

The Architecture of Power in Tigray (Northern Ethiopia) and Eritrea in the 1st millennium BCE – 1st millennium CE

RODOLFO FATTOVICH

The rise, consolidation and decline of the so-called D'MT polity (ca. 900/800 – 400/300 BCE) and the Kingdom of Aksum (ca. 50 BCE – 700 CE) in Tigray (northern Ethiopia) and Eritrea were associated with changes in the conception of the state, which modeled the traditional attitude to social hierarchy in the mind of the people and were exhibited in the elite buildings and tombs. In this paper the settlement and architectural evidence ascribable to these polities will be reviewed in order to outline i) the use of architecture (from settlements to single buildings) by the elites to display and sustain their power and ii) the consequences this use had in shaping the perception and acceptance of a social inequality by the population through the manipulation of their visual world.

Introduction

The centuries from ca. 900/800 BCE to 700/800 CE were a crucial time in the history of the whole Horn of Africa. In this period two major polities developed on the highlands of Tigray in northern Ethiopia and Eritrea: the so-called D'MT (Daamat/ Diamat) polity during 900/800 and 400/300 BCE and the Kingdom of Aksum between 50 BCE and 700 CE.¹ Despite these polities occupied the same territory in a temporal sequence, they were two distinct episodes in the history of the region, the evidence of continuity between them being small (Fig.1).²

The evidence of D'MT is very scarce, and the actual nature of this polity (chiefdom, tribal federation, early state?) is obscure. The occurrence of monuments and a few artifacts in South Arabian style, as well as inscriptions in Sabaean script and a variant of Sabaic language, suggest that the rise of the polity was in some way related to contacts between the people of the northern Horn of Africa and those of south-western Arabia, particularly the Sabeans, in the early 1st millennium BCE. The dynamics of these contacts, however, are debated. Different interpretations have been suggested, ranging from migration to and/ or colonization of the African highlands by one or more South Arabian tribes to commercial exchanges and acculturation or independent cultural developments.³

Beginning in the late 1st millennium BCE, the Kingdom of Aksum replaced the D'MT polity. This kingdom was an important commercial partner to the Roman and Byzantine Empire and dominated the southern Red Sea in the 1st millennium CE.⁴ The kingdom arose in central Tigray from a local polity with a different cultural tradition from D'MT and progressively incorporated the whole Tigray and Eritrea into one territorial state.⁵ In the late 1st millennium CE, the Aksumite kingdom declined and the core of the state shifted to southern Tigray and later to the present northern Amhara region in central Ethiopia.⁶

These early historical polities were successive stages in the development of social inequality in the northern highlands of the Horn of Africa and represented the background to the hierarchical structure of the later Ethio-Semitic Christian traditional society, which survived up to the 20th century in Ethiopia and Eritrea.⁷ Their rise, consolidation and decline were associated with changes in the conception of the state, which modeled the traditional attitude to social hierarchy in the mind of the people and were exhibited in the elite buildings and tombs.⁸

In this paper, I am pleased to offer to Steffen Wenig in the occasion of his eightieth birthday, I shall try to focus on i) the use of architecture (from settlements to single buildings) by the elites to display

1 Finneran 2007; Fattovich 2010a; Phillipson 2012.

2 Fattovich & Bard 1994; Fattovich 2010a.

3 Curtis 2008; Fattovich 2009; 2010a, 2012; Manzo 2009; Phillipson 2009a; Gerlach 2012.

4 Fattovich 2008; 2010a; Phillipson 2012.

5 Fattovich 2008; 2010a.

6 Phillipson 2009b; 2012.

7 Pankhurst 1998; Henze 2000.

8 Fattovich 2008.



Fig. 1: General Map of Northern Ethiopia and Eritrea with location of the sites quoted in the text

and sustain their power and ii) the consequences this use had in shaping the perception and acceptance of a social inequality by the population through the manipulation of their visual world.⁹

Architecture of Power: definition and problems

A definition of ‘architecture of power’ may sound simple: architecture is the material evidence of social inequality and elite power within a human group from local community to empire, up to the modern nation-state. The construction of monumental buildings and tombs actually points to a more and more centralized political organization with leaders and officers capable of managing a large labor force and redistributing resources through the population in conformity with a well established hierarchical scale (the pyramids of ancient Egypt being the most typical example).

This definition, however, is reductive even if it is consistent with the archaeological record.¹⁰ The ‘architecture of power’ is a multi-faced phenomenon, requiring different levels of analysis and inter-

pretation (each one generating a cascade of specific problems) to be appropriately understood in order to outline the contribution of architecture to fix the cognition of hierarchy in the mind of people and transform the acceptance of inequality into a cultural pattern of the population. In particular, four major aspects concerning the relation of architecture with social inequality, power, landscape, and social space could be distinguished, providing the investigation with sounder foundations.¹¹

a) Social inequality

Despite hierarchy is part of the social behavior humans inherited from primates,¹² the emerging of inequality was a cultural process,¹³ which was associated with the increasing authority of leaders in human groups.¹⁴

Architecture is directly related to this process insofar as palaces, temples, tombs and megaliths can be regarded as the materialization of differences in role, status, affluence and energy expenditure among

11 See also Manzo forthcoming.

12 de Waal 2005; Panskeep & Biven 2012; Wilson 2012.

13 Flannery & Marcus 2012.

14 Vaughn, Eerkens & Kanter 2009.

9 See Wells 2012.

10 Renfrew & Bahn 2004, 178-181.

the members of a human group and/ or between human groups.¹⁵ In particular, archaeological and ethnological evidence suggests that large monoliths and ritual houses characterized achievement-based societies; temples were typical of chiefly societies; and palaces were the mark of kingdoms and empires.¹⁶

b) Power

Power in social sciences is the capability of individuals or groups to affect the behavior of others in order to get preferred outcomes by means of coercion, reward or attraction.¹⁷ The legitimating of leadership is a crucial step to transform power into institutional authority within a human group.¹⁸ Power is based on three main strategies for manipulating social relations: i) by using threats or rewards to change the behavior of others against their interests; ii) by controlling the agenda of actions of others in order to limit their choices; and iii) by creating and shaping the perceptions, beliefs and preferences of others.¹⁹

Architecture is related to the practice of power as buildings and tombs are external material devices stimulating psychological changes in the mood and feelings of the people,²⁰ and may be regarded as 'constitutive symbols' of institutional authority.²¹ In particular, monumental constructions such as palaces, temples and tombs impose a physical perception of the existence of a powerful leadership over the people, generating a sense of subjection to the observer. Fortresses and other military facilities show other people the presence of a strong military power in order to dissuade them from aggression. Planned towns are the material device to induce from the top a feeling of social hierarchy and control of the agenda of activities among the people.

15 Earle 2004.

16 Flannery & Marcus 2012.

Achievement-based societies were characterized by inequality in the prestige of single ambitious leaders with a limited authority, which could not be inherited by their children. Chiefly societies were characterized by a hereditary rank. Kingdoms were characterized by the emerging of social classes (Johnson & Earle 2000; Flannery & Marcus 2012).

17 Nye 2011, 5-10.

18 Skalník 1978, 615.

19 Nye 2011, 14.

20 Lord Smail 2008, 170-174.

21 See Renfrew 2001, 2004.

A 'constitutive symbol' is a material thing, which not only represents an institution but contributes to generate the institution (Renfrew 2001: 129-131).

c) Landscape

Landscape can be defined as a complex palimpsest of natural and man-made features, which change through time and provide humans with a visual world and a cognitive map for organizing their actions through space and time.²² Natural landscape consists of all geological, geomorphologic, vegetal and animal features that provide people with information about the spatial distribution of resources and symbols of their cultural identity and social or personal history.²³ Man-made landscape includes residential settlements, cemeteries and cult features, as well as in a farming and/ or herding context agricultural terraces and fields, grazing areas, wells, cisterns, dams, draining channels, roads, tracks and paths, which link together all elements of the territory in one man-made system.²⁴ These landscape components overlap each other and form a web of scattered physical and symbolic features, which shape an imaginary landscape supporting together with local traditions the cultural memory of the population.²⁵ The settlement pattern, insofar as it is related to the social organization of the single populations, forms their political landscape,²⁶ and prominent features, such as e.g. large settlements, citadels, isolated monuments, are the power landscape of the population.²⁷

Architecture is a crucial aspect of landscape as buildings, tombs and megaliths provide people with landmarks to generate i) spatial cognitive maps for organizing their activities;²⁸ ii) a visual world for perceiving and knowing their web of social relations;²⁹ iii) a man-made environment for establishing connectivity and interaction among people and stimulating the rise of social networks between human groups;³⁰ iv) prominent features for shaping and maintaining their cultural memory.³¹ In particular, the differences in the type of settlement (hamlets, villages and towns), and size, style and sophistication of residential buildings (huts, houses, palaces), ceremonial centers (open air offering places, built or rock-cut temples and shrines), cemeteries and tombs, as well as their spatial distribution, are terri-

22 Crumley 1994; Knapp & Ashmore 1999; Ingold 2000a; Wilkinson 2003, 4-7.

23 Farina 2001; Turri 2003, 36-102.

24 see Foley 1981a; 1981b; Dunnell & Dancey 1983; Miller & Gleason 1994; De Guio 1995.

25 Assmann 2011.

26 Smith 2003.

27 De Guio 2000, 224-225.

28 Lynch 1960.

29 Ingold 2000b, 178-181; Wells 2012, 19-25.

30 Wynne-Jones 2007; Fisher 2009.

31 Meusbürger, Heffernan & Wunder 2011, 5-6.

torial markers of property and dominion and visual display of social inequality and authority, which are impressed in the mind of people since childhood.

d) Social space

Social space can be described as the positioning of people in the physical space in conformity with the network of social relations, which are determined by the cultural rules of the single human groups.³²

Architecture has a relevant role in producing and reproducing social relations insofar as the arrangement of buildings in a settlement and rooms inside a building shape the structure of social interaction within a human group and may physically indicate the social distance among the members of the group.³³ In the perspective of elite power and authority this distance is often emphasized by isolation of palaces (by means of either large open spaces or enclosures) and the public and/ or private space of the elite inside the buildings.³⁴

Emerging inequality in Tigray and Eritrea

At present, the earliest evidence of a social inequality on the highlands in Tigray and Eritrea dates to the first half of the 1st millennium BCE, and consists of the archaeological and epigraphic remains of the D'MT polity.³⁵

Archaeological investigations in the western lowlands at the border between present Eritrea and Sudan demonstrated that pastoral people occupying these regions in the 3rd – 2nd millennia BCE already formed (tribal?) polities with a simple administrative system and perhaps leaders at the top, inequality being possibly indicated by a larger consumption of sacrificed cattle during funerary ceremonies by single members of the group.³⁶ Rock-pictures in Eritrea suggest that pastoral people occupied the eastern highlands in the 2nd millennium BCE and might have been organized with similar polities, but no site surely ascribable to these populations has been recorded, so far.³⁷

In the late 2nd to mid-1st millennia BCE sedentary people with four distinctive ceramic traditions³⁸ occupied the coastal plains on the Gulf of Zula (Sahel Ceramic Tradition) and the highlands around Asmara in Eritrea (Hamasi Ceramic Tradition), the plateau from Senafe to Adigrat on both sides of the Eritrean-Ethiopian border (Agame Ceramic Tradition), and the highlands from Adwa to Aksum in Tigray (Tigray Ceramic Tradition).³⁹ The scale of social inequality and political organization of these populations is still unknown. The occurrence of a few administrative devices and a rich grave, as well as a hierarchy in the settlement size⁴⁰ might suggest that the people living around Asmara were developing forms of social inequality and hierarchy,⁴¹ although a nonhierarchical society based on kin relations and the use of collective power strategies with temporary leaders may sound theoretically more probable.⁴² Five aligned monoliths at Kaskase in central Eritrea⁴³ might also point on ethnographic comparison to the occurrence of a society with leadership based on the personal achievement of single members of the group in central Eritrea,⁴⁴ but this is a mere speculative hypothesis in the absence of systematic excavations at the site.

The rise of the D'MT polity in the early to mid-1st millennium BCE apparently was a sudden jump to

38 A ceramic tradition is a complex of technological and stylistic features, which persist through time in the manufacture of ceramics by a human group. Different temporal phases in the development and/or local variants in the spatial distribution of each tradition can be distinguished on the basis of innovations in the fabrics and/or style of the vessels (Fattovich, Marks & Ali, 1984, 178; see also MacDonald 2011).

39 Fattovich 2010a; 2012.

In this paper each tradition is indicated with local geographical names in order to make their spatial distribution immediately evident. I am aware that the traditional geographical names are no more used in the present administrative division of northern Ethiopia and Eritrea (see Phillipson 2012, 5-6), but these names are still well understood and used by local people. In particular, Tigray originally corresponded to the region surrounding Adwa and Aksum in present-day central Tigray Regional State (Saleh, Hirt, Smidt & Tetzlaff 2005, 352-354).

40 Tringali 2001; Lisbeqal 2005; Schmidt, Curtis & Teka 2008.

41 Fattovich 2010a.

42 See Kusimba & Kusimba 2010.

43 Manzo 1998a; Wenig 2006a; Curtis & Habtamichael 2008. These monoliths are usually described as South Arabian pillars (e.g., Manzo, 1998a; Curtis & Habtamichael, 2008). A personal inspection of the monoliths by the South Arabist J.-F. Breton and myself in June 2005 demonstrated that they are neither typically South Arabian nor Aksumite in style and might represent a different cultural tradition.

44 Flannery & Marcus 2012, 104-109.

32 Hall 1966.

33 See Fisher 2009.

34 Trigger 2003, 564-582.

35 Fattovich 2010a.

36 Fattovich, Sadr & Vitagliano 1988-1989; Sadr 1991; Fattovich 1995; Manzo 2012.

37 Fattovich 2012.

a higher scale of social inequality on the highlands. Monumental buildings in a South Arabian style and elite tombs were located at Yeha in central Tigray.⁴⁵ The inscriptions record leaders with the title of *mlk* (king?) and *mkrb* (*mukarib*) like the contemporary Sabaean kings in Yemen.⁴⁶ Sophisticated sculptures, suggesting a form of palatine art, were carved at this time,⁴⁷ and bronze, stone and clay stamp seals from assemblages of this polity point to a form of administration.⁴⁸ Bronze/ copper and iron tools and weapons were used by the elite.⁴⁹ This evidence suggests that tribal leaders were able to accumulate wealth and to impose their power over the population in central Eritrea and in eastern and central Tigray, most likely adopting South Arabian symbols of power and Sabaic as an official language as a strategy i) to generate an institutional authority, ii) to facilitate cross-cultural exchanges, and iii) to claim their legitimacy in front of other leaders and elites.⁵⁰ The occurrence of bronze stamp seals, which might have been used as brands for livestock, and large bronze agricultural tools, such as sickles, in elite tombs at Yeha⁵¹ may suggest that cattle property and symbolic control of farming were relevant aspects of the authority of the local leaders and/ or elite. Several iron sword-blades from most likely the last elite grave at Yeha, tomb T6,⁵² may indicate that military elements became part of the elite prerogatives at the decline of the D'MT polity in Tigray.

The archaeological evidence suggests that the development of the D'MT polity was characterized by i) the merging of the Agame and Tigray Ceramic Traditions into one mixed tradition, which may indicate a strong interaction between the communities in the present borderland between Eritrea and Tigray and those in central Tigray, and ii) the split of these ceramic traditions into different traditions when the polity declined.⁵³ This might suggest that D'MT was an attempt by some leaders to create a kingdom like, e.g., the one of the Zulu in South Africa in the early 19th century.⁵⁴ This experiment, however, did not last very long. In the absence of a precise chronology we can assume that the D'MT experience was 100-

150 years long on the basis of the number of kings, who are recorded in the inscriptions.⁵⁵

The cause of D'MT disappearing is still unknown. The name D'MT was no more recorded in later Aksumite inscriptions. On the contrary, the *Kebrä Nagast* – the national epic of the Ethiopian Christian monarchy,⁵⁶ and the medieval lists of kings only record sequences of kings of Aksum beginning in the early 1st millennium CE. This may suggest that the existence of the pre-Aksumite polity was completely removed from the cultural memory of the people. We can only hypothetically assume that the D'MT polity disappeared because of internal conflicts or as a consequence of Meroitic military raids into the Tigrean highlands.⁵⁷

Beginning in the 4th century BCE, a new polity emerged at Aksum in central Tigray. The earliest archaeological evidence of this polity has been recorded on Beta Giyorgis hill to the north-west of Aksum, and has been ascribed to the Proto-Aksumite Phase of the urban development of the ancient capital city.⁵⁸

The origins of the proto-Aksumite polity are uncertain. The use of funerary stelae together with votive offerings in the elite cemeteries points to the cult of the elite ancestors as the focal ideological feature of the institutional authority in the local society, and might suggest some kind of cultural continuity with the traditions associated with the leadership dating to the 3rd-2nd millennia BCE in the Eritrean-Sudanese lowlands.⁵⁹ The stelae also indicate an ideological break with the earlier D'MT polity, where cult temples were the focal ideological feature of the society, although the construction of a monumental building with a pre-Aksumite technique at Beta Giyorgis may suggest that some symbols of the earlier state were maintained. The funerary evidence from Beta Giyorgis also points to some similarities in symbolic behavior of the proto-Aksumite elite to

45 Anfray 1963; 1997; Fattovich 2009; Gerlach 2012.

46 Bernard, Drewes & Schneider 1991, 65-83.

47 de Contenson 1962; Pirenne 1965; Wolf & Nowotnick 2010a.

48 Anfray 1963; Fattovich 1990a.

49 Anfray 1963; Fattovich 2009.

50 See Kusimba & Kusimba 2010, 226.

51 Anfray 1963.

52 Anfray 1963, pl. CL, a-f; Fattovich 2009.

53 Fattovich 2009, in press.

54 See Flannery & Marcus 2012, 348-355.

55 Schneider 1976, 92.

56 See Raineri & Riva 2008.

57 Fattovich 1994, in press.

58 Fattovich & Bard 1994; 2000.

The UNO/BU excavations at Beta Giyorgis have distinguished five phases of urban development of Aksum, which have been dated on the basis of forty-eight radiocarbon dates from charcoal samples, associated imported materials and coins: Proto-Aksumite Phase (ca. 400 – 50 BCE), Early Aksumite Phase (ca. 50 BCE – 150 CE), Classic Aksumite Phase (ca. 150 – 400/450 CE), Middle Aksumite Phase (ca. 400/450 – 550 CE), and Late Aksumite Phase (ca. 550 – 700 ACE); c.f. Fattovich, Bard, Petrassi & Pisano 2000; Fattovich 2008).

59 Fattovich, Manzo & Bard 1998; Bard, Fattovich, Manzo & Perlingieri 2002.

that of the Napatan and Meroitic one.⁶⁰ This may suggest either a widespread use of some symbols in a mortuary context from Nubia to Tigray or elite contacts with Nubia in Proto-Aksumite time.⁶¹

The continuity in ceramics and funerary stelae between the Proto-Aksumite and Early Aksumite phases at Aksum demonstrates that the kingdom of Aksum descended from the proto-Aksumite polity. In the 1st–early 3rd centuries CE, Aksum most likely was the capital of a local petty kingdom, as epigraphic evidence records other similar polities in the highlands.⁶² In the 3rd century CE, the kings of Aksum progressively incorporated the surrounding regions, as far as the coastal plains, into one territorial state. In the 4th century CE, Christianity was introduced into the kingdom. The kingdom was still powerful in the 6th century CE and declined in the 7th/8th centuries CE. The Kingdom of Aksum finally collapsed in the 9th/10th centuries CE.⁶³

Different traditions in the style of the ceramics suggest that up to the 2nd century CE there were two cultural sub-regions corresponding to the central Tigray and the borderland between eastern Tigray and central Eritrea. In the 4th–6th centuries CE both sub-regions were incorporated into one cultural area as the same material culture spread over the whole Aksumite area.⁶⁴

The erection of carved stelae up to 9–10 m high on massive platforms associated with offering basins suggests that funerary cult was a very important component of the elite and royal ideology in Early Aksumite time (ca. 50 BCE – 150 CE). A distinctive model of Aksumite kingship emerged in Classic Aksumite time (ca. 150 – 350 CE), when Aksum became the capital of a large territorial state. At this time the throne surely was a relevant symbol of royal

power, and was replicated in funerary and triumphal contexts. Regalia included two types of crowns, a spear, rarely a sword, a scepter, and a fly-whisk. The crowns were a head-cloth and a tiara. Spearheads, arrowheads and a fragment of archer's loose from royal funerary contexts of late Classic to Middle Aksumite time (ca. 350/400 – 550 CE) at Aksum are very similar in style to Nubian (Meroitic and post-Meroitic) specimens, and may reflect a similar military symbolism in the ideology of kingship in both regions.⁶⁵ The occurrence of a royal cemetery with elaborately hewn stelae and basins carved on the stone slabs supporting them at Aksum indicates that in the mid-1st millennium CE the funerary cult was still a very important component of the ideology of the kings and the elite. In particular, the vine-leaf pattern on the stone slabs with basins at the base of the stelae may point to the use of wine in the funerary cult, and the adoption of a symbolism related to Dionysus-Bacchus by the Aksumite kings and elite, like in the contemporary Mediterranean world.⁶⁶ The carving of the more elaborated stelae in the shape of a palace suggests that the palace was an important symbol of the king and the elite in the late 3rd–early 4th centuries CE.

The disappearance of the funerary stelae in Middle Aksumite time (ca. 350/400 – 500/550 CE) points to an abandonment of funerary cult and a radical change in the royal and elite ideology. The construction of tomb superstructures representing a building may suggest that the palace still was regarded as a symbol of royal and elite power. In Middle Aksumite time the kings were represented on the coins wearing the head-cloth and the tiara, but the cross appeared as a royal symbol, supporting a change in the ideology and the adoption of a Christian model of kingship.⁶⁷ Finally, the representation of the king with crowns very similar to those of the contemporary Byzantine emperors on coins dating to the 6th – 7th centuries CE,⁶⁸ and the construction of a church over royal or elite hypogeal tombs in the style of the martyria may indicate that the Aksumite kings and elite adopted some elements of Byzantine royal symbolism in Late Aksumite time. The throne still was a symbol of the royal ideology, as kings sitting on the throne appear on coins dating to Late Aksumite times.⁶⁹

The decline of the Aksumite kingdom and the shift of the core of the Christian kingdom southwards in the 7th to 10th centuries CE was most likely due to

60 Similarities in mortuary symbolism include types of grave goods, basins for offerings in the mortuary cult, and possibly subsidiary burials associated with the tombs. In particular, an iron arrowhead and three model axes, one in bronze and two in iron, have been found in Proto-Aksumite tombs. Metal models of axes occur frequently in Napatan funerary contexts at Nuri, dating from the mid-6th to late 4th centuries BC. Iron arrowheads are frequent in Napatan, Meroitic and Post-Meroitic royal tombs dating from the late 1st millennium BC to the mid-1st millennium AD (see Dunham 1957; Lenoble 1997). This evidence may suggest an association of the proto-Aksumite elite with a military ideology like the Nubian kings.

61 Fattovich, Manzo & Bard 1998; Bard, Fattovich, Manzo & Perlingieri 2002.

62 Drewes 1962, 65–68; Drewes & Schneider 1976; Ricci 1990, 142–156.

63 Fattovich 2010a; Phillipson 2012.

64 Fattovich 2000.

65 Phillips 1995; Manzo 1998b.

66 Manzo 1999.

67 Munro-Hay 1991, 152.

68 Conti Rossini 1927; Pedroni 1997.

69 Pedroni 1997.

i) the penetration of Beja nomads from the Eastern Desert into the Eritrean highlands with consequent rise of Beja independent polities in this region and isolation of the Aksumite kingdom from a direct access to the sea,⁷⁰ and ii) the establishment of Islamic coastal polities, which replaced Aksum in the long distance trade with the Mediterranean countries, and probably did more weaken the power of the Aksumite kings and elite.⁷¹ Environmental crises perhaps due to a generally reduced rainfall in the late 1st millennium CE, possibly along with human deforestation, may have contributed to the decline of the kingdom, but the factual evidence is still uncertain.⁷²

In Post-Aksumite time the kings were no more resident at Aksum, but the largest church in the town, Enda Maryam Tsion, continued to be the focus of religious and political ideology in the Christian kingdom.

Changing political and power landscape, ca. 1000 BCE – 1000 CE

The political and power landscape of the sedentary populations in Tigray and Eritrea in the 1st millennium BCE and 1st millennium CE are still scarcely known as very few systematic surveys at a large territorial scale have been conducted in these countries, so far. These surveys did mainly focus on the region from Aksum to Yeha in central Tigray,⁷³ the surroundings of Gulo Makeda near Adigrat in eastern Tigray,⁷⁴ the Qohaito plateau in central Eritrea,⁷⁵ and the plateau surrounding Asmara in north-central Eritrea.⁷⁶

The results of these surveys suggest that the development of the D'MT polity and Aksumite kingdom were characterized by changes in the settlement pattern, from a rural pattern with compounds and villages to a urban pattern with towns, which reflected the forms of institutional authority of each polity and generated different political landscapes in the region through time.⁷⁷ The occurrence of different styles of rock-pictures of cattle, despite the difficulties in dating them,⁷⁸ may also suggest that in the 1st millennium BCE and 1st millennium CE the

nomadic and/or semi-nomadic herders in Eritrea were marking their territories in order to create their specific political landscape in contrast with those of the sedentary people.⁷⁹

The political landscape of Tigray and Eritrea in the early to mid-1st millennium BCE was characterized by two distinct types of settlement pattern in the region from central Tigray to central Eritrea, approximately corresponding to the territory under the apparent control of the D'MT leaders,⁸⁰ and in north-central Eritrea, respectively.

Based on the results of the surveys in the surroundings of Aksum as far as Yeha (central Tigray) and the region of Adigrat (eastern Tigray), the settlement pattern of the D'MT polity consisted of scattered hamlets, small and large villages, ranging from ca. 100 sqm to ca. 3 ha in area, a few larger settlements, about 6-7 ha in area, and two very large settlements over 20 ha in area.⁸¹ Most settlements occupied an area between 1 ha and 3 ha, suggesting relatively small communities surrounded by isolated hamlets and compounds. At least two larger settlements, about 6-7 ha in area, were located at Seglamen to the south-west of Aksum (ca. 7 ha) and Enda Gully to the east of Yeha (6 ha) in central Tigray,⁸² but we cannot exclude that other settlements, over 5 ha in size, occurred in other regions of D'MT territory.⁸³ A settlement of possibly 22 ha in area was located at Matara⁸⁴ in central Eritrea.⁸⁵ Finally, a very large settlement, ca. 208 ha in area, was located at Yeha in central Tigray.⁸⁶

This pattern points to a political landscape without a clearly-cut hierarchy of settlements, except for a few large villages, which might have been the

79 see e.g. Lenssen-Erz 2012.

80 Anfray 1990; Fattovich 1990a; 2010a.

81 Michels 2005; Sernicola 2007; D'Andrea et al. 2008.

82 Fattovich et al 2012; Michels 2005, 69.

83 D'Andrea et al 2008.

84 The size of the settlement at Matara has been tentatively calculated on the maximal distance between the stratigraphic tests where evidence dating to the early to mid-1st millennium BCE was recorded. The settlement, however, could be much larger.

85 Anfray & Annequin 1965; Anfray 1970.

86 Fattovich 2010b.

The area has been calculated on the basis of the systematic survey of the site, the Archaeological Expedition of the University of Naples "L'Orientale" conducted at Yeha in November 2009 (Fattovich 2010b). Actually, the survey demonstrated that ceramics ascribable to the D'MT time cover an area of ca. 2 sqkm including the whole modern village of Yeha. In the absence of test and/ or extensive excavations – which are difficult because most of the site is beneath the modern village – we cannot indisputably state if this was one large, compact settlement or a cluster of spaced, smaller units (compounds, elite residences?).

70 Conti Rossini 1928, 265-280; Fattovich 1990b.

71 Conti Rossini 1928, 295-302.

72 See Bard et al. 2000; French, Sulas & Madella 2009.

73 Michels 2005; Sernicola 2007; Sernicola & Sulas 2012.

74 D'Andrea et al. 2008; D'Andrea 2008.

75 Wenig 2006b; Wenig & Curtis 2008.

76 Curtis & Schmidt 2008; Schmidt 2011.

77 Fattovich 1990a; 2003; 2008.

78 Graziosi 1964; Červiček 1976; Calegari 1999; Teka 2008.

residence of an affluent elite,⁸⁷ and at least two possible towns. Yeha, where an impressive temple, a palace (?) and an elite cemetery were located, apparently was the dominant settlement of the polity,⁸⁸ and was a prominent landmark of the D'MT leaders to generate their specific power landscape. Small ceremonial centers were also built along the valleys of the rivers draining to the lowlands and may have been used as monumental landmarks in a well designed power landscape of the polity.⁸⁹

The settlement pattern associated with ceramics of the Hamasien Tradition (Ancient Ona Culture) in the region of Asmara, on the contrary, consisted of clusters of settlements with a larger village surrounded by smaller settlements,⁹⁰ suggesting a social organization with small nucleated communities and maybe distinct leaders, without a form of centralized political control over the whole population.

Beginning in the late 1st millennium BCE, the rise and expansion of the Aksumite kingdom represented a radical transformation of the political and power landscape in the whole region from the Takazze river in Tigray to the Sahel and Rore in Eritrea. This process was characterized by the development of a urban society with evidence of towns, villages, isolated hamlets, churches, cemeteries and isolated tombs,⁹¹ as well as a sharp contrast between towns and countryside.⁹²

The recorded evidence, however, points to two distinct types of 'urban' landscape in central Tigray and in eastern Tigray/central Eritrea, respectively.

In central Tigray the ancient landscape was characterized by a clearly-cut hierarchy in size of the settlements, ranging from the city of Aksum, over 100 ha in size, to small compounds less than 1 ha in area, and included large and small villages, elite residences, residential compounds, farming hamlets and workshops.⁹³ Large settlements, ranging from 7 to over 11 ha in area, were located mainly at the base or sometimes on the top of the hills. Isolated elite palaces were often scattered in the open plain. Villages, hamlets and compounds were located on the top or along the slopes of the hills. Field terraces,

wells, dams, paths, quarries and landmarks were other relevant components of the landscape.⁹⁴

The urban development of Aksum as a capital city was the main factor in forging the landscape at a local scale.⁹⁵ At present, the archeological evidence suggests: 1) A progressive increase in the size of Aksum from Proto-Aksumite to Early Aksumite time, when the town occupied an area of approximately 80 to 100 ha. 2) A progressive shift to the foothill of Beta Giyorgis and expansion of the settlement from north to south and west in Early Aksumite time. 3) A larger expansion in Classic Aksumite to Middle Aksumite time, when the city occupied an area of about 180 ha. 4) A sharp decrease in the area of the city in Late Aksumite time, when the settlement occupied an area of approximately 60 ha.

This process was correlated to changes in the occupation of the countryside around the city,⁹⁶ as the recorded evidence points to: 1) A progressive occupation of the rural area from Proto-Aksumite to Early Aksumite time, with a peak in this phase, when settlements were scattered over the whole metropolitan area of the capital city. 2) A sharp decrease in Classic and Middle Aksumite time, when the city was at the peak of its expansion and rural settlement were clustered at the top and around the hill of Beta Giyorgis. 3) A slow reoccupation in Late Aksumite time, when the area of the town was significantly reduced. Beta Giyorgis was the sub-urban rural area of the town during the whole history of the ancient capital city.

The landscape in eastern Tigray and central Eritrea, on the contrary, was characterized by scattered, affluent and/ or elite residential buildings and churches, as we can infer from the so-called urban centers at Gulo Makeda in Tigray and Deirà,⁹⁷ Qohaito, Tokonda in Eritrea.⁹⁸ Two towns with packed buildings were located at Matara in central Eritrea (ca. 20 ha in area) and Adulis in the Sahel (ca. 21 ha in area).⁹⁹

These differences in the political landscape of the western and eastern regions of the kingdom may suggest that a stratified society at a state scale of complexity emerged in central Tigray and progres-

87 The excavations at Seglamen have brought into light the remains of large buildings associated with very fine ceramics, suggesting these were the residence of affluent farmers or elite (Fattovich et al 2012).

88 Anfray 1963; 1997; Robin & de Maigret 1998; Japp, Gerlach, Hitgen & Schnelle 2011; Gerlach 2012.

89 Anfray 1990; Fattovich 1990a.

90 Curtis & Schmidt 2008.

91 Godet 1977; 1980-82; Fattovich 1999; Michels 2005.

92 Phillipson 1998, 119-123.

93 Fattovich 2003.

94 Michels 2005; Fattovich, Bard, Petrassi & Pisano 2000; Sernicola 2007.

95 Michels 1990; Phillipson 2000; Fattovich 2002; Sernicola 2007.

96 Sernicola 2007.

97 Andrea Manzo personal communication.

98 Wenig 2006b; 2006c; Wenig & Curtis 2008; D'Andrea et al. 2008.

99 Anfray 1974; Fattovich 1999; Peacock & Blue 2007.

sively incorporated a heterarchical society¹⁰⁰ in the eastern region.

Elite residential palaces and cemeteries with monumental stelae, churches and ceremonial thrones were the most impressive architectural landmarks in the Aksumite power landscape. Royal inscriptions and inscribed thrones along the roads to the entry of the capital city were erected at Aksum to emphasize the authority of the kings. Standing monoliths and rock-inscriptions were also used to delimit land.¹⁰¹

Beginning in the late 1st millennium CE, after the decline of the Aksumite kingdom, a rural landscape with hamlets and small villages re-emerged in the region of Aksum and possibly in the surroundings of Gulo Makeda.¹⁰² The settlement at Aksum occupied an area of about 40 ha and was located around the church of Enda Maryam Tsion.¹⁰³

At this time, built and rock-hewn churches were the most evident landmarks of an institutionalized authority in Tigray and Eritrea.¹⁰⁴

Changing architecture of power, ca. 1st millennium BCE – 1st millennium CE

Temples are the main architectural evidence of power in the early to mid-1st millennium BCE, suggesting that the D'MT leaders were trying to sustain their authority by means of an association with the gods.

Three main types of temples can be distinguished, including:

- 1) An impressive temple ('Great Temple') in south Arabian style at Yeha.¹⁰⁵ This was a rectangular building, ca. 14 m high, on a stepped platform with a projecting porch and six pillars at the entry. Four rows of pillars divided the interior into five aisles, and a sanctuary with three chambers was located at the eastern end of the temple.
- 2) Two smaller temples with a similar plan at Melazo/ Gobochele in central Tigray and Meqaber Ga'ewa in south-eastern Tigray.¹⁰⁶ These consisted of a rectangular enclosure surrounding a small building with a sanctuary to the east. The

temple at Meqaber Ga'ewa had a porch at the entry and a tripartite sanctuary.

- 3) Two small quadrangular temples with a narrow projecting entry at Hawlti in central Tigray.¹⁰⁷

A (questionable) evidence of a high status palace has been also recorded and partially excavated at Yeha to the north-west of the Great Temple.¹⁰⁸ This was a monumental building with six pillars forming a porch at the entry on a high stepped platform.

An elite cemetery with shaft-tombs was recorded at Yeha to the south of the Great Temple.¹⁰⁹ The tombs consisted of a quadrangular or rounded shaft, ca. 3 m deep, with two or three burial chambers at the bottom and no (surviving) superstructure.

No residential settlement has been extensively excavated, so far, and thus we have no exhaustive information about lower status residences. The massive foundations of a building with a north-east – south-west orientation at Seglamen, to the south-east of Aksum,¹¹⁰ might suggest that a provincial elite also existed in the D'MT polity, but this hypothesis requires further investigation to be confirmed.

The present evidence may suggest a division of the people into a powerful elite and commoners. The location of the so-called palace and temple on outcrops at the north-eastern side of the settlement at Yeha might indicate that the leaders wanted to establish a well defined social space by isolating themselves from the commoners.

In Aksumite time, residential, funerary and religious architecture provides evidence of possible changes in social inequality as well as in power and wealth of the elite from the late 1st millennium BCE to late 1st millennium CE.

Residential buildings include elite palaces, large and small rural houses, and urban domestic houses.

Elite palaces – as far as we can infer from the very scarce excavated evidence at Aksum and Matara – were multi-storied buildings on a stepped podium with a square or rectangular, indented plan, and consisted of a central building, surrounded by open courtyards and enclosed with a range of rooms.¹¹¹ Either the isolation of the central building in the palaces and the concentration of these palaces in the western sector of Aksum and Matara point to a hierarchical social space, which was characterized by the segregation of the upper elite from the rest of the population.

100 For a definition of heterarchy in archaeological analysis, see Crumley 1995.

101 Littmann, Krencker & von Lüke 1913, II/1, 107-121; Anfray 1972a; Munro-Hay 1991, 107; Phillipson 1997, 93-120; Fattovich, Bard, Petrassi & Pisano 2000.

102 Sernicola 2007; D'Andrea et al. 2008.

103 Michels 1990; Sernicola 2007; Fattovich 2008.

104 Lepage & Mercier 2005; Phillipson 2009b.

105 Robin & de Maigret 1998; Japp, Gerlach, Hitgen & Schnelle 2011; de Maigret 2011.

106 Leclant 1959; Wolf & Nowotnik 2010a, 2010b, 2011.

107 de Contenson 1963.

108 Anfray 1972b; 1997; Gerlach 2012.

109 Anfray 1963.

110 Fattovich 2010b.

111 Anfray 1972a; 1974; 2012; Munro-Hay 1991, 107; Phillipson 1997, 93-120.

In the territory of Aksum the earliest evidence of elite residential architecture is a Proto-Aksumite monumental building at Ona Nagast on the top of Beta Giyorgis hill.¹¹² Beginning in the early 1st millennium CE the elite palaces at Aksum apparently increased in size from Early Aksumite to Middle Aksumite time, and decreased in Late Aksumite time, suggesting a remarkable increase in power and wealth of the kings and elite in the 3rd-4th centuries CE, with a peak in the 5th to mid-6th centuries CE, and a decline in the late 6th-7th centuries CE.¹¹³

A large rural house dating to Middle Aksumite time was found at Qalqal Asba on the top of Beta Giyorgis hill. This was a “U” shaped structure built on a small podium, with nine rooms and a circular silo in a room.¹¹⁴ Another large rural house similar in plan to that at Qalqal Asba, most likely dating to Late Aksumite time, was recorded at Uchatei Golo to the west of Aksum.¹¹⁵ Three smaller rural houses, dating to Middle Aksumite time, were excavated at Guadguad Agazien and Tukul Emeni (TE I and II) on the top of Beta Giyorgis hill. The house at Guadguad Agazien was a small rectangular building with five rooms forming a compact structure surrounded by a courtyard. The house at Tukul Emeni I was L-shaped in plan with 3 rooms. The house at Tukul Emeni II was rectangular in plan with three aligned rooms and a circular silo in the northern room.¹¹⁶

Urban domestic houses have been found at Kidane Mehret (Aksum) and Matara.¹¹⁷ They included both upper and lower status houses forming quarters of close-packed buildings.¹¹⁸ Upper status houses were similar in plan to the central building of the elite palaces. Lower status houses were small arrangements of rooms separated by narrow lanes.

Funerary monuments have been investigated mainly at Aksum where they include man-made stone platforms, stelae, pit graves, shaft tombs, staircase tombs, and constructed tombs.¹¹⁹ Stone platforms, always associated with stelae, were erected as a superstructure to protect the elite tombs and as a place for the votive offerings to the deceased, as we can infer from the pottery basins which were often placed on the top of the platforms.¹²⁰ The stelae vary from simple unshaped monoliths in a natural shape

to dressed, symmetrical and sculptured monoliths, and range in height from about 2-3 m to over 30 m. Most likely, these monoliths were erected to commemorate lineages rather than individuals.¹²¹ To date, the oldest stelae, dating to Proto-Aksumite time, have been recorded at Ona Enda Aboi Zewgè on the top of Bieta Giyorgis hill.¹²²

The chronological sequence of the funerary monuments and tombs at Aksum provides evidence of a trend in increasing size and complexity, which is consistent with that of the residential architecture.

In early Proto-Aksumite time small platforms, about 1-1.1 m high, were constructed to cover simple pit-graves, ca. 2 m deep, and were associated with rough stelae, ca. 2-3 m high. Three types of monoliths were identified suggesting a division of the population into three main segments. At the end of this period stone platforms were constructed in a modular way covering elaborated pit-graves, ca. 5 m deep, which were associated with 4-5 m high stelae. In Early Aksumite time shaft tombs with stone platforms at least 1.5 m – 2 m thick and carefully carved stelae with a rounded top, up to 9-10 m high, replaced the earlier pit-graves. In Classic Aksumite time a royal cemetery with elaborated, rock-cut multi-chamber, shaft tombs associated with massive stone platforms and well carved stelae was located at the eastern foothill of Beta Giyorgis. A lower status elite cemetery with simple shaft tombs often associated with roughly pointed monoliths was located to the west of the ancient city. At the end of this phase monumental tombs were built in the royal cemetery. They were associated with massive stone platforms, over 5 m high, and monumental hewn stelae representing multistoried buildings. A very rich staircase tomb with a superstructure representing a house also dates to the end of this phase. In Middle Aksumite time, at least a hypogeal tomb with a superstructure representing a house was built in the royal cemetery, being, however, smaller in size than the tombs of late Classic Aksumite time. Finally, two large hypogeal tombs, traditionally ascribed to kings Kaleb and Gabra Maskal, as well as a few shaft tombs with a cross profile to the west of them may date to Late Aksumite time.¹²³

No pre-Christian Aksumite temple was discovered at Aksum or elsewhere, so far. In Christian time churches were built over the whole territory of the kingdom, most likely under the patronage of the kings and nobles. The churches were apsidal basilicas

112 Fattovich & Bard 1997; 1998.

113 Fattovich 2008.

114 Fattovich & Bard 2002.

115 de Contenson 1961.

116 Fattovich, Beyene, D’Andrea, DiBlasi & Manzo 2000; Fattovich & Bard 2002.

117 Anfray 1970; 1974; Phillipson 2000, 367-379.

118 Phillipson 2012, 119-121.

119 Fattovich et al. 2000, 50-55; Phillipson 2012, 139-157.

120 Bard, Fattovich, Manzo & Perlingieri 1997.

121 Fattovich 1987; Phillipson 1994.

122 Bard, Fattovich, Manzo & Perlingieri 1997.

123 Phillipson 2012, 139-157.

with three to five aisles on a stepped podium with an indented plan and sometime with a cruciform plan.¹²⁴

The remains of three Aksumite churches have been recorded in the region of Aksum: the “Cathedral” of Maryam Tsion at Aksum and two churches on the southeastern slopes of Bieta Giyorgis. The Cathedral of Maryam Tsion was a massive building with a podium, 66 m long, over 41 m wide and 3.4 m high, and was originally divided into five aisles. According to the Ethiopian traditions the church was built in the mid-4th century CE, but a later dating to the mid-6th century CE cannot be excluded.¹²⁵ An apsidal basilica with three aisles, a transept and a cruciform church were built at Bieta Giyorgis in Late Aksumite time.¹²⁶ The basilica was about 8 m wide, at least 10 m long, with a podium about 1.6 m high. The difference in size between the Cathedral at Aksum and the churches at Bieta Giyorgis clearly demonstrates the absolute preeminence of the Cathedral in Middle to Late Aksumite times. Two more churches have been also excavated at the entry of the ancient town at Mahraf along the traditional route to Hamasien, Agame and the Mareb/ Gash Valley to the north¹²⁷ and Gwangwa Edaga along the route to Tembien and Agame to the east.¹²⁸

On the whole, the residential, funerary and religious architectural evidence in the region of Aksum points to: 1) A progressively increasing social hierarchy from the late 1st millennium BCE to mid-1st millennium CE and a decreasing hierarchy in the second half of the 1st millennium CE. 2) The emerging of a new form of religious elite and institutional authority beginning in the 4th-5th centuries CE as a consequence of the introduction and consolidation of Christianity in the kingdom.¹²⁹

At present, no elite buildings dating to the late 1st millennium CE have been found in Tigray and Eritrea, supporting the political and economic decline of these regions since the 8th-9th centuries CE. Two monumental hypogeal tombs at Degum in south-eastern Tigray, anyway, suggest that an elite existed to the south of Aksum in the late 1st millennium CE and used funerary architecture for exhibiting their power and authority.¹³⁰

The occurrence of a large rural house at Seglamen to the south-west of Aksum suggests the existence of

affluent farmers in this region. This was a rectangular building, ca. 12 m x 8 m in size, divided into separate rooms forming a main residential area with two long rectangular rooms to the north.¹³¹ Another rectangular house with two rooms was found at the same site,¹³² and a circular house was excavated at Ona Enda Aboi Zewge on the top of Beta Giyorgis hill.¹³³

A cemetery with small rectangular graves inside and outside a rectangular church, about 8.5 x 7 m in size, was also recorded at Beta Giyorgis,¹³⁴ and might be ascribed to a small community of farmers living on the top of the hill in the late 1st – early 2nd millennia CE.

Built and rock-hewn churches are the main evidence of an institutional authority in the region from central Tigray to central Eritrea after the decline of the Aksumite kingdom in the 7th century CE.¹³⁵ The churches, despite their different techniques of construction, maintained the basic plan of the earlier apsidal basilicas, and were often located in isolated and inaccessible places, emphasizing the diffusion of a monastic style of life.

Conclusions

In synthesis, the fragmentary archaeological record, I tried to very sketchily outline in the previous pages, may suggest:

- 1) In the early to mid-1st millennium BCE, the D’MT society was organized on a heterarchical base, with peer communities of farmers scattered over the territory of the polity, under the control of leaders (paramount chiefs?) most likely resident at Yeha, where a large settlement was located. At this time, temples – often associated with ‘royal’ inscriptions – were used to manifest an institutionalized authority and to generate an incipient visual world of the political power.
- 2) Beginning in the late 1st millennium BCE, a clearly cut hierarchical society, at a state scale of complexity, emerged in the region of Aksum and progressively incorporated the surrounding highlands as far as the Red Sea coast and western lowlands. In the late 1st millennium BCE only two hierarchical levels can be tentatively identified: elite and commoners. Beginning in the early 1st millennium CE a social differentiation emerged within the elite and culminated in the

124 Phillipson 2009b, 37-50.

125 Phillipson 1997, 171-178; 1998, 114-116.

126 Ricci & Fattovich 1988.

127 Fattovich et al. 2009.

128 Hagos 2008.

129 Fattovich 2008.

130 Lepage 1971; 1972; Phillipson 2009b, 89-91.

131 Ricci & Fattovich 1987.

132 Ricci & Fattovich 1987.

133 Fattovich & Bard 2002.

134 Ricci & Fattovich 1988.

135 Phillipson 2009b.

3rd-5th centuries CE, when larger palaces and “royal” tombs were constructed. In the 5th-7th centuries CE at least three hierarchical strata existed: kings and upper elite, lower elite and/or rich farmers, and commoners, including farmers and craftsmen. Royal palaces, elite residences, funerary monuments and tombs, and later churches, as well as rural and urban houses with a different size were used to manifest this hierarchy and generated a well defined visual world of a strong political power, stimulating the awareness of authority in the population.

- 3) In the late 1st millennium CE, after the decline of the Aksumite kingdom and the southward shift of the center of political power, the churches became the main evidence of an institutionalized authority and generated a visual world, which gave prominence to the religious hierarchy and authority.

I am aware this interpretation is largely speculative, because of the scarcity of factual evidence, but I hope it may stimulate younger generations of archaeologists to formulating working hypotheses to be tested in the field with future investigations.

Literature

- Anfray, F., 1963, Une campagne de fouilles à Yeha (Février-Mars 1960), *Annales d’Ethiopie* 5, 171-192
- Anfray, F., 1970, Matara, *Travaux de la R.C.P.* 230, Documents pour servir à l’Histoire des Civilisations Ethiopiennes 1, 53-60
- Anfray, F., 1972a, L’archéologie d’Axoum en 1972, *Paideuma* 18, 60-78
- Anfray, F., 1972b, Fouilles de Yeha, *Annales d’Ethiopie* 9, 45-56
- Anfray, F., 1974, Deux villes axoumites: Adoulis et Matara, in: *Atti del IV Congresso Internazionale di Studi Etiopici*, Roma, 747-765
- Anfray, F. 1990. *Les anciens éthiopiens*, Paris
- Anfray, F., 1997, Yeha. Les ruines de Grat Be’al Gebri – *Recherches archéologiques*, *Rassegna di Studi Etiopici* 39, 5-23
- Anfray, F., 2012, Le site de Dongour, Aksum, Ethiopie. *Recherches archéologiques*, Hambourg
- Anfray, F., Annequin, G., 1965, Matara. Deuxième, troisième et quatrième campagnes de fouilles, *Annales d’Ethiopie* 6, 49-86
- Assmann, J., 2011, Communicative and Cultural Memory, in: Meusburger, P., Heffernan, M., Wunder, E. (Hrsg.), *Cultural Memories*, New York, 15-27
- Bard, K. A., Coltorti, M., Di Blasi, M. C., Dramis, F. and Fattovich, R., 2000, The Environmental History of Tigray (Northern Ethiopia) during the Holocene: a Preliminary Outline, *The African Archaeological Review* 17 (2), 65-86
- Bard, K. A., Fattovich, R., Manzo, A. and Perlingieri, C., 1997, Archaeological Investigations at Bieta Giyorgis (Aksum), Ethiopia: 1993, 1994, 1995 Field Seasons, *Journal of Field Archaeology* 24, 387-403
- Bard K. A., Fattovich, R., Manzo, A. and Perlingieri, C., 2002, Aksum Origins, Kassala and Upper Nubia: new evidence from Bieta Giyorgis (Aksum), *Archéologie du Nil Moyen* 9, 31-39
- Bernard, E., Drewes, A.-J. and Schneider, R., 1991, *Recueil des Inscriptions de l’Ethiopie des Périodes Pré-Axoumite et Axoumite*, Paris
- Calegari, G., 1999, *L’arte rupestre dell’Eritrea. Repertorio ragionato ed esegesi iconografica*, Milano
- Červíček, P., 1976, Rock Engravings of the Hamasèn Region, Eritrea, *Paideuma* 22, 237-256
- Conti Rossini, C., 1909, Les listes des rois d’Aksum, *Journal Asiatique* 14, 263-320
- Conti Rossini, C., 1927, Monete aksumite, *Africa Italiana* 1, 179-212
- Conti Rossini, C., 1928, *Storia d’Etiopia*, Bergamo
- Crumley, C. L., 1994, Historical Ecology: A Multidimensional Ecological Orientation, in: Crumley, C. L. (Hrsg.), *Historical Ecology*, Santa Fè, 1-16
- Crumley, C. L., 1995, Hierarchy and the Analysis of Complex Societies, *Archaeological Papers of the American Anthropological Association* 6, 1-5
- Curtis, M. C., 2008, New Perspectives for Examining Change and Complexity in the northern Horn of Africa during the First Millennium BCE, in: Schmidt, P. R., Curtis, M. C. and Teka, Z. (Hrsg.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 329-348
- Curtis, M. C., Habtamichael, D., 2008, Matara, Kesekese, and the “Classic Period” Archaeology of the Akele Guzay Highlands: A Brief Overview, in: Schmidt, P. R., Curtis, M. C. and Teka, Z. (Hrsg.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 311-327
- Curtis, M. C., Schmidt, P. R., 2008, Landscape, People and Places on the Ancient Asmara Plateau, in: Schmidt, P. R., Curtis, M. C. and Teka, Z. (Hrsg.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 65-108
- D’Andrea, A. C., 2008, Pre-Aksumite and Aksumite settlement of Gulo Makeda, eastern Tigray, Ethiopia, in: *Cultural Diversity of Africa’s Past*, Society of Africanist Archaeologists (SAfA), 19th Biennial Meeting, Abstracts, Frankfurt, 48
- D’Andrea, A. C., Manzo, A., Harower, M. J. and Hawkins, A. L., 2008, The Pre-Aksumite and Aksumite Settlement of NE Tigray, Ethiopia, *Journal of Field Archaeology* 33 (2), 151-176
- De Contenson, H., 1961, Les fouilles à Ouchatei Golo, près d’Axoum en 1958, *Annales d’Ethiopie* 4, 3-16

- De Contenson, H., 1962, Les monuments d'art sudarabe découverts sur le site de Haoulti (Ethiopie) en 1959, *Syria* 39, 64-87
- De Contenson, H., 1963, Les fouilles à Haoulti en 1959: rapport préliminaire, *Annales d'Ethiopie* 5, 41-52
- De Guio, A., 1995, Surface and Subsurface: Deep Ploughing into Complexity, in: Hensel, W., Tabaczynsky, S., Urbanczyk, P. (Hrsg.), *Theory and Practice of Archaeological Research II*, Warszawa, 329-414
- De Guio, A., 2000, *Archeologia del Potere*, in: Francovich, R. Manacorda, D., *Dizionario di Archeologia*, Bari, 222-228
- De Maigret, A., 2011, Some new considerations on the Great Temple of Yeha, in: Wenig, S. (Hrsg.), *In Kaiserlichem Auftrag. Die Deutsche Aksum-Expedition 1906 unter Enno Littmann, 2: Altertumskundliche Untersuchungen der DAE in Tigray/ Äthiopien*, Wiesbaden, 183-201
- De Waal, F., 2005, *Our Inner Ape*, New York
- Drewes, A. J., 1962, *Inscriptions de l'Ethiopie antique*, Leiden
- Drewes, A.-J., Schneider, R., 1976, Origine et développement de l'écriture éthiopienne jusqu'à l'époque des inscriptions royales d'Axoum, *Annales d'Ethiopie* 10, 95-107
- Dunnell, R. C., Dancy, W. S., 1983, The siteless survey: a regional scale data collection strategy, in: Schiffer, M. B. (Hrsg.), *Advances in archaeological method and theory* 6, New York, 267-287
- Dunham, D., 1957, *Royal Cemeteries of Kush IV. Royal Tombs at Meroe and Barkal*, Boston
- Earle, T., 2004, Culture Matters: Why Symbolic Objects Change, in: DeMarrais, E., Gosden, C. and Renfrew, C. (Hrsg.), *Rethinking Materiality. The Engagement of mind with the material world*, Cambridge, 153-165
- Farina, A., 2001, *Ecologia del Paesaggio*, Torino
- Fattovich, R., 1987, Some Remarks on the Origins of the Aksumite Stelae, *Annales d'Ethiopie* 14, 43-69
- Fattovich, R., 1990a, Remarks on the Pre-Aksumite Period in Northern Ethiopia, *Journal of Ethiopian Studies* 23, 1-33
- Fattovich, R., 1990b, The peopling of the northern Ethiopian-Sudanese borderland between 7000 and 1000 BP: a preliminary model, *Nubica*, 1/2, 3-45
- Fattovich, R., 1994, Meroe e Aksum: alcune riflessioni, in: Berger, C., Clerc, G. and Grimal, N. (Hrsg.), *Homages à Jean Leclant*, Cairo 2, 117-134
- Fattovich, R., 1995, The Gash Group. A Complex Society in the Lowlands to the East of the Nile, *Cahiers de Recherche de l'Institut de Papyrologie et d'Égyptologie de Lille* 17 (1), 191-200
- Fattovich, R., 1999, The Development of Urbanism in the Northern Horn of Africa in Ancient and Medieval Times, in: Sinclair, P. (ed.), *The Development of Urbanism in Africa from a Global Perspective*, Uppsala, <electronic publication <http://www.arkeologi.uu.se>> (30.9.2013)
- Fattovich, R., 2000, Aksum and the Habashat: State and Ethnicity in Ancient Northern Ethiopia and Eritrea, Boston University, African Studies Center, working paper 238, Boston
- Fattovich, R., 2002, The urban development of Aksum (Tigray): an archaeological and historical outline, in: Yiman, B. et al. (Hrsg.), *Ethiopian Studies at the End of the Second Millennium I*, Addis Ababa, 13-25
- Fattovich, R., 2003, The Ancient Landscape of Aksum (Northern Ethiopia), ca. 400 BC – AD 123-128700: Some Preliminary Remarks, in: Liverani, M. (Hrsg.), *Arid Lands in Roman Times*, Firenze, 123-128
- Fattovich, R., 2008, *Kings and Farmers: The Urban Development of Aksum, Ethiopia: ca. 500 BC-AD 1500*, Boston University, African Studies Center, PSAE Research Series 4, Boston
- Fattovich, R., 2009, Reconsidering Yeha, c. 800-400 BC, *The African Archaeological Review* 26, 275-290
- Fattovich, R., 2010a, 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., 2010b, UNO Archaeological Expedition at Aksum (Tigray): 2009 Field Season Final Report, *Newsletter di Archeologia CISA* 1, 85-112; electronic publication: <http://www.unior.it/index2.php?content_id=8114&content_id_start=1> (15.05.2013)
- Fattovich, R., 2012, Eritrea in the Second and First Millennium BC: An Archaeological Overview, in: Lusini, G. (ed.), *Annali dell'Istituto Universitario Orientale di Napoli* 70, 17-27
- Fattovich, R., 2012, The Northern Horn of Africa in the First Millennium BCE: Local Traditions and External Connections, *Rassegna di Studi Etiopici* 4 (n.s.), 1-60
- Fattovich, R., Bard, K. A., 1994, The Origins of Aksum: A View from Ona Enda Aboi Zaguè (Tigray), in: Marcus, H.G. (ed.), *New Trends in Ethiopian Studies. Papers of the 12th International Conference of Ethiopian Studies I*, Lawrenceville, 16-25
- Fattovich, R., Bard, K. A., 1997, Scavi archeologici nella zona di Aksum. G. Ona Enda Aboi Zeugè e Ona Nagast (Bieta Giyorgis), *Rassegna di Studi Etiopici* 39, 49-70
- Fattovich, R., Bard, K. A., 1998, Scavi archeologici nella zona di Aksum. H. Ona Enda Aboi Zeugè e Ona Nagast (Bieta Giyorgis), *Rassegna di Studi Etiopici* 41, 57-76
- Fattovich, R., Bard, K. A., 2001, The Proto-Aksumite Period: An Outline, *Annales d'Ethiopie* 17, 3-24
- Fattovich, R., Bard, K. A., 2002, Scavi archeologici nella zona di Aksum. J. Bieta Giyorgis, *Rassegna di Studi Etiopici* 1 n.s., 7-19

- Fattovich, R., Bard, K. A., Petrassi, L. and Pisano, V., 2000, *The Aksum Archaeological Area: A Preliminary Assessment*, Napoli
- Fattovich, R., Berhe, H., Phillipson, L. and Sernicola, L., 2012, *Archaeological Expedition at Aksum (Ethiopia) of the Università degli Studi di Napoli, "L'Orientale"* (2010 Field Season: Seglamen), *Newsletter di Archeologia CISA* 3, 111-228; electronic publication: <http://www.unior.it/index2.php?content_id=8114&content_id_start=1> (30.9.2013)
- Fattovich, R., Beyene, Y., D'Andrea, A. C., Di Blasi, M. C. and Manzo, A., 2000, *Scavi archeologici nella zona di Aksum. I. Bieta Giyorgis*, *Rassegna di Studi Etiopici* 43, 43-61
- Fattovich, R., Beyene, Y., Manzo, A., Perlingieri, C., Phillipson, L., Senicola, L., Sulas, F., 2009, *Archaeological Investigations at Aksum of The University Of Naples "L'Orientale"* (2005-2007), *Newsletter di Archeologia CISA* 0, 91-100; electronic publication: <http://www.unior.it/index2.php?content_id=8114&content_id_start=1> (05.07.2013)
- Fattovich, R., Manzo, A. and Bard, K. A., 1998, *Meroe and Aksum: New Elements of Comparison*, *Archéologie du Nil Moyen* 8, 43-53
- Fattovich, R., Marks, A. E., and Ali, A. M., 1984, *The archaeology of the Eastern Sahel: preliminary results*, in: *The African Archaeological Review* 2, 173-188
- Fattovich, R., Sadr, K. and Vitagliano, S., 1988-1989, *Society and Territory in the Gash Delta (Kassala, Eastern Sudan), 3000 B.C. - A.D. 300/400*, *Origini* 14, 329-357
- Fisher, K. D., 2009, *Placing social interaction: An integrative approach to analyzing past built environments*, *Journal of Anthropological Archaeology* 28, 439-457
- Flannery, K. and Marcus, J., 2012, *The Creation of Inequality. How Our Prehistoric Ancestors Set the Stage for Monarchy, Slavery, and Empires*, Cambridge (Mass.)
- Finneran, N., 2007, *The Archaeology of Ethiopia*, London
- Foley, R., 1981a, *A model of regional archeological structure*, *Proceedings of the Prehistoric Society* 47, 1-17
- Foley, R., 1981b, *Off site archaeology: an alternative approach for the short-sited*, in: Hodder, I., Isaac, G., Hammond, N. (eds.), *Pattern in the past: Essays in honour of David Clarke*, Cambridge, 57-183
- French, C., Sulas, F. and Madella, M., 2009, *New geoarchaeological investigations of the valley systems in the Aksum area of northern Ethiopia*, *Catena* 78, 218-233
- Gerlach, I., 2012, *Yeha: An Ethio-Sabean Site in the Highlands of Tigray (Ethiopia)*, in: Sedov, A. (ed.), *New Research in Archaeology and Epigraphy of South Arabia and Its Neighbors*, Moskow, 215-240
- Godet, E., 1977, *Repertoire de sites pre-Axoumites et Axoumites du Tigre (Ethiopia)*, *Abbay* 8, 19-58
- Godet, E., 1980-82, *Repertoire de sites pre-Axoumites et Axoumites d'Ethiopie du Nord, Iie Partie: Erythree*, *Abbay* 11, 73-113
- Graziosi, P., 1964, *New Discoveries of Rock Paintings in Ethiopia*, *Antiquity* 138, 91-99, 187-190
- Hagos T., 2008, *Archaeological Rascue Excavations at Aksum, 2005-2007*, Addis Ababa: *The Ethiopian Cultural Heritage Project*
- Hall, E. T., 1966, *The Hidden Dimension*, New York
- Henze, P. B., 2000, *Layers of Time. A History of Ethiopia*, New York
- Ingold, T., 2000a, *The temporality of landscape*, in: Ingold, T. (Hrsg.), *The Perception of the Environment. Essays in livelihood, dwelling and skill*, New York, 189-208
- Ingold, T., 2000b, *Building, dwelling, living: how animals and people make themselves at home in the world*, in: Ingold, T. (Hrsg.), *The Perception of the Environment. Essays in livelihood, dwelling and skill*, New York, 172-188
- Japp, S., Gerlach, I., Hitgen, H. and Schnelle, M., 2011, *Yeha and Hawelti – Cultural Contacts Between Saba and D mt. New Research of the German Archaeological Institute in Ethiopia*, in *Proceedings of the Seminar for Arabian Studies* 41, 1-19
- Johnson, A. W. and Earle, T., 2000, *The Evolution of Human Societies*, Stanford (2nd edition)
- Lenoble P., 1997, *Enterrer les flèches, enterrer l'Empire. Carquois et flèches des tombes impériales à el-Hobagi*, *Cahiers de Recherche de l'Institut de Papyrologie et d'Égyptologie de Lille* 17 (2), 137-152
- Libsekal, Y., 2005, *Rescue Excavations at Mai-Temenay*, in: Raunig, W. and Wenig, S. (eds.), *Afrikas Horn. Akten der Ersten Internationalen Littmann-Konferenz*, Wiesbaden, 427
- Knapp, A. B. and Ashmore, W., 1999, *Archaeological Landscapes: Constructed, Conceptualized, Ideational*, in: Ashmore, W. and Knapp, A. B. (eds.), *Archaeologies of Landscape*, Oxford, 1-30
- Kusimba, C. M. and Kusimba, S. B., 2010, *Leadership in Middle-Range African Societies*, in: Vaughn, K. J., Eerkens, J. W. and Kantner, J. (eds.), *The Evolution of Leadership. Transitions in Decision Making from Small-Scale to Middle-Range Societies*, Santa Fe, 223-247
- Leclant, J., 1959, *Haoulti-Melazo (1955-1956)*, *Annales d'Ethiopie* 3, 43-57
- Lenssen-Erz, T., 2012, *Pastoralist appropriation of landscape by means of rock art in Ennedi Highlands, Chad*, *Afrique Archéologie & Arts* 8, 27-43
- Lepage, C., 1971, *Les monuments rupestres de Degum et les églises de la vallée*, *Travaux de la R.C.P. 230 – Documents pour servir à l'Histoire des Civilisations Ethiopiennes* 2, 61-72

- Lepage, C., 1972, Les monuments chrétiens rupestres de Degum en Éthiopie (rapport préliminaire), Cahiers archéologiques, 22, 167-200.
- Lepage, C. and Mercier, J., 2005, Art Éthiopien. Les églises historiques du Tigray, Paris
- Littmann, E., Krencker, S. and von Lüpke, Th., 1913, Deutsche-Aksum Expedition II/1-2, Berlin
- Libsekal Y., 2005. Rescue Excavations at Mai-Temenay, in W. Raunig and S. Wenig (eds.), Afrikas Horn. Akten der Ersten Internationalen Littmann-Konferenz (Meroitica 22), Harrassowitz Verlag, Wiesbaden, p. 427.
- Lynch, K., 1960, The Image of the City, Cambridge (Mass.)
- Lord Smail, D., 2008, On Deep History and the Brain, Berkeley
- MacDonald, K. S., 2011, Betwixt Tichitt and the IND: the pottery of the Faïta Facies, Tichitt Tradition, Azania: Archaeological research in Africa 46 (1), 49-69
- Manzo, A., 1998a, Note su alcuni siti archeologici eritrei, Rassegna di Studi Etiopici 47, 57-69
- Manzo, A., 1998b, The dynamics of external contacts of northern Ethiopia and Eritrea from Proto-historical to Aksumite times, late 2nd millennium BC - late 1st millennium AD, in: Ethiopia and its neighbours, Frankfurt, 35-52
- Manzo, A., 1999, Vines, wine, argiromata cai krisomata. Remarks on Some Sculptured Aksumite Decorations and their Ideological Meaning, Annali dell'Istituto Universitario Orientale di Napoli 5-9, 347-367
- Manzo, A., 2009, *Capra nubiana* in Berbere Sauce? For a Constructionist Approach to Pre-Aksumite Art, The African Archaeological Review 26, 291-303
- Manzo, A. (ed.), 2012, Italian Archaeological Expedition to the Eastern Sudan of the University of Naples "L'Orientale" - Report of the 2011 Field Season, Naples
- Manzo, A., forthcoming, Architecture, Power, Communication. Case Studies in Ancient Nubia, in: Martínez, A., d'Alòs, M. and Lane, P. (eds.), Architectures of Power in the Horn of Africa and the Upper Nile Basin. From Ancient Times to the Present (in press)
- Meusburger, P., Heffernan, M. and Wunder, E., 2011, Cultural Memories: An Introduction, in: Meusburger, P., Heffernan, M. and Wunder, E. (eds.), Cultural Memories, New York, 3-14
- Michels, J. W., 1990, Review Article: Excavations at Aksum, The African Archaeological Review 8, 177-188
- Michels, J. W., 2005, Changing Settlement Patterns in the Aksum-Yeha Region of Ethiopia: 700 BC - AD 850, Oxford
- Miller, N. F., Gleason, K. L. (eds.), 1994, The Archaeology of Garden and Field, Philadelphia
- Munro-Hay, S. C., 1991, Aksum. An African Civilisation of Late Antiquity, Edinburgh
- Nye, J. S. (Jr.), 2011, The Future of Power, New York
- Pankhurst, R., 1998, The Ethiopians. A History, Oxford
- Panskeep, J., Biven, L., 2012, The Archaeology of Mind. Neuroevolutionary Origins of Human Emotions, New York
- Peacock, D., Blue, L. (eds.), 2007, The ancient Red Sea Port of Adulis, Eritrea, Oxford
- Pedroni, L., 1997, Una collezione privata di monete aksumite, Bollettino della Società Italiana di Numismatica 28-29, 7-147
- Phillips, J., 1995, Egyptian and Nubian Material from Ethiopia and Eritrea, The Sudan Archaeological Research Society Newsletter 9, 2-10
- Phillipson, D. W., 1994, The Significance and Symbolism of Aksumite Stelae, Cambridge Archaeological Journal 4 (2), 189-210
- Phillipson, D. W., 1997, The Monuments of Aksum, London
- Phillipson, D. W., 1998, Ancient Ethiopia. Aksum, Its Antecedents and Successors, London
- Phillipson, D. W., 2000, Aksumite Urbanism, in: Anderson, D. M., Rathbone, R. (eds.), Africa's urban past, Oxford, 52-65
- 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, The African Archaeological Review 26, 257-274
- Phillipson, D. W., 2009b, Ancient Churches of Ethiopia. Fourth-Fourteen Centuries, New Haven
- Phillipson, D. W., 2012, Foundations of an African Civilization: Aksum and the northern Horn, 1000 BC - AD 1300, London
- Pirenne, J., 1965, Arte saaba d'Étiopia, Enciclopedia dell'Arte Antica VI, Roma, 1044-1048
- Raineri, O., Riva, R., 2008, Kebra Nagast: La Gloria dei Re. Salomone e la Regina di Saba, Roma
- Renfrew, C., 2001, Symbol before Concept: Material Engagement and the Early Development of Society, in: Hodder, I. (ed.), Archaeological Theory Today, Cambridge, 122-140
- Renfrew, C., 2004, Towards a Theory of Material Engagement, in: DeMarrais, Gosden, C. and Renfrew, C. (eds.), Rethinking Materiality. The Engagement of mind with the material world, Cambridge, 23-31
- Renfrew, C., Bahn, P., 2004, Archaeology. Theories, Methods and Practice, 4th edition, London
- Ricci, L., 1990, Appunti archeologici, Rassegna di Studi Etiopici 32, 129-165
- Ricci, L., Fattovich, R., 1987, Scavi archeologici nella zona di Aksum. A. Seglamièn, Rassegna di Studi Etiopici 30, 117-169
- Ricci, L., Fattovich, R., 1988, Scavi archeologici nella zona di Aksum. B. Bieta Giyorgis, Rassegna di Studi Etiopici 31, 123-197

- Robin, Ch. J., de Maigret, A., 1998, Le grand temple de Yéha (Tigray, Éthiopie), après la première campagne de fouilles de la Mission Française (1998), *Compte Rendus de l'Académie des Inscriptions et Belles-Lettres*, Juillet-Octobre 1998, 737-798
- Saleh, A., Hirt, N., Smidt, W. G. C. and Tetzlaff, R. (eds.), 2005, *Friedensräume in Eritrea und Tigray* unter Druck, Berlin
- Sadr, K., 1991, *The Development of Nomadism in Ancient Northeastern Africa*, Philadelphia
- Schmidt, P. R., 2011, New Light on Ancient Eritrea: Local Variations during the 1st Millennium B.C.E. in: Wenig, S. (ed.), *Die Deutsche Aksum-Expedition 1906 unter Enno Littmann Band 2: Altertumskundliche Untersuchungen der DAE in Tigray/ Äthiopien*, Wiesbaden, 249-270
- Schmidt, P. R., Curtis, M. and Teka, Z., 2008, The Ancient Ona Communities of the First Millennium BCE: Urban Precursors and Independent Development on the Asmara Plateau, in: Schmidt, P. R., Curtis, M. and Teka, Z. (eds.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 109-161
- Schneider, R., 1976, Documents épigraphiques de l'Éthiopie – V, *Annales d'Éthiopie* 10, 81-93
- Sernicola, L., 2007, *Il modello d'insediamento sull'altopiano Tigrino (Etiopia settentrionale / Eritrea centrale) in epoca Pre-Aksumita e Aksumita (ca. 700 a.C. – 800 d.C.)*. Un contributo da Aksum, Ph. D. Dissertation, Napoli
- Sernicola, L., Sulas, F., 2012, Continuità e cambiamento nel paesaggio rurale di Aksum: dati archeologici, etnografici e paleoambientali, in: Bausi, A., Brita, A., Manzo, A., Baffioni, C. and Francesca, E. (eds.), *Aethiopica and Orientalia. Studi in onore di Yaqob Beyene II*, Napoli, 549-573
- Skalník, P., 1978, The Early State as a Process, in: Claessen, H. J. M., Skalník, P. (eds.), *The Early State*, The Hague, 597-618
- Smith, A. T., 2003, *The Political Landscape. Constellations of Authority in Early Complex Societies*, Berkeley
- Teka, Z., 2008, Distribution and Significance of Ancient Rock Art sites in Eritrea, in: Schmidt, P. R., Curtis, M. and Teka, Z. (eds.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 49-61
- Trigger, B.G. 2003. *Understanding Early Civilizations*. Cambridge
- Tringali, G., 2001, "Sigilli" in cotto ed in pietra da onà dell'Eritrea ed Aksum, *Archaeologia Africana* 7, 77-78
- Turri, E., 2003, *Il paesaggio degli uomini. La natura, la cultura, la storia*, Bologna
- Vaughn, K. J., Eerkens, J. W. and Kantner, J. (eds.), *The Evolution of Leadership. Transitions in Decision Making from Small-Scale to Middle-Range Societies*, Santa Fe
- Wells, P. S., 2012, *How Ancient Europeans Saw the World. Vision, Patterns, and the Shaping of the Mind in Prehistoric Times*, Princeton
- Wenig, S., 2006a, Der archäologische Platz von Kaskase, in: Wenig, S., Smidt, W., Vogt, B. and Volker-Saad, K. (eds.), *Die Deutsche Aksum-Expedition 1906 unter Enno Littmann Band 1: Die Akteure und die wissenschaftlichen Unternehmungen der DAE in Eritrea*, Linden Soft, 329-332
- Wenig, S., 2006b, Das Hochplateau von Qohaito: Impressionen, in: Wenig, S., Smidt, W., Vogt, B. and Volker-Saad, K. (eds.), *Die Deutsche Aksum-Expedition 1906 unter Enno Littmann Band 1: Die Akteure und die wissenschaftlichen Unternehmungen der DAE in Eritrea*, Linden Soft, 353-362
- Wenig, S., 2006c, Der archäologische Platz von Tokonda, in: Wenig, S., Smidt, W., Vogt, B. and Volker-Saad, K. (eds.), *Die Deutsche Aksum-Expedition 1906 unter Enno Littmann Band 1: Die Akteure und die wissenschaftlichen Unternehmungen der DAE in Eritrea*, Linden Soft, 343-352
- Wenig, S. and Curtis, M. C., 2008, Qohaito: An Ancient Highland Urban Center, in: Schmidt, P. R., Curtis, M. C. and Teka, Z. (eds.), *The Archaeology of Ancient Eritrea*, Trenton (NJ), 287-300
- Wilkinson, T. J., 2003, *Archaeological Landscapes of the Near East*, Tucson
- Wilson, E. O., 2012, *The Social Conquest of Earth*, New York
- Wolf, P., Nowotnick, U., 2010a, The Almaqah temple of Meqaber Ga'ewa near Wuqro (Tigray, Ethiopia), *Proceedings of the Seminar for Arabian Studies* 40, 367-380
- Wolf, P., Nowotnick, U., 2010b, Das Heiligtum des Almaqah von Meqaber Ga'ewa in Tigray Äthiopien, *Zeitschrift für Orient-Archäologie* 3, 164-213
- Wolf, P., Nowotnick, U., 2011, Ein neuer äthio-sabäischer Fundplatz in Tigray/Äthiopien – Der Almaqah-Tempel von Meqaber Ga'ewa, in: Wenig, S. (ed.), *In Kaiserlichem Auftrag. Die Deutsche Aksum-Expedition 1906 unter Enno Littmann 2: Altertumskundliche Untersuchungen der DAE in Tigray/ Äthiopien*, Wiesbaden, 203-219
- Wynne-Jones, S., 2007, Multiple landscapes and layered meanings: scale, interaction and processes in the development of a Swahili town, in: Kohring, S., Wynne-Jones, S. (eds.), *Socialising Complexity. Structure, Interaction and Power in Archaeological Discourse*, Oxford, 142-160

EIN FORSCHERLEBEN ZWISCHEN DEN WELTEN

ZUM 80. GEBURTSTAG VON STEFFEN WENIG

HERAUSGEGEBEN VON

ANGELIKA LOHWASSER & PAWEL WOLF



MITTEILUNGEN DER SUDANARCHÄOLOGISCHEN
GESELLSCHAFT ZU BERLIN E.V.

SONDERHEFT • 2014

Impressum:

ISSN 0945-9502

Der antike Sudan. Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin e.V.
Sonderheft • 2014

HERAUSGEGEBEN VON: Angelika Lohwasser & Pawel Wolf

ERSCHEINUNGSORT: Berlin

INTERNETPRÄSENZ: www.sag-online.de

LAYOUT & SATZ: www.frank-joachim.de

DRUCK: www.dbusiness.de

TITELBILD: Säulenbasis mit Löwe, Große Anlage von Musawwarat es Sufra, Raum 108
(Foto: Claudia Näser)

FRONTISPIZ: Der Jubilar im Garten seines Hauses in Berlin-Karow
(Foto: Jane Humphris, Bildbearbeitung: Frank Joachim)

© Das Copyright liegt bei den jeweiligen Autorinnen und Autoren

DANK

Dass diese Festschrift zustande gekommen ist, verdanken wir vielen Mitwirkenden. An erster Stelle stehen die Autorinnen und Autoren, die mit ihren vielseitigen und fundierten Artikeln das eigentliche Geschenkpaket geschnürt haben. Julia Petereit hat die redaktionelle Arbeit übernommen – Korrekturen gemacht, Literatureinträge kontrolliert und vieles mehr. Sollte doch noch ein Fehler zu finden sein, ist das der Fülle der Beiträge und der gegen Ende deutlich knappen Zeit geschuldet! Frank Joachim hat das Layout hergestellt und unermüdlich auf Bitten um Veränderungen reagiert. Die Sudanarchäologische Gesellschaft zu Berlin e.V. stellt ihre Mitgliederzeitschrift „Der antike Sudan“ für die Aufnahme dieses Sonderheftes zur Verfügung und ehrt damit den Gründungsvater von Verein und Zeitschrift. Darüber hinaus hat sie den Druck zwischenfinanziert und damit die Herstellung erleichtert. Der Lehrbereich Ägyptologie und Archäologie Nordostafrikas der Humboldt-Universität zu Berlin übernimmt in bewährter Weise den Vertrieb, um die Erkenntnisse auch an die wissenschaftliche Gemeinschaft weiterzugeben. Instituts-, Grabungs- und Familienangehörigen haben mit Rat und Tat, vor allem aber Geduld und moralischer Unterstützung zum Gelingen beigetragen!

Ihnen allen und weiteren ungenannten Helfern gebührt unser aufrichtiger Dank!

INHALTSVERZEICHNIS

GRUSSWORT	7
TABULA GRATULATORIA	9
BIBLIOGRAPHIE	11
FRANCIS BREYER Kipkipi, ein soldatensprachlicher Somatismus oder: Wohin floh der letzte kuschitische Pharao vor den Assyrern?	21
Ueli BRUNNER Die sabäische Dammanlage Mabnā al-Ḥašrağ in Ma'rib, Jemen	25
KLAUS DORNISCH Ketzerisches zum „Thron von Hawelti“	37
DAVID N. EDWARDS Early Meroitic Pottery and the creation of an early imperial culture?	51
EUGENIO FANTUSATI, ELEONORA KORMYSHEVA & SVETLANA MALYKH Abu Erteila – An Archaeological Site in the Butana Region	65
RODOLFO FATTOVICH The Architecture of Power in Tigray (Northern Ethiopia) and Eritrea in the 1st millennium BCE – 1st millennium CE	95
MARTIN FITZENREITER Taharqo und Osiris Fragmente einer Kapelle im Ägyptischen Museum der Universität Bonn	111
BALDUR GABRIEL Kulturhistorische Landschaftselemente am 5. Nilkatarakt/Nordsudan nach Google-Earth-Bildanalysen mit Anmerkungen nach Groundcheck (GC)	129
WŁODZIMIERZ GODLEWSKI Dongola Capital of early Makuria: Citadel – Rock Tombs – First Churches	153
KRZYSZTOF GRZYMSKI The Decorated Faience Puteals from Meroe	165
JANA HELMBOLD-DOYÉ Rundstäbe, Leisten und Lisenen	169
JANE HUMPHRIS & THILO REHREN Iron production and the Kingdom of Kush: an introduction to UCL Qatar's research in Sudan	177
FRANK JOACHIM Der Nordfriedhof (IF) von Musawwarat es Sufra	191
TIM KARBERG Rinder in Musawwarat es Sufra	215

ADAM ŁAJTAR Epitaph of Staurosaña († 1057), granddaughter (?) of a king Zakharias, found in Dongola	221
ANGELIKA LOHWASSER Neujahr in Nubien	229
ANDREA MANZO New Eastern Desert Ware Finds from Sudan and Ethiopia	237
JACKE PHILLIPS The Foreign Contacts of Ancient Aksum: New finds and some random thoughts	253
WALTER RAUNIG Frühes Eisen in Nordostafrika	269
ALESSANDRO ROCCATI B2400: A New Page in Meroitic Architecture	293
THOMAS SCHEIBNER Entstehung, Ursprung und Nutzung – Die Hafire in Musawwarat es-Sufra und in der Keraba als Wirtschaftsbauten	299
GUNNAR SPERVESLAGE Ausgegraben: Der Wörterbuchentwurf von Samuel Birch Ein Werkstattbericht	323
PETRA WESCHENFELDER Who gets the lion's share? Thoughts on Meroitic water management and its role in royal legitimization	335
PAWEL WOLF Essay über den meroitischen Eklektizismus in Musawwarat es Sufra, oder: woher stammt der meroitische Einraumtempel?	351
JANICE YELLIN The Kushite Nature of Early Meroitic Mortuary Religion: A Pragmatic Approach to Osirian Beliefs	395
MICHAEL H. ZACH Die frühesten Fotografien meroitischer Altertümer	405
FARBTAFFELN	415