and Himyarites from Meroe", *Meroitic News letter*, 23, p.1-9.
- Boardman, S. (2000). "Contributions on Archaeobotany", in: D.W. Phillipson (ed.). *Archaeology at Aksum, Ethiopia, 1993-97*. Pp: 268-270, 363-368, 412-414. London.
- Boardman, S., and Phillipson, D. W. (2000). "Archaeobotany", in: Phillipson, D.W. (ed.). *Archaeology at Aksum, Ethiopia, 1993-97*. Pp: 468-470. London.
- Bosc-Tiessé, C. *et al.* (2014). "The Lalibela Rock Hewn Site and its Landscape (Ethiopia): An Archaeological Analysis". *Journal of African Archaeology*, 12 (2), 141-164.

- Brandt, S. A. (1984). "New perspectives on the origins of food production in Ethiopia", in: Clark, J. D. and Brandt, S. A. (eds.). *From Hunters to Farmers. The Causes and Consequences of Food Production in Africa*. University of California Press, Berkeley. Pp. 173–205.
- Breen, Colin (2007). "Advocacy, international development and World Heritage Sites in sub-Saharan Africa". *World Archaeology*, 39(3), 355 – 370.
- Breton, Jean-Francois and Munro-Hay, S. C. H. (2002). "New Himyaritic coins from Aksum (Ethiopia)". *Arabian Archaeology and Epigraphy*, 13: 255–258.
- Bruce, James (1790). *Travels to discover the source of the Nile in the years 1768, 1769, 1770, 1771, 1772 and 1773* (Five volumes). Edinburgh.
- Budge, E. A. W. (2000). *The Queen of Sheba and Her Only Son Menyelek (Kebre Nagast)* (tran). Cambridge.
- Budge, E. A. W. (1928). *The Book of the Saints of the Ethiopian Church*. (trans.), 4 vols. Cambridge.
- Burstin, S. M. (1994). "Sayee's Axumite Inscription from Meroe: Observations on a New Edition". *Meroitic Newsletter*, 25: 39-43.
- Butzer, Karl (1982). "Empires, capitals and landscapes of ancient Ethiopia". *Archaeology*, 35(5): 30-37.
- Butzer, K. W. (1981). "Rise and Fall of Axum, Ethiopia: A Geo-Archaeological Interpretation". *American Antiquity*, 46 (3): 471-495.
- Buxton, David and Matthews, Derek (1974). The reconstruction of vanished Aksumite buildings. *Rassegna di studi Etiopici*, vol. XXV-1971-1972. Roma: Istituto per L'Oriente.
- Cain, C.R. (2000). "Archaeozoology", in: Phillipson, D. W. (ed.). *Archaeology at Aksum, Ethiopia, 1993–7*. London. Pp. 369-379.
- Caquot, André (1965). "L'inscription éthiopienne de Mārib". *Annales d'Ethiopie*. Volume 6. Pp. 223-227.

- Caquot, André and Leclant, Jean (1956). "Rapport sur les récents travaux de la section d'archéologie de l'Institut éthiopien d'études et de recherches". *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 100e année, N. 2, pp. 226-235.
- Chittick, H. N. (1976): "Radiocarbon dates from Aksum". *Azania: Archaeological Research in Africa*, 11(1): 179-181
- Chittick, Neville (1974). "Excavations at Aksum, 1973-4: a Preliminary Report". *Azania, journal of the British Institute in Eastern Africa*. Vol. IX. Pp: 159-205.
- Christides, Vassilios (1972). "The Himyarite-Ethiopian war and the Ethiopian occupation of South Arabia in the Acts of Gregentius (ca. 530 A.D.). *Annales d'Ethiopie*, 9: 115-146.
- Ciampalini, R. *et al.* (2008). "Plough marks as a tool to assess soil erosion rates: A case study in Axum (Ethiopia)". *Catena*, 75: 18-27.
- Cleere, Henry (2012). "Series foreword", in: Comer, Douglas C. (2012). *Tourism and Archaeological Heritage Management at Petra. Driver to Development or Destruction?* New York. Pp. vii-viii.
- Cleere, Henry (N.D). "Preserving Archaeological Sites and Monuments". *Available at: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>* (accessed on 20/10/2015).
- Comer, Douglas C. (2012). "Petra as a Bellwether Archaeological Site on the World Heritage List", in Comer, Douglas C. (2012). "Petra as a Bellwether Archaeological Site on the World Heritage List", in Comer, Douglas C. (2012). *Tourism and Archaeological Heritage Management at Petra*. New York. Pp. 3-28.
- Comer, Douglas C. (2012). "The Tourism Juggernaut: A Retrospective on Profit and Preservation at Petra", in Comer, Douglas C. (ed.). *Tourism and Archaeological Heritage Management at Petra*. New York. Pp. 169-87.
- Connah, G. (1998) (ed.). *Transformations in Africa: Essays on Africa's Later Past*. London: Leicester University Press.
- Connah, G. (1987). *African Civilizations: An Archaeological Perspective*. Cambridge: Cambridge University Press.
- Contenson, Henri de (1981). "Pre-Aksumite Culture", in : G. Mokhtar (ed.). *General History of Africa: Ancient Civilizations of Africa*. vol. 2. Paris. Pp. 341-361.

- Contenson, Henri de (1963). "Les fouilles à Axoum en 1958- Rapport préliminaire". *Annales d'Ethiopie*, 5: 3-40.
- Contenson, Henri de (1961). "Trouvailles fortuites aux environs d'Axum (1957-1959)". *Annales d'Ethiopie*, 4: 15-23.
- Contenson, Henri de (1959). "Les fouilles a Axoum en 1957 - rapport preliminaire". *Annales d'Ethiopie*, 4: 3-16.
- Conti Rossini, C. (1931). "Antiche rovine sulle rore eritree". *Rassegna di Studi Etiopici*, ser. 6, fasc. 2, 1931: 241-278.
- Conti Rossini, C. (1928). *Storia d'Etiopia*, vol. 1. Bergamo.
- Conti Rossini, C. (1910). *Liber Axumae*. CSCO, Script. Aeth. Series altera, VIII.
- Cosgrove, D. (1984). *Social Formation and Symbolic Landscape*. London: Croom Helm.
- Crawford, O.G.S. 1953. *Archaeology in the Field*. London: Phoenix House.
- Cummins, A. *et al.* (2013). "Report of the High Level Reactive Monitoring Mission to Aksum". Mission undertaken from 20th to 27th January 2013 (UNESCO document:WHC-13/37.CO M/7B). Available at: <file:///C:/Users/Hiluf/Downloads/mis15-2013.pdf> (accessed online: December 2014).
- Curtis, Matthew C. (2004). "Ancient interaction across the southern Red Sea: new suggestions for investigating cultural exchange and complex societies during the first millennium BC", in: Lunde, P. and Porter, A. (eds.). *Trade and Travel in the Red Sea Region*. Oxford Archaeopress. Pp. 57-70.
- D'Andrea , A. Catherine *et al.* (2008). "The Pre-Aksumite and Aksumite Settlement of NE Tigray, Ethiopia". *Journal of Field Archaeology*. 33: 151-76.
- Dembski, G. (1988). "The Coins of Arabia Felix", in W. Daum (ed.). *Yemen: 3000 Years of Art and Civilization in Arabia Felix*. Frankfurt: 125-128.
- Darbyshire, I. *et al.* (2003). "Forest clearance and regrowth in northern Ethiopia during the last 3000 years", *The Holocene* 13,(4): 537–546.
- Dewing, H. B. (ed. and trans.) (1914). *Procopius: History of the Wars*. London.

- DiBlasi, Michael C. (2005). "Forward", in: Michels, Joseph W. (2005). *Changing settlement patterns in the Aksum – Yeha region of Ethiopia: 700 B.C - AD 8500*. Bar International Series 1446. Cambridge Monographs in African Archaeology, 64. Pp: ix-xvii.
- Doresse, Jean (1956). *Au Pays de la reine de Saba: l'Ethiopie antique et moderne*. Paris.
- Drewes, A.J. And Schneider, R. (1991). "Les Inscriptions de la period pre-Axoumoite", in : E. Bernand et al. (1991). *Recueil des inscriptions se l'Ethiopie des periodes Pre-Axoumite et Axoumite*. *Academie des inscriptions et belles-lettres*. Tome 1 : 65-213. Paris.
- Dubois, Colette (2003). "Bab al-Mandab". *Encyclopaedia Aethiopica*, 1: 427-428. Wiesbaden: Harrassowitz.
- ECHP (2007). "Site Planning & Conservation Activities in Gondar and Axum. Axum Sub component: Volume B3 – Site Interpretation Design Report". Unpublished report; file in Aksum Culture and Tourism Office.
- Ehret, C. (1980). "On the Antiquity of Agriculture in Ethiopia". *Journal of African History*. vol. 20: 161-77.
- Ethiopian Mapping Agency (1988). *National Atlas of Ethiopia*. Addis Ababa.
- Fattovich, R. (2010). "The Development of Ancient States in the Northern Horn of Africa, c. 3000 BC–AD 1000: An Archaeological Outline". *Journal of World Prehistory*, 23:145–175.
- Fattovich, R. (2009). "Reconsidering Yeha, c. 800-400 BC". *African Archaeological Review*, 26: 275-290.
- Fattovich, R. (2004). "The 'pre-Aksumite' state in northern Ethiopia and Eritrea reconsidered", in: Lunde, P. and Porter, A. (eds.). *Trade and Travel in the Red Sea Region*. Oxford Archaeopress. Pp. 71-77
- Fattovich, R. (2001). "The Horn of Africa", in: Murray T. (ed.). *The encyclopedia of archeology 2: History and discoveries*, I: 35–43). Santa Barbara (CA): ABC–Clio.
- Fattovich, R. (1995). "Archaeological excavations at Bieta Giyorgys (Aksum, Tigray): A preliminary report on the 1994 field season". *Nyame Akuma*, 43: 34-37.
- Fattovich, R. (1994a). "Archaeology, history and development in Ethiopia: The Environmental History of Tigray Project". *IES Bulletin*, 2: 9–12.
- Fattovich, R. (1990). "Remarks on the Pre-Aksumite Period in Northern Ethiopia". *Journal of Ethiopian Studies*, 23: 1-31.

- Fattovich, R. (1989). "Remarks on the Late Prehistory and Early History of Northern Ethiopia". *Proceedings of the Eighth International Conference of Ethiopian Studies*. Addis Ababa: IES, 1: 85-104.
- Fattovich, R. (1987). "Some remarks on the origins of the Aksumite Stelae". *Annales d'Ethiopie*, 14: 43-69.
- Fattovich, R., & Bard, K. A. (eds.). (2007). *Mersa/Wadi Gawasis 2006–2007: Harbor of the Egyptian Pharaohs*.
- Fattovich, R. and Bard, K.A. (2001). "The Proto-Aksumite Period: An Overview". *Annales d'Ethiopie*, 17: 3-24.
- Fattovich, R. *et al.* (2001). "IUO/BU Joint archaeological expedition at Bieta Giyorghis (Aksum, Ethiopia): 2000 Field season". *Nyame Akuma*, 55: 15-22.
- Fattovich, R. *et al.* (2000a). *The Aksum Archaeological Area: A Preliminary Assessment*. Naples: Istituto Universitario Orientale.
- Fauvelle-Aymar, F.-X. (2009). "Les inscriptions d'Adoulis (Érythrée): Fragments d'un royaume d'influence hellénistique et gréco-romaine sur la côte africaine de la mer Rouge". *Bulletin de l'institut Français d'Archéologie orientale*, tome 109: 135-160.
- Fauvelle-Aymar, F.-X., *et al.* (2011). "Le lion de Kombolcha et le léopard d'Aksum : des félins rupestres paléochrétiens ?" *Annales d'Éthiopie*, 26: 269-289.
- Fauvelle-Aymar, F.-X. *et al.* (2010). "Rock-cut stratigraphy: sequencing the Lalibela churches". *Antiquity*, 84: 1135–1150.
- Finneran, N. (2007). *The Archaeology of Ethiopia*. London: Routledge.
- Finneran, Nial (2005). "The Archeological Landscape of the Shire Region, Western Tigray, Ethiopia". *Annales d'Ethiopie*. 21: 7-29.
- Finneran, N. (2001). "The Aksum long blades: A Late Pleistocene/EarlyHolocene (Mode 4) lithic industry from Northern Ethiopia". *Nyame Akuma*, 55: 23-31.
- Finneran, N. (2000a). "A new perspective on the Late Stone Age of the Northern Ethiopian highlands: Excavation at Anqer Bahti, Aksum, Ethiopia 1996". *Azania*, 35, 21–51.
- Finneran, N. (2000b). "Excavations at the Late Stone Age Site of Bahti Nebait, Aksum, Northern Ethiopia". *Azania*, 35, 53–73.

- Finneran, N. (1998). "Investigating the earliest Food-producing communities of the northern Ethiopian Highlands: A case study from Aksum, Tigray". *Nyame Akuma*, 49: 35-42.
- Gajda, Iwona & Yohannes Gebreselassie (2009). "Pre-Aksumite inscribed incense burner and some architectural ornaments from Addi Akaweh (Tigray, Ethiopia)". *Annales d'Éthiopie*, 24: 49-61.
- Gajda, Iwona *et al.* (2009). "Pre-Aksumite Inscriptions from Maqaber Gaewa (Tigray, Ethiopia)". *Annales d'Ethiopie*, XXIV: 33-48.
- Gardner, J. W. (1977). "Blameless Ethiopians and Others". *Greece & Rome, Second Series*, 24(2): 185-193. Cambridge University Press.
- Grant, J. *et al.* (2008). *The Archaeology course book. An introduction to themes, sites, methods and skills*. Third Edition. London.
- Greene, Kevin and Moore, Tom (2010). *Archaeology: an introduction*. London.
- Grzyski, Krzysztof (2004). "Landscape Archaeology of Nubia and Central Sudan". *The African Archaeological Review*, Vol. 21, No. 1 (Mar., 2004): 7-30:
- Hagg, T. (1994). "Sayee's Axumite Inscription from Meroe –Again". *Meroitic Newsletter*, 25: 45-8.
- Hagg, T. (1984). "A new Axumite Inscription in Greek from Meroe; a preliminary report". *Meroitica* 7: 436-41. Meroitistische Forschungen 1980.
- Hahn, Wolfgang (2000). "Aksumite Numismatics: a critical survey of recent research". *Revue numismatique*, 6e série - Tome 155: 281-311.
- Harlan, J. (1992). "Indigenous African agriculture", in: Cowan, C. W., and Watson, P. J. (eds.). *The Origins of Agriculture, an International Perspective*. Smithsonian Institution Press, Washington, DC. Pp. 59–70.
- Harlan, J. (1982). "The origins of indigenous African agriculture", in: Clark, J. D. (ed.). *Cambridge History of Africa. From Earliest Times to c. 500 BC*. Vol. I. Cambridge: University Press. Pp. 624–657.
- Harlan, J. (1969). "Ethiopia: A center of diversity". *Economic Botany* 23: 309–314.
- Hiluf, Berhe (2011). "Newly Discovered Archaeological Sites from Feresmay Area (Tigray, Ethiopia)". *Nyame Akuma*, 76: 15-22.

- Hiluf, Berhe (2009). "Preliminary Report on the Archaeological Excavation of Meqaber Gaewa at Addi Akaweh (Tigrai, Ethiopia)". *Annales d'Ethiopie*, 24: 15-31.
- Hiluf Berhe (2005). "Heritage protection and the law" (unpublished). Paper presented on public awareness creation in Aksum. Archive in Culture and Tourism Office, Aksum.
- Hiluf Berhe (2004). "Report on the archaeological sites of Medebay-Welel" (unpublished), a report submitted to the Culture and Tourism Office, Aksum. Archive in Culture and Tourism Office.
- Hirsch, B. & Fauvelle-Aymar, F.-X. (2001). "Aksum après Aksum: Royauté, archéologie et herméneutique chrétienne de Ménélik II (r. 1865-1913) à Zâr'a Ya'qob (r. 1434-1468)". *Annales d'Ethiopie*, 17: 57-107.
- Hu, Di (2011). "Advancing Theory? Landscape Archaeology and Geographical Information Systems". *PIA*, 21: 80-90.
- Ingold, T. (1993) "The Temporality of Landscape". *World Archaeology* 25 (2): 152-74.
- Isaac, E., and Felder, C. (1988). "Reflections on the Origins of the Ethiopian Civilization". *Proceedings of the 8th international conference of Ethiopian Studies*, 1: 71-83. Addis Abeba.
- Jim, Grant *et al.* (2008). *The Archaeology Course Book. An Introduction to Themes, Sites, Methods and Skills*. Third Edition. London and New York.
- Johnson, Matthew (2007). *Ideas of Landscape*. Blackwell Publishing.
- Johnson, Matthew (2005). "Thinking about Landscape", *in*: Bahn, Paul and Renfrew, Colin (eds.). *Archaeology*. London. Pp. 116-119.
- Kankpeyeng, Benjamin W. and DeCorse, Christopher R. (2004). "Ghana's Vanishing Past: Development, Antiquities, and the Destruction of the Archaeological Record". *The African Archaeological Review*, 21(2). Pp. 89-128.
- Kassaye Begashaw (1994). "Archaeological research in Ethiopia: progress and current situation". *International Conference of Ethiopian Studies*, 1: 95-103. Paris.
- Keall, Edward J. (2004). "Possible connections in antiquity between the Red Sea coast of Yernen and the Horn of Africa", *in*: Lunde, P. and Porter, A. (eds.). *Trade and Travel in the Red Sea Region*. Oxford Archaeopress. Pp. 43-55.

- Kebedé Mikaël and Leclant, Jean (1955). "La Section d'Archéologie (1952-1955)". *Annales d'Ethiopie*, 1: 1-8.
- Kibunjia, Mzalendo (1997). "The Management of Archaeological Collections and Resources in Africa". *African Archaeological Review*, 14(3): 137-141.
- Kirwan, L. P. (1972). "The Christian Topography and the Kingdom of Axum". *The Geographical Journal*, 138(2): 166-177.
- Kobishchanov Y.M. (1981). "Aksum: political system, economics and culture, first to fourth century", in: G. Mokhtar (ed.). *General History of Africa II: Ancient Civilizations of Africa*. Berkeley. Pp. 381-400,
- Kobishchanov, Yuri M. (1979). *Axum*. The Pennsylvania state university press.
- Koh, SeJin (2014). "A Joint Archaeological Expedition by Ethiopia Exploration Foundation, Korea, and Aksum University, Ethiopia: Preliminary Report on the First Season of Excavations at Taka'a Maryam in Aksum, Ethiopia". Unpublished report, 18 pages, file at Department of Archaeology and Heritage Management, Aksum University.
- Küster, Hansjörg (2004). "Cultural Landscapes", in: Martin Dieterich and Jan Van der Straaten (eds.). *Cultural Landscapes and Land Use*. Netherlands: Kluwer Academic Publishers. Pp: 1-11.
- Leclant, J. (1959). "Les fouilles a Axoum en 1955-1956. Rapport preliminaire". *Annales d'Ethiopie*, 3: 3-24.
- Leeman, Bernard (2009). "The Sabaeen inscriptions at Adi Kaweh – evidence supporting the narrative of the Sheba – Menelik cycle of the Kebra Nagast". A paper presented at the African Studies Association of Australasia and Pacific Conference, University of Queensland, St Lucia, Brisbane, Australia, Friday 2 October 2009.
- Lefebvre, Théophile (1845-51). *Voyage en Abyssinie. Exécuté pendant les années 1839, 1840, 1841, 1842 et 1843*. Volume three. Paris.
- Levine, D. (1974). *Greater Ethiopia: the Evolution of a Multi-Ethnic Society*. Chicago and London.
- Littmann, E. et al. (1913). *Deutsche Aksum-Expedition*. 4 volumes; Berlin.
- Mabulla, Audax Z. P. (2000). "Strategy for Cultural Heritage Management (CHM) in Africa: A Case Study". *The African Archaeological Review*, 17(4): 211-233.

- Manzo, A. (2004). "Late Antique evidence in Eastern Sudan". *Sudan & Nubia*, 8: 75–83.
- Manzo, A. (1999). "Echanges et contacts le long du Nil et de la Mer Rouge dans l'époque protohistorique (IIIe et IIe millénaires avant J.-C.)". Oxford: B.A.R.
- Manzo, A. (1998). "The dynamics of external contacts of northern Ethiopia and Eritrea from Proto-historical to Aksumite times, late 2nd millennium BC–Late 1st millennium". *Ethiopia and its Neighbors*. Frankfurt: The Archaeological Museum in Gdansk. Pp. 35–52.
- Mattingly, H. (1952). *A Guide to the Exhibition of Roman Coins in the British Museum: Corrected Version*. London.
- McCrindle, J. W. (1929). *The Christian Topography of Cosmas, an Egyptian Monk*. London: The Hakluyt Society.
- Mesfin Woldemariam (1972). *An Introductory Geography of Ethiopia*. Addis Ababa.
- Mesfin Woldemariam (1969). *An Atlas of Ethiopia*. Il Poligrafico Priv. Ltd. Co., Asmara.
- Meshorer, Y. (1965-66). "An Aksumite coin from Caesarea". *Israel Numismatic Journal*, III.
- Michels, Joseph (2005). *Changing settlement patterns in the Aksum – Yeha Region of Ethiopia, 700BC – AD850*. Oxford: Archaeopress.
- Michels, Joseph (1988). "The Aksumite Kingdom: a settlement archaeology perspective". *Proceedings of the ninth international congress of Ethiopian studies*. Moscow. Pp: 173-183.
- Michels, Joseph (1979). "Axumite archaeology: an introductory essay", in: Kobishchanov, Y.M (1979). *Axum*. Pennsylvania University State. Pp:1-34.
- Mire, Sada (2011). "The Knowledge-Centred Approach to the Somali Cultural Emergency and Heritage Development Assistance in Somaliland". *African Archaeological Review*, 28: 71–91.
- Monneret de Villard, Ugo (1938). *Aksum: Ricerche di Topografia Generale*. Roma.
- Mordini, A. (1967) "Gold Kushana coins in the convent of Dabra Dammo". *Journal of the Numismatic Society of India*, 29: 19-25.

- Muller, David Heinrich (1896). "On the inscriptions from Yeha and Aksum", in Bent, T. (1896). *The Sacred city of the Ethiopians, being a record of travel and research in Abyssinia in 1893*. London. Pp: 231-285.
- Munro-Hay, S. C. H. (2005). *The Quest for the Ark of the Covenant. The True History of the Tablets of Moses*. London: I.B. Tuaris.
- Munro-Hay, S. C. H. (1997). *Ethiopia and Alexandria: The Metropolitan Episcopacy of Ethiopia*. Wiesbaden.
- Munro-Hay, S. C. H. (1993). "State Development and Urbanism in Northern Ethiopia", in: Shaw, T. *et al.* (eds.) *Archaeology of Africa: Food, Metals and Towns*. London. Pp. 609-621.
- Munro-Hay, S. C. H. (1991). *Aksum: An African Civilization of Late Antiquity*. Edinburgh.
- Munro-Hay, S. C. H. (1989). *Excavations at Aksum: An Account of Research at the Ancient Ethiopian Capital Directed in 1972-'74 by the Late Dr. Neville Chittick*. Memoirs of the BIEA, No. 10. London.
- Munro-Hay, S. C. (1988). "The British Institute in Eastern Africa's excavations at Aksum, Northern Ethiopia". *International Conference of Ethiopian Studies*, 1: 89-93. Paris.
- Munro-Hay, S. C. H. (1984). *The Coinage of Aksum*. New Delhi.
- Munro-Hay, S. C. H. and Nosnitsin, D. (2003). "Danə'el, *Haṣani*". *Encyclopaedia Aethiopica*, 1: 84-5 Wiesbaden: Harrassowitz.
- Munro-Hay, S. C. H. and Juel-Jensen, B. (1995). *Aksumite Coinage*. London.
- Muth, Franz-Christoph (2003). "Ahmad b. Ibrahim al-Gazi", *Encyclopaedia Aethiopica*, 1: 155-58. Wiesbaden: Harrassowitz.
- Negarit Gazeta (2000). "Research and Conservation of Cultural Heritage Proclamation number 209/2000". *Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia*, 6th year, no. 39: 1345-1355. 27th June 2000, Addis Abeba.
- O'Connor, David (1982). "Egypt, 1552—664 BC", in: Clark, J. Desmond (ed.). *The Cambridge History of Africa: from the Earliest Times to c. 500 BC*. Volume I. Cambridge University Press. Pp. 830-940.
- Page, T. E. *et al.* (eds.) (1917). *The Geography of Strabo*. Vols. I, VII, and VIII. London.

- Pankhurst, R. (1997). *The Ethiopian border lands. Essays in Regional History from Ancient Times to the end of the 18th century*. The Red Sea Press, INC.
- Pankhurst, R. (1974). "The History of Ethiopia's Relations with India prior to the 19th century", IV, *Congresso Internazionale di studi Etiopici*, 1: 205-311.
- Pankhurst, R. (1961). *An Introduction to the Economic History of Ethiopia from ancient times to 1800*, with a forward by K.M. Panikkar. England: Lalibela House.
- Parks, Shoshaunna, *et al.* (2006). "The Conservation of Maya Cultural Heritage: Searching for Solutions in a Troubled Region". *Journal of Field Archaeology*, 31(4). Pp. 425-432.
- Patia, P. and Santana, M. (2011). "Introduction to Heritage Documentation", in Stylianidis, E., Patias, P., and Santana, M. Quintero (eds.). *CIPA heritage documentation best practices and applications*, volume XXXVIII-5/C19. Pp. 9-13.
- Pearce, Nathaniel (1831). *The Life and Adventures of Nathaniel Pearce, written by himself during a residence in Abyssinia from the year 1810 to 1819*. London: Colburn and Bentley.
- Phillips, Jack (2004). "Pre-Aksmite Aksum and its neighbours", in: Lunde, P. and Porter, A. (eds.). *Trade and Travel in the Red Sea Region*. Oxford Archaeopress. Pp.79-85.
- Phillips, Jacke (1997). "Punt and Aksum: Egypt and the Horn of Africa". *Journal of African History*, 38: 423-457. Cambridge University Press.
- Phillipson, D. W. (2012). *Foundations of an African Civilization. Aksum and the northern Horn of Africa 1000BC-AD1300*. James Currey.
- Phillipson, D. W. (2009a). "The first millennium BC in the Highlands of Northern Ethiopia and South-Central Eritrea: A Reassessment of Cultural and Political Development". *African Archaeological Review*. 26: 257-274.
- Phillipson, D. W. (2009b). "Aksumite Civilization, its connections and descendants". *Mitteilungen der Sudanarchaeologischen Gesellschaft Zu Berlin E.V.* Heft 20. Pp: 75-91.
- Phillipson, D. W. (2004): "The Aksumite roots of Medieval Ethiopia". *Azania: Archaeological Research in Africa*, 39(1): 77-89.
- Phillipson, D. W. (2003). "Aksum. An Archaeological Introduction and Guide". *Azania: Archaeological Research in Africa*, 38 (1): 1-68.

- Phillipson, D. W. (2000). *Archaeology at Aksum, Ethiopia, 1993–7*. 2 volumes. London.
- Phillipson, D. W. (1998). *Ancient Ethiopia: Aksum, its antecedents and successors*. London: British Museum.
- Phillipson, D. W. (1997). *The Monuments of Aksum. Based on the work in 1906 of the Deutsch Aksum-Expedition by Enno Litmann, Daniel Krencker, and Theodor Von Lupke (Berlin, 1913)*, translated by Rosalind Bedlow.
- Phillipson, D. W. (1994). “The B.I.E.A. Aksum Excavations, 1993”. *Nyame Akuma*, 41: 15-25.
- Phillipson, D. W. (1993a). *African Archaeology*. Cambridge: Cambridge University Press.
- Phillipson, D. W. (1993b). “The antiquity of cultivation and herding in Ethiopia”, in: Shaw, T., Sinclair, P., Andah, B., and Okpoko, A. (eds.), *The Archaeology of Africa, Food, Metals and Towns*. Routledge, London. Pp. 344–357.
- Phillipson, D. W. (1982). “The Later Stone Age in sub-Saharan Africa”, in Clark, Desmond (ed.). *The Cambridge History of Africa. Volume I: From the Earliest Times to c. 500 BC*. Cambridge University Press. Pp. 410-477.
- Phillipson, D. W. (1977). “The excavation of Gobedra rock-shelter, Axum”. *Azania*, 12, 55–60.
- Phillipson, L. (2009a). “Lithic artefacts as a source of cultural, social and economic information: the evidence from Aksum, Ethiopia”. *African Archaeological Review*, 26, 45-54 .
- Phillipson, L. (2009b). *Using stone tools: The evidence from Aksum, Ethiopia*. Oxford: Archaeopress.
- Pirenne, J. (1988). “The Chronology of Ancient South Arabia-Diversity of Opinion”, in: Daum W. (ed.). *Yemen: 3000 Years of Art and Civilization in Arabia Felix*. Frankfurt. Pp. 116-122.
- Pirenne, J. (1956). “Paléographie des inscriptions sud-arabes. Contribution à la chronologie et à l’histoire de l’Arabie du sud antique”, *Verhandelingen van de Koninklijke Vlaamse Academie van België, Kl. der Letteren*, No. 26. Bruxelles.
- Plant, Ruth (1985). *Architecture of the Tigre, Ethiopia*. Worcester : Ravens.
- Poissonnier, Bertrand (2012). “The giant stelae of Aksum in the light of the 1999 excavations”, in: Fauvelle-Aymar, François-Xavier (ed.). *Palethnology of Africa*. Bilingual review of prehistory. Pp. 49-86.

- Polotsky, I. (1940). *Kephalaia*. Stuttgart.
- Porteous, J. D. (1990). *Landscapes of the Mind: Worlds of Sense and Metaphor*. Toronto: University of Toronto Press.
- Prott, Lyndel V. (1993). "The Impact of Policy on Cultural Heritage Protection", in Margaret G. H. Mac Lean (ed.). *Cultural Heritage in Asia and the Pacific: Conservation and Policy*. Proceedings of a Symposium held in Honolulu, Hawaii, September 8-13, 1991. Pp. 1-14.
- Puglisi, Salvatore M. (1941). "Primi risultati delle indagini compiute dalla Missione archeologica di Aksum". *Africa Italiana* 8: 95-153.
- Puglisi, Salvatore M. (1946). "Industria litica di Aksum nel Tigrai occidentale". *Rivista di Scienze Preistoriche* 1: 284-90.
- Rackham, B. H. (1947-56) (ed. and trans.). *Plinius Secundus. Natural History*. London.
- Ricci, Lanfranco (1990). "Appunti archeologici". *Rassegna di Studi Etiopici*, 32:129-165.
- Ricci, Lanfranco (1974). "Scavi archeologici in Etiopia". *Africa* (Rome), 29:435-441.
- Ricci, Lanfranco, and Fattovich, Rodolfo (1988). "Scavi archeologici nella zona di Aksum, B. Betegiorgis". *Rassegna di Studi Etiopici*, XXXI: 123-197.
- Rickerby, Stephen (1997). "The Role of Documentation in Defining Conservation Strategies at Grotto Sites", in Agnew, Neville (ed.). *Conservation of Ancient Sites on the Silk Road*. International Conference on the conservation of Grotto Sites, 1993, China. Pp. 62-66.
- Robin, C. (1989). "La première Intervention Abyssins en Arabie Méridionale (de 200 a 270 de l'ère chrétienne environ)", in: Taddesse Beyene (ed.). *Proceedings of the Eighth International Conference of Ethiopian Studies*, 2: 147-62. Addis Ababa.
- Robin, C. (1981). "Les Inscriptions d'al-Mis'al et la chronologie de l'Arabie méridionale au IIIe siècle de l'ère chrétienne". *Comptes rendus: Académie des Inscriptions et Belles-Lettres (Avril-Juin)*: 315-339.
- Robin, C. and de Maigret, A. (1998). "Le grand temple de Yeha (Tigray, ethiopie) apres la premier campagne de fouilles de la mission francaise (1998)". *Comptes-rendus des seances de l'Academie des Inscriptions et Belles -Lettres*. 737-798.

- Salt, H. (1814). *A Voyage to Abyssinia and Travels to the Interior of that Country, Executed Under the Orders of the British Government in the Years 1809 and 1810*. London.
- Schlumberger, Gustave (1886). “Une nouvelle monnaie royale éthiopienne, monnaie d'or du Négus Kaleb, roi d'Aksum, conquérant de l'Yémen au VI^e siècle”. *Comptes-rendus des séances de l'Académie des Inscriptions et Belles-Lettres*. 30^e année, N. 2, p. 231.
- Schneider, R. (1988). “A New Aksumite Chronology”. *Journal of Ethiopian Studies*, 21: 111-120.
- Schneider, R. (1978). “Documents épigraphiques de l'Éthiopie - VI”. *Annales d'Éthiopie*, 11: 129-132.
- Schneider, R. (1976a). “A propos de ‘L’imbroglio de trois siècles de chronologie Aksumite”. *Documents pour servir a l'histoire de la Civilisation Éthiopienne, Facs. 7: 22-32*
- Schneider, R. (1976b). “Les débuts de l'histoire Éthiopienne”. *Documents pour servir a l'histoire de la Civilisation Éthiopienne, Facs. 7: 47-54*.
- Schneider, R. (1976c). “L’inscription chrétienne d'Ezana en écriture Sudarabe”. *Annales d'Éthiopie*, 10: 109-117.
- Schnelle, Mike (2011). “Grat Be`al Gebri – a Monumental Half Timber Complex of the Early 1st Millennium B.C. in the Ethiopian Highland: Comparisons with Constructions in South Arabia and the Near East and the Continuation of the Construction Techniques with Wood in the Ethiopian Building Tradition”. *Paper read at the 18th International Conference on Ethiopian Studies, Dire Dawa, Ethiopia, November 2011*.
- Schoff, Wilfred (1912). *The Periplus of the Erythrean Sea*. New York.
- Sergew Hableselassie (1972). *Ancient and Medieval Ethiopian History to 1270*. Addis ababa.
- Shanks, M. (2001). “Culture/archaeology. The dispersion of a discipline and its objects”, in: Hodder, I. (ed.), *Archaeological Theory Today*. Cambridge, UK, pp. 284-306.
- Shinnie, P. L. (1996). *Ancient Nubia*. London.
- Shinnie, P. L. (1978a). “The Nilotic Sudan and Ethiopia, c. 660 BC to c. AD 600”, in: Fage, J. D. and Oliver, Roland (eds.). *The Cambridge History of Africa: c. 500 BC to AD 1050*, vol. 2, Cambridge University Press: 210-271.

- Shinnie, P. L. (1978b). "Christian Nubia", in: Fage, J. D. and Oliver, Roland (eds.). *The Cambridge History of Africa: c. 500 BC to AD 1050*. vol. 2, Cambridge University Press: 556-588.
- Shinnie, P. L. (1967). *Meroe: A Civilization of the Sudan*. London.
- Sutton, J. E. G. (1989). "Aksum, the Eritrean Sea and the world of late antiquity: a forward", in: Munro-Hay, S. C. H. (1989). *Excavations at Aksum: An Account of Research at the Ancient Ethiopian Capital Directed in 1972-74 by the Late Dr. Neville Chittick*. Memoirs of the BIEA, No. 10: 1-6. London.
- Tadesse Tamrat, (1977). "Ethiopia, the Red Sea and the Horn", in: Olive, Roland (ed.). *The Cambridge History of Africa, from c. 1050 to c. 1600*. Volume 3. Cambridge University press. Pp: 98-182.
- Tadesse Tamrat (1972). *Church and State in Ethiopia: 1270-1527*. Oxford.
- Tanyeri-Erdemir , Tuğba (2006). "Archaeology as a Source of National Pride in the Early Years of the Turkish Republic". *Journal of Field Archaeology*, 31(4): 381-393.
- Tekle Hagos (2008). *Archaeological Rescue Excavations at Aksum, 2005-2007*. Addis Ababa: The Ethiopian Cultural Heritage Project.
- Tekle Hagos (2000). "Preliminary report on the archaeological expedition of Enda Azay Wondimhunegn", unpublished report submitted to ARCCCH, December 22/2000, Addis Abeba, in File no. -/- -/03 in "Excavation at Berik Awdi and road to Kaleb site", page 54-60, Aksum Culture and Tourism Office archive.
- Tilley, C. (1994). *A Phenomenology of Landscape: Places, Paths and Monuments*. Oxford.
- Trigger, Bruce (1984). "Alternative Archaeologies: Nationalist, Colonialist, Imperialist". *Man* 19: 355-370.
- Tsige Gebru *et al.* (2009). "Holocene palaeovegetation of the Tigray Plateau in northern Ethiopia from charcoal and stable organic carbon isotopic analyses of gully sediments". *Palaeogeography, Palaeoclimatology, Palaeoecology*, 282: 67-80.
- UNESCO (2014). "World Heritage in Danger". URL: <http://whc.unesco.org/en/danger> (accessed: December 2014).
- UNESCO (2013). "Convention concerning the protection of the world cultural and natural heritage". World Heritage Committee. Thirty-seventh session, Phnom Penh, Cambodia,

- 16 -27 June 2013. Document: WHC-13/37.COM/7B. URL: <http://whc.unesco.org/archive/2013/whc13-37com-7B-en.pdf> (accessed, December 2014)
- UNESCO (2012). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee. Thirty-sixth session, Saint- Petersburg, Russian Federation, 24 June – 6 July 2012. Document: WHC-12/36.COM/7B. URL: <http://whc.unesco.org/archive/2012/whc12-36com-7B-en.pdf> (accessed: December 2014).
- UNESCO (2010). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee. Thirty-fourth session, Brasilia, Brazil, 25 July – 3 August 2010. Document: WHC-10/34.COM/7B. URL: [:http://whc.unesco.org/archive/2010/whc10-34com-7Be.pdf](http://whc.unesco.org/archive/2010/whc10-34com-7Be.pdf) (accessed: December 2014).
- UNESCO (2008a). “Operational Guidelines for the Implementation of the World Heritage Convention”. Document: WHC.08/01 (accessed, December 2014).
- UNESCO (2008b). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee; thirty-second session, Quebec City, Canada, 2 –10 July 2008. Document: WHC-08/32.COM/7B.Add. URL: <http://whc.unesco.org/archive/2008/whc08-32com-7B.Adde.pdf> (accessed: December 2014).
- UNESCO (2006). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee. Thirtieth Session, Vilnius, Lithuania, 8-16 July 2006. Document: WHC-06/30.COM/7B. URL: <http://whc.unesco.org/archive/2006/whc06-30com-7bE.pdf> (accessed: December 2014).
- UNESCO (2005). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee; Twenty-ninth Session, Durban, South Africa, 10-17 July, 2005. World Heritage 29 COM. Document: WHC-05/29.COM/7B.Rev URL: <http://whc.unesco.org/archive/2005/whc05-29com-07BReve.pdf> (accessed: December 2014).
- UNESCO (2003). “Periodic report, Africa”. World Heritage Reports 3. Paris: UNESCO. URL: <http://whc.unesco.org/document/3183> (accessed, December 2014).
- UNESCO (29 January 1999). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee, twenty-second session,

- Kyoto, Japan, 30 November - 5 December 1998. Document: WHC-98/CONF.203/18. URL: <http://whc.unesco.org/archive/repcom98.pdf> (accessed: December 2014).
- UNESCO (1998).” Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee, twenty-second session, Kyoto, Japan, 30 November - 5 December 1998. Document: WHC-98/CONF.203/18.Rev. URL: <http://whc.unesco.org/archive/1998/whc-98-conf203-8reve.pdf> (accessed, December 2014).
- UNESCO (10 March, 1997). “Convention concerning the protection of the world cultural and natural heritage”. Report of the World Heritage Committee at its twentieth session, 2-7 December 1996, Merida, Mexico. Document: WHC-96/CONF.201/21 .URL: <http://whc.unesco.org/archive/1996/whc-96-conf201-21e.pdf> (accessed: December 2014).
- UNESCO (1980). “Convention concerning the protection of the world cultural and natural heritage”. World Heritage Committee Fourth Session. Paris, 1-5 September 1980”. URL: <http://whc.unesco.org/archive/repcom80.htm#15> (accessed: 24/12/2014)
- Valentia, George Viscount (1809). *Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia, and Egypt in the years 1802, 1803, 1804, 1805, and 1806*. In Three volumes (vol. III). London.
- Vantini, G. (1975). *Oriental Sources Concerning Nubia*. Heidelberg and Warsaw.
- Vavilov, N. I. (1951). “The Origin, Variation, Immunity and Breeding of Cultivated Plants”. *Chronica Botanica*, 13: 1-364.
- Vavilov, N. I. (1926). *Studies on the Origin of Cultivated Plant*. Leningrad.
- Walker, S, C. *et al.* (2013). “Report from Phase II Analysis of the Necropolis and Elite Structure Adjacent to the Tombs of Kaleb and Gebre Meskel: presentation on the survey findings of the newly identified archaeological sites north and east of the Kaleb and Gebre Mesqel tomb complex”, (unpublished). Aksum University – Department of Archaeology: Aksum, Tigray, Ethiopia.

- Wenban-Smith, Francis (1995). "Square pegs in round holes. Problems of managing the Palaeolithic heritage", in Malcolm A. Cooper, Antony Firth, John Carman and David Wheatley (eds.). *Managing Archaeology*. London. Pp. 142-157.
- Wendowski, Marlies and Ziegert, Helmut (2003). "Aksum at the transition to Christianity". *Annales d'Ethiopie*, 19: 215-230.
- Willems, Willem J.H (2000). "The management of the archaeological heritage in the Netherlands". *Archaeologia Polona*, vol. 38, 153-168.
- Willems, Willem J.H (1998). "Archaeology and heritage management in Europe: trends and developments". *European Journal of Archaeology*, 1(3), 293-311.
- Wilson, R. T. (1977). "The vegetation of Central Tigre, Ethiopia, in relation to its land use". *Webbia* 32(1): 235–270.
- Winter, Joseph C. (1980). "Indian Heritage Preservation and Archaeologists". *American Antiquity*, 45(1). Pp. 121-131.
- Wolf, Pawel and Nowotnick, Ulrike (2010). "The Almaqah temple of Meqaber GaKewa near Wuqro (Tigray, Ethiopia)". *Proceedings of the Seminar for Arabian Studies* 40: 367–380.
- Worku Derara (2010). "Training in Archaeology and Heritage Management in Higher Education Institutions in Ethiopia". *Proceedings of the First Annual Workshop of the Ethiopian Archaeologists' Association (EAA)*. Addis Abeba. Pp. 59-72.
- Yohannes Gebreselassie (2011). "Plague as a Possible Factor for the Decline and Collapse of the Aksumite Empire: a New Interpretation". *Ityopis*, 1: 36-61.
- Yule, Paul (2013). "A Late Antique Christian king from Zafar, southern Arabia". *Antiquity* 87: 1124–1135.
- Yule, P. *et al.* (2007). "Zafar, Capital of Himyar, Ibb Province, Yemen First Preliminary Report: 1998 and 2000, Second Preliminary Report: 2002, Third Preliminary Report: 2003, Fourth Preliminary Report: 2004". *ABADY* 11: 479–547
- Ziegert, Helmut (2002). *Archaeology as History*. Hamburg.
- Ziegert, Helmut (2001). "Preliminary Report on the Hamburg Archaeological Mission to Axum 2000". *Annales d'Ethiopie*, 17: 25-33.