War on the southern frontier of the emerging state of ancient Egypt

A warfare perspective on the history of the A-Group people
in Lower Nubia during the 4th millennium BCE

Henriette Hafsaas-Tsakos

Dissertation for the degree of philosophiae doctor (PhD)
at the University of Bergen

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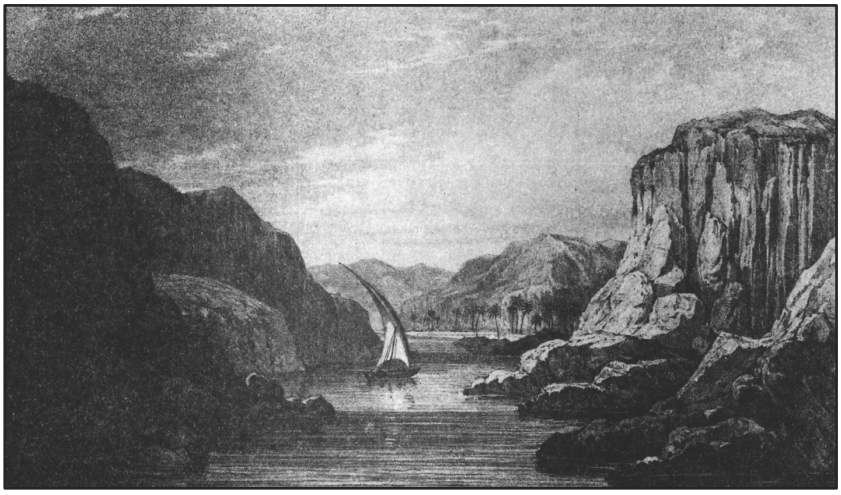
Henriette Hafsaas-Tsakos

About Bab el-Kalabsha

"On the afternoon of the seventeenth we came to a place where the mountains close upon the river in a very abrupt manner, leaving no level land on the banks; the hills at the same time presented some very grand though rude scenery. This, by some travellers, is termed the boundary between Egypt and Nubia, though I should be inclined to agree with the French, that the first cataract is a more natural limit to the two countries; as immediately above Assuan, you perceive not only a country quite different from that below, but even natives of a character and colour in no way resembling the Egyptians, differently clothed, and speaking another language."

Charles Leonard Irby and James Mangles (1823: 5)

Travels in Egypt and Nubia, Syria and Asia Minor;
During the years 1817 & 1818



Frontispiece: Bab el-Kalabsha by J.D. Harding after an original by H.W. Beechey. From Irby and Mangles (1823: plate between p. 4 and 5).

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Chapter 1: Introduction

For the traveller coming from the Mediterranean Sea, the Nile is navigable for *c*. 1000 kilometres before the first obstacle; the granite boulders and rapids called the First Cataract. This became the southern border of the ancient state of Egypt at the end of the 4th millennium BCE, and it remained a cultural boundary between Egypt and the south for the next five millennia. Since antiquity, the land immediately beyond the First Cataract has been called Nubia after its Nubian population. During medieval times, Nubia stretched beyond the confluence of the Blue and the White Niles, *c*. 1700 kilometres to the south of the First Cataract. Since then, the Nubian heartlands have retracted, and Nubia is currently situated between the First and the Third Cataracts of the Nile in the borderlands of the modern states of Egypt and Sudan. The northern part of the heartlands of Nubia between the First and the Second Cataracts were flooded during the 1960s when the Aswan High Dam was built, and the remaining parts of Nubia are currently threatened by new dams.

This thesis studies the indigenous people in Lower Nubia during the 4th millennium BCE through a warfare perspective. I have arrived at the topic via two stages of sharpening the focus of my research. First, from considering culture contact in form of both trading and warfare in the Nile Valley during the Bronze Age to focussing on war on the southern frontier of the ancient state of Egypt during the Bronze Age. Second, as I started to explore the archaeological record for finds indicating violent conflict and war in a diachronic perspective, I realized that the evidence for war between people living south and north of the First Cataract was overwhelming already during the 4th millennium BCE, and at the same time the nature of the intergroup relationships during this time was in need of a detailed disentanglement. Therefore, I decided that the later wars of the Bronze Age have to be treated elsewhere (see Hafsaas, 2006 and Hafsaas-Tsakos, 2010 for earlier attempts). Nevertheless, I will retain a holistic perspective on war in a greater part of the Nile Valley during the Bronze Age in the introductory chapters in order to have a richer material from which to make generalized conclusions in the final chapter.

Today, both Egypt and Sudan are states with rapid population growth and competition for vital resources, which are linked to violent conflicts, civil wars and war (see definitions on pp. 5-6 below).

After the end of the Bronze Age, Egypt was repeatedly conquered and ruled by invading Libyans, Kushites, Assyrians, Persians as well as Alexander the Great, but dynastic rule following the same practices and beliefs as established during the Bronze Age continued for another millennium. The end of ancient Egypt is conventionally set with the death of Cleopatra – the last ruler of the Ptolemaic dynasty – and the incorporation of Egypt into the Roman Empire in 30 BCE. For the next 1800 years, Egypt was exploited for grain, gold and precious stone by a succession of empires – Byzantium, Persia, the Caliphate and the Ottoman Empire. From the end of the 18th century, Egypt became a strategic position for controlling trade for European countries – not only in the Middle East but to India and the Far East as well. Napoleon Bonaparte invaded Egypt in 1798, but was expelled by British and Ottoman forces three years later. Then Egypt came under control of Mohammed Ali – an Albanian commander of the Ottoman army and later self-appointed Khedive of Egypt and Sudan. The Suez Canal was built in 1869 with assistance from France, but Great Britain took control of the canal and the rest of Egypt in 1882. In 1914, Egypt became a British protectorate with a descendant of Mohammed Ali as king from 1922. During the Second World War, Egypt was invaded by Germany and Italy in 1942, but the British and allied forces were victorious in the Battles of El Alamain and drove the axis powers out in an offensive that became a turning point of the war. A decade later, the so-called Free officers of the Egyptian army overthrew the monarchy in a revolution that brought Gamal Abdel Nasser to power as president in 1956. With Egyptians gaining independence from foreign rule, three brief wars were fought: first for the nationalization of the Suez Canal in 1956, then the Six-Day war in 1967 when the territories of the Gaza Strip and Sinai were lost to Israel, and finally the Yom Kippur war that reclaimed Sinai from Israel in 1973. For millennia, the Egyptian people were ruled by foreigners and suppressed by authoritarian regimes, but only in January 2011 was there a people's revolution that forced President Hosni Mubarak to resign after three decades in power. In June 2012, a new president was elected, the

Muslim Brotherhood's Mohammed Morsi, but he was deposed by the military a year later after millions of protesters took to the streets. An interim government ruled until the former army chief Abdul Fattah al-Sisi won the presidential elections in May 2014 (data from BBC's Egypt profile timeline: webpage). The conflicting interests of the Egyptians have caused several violent clashes, but a full scale civil war has been avoided so far. Nevertheless, the underlying causes for the revolution have not been solved such as a large young population without employment combined with shortages of agricultural land and water.

Sudan actually got its modern borders due to warfare: First through the conquests by the Ottoman rulers of Egypt between the 1820s and the 1870s (Ryle and Willis, 2011: 3) and then the Anglo-Egyptian conquest in 1898 (Collins, 2008: 31), which also came to include the independent sultanate of Darfur in 1916 (Holt and Daly, 2000: 110). The borders of the Anglo-Egyptian condominium were maintained when Sudan became independent in 1956 (Ryle and Willis, 2011: 4), but the northern and southern parts of the new state fought the longest civil war in Africa. The civil war was terminated with a Comprehensive Peace Agreement in 2005, which culminated with a referendum where the southern part of the country voted for and received independence in 2011. Nevertheless, violent conflict and war over basic and valuable resources continue. The new state of South Sudan and Sudan are now fighting over territory and oil fields in the border regions, and South Sudan is already deeply split in a civil war that is dividing the country along ethnic boundaries with great human sufferings. Furthermore, inside the present state of Sudan, violence has not ceased in either Darfur in the west or in the Red Sea Mountains in the east, while fighting has also emerged in the Blue Nile state in the southeast. The Nubians in the northern part of the country have until now been in relatively peaceful relations with the central government as they resorted to silent resistance rather than armed conflict when the Aswan High Dam was built during the 1960s and flooded a large part of their traditional land (Jok, 2007: 92). However, the building of the Merowe Dam in 2009 and the planned dams at Kajbar and Shereik have caused social unrest, popular discontent and violent demonstrations demanding a regime change (*Sudan Tribune*, 20

December 2011). In sum, the ongoing violence illustrates that Sudan has a central government at war with systematically marginalized peripheries.

In contrast to the attention that war has received both in the research on the modern history and in the study of the contemporary societies, instances of violent conflict and war are underrepresented in the archaeological literature on ancient societies in Sudan. The conspicuous absence of warfare in the research of archaeologists working in Sudan seems to be a result of both the data collecting methods focussing on either large-scale salvage excavations or long-term excavations of single sites as well as the present conditions of war stimulating research paradigms that emphasize peaceful coexistences between ethnic groups in the past. However, as this study will demonstrate, war was neither as omnipresent in the past as seen in the history of colonial and post-colonial Sudan nor was it as absent as suggested by the silencing of the topic among archaeologists working in Sudan.

A warfare perspective on the 4th millennium BCE in Lower Nubia

Theoretically informed studies of long-term patterns of war in pre-state or early state societies are still rare (Allen and Arkush, 2006: 2), and this is particularly the case for Africa. A warfare angle thus offers a new perspective on the beginning of the Bronze Age in the Nile Valley, and it becomes particularly interesting when seen from the position of the Middle Nile – the geographical term for northern Sudan and southern Egypt preferred nowadays by the archaeologists working there (see p. 12 below). Egyptian military campaigns into the Middle Nile region have of course been mentioned in earlier works, but mainly because they were recorded in the ancient sources (e.g. Welsby, 2004a). However, war has never been the topic of specialized archaeological studies of the 4th millennium BCE in Lower Nubia, and there have never been any serious attempts of studying the indigenous responses to Egyptian military expansions into the Middle Nile region during the Bronze Age.

Long stretches of the Middle Nile are among the archaeologically most thoroughly investigated regions in the world due to the western world's fascination with the past in both Egypt and Sudan, but also because of the large-scale salvage excavations in connections with the dam constructions on the Nile. Innumerable site

reports, articles and monographs have been written about Lower Nubia during the 4th millennium BCE, which is the place and period under consideration in this thesis. However, very few of these deal with or even mention warfare. By employing this perspective, a new understanding of the past of this place and era is expected. Interpreting the culture history of this region through a perspective focussing on contexts of war between ethnic groups with different levels of social complexity will offer important insights into the dynamic relationships between peoples from societies with contrasting forms of political organizations, which imply diverse relationships of power, domination and resistance. I will emphasize that a long-lasting ancient state was under formation in Egypt from the beginning of the 4th millennium BCE, while the societies living along the Middle Nile had stateless political organizations of different forms. This thesis will ultimately investigate if this made the wars in the region to be of a special kind that is found on the frontiers between states and stateless societies (see the sections *A theory for explaining wars on the southern frontier of ancient Egypt* in Chapter 6 and *Wars on the southern frontier of the Egyptian state during the Bronze Age* in Chapter 12).

Furthermore, the case-studies of war in Lower Nubia during the 4th millennium BCE that are presented in this thesis contribute to the discussions of the complexities of the circumstances that led to war and to the structural difficulties in attaining peace. The study of past societies can thus be used to predict situations where it is likely that conflicts turn into war as well as to forecast how present societies, like Sudan and South Sudan, will struggle first with achieving peace and then with aftermaths of war.

Definitions

It can be useful already here to briefly define some central concepts used in the thesis. There are numerous definitions of war and warfare. For the purpose of this study, I will use the definition of war that has been formulated by the American anthropologist Keith F. Otterbein (2004: 9): **War** is *armed combat between political communities*. The anthropologist Napoleon Chagnon (1990: 80) has made some interesting points concerning violent conflicts as the precursors of war, since conflicting interests between peoples and groups are inevitable and may often lead to

competition and fighting, although resolutions to conflicts are not bound to be violent. Violent conflicts may thus escalate into war if the political communities to whom the individuals or groups belong get involved. As stated in the previous section, the communities engaged in the wars discussed in this thesis were often equal to ethnic groups, but they had different levels of political organization ranging from egalitarian groups to the ancient state of Egypt (see the sections *Ethnicity* and *Political organization* in Chapter 4). I will thus emphasis that the wars between these ethnic groups with different levels of political organization were of a special nature (see the section *Wars on the state frontier* in Chapter 6).

The defining characteristic of war in Otterbein's definition is *"armed combat"*, which he explains as fighting with weapons**.** **Weapons** are defined as *tools whose primary function is to cause physical harm during warfare and/or hunting* (Gilbert, 2004: 3). I will use the term **warrior** to designate *a person who uses weaponry for warfare* (Harding, 2006: 505). In armed combat, warriors use weapons for *the intentional infliction of physical harm on another human being*, and this is a definition of **violence** (Riches, 1986: 4). Violence is thus any form of intentional violent act against a fellow human (e.g. child or wife beating), while war is characterized by its group organization. Furthermore, Otterbein's definition of war emphasizes political communities, which he considers as groups that are politically independent with their own chiefs (Otterbein, 2004: 9). War is thus distinguished from a **feud**, which can be defined as violence and counter-violence between individuals or families of different local groups within a political community (Helbling, 2006: 115). Another contrast between wars and feuds is that warfare usually aims at defeating the enemy by killing or expelling him (Helbling, 2006: 115), while killings during a feud usually will lead to a settlement involving the payment of some form of blood-wealth in order to attain a balance (cf. Evans-Pritchard, 1940: 161). In between feuds and wars are civil wars**.** A **civil war** is an armed combat between organized groups within a state with the aim of taking power at the centre or in a region, or to change government policies (Fearon, 2007). This is not only a modern phenomenon as there were periods of civil war in the ancient state of Egypt (Shaw, 2000a: 11).

The two essential elements in the employed definition of war – political communities/ethnic groups and weapons – will be discussed more thoroughly in Chapters 4 and 7.

An inter-regional approach

Mainstream processual and postprocessual archaeologists have employed autonomous perspectives focussing on local or regional units, but these approaches have lately been criticized (Kristiansen and Larsson, 2005: 5). Archaeologists working in the Egyptian and the Sudanese parts of the Nile Valley, Egyptologists and Nubiologists, usually undertake their research within the present national borders. Also Nubiologists have thus recently been criticized for studying the Nile Valley in northern Sudan in isolation (Török, 2009: xvi; Phillipson, 2011: 304). There is today a tendency to ignore the importance of culture contact in the Nile Valley and for Egyptology and Nubiology to be separate fields of research since the respective scholars seem to be confined by the borders of the present states as well as of their concessions for surveying and excavations. Furthermore, the leading foreign archaeologists working in northern Sudan often excavate a single site for decades without reaching the stage of final publication. Characteristically, Charles Bonnet has been excavating Kerma, the most important Bronze Age site in Sudan, for more than three decades, but he has focussed almost solely on the locality of Kerma without considering the site in a wider geographical or cultural context than the Kerma basin.

As we saw from the definition above, war is an aspect of inter-group relations (cf. Bossen, 2006: 90). By using a warfare perspective, I cannot select a single entity or site for study, but have to study all the political communities of a broader region and especially the relationship between them (cf. Otterbein, 1994: xvii). This means that although the people of the Middle Nile are the focus of this thesis, their Egyptian neighbours were their main opponents, and warfare in the Nile Valley during the Bronze Age was often due to conflicts between the peoples of these two regions.

Research questions

Through a warfare perspective on the 4th millennium BCE in Lower Nubia, periods of war between ethnic groups (see definition on p. 96 below) in Lower Nubia and Upper Egypt will be identified and explored. The aim is to uncover different causes for war, changing patterns of warfare and social effects of violence. In order to do this, I have formulated six research questions that take into account that wars in Lower Nubia were mainly the result of violent expansions from more politically centralized societies in Egypt:

1) Which factors could cause war between communities with different levels of political centralization in the Nile Valley during the Bronze Age?

2) How can we identify the ethnic groups opposing each other in war in the archaeological record?

3) Which weapons were used in warfare?

4) Which political community was the initial aggressor in the wars?

5) How did wars come to an end?

6) How were the societies affected or changed by war?

The first question requires a substantial amount of background information in order to be answered, so the landscape and climate, people and timeframe as well as the specific features of the Bronze Age will be thoroughly presented in Chapters 2 to 4. Furthermore, we need to know relevant theories for explaining causes of war. These theories are first presented in form of how earlier research has approached war in Chapter 5, while several different theoretical approaches to causes of war will be discussed in Chapter 6. The second question is discussed theoretically in the section on ethnicity in Chapter 4, while the empirical case-studies are studied in Chapters 8 to 10. For the third question to be answered, we need to examine the finds of weapons and injuries afflicted by these weapons, and these results are presented in Chapter 7 and the two catalogues in the appendix. The fourth to the sixth questions need historically particularistic knowledge, so the answers to these questions can only be discussed in the reconstruction of the events in Chapter 11, which narrate the history of war in Lower Nubia during the 4th millennium BCE. The general conclusions to these research questions and the thesis more generally will be presented in Chapter 12.

Methodology

The research questions will be approached by studying the material remains of the people living along the Nile in Lower Nubia during the 4th millennium BCE as well as taking advantage of the relevant iconographic and written testimonies compiled by the ancient Egyptians, who left behind one of the richest collections of historical sources in the entire Bronze Age world. Both the archaeological and the historical records will be explored as fully as possible in this thesis. I will thus draw on the anthropologist Clifford Geertz' (1973) methodology of 'thick description' by not only examine theories and evidence of war as presented in Chapters 6 and 7, but situate the study of war in the Nile Valley within environmental and social contexts through a detailed description of the landscape and climate in Chapter 2, the political organizations and ethnic compositions in Chapters 4 and 8, and the historical settings in Chapter 11. However, neither the historical nor the archaeological records are absolute and exhaustive. The totality of the human-made remains is never transmitted through time, and this leaves us with a record containing gaps and silences, which need to be filled in by careful interpretations of the evidence that we do have at hand. The written sources are moreover ambiguous as they were usually composed by the victors or as propaganda, so this necessitates a cautious use of the information they transmit since alternative voices have rarely survived.

The sources that can throw light on warfare in Lower Nubia during the 4th millennium BCE thus fall into three categories: First, direct archaeological sources for war are weapons and remains of fortifications, but other archaeological data – such as settlement patterns – will also throw light on the circumstances of war. Second, historical sources encompass both writing and iconography. The written sources are solely Egyptian, and only a few iconographic scenes can be attributed to people of the Middle Nile. There are few contemporary written records, since writing was invented towards the end of the 4th millennium BCE (e.g. Stauder, 2010). The pictorial sources relied upon in this study are carved artefacts, rock drawings, wall paintings and monumental reliefs. Third, osteological sources are uncovered by archaeologists, but they give a separate line of evidence if physical anthropologists examine the bones and

find traces of injuries caused by violence (see the definition on p. 6 above). Although thousands of graves with human remains have been excavated in the Nile Valley, unfortunately only a small percentage of the skeletons have been studied or stored for future examinations. The traces of war in form of systematic patterns of violent injuries are thus particularly inconsistent. The evidence from these three categories of sources will be combined with the socio-historical contexts by using inferential techniques in order to arrive at the reconstruction of a historical narrative of war with analytical replies to the research questions in Chapters 11 and 12.

Structure of the thesis

This thesis consists of two parts. Part I encompasses the background information. Chapter 2 describes the landscape of the Nile Valley and its climate during the Bronze Age, and Chapter 3 presents the ethnic groups inhabiting the region during the Bronze Age and the internal chronologies for the groups of the 4th millennium BCE. In Chapter 4, I discuss the characteristics of the Bronze Age – both generally and specifically for the Nile Valley. Chapters 5 and 6 introduce the theoretical perspectives by focussing on earlier research and different approaches for explaining war. After the theoretical foundations have been established, Chapter 7 presents data related to war and warfare in form of a description of both different categories of weapons and skeletal trauma caused by violence.

Having established the background information for investigating war in Lower Nubia during the 4th millennium BCE, war in the culture history of this region is considered in Part II. I start in Chapter 8 by examining the ethnic identity of the inhabitants in Lower Nubia during the 4th millennium BCE in order to demonstrate that two ethnic groups inhabited the northern part of Lower Nubia during the second half of the 4th millennium BCE. Chapters 9 and 10 include detailed descriptions of the sites of these two groups, which were both indigenous and immigrating people. In Chapter 11, I reconstruct the history of the people in Lower Nubia during the 4th millennium BCE in a warfare perspective. In Chapter 12, I summarize and conclude the insights gained by using a warfare perspective in the interpretation of the archaeological remains from the 4th millennium BCE in Lower Nubia.

Part I: Backgrounds to war in Lower Nubia during the 4th millennium BCE

Chapter 2: Landscape, climate and warfare

Landscape and climate influence all aspects of human life, including warfare (see the concluding section of this chapter). A description of the natural environment is thus essential for understanding possible reasons for competition and conflict over both basic and valuable resources, although these are not the sole reasons for war (see *Chapter 6*). With the significance that I give to how the natural environment shape human destiny, this chapter makes a detailed presentation of the landscape of the Nile Valley and its climate during the Bronze Age.

The river and the desert

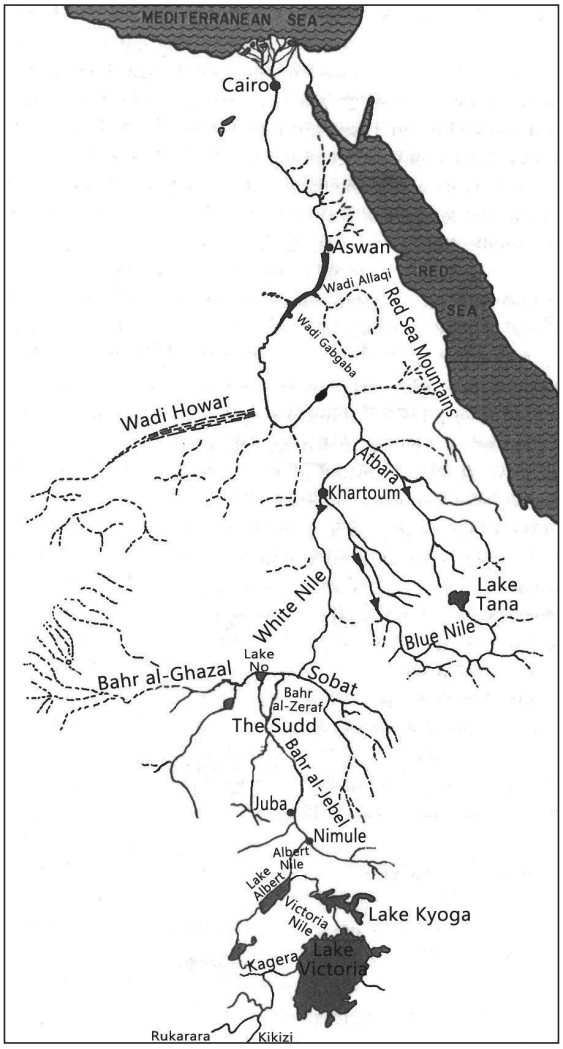
The landscape of Egypt and northern Sudan is characterized by two main features: the river Nile and the surrounding deserts. The following description of the natural landscape will take the Nile as a departing point as the river is moving through the landscape flowing from south to north. The hydrology of the river upstream of the confluence of the White and the Blue Niles in Central Sudan determines the flood regime of the river as it penetrates the desert. Outside the river valley is the Sahara, whose geology shapes the flow of the Nile.

The riverine parts of southern Egypt and northern Sudan are often called by the ethno-geographical term *Nubia*, after the Nubian population inhabiting this region since at least the third century BCE (Kirwan, 1974: 43, 46). In recent years, it has become more common to use the ethnically neutral term *Middle Nile*, which is a toponym referring to the landscape formation. I will follow this trend, especially since the period under consideration predates the time when the region was occupied by Nubians from whom the name Nubia is derived. The origin of the term Middle Nile has been attributed to the French archaeologist Jean Vercoutter, who named the French Archaeological Unit in Sudan *Archéologie du Nil Moyen* (Geus, 1986: 7). The Middle Nile is the stretch of the Nile from the confluence of the Blue and White Niles in the south to the First Cataract in the north. In terms of today's topography, the two Niles meet where Khartoum, the capital of modern Sudan, has developed and expanded for almost two centuries, while the First Cataract is situated upstream of Aswan – the

southernmost city in modern Egypt and the traditional border of ancient Egypt in the south.

The sources of the Middle Nile[1]

The Nile is the longest river in the world (**Map 1**). The sources of the White Nile are the many small rivers that flow into Lake Victoria at the heart of the African continent. The outlet of Lake Victoria is on the northern shore. Like the lake, the river flowing out of it was named in honour of Queen Victoria (1819-1901), who reigned during the era when British explorers discovered the sources of the Nile (Moorehead, 1971: 42). The Victoria Nile flows northwards to the edge of the African Rift Valley. From there the river drops over Murchison Falls (Collins, 2002: 36-37). Below is Lake Albert, named after the husband of Queen Victoria (Moorehead, 1971: 90). The river continues from the lake as the Albert Nile (Collins, 2002: 37). The Lake Plateau ends *c*. 180 kilometres further northeast, where the river makes a sharp turn to the northwest and continues as *Bahr*



Map 1: The Nile Basin. Adapted from Dumont (2009: fig. 1).

[1] The distances given in this chapter have been measured in Google Earth. The distances of the river follow its course and not a straight line. Some geographical information has also been obtained through surveys in Google Earth, and Google Earth will then be given as reference.

al-Jebel (Arabic for 'River of the Mountain'). The Bahr al-Jebel tumbles over rapids and waterfalls through a narrow gorge for *c*. 155 kilometres, while it drops a total of 160 metres (Barbour, 1961: 113; Dumont, 2009: 6), before reaching Jebel Rejaf, a distinctive mountain cone that is a natural marker of the end of the navigable part of the river for those coming from the north (Collins, 2002: 48). A little to the north is Juba, the capital of the newly independent South Sudan. In the stretch downstream from Juba, the river enters a wide plain and changes its character by splitting into several branches. This soon becomes *the Sudd* (Arabic for 'the Barrier'), the largest swamp in the world (Moorehead, 1971: 83). It permanently covers some 7000 square kilometres, which become as much as 90 000 square kilometres at the height of the flood (Dumont, 2009: 6). This inland delta is neither water nor land, but a sea blocked by papyrus and floating islands made of rotting vegetation (Moorehead, 1971: 83). The Bahr al-Jebel continues northwards for *c*. 570 kilometres until it runs into Lake No. The *Bahr al-Ghazal* (Arabic for 'River of the Antelope') also enters Lake No, but from the west. This river collects all small streams on the border of the Congo-Nile watershed (Collins, 2002: 63), but contributes with little more than a trickle as 92 per cent of the water is lost to evaporation (Barbour, 1961: 116). The outlet of Lake No in the east is the beginning of *An-Nil al-Abiyad*, meaning 'the White Nile' in Arabic, although the name is not descriptive yet as the water has a greenish hue from the decomposition of the vegetation in the Sudd (Collins, 2002: 2). About 110 kilometres downstream, the White Nile receives the water of the Sobat River, a main contributor to the volume of the Nile with a drainage basin encompassing the mountains of south-western Ethiopia and the mountains of the watershed between South Sudan and Uganda (Collins, 2002: 78, 80-81). The White Nile has its name from the whitish sediments carried by the Sobat River during the flood. From the confluence with Sobat, the White Nile flows broad and majestic northwards for *c*. 760 kilometres until it is united with the Blue Nile.

The source of the Blue Nile is the swamp Ghish Abbai from where rises the Little Abbai, the main tributary among numerous headstreams feeding Lake Tana on the mountain plateau of northern Ethiopia (Moorehead, 1972: 13). The almost imperceptible outlet of the Great Abbai, as the Blue Nile is called in Amharic, is at the

southern end of Lake Tana (Moorehead, 1972: 12; **Figure 1)**. From there the river flows for *c*. 30 kilometres before throwing itself over the threshold of black basalt, forming the falls of *Tiss-Issat* (Amharic for 'Smoke Fire') (Snailham, 1970: 17; Arsano, 2009: 163). In rain season, the water pours over the rocks in some spectacular cascades separated by small islands, but since the 1960s, the construction of a hydropower station that is well integrated into the terrain has diverted some of the water away from the smoking falls of the Blue Nile (Snailham, 1970: 17-18).

Figure 1: The beginning of the Great Abbai at the outlet of Lake Tana. Photo by Hafsaas-Tsakos.

Tiss-Issat is the end of the relatively peaceful journey of the Great Abbai **(Figure 2)**. From there, the river makes a great loop moving first to the east, so to the south, then to the west, and finally towards the north, the direction of the Mediterranean Sea (Moorehead, 1972: 14). From the Tiss-Issat Falls, the Great Abbai starts excavating a spectacular gorge (Dumont, 2009: 7). The asphalt road from Bahir Dar to Addis Abeba crosses the Great Abbai at a point where the gorge is 2000 metres wide and 1400 metres deep, and the gorge is dug into a plateau that is 2600 metres above sea-level (Talbot and Williams, 2009: 50; **Figure 3)**. Through the gorge, numerous tributaries add water to the Great Abbai. When the river crosses the border with Sudan after *c*. 840 kilometres, it has dropped from 1830 metres asl at Lake Tana to 493 metres asl at Bumbadi (Dumont, 2009: 7). Ethiopia is now constructing a gigantic dam near Bumbadi. The downstream states Sudan and Egypt are against the project, and Egypt threatens to go to war if deprived of the essential Nile water when the dam closes its gates (Hussein, 2014). Through the continuous excavation of its deep gorge, the Great Abbai takes up a heavy load of sediments that gives the water a

Figure 2: The Tiss-Issat or the Blue Nile Falls. Photo by Hafsaas-Tsakos.

dark brown colour. It is this colour that gives the river its name in Sudan, *An-Nil al-Azraq*, meaning 'the Blue Nile' in Arabic (Sougayroun, 2009: 110). The river flows broad and majestic when the mountain massif of Ethiopia ends and the river reaches the plains of Sudan (Collins, 2002: 3). About 35 kilometres downstream from the border, the Blue Nile enters the 65 kilometres long reservoir of the Roseires Dam, which was built at Damazin in 1966 as part of the compensation to Sudan for the building of the Aswan High Dam in Egypt. Like all the dams on the Nile, the reservoir was quickly filled with sediments, and three-quarters of its capacity was lost within ten years of its completion (Collins, 2002: 101). The dam was originally built for irrigation purposes, but a hydropower plant was added in 1971 (see appendix compiled by Anyimadu in Verhoeven, 2011: 19). Sudan has just completed a heightening of the Roseires Dam in order to produce more electricity (The Republic of Sudan, Ministry of the Cabinet Affairs, Secretariat General, 2013: webpage). This has added 10 metres

Figure 3: The Blue Nile Gorge. Photo by Hafsaas-Tsakos.

to the height and doubled the length of the dam from 12,5 kilometres to 24,1 kilometres (China International Water & Electric Corporation: webpage).

In 1925, the Sennar Dam was built *c*. 200 kilometres downstream from where the Roseires Dam was built four decades later. The purpose of this dam was to provide a dependable source of water for agriculture on the clay plain between the White and the Blue Niles. This fertile plain is called *al-Gezira*, meaning 'the Island' in Arabic, since it is enclosed by rivers on three sides (Collins, 2002: 102). Downstream from Sennar, the river meanders over the plain for *c*. 100 kilometres until the seasonal river of Dinder enters the Blue Nile in the rainy season. The Rahad, another seasonal river, joins *c*. 60 kilometres further downstream (Google Earth). The Blue Nile then continues for *c*. 250 kilometres northwards until it meets the White Nile in an embrace that an Arab poet has called "*the longest kiss in history*" (Tvedt, 2012: 127). Tuti Island is in the middle of the confluence, and the dark waters of the Blue Nile and the

bright waters of the White Nile meet at its northernmost tip (**Figure 4**). At first the water of different hues from the two rivers seems to run side by side, but then they blend and become the Nile.

Figure 4: The meeting of the dark water of the Blue Nile (left) and the bright water of the White Nile (right). Photo 879/6/1 in the Sudan Archive at Durham.

The flood regime of the Nile

The topography of the White and the Blue Niles give the Middle Nile its characteristic flood regime. At Khartoum, the White Nile has an almost constant flow of water throughout the year, since only the flooding of the tributary Sobat contributes to raise the water levels (Barbour, 1961: 111). The reason for this is that when the river floods in the summer rainy season, the river overflows its banks in the Sudd, and the spill water is unable to return to the riverbed and is lost in evaporation (Barbour, 1961: 113). Sobat, the Blue Nile and Atbara originate in the mountains of Ethiopia, where heavy rainfalls in the summer cause the Nile to flood from May to September (Collins, 2002: 4). During the flood season, rain water falling in Ethiopia contributes 86 per cent of the water in the Nile as measured at Aswan (Arsano, 2009: 161). Consequently, the perennial tropical rain of the Lake Plateau of East Africa ensures a year round run off

through the desert, while the annual flood from the Ethiopian mountains brings silt that fertilizes and water that moistens the dry banks of the Nile, and this makes agriculture possible in what is otherwise a desert environment (**Figure 5**).

Figure 5: The Nile and its green river banks as seen downstream from Jebel Dosha in Upper Nubia. Photo by Hafsaas-Tsakos.

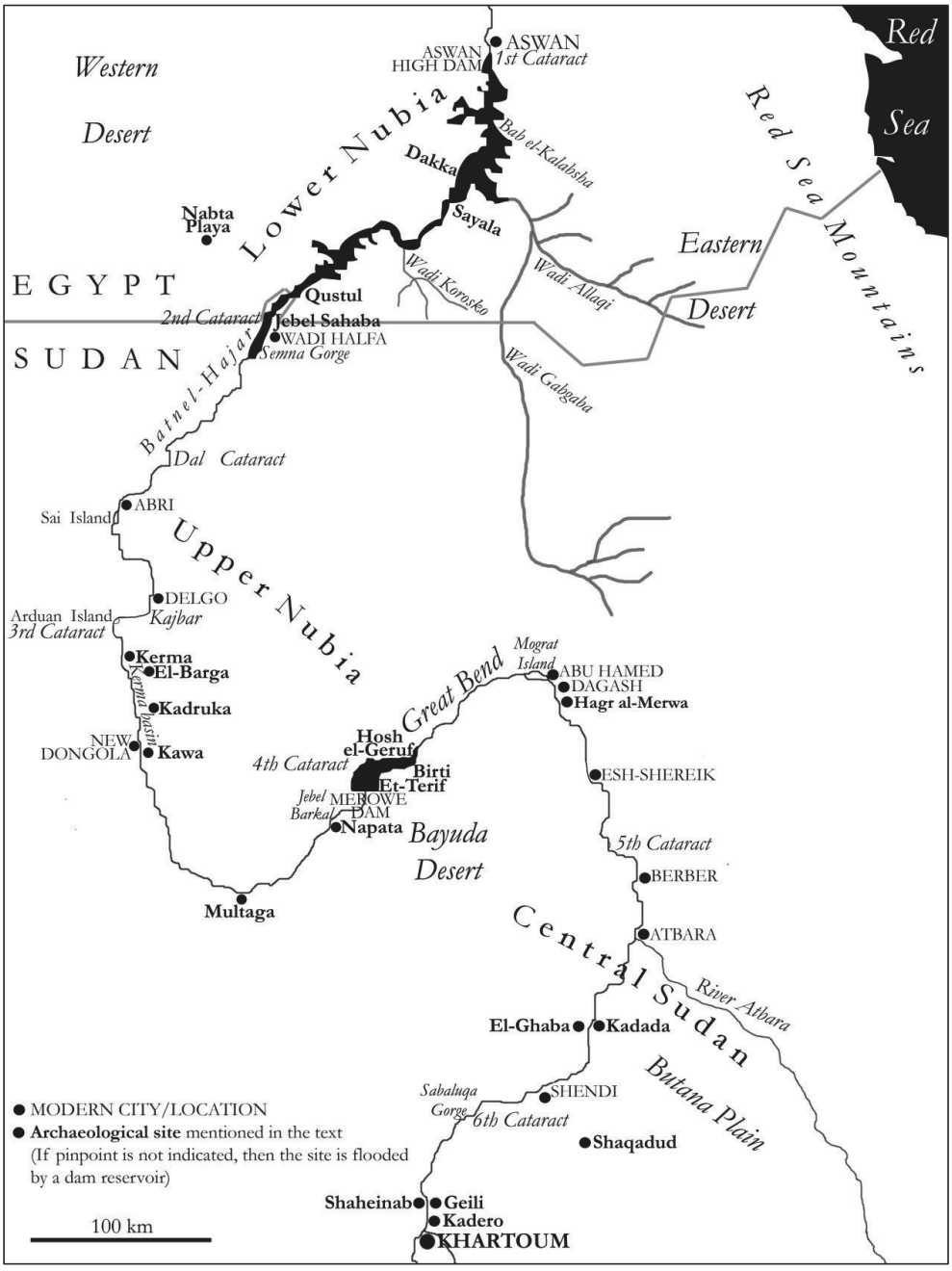
Although the flood returns every year, it varies in volume and date. Years of too high or too low floods, and particularly a sequence of such years, may result in crop failure, famine and poor life conditions that may culminate in plagues; while good years provide surpluses, affluence and prosperity. In the past, the lean years contributed to keeping population levels within the carrying capacity of the land. For Egypt, this balance became utterly destroyed with the building of the Aswan dams, since the dams at Aswan are partly responsible for the enormous population growth in the country. The population of Egypt was estimated as 9,6 million people in the 1897 census (Ibrahim and Ibrahim, 2003: 210), before the completion of the first Aswan Dam in 1902. In the wake of the heightening of the Aswan Dam in 1934 and the completion of the Aswan High Dam in 1971, the population had grown to 38 million in 1977 and 66 million in 2002. The population is expected to reach 83 million people by 2017 (Elemam, 2009: 220). As the population continues to grow, the need for freshwater is also increasing (see Collins, 2002: 231). In Egypt, the available freshwater now equals the limit of water poverty for a nation, and a situation of water

scarcity can be reached already by 2025 (Elemam, 2009: 218). Connected to the water scarcity is another disadvantage of the population growth: Egypt, once the breadbasket of the ancient world, is now reported to be the world's largest importer of wheat (see Food and Agriculture Organization of United Nations, 2012: webpage).

The regions of the Middle Nile

The Middle Nile begins with the confluence of the White and Blue Niles in Central Sudan and ends *c*. 1850 kilometres further north when the river flows out of the First Cataract at Aswan in southern Egypt (**Map 2**). On its journey, the river passes over bedrock that alternates between soft sandstone and harder metamorphic rocks, which create calm stretches and treacherous cataracts respectively. *Καταρράκτης* is the Greek word for waterfall. The cataracts are the most distinctive trait of the Middle Nile, and they are characterized by stretches where rapids and islands interrupt the gentle flow of the river. Cataracts are formed where the river flows over outcrops of granite, gneiss and crystalline schist, since these rocks are more resistant towards withering than sandstone (Lyons, 1908: 461).

The cataracts are thus not actual waterfalls, but the river has a steeper gradient through the regions with harder bedrocks. This feature of the cataracts has attracted the attention of dam builders since the end of the 19th century. Until now, dams have been built on the First Cataract and on the Fourth Cataract – the two Aswan Dams in Egypt and the Merowe Dam in Sudan respectively. The Government of Sudan is currently planning to build dams on all the remaining cataracts of the Middle Nile (see **Map 2**). Furthermore, a double dam on the Upper Atbara and Setit Rivers is under construction, and the heightening of the Roseires Dam on the Blue Nile is already implemented (see appendix compiled by Anyimadu in Verhoeven, 2011: 18-19). This is alarming for the people who will be affected by the dams and their reservoirs, especially when one considers the history of development-induced poverty among resettled people after dam building and other infrastructure projects in Sudan (Hafsaas-Tsakos, 2011: 53, 55-58). The future of the Middle Nile – its landscape, people and cultural heritage – is therefore under serious threat (R. Haaland et al., 2012a & b).



Map 2: The Middle Nile with regions, geographical features and sites in Upper Nubia and Central Sudan mentioned in the text. Graphics by Hafsaas-Tsakos.

The cataracts of the Middle Nile are numbered from one to six in the direction that the earliest western explorers travelled in search of the source of the great river –

that is from north to south. But if one instead is following the course of the river from the south, then the first cataract to be traversed is the Sixth Cataract just north of the confluence of the White and the Blue Niles.

The Middle Nile can be subdivided geographically into three larger regions: Central Sudan, Upper Nubia and Lower Nubia (see **Map 2**). These three regions are separated by major tracts of cataracts, which were obstacles to travel both on the river as well as on the rocky banks. In addition, each of these broad regions could be subdivided into smaller sections with a variety of environments.

Central Sudan

The southernmost region, Central Sudan, includes the riverine regions upstream from Mograt Island at the point where the northward flow of the river is interrupted by the Great Bend towards southwest. Central Sudan is an archaeologically *terra incognita* for the Bronze Age (Edwards, 2004: 110). The only exceptions are in the northernmost part, where archaeological remains have been uncovered at Mograt Island (Schulz, 2008) and rock inscriptions have been recorded at Hagr el-Merwa (Davies, 1998). On Mograt Island, German archaeologists have recently uncovered the sites of the furthest known upstream extension of indigenous people connected with the Bronze Age world (Schulz, 2008: 46; Hafsaas-Tsakos, 2013: 80).

Hagr al-Merwa (Arabic for 'Rock of Quartz') is a distinctive landmark on the stretch of the river upstream from Mograt Island. It is a quartz outcrop 40 metres long and nine metres wide with a maximum height of 24 metres above the surrounding plain (Davies, 1998: 26). H.C. Jackson, governor of the Halfa province in the early 1920s, undertook a trek in this region. He noted after visiting Hagr al-Merwa that the outcrop is conspicuously visible for a long distance as the white quartz "*glistens in the sunlight*" (Jackson, 1926: 22-23). This is perhaps why two Egyptian kings in the mid-second millennium BCE choose this rock surface for carving stele marking their southern boundary, more than 1400 kilometres further upstream along the Nile from the traditional border of Egypt at the First Cataract (see Davies, 1998). These inscriptions are thus the testimonies of the furthest expansion up the Nile of people

belonging to the metal-using societies in Egypt. So, this boundary stela marks the deepest penetration into Africa by people belonging to the Bronze Age world.

Upper Nubia

The granite outcrops and large islands of the Fourth Cataract seem to have acted as a border region between Upper Nubia and the regions further south. The recent salvage excavations in the Fourth Cataract in the frame of the Merowe Dam Archaeological Salvage Project (MDASP) have uncovered numerous archaeological remains contemporary to the Bronze Age. A scarab identified as belonging to the Egyptian king Thutmose IV was found on Birti Island (Jackson, 1926: 21). On the east bank opposite the downstream end of Birti was the village Hosh el-Geruf, where gold was extracted during the Bronze Age (Emberling and Williams, 2007: 83). Downstream from Birti, the river turned towards southwest at the village of et-Terif on the west bank. Two copper mirrors as well as another copper-alloy object were recently uncovered in a 3rd millennium context at Cemetery 4-K-203 near et-Terif (Welsby, 2003: 31).[2] This is the furthest upstream along the Nile that copper objects dating to the Bronze Age have been found.

The middle region, *Upper Nubia*, comprises the area downstream of the Fourth Cataract in the south and the Dal Cataract in the north. This region can be subdivided by the Third Cataract into two regions, the Dongola Reach in the south and the Abri-Delgo Reach in the north. The rocks and shoals of the Batn al-Hajar and the Second Cataract seem to have constituted a buffer zone between Upper and Lower Nubia. In the 2nd millennium BCE, the Egyptians built a chain of fortresses on this natural frontier and made it their southern border, which they held for more than 200 years (Hafsaas, 2006: 116, 122).

[2] Ruth Humphreys of Leicester University is now compiling a PhD based on the Bronze Age sites excavated by the Sudan Archaeological Research Society in the Fourth Cataract.

Lower Nubia

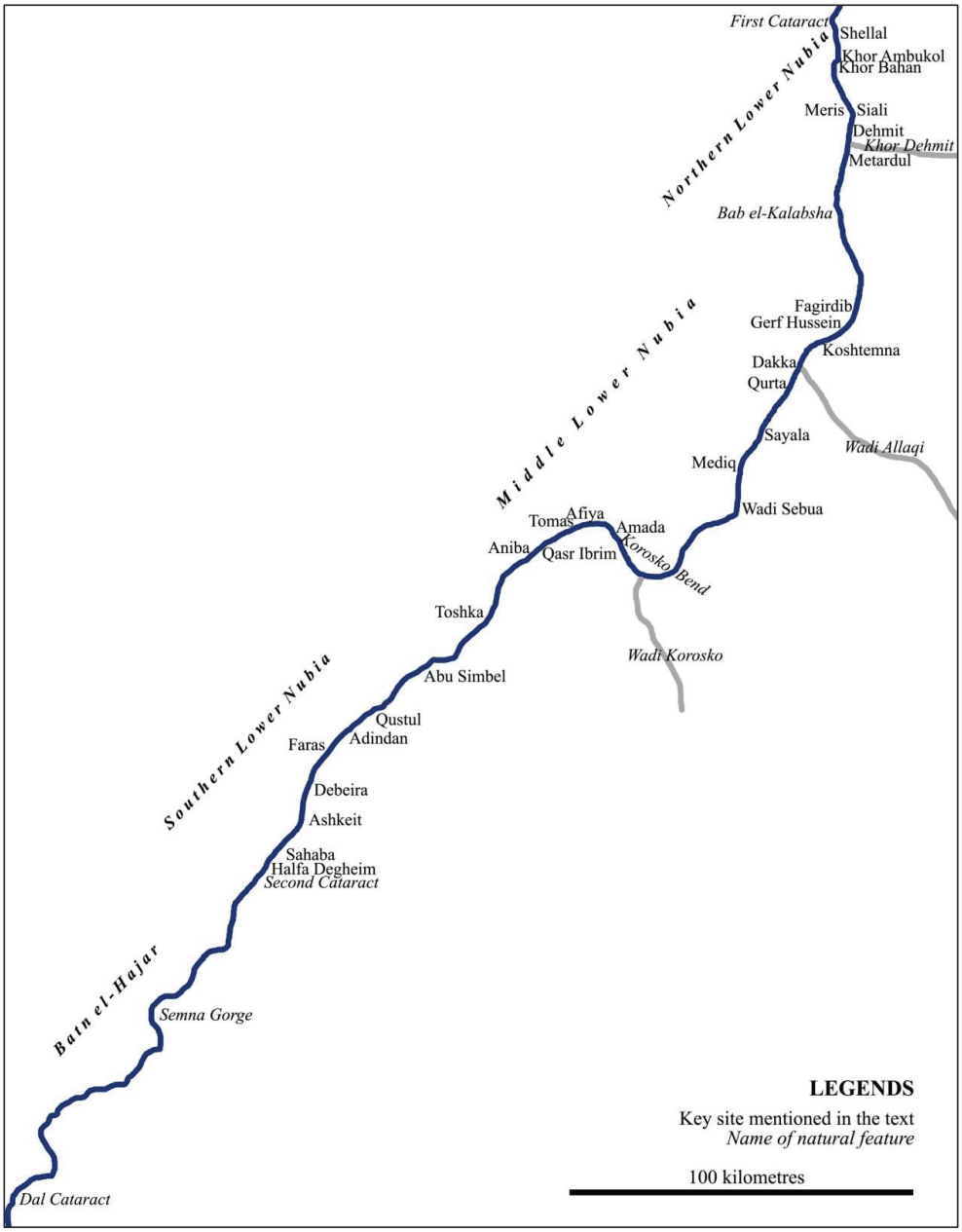
The northernmost region, *Lower Nubia*, was situated between the Second Cataract in the south and the First Cataract in the north. The First Cataract is the physical border between the Egyptian Nile Valley and the Middle Nile. Throughout history, Lower Nubia seems to have been in-between the more densely populated regions of Egypt in the north and Upper Nubia in the south (Edwards, 2004: 7). Lower Nubia also appears to have been a frontier of the Egyptian state (see the section *Wars on the southern frontier of the Egyptian state during the Bronze Age* in Chapter 12). In the 2nd millennium, the settlement and fortress on Elephantine Island below the First Cataract continued to be called the southernmost place in Egypt even though a new southern border was established at Semna in Batn el-Hajar. The whole of Lower Nubia was thus a frontier zone between centralized political centres in the north and south – the Egyptian state and the Kerma kingdom in Upper Nubia respectively (Török, 2009: 14).

Lower Nubia is the geographical focus of this thesis, so its landscape will be described in greater detail in the next section.

The land between the cataracts

The *c*. 330 kilometres long reach of the Middle Nile between the Second and the First Cataracts is usually referred to as Lower Nubia (Trigger, 1965: 10; W.Y. Adams, 1977: 24; Török, 2009: xxi). Lake Nasser/Nubia, the reservoir of the Aswan High Dam, flooded this region completely in the late 1960s (see **Map 2**). Since the landscape that would have existed in the Bronze Age no longer exists, the description of Lower Nubia is best phrased in the past tense (**Map 3**). This imaginary journey through Lower Nubia starts in the inhospitable borderlands in the south and progresses northwards with the flow of the river.

The rapids of the Dal Cataract are still the southern gate of the *Batn al-Hajar* (Arabic for 'Belly of Stone'), which is a particularly rocky region (see W.Y. Adams, 1977: 26, 28; **Figure 6**). In the north, the riverine parts of Batn al-Hajar are now submerged by the southernmost part of the reservoir behind the Aswan High Dam (**Figure 7**). Before the flooding, there were more than 350 islets in the river in this



Map 3: Lower Nubia with key sites mentioned in the text. Graphics by Hafsaas-Tsakos.

region as the river descended over rocks of granite and greywacke with barren mountains on both banks. It was then the most desolate region along the Middle Nile (Emery, 1965: 23), and it is now almost depopulated. However, the Bronze Age was a period when this region appears to have been more densely settled than at other times,

Figure 7: The rocky region of Batn el-Hajar. The river can be glimpsed behind the mountains. Photo by Hafsaas-Tsakos.

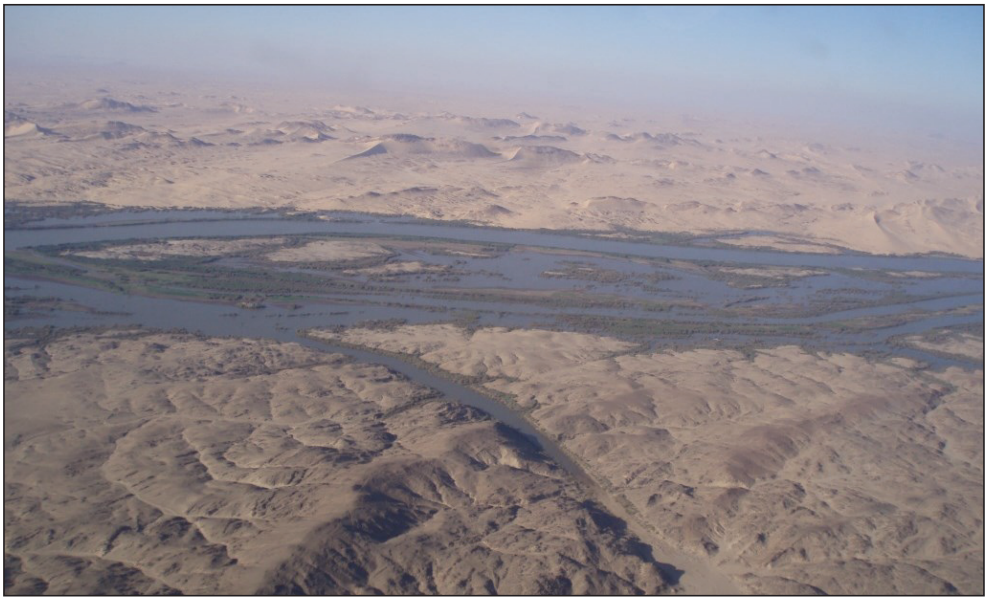


Figure 6: The reservoir behind the Aswan High Dam flooding the banks of the Nile in Batn el-Hajar. Photo by Hafsaas-Tsakos.

to the exception perhaps of the latter part of medieval times when it was a Christian refuge against Islam (W.Y. Adams, 1977: 27). During the low-water season in the Semna Gorge, *c*. 80 kilometres south of Dal, the river pressed through an only 30 metres wide crack in the granite (W.Y. Adams, 1977: 27), so this was a formidable

natural barrier for river traffic. The Batn el-Hajar ended with the Second Cataract, *c*. 160 kilometres downstream from the Dal Cataract (Bard, 2008: 53).

Only three districts in Lower Nubia had wide floodplains able to sustain populations of any size, but fertile plots could also be found at the mouths of khors and wadis. The fertile patches were separated by areas where rocks and sand reached down to the river (Trigger, 1976: 14). The southernmost of the three fertile districts spanned *c*. 60 kilometres from Halfa Degheim just north of the Second Cataract to the gorge of Abu Simbel (Nordström, 1972: plates 3-4; Williams, 1986: plates 2-3), where one of the last Bronze Age kings of Egypt, Ramses II (1279-1213 BCE), built the famous rock-cut temple in the cliffs above the river. The most productive locality in this district was the west bank of Faras (Trigger, 1965: 14). During the Bronze Age, a second river channel, which had dried up by the first millennium BCE, flowed to the west of the Nile at Faras and created a large and fertile island in the Nile (Griffith, 1921: 2, plate 1; Trigger, 1976: 76). Just north of Faras' location is the border between the modern states of Sudan and Egypt. On the Egyptian side of the border were the three villages Adindan, Qustul and Abu Simbel on the east bank. This district belonged geographically together with Faras in Sudan, for north of Abu Simbel the river valley became narrow and was bordered by desert for more than 10 kilometres (Williams, 1986: 3).

About 20 kilometres north of Abu Simbel started the next fertile district. It stretches for *c*. 50 kilometres from Toshka in the south to the beginning of the Korosko Bend in the north, and this stretch was perhaps the most productive in all of Lower Nubia (Trigger, 1965: 14). Nevertheless, few sites from the 4th millennium were excavated in this district. The west bank downstream from Toshka was a continuous narrow floodplain for *c*. 15 kilometres, while the east bank was dominated by "*shelving rocks and great boulders*" (Weigall, 1907: 1923-124). About 30 kilometres north of Toshka, three summits of a great sandstone cliff rose steep up from the river. *Qasr Ibrim* (Arabic for 'Fortress of Ibrim') was built on the flat top of the middle hill (Weigall, 1907: 119). A fortress has commanded the top of this cliff since at least the seventh century BCE (Horton, 1991: 264). Its elevated position makes it one of only a few archaeological sites that escaped the flooding of Lower Nubia, and it now

occupies an island in Lake Nasser. It is possible that there were rapids in the river below Qasr Ibrim during the Bronze Age (Weigall, 1907: 116). In this district, the floodplain was broadest at Aniba (Trigger, 1965: 14), about 6 kilometres downstream from Qasr Ibrim (Weigall, 1907: 115). The floodplain at Aniba was 300 metres wide and continued for several kilometres (Steindorff, 1935: 17). Behind the 20th century houses of the village were the mounds marking the town and fortress of the Bronze Age. On the desert slopes were many extensive cemeteries (Weigall, 1907: 115), and among them were the largest Bronze Age cemetery in Lower Nubia (see Hafsaas, 2006: App. 4). The plain of Aniba continued for *c*. 20 kilometres to the villages of Tomas and Afiya (Steindorff, 1935: 17). At Tomas, several routes departed into the desert and arrived at the Nile again both in Egypt (Bourriau, 1999: 47) and further north in Lower Nubia (see below).

Around 20 kilometres upstream from Qasr Ibrim, Lake Nasser makes a small bend since the river flowed in a south-easterly direction there for *c.* 20 kilometres. This bend has traditionally been called the Korosko Bend, and it circumvented the Korosko Hills on the west bank (see Trigger, 1965: 14). During the Bronze Age, the midpoint of the bend appears to have marked a transition from the alluvial plains upstream to a region with a much lower carrying capacity (Wegner, 1995: 129-130). The river turned northwards again at the point where Wadi Korosko entered the Nile on the west bank (Google Earth; **Figure 8**). Wadi Korosko was the starting point for desert routes

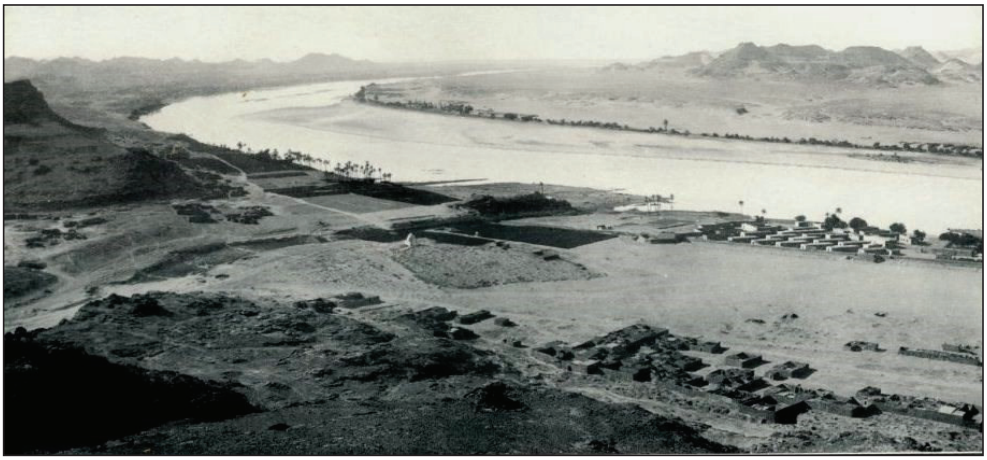


Figure 8: View of the Korosko Bend from Wadi Korosko with the beginning of the Korosko Hills on the opposite bank. Photo from Weigall (1907: plate 51).

leading both to gold mining regions of the Eastern Desert as well as to the Great Bend of the Nile near Mograt Island via Wadi Gabgaba (Török, 2009: 84).

For the *c*. 30 kilometres between Korosko and Mediq, the cliffs and sand of the deserts came down to the river, and few ancient sites were reported for that stretch of the river (see Weigall, 1907: 97, 100). A desert route departing from the river valley on the west bank opposite the village of Mediq was the beginning of the ancient track leading to Tomas by cutting off the bend of the river by traversing the Korosko Hills (Weigall, 1907: 96). There was *c*. 5 kilometres from Mediq to Sayala, which may have been the seat of a chieftain at the beginning of the Bronze Age. Midway between Sayala and Qurta, *c*. 10 kilometres further north, the landscape gradually opened up (Weigall, 1907: 95).

The northernmost district consisted of a series of open floodplains stretching for *c*. 25 kilometres between Qurta in the south and Gerf Hussein in the north. The most fertile of these plains was Dakka on the west bank of the river (Trigger, 1965: 14). This plain was *c*. 8 kilometres long and one and a half kilometres wide. The soil consisted of alluvium, which suggests that the river in the past faced a shallow and wide reach causing the current to slow down and mud to deposit during the flood (Firth, 1915: 3). All the cemeteries dating to the Bronze Age were situated on the higher alluvial mud banks (Firth, 1915: 3). This observation may indicate that the whole plain was annually flooded creating fertile pasture land. The Dakka plain was bordered by sandstone in the west (Firth, 1915: 3). About 4 kilometres out in the desert, there is a group of pyramidal sandstone hills (Firth, 1915: 6), which are now looking down on Lake Nasser. Opposite Dakka was the mouth of Wadi Allaqi – the largest and longest wadi originating in the Red Sea Mountains (Trigger, 1965: 14). About 80 kilometres upstream from the junction with the Nile, Wadi Allaqi is entered by the tributary Wadi Gabgaba, which has its source at a watershed only *c*. 65 kilometres north of Abu Hamed at the beginning of the Great Bend (Google Earth; see **Map 2**). This wadi system gave access to the gold and copper deposits in the Eastern Desert (Trigger, 1976: 67), the pastures in the valleys of the Red Sea Mountains and a desert route to the south arriving at the Nile near Mograt Island (Google Earth; see **Map 2**).

About 20 kilometres north of Dakka was Gerf Hussein (Weigall, 1907: 85), which in ancient times appears to have been the northernmost concentration of population south of Bab el-Kalabsha (Firth, 1912: 1; Trigger, 1965: 14).

At Bab el-Kalabsha, located *c*. 40 kilometres north of Gerf Hussein, the river entered once more a region where the bedrock consisted of granite (W.Y. Adams, 1977: 24). *Bab* (باب) means 'gate' in Arabic, and the Gate of Kalabsha was a distinctive geographical marker as granite cliffs constricted the river so that it was only 220 metres wide, and the flow of water was interrupted by rocks and islands (Trigger, 1965: 14).

From Bab el-Kalabsha, the cliffs came very close to the river (Reisner, 1910: 297; see **Frontispiece**), with limited alluvial for human settlement. After *c*. 8 kilometres, the village of Metardul was located on the south side of a small khor on the east bank (Reisner, 1910: 284). About two kilometres further north, Khor Dehmit entered the river. This was the largest of the dry water courses that came down from the desert on the east bank between Bab el-Kalabsha and *Shellal* (Arabic for 'Rapids') at the beginning of the First Cataract. For several kilometres, the river valley was thus much broader downstream of the khor, and there was a relatively broad plain on the east bank (Reisner, 1910: 256).

About 10 kilometres downstream from Khor Dehmit, the river valley broadened out with large cultivable areas on the *c*. 3 kilometres long Meris plain on the east bank and between Fugda and Hafir on the west bank (Reisner, 1910: 204).

About 12 kilometres downstream from the Meris plain, the river made a sharp turn to the east for *c*. 2 kilometres before resuming the course to the north. Midway in this curve, Khor Bahan entered the Nile on the east bank, and at the downstream exit of the curve, Khor Ambukol also joined the Nile (Reisner, 1910: plan 2).

After Khor Ambukol, the river ran through a rocky and barren gorge, and the Aswan High Dam was built on this stretch (Google Earth). About 6 kilometres north of Khor Ambukol, the large islands – El-Hesa, Biga and Awad – at the beginning of the First Cataract split the river into branches. On the west bank opposite Biga Island are the unflooded parts of the plain of Shellal (Reisner, 1910: plan 2). The old Aswan Dam was built just downstream from Awad Island. The southernmost stretch of the

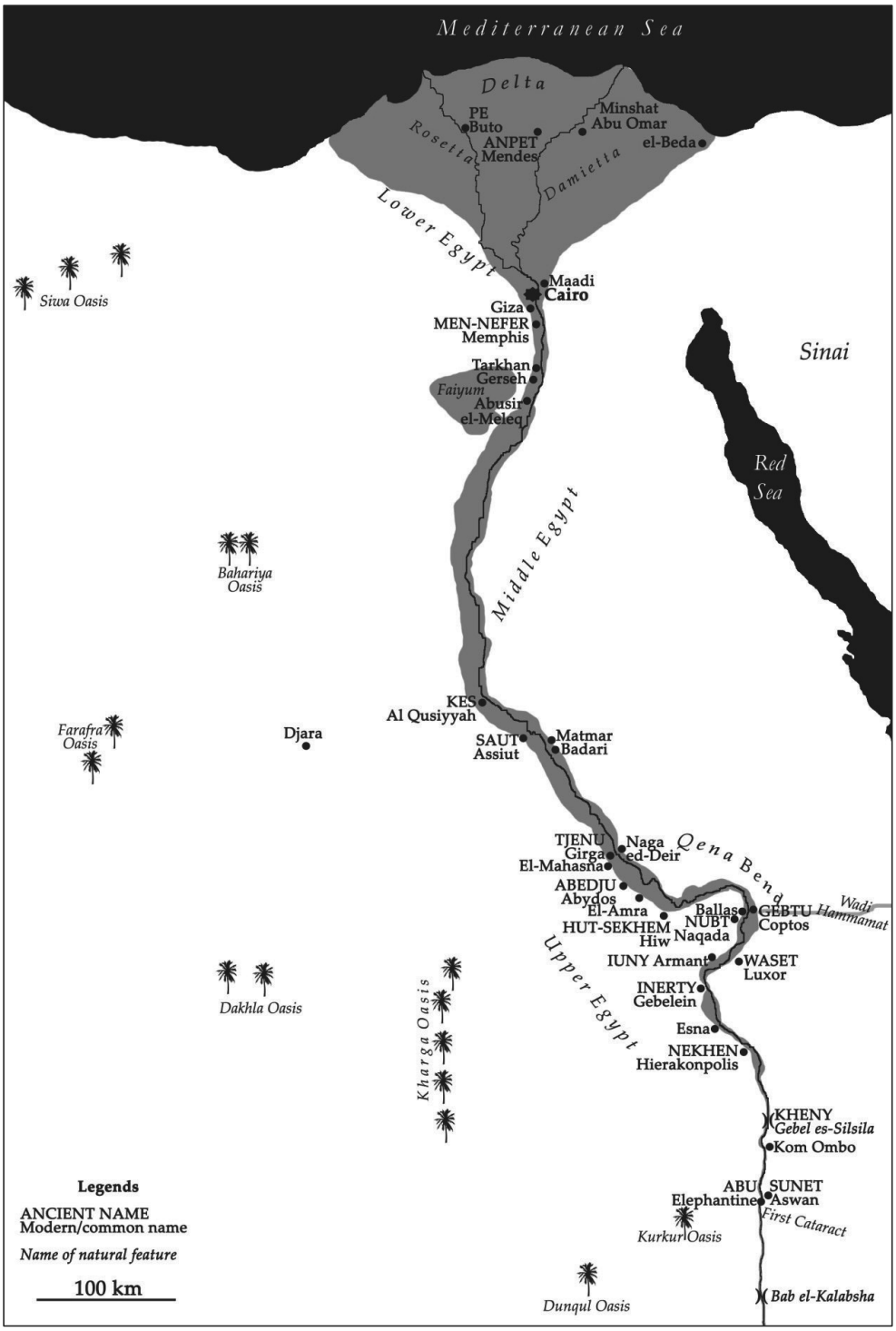
First Cataract is therefore submerged by this dam and its reservoir. About 12 kilometres downstream from El-Hesa Island is Elephantine Island, the first obstruction of the river at the First Cataract when coming from the north (see p. 1 above). From this point starts the Egyptian Nile Valley.

Although Lower Nubia consisted of three fertile districts as described in this section, a different subdivision of the region is more fitting with the historical development during the 4th millennium BCE (see *Part II*). I will therefore call the southern district described above for southern Lower Nubia. Middle Lower Nubia will refer to the region between Abu Simbel in the south and Bab el-Kalabsha in the north, and this subregion thus encompasses the two other fertile districts. I will call the reach between Bab el-Kalabsha and the First Cataract for northern Lower Nubia (see **Map 2**).

The black land

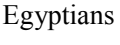
The core territory of ancient Egypt was the river valley north of the First Cataract and the delta where the Nile splits into branches before pouring into the Mediterranean Sea (Bard, 2008: 47; **Map 4**). The ancient Egyptians called Egypt for *Kemet* ( [*kmt*], det. [place name]), meaning the 'Black Land', and the name derived from the black fertile silt deposited on the banks by the river (McDermott, 2001: 126). In contrast, the barren deserts were called *Deshret* ( [*dšrt*], det.  [desert]), meaning the 'Red Land' (McDermott, 2001: 126). The geographical names of Bronze Age sites and localities in Egypt can be given in three different forms: 1) names transliterated and vocalized from ancient Egyptian, 2) classical names in Greek, and 3) modern names in Arabic (Bard, 2008: 51). I will use the ancient names for the sites that are included in the discussions of Part II, although the most frequently used names will be given in clamps for easy reference.

The southernmost towns in Egypt were located just downstream of the First Cataract. *Abu* (ideogr.  [*3bw*], det.  'foreign land'), meaning 'elephant' in ancient Egyptian (Allen, 2000: 429; Kahl, 2002: 1-2), was situated on Elephantine Island, and ancient *Sunet* [ [*swnt*], det. [place-name]), meaning 'the market', was situated



Map 4: Ancient Egypt with key sites mentioned in the text. Graphics by Hafsaas-Tsakos.

under modern Aswan on the east bank opposite Elephantine. Unfortunately, Sunet remains archaeologically unexplored (H.S. Smith and Giddy, 1985: 319).

For *c*. 145 kilometres north of the First Cataract, the bedrock is for the last time sandstone like along major parts of the Middle Nile, and the floodplain is narrow since the river cuts a deep channel in the soft bedrock (Bard, 2008: 53). Gebel es-Silsila is the stretch of the river *c*. 65 kilometres north of the First Cataract where the sandstone cliffs protrude on both sides of the Nile creating a two kilometres long gorge (Google Earth). The Egyptians called the passage *Kheny* ( [*ḫny*], det. [row] +  [place-name]) (Gardiner, 1916: 192), meaning 'The Place of Rowing' (from  [row] + [past passive particle] +  [det. for place-name]). This indicates that there were rapids at this place during the Bronze Age, since that would mean that the boats had to be rowed through the gorge rather than sailed.

About 55 kilometres north of Gebel es-Silsila is the ancient site *Nekhen* (ideogr. [*nḫn*], det. [place-name]), meaning 'City of the Falcon' and better known as Hierakonpolis in Greek or Kom el-Ahmar in Arabic (McDermott, 2001: 133). There are also several minor sites along this stretch of the Nile.

At modern Esna, *c*. 30 kilometres north of Nekhen, the landscape changes completely as sandstone gives way to limestone, which is the bedrock bordering the Nile to modern Cairo (Baikie, 1932: 670; Gardiner, 1961: 33). Northwards from Esna, the floodplains are broad and ideally suited for large-scale cereal cultivation (Bard, 2008: 53).

About 25 kilometres north of Esna, is the ancient site *Inerty* ( [*jnr-tj*]) meaning 'Two Rocks' (Roveri, 2001: 7). The name derives from the two limestone ridges that are prominent landmarks of the west bank (Baikie, 1932: 332). Similarly, the modern Arabic name *Gebelein* also means 'Two Hills'.

About 10 kilometres north of Gebelein, the river makes a turn to the east, starting the Qena Bend – a *c*. 125 kilometres long eastward curve (Google Earth). The desert inside the Qena Bend has been called the Theban Desert (Darnell and Darnell, 2002: 3). Many important Bronze Age sites are located along the Qena Bend. About 8 kilometres into the bend is the ancient site of Iuny [ [*jwnj*], det.  [place-name]),

which is better known by its Greek name Hermonthis or its modern Arabic name Armant (Fischer, 1968: 29). About 12 kilometres downstream from Iuny is the ancient city of *Waset* ( [*w3st*], det. [place-name]) meaning 'The Sceptre of Authority' (Strudwick and Strudwick, 1999: 9). It is better known by its Greek name Thebes (Strudwick and Strudwick, 1999: 10), or Luxur – a corruption of El-Uqsur, which is plural of 'castle' in Arabic, referring to the towering ruins of the temples (Baikie, 1932: 341). Waset was capital of Egypt during the Eleventh Dynasty. On the west bank, *c*. 25 kilometres downstream from Thebes is the modern village of Naqada or the ancient city *Nubt* ( [*nbwt*], det.  [place-name]) meaning 'Gold Town' (Kemp, 1989: 35, fig. 6; Wilkinson, 1999: 37). Wadi Hammamat enters the Nile on the east bank some kilometres north of Nubt.

At the exit of the Qena Bend *c*. 80 kilometres downstream from Naqada is the modern town Hiw (alternative writing Hu) or Diospolis Parva, as it was called in Greco-Roman times (Bard, 1994: 273). The site was known as *Hut-Sekhem* ( [*ḥwt-sḫm*], det.  [place-name]) by the ancient Egyptians (Baikie, 1932: 313), and several cemeteries from the Bronze Age are located there (Bard, 1994: 274).

About 40 kilometres downstream from Hiw is modern Abydos, which is derived from ancient Egyptian *Abedju* ( [*3bḏw*], det.  [place-name]) (McDermott, 2001: 130). Like Nekhen and Nubt, Abedju was one of the most important sites at the beginning of the Bronze Age in Egypt.

About 140 kilometres downstream of Abydos is the modern town Assiut, which the ancient Egyptians called *Saut* ( [*z3wt*], det. [place-name]), meaning the 'Guardian', (Wilkinson, 2010: 35).

About 60 kilometres north of Assiut is the deviation of the Bahr Yusef that flows parallel to the main Nile branch for *c*. 200 kilometres before emptying into the Faiyum depression (Google Earth). About 80 kilometres downstream from the entrance to Faiyum is the location of the long-lasting capital of ancient Egypt, which is best known by its Greek name Memphis. The ancient Egyptians called it *Men-nefer* ( [*mn-nfr*], det. [pyramid] and  [place-name]) (McDermott, 2001: 130), meaning 'Enduring and Beautiful'.

About 20 kilometres downstream from Memphis is the centre of Cairo, the modern capital of Egypt since the Arab invasion in 641 CE. The Nile Valley proper ends and the Delta begins *c*. 18 kilometres north of Cairo (Google Earth).

The delta is the name given to the whole area where the river flows into a large bay in the coast line, which over the millennia has been completely filled with silt deposited by the river creating the wide and flat Nile delta. In ancient times, the river split into several branches, but today the river is only divided into the Damietta branch in the east and the Rosetta branch in the west (Kemp, 1989: 8). Each river channel runs for *c*. 170 kilometres before reaching the sea thus ending the long voyage of the Nile (Google Earth). On the sandy shores of the Mediterranean Sea ends also our descriptions of the landscapes that the Nile passes through from its humble beginnings as small streams at the heart of the African continent.

Before we leave the Nile, let us sum up the differences of the riverine landscape in Egypt and Sudan. The cataracts divide the Middle Nile into several smaller regions, while Egypt consists of two different environments, the valley and the delta, that are unified without any obstacles for travel. In fact, the Nile in Egypt facilitates river transport: the constant north wind fills the sails so that the ships can journey upstream, and the current of the river carries the ships downstream (Bard, 2008: 53). As a result, in hieroglyphic writing the word for ‘going north’ was determined by a boat without sails ( [*ḫdi*]), while ‘going south’ was depicted as a boat with sails ( [*ḫnti*]) (McDermott, 2001: 126). Without the unifying features of the Nile in Egypt, it is doubtful that this narrow strip of land would have become the first territorial state in the world. The Nile made it possible to unite Egypt, a single territory under a single ruler, with a single collective identity.

The deserts

The landscape outside Egypt and Lower Nubia is today desert. The *Sahara* (Arabic for ‘desert’) is the largest hot desert in the world and covers the northern part of the African continent (Krzywinski, 2001: 23). Its physical boundaries are the Atlantic Ocean in the west, the Atlas Mountains and the Mediterranean Sea in the north, and the Red Sea in the east. However, there is no physical border in the south,

and Sahara's southern extension is determined by rainfall. In the central parts of the desert, there is less than 10 mm rain per year, which increases to 100 mm at the southern border of the Sahara (Krzywinski, 2001: 23). The Sahara has expanded southwards for the past millennia as a consequence of the gradual retreating of the tropical summer rains (see the section *Holocene climate in Eastern Sahara* below). Presently the southern limit is more or less aligned with latitude 16º N with the exceptions of the Sahelian savannahs of the Butana and the Bayuda (Krzywinski, 2001: 30; Google Earth). The *Sahel* (Arabic for 'seashore') is the name of the zone of semi-desert bordering the Sahara in the south (**Figure 9**). The ecological factor that can define the transition from the Sahel to the Sahara is where the perennial scattered vegetation of the former is replaced by a vegetation pattern limited to drainage lines in the latter (Krzywinski, 2001: 25). The desert is a heterogeneous landscape – not only the empty sand plains and rolling dunes of our imagination. It is a mosaic of mountains, rocky plateaus, sand-dunes, dry river beds and oases. The arid land bordering the Nile can thus be subdivided into several distinctive regions.

Figure 9: The Sahelian savannah of the Butana plain towards the end of the dry season. Photo by Hafsaas-Tsakos.

The region between the Red Sea coast and the Nile north of the River Atbara is called the Eastern Desert (Barnard, 2009: 19). Flanking the Red Sea in the far east are the Red Sea Mountains with peaks more than 2200 metres above sea-level. Winter rain is still falling there, and acacia trees grow in the valleys in sufficient numbers to support nomadic people (Krzywinski and Pierce, 2001).

The desert on the western bank of the Nile is the extensive Sahara. The part of Sahara bordering the Nile in Egypt and Lower Nubia is often called the Western Desert. Today, the only sources of water in the Western Desert can be found in a few scattered oases (see **Map 3**), or through deep drilling for fossil water.

The Nile is the only river that crosses the Sahara. There are however many dry beds of rivers and streams in the desert. Some of them are remnants of water courses formed during more humid periods in the past, while others still carry water during occasional rain. Wadi (وادي) is the Arabic term for a river bed where water is flowing only during periods of rain. There are several major wadis and numerous khors along the banks of the Nile, and some of the southern wadis were seasonal or perennial tributaries in the past. Wadis were strategically important as routes to resources in the desert, but they were also used by armies or raiding parties on the move.

After the landscape has been described, it is now time to consider the climate during the Bronze Age.

Holocene climate in Eastern Sahara

The climate history of the Sahara is still not fully understood (Krzywinski, 2001: 32), but research shows that the desert has not been uniformly arid. Since the end of the last glacial period 13,000 years ago, climatic changes have had wide implications for the development of human life. This geological period is termed the *Holocene* (Greek for 'completely recent') and continues until today. The climatic zones of North Africa are distributed on a north-south axis following expansions and withdrawals of the front of monsoon rain from the south during the summer and rain brought by the mid-latitude westerlies from the north during the winter (see Hassan, 1997: 216; Hoelzmann et al., 2004: 220). During the Holocene, there were several

fluctuations in the extension of the monsoon belt, and this had great impact on vegetation and life in the Sahara.

One of the most reliable ways to study environmental changes in the past is through analyses of pollen deposited in the sediments of lakes and bogs. Fluctuations in both vegetation and climate can be reconstructed by sorting the microscopic pollen grains by species and quantities (Krzywinski, 2001: 101). Besides pollen, lake sediments can also provide other biological as well as mineralogical indicators for environmental changes (Mees et al., 1991: 227). However, the progressive desiccation of the Sahara has eliminated almost all natural pollen and sediment archives in permanent aquatic environments (Kröpelin, 2008: 765), but there are still a few lacustrine deposits in what is now arid savannah or desert. Since the monsoonal rain follows a north-south axis, it is possible to transfer the results from the deserts to the same latitude along the Nile. I will thus suggest that the climate and vegetation in localities of the same latitudes were comparable during the Bronze Age.

The studies of the sediments in Malha Crater Lake in Sudan and Lake Yoa in Chad are used for the reconstruction of the fluctuations of climate and vegetation along the Middle Nile, as these lakes are among a few sites that can document the transition from the green Sahara of the early Holocene to the desert Sahara of today. The study of pollen deposited in the paleolakes of El Atrun is limited to the early Holocene (Jahns, 1995), so this site is thus not relevant for a reconstruction of the climate during the Bronze Age. The analyses of the sediments of the paleolake at Selima Oasis provide important information for the changes of climate and vegetation in northern Sudan (Haynes et al., 1989), while pollen has not been studied from the West Nubian paleolake. For the regions situated further north than Selima Oasis, no pollen is preserved in the playa deposits (Haynes et al., 1989: 109). So, indications of past changes of vegetation patterns there have been based on studies of charcoal samples from archaeological contexts (Neumann, 1989). Finally, analyses of the pollen record in the Burullus Lagoon in the Delta have demonstrated changes in the flow of the Nile. I will review these four studies from south to north before I attempt a reconstruction of the Bronze Age climate of the Nile Valley and its fringes.

Malha Crater Lake

Malha Crater Lake (15º08' N, 26º12' E) is situated in the Meidob Hills in the province of Northern Darfur in Sudan (Mees et al., 1991: 228). The lake is thus situated some kilometres south of the latitude of the confluence of the White and the Blue Niles more than 670 kilometres further east (Google Earth). A sediment core taken from the middle of the lake represents an unbroken record of the climate in the region for the past 9000 years (Mees et al., 1991: 231-232). A layer of pyroclastic material prevented deeper boring, and a radiocarbon date of 8290 C^{14} yr BP or 7800 cal yr BCE[3] was obtained from the base of the core (Mees et al., 1991: 230). Six distinct phases of the lake were separated from one another by intervals when the climatic conditions were drier than today and in two cases the lake dried completely out (**Figure 10**). Today, Malha Crater Lake is permanent, but saline (Dumont and el Moghraby, 1993: 384). The mean precipitation in the area is 114 mm per year (Dumont and el Moghraby, 1993: 381). The paleo-limnological study demonstrates a progressive aridification since the early Holocene wet phase ended at *c*. 5800 BCE. The mid-Holocene arid phase is testified in phase II with numerous fluctuations in the lake levels as well as a marked decline of the lake level between 5800 and 5250 BCE. More humid and stable conditions returned in phase III, between 5250 and 3150 BCE (see **Figure 10**). Phase IV, from *c*. 3150 to 1200 BCE corresponds to the Bronze Age. At that time, the water in the lake was brackish, and both the beginning and the end of the Bronze Age experienced brief, intensely dry intervals (Dumont and el Moghraby, 1993: 384; see **Figure 10**). Phase V, between 1200 and 50 BCE, experienced the worst dry spell recorded (see **Figure 10**). In course of the last two thousand years,

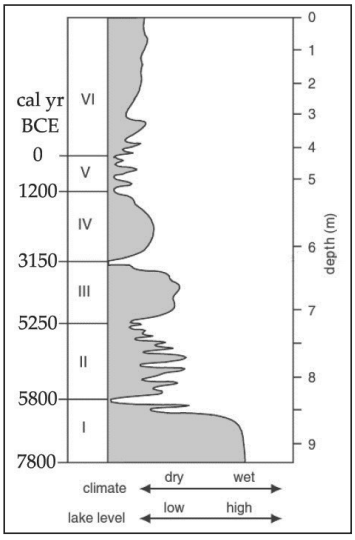


Figure 10: Reconstructed lake levels at Malha Crater Lake. After Dumont and El Moghraby (1993: fig. 3) with calibrated dates adopted from Wendorff, Karlén and Schild (2007: fig. 6.7).

[3] Calibrated dates adopted from Wendorf, Karlén and Schild (2007: fig. 6.7, 205).

represented by phase VI, the climate and lake level seem to have recovered and stabilized after the most arid conditions of the first millennium BCE (Dumont and el Moghraby, 1993: 385).

Lake Yoa

Recent research on the sediments of Lake Yoa (19.03º N, 20.31º E) in northern Chad has revealed that the establishment of today's desert ecosystem was a gradual process as a result of continuous vegetation degradation between 3600 and 700 BCE in response to decreasing rainfall (Kröpelin et al., 2008). Lake Yoa is situated on the same latitude as the modern town of New Dongola on the Middle Nile, which is located 1000 kilometres further east (Google Earth).

The first indication of a dryer climate in the region around Lake Yoa is the increase of acacia trees and other plants typical of semi-desert floras around 2600 BCE (Kröpelin et al., 2008: 7669. Nevertheless, the region was an open grass savannah with a few tropical trees (e.g. Piliostigma, Lannea and Fluggea virosa) along the banks of the wadis until around 2300 BCE. The decrease of grass pollen in the sediments dating between 2800 and 2300 BCE indicates that the grass cover became increasingly sparse or even discontinuous. From 1700 BCE there was an increasing amount of windblown sand in the lake sediments, which confirms the observation of the gradual disappearance of the grass cover. The first semi-desert plant community was established between 1900 and 1100 BCE, while the scatters of hyper-arid desert plants of today followed in 700 BCE (Kröpelin et al., 2008: 766). The combined evidence suggests that the annual rainfall of the region decreased from around 250 mm at 4000 BCE to less than 150 mm by 2300 BCE. Then a slower decrease followed until the establishment of a hyper-arid environment with less than 50 mm rain annually by 700 BCE, and these conditions have continued until today (Kröpelin et al., 2008: 768).

Selima Oasis

Today, Selima Oasis (22˚22' N, 29˚18' E) is situated in a total desert, and it is uninhabited. However, the oasis remains an important stop on the *Darb el-Arba'in* meaning 'the track of forty [days]' from Darfur in western Sudan to Assiut in Middle

Egypt (Haynes et al., 1989: 110, 112). Selima Oasis is situated *c*. 170 kilometres to the west of the Semna Gorge in the Batn el-Hajar (Google Earth). The water table at Selima is now one metre below the surface and supports only a few species of trees, scrubs and grasses (Haynes et al., 1989: 112). Analyses of an almost 4 metres deep section through laminated sediments from the main paleo-lake at Selima Oasis has provided a chronological sequence from *c*. 7700 BCE to 2100 BCE (Haynes et al., 1989: 115). The earliest date indicate the beginning of the early Holocene wet phase at Selima, which is now situated close to the core of the present hyperarid desert of eastern Sahara (Haynes et al., 1989: 109, 117). The lake appears to start declining in size from *c*. 4600 BCE, and intense evaporation after *c*. 2500 BCE led to its complete disappearance by *c*. 2100 BCE (Haynes et al., 1989: 118, 121). Unfortunately, the pollen in the sediments younger than *c*. 4200 BCE was not preserved – probably because the upper layers of the sediments had dried out completely (Haynes et al., 1989: 126, fig. 13). The pollen analysis shows that there was higher concentration of Sahelian trees and scrubs up to *c*. 5000 BCE, and then semi-desert grasses and scrubs prevailed until the pollen record was broken at *c*. 4200 (Haynes et al., 1989: 132). By the time the lake dried out around 2100 BCE, Selima would in all probability have been an oasis in a desert environment.

Burullus Lagoon

In 1974, a 27,5 metres long sediment core was taken from Burullus Lagoon (31˚23’ N, 30˚40’E) in the delta of the Nile. The results from the pollen analyses of the Holocene section of the core were recently published (Bernhardt, Horton and Stanley, 2012). The study demonstrates that changes in precipitation over the Nile’s headwaters affected both the flow of the river and the Nile delta vegetation (Bernhardt, Horton and Stanley, 2012: 616). The importance of this study for our investigation of Bronze Age climate is that two of their indicated periods of reduced flow of the Nile and decreases in pollen deposits fit with documented extreme droughts in ancient Egypt and the Middle East, i.e. at 3000 BCE and at 2200 BCE (Bernhardt, Horton and Stanley, 2012: 617).

Reconstruction of Bronze Age climate and vegetation patterns

Between 11,000 BCE and 700 BCE, the climate in Eastern Sahara oscillated between wetter and drier phases (Hassan, 1997). Rains returned around 11,000 BCE (Hassan, 1997: 216). The wetter conditions caused a greening of the desert and many lakes were created. John Sutton (1974, 1977) called the broad-spectrum resource utilization including hunting, gathering and fishing that extended into the green Sahara for the *aqualithic*. Characteristic was for instance the supra-regional pottery tradition of *dotted wavy-line* decorated pots which can be found throughout southern Sahara (Hoelzmann et al. 2001: 212). Randi Haaland (1992) has argued that the innovation of pottery was significant because the pots could be used for boiling food in order to make a wider range of foodstuff more digestible (see also R. Haaland and G. Haaland, 2013: 542). A controversial proposal by Fred Wendorf and Romauld Schild (2001: 653-658 with references) was that cattle were domesticated during the first half of the early Holocene wet phase, from *c*. 9200 to 7700 BCE, in the region of Nabta-Kiseiba in the Western Desert, *c*. 90 kilometres west-northwest of Abu Simbel in Lower Nubia (for the latest criticism of the claim of early domestic cattle in the Nabta-Kiseiba region, see di Lernia, 2013). The limited number of cattle bones found was explained by the utilization already of the renewable resources milk and blood in order to avoid slaughtering the animals to get food (Close, 1990). There have also been claims for domesticated cattle bones at two sites on the east bank of the Kerma Basin with associated dates of *c*. 7000 BCE (Honegger, 2005: 243, 247; 2010: 83), but recent faunal analyses have cast doubt on the identification of these bones as belonging to cattle (Linseele, 2012: 18). The majority of the available evidence seems to favour a later adoption of cattle herding in Sahara. Analyses of mtDNA and Y-chromosome DNA of modern cattle indicate an independent domestication of the taurine or straight-backed cattle in Southwest Asia, while there seems to be a contribution from indigenous aurochs to domesticated cattle in Africa (Gifford-Gonzales and Hanotte, 2013: 496). Recent chromatography and spectrometry analyses of pot sherds from Fezzan in Libya, which is more than 1600 kilometres west of the Nile, have demonstrated that milk was the contents of pots there from *c*. 5800 BCE (Dunne, et al. 2012). The earliest indisputable evidence for domestic cattle in the Nabta-Kiseiba

region date to about the same time (Gifford-Gonzales and Hanotte, 2013: 496). This is around the time when the early Holocene wet phase ended according to the results from Malha Crater Lake (see p. 39 above). The following global dry spell of the middle Holocene (Anderson, Maasch and Sandweiss, 2007) seems significant as a stimulus for the relatively rapid movement of herders with domestic cattle from Sinai and the Levant into Northeast Africa (di Lernia, 2013: 534).

The so-called mid-Holocene arid phase lasted between *c*. 5800 and 5250 BCE, according to the indications of phase II from Malha Crater Lake (see the section *Malha Crater Lake* above; see also Wendorf, Karlén and Schild, 2007: 218). This seems to be the time when cattle pastoralists became established in Sahara (A.B. Smith, 2005: 91) – probably since environmental deterioration forced the abandonment of a broad-spectrum utilization to a reliance on animal herding. The dates of domestic animals are earliest in the north-eastern part of Sahara and then spread westwards and southwards (Gifford-Gonzales, 2005: 201). The rapid dispersal was facilitated by mobility – a key strategy for pastoralists coping with resource uncertainties (di Lernia, 2013: 535).

The playas in the northern oases of Egypt dried up around 5000 BCE (Nicoll, 2004: 568), and present desert flora was established there by 4000 BCE (Nicoll, 2004: 569). The middle Holocene dry spell thus appears to have made the Western Desert of Egypt less habitable for people, and the Nile Valley became a zone of refuge (Midant-Reynes, 2000b: 90). As a consequence, cattle herders with a comparable focus on body decoration in form of cosmetic application of pigments (see the section *Cultural and social significance of cosmetic palettes* in Chapter 8), combs, bangles and complex bead repertoires became established from Matmar in Upper Egypt to the confluence of the White and Blue Niles in Central Sudan during the 5th millennium BCE (Wengrow et al. 2014: 98 & fig. 2). The practices of burying the deceased in cemeteries became a distinctive feature. The frequent location of cemeteries on prominent places in the landscape suggests that new forms of territoriality emerged (Wengrow et al. 2014: 102). In contrast to the developmental sequence in the Fertile Crescent (Marshall and Hildebrand, 2002: 100), sustained efforts of cereal farming and investments in sedentary life were only adopted at the beginning of the 4th millennium BCE (Wengrow et al. 2014: 102-103).

As a result of a renewed expansion of monsoonal rain towards the north in the southern parts of the Sahara, a new humid phase lasted from *c*. 5250 to *c*. 3500 BCE, (Bernhardt, Horton and Stanley, 2012: 617) – roughly corresponding to phase III at Malha Crater Lake (see **Figure 10**). From *c*. 4000 BCE, a developed pastoral lifestyle was practiced by the inhabitants in Wadi Howar and along the banks of the Western Nubian Paleolake, and it is probable that the new way of life was transmitted through contact with pastoralists from the Nile Valley (Hoelzmann et al. 2001: 211, fig.11).

The intensely dry interval at the beginning of the Bronze Age at *c*. 3150 BCE, which was recorded at Malha Crater Lake (see **Figure 10**), has recently been confirmed by the sediment core taken from Burullus Lagoon as a drought around 3000 BCE (Bernhardt, Horton and Stanley, 2012). Furthermore, the timing of this dry spell coincides with the unification of Egypt, which appears to be a period of intensive warfare (see the section *The rise of the united kingdom of ancient Egypt* in Chapter 4 below).

The gradual desiccation of the green Sahara of the early Holocene naturally affected human life in the region. At Selima, the tree cover declined from *c*. 5000 and the lake levels fell from *c*. 4600 (see p. 41. above) suggesting that the monsoonal rain started to shift southwards. This affected the vegetation over eastern Sahara, the lakes fed by rain-water in the region of Nabta Playa in the Western Desert dried out to become playas (dry lake bed in a desert basin) and the flow of the Nile decreased (Bernhardt, Horton and Stanley, 2012: 617). The case-studies presented here show that the desiccation happened earlier in the north than in the south in response to the gradual shift southwards of monsoonal rain (see also Hoelzmann et al. 2004: 230). Hyper-aridity set in at Nabta Playa around 3000 BCE (Wendorf, Karlén and Schild, 2007: 220) and at Selima between 2500 and 2100 BCE (see p. 41 above). At Lake Yoa, the grass cover became increasingly sparse since *c*. 2800 BCE, and it had disappeared completely around 1700 BCE (see p. 40 above). The West Nubian Paleolake had completely dried out by 2000 BCE (Hoelzmann et al. 2001: 207, fig. 11). Both the Butana and the Bayuda would have received more water during the Bronze Age than the regions further north. According to the pollen record of Burullus Lagoon there were low Nile floods around 2200 BCE, and this coincides with recorded

draughts and the outbreak of civil war in Egypt during the First Intermediate Period. The middle Holocene ended around 1200 BCE with the dry spell at the transition between phase IV and V in Malha Crater Lake (see Wendorf, Karlén and Schild, 2007: 204, fig. 6.7), and the close of the epoch called the Bronze Age at the same time is probably not a mere coincidence.

This reconstruction of the climate in eastern Sahara during the early and middle Holocene demonstrates that it was during the Bronze Age that the regions bordering the Middle Nile experienced an increasingly drier climate and the disappearance of the vegetation cover with the gradual retreat of monsoonal rain towards the south. The climatic changes, particularly the desiccation of the desert, naturally instigated population movements, which always include a potential for violent conflicts and wars. This brings us to the concluding section of this chapter, which discusses how the landscape and climate influenced warfare practices and causes for war.

Landscape, climate and warfare in the Nile Valley

First of all, climatic deterioration is often linked with war (see the section *Ecological approaches* in Chapter 6). When food and water resources become depleted in the event of draughts, extreme floods and colder weather, people may be forced to either fight over the resources in their area or to expand into a neighbouring area followed by conflict over resources between the newcomers and the original inhabitants (cf. Chapman, 1999: 140). Second, in war, both landscape and climate influence decisions of what to protect and what to attack, as well as when and how to do it (Hill and Wileman, 2002: 14). The availability of natural resources contributes to the choices of weapons, armours and fortifications that are possible to use. The landscape and vegetation influence transport and supply possibilities, and thus the numbers of fighting men and their range. Seasonality determines when it is most suitable to make a military campaign. Landscape forms will also provide locations suitable for defences and fortifications as well as for battlegrounds or guerrilla attacks. Along the Nile, military operations across the river would have necessitated a small fleet of wooden boats that could land the warriors and maintain communications and supplies throughout the duration of fighting (Gilbert, 2004: 29).

Let us now see how the landscape and climate of the Nile Valley could influence warfare practices in both Lower Nubia and Egypt from a general point of view.

The Middle Nile

Since the middle Holocene, the increasingly dry conditions in the lands bordering Lower Nubia were creating barriers between regions, because the open grasslands disappeared and the deserts were becoming increasingly difficult to cross. This encouraged people to settle near the Nile (Edwards, 2004: 40). From an archaeological perspective, it has already been demonstrated that this caused less contact between people and increasing cultural diversity – e.g. the regional development of Laqiya and Leiterband style decorated pottery in the region of Wadi Howar and the West Nubian Paleolake (Hoelzmann et al. 2001: 212; R. Haaland and G. Haaland, 2013: 542). Another expected outcome of direct relevance to the topic of this thesis would be higher population densities in smaller areas and more competition for food and other resources, which could increase the incidents of violent conflict and war.

The different regions of the Middle Nile were, as we have seen, separated by stretches of cataracts. These regions were less fertile due to the rocky banks, but such inaccessible regions seem to have acted as refuges during periods of unrest. The cataracts were also obstacles for movement on the river as well as on the banks, and this would have seriously limited the range of warriors. The cataracts furthermore acted as barriers that to some extent sheltered the regions beyond them from invasions. However, the many bends of the river made it possible to make short-cuts through the desert, which was also utilized by armies. One of the examples of this in the history of conquering the Middle Nile was the railway that Kitchener built through the Eastern Desert from Wadi Halfa to Abu Hamed in the late 19th century (Churchill, 1899: 141, 146).

There are sources of copper in the deserts bordering the Middle Nile, but it is uncertain if they were utilized by the indigenous people (see the section *The inclusion of the Middle Nile region in the Bronze Age world* in Chapter 4). Hard stone for

making weapons such as arrowheads, mace-heads and axe-heads was readily available along the Middle Nile, but there were no sources of good flint. Permanent fortifications could be built both from mud brick and from stone, but this was rarely done by indigenous people during the Bronze Age. The people of the Middle Nile probably used perishable materials to build enclosures for themselves and their animals from both predators and potential enemies (Williams, 2000: 7). Even ephemeral camp sites may have been protected by enclosures made of thorns and shrubs (Hafsaas, 2006: 61). The more permanent settlements would probably have been protected by palisades, which would leave only postholes in the archaeological record. However, postholes from palisades have been uncovered through meticulous excavations of a late 4th millennium BCE settlement at Kerma in Upper Nubia (Honegger, 2004a: 65).

Central Sudan still benefitted from generous summer rains, so this region had more substantial populations of pastoral nomads in the savannah hinterlands throughout the Bronze Age. In order for central authority to command trade routes and secure an influx of raw materials to Upper Nubia, the pastoralists of the hinterlands had to be controlled either through military force or through alliances (see Trigger, 1985: 470; Hafsaas-Tsakos, 2009b: 66). Nevertheless, the greatest military threat for the communities of the Middle Nile during the Bronze Age was always the Egyptians – their more advanced neighbours in the north. This changed fundamentally during the Iron Age, when the first state in the Middle Nile challenged and conquered Egypt – but that is a different history…

Egypt

The characteristic geography and climate of Egypt also shaped the military history of this ancient state on the Nile. In the Bronze Age, the Nile Valley of Egypt was surrounded by desert and ocean like today, and these uninhabitable borderlands contributed to forming a coherent region that was relatively easy to defend from outside conquerors (Hamblin, 2006: 308). However, the inhabitable area of Egypt was confined to the Nile Valley with limited possibilities for lateral expansion since the territory bordering the Nile was desert.

The natural border of Egypt in the north was the Mediterranean Sea. While seaborne trade was established shortly after 3000 BCE (Bard, 2000: 77-78), the earliest military invasions from this direction were the legendary Sea Peoples in 1190 BCE (Hamblin, 2006: 309). These attacks took place at the beginning of the Iron Age, and they are thus outside the scope of this thesis. The deserts to the east and west of the Nile Valley were inhabited by nomadic peoples throughout the long history of Egypt. The low population density of these groups usually prevented them from raising military forces strong enough to pose a threat to Egypt, although they harmed local communities through raiding and plundering (Hamblin, 2006: 308-309). During the Bronze Age, the only external military threats to Egypt were thus coming from the north-east, where Sinai provided a land bridge to Palestine, and from the south, where the Middle Nile provided a fertile passage to Sub-Saharan Africa. The last threat to Egyptian unity was internal wars causing political fragmentation and rivalry between petty states.

The Nile valley of Egypt was not rich in natural resources beside fertile soil, but most materials needed for warfare during the Bronze Age could be procured in the Nile Valley itself or in the neighbouring deserts. Where the bedrock consisted of limestone between Esna and Cairo, chert and flint were readily available for making weapons and tools such as arrowheads, daggers, knives, scrapers and sickle blades (Aston, Harrell and Shaw, 2000: 28-29). Reeds for making arrow-hafts were available along the river. Hard stone was quarried in the deserts, and copper and gold were mined in the Eastern Desert. One of the functions of gold was as payment for mercenaries (Williams, 1999: 437). The increasing sedentary populations including wealthy elites, led to the need for fortifications. The fortresses were made of mud brick, and the raw materials for their construction could be found anywhere on the floodplain. The personnel for building the fortifications were probably farmers enrolled for forced labour during seasons of less work in the agriculture. The long fallow period of the agricultural cycle allowed for recruiting farmers into the army, and mercenaries from various neighbouring groups were probably employed from the beginning of the Egyptian state.

The Nile in Egypt could be used for relatively rapid transport and supply needs, since an army in a couple of days could be transported from one end of the country to the other, and supplies could be transported to where they were needed. The deserts also provided easy surfaces for overland transport, although logistics would have been a challenge.

* * *

The scene for the historical narrative has now been set through a thorough description of the landscape of the riverine parts of Sudan and Egypt as well as a reconstruction of the climate history in the region. Let us move on to the actors and their time-frames.

Chapter 3: People and chronology

Since war is a violent aspect that can develop in the relationship between political communities, warfare cannot be satisfactorily studied by focussing on only one community (see the definition of war on pp. 5-6 above). I argue that the political communities in the case-study of this thesis were identical with ethnic groups (see the section *Ethnicity* in Chapter 4 for the theoretical approach and Chapter 8 for discussion of ethnicity in Lower Nubia during the 4th millennium BCE). In order to present a narrative of war in the Nile Valley at the beginning of the Bronze Age, the actors on the historical scene and the agents behind the archaeological record have to be identified and defined. Several distinct cultural assemblages from the Bronze Age have been uncovered in the Nile Valley, so the region must have been inhabited by a plurality of ethnic groups at that time (see Hafsaas, 2006: 4-6). The warfare perspective is a new approach to the culture history of Lower Nubia in the 4th millennium BCE, so I will therefore mainly concentrate on violence between different ethnic groups, as this is easier to identify in both the archaeological and written records than intertribal feuds or civil war.

The Egyptians of the Bronze Age are manifested through written records and material culture as an ethnic group since the unification of the land under one ruler around 3100 BCE. Before the unification, Egypt consisted of several different territories, which were inhabited by people with regional identities (e.g. Köhler, 2008: 523). In the period before the political unification, the material culture of the people in the Egyptian Nile Valley was becoming increasingly more homogenous (Friedman, 1994: 907, 924).

Although ancient Egypt was one of the most powerful and advanced centres of the Bronze Age world, my approach will be from the geographical perspective of its southern frontier. The so-called A-Group people of Lower Nubia will thus play the leading role in this narrative, while the Egyptians will be the supporting actors. The Egyptians will however play an important part since they were the main enemies of the A-Group people.

In this chapter, we will contextualize the A-Group people – the earliest participants from the Middle Nile in the Bronze Age world. I first describe the

background for the archaeological work undertaken on 4th millennium BCE remains along the Middle Nile; then I present the ethnic groups inhabiting Upper Egypt and Lower Nubia during this period; and finally I discuss the chronology of the 4th millennium BCE for Upper Egypt and Lower Nubia.

Uncovering the 4th millennium BCE remains in Lower Nubia

Systematic archaeological exploration of the land upstream from the First Cataract of the Nile was undertaken for the first time between 1907 and 1911 in the advent of the raising of the height of the Aswan Dam in Egypt (W.Y. Adams, 2007: 48). The dam was originally built between 1898 and 1902 by British colonialists, and subsequently heightened twice – in 1912 and 1933 (Waterbury, 1979: 33). The first raising of the dam flooded the riverine parts of Lower Nubia for a distance of about 150 kilometres between Shellal and Wadi es-Sebua (Emery, 1965: 20).

On the orders of the Director-General of the Antiquities Department of Egypt, Gaston Maspero, the first survey of Lower Nubia was undertaken in 1905 and 1906 by the Chief Inspector of Antiquities for Upper Egypt, Arthur E. P. B Weigall. The aims were to estimate the salvage work needed in the area to be flooded, to give a statement on the conditions of all the monuments of Lower Nubia, as well as to encourage more scientific work in Lower Nubia (Weigall, 1907: 1). Weigall concluded that there were no antiquities in all of Egypt in such a state of urgent attention and protection as the monuments of Lower Nubia (Weigall, 1907: 3).

Weigall's report of the conditions of the antiquities of Lower Nubia was presented to the hydrologic engineer in charge of heightening the dam, Sir William Garstin. This resulted in a large sum of money being provided for an archaeological survey and salvage excavations (Weigall, 1907: v-vi), called the *Archaeological Survey of Nubia*. It consisted of two separate projects. The first was placed under the Department of Antiquities and directed by Maspero himself. It consisted of the consolidation and recording of the major temples. The second project was placed under the Survey Department and directed by Sir Henry Lyons. It aimed at recording cemeteries and other archaeological sites (Trigger, 1965: 37). It is the latter project that is of interest for this study.

The first archaeological excavations in Lower Nubia were undertaken by John Garstang at Koshtemna in 1906 (Weigall, 1907: 84). He mainly worked on one of the oldest cemeteries recorded by Weigall (Weigall, 1907: 29). It was an A-Group cemetery, but it has remained unpublished.

Before the first raising of the Aswan Dam was completed in 1912, the threatened area between Shellal and Wadi es-Sebua was explored systematically between 1907 and 1911 (Reisner 1910; Firth 1912, 1915, 1927). This work laid the foundation for the study of Lower Nubian history and its cultural phases (see the section *The Bronze Age People of Lower Nubia* below). More than 40 cemeteries dating to the 4th millennium BCE were recorded or excavated.

After the northern part of Lower Nubia was flooded, four archaeological expeditions excavated 4th millennium sites between 1910 and 1920. The *Oxford Excavations in Nubia* led by Francis Ll. Griffith (1921) excavated half of a large A-Group cemetery at Faras between 1910 and 1912. In the winter of 1910-1911, German Egyptologist Hermann Junker (1919) of the Vienna Academy of Science excavated some cemeteries at Kubaniya, just north of the First Cataract in Egypt, which he claimed were more closely affiliated with the cultures of Lower Nubia than Upper Egypt. In 1912 and 1914, the German *Ernst von Siegelin Expedition* under the direction of Georg Steindorff (1935) excavated a small A-Group cemetery at Aniba. In the winter of 1915-1916, Oric Bates and Dows Dunham of Boston Museum of Fine Arts excavated several A-Group cemeteries at Gemai in the Second Cataract.

The Aswan Dam was heightened again in 1933. As a result, the second *Archaeological Survey of Nubia* investigated the threatened area between Wadi es-Sebua and Adindan in the seasons between 1929 and 1934. The British archaeologists Walter Brian Emery and Sir Laurence P. Kirwan led the survey assisted by young Egyptian archaeologists (Emery and Kirwan, 1935). The second mission recorded 14 A-Group sites of which only five were excavated. On this limited basis, they made few additions to the picture already established of the 4th millennium BCE in Lower Nubia (Emery, 1965: 54).

During the two rounds of the Archaeological Survey of Nubia, the archaeologists in charge were coming from Great Britain and the United States:

Reisner, Firth, Emery and Kirwan. This changed with the building of the Aswan High Dam. In the mid-1950s, the Egyptians had a complicated relationship with both the British and the Americans over the funding of the Aswan High Dam (see Waterbury, 1979: 104-107). They thus considered *United Nations Educational, Scientific, and Cultural Organization* (UNESCO) as a viable international alternative for organizing the archaeological salvage campaign (Hassan, 2007: 79). UNESCO accepted the challenge and thus coordinated the world's largest international operation in order to rescue the cultural heritage to be flooded on both the Egyptian and the Sudanese sides of the border (W.Y. Adams, 1968: 110; Säve-Söderbergh, 1987: 64-97).

Lower Nubia in the 4th millennium BCE

Inherent in a specific environment are diverse opportunities and constraints for human life. In the past, the combination of landscape and climatic conditions shaped subsistence patterns and settlement distributions, and different adaptations to the environment contributed to shaping different ethnic identities as well as the relationships between peoples with different ethnicities. Ethnic diversity is often used as a reasonable explanation for wars (Haas, 1999: 12), so it is important to have identified the ethnic groups of the time and region that are under consideration in a study of warfare (see *Chapter 8*).

During the 20th century, Lower Nubia was inhabited by Nubians – an ethnic group with its own language – Nubian, or Rotana as it is called by the surrounding Arabic-speakers (Tsakos, 2012: 259). This is probably the reason why the archaeologists investigating Lower Nubia expected to find the remains there from a different ethnic group than the ancient Egyptians. This chapter will thus bring people into the landscape described in Chapter 2.

The following review will explain how the cultural assemblages of the 4th millennium BCE in Lower Nubia were identified and defined during the Archaeological Survey of Nubia between 1907 and 1911, and how the knowledge of these assemblages and the history of the people who made them have expanded over the following century.

The first season of the Archaeological Survey of Nubia was directed by the renowned American archaeologist George Andrew Reisner, then assistant professor at Harvard University. According to Reisner (1908: 9), the aims of the archaeological salvage campaign were to throw light on:

> *the successive races and racial mixtures, the extent of the population in different periods, the economical basis of the existence of these populations, the character of their industrial products, and the source and the degree of their civilization.*

Reisner continued by stating that the Egyptian civilization developed rapidly due to the invention of copper implements and the use of these in the exploitation of the natural resources, while the peoples living further south failed to keep pace because of the natural poverty of their country (Reisner, 1908: 9). I will return to the introduction of copper to the people living in the Nile Valley in Chapter 4.

The archaeological exploration started in the First Cataract at the northern end of the survey area, where eleven cemeteries of various periods were discovered in a few days. The burial ground of interest for the classification of the 4th millennium BCE remains in Lower Nubia is Cemetery 7 at Shellal. It was located on a wide plain surrounded by low mountains of granite boulders (**Figure 11**). Today, the lower part of the plain is flooded by the lake between the old Aswan Dam and the Aswan High Dam. Reisner's excavations revealed that the plain contained thousands of graves and had been used as a burial ground from the 4th millennium BCE throughout the next five millennia down to the Muslim graves of the early 20th century. The material uncovered from the excavated graves was very important at the initial stage of the survey as it enabled Reisner to split the culture history of Lower Nubia into archaeological groups based on a relative chronology (Reisner, 1908: 17). His principle for establishing the groups was that "*small uniform groups of similar graves may be considered to be of one community and one date, unless direct evidence*

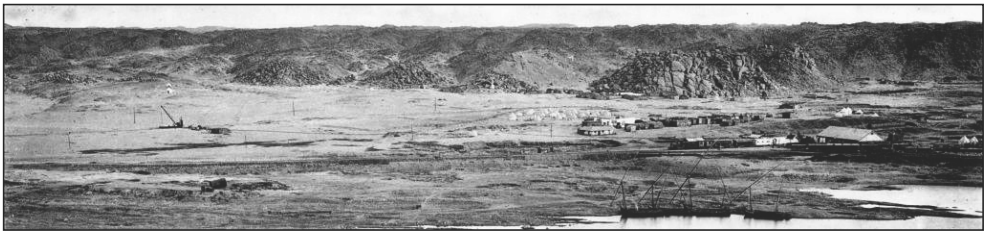


Figure 11: The plain at Shellal with the train station. Photo from Reisner (1910: plate 1a).

appears to the contrary" (Reisner, 1910: 42). Before Reisner was certain about the absolute dates of the different archaeological assemblages, he gave the different groups the letters A, B, C, D and E, in order to indicate the relative chronological position. After excavating Cemetery 15, which Reisner identified as much later in date than the other groups, X was added since he could not know how much time had elapsed since Group E (Reisner, 1909: 5).

The three earliest assemblages, the so-called A-Group, B-Group and C-Group, have since been used as the terms for the indigenous populations inhabiting Lower Nubia during the Bronze Age. The A-Group was considered as contemporary with the Predynastic and Early Dynastic era in Egypt (Firth, 1912: 54), the few Egyptian imports in some late B-Group graves were dated by Reisner from the Second to the Sixth Dynasty (Reisner, 1908: 18), and the C-Group graves were dated from the Seventh to the Sixteenth Dynasty in Egypt (Reisner, 1910: 5).

After the first season, Reisner was awarded a more prestigious position in excavations in Palestine, and his former assistant, Cecil Mallaby Firth, succeeded him as director of the Archaeological Survey of Nubia for the next three seasons. Firth continued the classificatory work started by Reisner.

In the next sections, I will first reconsider the classification made by Reisner and Firth of the 4th millennium BCE remains with a century of accumulated knowledge about material culture and burial traditions along the Middle Nile, as well as more refined anthropological and archaeological perspectives on ethnicity. Then I will briefly describe the Abkan and the Pre-Kerma peoples – possible predecessors and successors of the A-Group people.

The A-Group people

The thirteen cemeteries dating to the 4th millennium BCE that were excavated under Reisner's direction between Shellal and Metardul in 1907-1908 are conventionally accorded to the A-Group people by Nubiologists. The Egyptian settlement Abu on Elephantine Island was established in the mid-4th millennium BCE (Raue, 2002: 20). So, the location of Cemetery 7 within the First Cataract and only ten kilometres south of Elephantine Island thus appears unsuitable for establishing a

culture history for Lower Nubia. It seems that the majority of the 4th millennium BCE cemeteries in northern Lower Nubia instead belonged to the Upper Egyptian Naqada culture (see *Chapters 8, 9 and 10* for a full discussion). This was in fact recognized by Reisner, for in his final report, he avoided the term A-Group and used instead the Egyptian chronological terms Predynastic and Early Dynastic (Reisner, 1910: 314). Furthermore, he concluded with the general statement: "*Nubia and Egypt were during the Predynastic period culturally and racially one district*" (Reisner, 1910: 347).

The following season in 1908-1909, Firth (1912) excavated nine similar cemeteries between Sharaf el Din Togog and Koshtemna. Firth maintained Reisner's position that during the Predynastic period: "*Nubia was occupied by the Egyptian race with the same culture as the Egyptians of the same period in Egypt*" (Firth, 1912: 2). In his opinion, Nubia was still occupied by Egyptians during the following Early Dynastic Period, but they were "*hardly keeping pace with the Egyptian culture of Egypt*" (Firth, 1912: 2). It was the remains of these degenerated Egyptians that Firth ascribed to the A-Group. In the next two seasons, Firth (1915, 1927) excavated another twenty cemeteries dating to the 4th millennium BCE.

In 1910-1911, Junker excavated several cemeteries at Kubaniya on the west bank of the Nile about 10 kilometres north of the First Cataract. Before he started the excavations at Kubaniya, Junker had consulted the final publication of the season of fieldwork undertaken by Reisner and the preliminary report of the following two seasons by Firth. When Junker published his investigations in 1919, he had also access to the final publications of two of the three fieldwork seasons by Firth (H.S. Smith, 1991: 94). Junker (1919: 3) argued that there were features of the material culture at Kubaniya that distinguished it from contemporary Egyptian sites. He thus assigned the central part of the cemetery to the A-Group (Junker, 1919: 6), and some clusters of peripheral graves to the B-Group (Junker, 1919: 15). Junker concluded that the population south of Gebel es-Silsila was culturally distinct from the rest of Upper Egypt (Junker, 1919: 2).

Maria Carmela Gatto and Serena Giuliani (2006-2007: 121) have recently undertaken surveys in the 40 kilometres long stretch of the Nile Valley between the First Cataract and Kom Ombo, which is further downstream, with the aim of testing

Junker's hypothesis that "*the region of the First Cataract was never a real borderline between Nubia and Egypt*". They claim that the majority of the sites in this region, spanning from the Middle Palaeolithic to the Islamic period, were *"related to a stable and long-term Nubian presence in the area*" (Gatto and Giuliani, 2006-2007: 121). Gebel es-Silsila (see p. 33 above) located *c*. 20 kilometres further downstream may thus have been a physical border that was also used as a cultural boundary, although I reach a different conclusion after a comprehensive analysis of the archaeological data between the First Cataract and Bab el-Kalabsha located *c*. 70 kilometres further upstream (see *Chapters 8, 9, 10 and 11*).

Between the first and second campaigns of the Archaeological Survey of Nubia, excavators of A-Group sites at Faras and Aniba in southern Lower Nubia expanded on the opinions of Reisner and Firth and proposed that the Predynastic sites in Lower Nubia were colonies established by the Egyptians in order to secure raw materials from central Africa (Griffith, 1921: 3; Steindorff, 1935: 2).

When the old Aswan Dam was heightened again in the 1930s, Emery and Kirwan continued the survey of Lower Nubia by working in the threatened area between Wadi es-Sebua and Adindan. In accordance with Firth, they assigned the term A-Group to the archaeological material contemporary with the First and Second Dynasties in Egypt. They wrote about the A-Group graves that: "*Not only culturally but physically the people of these cemeteries are unmistakably Egyptian*" (Emery and Kirwan, 1935: 1), although they noticed "*a peculiarly fine variety of Nubian painted pottery*" that showed "*a certain degree of native culture*" (Emery and Kirwan, 1935: 1). Emery and Kirwan concluded their work on the inhabitants of Lower Nubia during the 4th millennium BCE that it "*in no way alters or adds to the conclusions set forth by the previous excavators*" (Emery and Kirwan, 1935: 1). Emery (1965: 123-124) maintained this standpoint in his later review of the culture history of Lower Nubia.

It was Arkell (1961 [1955]: 37) who first emphasized that the A-Group was a people, or an ethnic group as he might have phrased it today (see the section *Ethnic groups and identities* in Chapter 4). Furthermore, he linked the pottery tradition of the A-Group people with the south and acknowledged the import of copper implements from Egypt. Nevertheless, Arkell maintained the view that the cemeteries between the

First Cataract and Dakka dating to the 4th millennium BCE were Egyptian (1961 [1955]: 37), which is almost the same as the conclusions reached in this thesis (see *Chapter 10*). In a historical overview of the doomed monuments of Nubia in front of the flooding by the reservoir of the Aswan High Dam, Walter A. Fairservis (1962: 81) suggested that the A-Group sites were made by Egyptians settling in Lower Nubia in order to escape the wars preceding the unification of Egypt. This is an exceptional statement connecting the 4th millennium BCE sites in Lower Nubia with warfare.

During the archaeological salvage campaigns of the 1960s, numerous cemeteries and also some habitation sites accorded to the A-Group people were excavated in the southern part of Lower Nubia before the whole region was irreversibly flooded by the reservoir of the Aswan High Dam in 1971 (see Appendix 1). Several prominent archaeologists made their doctoral theses on the material from Lower Nubia. One of them was the distinguished Canadian archaeologist, the late Bruce Trigger, with his thesis on *History and settlement in Lower Nubia* (1965). Trigger acknowledged that the site at Khor Bahan was of Egyptian Predynastic origin. He thus suggested that more than one ethnic group was living in Lower Nubia during the early 4th millennium BCE, since a different archaeological assemblage was uncovered in the region of the Second Cataract (Trigger, 1965: 68-70), the so-called Abkan culture (Trigger, 1976: 32). A decade later, Trigger (Trigger, 1976: 32) described the cemetery at Khor Bahan as the earliest A-Group site, which was the prototype of similar and slightly later sites that had been found all over Lower Nubia. Trigger had then become influenced by the Swedish archaeologist Hans-Åke Nordström, who had made the first comprehensive analysis of the A-Group people.

Nordström was one of the pioneers of the UNESCO campaign of the 1960s. He first arrived in Sudan in 1960 as a UNESCO programme assistant attached to the Sudan Antiquities Service (Nordström, 2006). He conducted a survey of the west bank between Gemai at the northern end of the Second Cataract and Dal at the southern end of the Batn el-Hajar together with the British archaeologist Anthony Mills. After concluding the fieldwork, Nordström was active in the publication of the results of the Scandinavian Joint Expedition. He then moved on to an academic position with little time for his archaeological passion, the A-Group people. Only when he retired was he

again able to devote his research to the salvaged remains of the Aswan campaign, where his main task has been the final publication of the prehistoric sites from the west bank survey (Nordström, 2014). Nordström's point of departure was processual with a strong focus on the "*socio-economic structure*" (Nordström, 1972: 18). He accepted Junker's (1919) proposition that the border between Egypt and Lower Nubia was at Gebel el-Silsila (Nordström, 1972: 25). Nordström therefore considered it likely that the people responsible for the Khor Bahan cemetery were of local origin and ethnically distinct from the Egyptians (Nordström, 1972: 28). In recent decades, Nordström has published several articles on the A-Group people focussing on gender and social stratification within a more postprocessual perspective (see Nordström, 1996; 2001; 2004a; 2004b). However, he has maintained an autonomous perspective on the people of Lower Nubia during the 4th millennium BCE, and he still considers these people as belonging to a single ethnic group – the A-Group.

Another important person for the interpretation of the A-Group people is the American Egyptologist Bruce B. Williams. He published the results from the excavations of the most intriguing A-Group site – namely Cemetery L at Qustul (Williams, 1986). The burials at Cemetery L were unusually large and richly equipped. Among the unique objects found there was an incense burner with many motifs of Egyptian royal iconography (see pp. 353-354 below). On the basis of a controversially early dating of the site, Williams (1986: 163-190, 1987) argued that the origin of Egyptian kingship should be sought among the A-Group elite. Although this theory has proved doubtful (cf. W.Y. Adams, 1985; Baines, 1995: 104-105), Williams demonstrated that Cemetery L was a burial ground for A-Group chieftains who had adopted much of the royal ideology from their Upper Egyptian counterparts (Wilkinson, 1999: 39).

In the last decade, the most active researcher focussing on the A-Group people has been the Italian archaeologist Maria Carmela Gatto. She has not only reviewed earlier material, but also undertaken archaeological surveys and excavations in the region bordering Lower Nubia in the north as well as participated in other archaeological missions with the aim of uncovering A-Group remains.

The most recent contribution to the study of the A-Group is by the Australian Egyptologist Jane Roy (2011) with a book on the politics of trade between Egypt and Lower Nubia during the 4th millennium BCE.

Nevertheless, the processes of the gradual appearance and the sudden disappearance of the A-Group people in the archaeological record are still not fully understood, despite that the archaeological salvage campaigns have ensured that Lower Nubia was thoroughly surveyed with a high percentage of the recorded sites being excavated, and archaeologists have undertaken specialized studies or syntheses of the 4th millennium BCE remains (e.g. Trigger, 1965; Nordström, 1972; Williams, 1986; H.S. Smith, 1991; O'Connor, 1993; Rampersad, 2000; Takamiya, 2004; Gatto, 2006a; Hafsaas-Tsakos, 2009a; Roy, 2011; Stevenson, 2012 to mention some of the most central contributions). The main topics of research have been pottery production and trade, while subsistence patterns, ethnic identity, political organization and religious beliefs have not been satisfactorily clarified. Furthermore, instances of violence or warfare have largely been ignored for the A-Group people. The warfare perspective employed in this thesis will throw new light upon both the appearance and disappearance of the A-Group people in the archaeological record.

After this discussion of the A-Group, let us continue with Reisner's B-Group and the question of whether this assemblage is earlier or later in time than the A-Group.

The B-Group

Reisner noticed ten distinctive categories of graves in eight cemeteries in northern Lower Nubia. He assigned these graves to the B-Group and argued that these graves were "*immediately after the Early Dynastic graves in date*" (Reisner, 1910: 332), i.e. contemporary with the Old Kingdom in Egypt. Firth also noted B-Group graves scattered "*in patches at the edge of larger and earlier cemeteries, or in small isolated groups*" (Firth, 1912: 13). The main characteristics of these graves were the almost complete absence of pottery, the body lying on and covered with goatskins, and a limited range of grave goods consisting of a few beads, shell bracelets, a pebble palette and a little malachite (Firth, 1912: 12).

Based on his work at Kubaniya, Junker (1919: 26) was the first archaeologist to question the date of the B-Group, and he was inclined to put the B-Group graves earlier than the A-Group in the chronological sequence. Griffith (1921: 12), who worked in southern Lower Nubia, in contrast remarked that he recognized no trace of the B-Group during his work at Faras. In the publication of the Bronze Age sites at Aniba, Steindorff (1935: 5) included the B-Group in his chronological overview of Lower Nubia, but also he had found no trace of this phase himself. Emery and Kirwan (1935: 2) noted that the B-Group sites were "*few and extremely poor in archaeological material*". In his general overview of settlement in Lower Nubia, Trigger (1965: 45) incorporated the B-Group and Old Kingdom remains into his Early Nubian sequence as phase III. Although Trigger admitted that Junker was partly correct in suggesting that the phase belonged with the earliest phases, he argued that "*the existence of the phase and its general characteristics are established beyond question*" (Trigger, 1965: 78).

When the Aswan High Dam campaign started in the southern part of Lower Nubia during the 1960s, almost no B-Group sites and remains were recorded. However, during the investigations of the Early Dynastic and Old Kingdom strata at the Egyptian fortress of Buhen, Emery (1965: 111, 113, 114) argued that *c*. 5 per cent of the pot sherds uncovered were of A-Group and B-Group types while the majority of the sherds were Egyptian.

In a thorough work reviewing all B-Group sites, the British Egyptologist Harry S. Smith (1966) cancelled the B-Group, leaving a chronological gap in the habitation of Lower Nubia from *c*. 3000 to 2500 BCE. He argued instead, like Junker, that the so-called B-Group graves were often the earliest A-Group graves, and that this point was missed by Reisner because of the lack of Egyptian imports in these graves. Furthermore, it appears that Reisner throughout his work was strongly influenced by the degenerationism that was still lurking in the wake of evolutionary perspectives on human culture, and he often tended to favour devolution over evolution when he established the chronological sequence for an area (e.g. when he worked out the chronology of the later Kerma culture of Upper Nubia).

In the same volume as Smith's invalidation of the B-Group also appeared an article by Nordström (1966), who suggested a direct transition from the A-Group to the C-Group. This proposal was based on fieldwork in Batn el-Hajar, and Nordström formed a hypothesis about a continuous influx of people from the south. The works of Smith and Nordström refuted the existence of the B-Group, and a hiatus of habitation of local people for more than 500 years in Lower Nubia was accepted by the majority of Nubiologists.

The B-Group recorded by Reisner (1910), Firth (1912), and Emery and Kirwan (1935) has turned out to be a complex and diverse group. The B-Group sites of relevance for this study are the ten groups of B-Group graves uncovered by Reisner in northern Lower Nubia (**Table 1**). Five of these sites can now be assigned to the earliest A-Group habitation in the area (see *Chapter 9*). Of the remaining B-Group sites, two appear to date between the A-Group and the C-Group habitations, two are indeterminable when it comes to assigning both a chronological phase and a cultural affiliation, and one cemetery is mainly belonging to the C-Group (see **Table 1**). Firth appears to have been uncertain about Reisner's B-Group, and he thus assigned to the B-Group both A-Group graves without Naqada imports as well as uncharacteristic graves in C-Group cemeteries (see H.S. Smith, 1966: 95-96).

In recent decades, the gap in the habitation record of Lower Nubia following the cancellation of the B-Group has been questioned. The first to question the hiatus was Williams (1989: 121-133), who noted that there were several graves in Lower Nubia that could only be dated to the period between the A-Group and the C-Group people. The French archaeologist Brigitte Gratien (1995) has argued that the B-Group existed on the basis of indigenous pottery found at the Egyptian Old Kingdom town at Buhen as well as the Old Kingdom texts referring to indigenous people in the Middle Nile. Furthermore, excavations from stratified layers at Elephantine have shown that there were people present there with a material culture comparable to that of Lower Nubia throughout the first half of the third millennium BCE (Raue, 2002), and this makes it likely that they also inhabited Lower Nubia. Cemetery 215 at Abu Simbel in the far south of Lower Nubia is worth looking closer at in this connection. The excavators Emery and Kirwan believed that the mainly A-Group cemetery continued through the

B-Group to the C-Group (Emery and Kirwan, 1935: 450). It thus seems clear that Lower Nubia was impoverished but not completely depopulated during the first half of the third millennium. Williams (1989: 127) has called for a complete re-examination of the evidence of the B-Group and the people inhabiting Lower Nubia during the hiatus, but that is beyond the scope of this thesis.

Cemetery	**Reisner (1910)**	**H.S. Smith (1966, 1991)**	**Hafsaas-Tsakos**
7/201-243, 250-268	Early B-Group	Early A-Group (1991: 98).	Proto phase of A-Group
7/109-147, 150, 175-178, 190, 276	Late B-Group	Mainly C-Group graves (1966: 86).	Chronologically intermediate between A-Group and C-Group.
14/1-21, 41, 43	B-Group graves	Predynastic (1966: 87).	Proto phase of A-Group
17	B-Group graves and graves of indeterminable age, animal graves	Early A-Group (1991: 101).	Proto phase of A-Group
23	B-Group and C-Group graves	Most were undoubtedly C-Group, but a few may have belonged to Predynastic or A-Group times (1966: 90).	Mainly C-Group
41/201-243	B-Group	Most of Predynastic date, but one or two may be of the late C-Group (1966: 92).	Proto phase of A-Group
45/Block F	B-Group	Nubian predynastic (1966: 93).	Proto phase of A-Group
45/Block D	B- and C-Groups	No reasons for considering these graves as an archaeological group, or for dating them to the Old Kingdom (1966: 94).	Probably post-A-Group. Some green-glazed beads point to Naqada IID as the *terminus post quem* for the cemetery. There is no characteristic Naqada or A-Group material, which suggests that this group of graves are post-A-Group and pre-C-Group.
49/1-3, 5-6	Probably B-Group	Nothing can be inferred about the group and date of these graves (1966: 95).	Indeterminable
50/100-110	B-Group	Burial position and orientation show C-Group customs, if anything (1966: 95).	Indeterminable

Table 1: B-Group sites excavated by Reisner and re-examined by H.S. Smith.

Nevertheless, documenting that there were indigenous people inhabiting Lower Nubia during the first half of the third millennium is not the same as suggesting that

these people were the B-Group. It thus seems that there was a continuation between the A-Group and the C-Group people as well as new people arriving, as Nordström suggested, although there was also a major break. In this thesis, the term B-Group will not be used as a designation for inhabitants of Lower Nubia.

The Abkan people of the Second Cataract region

One of the possible predecessors of the A-Group people may have been the carriers of the Abkan material culture. The Abkan complex was initially identified by Oliver H. Myers (1958, 1960), who excavated habitation remains near Abka in the Second Cataract in 1947-1948, but the term 'Abkan' was first suggested by Joel L. Shiner (1968) and then revised by Nordström (1972: 12-16). The few available radiocarbon dates indicate a date in the late 5th millennium BCE, and it has been suggested that the terminal phase of the Abkan people in the Second Cataract was contemporary with the earliest A-Group phases at the beginning of the 4th millennium BCE (Nordström, 1972: 28; Lange and Nordström, 2006: 298). A recent survey of the Abkan sites shows them to be distributed from the Second Cataract southwards to the southernmost extension of the Great Bend of the Nile in Upper Nubia as well as in the Western Desert (**Figure 12**). The Abkan people appear to have relied on hunting and fishing (Nordström, 1972: 15-16). Neolithic traits are indicated by equivocal evidence for goats as well as the presence of ground stone axes (Edwards, 2004: 47).

Figure 12: The Abkan culture. After Garcea and Hildebrand (2009: fig. 2/b).

This summary of the Abkan people is brief – both because the data is scant and because they will only be considered as one possible influence in the formation of the A-Group people as an ethnic group.

The Pre-Kerma people of Upper Nubia

South of the Third Cataract, another well-defined cultural group called the Pre-Kerma people emerged in the Kerma basin in the late 4th millennium BCE (Honegger, 2004b: 38). Kerma in Upper Nubia would become a strong kingdom by the beginning of the 2nd millennium BCE, but the roots of this society reached back to the Pre-Kerma period (Garcea and Hildebrand, 2009: 310). The Pre-Kerma as a distinctive chronological phase was defined by Swiss archaeologist Charles Bonnet (1988) when he found a settlement underlying the great Eastern Cemetery of the Bronze Age kingdom at Kerma. The identification of remains of the so-called Pre-Kerma people by Bonnet (1992, 1995) and Honegger (1995) has thus pushed the Kerma cultural horizon back in time. Excavations at multiple sites have now yielded dates between *c*. 3300 and 2600 BCE for the Pre-Kerma period (Honegger, 2004a). The beginning of the Pre-Kerma period in Upper Nubia thus overlaps with the end of the A-Group period in Lower Nubia. The Pre-Kerma people were not part of the Bronze Age world, so they will play a peripheral role in this thesis.

Chronological framework for the 4th millennium BCE in the Nile Valley

It is necessary to establish a detailed timeline in order to distinguish episodes or phases when violence and warfare were predominant in Lower Nubia during the 4th millennium BCE. The diachronic frameworks for the Bronze Age of Egypt, Lower Nubia and Upper Nubia display some overall correspondences (**Table 2**). The contemporary shifts from one period or phase to the next between these three chronologies is probably a result of both the Egyptocentric mentality of archaeologists and the parallel courses of development produced by cross-cultural interactions in the past. However, the historical trajectories of the Egyptians and the different ethnic groups of the Middle Nile also diverge due to vibrant and dialectical relationships, so that the peoples of the Middle Nile were becoming powerful when the Egyptians were weakened, and the Egyptians expanded southwards when they were strong. However, the different ethnic groups all followed their own historical course that was both dynamic and unique.

BCE		Lower Egypt	Upper Egypt	Lower Nubia	Upper Nubia
3800	Predynastic	Maadi	Naqada IA-B	Proto A-Group	Neolithic
3700					
3600			Naqada IC-IIB		
3500				Early A-Group	
3400			Naqada IIC-IID2		
3300		Naqada IIIA1-IIIB		Middle A-Group	Pre-Kerma
3200					
3100	Early Dynastic	First Dynasty		Terminal A-Group	
3000					
2900		Second Dynasty		Hiatus?	
2800					
2700	Old Kingdom	Third Dynasty			
2600		Fourth Dynasty			
2500		Fifth Dynasty		C-Group I/a	Early Kerma
2400		Sixth Dynasty			
2300					
2200		First Intermediate Period		C-Group I/b	
2100	Middle Kingdom	Eleventh Dynasty			Middle Kerma
2000		Twelfth Dynasty		C-Group II/a	
1900					
1800		Thirtheenth Dynasty			
1700		Second Intermediate Period		C-Group II/b	Classic Kerma
1600					
1500	New Kingdom	Eighteenth Dynasty		C-Group III	Late Kerma
1400				Egyptian occupation	
1300		Nineteenth Dynasty			
1200		Twentieth Dynasty			

Table 2: The Bronze Age chronology for Lower and Upper Egypt together with Lower and Upper Nubia. After Dee et al. for the Naqada period of Upper Egypt, Shaw (2000: 480-481) for Predynastic Lower Egypt and Dynastic Egypt, A-Group in Lower Nubia (Table 4 here), Hafsaas (2006: Table 1) for C-Group in Lower Nubia and Hafsaas-Tsakos (2013: Table 1) for Kerma period.

In the early twentieth century, archaeological cultures were perceived as individuals: they were born, developed, flourished, transformed and died – following a trajectory of early, middle, classic, late and terminal (Díaz-Andreu and Lucy, 2005: 2). This formula was used by Nordström (1972) for the A-Group period, Gratien (1978) for the Kerma period and Honegger (2001: table 2, 228) for the Pre-Kerma period. These chronological labels have stuck until today.

A different terminology was chosen for Predynastic Egypt. Petrie had divided the Predynastic period into three major phases based on the material from three type sites that were representative for each of the three phases: Amratian from el-Amra, Gerzean from el-Gerza and Semainean from Semaina (Midant-Reynes, 2000a: 45-46; Midant-Reynes, 2000b: 231). The German Egyptologist Werner Kaiser (1957) considered all these three phases as belonging to the Naqada Culture – from the site where Petrie first had discovered predynastic material. Furthermore, he renamed Petrie's phases as three chronological *stages* ('Stufen' in German): Naqada I, II and III (Kaiser, 1957: 69), which were then divided into 11 sub-stages by using Latin letters, i.e. Naqada Ia-c, IIa-d and IIIa-c (Kaiser, 1957: plates 21-24). Kaiser's *Stufen* are now generally considered as subdivisions of the three main phases of the Naqada period (see Midant-Reynes, 2000a: 46; Hendrickx, 2006: 64-66). The Austrian archaeologist Manfred Bietak (1968: 18) also used the concept of Stufen when he established the C-Group chronology, which was divided into to three stages with subdivisions of the two early stages: C-Group I/a-b, II/a-b and III.

The basic refinement of the chronologies for the Middle Nile is often based on cross-dating of objects and features occurring in the same contexts as dateable imports arriving from Egypt. Although increasing numbers of radiocarbon dates are also becoming available, the chronology of Egypt is still essential for dating sites in the Middle Nile. Before progressing to the 4th millennium BCE chronology for Lower Nubia, I will thus introduce the contemporary chronology for Egypt. I will thereafter use the latest revisions of the Egyptian chronology as a starting point for establishing concordances between the Egyptian timeline and the chronology of Lower Nubia.

The Naqada period in Egypt

In the winter season of 1894-1895, Petrie and his companion James Edward Quibell (1896) undertook excavations of some large cemeteries at Naqada and Ballas in the middle of the Qena Bend in Upper Egypt. More than 3000 graves were cleared in just over three months. Although especially Petrie was fascinated by the origins of ancient Egypt, they initially failed to identify the early date of the cemeteries. They instead assigned these sites to a "*new race*", which they suggested immigrated to

Egypt during the First Intermediate Period and drove out the local inhabitants (Petrie and Quibell, 1896: 17-18). While working for Petrie, the French archaeologist Jacques de Morgan was the first to recognize the antiquity of the cemetery at Naqada when he uncovered the name of Menes, the legendary first king of the First Dynasty, together with similar grave goods as the graves ascribed to Petrie's "*new race*" in a large tomb that probably belonged to the First Dynasty Queen Neith-hotep (Spencer, 2011: 19). It took five years after de Morgan's discovery before Petrie conceded after intensive studies that the cemeteries at Naqada and Ballas were indeed *predynastic* (Spencer, 2011: 19), a term that signifies that this epoch was placed in time before a united Egypt was ruled by successive dynasties of rulers.

Although the publication of the excavations of Naqada and Ballas by Petrie and Quibell (1896) identified wrongly the date of the material, the study of the pots from these sites became the foundation for the chronological organization of the Naqada period. With the subsequent excavations of the cemeteries at Abadiya and Hu at the downstream exit of the Qena Bend, Petrie expanded his knowledge of the pottery forms, and these corpora were used for his system of *sequence dating* (S.D.) (Petrie, 1901b, 1921, 1939). Petrie's three phases were divided into 50 relative sequence dates, which he started numbering from 30. This was a wise precaution, for Guy Brunton later on discovered earlier remains at Badari, which is now termed as the Badarian period (Midant-Reynes, 2000a: 45). Petrie's sequence dates and chronological phases were used as the foundation for the chronology established by Kaiser. The most recent revision of the Naqada chronology has been undertaken by the Belgian Egyptologist Stan Hendrickx (2006), and his system is used in this study (**Table 3**). There is, however, no consensus about the absolute dates for the Naqada period. I will use the freshly obtained absolute dates from an extensive radiocarbon dating project (Dee et al. 2014). Egyptian type artefacts from the different Naqada phases are important for the dating of contemporary A-Group sites in Lower Nubia, so some of them have been included in the table (see also **Figure 62**).

The Dutch Egyptologist Edwin van den Brink (1992: vi) has suggested that regional chieftains belonging to the period before the advent of writing should be termed Dynasty 00. The proposal was based on the existence of rich graves containing

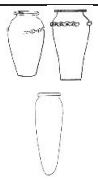
Subdivisions	Cal. BCE	Rulers and kings	Type artefacts according to S.D.
Naqada IA-IB	*c.* 3800-3600		
Naqada IC-IIB	*c*. 3600-3400		 IC  IIA  IIB
Naqada IIC-IID2 *Dynasty 00*	*c*. 3400-3300	Regional rulers with unknown names	 IIC  IID1  IID2
Naqada IIIA1-IIIB *Dynasty 0*	*c*. 3300-3100	Scorpion I Double Falcon Pe-Hor Irj-Hor Horus Ka Horus Scorpion II	 IIIA1  IIIA2  IIIB
Naqada IIIC1 *First Dynasty*	*c*. 3100-2900	Narmer Hor-'Aha Djer	 
Naqada IIIC2 c. 3000 BCE		Djet Meret-neit (regent) Den Abjib	
Naqada IIID c. 2910 BCE		Semerkhet Qa-a Sneferka (opponent?) Horus "Bird" (opponent?)	No cylindrical jars 

Table 3: Chronology for the Naqada period in Egypt. Adapted from Hendrickx (2006: 89-92, including tables) with absolute dates from Dee et al. (2014: table 1, fig. 4). Figures from Petrie (1921, 1953).

recognizable royal iconography at Tjenu, Nubt and Nekhen (see the discussion under *The rise of the united kingdom of ancient Egypt* in Chapter 4). These lines of rulers date to Naqada IC-IIC. The term has not been generally accepted as the term dynasty

should be reserved for a succession of kings rather than contemporary regional chieftains. Nevertheless, these anonymous rulers should be recognized as the forefathers of the later dynastic tradition (Wilkinson, 1999: 52). Dynasty 0 is applied to the stage when both Upper and Lower Egypt were ruled by a king with a centralized government, but when there were still many conflicts with local elites attempting to re-establish the old regional order (Anđelković, 2011: 30). It is still not clear how many kings were part of Dynasty 0, their sequence or the length of any of the reigns. A conservative evaluation of the evidence suggests that Scorpion I, Double Falcon, Pe-Hor, Irj-Hor, Horus Ka/Sekhen and Horus Scorpion II as well as two kings whose names have not yet been understood should be considered as proto-dynastic kings (see Wilkinson, 1999: 52-59 for a discussion of the evidence related to each king; Dreyer, 1999 for Double Falcon), although they were not part of a dynasty. Scorpion I was probably the first king ruling a substantial geographical region (see the section *Unification* in Chapter 4), while Pe-Hor is only attested at Qustul in Lower Nubia (Williams, 1986: 149) and Scorpion II has been suggested as a king of Nekhen [Hierakonpolis] (Kaiser, 1964: 102-105; Trigger, 1983: 46; Wilkinson, 1999: 56; Kahl, 2006: 95-96). Only two of the Dynasty 0 kings are represented in Cemetery B at Abydos: Irj-Hor and Ka/Sekhen. The latter appear to have been a successor of the former as well as the immediate predecessor of Narmer, first king of the First Dynasty. Horus Narmer is generally considered as the first king of the First Dynasty – the legendary King Menes (Kahl, 2006: 94). This has lately been verified by a seal impression from the tomb of Qa-a, which lists all the kings of the First Dynasty up to that ruler (**Figure 13**; see Dreyer et al., 1996: 72).

As with the preceding Dynasty 00 and Dynasty 0, there are currently insufficient data available for the First and the Second Dynasties to determine either the length of individual reigns or the length of the dynasties as a whole (Kahl, 2006). I will follow the recent radiocarbon chronology (Dee et al. 2014), by which Narmer ascended the throne in *c*. 3100 BCE. The two earliest dynasties are usually referred to collectively as the Early Dynastic period, but this period is only briefly touched upon in this thesis.

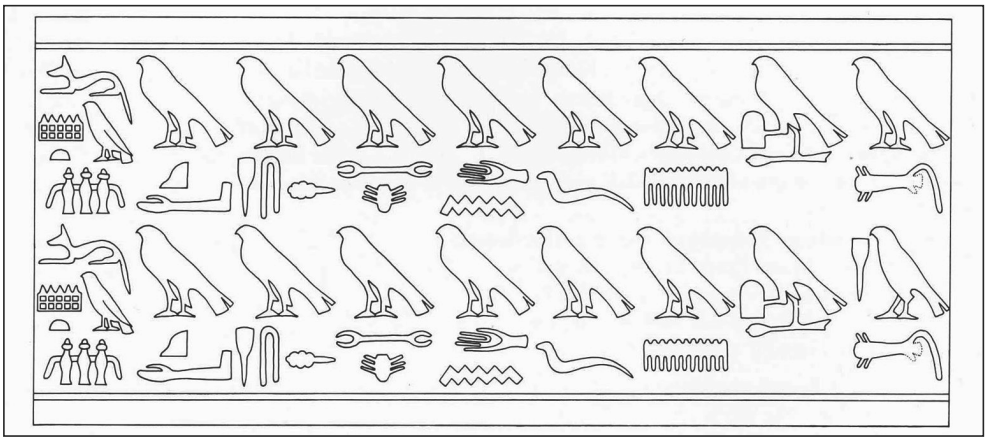


Figure 13: Seal impression with the names of Qa-a, Semerkhet, Anedjib, Den, Djet, Djer, Aha and Narmer. Drawing from Dreyer et al. (1996: fig. 26).

The A-Group period in Lower Nubia

The people inhabiting Lower Nubia were the closest neighbours of the Egyptians along the Middle Nile. Most of the excavations in Lower Nubia took place before the invention of radiocarbon dating. However, the Egyptian imports deposited in the graves can be used to date the archaeological assemblages found there. The cross-dating of features that occur in a secure context together with imported Egyptian objects of known date generates a *terminus post quem* date. The calendar dates of the Egyptian chronology (see **Table 3** above) make it possible to fix the phases more accurately in time, and thus provide us with a timeframe for Lower Nubia. The people of Lower Nubia nevertheless had their internal development independently of Egypt in the north and Upper Nubia in the south.

It was Steindorff (1935: 24-25) who made the first typology of A-Group pots based on the few graves in Cemetery NN at Aniba. In his revision of Reisner's timeline for Lower Nubia, Steindorff made two chronological subdivisions of the A-Group: *Nubisches Altertum 1-2* (Steindorff, 1935: 1). Trigger (1965: 44) based his chronology on Steindorff, but his *Early Nubian* sequence consisted of the subdivisions I, II and III, which corresponded to Reisner's Predynastic, A-Group and B-Group, respectively (Trigger, 1965: 45). Also Nordström (1962) used Steindorff's work as a starting point for his classification of the A-Group ceramics from the sites of the Scandinavian Joint Expedition near the Second Cataract. In his seminal work on the A-

Group, Nordström (1972: 18) divided the A-Group into three stages: the *early*, *classic* and *terminal* phases. He lately revised the terminology of his chronology by substituting the *classic phase* with a *middle phase* (Nordström, 2004a: 137, 141). These phases were distinguished by the earliest and latest Egyptian artefacts found in different A-Group assemblages.

Nordström (1972: 28) suggested that the early A-Group phase was only represented in the region between Kubaniya in the north and Sayala in the south, while the region around the Second Cataract was inhabited by the contemporary Abkan group. He thus identified the early phase based solely on data from earlier publications. In contrast, Egyptologists have maintained that the cemeteries with substantial amounts of Naqada material in northern Lower Nubia were the burial grounds of Naqada immigrants in the region, and not sites of an early A-Group phase (see discussions in *Chapter 8* and *Chapter 10*). In a more recent article, Nordström (2004a: 140) observes that there is a lack of continuation of traditions and social development between the early phase and the middle phase of the A-Group. The early phase thus remains poorly defined and understood. Gatto (2006a: 62) has recently argued in favour of the Egyptological interpretation whereby the sites between Kubaniya and Metardul that mainly contained Naqada material were part of the Naqada settlement system.

Harry S. Smith (1966, 1991) has added an A-Group phase that is earlier than the early phase of Nordström by arguing convincingly for placing Reisner's B-Group chronologically earlier rather than later than the A-Group proper (see the section *The B-Group* above and *Chapter 8* below). I thus consider that the relative presence or absence of objects of Naqada material culture is the main discriminating factor in northern Lower Nubia between Naqada cemeteries on the one hand and the earliest A-Group cemeteries on the other hand. This assumption will be tested in Chapter 8, since it will be a very interesting case-study if two ethnic groups coexisted in the same environment by either exploiting different ecological niches or by competing for the same resources (see the section *Ethnicity* in Chapter 4 as well as *Part II*).

The earliest A-Group phase, as first identified by Smith, is discussed more thoroughly in Chapter 9. Following Smith's arguments for dating the B-Group to the

earliest A-Group phase, Gatto (2006a: 67) has recently proposed to divide the early phase into two sub-stages. I therefore introduce the term *proto phase* for Smith's dating of the B-Group to the earliest A-Group (see *Chapter 8*), and I use *early phase* for the latter part of Nordström's early phase in accordance with the conventional chronology. The term *proto* was chosen in order to indicate that the ethnic identity of the inhabitants of northern Lower Nubia had not yet taken the form that is recognizable in the subsequent A-Group phases.

According to Nordström (1972: 29), the A-Group people expanded southwards to Melik en-Nasir in the Batn el-Hajar during the middle phase[4]. He has argued that elements from the A-Group people of northern Lower Nubia and the terminal Abkan of southern Lower Nubia were blended at this stage (Nordström, 1972: 29, 2004: 141). Nordström (2004: 141) furthermore points to the site 11-Q-72 on the Saras plain in the Batn el-Hajar as a key for understanding the transition between the terminal Abkan and the middle phase of the A-Group in the far south. In a more recent article, Nordström (2006: 37) has stressed again that the relationship between the Abkan people of the Second Cataract region and the A-Group people in northern Lower Nubia needs to be clarified. This is however outside the framework that is necessary to establish in this thesis.

During the terminal phase, there were only a few A-Group graves to the north of Gerf Hussein in northern Lower Nubia (Nordström, 2004a: 142). At that time, there were interred some individuals with exceptionally rich grave goods in Cemetery L at Qustul and in Cemeteries 137 and 142 at Sayala (see Nordström, 2004: 142, fig. 4). Cemetery L may have been a cemetery for kings (Williams, 1986), since rulers inspired by Egyptian royal ideology were buried there (Wilkinson, 1999: 39). Other rich cemeteries in that district may have belonged to elites that were subordinate to the power centre at Qustul (Nordström, 2004a: 142, fig. 4). Cemeteries 137 and 142 may have belonged to a different lineage of chieftains in the Sayala region (H.S. Smith, 1993: 372, 375; Jiménez-Serrano, 2003: 257-258). This will be further discussed in

[4] The A-Group sites in Batn el-Hajar have not been published in detail yet, so they are not included in this study.

Chapter 11 (see the section *The influence of exchange on political organization of A-Group communities*).

A recent project for dating the dynastic period in Egypt has analysed seven radiocarbon dates from A-Group sites of the terminal phase. The specimens tested were cow hair from fragments of hide used for wrapping the bodies uncovered from graves at the Cemeteries 277 (5), 401 (1) and 227 (1) in the concession of the Scandinavian Joint Expedition in southern Lower Nubia. The calibrated dates range between 3361 and 3021 BCE with a 95 per cent probability (Stevenson, 2012: 17, table 2). Nordström (1972: 190) dated Cemetery 277 to the middle and early terminal phase of the A-Group, and the imported Egyptian pots date between Naqada IID and Naqada IIIB (see Roy, 2011: table 157). The radiocarbon dates thus corresponds well to the chronologies (see **Table 3** and **Table 4**).

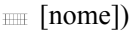
Following the most recent research and the preceding discussion, I will propose a revised chronology for Lower Nubia during the 4th millennium BCE (**Table 4**), by taking into account different historical sequences in northern and southern Lower Nubia.

A-Group phases		**Contemporary Egyptian phases**	**Years BCE (calibrated)**
Southern Lower Nubia	**Northern Lower Nubia**		
Terminal Abkan	Proto phase	Naqada IA - Naqada IC	3800-3530
	Early phase	Naqada IIA - Naqada IIC	3530-3360
Middle phase		Naqada IID1 - Naqada IIIA2	3360-3200
Early terminal phase		Naqada IIIB	3200-3100
Late terminal phase		Naqada IIIC1	3100-3000

Table 4: Chronology for the A-Group people including cross-dating with Egypt. Based on Nordström (2004a: 140-142), Gatto (2006a: 67) and the discussion above. Absolute dates from Dee et al. (2013).

Ancient geographical and ethnic names

Having presented the people of Lower Nubia in the 4th millennium BCE and their chronology, I will in this section briefly present the ancient geographical and ethnic names that have been preserved in hieroglyphic writing and that are of relevance to this study.

The names given by the ancient Egyptians to the river valley and the delta were 'Sedges' ( [*šm'w*], det.  [nome]) and 'Land of the papyri thicket' ( [*t3-mḥw*],  det. [place-name]) respectively, based on the plants that characterized the two regions (McDermott, 2001: 38). These names are conventionally translated as

Upper Egypt for the valley part and Lower Egypt for the delta part. The northern part of Upper Egypt is sometimes referred to by the imprecise term Middle Egypt (Wilkinson, 1999: 372), which here will encompass the Nile valley between the Badari region and the entrance to the Faiyum (see **Map 3** for the subdivisions of Egypt). Since the Early Dynastic period, Egypt was divided geographically into administrative entities called nomes. Each nome had its own capital and a local governor called nomarch. There were 22 nomes in Upper Egypt and 20 nomes in Lower Egypt (Allen, 2000: 22).

The ancient Egyptians used various terms for the land and people of the Middle Nile during the Bronze Age. The earliest attestation of a geographical name for a part of the lands in the south appeared in the First Dynasty with the toponym *Ta-Seti* ( [*t3 stj*]) translated as 'Land of the Bow', which most probably equalled Lower Nubia (Midant-Reynes, 2000b: 225). It was recorded on an ivory label of King Aha (Petrie, 1901: 20). The label depicts a bow sign above an early form of the hieroglyph for 'land' (**Figure 14**). Also belonging to Aha is an ebony tablet with a prisoner identified by a bow sign, which suggests that he was from Ta-Seti (Petrie, 1901a: 20; see **Figure 107**). It has been argued that in these cases Ta-Seti may only have meant the first nome of Upper Egypt, which has the same name (Säve-Söderbergh, 1941: 7). However, the depiction of a prisoner with his arms bound on the back and a bow sign attached to the rope at Jebel Sheikh Suliman just below the Second Cataract and dating to the reign of king Djer (**Figure 15;** see also the section *King Djer* in Chapter 11), positively identifies Ta-Seti with

Figure 14: Ivory label inscribed with Ta-Seti on the right. Photo in Petrie (1901a: plate 3/3).

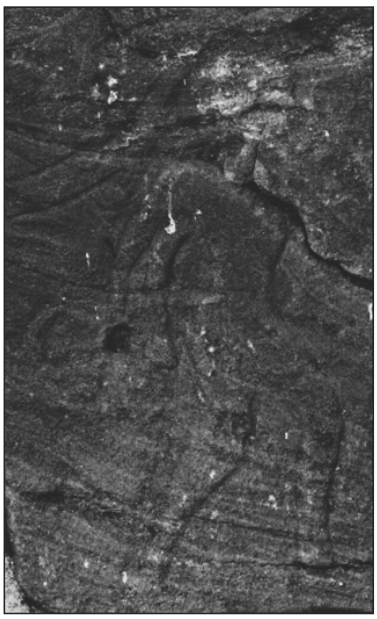
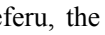
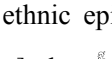


Figure 15: A back-bound prisoner carrying a bow sign from the rock art tableaux at Jebel Sheikh Suliman. Photo by Tsakos.

Lower Nubia (Nordström, 1972: 32). I present a new explanation for why the southernmost nome of Upper Egypt and the northernmost part of the Middle Nile were called by the same toponym in Chapter 11 (see p. 335 below). Ta-Seti was also recorded on other First Dynasty labels and reliefs, and they are presented in Chapter 11 (see the section *The records of state expansions into Lower Nubia*).

The only Second Dynasty evidence for Ta-Seti is a fragmentary victory stela of king Khasekhem(wy) from Nekhen [Hierakonpolis], which depicts a fallen enemy with the bow sign on his head (see **Figure 112;** the section *King Khasekhem(wy)* in Chapter 11). The term Ta-Seti was also used during the Twelfth Dynasty[5], but then the term seems to refer generally to the parts of the Middle Nile known to the Egyptians, i.e. Lower and Upper Nubia.

There are no references to people or places in the Middle Nile during the Third Dynasty (Jiménez-Serrano, 2006: 141). For the reign of the Fourth Dynasty king Sneferu, the Palermo Stone records a raid on *Ta-Nehes* ( [*t3 nḥs*]), which is commonly translated as 'Land of the Negro' (Jiménez-Serrano, 2006: 141-142). The earliest attestations of the *nisbe* (Arabic term for derived adjective) of Nehes are from some Fifth Dynasty mastaba chapels at Giza, where three individuals are described by the ethnic epithet *Nehesy* (see Fischer, 1961: 75). *Nehesy* ( [*nḥsy*] or  [*nḥsy*], det.  [enemy], [throwstick],  [man],  [woman]) was apparently used as a collective term for the people of the south (Gardiner, 1947: 74; Hannig, 2003: 646-647), and the term can be transliterated into 'the bronzed/burnt' (Redford, 2004: 5). During the Bronze Age, the inhabitants of the Middle Nile were thus similarly recognized as when the ancient Greeks in antiquity termed the region *Aethiopia* meaning 'Land of Burnt Faces', or in more recent times, when the Arabs called it *Bilad as-Sudan* meaning 'Land of the Blacks'. In all three cases, the lands south of Egypt were defined as inhabited by people with a black complexion in contrast to the more fair-skinned people of the north (Hafsaas-Tsakos, 2009b: 53). Furthermore, the

[5] A stele (Museo Archeologico di Firenze 2540) was erected at Buhen by General Mentuhotep in the 18th regnal year of Senusret I in commemoration of victories over southern enemies (H.S. Smith, 1976: 39). The scene at the top of the stele depicts the god Montu, and the text over and before Montu reads: "*Montu, Lord of Waset, who says: 'I have brought for thee all countries which are in Ta-Seti beneath thy feet, Good God*'" (H.S. Smith, 1976: 40 and see plate 69 for the hieroglyphs).

use of a throwing stick as a determinative sign emphasized that foreigners had less sophisticated weaponry than the Egyptians (Ritner, 2011: 242). When referring to people from the Middle Nile regardless of ethnic or tribal affiliation, I will in this thesis avoid characterizing terms that may be insulting today.

However, the people of the Middle Nile in the Bronze Age were not a homogeneous group. From the Sixth Dynasty onwards, the Egyptians used other names that seem to refer to ethnic groups as well as geographical regions in addition to the collective term Nehesyw. From the Middle Kingdom, two toponyms became more important than others. These are *Wawat* ( [*w3w3t*], det.  [foreign land]) for Lower Nubia (Hannig, 2003: 1549) and *Kush* ( [*k3š*], det. [foreign land]) for Upper Nubia (Dermott, 2001: 135). During the Middle Kingdom, the term Iunw ([*jwn*], alt.  [*jwn*], det.  [foreign enemy people], alt. [enemies]) appears to have been used as a general name for desert nomads of Lower Nubia (Allen, 2000: 454), and more specifically for inhabitants around Batn el-Hajar[6]. There is a reference on the Palermo stone to *"smiting the Iunw"* in the reign of king Den of the First Dynasty. Iunw is sometimes inferred as referring to peoples on the Sinai peninsula (Wilkinson, 2000a: 106, fig. 1), but the later connection of this ethnic label with Batn el-Hajar makes it probable that it actually referred to the inhabitants of this southern region (see also Kahl, 2002: 19).

This overview of Egyptian writings of geographical and ethnic names for the Middle Nile and the southerners shows that the terms abounded with determinatives consisting of weapons and enemies, and this suggests a hostile relationship throughout the Bronze Age. This observation has brought us back to the subject of the thesis, and I will conclude this chapter with some general remarks about warfare and chronology.

[6] Both the Ramesseum list of Egyptian Middle Kingdom fortresses in Lower Nubia and a commemorative stele found at the fortress on the island Uronarti in the Batn el-Hajar name the fortress there as *Repelling the Iunw* ( [*ḥsf*] det. [force/effort],  [*jwnw*] det.  [foreign enemy people], alt. [enemies]) (Gardiner, 1916: 189).

Chronology and warfare

First of all, both the climate and vegetation in the Middle Nile region deteriorated during the Bronze Age (see the section *Holocene climate in eastern Sahara* in Chapter 2), and this naturally affected the development of societies as well as increased the likelihood of conflict over resources that escalated to war (see the sections *Ecological approaches* and *Materialist approaches* in Chapter 5). Upper Egypt and Lower Nubia, which are the regions under consideration here, probably experienced the climate changes first and most severely, and the deteriorating climate was probably one of the factors leading to the first war between the people in these two regions in the mid-4th millennium BCE (see the section *The first war in the area of the First Cataract* in Chapter 11).

Furthermore, periods of "*structural coherence*" as represented by either stability or evolving complexity were usually much longer than episodes of "*unstructured events*", which occurred at irregular intervals and at unpredictable timing (Bintliff, 2004: 192; see the section *Structuralist and structural approaches* in Chapter 5). These unstructured events were in many cases related to warfare, and many chronological divisions in human history are set at events such as wars, battles, conquests and peace treaties (Haas, 1999: 11). The unstructured events show that it is often the acts of extraordinary or powerful persons that drive history and add flavour to a specific period (see the section *Practice-agency approaches* in Chapter 6). The military campaigns and ambitions for empires of some Egyptian kings had for instance tremendous impact on the life of people along the Middle Nile throughout the Bronze Age.

The discussions of war on the frontier between Egypt and the Middle Nile at the beginning of the Bronze Age in Part II will demonstrate that warfare had implications for both personal life courses and the destiny of ethnic groups (see the section *Culture contact approaches* in Chapter 6). In this study, the following cases will be discussed in Chapter 11:

1) A violent formation of the ethnic boundary between the Naqada Egyptians and the A-Group people in the mid-4th millennium BCE.

2) The virtual disappearance of the A-Group people at the end of the 4th millennium BCE.

Before we come that far though, further introductions are necessary. First Chapter 4 will present an overview of the Bronze Age in general and it's unfolding along the Middle Nile in particular, before Part I is concluded with Chapter 5 providing an overview of earlier research on war, Chapter 6 presenting theoretical approaches to war in general, and Chapter 7 discussing the evidence for war along the Middle Nile during the Bronze Age with special emphasis on Lower Nubia in the 4th millennium BCE.

Chapter 4: The Bronze Age in the Nile Valley

I maintain the conventional threefold classification of prehistory into a Stone Age, Bronze Age and Iron Age. This three age system was developed between 1816 and 1836 by the Danish antiquarian Christian Jürgensen Thomsen, when he established a classification of the collections of the National Museum of Denmark into successive stages of technological development on the basis of people's primary use of either stone, bronze or iron implements in order to exploit and modify the environment (Trigger, 2006: 123-127). Thomsen's tripartite scheme has turned out to be valid for major parts of the vast geographical region of Eurasia, although it is not applicable for the New World and large parts of Sub-Sahara Africa. Consequently, it is often overlooked that the three age system is valid for Northeast Africa spanning the Nile Valley of Egypt as well as Lower and Upper Nubia in northern Sudan[7] (e.g. Stahl, 2005: 7). The focus of this chapter is the intermediate of Thompsen's three stages – the Bronze Age. This is also the period that is most often ignored for the African continent, since it is limited to the north-eastern corner. In the core areas of the Afro-Eurasian world, the Bronze Age lasted from *c*. 3500 to 1200 BCE (see Hafsaas-Tsakos, 2009: 55).

As we will see in this chapter, the people living along the Middle Nile during the 4th to the 2nd millennia BCE either themselves belonged to the sphere of the Bronze Age world like the Kerma people, or were in direct contact with the Bronze Age civilizations to the north like the A-Group and C-Group peoples, or were in contact with the Bronze Age cultures of the Middle Nile like peoples living in the deserts bordering Upper Nubia or further south in Central Sudan. Upper Nubia was thus the southernmost region of Africa that belonged to the interconnected world of the Bronze Age (see Hafsaas-Tsakos, 2009).

In the summary of a research project comparing the regions of the Mediterranean, Central Europe and Scandinavia during the Bronze Age, the archaeologists Timothy Earle and Kristian Kristiansen (2010a) emphasize some of the

[7] It is also possible that there was a "Bronze Age" in the highlands of Tigray and Eritrea at a later date, as iron working did not commence on the Horn of Africa before the first millennium BCE (Phillipson, 1998: 38).

innovations and hallmarks of the Bronze Age: the use of copper and bronze, the formation of ethnic identities, the establishment of long-distance trade and alliance networks, and the emergence of political organization and institutionalized warfare. In this chapter, I will provide a short introduction to each of these topics, except for warfare, which will be the subject of the next three chapters as well as Part II. Furthermore, I will also investigate how these themes materialized along the Middle Nile – forming societies that can be defined as belonging to the southernmost extension of the Bronze Age world into Africa.

The use of copper and bronze

The precondition for defining a historical period in a region as belonging to the Bronze Age is naturally the use of copper and/or bronze. In order to fulfil this prerequisite, it is necessary to establish when and where metals and metallurgy were first discovered and/or used in different parts of the Nile Valley as the metal technology did not arrive at the same time in the entire region. The new knowledge was probably first introduced to Upper Egypt from Sinai – perhaps via a direct route crossing the Red Sea (Midant-Reynes, 2000b: 161). From Upper Egypt, both the metal artefacts and the related technology spread southwards at intervals.

Egypt becomes part of the Bronze Age world

During the Badarian period in the latter half of the 5th millennium BCE, only a few pins and beads made of cold-hammered copper have been found in Upper Egypt. Early pillaging of cemeteries appears to have been undertaken with the purpose of obtaining precious metals, so more copper objects were probably circulating than those discovered by archaeologists (Anfinset, 2010: 145; Midant-Reynes, 2000b: 155). Grave robbing has of course been an activity that has destroyed cemeteries from all periods.

During Naqada I, copper was still hammered into shape, but a greater variety of objects were made. This included pins, needles, beads, finger rings, bracelets, anklets, fish-hooks, harpoons and points (Midant-Reynes, 2000b: 181). During this period, firm contacts were established between Upper Egypt and the Lower Egyptian site of

Maadi, where copper-working also took place (Midant-Reynes, 2000b: 181, 212-215). The people at Maadi had connections with communities in the Beersheva valley in Palestine (Levy, 1995: 242; Wenke, 2009: 227), where people had experience in copper smelting and casting since *c*. 4300 BCE (Golden, 2010: 80). The earliest copper axe from Egypt was found at Matmar in Middle Egypt, and it is dated to Naqada I (Brunton, 1948: 16; Wilkinson, 1999: 29). Although this axe is a unique object (see the section *Copper-alloy axes* in Chapter 7), it suggests that larger copper objects also existed at this early time, but that few of them have been preserved in the archaeological record.

During Naqada II, the production of copper objects in Egypt accelerated in tandem with the earliest use of gold and silver. Furthermore, copper was increasingly being used as a substitute for stone objects through the manufacture of axes and daggers (Midant-Reynes, 2000a: 55; Wengrow, 2006: 34, fig. 1.6). The finding at the settlement at Adaima in Upper Egypt of two copper axe-heads that had been cast in an open mould testifies to the development of the technology (Midant-Reynes, 2000b: 194-195). This moreover demonstrates that the new technology was used specifically for making more effective weapons. Furthermore, the search for copper deposits and supplies of other precious raw materials contributed to developing an expansionistic mentality in the societies in Egypt (Hamblin, 2006: 311). The transition between Naqada IIB and IIC can thus be said to mark the beginning of the Bronze Age in Egypt, after a Chalcolithic period spanning the Badarian and the Naqada I-IIB phases (*c*. 4400-3400 BCE). Although these terms are not widely used by Egyptologists, they demonstrate that Egypt was part of a larger cultural sphere.

From Naqada IIC onwards, the scale and sophistication of copper-working improved markedly. Noteworthy are axes, adzes and ribbed daggers (Wengrow, 2006: 38-39). While stone axes still dominated during Naqada II, copper axes became the norm from Naqada III onwards (see Gilbert, 2004: fig. 5.44). Furthermore, the small baboon figurine uncovered in tomb 1552 at Tarkhan has been suggested as the earliest use of the *cire-perdue* (French for ‘lost wax’) technique in Egypt during the later Naqada III phases (Baumgartel, 1960: 21).

During the First Dynasty, metalworking reached new levels and quantities (Wilkinson, 1999: 72). At *Umm el-Qaab* (Arabic for 'Mother of Pots'), the cemetery at Abedju for regional predynastic chiefs, the First Dynasty kings as well as the two last kings of the Second Dynasty, copper objects were found in great numbers in form of serving vessels, tools and weapons (Wengrow, 2006: 255), although the tombs have been repeatedly plundered. In the pillaged tomb of king Djer were found a copper finial for a carrying litter, a chisel, a harpoon, a nail, six needles and three pins (Petrie, 1901a: 36, plate 35/83-95). Four chisel-like copper implements were found in one of the subsidiary graves next to the tomb of king Djer (Petrie, 1901a: 24, plate 6/23-26), while 16 of the subsidiary graves of king Djer contained copper objects including axe-heads, adzes, chisels, knives, borers, needles and a pair of tweezers (Petrie, 1925: 2, 4-6). Furthermore, an extraordinary collection of copper vessels, tools and weapons was found in an undisturbed room in mastaba tomb 3471 at Sakkara (Emery, 1949: 18-19). The tomb is dated by inscriptions to the reign of king Djer (Emery, 1949: 13). A copper axe-head and adze inscribed with the names of king Djet were found in one of the subsidiary graves near his tomb (Petrie, 1925: 4). Copper tools were found in the tomb of the stone-vase maker of Queen Meryet-nit at Sakkara (Emery, 1961: 69). A copper axe-head was found in the tomb of king Den (Dreyer, 1990: plate 26), and a copper bowl inscribed with the name of Den was found among the heirlooms of King Semerkhet (Wilkinson, 1999: 77).

The use of copper seems to increase during the Second Dynasty. Numerous copper vases were found in the central chamber of the tomb of the penultimate king, Peribsen (Petrie, 1901a: 12). According to an event recorded on the Palermo Stone, the last king of the Second Dynasty, Khasekhem(wy), commissioned a copper statue of himself in his 15th regnal year (Wilkinson, 2000a: 133), and this is an indirect attestation of more advanced metalworking (Wilkinson, 1999: 94). Huge quantities of copper vessels and needles, as well as chisels, axes and a model dagger were found in Khasekhem(wy)'s tomb (Petrie, 1901a: 12-13; Bard, 2000: 86).

It is often assumed that the Egyptians used pure copper without alloying with other metals. However, analyses of a wide range of axes and other objects from the collections of the British Museum, the Ashmolean Museum and the Petrie Museum

have demonstrated that copper was intentionally alloyed with arsenic in order to increase the hardness of the resulting metal (Cowell, 1987: 96-97). Among the earliest arsenical copper objects is an axe-head found in an A-Group grave in Cemetery 3 at Faras (Davies, 1987: 27). Arsenical copper was widely used from the Early Dynastic period up to the New Kingdom (Davies, 1987: 24). The earliest evidence for bronze, which means the alloy of copper with at least four per cent tin, are two vessels (BM 35571 and BM 35572) with seven and nine per cent tin respectively (Cowell, 1987: 98). Both were found in the tomb of king Khasekhem(wy) (Spencer, 1993: 89). Tin was also used in smaller amounts than 4 per cent in other Early Dynastic objects (Cowell, 1987: 98). Nevertheless, bronze was only applied on a limited scale until the Middle Kingdom when it gradually started to replace arsenical copper (Davies, 1987: 24).

Copper mining

The increasing prevalence of copper objects in royal and elite tombs of the First Dynasty was probably the result of royal expeditions to copper mines in the Eastern Desert and/or increased trade with copper-mining regions on the Sinai peninsula and in the Negev desert in southern Palestine, and it testifies to an expansion of copper working in Egypt (Bard, 2000: 69). In this connection, it is interesting to note that several records of king Den describe military expeditions on the northeastern frontier of Egypt (Wilkinson, 1999: 77). These expeditions were probably undertaken in order to safeguard the trade routes to the copper-bearing regions of Wadi Maghara and Serabit el-Khadim on Sinai in order to secure the import of the copper and malachite that were mined there (Emery, 1961: 74).

By the reign of Djoser, the first king of the Third Dynasty, the Egyptians appear to have asserted direct control over the copper and turquoise mines in Wadi Maghara on Sinai (Wengrow, 2006: 147). Also the names of Djoser's successors Sekhemkhet and Zanakht were recorded in rock inscriptions there, as well as the names of the Fourth Dynasty kings Sneferu and Khufu (Malek, 2000: 105). During the Fifth Dynasty, the kings Sahura, Nyuserra, Menkauhor and Djedkara left their names at these mines (Malek, 2000: 111), and copper and turquoise continued to be mined at

Wadi Maghara during the reigns of the Sixth Dynasty kings Pepy I and Pepy II (Malek, 2000: 115).

The Egyptians also mined copper closer to the Nile Valley. Remains from on-site smelting of copper during the Early Dynastic period and the Old Kingdom have been uncovered near the Gebel Zeit massif in the Eastern Desert (Wengrow, 2006: 147).

There are indications that a fortified Egyptian settlement was established at Buhen just below the Second Cataract in Lower Nubia already during the Second Dynasty. The evidence that this hypothesis rests on is the large size of the mud bricks, presence of sealings made by a cylinder seal and sherds of pots used during the Second Dynasty (Emery, 1965: 112-113). The main activity undertaken at the site throughout its use was processing of copper ore (Emery, 1965: 111). Some of the sealings and ostraca found in a later stratigraphical level of the settlement were inscribed with the names of several Egyptian kings – Khafra of the Fourth Dynasty being the earliest and Nyuserra of the Fifth Dynasty the latest (Emery, 1965: 114). The findings of sealings with names of kings furthermore suggest that the copper processing activities at Buhen were undertaken for the crown. The sources of the ore are unknown, but they were probably close to the site. It has been suggested that oxidised deposits of copper in the gold-bearing region of Batn el-Hajar were utilized on the basis of the high gold content in the copper from Buhen (El Gayar and Jones, 1989: 40).

When the C-Group people controlled Lower Nubia from the late Fifth Dynasty to the Twelfth Dynasty, no mining activities appear to have been undertaken from bases in Lower Nubia (see Hafsaas, 2006: 137-142). Furthermore, from the late Sixth Dynasty to the mid-Twelfth Dynasty, the Egyptians also appear to have been unable to send expeditions to the mines of Sinai, while the known copper mines of the Eastern Desert appear to have become exhausted. The lack of access to copper during that timespan explains the limited amounts of copper objects in circulation during the latter half of the 3rd millennium BCE.

A stele (EMC 71901) found near the gold and amethyst mines around Wadi el-Hudi in the desert *c*. 35 kilometres southeast of the First Cataract records that an official named Hor was ordered by king Senusret I, the second king of the Twelfth

Dynasty, to collect copper in Ta-Seti (Rowe, 1939: 188-189). At that time, Ta-Seti probably denoted all of the land south of Egypt (see p. 76 above). Hor boasted that he brought back copper in "*great quantity*" and that it was "*dragged on sledges and carried upon stretchers*" (Rowe, 1939: 191). The expedition of Hor suggests that the Egyptians were resuming copper mining in the hinterlands of Lower Nubia at the beginning of the Twelfth Dynasty. The inscription also informs us that Hor had the army at his disposal, and several references in the text suggest hostile relations with the people in Lower Nubia.

After the conquest of Wawat, i.e. Lower Nubia (see p. 77 above), during the early Twelfth Dynasty, the fortress built at Kuban at the mouth of Wadi Allaqi was used for processing copper ore (Hafsaas, 2006: 116, 118). The copper deposits at Abu Seyal in Wadi Allaqi were mined extensively during ancient times (Lucas and Harris, 1962: 205), and it is highly probable that it was copper from Abu Seyal that was processed at Kuban. The slag heaps from the copper smelting at Kuban have been estimated to constitute more than 200 tonnes, and it has been suggested that around 12 tonnes of copper were extracted (Lucas and Harris, 1962: 207-208; El Gayar and Jones, 1989: 38).

The five first kings of the Twelfth Dynasty all sent at least one mining expedition to the copper mines at Serabit el-Khadim on Sinai (Mumford, 1999: 882). The copper and turquoise mines were worked extensively during the reign of Amenemhat III who sent 23 expeditions to Sinai (Wilkinson, 2010: 180), and his successor Amenemhat IV also sent several expeditions to Sinai for obtaining copper (Callender, 2000: 170). A few inscriptions from the Thirteenth Dynasty (Callender, 2000: 171) suggest that copper mining continued, although on a smaller scale.

The inclusion of the Middle Nile region in the Bronze Age world

The A-Group and C-Group peoples inhabited Lower Nubia during the period from *c*. 3800 to 1500 BCE (with a possible hiatus between *c*. 3000 and 2500 BCE), while the so-called Pre-Kerma and Kerma peoples populated Upper Nubia from *c*. 3300 to 1500 BCE. Both time spans overlap with the Bronze Age (*c*. 3500-1200 BCE) of the wider Afro-Eurasian context. Copper objects and later also copper metallurgy

were introduced to the Middle Nile region from Egypt in a stepwise process: First to Lower Nubia and then to Upper Nubia. The Fourth Cataract was the region furthest upstream on the Nile where copper-alloy artefacts dating to the Bronze Age have been uncovered (see p. 23 above). At the present state of knowledge, neither copper/bronze objects nor the related technology seem to have arrived to Central Sudan during the time span of the Bronze Age. In Central Sudan, a prolonged Neolithic period was followed immediately by an Iron Age as in most parts of Africa. The Middle Nile was thus a vast frontier zone between metal-using and stone-using peoples.

We will now trace the introduction of copper and bronze to the people of the Middle Nile by starting with the northernmost region, where metals were first imported. The introduction of copper and bronze to the Nile Valley is of particular importance for this study of war, since these metals were essential raw materials for making weapons. In fact, the commonest artefact made of copper/bronze along the Middle Nile during the Bronze Age was the dagger – a specialized weapon (Hafsaas-Tsakos, 2013: 84; see the section *Upper Nubia* below).

Lower Nubia

The earliest copper objects were traded to Lower Nubia from Egypt during the A-Group period. In the graves belonging to the proto phase, only a few copper needles were found, but malachite was a common part of the grave goods (**Table 5**). From the middle phase onwards, the commonest categories of copper objects in A-Group contexts were awls, axe-heads/adzes/chisels and bracelets (see **Table 5**). In the high-status Cemetery L at Qustul, only a few copper objects had escaped the heavy plundering, but they included a spearhead (see **Figure 49**), a finial in the shape of the flower of the papyrus plant, probably another finial in the shape of a bull-hoof, parts of a shallow dish, two awls and three finger rings (Williams, 1986: 128). Parallels to the triangular, tanged spearhead have been found in early Naqada III contexts at Minshat Abu Omar and Tarkhan in Lower Egypt as well as at Azor on the coast of Palestine (Wengrow, 2006: 169, 171). The papyriform finial was probably one of the metal fittings attached to the wooden legs of a carrying bed or litter, of which parallels have also been found in graves at Minshat Abu Omar (Wengrow, 2006: 169) as well as in

the tomb of king Djer (see p. 83 above). The finial shaped like a bull-hoof was probably from the leg of a bed with bull-legs (Williams, 1986: 128). A similar bed was found in the elite Cemetery HK6 at Nekhen [Hierakonpolis], in the large tomb 11 dating to Naqada IIIA2 (B. Adams, 1996: 13).

Region	Object / Cemetery	Chronology	Awls & borers	Chisel	Brace-lets	Adzes	Jewelry	Need-les	Axes	Har-poons	Knives	Spear-head	Misc.	Sub-total	Total	Mala-chite
Northern Lower Nubia	**7/SE**	Proto												**0**		8
	14	Proto												**0**		5
	17	Proto												**0**		3
	41/200	Proto						2						**2**		8
	44	L. Early												**0**		2
	45/200	Proto												**0**	**2**	1
	7/100-300	Naqada IIIA2-C												**0**		9
	17	Naqada IC-IID1						5					1	**6**		4
	23	Naqada IIC-IIIA1												**0**		0
	30	Naqada IIC-IID2												**0**		0
	40	Naqada IID2-IIIB			1		2			1				**4**		0
	41/400	Naqada IIC-IIIB					1							**1**		0
	43	Naqada IIA-IID1											1	**1**		1
	45/100-400	Naqada						1						**1**		2
	50	Naqada IIIA2-IIIB												**0**		0
	111	Naqada IID1												**0**	**12**	0
Middle Lower Nubia	**73**	Middle-E. Terminal			2									**2**		0
	76	Middle-E. Terminal			1									**1**		1
	79	L. Early-E. Terminal	5		1		1						1	**8**		1
	80	Early-E. Middle	1											**1**		2
	89	L. Middle-E. Terminal	1	3	1	1			1					**7**		4
	92	E. Middle -E. Terminal												**0**		0
	98	Middle-E. Terminal												**0**		0
	99	E. Middle-E. Terminal			1									**1**		4
	101-102	Middle-E. Terminal			2				1				2	**5**		3
	103	L. Early-E. Middle												**0**		0
	111	L. Middle-E. Terminal	1				1						1	**3**		3
	134	Middle									1			**1**		2
	136	Middle	2					1			1			**4**		1
	137	Middle		5		3				1			1	**10**		3
	142	L. Middle-E. Terminal		2					2					**4**		1
	148	L. Middle-E. Terminal		1	2			1						**4**		0
	166	L. Early-E. Terminal												**0**		0
	168	E. Terminal												**0**		0
	NN	E. Terminal												**0**		0
	204	L. Middle-E. Terminal	4	2										**6**		0
	206	L. Middle-E. Terminal	4	1										**5**	**62**	0
Southern Lower Nubia	**215**	L. Middle-Terminal	8									1		**9**		0
	L	L. Middle-Terminal	2				3					1	4	**10**		0
	W	L. Middle-Terminal	1			2			1	1				**5**		0
	V	Terminal	1											**1**		0
	Faras 3	Middle-Terminal	4	3	1		2		1	1				**12**		0
	298	L. Middle-Terminal	4											**4**		0
	292	Terminal				1			1					**2**		0
	308	Middle-E. Terminal												**0**		0
	230	Middle-Terminal												**0**		0
	187	Terminal												**0**		0
	332	L. Middle-Terminal	2								1			**3**		4
	401	Terminal												**0**		0
	277	Middle-E. Terminal	6			2			1					**9**	**55**	4
	Subtotal	4th millennium BCE	**46**	**17**	**12**	**9**	**10**	**10**	**8**	**4**	**3**	**2**	**11**	**Total**	**132**	**76**

Table 5: The distribution of copper-alloy objects and malachite in 4th millennium BCE sites in Lower Nubia. Naqada sites are marked with a black background. Data from excavation reports (Reisner, 1910; Firth, 1912, 1915, 1927; Steindorff, 1935; Emery and Kirwan, 1935; Williams, 1986, 1989; Nordström, 1972).

The C-Group people also imported copper and bronze objects from Egypt. During the latter part of the I/a-phase (i.e. contemporary with the Sixth Dynasty), copper objects were first deposited in the graves at Cemetery N at Aniba – the largest C-Group cemetery. The vast majority of the copper/bronze objects uncovered in C-Group contexts were found at this site, so I have selected it for demonstrating the chronological development in the import of copper/bronze objects by the C-Group people (**Table 6** and **Figure 16**).

Contexts (from	Specialized weapon	Tool-weapons/weapon-tools				Toiletries			Other categories		Total
early to late)	Daggers	Axes	Adzes	Chisels	Knives	Mirrors	Rings	Awls	Fittings	Needles	per phase
N/446						1					
N/457						1					
N/530:a						1					
N/557:a						1					
N/795						1					
N/834						1					
N/857						1					
N/907						1					
N/925:c						1					
N/961:a						1					10
N/459									1		
N/461						1					
N/479								1			
N/505:b						1					
N/534:b						1					
N/758						1					
N/780							1				
N/954:a						1					
N/958:b			1	1	1	1					12
N/222						2					
N/385						1					
N/429						1					
N/503						1					
N/509						1					
N/600							1				
N/647						1					
N/686	1										
N/953										1	10
N/11	1					1					
N/21		1									
N/26						1					
N/52						1					
N/389						1					
N/352		1									
N/487	1	1				1					
N/546	1										
N/649	1					1					13
Total	5	3	1	1	1	29	2	1	1	1	45

Table 6: The distribution of copper alloy/bronze objects in Cemetery N at Aniba. Data from Steindorff (1935).

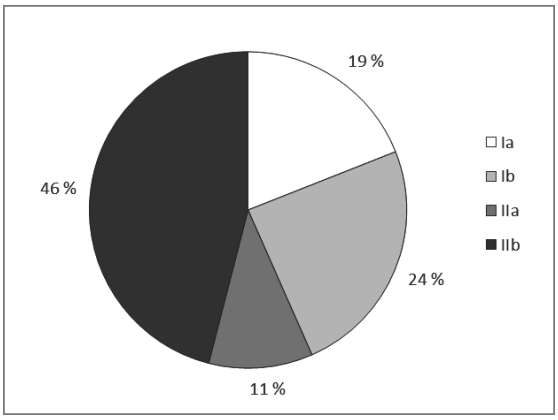


Figure 16: Distribution in time of copper/bronze objects at Cemetery N at Aniba. The numbers of copper/bronze objects are shown in percent per hundred years of trade. N=45. The data is based on the following formula: number of objects divided by years of trade and

During the I/a-phase, the only category represented in the sample was mirrors, and they remained the most popular category of copper object among the C-Group people (see **Table 6**). There was an increase in the number of copper objects deposited in the I/b-graves compared to the previous phase, while there was a sharp decline in the influx of copper objects to the C-Group people during the II/a-phase (see **Figure 16**). This suggests that there were restrictions on the availability of copper for the C-Group people when Lower Nubia was conquered and occupied by Egypt, although trade between the C-Group people and the Egyptians continued (Hafsaas-Tsakos, 2010: 392). Then there was a dramatic increase in imports of copper/bronze objects during the II/b-phase (see **Figure 16**). Specialized weapons in form of bronze daggers and battle axes were then for the first time important categories, although mirrors continued to be the commonest object. In three out of five instances, daggers were actually found together with mirrors during phase II/b (see **Table 6**).

The peoples of Lower Nubia do not seem to have had their own production of copper and bronze implements, and both the A-Group and the C-Group peoples received artefacts made from these metals through exchange with Egypt. Although the Egyptians had copper smelting facilities at Buhen during the 3rd millennium BCE and at Kuban during the 2nd millennium BCE, the people of Lower Nubia do not appear to have adopted metallurgy as a technology. Furthermore, throughout the Bronze Age, weapons of copper-based alloys were not that common in Lower Nubia (see **Tables 5** and **6**). This was probably due to Egyptian restrictions on the export of a superior weapon technology to real or potential enemies.

In order to subjugate the local inhabitants, the Egyptians undertook military campaigns and conquests of Lower Nubia before they established their copper smelting facilities at both Buhen in the 3rd millennium BCE and Kuban in the 2nd millennium BCE. It is therefore likely that access to deposits of copper, but also gold, in the hinterlands of Lower Nubia was a motivating factor for war from the side of the Egyptians (see the section *Materialist approaches* in Chapter 6).

Upper Nubia

Copper objects were extremely rare during the Pre-Kerma period and the early phase of the Kerma period in Upper Nubia. During the former, only a copper awl imported from the north, probably via A-Group middlemen, is known from a grave dating to *c*. 3000 BCE at Kerma upstream of the Third Cataract (Honegger, 2004b: 45). In total five copper mirrors have been uncovered from contexts dating to the early phase of the Kerma period: one from the large Kerma cemetery on Sai Island (Gratien, 1986: 362), two from sector 5 in the Eastern Cemtery at Kerma (Bonnet, 1982: 51), as well as two from et-Terif in the Fourth Cataract (Welsby, 2003: 31).

From the middle phase of the Kerma period, the vast majority of the copper and bronze objects in Upper Nubia were found in the Eastern Cemetery at Kerma with only a few items being uncovered at other sites. I will therefore use the data of this cemetery for tracing the shifting trends in popularity for different categories of copper/bronze objects (**Table 7**) as well as the development in the consumption of copper/bronze artefacts through time (**Figure 17**).

The earliest imports of copper-alloy objects in the Eastern Cemetery date to the end of the early phase of the Kerma period, when metal came into use among the elites at Kerma as imported objects from the north. The most numerous objects were mirrors and daggers (see **Table 7**). Based on both archaeological and written sources, trade between Egypt and Kerma started at the transition from the early to the middle phase of the Kerma period (Hafsaas-Tsakos, 2009b: 59-60). During the middle phase, daggers imported from Egypt were the commonest objects. This is in contrast to the C-Group people in Lower Nubia, where only a single dagger was imported during the contemporary II/a-phase of the C-Group (see **Table 6**). The earliest daggers of a shape

Contexts (from	Specialized weapons - daggers			Tool-weapons/weapon-tools			Toiletries				
earliest to latest)	Egyptian type	Kerma type	Ivory butts	Knives	Harpoons	Axes	Razors	Mirrors	Tweezers	Awls	Curler
Sector 5	—	—	—	—	—	—	—	2	—	—	—
Cemetery N	5	—	1	—	—	2	—	7	—	—	—
Sector 7	—	—	—	—	—	—	—	2	—	—	—
Sector 8	1	—	—	—	—	—	—	—	—	—	—
Sector 20	2	—	—	—	—	—	—	—	—	—	—
Sector 12	—	—	—	—	—	—	1	—	—	1	—
Sector 24	—	—	—	—	—	—	1	—	—	—	—
Sector 15	1	—	—	—	—	—	—	—	—	—	—
Tumulus M	1	—	1	—	—	—	1	—	—	—	—
Cemetery B	3	2	2	3	—	2	—	1	—	—	—
Tumulus LX	—	—	1	—	—	—	1	—	—	—	—
Tumulus LVI	—	—	1	—	—	—	—	—	—	—	—
Tumulus LIV	—	1	—	—	—	—	—	—	—	2	—
Sector 19	—	—	—	—	—	—	—	—	—	—	1
Tumulus XXXVIII	—	—	—	—	—	—	—	—	—	2	—
Tumulus XXXIX	—	1	—	—	—	—	—	—	—	—	—
Tumulus XXXV	—	1	1	1	—	—	1	—	—	—	—
Tumulus XXI	—	—	1	—	—	—	—	—	—	—	—
Tumulus XXVII	—	—	—	1	—	—	—	—	—	—	—
Tumulus XX	—	—	—	2	—	—	—	—	—	—	—
Tumulus XIX	—	—	—	—	—	—	—	—	—	2	—
Tumulus XVIII	—	4	2	1	4	—	2	—	—	—	—
Tumulus XVI	—	9	13	4	—	—	3	—	—	—	1
Tumulus XV	—	1	—	—	—	—	—	—	—	1	—
Tumulus XIV	—	1	—	—	1	—	—	—	—	—	—
Tumulus X	—	32	15	1	—	—	3	—	—	—	—
Tumulus XII	—	1	—	—	—	—	—	—	—	—	—
Tumulus XLI	—	—	1	—	—	—	—	—	—	—	—
Tumulus IV	—	22	6	—	—	—	—	—	1	—	1
Tumulus III	—	3	4	3	—	—	19	9	6	—	1
Total	**13**	**78**	**49**	**16**	**5**	**4**	**32**	**21**	**7**	**8**	**4**
Total number of daggers and butts:			**140**	**Total:**		**25**	**Total:**				**72**

Legends:

Early phase
Middle phase
Early classic phase
Late classic phase

For the different contexts, see Hafsaas-Tsakos, 2013: fig. 2.

Table 7: The distribution of the commonest categories of copper alloy/bronze objects in the Eastern Cemetery at Kerma. Adaptation of Hafsaas-Tsakos (2013: table 2).

indicating local production at Kerma date to the latter part of the middle phase of the Kerma period, while imports of Egyptian daggers came to a halt (see **Table 7**). During the late early and the middle phases, there was a limited import of copper-alloy objects from Egypt to Kerma (see **Figure 17**). By the beginning of the early classic phase the technology of copper smelting and casting had certainly been adopted by the people of Kerma, and the most characteristic product was the so-called Kerma dagger (Hafsaas-Tsakos, 2013: 86). The overwhelming majority of copper-alloy objects at Kerma date to the late classic phase (see **Figure 17**), and the locally produced daggers were most numerous (see **Table 7**). It is noteworthy that in the latest tumulus at Kerma, Tumulus III, there was a correlation in the peaks of occurrence of the toilet articles of copper,

i.e. razors and tweezers, as well as mirrors (see **Table 7**) contained half of all the copper objects belonging to the category of toiletries such as razors, mirrors and tweezers (see **Table 7**). A final observation about which objects were chosen to be made of metal is that bronze was most preferably used for weapons at Kerma, followed by different categories of toiletries and only to a limited degree tools. This probably reflects the reality where metallurgy was mainly used for making weapons in a weapon race before the war between Kush and Egypt in the mid-2nd millennium BCE (see Hafsaas-Tsakos, 2013: 87, 90).

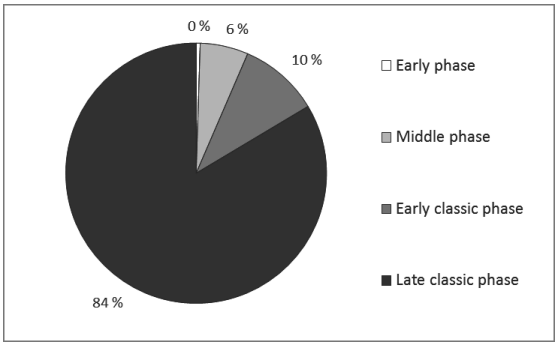


Figure 17: Distribution in time of copper/bronze objects in the Eastern Cemetery at Kerma. The numbers of copper alloy/bronze objects are shown in percent per hundred years of trade. N=188 (the butts are not included). The data is based on the following formula: number of objects divided by years of trade and multiplied by a hundred years.

It remains to be proven whether the large-scale indigenous copper industry at Kerma also included the mining of copper ore. The Sudanese archaeologist Ikhlas Abdel Latif (n.d.) has undertaken chemical analyses of 21 copper and bronze artefacts from all periods, and she argues in an unpublished paper that the composition of copper with zinc suggests that an ore located in Sudan was used.[8] This interesting proposal needs more research in order to be confirmed.

The distribution pattern of copper and bronze objects in Upper Nubia probably reflects the actual distribution of these objects. Kerma must have been a centre that controlled both the copper supply and the manufacturing technology.

This section has demonstrated beyond doubt that people living in both Lower Nubia and Upper Nubia belonged to the copper using world of the Bronze Age. We will now move on to the next hallmark of the Bronze Age – the forging of ethnic identities.

[8] I am grateful to Ikhlas for sharing the results from this study with me.

Ethnicity

During the Bronze Age, new forms of "*more bounded ethnic commonalities*" emerged (Earle and Kristiansen, 2010b: 243), and ethnic identities became more pronounced. The forging of ethnic identities seems linked to the formation of more complex political communities at the time (Earle and Kristiansen, 2010b: 238). Ethnicity is important for this study of war, since on the one hand, the political communities that were engaged in war against each other during the Bronze Age were often ethnic groups; and on the other hand, war can be significant for the construction and modification of ethnic identities as well as the disappearance of ethnic groups during particular historical circumstances.

This section will first explore ethnic groups and identities as well as ethnic boundaries and territories from a theoretical perspective, and then see how ethnic identities can materialize in the archaeological record.

Ethnic groups and identities

In the influential introduction to the edited book *Ethnic groups and boundaries* (1969), the Norwegian anthropologist Fredrik Barth employed the earliest subjective approach to ethnicity. The introduction and essays of the book condemned the equation between culture and ethnic groups, and Barth criticized the prevailing content of the concept *ethnic group* as being too similar to the traditional proposition "*a race = a culture = a language*" (Barth, 1969: 11). Barth emphasized that ethnic groups are "*categories of ascription and identification by the actors themselves, and thus have the characteristic of organizing interaction between people*" (Barth, 1969: 10). Nevertheless, as Barth argued more recently, ethnic identification must depend not only on self-ascription but also on ascription by others, because ethnicity will only make organizational difference if individuals embrace it, are constrained by it, act on it and experience it (Barth, 1994: 12). Furthermore, Barth suggested moving the focus of the research away from the differences between cultures and their historical boundaries and instead addressing the processes involved in generating and maintaining ethnic groups as well as the nature of the boundaries between them (Barth, 1969: 10). In other words, instead of studying the "*content*" of isolated cultural units,

researchers should focus on the social dimensions of ethnic groups and especially the maintenance of ethnic boundaries through interaction (Barth, 1969: 10-11).

Thomas Hylland Eriksen (1993: 12), another Norwegian anthropologist, has expanded on Barth's argumentation and stresses that *"ethnicity is essentially an aspect of a relationship, not a property of a group"*. As such, ethnicity is an aspect of social organization in contact situations, which is often related to economic and political relationships, and in particular inter-group competition (Jones, 1997: 28). In a subjective perspective, ethnic identities can thus be both fluid and situational, but this aspect was ignored by Barth (Jones, 1997: 75). Furthermore, subjectivist approaches take the existence of the cultural characteristics that symbolize the ethnic identity for granted (Jones, 1997: 78). The subjective approach can thus be complemented by a more objective perspective that incorporates both culture and structure (Jones, 1997: 80). By integrating the two perspectives, the objectivist approaches include the cultural contexts and social relations in which the subjectivist approaches argue that the interaction between agents with different ethnic identities takes place (Jones, 1997: 87). A more complex theory for explaining ethnicity was thus formulated in the late 1980s, when the anthropologist G. Carter Bentley (1987) applied Pierre Bourdieu's theory of practice. Bentley (1987: 27) used Bourdieu's concept of *habitus* as a means of providing an objective grounding for the subjective construction of ethnic identity through feelings of likeness and difference. According to Bourdieu (1977: 72), habitus is a system of durable, transposable dispositions characteristic of a particular type of environment. The structural dispositions of habitus infuse all aspects of cultural practices and social relations characteristic of a particular lifestyle (Jones, 1997: 120-121). The dispositions of habitus are simultaneously both "*structuring structures*" and "*structured structures*", since they both shape and are shaped by social practices (Postone, LiPuma and Calhoun, 1993: 4). An example is "*ethnically specific suites of motor habits*" that develop with intentional and intensive training, such as pottery making (MacEachern, 1998: 123). Ethnoarchaeological research in the Mandara Mountains on the border between Cameroon and Nigeria has demonstrated that the female potters experimented with making new forms of pots, and these were sometimes inspired by other pottery traditions. However, the potters often found it

difficult to learn how to make other types – especially correct proportions of vessel forms (MacEachern, 1998: 122-123).

In the influential book *The archaeology of ethnicity*, Siân Jones (1997) makes a discussion of both the conceptual and the theoretical developments in the research on ethnicity, and she also transcends the dichotomy between subjectivist and objectivist perspectives of ethnicity by drawing on Bentley's use of habitus. However, she emphasizes, in accordance with Barth, that

> *"ethnicity is not directly congruent with either the habitus, or the cultural practices and representations that both structure, and are structured by, the habitus. Crucially, ethnic identification involves an objectification of cultural practices (...) in the recognition and signification of difference in opposition to others" (Jones, 1997: 128).*

On the basis of her investigations, she developed the following definition of ethnic group:

> *"any group of people who set themselves apart and/or are set apart by others with whom they interact or co-exist on the basis of their perceptions of cultural differentiation and/or common descent (Jones, 1997: xiii).*

This definition eloquently combines the subjectivist and objectivist positions on ethnicity, and it will thus be employed in this thesis.

Ethnic boundaries and territories

As noted above, Barth shifted the focus of study to "*the ethnic boundary that defines the group, not the cultural stuff that it enclose"* (Barth, 1969: 15). One of the central themes explored in this thesis is the establishment of the ethnic boundary between Naqada people and A-Group people, so this is an essential concept to explore. Barth's use of the term boundary has been criticized as being misleading, since a boundary concept indicates that the people of a single ethnic group are completely separated from members of other ethnic groups (Emberling, 1997: 299). However, Barth's point is exactly that the boundaries are social, and that group identity and boundaries can be maintained despite interaction with other groups (Barth, 1969: 15). In fact, ethnic boundaries persist even if there is a flow of personnel across them (Barth, 1969: 1, 23). Both anthropological (e.g. G. Haaland, 1969: 70; G. Haaland, 2009: 99-101) and ethnoarchaeological (e.g. Hodder, 1982: 24, 31) fieldwork have

demonstrated that people indeed change ethnic identity – especially if they settle with a different ethnic group and change their lifestyle accordingly. The reason for changing identity would be that other people would expect and judge their behaviour as if they were belonging to the ethnic group they were living with. From a warfare perspective, it is also important to note that protection from raids and attacks often depends on belonging to an ethnic group.

Furthermore, different ethnic groups often inhabit different geographical settings. Cultural exchanges can traverse ethnic boundaries (e.g. MacEachern, 1998: 122; Gosselain, 2000: 200), which are primarily social boundaries (see Barth, 1969: 15). However, contact between ethnic groups takes place in physical contexts – across geographical borders. Boundaries thus work both by marking different social groups and by dividing territory "*on the ground*" (see Barth, 2000: 17). It is characteristic that boundaries separate what they distinguish (Barth, 2000: 27), and the making of a boundary is a cognitive act (Barth, 2000: 30). Ethnic identities are thus constructed in interactions with others across social, cultural and geographical boundaries (Jenkins, 1996: 24).

Frontiers are distinctive from boundaries, and the term is reserved for zones delineating colonial territories from the hinterlands of indigenous peoples (Lightfoot and Martinez, 1995: 473). As such, frontiers can be of three different types: 1) between civilized and tribal peoples, 2) between nomadic pastoralists and farmers, and 3) between foragers and farmers (Ferguson, 1997: 425). Frontiers are thus often zones of interaction where encounters between peoples of different ethnic identities take place (Lightfoot and Martinez, 1995: 473), but they can also be almost depopulated areas where the strongest group has unmediated access to the natural resources (see Wengrow, 2006: 147 for Lower Nubia in the first half of the third millennium BCE).

Both boundaries and frontiers are central concepts in warfare studies, because they contribute in defining whom it is culturally acceptable to wage war against. There were several ethnic boundaries along the Middle Nile during the Bronze Age (e.g. Hafsaas-Tsakos, 2010: 389). However, the boundary in the region of the First Cataract was of a special sort, because this was also a frontier zone between people belonging to the ancient Egyptian state in the north and peoples with other forms of political

organization in the south (see the section *A theory for explaining wars on the southern frontier of ancient Egypt* in Chapter 6 and *Part II*).

Ethnic identity in the archaeological record of the Middle Nile

In recent years, ethnicity has been brought to the foreground of Bronze Age research in Europe (e.g. Earle and Kristiansen, 2010: 236-243), but also in Egypt (e.g. Stevenson, 2009: 69-72), Lower Nubia (e.g. Roy, 2011: 2-3 for the A-Group and Hafsaas, 2006: 4-6 for the C-Group) and Upper Nubia (e.g. S.T. Smith, 2003: 10-55).

Archaeologists have to rely on the implications of material culture in the identification of ethnic groups, although in some cases historical documents or modern informants can provide additional information (cf. Emberling, 1997: 311). Since societies are changing, then so do also ethnic identities. Archaeology provides the long-term perspective that is necessary for studying processes of *ethnogenesis* (Greek for 'the creation of ethnicity'), the long-term persistence of ethnic groups, and their eventual disappearance (Emberling, 1997: 296), and war can contribute to all these processes.

Barth (1969: 14) suggested that ethnic identity is expressed through:

1) Overt signs exhibited through material culture.

2) Fundamental value orientations by which a person's performance is judged.

In addition, Olivier P. Gosselain (2000) has emphasized that also subtle aspects of material culture can be the result of a materialization of ethnic identity. The appropriation of material culture is not always a conscious process, and the processes of making material culture are often embedded in cultural values and representations as part of our habitus (Gosselain, 2000: 189). Ethnic identity can thus be manifested in dimensions of material culture that is not part of the overt signification of ethnicity (Jones, 1997: 120-121). The focus on ethnicity in this thesis concerns the self-conscious objectification of cultural practices or material culture in order to forge a collective identity in opposition to another group with special emphasis on situations of competition, conflict and war (see the discussion in the section *Ethnic groups and identities* above). However, the ethnic emblems selected to express ethnic identity in the past may not be visible in the archaeological record – for instance body decoration,

scarification, dress and hair styles. The methods of uncovering ethnic identity in the past will thus have to draw on both overt and subtle choices in the use of material culture as expressions of ethnicity, but also practices related to habitus (see *Chapter 8*).

I will argue that it is possible to identify ethnic identities in the Nile Valley during the Bronze Age. Numerous sites have been excavated in this region with the result that several coherent archaeological assemblages have been identified on the basis of different inventories of material culture, and Barth has argued that material culture is one way through which ethnic identity can be expressed. Furthermore, these archaeological groups have different distributions in time and space (see **Table 2**) and different lifestyles in different environments. Different environments would create different habitus. The other way to express ethnic identity according to Barth is through fundamental value orientations, e.g. language, religion, culturally defined physical characteristics and cuisine (see Emberling, 1997: 310). These value orientations may be more difficult, although not impossible, to detect through material culture.

A common obstacle towards identifying ethnic groups in the past is that material culture often cross-cut presumed ethnic boundaries (see next section on cross-cultural trade). Furthermore, we cannot know a priori which features people in the past selected to signify ethnic identity, as already pointed out by Randi Haaland (1972: 106-107) in her study of the lithic artefacts uncovered by the Scandinavian Joint Expedition in the region of the Second Cataract (see also R. Haaland, 1977). Ethnographic analogies may be a useful guidance when searching for expressions of ethnic identity in archaeological data. Ian Hodder's (1982) ethnoarchaeological fieldwork in Baringo has demonstrated that certain aspects of dress as well as other items of material culture had fairly clear breaks at the tribal boundaries (Hodder, 1982: 22). It is important to note that it was in contexts of competition and conflict over resources between groups that ethnic identity was most clearly displayed. Hodder (1982: 31) explained this in terms of security, because it is by being member of a particular group that one ensures the rights to both land and protection. However, there were also some categories of material culture that crosscut the ethnic boundaries in Baringo (Hodder, 1982: 58). Hodder (1982: 73) described this phenomenon as

adaptive social strategies of subgroups within the ethnic groups – particularly concerning conflicting interests between generations. However, the occurrence of similar objects in the assemblages of different ethnic groups can also be a result of trade (see the section *Long-distance exchange* below).

In order to make the argument for the existence of an ethnic group in the past stronger, it is important to demonstrate that there is a combination of objects that can be linked to the ethnic identity. The archaeological evidence for ethnic identity therefore needs to occur simultaneously in multiple categories and in a variety of media (cf. Emberling, 1997: 318; Stevenson, 2009: 77). Moreover, it is important to emphasize Barth's point that the signs expressed through material culture should be "*obvious*", which means that the objects articulating ethnic identity should be unambiguous and highly visible, although these traits not always survive in the archaeological record.

Both the fluidity and the rigidity of the ethnic boundaries of the peoples living along the Nile Valley have created the great diversity of ethnic groups through time and across space since the Bronze Age. Still today, the Middle Nile is occupied by both Nubian and Arab tribes with their own ethnic identities that are distinctive from the national identity. The present-day Nubians of the Middle Nile even speak a different language – modern Nubian – in contrast to the Arabic-speaking majority in northern Sudan. It is possible that the First Cataract was a language barrier in the 4th millennium BCE too (Rilly, 2014 only discuss phonetic evidence from the 2nd millennium BCE onwards), and this may have contributed in the resilience of this ethnic boundary. In contrast to the situation along the Middle Nile, the Egyptians in the north have produced and reproduced their ethnic identity, which means its boundaries rather than the content, for several millennia, although the political rulers and elites have come from many different ethnicities and nationalities since the end of the Bronze Age (see p. 2 above).

Ethnic pluralism thus seems to have been a persisting feature of the Middle Nile that can be traced at least from the beginning of the Bronze Age onwards (Hafsaas, 2006; Hafsaas-Tsakos, 2009). I will thus elaborate in Chapters 8 to 10 on my view that different archaeological assemblages in Lower Nubia during the 4th millennium BCE

should be identified as separate ethnic groups with recognizable ethnic identities. I will use distribution patterns to show that some categories of the material culture and cultural practices were more or less confined within the boundaries between these ethnic groups, while other categories transcended these boundaries (e.g. copper objects). The reasons for the latter patterns are twofold: First, the ethnic groups along the Middle Nile in the Bronze Age seem to descend from widespread cultural traditions of Neolithic Sudan and the Green Sahara; and, second, these groups were engaged in exchange both with each other and the Egyptians in the north. And this latter point brings us to the next hallmark of the Bronze Age – long-distance exchange across cultural borders.

Long-distance exchange

The many similarities of the Bronze Age in widely separated regions of Europe, Asia and Africa made archaeologists understand from an early stage in the history of research that cross-cultural contacts over long distances were an especially important factor during this period. From the end of the 19th century to the mid-20th century, the research on the Bronze Age within the framework of the culture-historical archaeology viewed the Bronze Age world as connected through diffusion and migration (Trigger, 2006: 211, 217). This position was represented by key figures such as the Swedish archaeologist Gustaf Oscar Montelius and the Australian archaeologist Vere Gordon Childe (Trigger, 2006: 228, 246). However, the New "processual" Archaeology of the 1960s focussed more on regional developments and emphasized functionalist explanations for both social processes and cultural evolution (Jones, 1997: 26). Archaeologists working within the processual paradigm considered ethnicity as an unimportant focus of archaeological enquiry (Jones, 1997: 5), and cross-cultural contact was therefore largely ignored.

In anthropology and sociology, Barth's (1969, see above) and Wallerstein's (1974, see below) works initiated a significant shift in the view on cultures from bounded entities to an interconnected, transregional view of human interaction. After some delay, their perspectives also started to influence archaeologists.

The long-distance connections of the Bronze Age were reconsidered when the idea of a Bronze Age world system was introduced. The concept of a *world system* was perceived by the Italian sociologist Immanuel Wallerstein (1974, 1980 and 1989) in a trilogy where he analysed the development of capitalism in Europe from the late 15th century and the subsequent dispersal of capitalist economies. Wallerstein integrated the numerous economies of the world into a *world system* that was divided into three zones: cores, semiperipheries and peripheries. However, Wallerstein's initial model of the capitalist world system lacked a long-term dimension, and this has subsequently been added by historical and archaeological research (see Hafsaas-Tsakos, 2009: 52 for a fuller discussion). Several scholars have argued in favour of the existence of a Bronze Age world system from around 3000 BCE (see e.g. Kohl, 1978; Ekholm and Friedman, 1979; Algaze, 1989; Edens, 1992; Frank, 1993; Sherratt, 1993; Chase-Dunn and Hall, 1994; Kristiansen, 1998; Barrett, 1998; Frank and Gills, 2000; Frank and Thompson, 2005; Hafsaas-Tsakos, 2009b). The geographical extension of the Bronze Age world system is now considered to encompass Asia west of the Indus Valley (excluding the tundra in the north), Mediterranean and temperate Europe, and the Nile Valley of Northeast Africa. The Middle Nile is thus the southernmost extension into Africa of this interlinked Bronze Age world (Hafsaas-Tsakos, 2009b: 65).

The systemic approach of the world system model has lately been complemented by Kristian Kristiansen and Thomas B. Larsson's (2005) new perspective on Bronze Age societies. They focus on individuals and processes through travels, transmissions and transformations. Their work is thus representative for transfer studies, which investigate societies and cultures from the perspective of dynamics, flows and movements by studying phenomena ranging from individuals and groups undertaking journeys and migrations to a variety of processes by which material and symbolic goods are transferred. A representative of this approach in African archaeology is David Killick's (2009) critical review of world system theory where he uses the trade between East Africa and the Islamic world as a case study for technology transfer, or the lack of it, in contexts of inequality, unequal exchange and dependency.

It is clear that both Lower Nubia and Upper Nubia were partaking in the interconnected Bronze Age world, and this observation is not only based on the use of copper alloys. Chapter 7 will show that weapons used by people along the Middle Nile were part of the weaponry of the Bronze Age world. Furthermore, the identity of elite members was in many cases expressed through similar objects and practices as in other parts of the Bronze Age world.

Centres and peripheries

Studies of cross-cultural contact in the Bronze Age often use centre-periphery perspectives on trade (e.g. S.T. Smith, 1998 and Hafsaas-Tsakos, 2009b for the Middle Nile). The focus on centre-periphery relations in archaeology has largely been inspired by two of Wallerstein's (1974) central concepts, namely cores and peripheries. The *core* areas are the political and economic centres, which are characterized by increasing diversification and specialization (Wallerstein, 1974: 102-103). The *peripheries* of Wallerstein's model are defined geographically by the distance from the core and economically as suppliers of raw materials (Rice, 1998: 45). A core should not only be conceived as a single centre, as it can also be a large polity or even a cluster of such polities (Champion, 1989: 3). It is typical for peripheries to have a geographical location without opportunities for interactions with a plurality of centres in contrast to cores that usually have many possibilities for meeting their needs (Champion, 1989: 14). Furthermore, a characteristic of the world system model is that the relationships between centres and peripheries are asymmetric. The cores are the main consumers of all goods, while the peripheries are the main providers of raw materials. The rulers of the cores are also usually the dominant partners in political relationships, while their subjects as well as the people of the peripheries are the dominated partners (Hafsaas, 2009b: 51). It was the threat of military force that compelled the peripheries into unequal exchange (Killick, 2009: 182). One reason for why centre-periphery perspectives have been used so much in research on the Bronze Age is that this was the first time in history that centres and peripheral regions were becoming clearly pronounced.

Archaeologists usually approach centre-periphery relations from the centres looking outwards (Rice, 1998: 45). The initial application of the centre-periphery perspective tended to ignore native agency, but this is now being rectified and agency in peripheral regions has attracted greater attention (see S.T. Smith, 2003: 58-59 for Upper Nubia during the New Kingdom). This thesis approaches the relationship from the peripheral region of the Middle Nile looking towards the core of Egypt. The centres often have a technological and military superiority so that peripheral ethnic groups are unable to mount effective resistance. However, it is important to note that centre-periphery systems are dynamic, and spatio-temporal shifts in the locations of power happen with implications both for levels of complexity and for the composition of ethnic identities. A centre-periphery perspective can thus offer a background for discussing war and warfare, especially between societies with different levels of social complexity and unequal exchange, which was the case in the Nile Valley during the Bronze Age.

Trade and alliances during the Bronze Age

During the Bronze Age, travelling between urbanized centres became systematic and far-reaching for purposes of both trade and political connections. The centres had a constant need for raw materials, while the peripheral regions demanded precious commodities and knowledge from the centres (Earle and Kristiansen, 2010c: 19). The localized occurrence of essential raw materials, such as metal ores, was important for the development of organized trade during the Bronze Age. Calculations of profit were possible since both raw materials and manufactured products were of some scarcity, which led to regional value differences (Kristiansen and Larsson, 2005: 108). The emerging elites had a strong interest in sponsoring and controlling the craft industries within their region in order to participate in cross-cultural exchange so that they could acquire prestige goods and raw materials that were unavailable locally (Köhler, 2010: 40) as well as to make alliances with elite partners in other regions through trading partnerships and marriages (Kristiansen and Larsson, 2005: 205).

Long-distance movements of people, goods and ideas across ethnic boundaries were a common feature from the beginning of the Bronze Age in different

geographical regions. The travels were instigated by the search for copper and other metals, which were relatively rare (Kristiansen and Larsson, 2005: 108). The new metals could be used for display by emerging chiefs, to reward supporters and alliance partners, and copper-alloy weapons could be used to arm warriors (Earle and Kristiansen, 2010b: 226).

Moreover, the Bronze Age elites were consumers of a variety of desirable commodities, and not all of them were made of precious metals. Some of these commodities were produced locally, while others were traded over long-distances. The exotic and rare products were most important in the semiotic and socio-economic games that people played with consumption (Sherratt, 1996: 156). Travels were thus an important means of gaining access to foreign prestige and wealth (Kristiansen and Larsson, 2005: 130). Furthermore, travels and trade were important in forming alliances and creating social capital for harder times. Crop failures could occur unpredictably and were disastrous without some sort of risk-buffering. One way of providing food security would have been to form exchange relationships and strategic alliances with other villages and pastoralists in the hinterlands.

Although long-distance trade gave opportunities for making huge profits, it was often at high risks (Curtin, 1984: 6). It was usually necessary for the rulers to use soldiers or warriors for protecting both trade routes and caravans (Earle and Kristiansen, 2010b: 227), and probably also to force terms and rates of transactions that were favourable towards the centre thus developing unequal exchange. War was therefore intimately linked with trade (see the sections *Materialist approaches* and *Structuralist and structural approaches* in Chapter 6 as well as *From enemies to trading partners* in Chapter 11).

Exchange in the Nile Valley during the Bronze Age

The wide alluvial plains in Egypt are poor in natural resources, except for their agricultural potential. Food surpluses often anticipate social inequality and prestige economies (Hayden, 2001: 249). The ability of some individuals to produce, store and transform food surpluses into prestige objects or labour changed the society in Egypt, as these entrepreneurs established themselves as political and economic elites and used

the surpluses to sustain non-food producers like craftspeople, ritual specialists, warriors and rulers (Hafsaas-Tsakos, 2009a: 25). These emerging elites desired to display their new and exclusive identities. It was thus only a matter of time before the Egyptians sent explorers to their hinterlands, where they found that both useful and exotic products could be procured from the surrounding deserts and the lands to the south and northeast. On the same token, the people of first Lower Nubia (e.g. Hafsaas-Tsakos, 2009a) and subsequently Upper Nubia (e.g. Hafsaas-Tsakos, 2009b) discovered the world of Egyptian commodities as both manufactured products and luxurious foodstuff could be obtained from the north. The result of these realizations was the beginning of a lively exchange between the Egyptians and the people of the Middle Nile. Despite people travelling and goods being exchanged, there appears to have been a considerable time lag in the transfer of important ideas and technologies such as metallurgy, pyro-technology, writing, potter's wheel and religion. The reasons for this may be on the one hand that the people of the Middle Nile were only interested in some of the commodities and ideas of the Egyptians and on the other hand that the Egyptians were unwilling to share knowledge of superior technologies such as metallurgy.

Ancient Egypt was one of the most significant and powerful Bronze Age civilizations. Situated on the African continent and at the same time on the southern shore of the Mediterranean Sea, Egypt was placed at the centre of a thriving trade network and firmly within the core region of the Bronze Age world. This core can be seen as incorporating the lands surrounding the eastern part of the Mediterranean, including the large islands of Crete and Cyprus. Furthermore, Egypt benefitted from having hinterlands on two continents – northeast Africa and southwest Asia with different natural environments that provided access to a rich variety of resources. In the Nile Valley, the beginning of the Bronze Age seems to be contemporary with the beginning of more intensive trade between people belonging to different ecological regions and thus also different cultural spheres. Contacts across cultural boundaries were often made for the purpose of obtaining exotic or prestigious materials, and most of the studies of cross-cultural contact between different groups in the Nile Valley have focussed on peaceful trade (e.g. Trigger, 1985). This means that indications or

evidence for war have been understudied (see the section *Warfare in archaeological research* in Chapter 6). Chapter 11 of this thesis will demonstrate that the first testified encounters between people from Upper Egypt and Lower Nubia were violent, and violence and war were persistent, although not constant, features of the relationships between the Egyptians and the people of the Middle Nile throughout the Bronze Age (see *Chapter 12*).

Like warfare, plundering has also long roots in human history. In the case of the Nile Valley, it was not only the Egyptians that pursued this activity. The most fundamental cost to anyone undertaking long-distance trade along the Middle Nile was to protect the commodities from violent seizure (cf. Curtin, 1984: 41). When the Egyptian state was too weak to send military expeditions for plundering the south for its resources or unable to trade directly with Upper Nubia, the people of Lower Nubia could plunder the caravans going to Upper Nubia, demand tribute for safe passage, or obstruct the trade altogether and make profit as middlemen, as described in the Old Kingdom autobiography of Harkhuf (see commentary in e.g. Hafsaas, 2006: 115). In this way, trade was not only the positive aspect of long-distance exchange as opposed to warfare, but it was also deeply connected with violent conduct or the threat of violence.

The Bronze Age of the Nile Valley was situated in time when monsoon rain already were retreating southwards (see the section *Holocene climate in Eastern Sahara* in Chapter 2) and well before the introduction of the camel to the region. The Nile valley was thus a land corridor that linked the regions bordering the southeastern Mediterranean littoral with Sub-Saharan Africa without hazardous desert crossings (W.Y. Adams, 1977; Connah, 2001: 18). Another option was to travel by boat along the shores of the Red Sea to the legendary land of Punt on the Red Sea coast of Eritrea (Shaw, 2000b: 323-324), but that region is outside the geographical scope of this thesis. The Nile Valley was thus a strategic artery that was worth fighting for. War and warfare in the Nile Valley cannot be studied without considering trade, which was always part of cross-cultural contacts in the region.

Exchange between the ethnic groups of the Nile Valley seems to have been more or less continuous, and it is therefore well studied. Inter-ethnic conflict, however,

seems to be the outcome of particular historical circumstances (see *Part II*), and it has therefore been largely ignored by Nubiologists (see the section *Warfare studies in Sudan archaeology* in Chapter 5).

Political organization

The Bronze Age was not only a period when long-distance exchange and more fixed ethnic boundaries were established. In many regions, the Bronze Age was also a formative period for establishing political territories and hierarchical organization (Kristiansen, 1999: 184). Particular individuals or groups, who managed to control long-distance trade routes and craft specialization, also gained a competitive advantage in the struggle for power over people, territories and production. This was certainly the case for both Egypt and the Middle Nile region.

Egypt was one of the pristine states of the world (Trigger, 2003: 28-29), and the earliest territorial state anywhere (Maisels, 2010: 139). I will therefore first present an updated version of the development of political organization and royal ideology in Egypt in this chapter as an introduction to the discussions of the situation in the Middle Nile, where secondary political organization took place largely due to contact with Egypt (see *Part II*). The obvious focus of this section will be how war was related to both state formation and royal ideology in Egypt.

I will also emphasize heterarchical relations in the period preceding state formation. Studies of political organization often assume that hierarchy is the only alternative to egalitarian social relationship where all individuals have equal access to resources (O'Reilly, 2003: 301). While hierarchy refers to relationships of vertical inequality in access to wealth and power, heterarchy refers to horizontal relationships (Hayden, 2001: 234). Heterarchy can thus be defined as networks where each group shares the same positions of power and authority. This often takes the form of several local hierarchies, where the interacting elites are equals within a heterarchy (see Brumfiel, 1995: 125). A heterarchical organization can be identified archaeologically by a widespread distribution of prestige objects rather than in a single centre (see Hayden, 2001: 249). We have already seen a good example of this at the beginning of this chapter (see the section *The inclusion of the Middle Nile region in the Bronze Age*

world in Chapter 4), where copper objects were quite evenly distributed in the richest graves of each cemetery of the A-Group people (see **Table 5**), which indicates a heterarchical organization (see more in *Chapter 11*). Among the C-Group and Kerma peoples in contrast, the majority of the copper-alloy objects were concentrated at one centre – Aniba and Kerma respectively (see p. 89 and p. 91 above).

The rise of the united kingdom and territorial state of ancient Egypt

This section will discuss the complementary processes of state formation and the development of an ideology of a united kingdom in Egypt at the beginning of the Bronze Age, since warfare was an element in both.

The early studies of state formation in Egypt often relied on the ancient tradition of the unification of Egypt with a focus on warfare and conquest as represented in the iconography of the period (Köhler, 2010: 36). Since the 1980s, various integration theories for state formation have also been employed, although conflict theories have not been completely abandoned (Köhler, 2010: 37). There is thus no consensus among Egyptologists whether the establishment of a large territorial state in the Nile Valley happened peacefully or violently. Furthermore, there is also disagreement concerning when the process of unification was completed – at the end of Naqada II or in late Naqada III (Bard, 2008: 104).

Before attempting a reconstruct of the emergence of state and kingship in a warfare perspective, let us have a closer look at the three centres in Upper Egypt during the Naqada period and their development with special emphasis on the emergence of elites and rulers as testified in the mortuary evidence.

Abedju and Tjenu

The northernmost district in Upper Egypt where social stratification and rulers appear in the archaeological record is the Abydos region just north of the Qena Bend (see p. 34 above). *Abedju*, or Abydos as it is called today, was the burial ground for the rulers of Tjenu (Wilkinson, 1999: 40). The Bronze Age settlement of *Tjenu* ( [*ṯnw*], det.  [place-name]), or This as it was called in classical sources, has not been

located, but it probably lies under the modern city of Girga (Wilkinson, 1999: 354) – about 15 kilometres north of Abedju (Google Earth).

Cemetery U at Abedju was established already during Naqada IA. During Naqada IC and IIA-B, some of the grave pits became larger and grave goods became more numerous in these graves (Dreyer et al., 1998: 95). Grave 239 dating to Naqada IC contained a white cross-lined beaker decorated with a painted scene consisting of a pregnant woman as well as four representations of male figures wearing a tail and feathers on their heads while threatening two minor figures with a mace (**Figure 18**). The posture of the man is similar to the classic smiting pose of the king in later royal iconography (Dreyer et al., 1998: 111-112, fig. 12/1). The male figures have thus been interpreted as an early depiction of a ruler (Wilkinson, 1999: 32). An alternative interpretation is that the male figures represent a group of warriors dispatching prisoners of war (Hamblin, 2006: 313). In both interpretations the core of the depiction is a smiting scene.

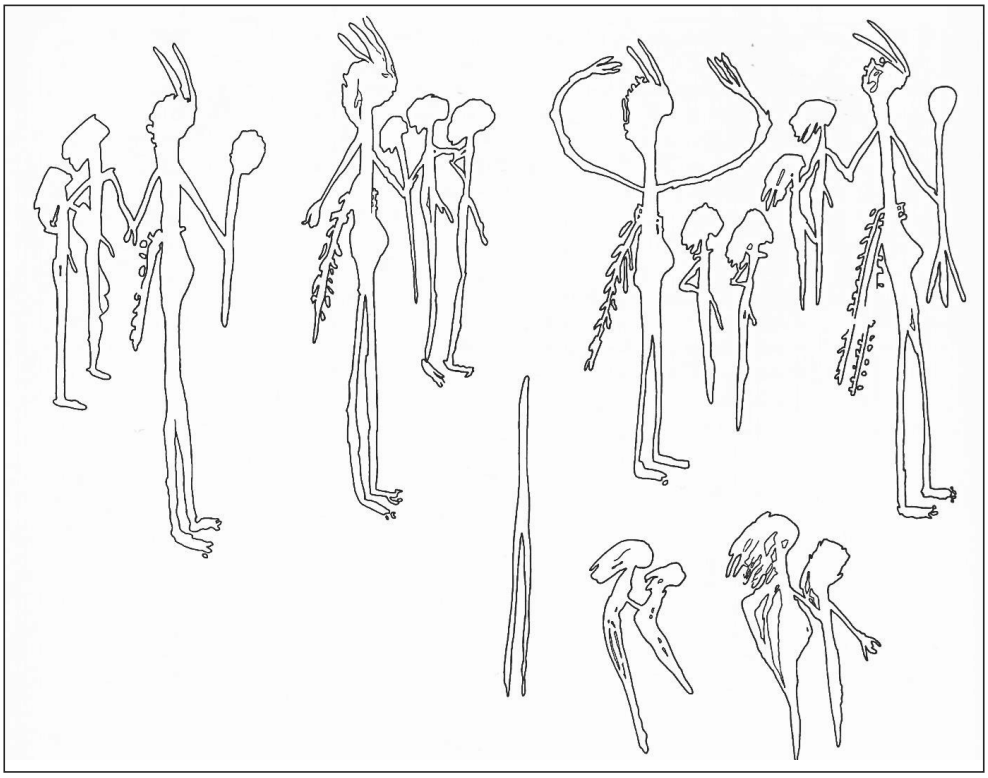


Figure 18: The painted scene on the white cross-lined beaker from grave 239 depicting a man with a mace as well as other figures. Drawing from Dreyer et al. (1998: fig. 13).

It was also in the burials dating to Naqada IC to IIB that mace-heads, flint daggers and arrowheads were becoming more common at Abedju (Gilbert, 2004: 166-173, App. 4). One exceptional example is tomb U-141 dating to Naqada IC-IIA. It was severely disturbed, but still contained 55 transverse arrowheads, nine flint blades and a fragment of a fishtail dagger (Dreyer et al., 1998: 80; Dreyer et al., 2000: 83). The high status of the tomb owner is indicated by the presence of copper and silver needles as well as fragments of stone vases (Dreyer et al., 1998: 80). I thus suggest that this could be one of the earliest burials of a warrior chief. The scene on the white cross-lined beaker (see **Figure 18**) may in this context be considered as a warrior chief that also became chief of his society.

No burials dating to Naqada IIC have so far been uncovered in Cemetery U (Dreyer et al. 1998: 94). However, from Naqada IID, the cemetery is clearly reserved for elite members (Dreyer, 2011: 127). Tomb U-547 from that time included the upper part of a *heqa*-sceptre ([*ḥq3*] meaning 'ruler') of red limestone (Dreyer et al., 1996: 21). This indicates that the tomb owner was a ruler carrying a symbol of his authority and office.

Since Naqada IIIA, all tombs in Cemetery U were lined with mud bricks and covered by a roof of wooden beams (Dreyer, 2011: 127). Nine tombs were subdivided into several chambers. The largest and wealthiest grave was tomb U-j with 12 chambers and dating to Naqada IIIA2 (Dreyer, 2011: 128). The tomb had been gravely plundered, but some items deemed of no value by the robbers still attest to the rank and importance of the person buried in the tomb. The identification of this person as a king rests on the finding of a complete ivory sceptre (Görsdorf, Dreyer and Hartung, 1998: 171; **Figure 19**), as well as the remaining grave goods consisting of more than 2000 pots including *c*. 700 wine jars from Palestine, fragments of numerous stone vessels as well as a complete dish of obsidian – a raw material from Ethiopia or south-western Arabia (see Bavay et al., 2000: 10, 15 for analyses of the source of obsidian), ivory gaming pieces and items for

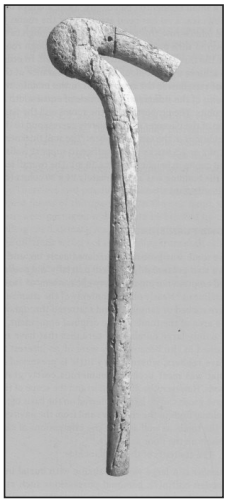


Figure 19: Heqa-sceptre of ivory from tomb U-j. Photo by Dreyer (2011: fig. 14.9).

personal decoration (Dreyer, 2011: 132-133). However, the most important finds from tomb U-j are 125 pots with ink inscriptions and 160 tags of ivory and bone with incised characters (Dreyer, 2011: 134). These inscriptions represent the earliest evidence for writing yet found in Egypt and indicate the presence of a literate administration at Tjenu (Wilkinson, 2000b: 286). On the basis of parallels from later periods, the signs most probably record an agricultural estate and the name of the king who founded it. The most frequent name was Scorpion, who was most probably the tomb owner himself (Dreyer, 2011: 134). Moreover, among the depictions on the ivory tags are several bowmen (Dreyer et al., 1998: fig. 76/45-47; see **Figure 42**). These archers possibly represent the earliest writing of the hieroglyph for an 'armed force' or 'war party' – i.e.  [*mš'*] (Gilbert, 2004: 45). The oldest hieroglyphs demonstrate a rapid development of social organization with administrative and bureaucratic control over many aspects of life (Ciałowicz, 2006: 924).

Both the multi-chamber graves and some single chamber graves in Cemetery U have been assigned to Predynastic rulers, who were the predecessors of the kings buried in the nearby royal necropolis of the First and Second Dynasties (Dreyer, 2011: 128). Between Cemetery U and the royal necropolis is Cemetery B, where recent re-examinations of Petrie's excavations have demonstrated that two of these tombs belonged to named kings immediately preceding the First Dynasty, namely Irj-Hor and Ka/Sekhen, and two other tombs belonged to the first two kings of the First Dynasty, namely Narmer and Aha (Dreyer, 2011: 128; Bestock, 2011: 137). To the southwest of Cemetery B is the burial ground of the subsequent kings of the First Dynasty as well as the two last kings of the Second Dynasty (Bard, 1994: 275; Wilkinson, 1999: 232). Other contemporary cemeteries in the vicinity of Abedju are El-Mahasna *c*. 12 kilometres to the north, El-Amra *c*. nine kilometres to the southeast, as well as Naga ed-Deir on the east bank opposite Girga (Bard, 1987: 85). The latter was probably the burial ground for the majority of the population of Tjenu (Wilkinson, 1999: 354).

Today, the Abydos region is the richest agricultural area in Upper Egypt, and agriculture was probably the basis for wealth accumulation at the beginning of the Bronze Age (Bard, 1987: 90). Food surpluses were a prerequisite for the development of social inequality and a hierarchical political organization (see p. 105 above). The

Abydos region was also strategically located at the junction of several desert routes. From ancient Hut-Sekhem [Hiw], at the downstream exit of the Qena Bend, a route by-passing the bend of the river cut through the desert to the southern part of the Qena Bend (Darnell, 2002: 3, fig. 1). Furthermore, the shortest route from the Nile Valley to the Kharga Oasis and from there southwards to the Middle Nile also departed from Hut-Sekhem (Bard, 2008: 101). Finally, the Abydos region was the northernmost of the competing Predynastic polities in Upper Egypt, and the chief of Tjenu thus benefitted from more easy access to Lower Egypt and trade goods from Palestine.

Nubt

The central district where social hierarchies and royal ideology were first formulated was the Naqada region in the Qena Bend. In 1894-1895, Petrie excavated three cemeteries with more than 2000 graves on the desert edge outside modern Naqada on the west bank, while Quibell excavated *c*. 1000 graves at Ballas about 14 kilometres to the north (see **Map 4**). Two contemporary settlements, called the North Town and the South Town, were also partly excavated near Naqada (Bard, 1987: 84). The habitation at Naqada has been identified with ancient Nubt, which means 'Gold Town' (see p. 34 above). This indicates that the site had access to gold and copper deposits in the Eastern Desert. On the east bank opposite Nubt is the mouth of Wadi Hammamat (Midant-Reynes, 2000b: 198), where gold, copper and hard stones were mined and quarried. Gebtu [Coptos] at the mouth of Wadi Hammamat was probably also an import site during the Naqada period (Wilkinson, 1999: 351).

Petrie called the largest cemetery at Nubt for the "*Great New Race Cemetery*" due to his wrong interpretation of the site as representing an invading race (see pp. 67-68 above). The original name has thus become meaningless, and I will refer to it as the *Great Cemetery*. The earliest graves in the Great Cemetery date to Naqada IA (Hendrickx, 2006: 74), and they consisted of small grave pits with little grave goods (Bard, 2008: 97). The earliest manifestation of an item of royal regalia in Egypt is a crown in the shape of the later *Red Crown of Lower Egypt*, which was depicted in raised relief on a sherd from a large black-topped jar (AMO 1895.795) found in grave 1610 and dating to Naqada IC (Baines, 1995: 95; **Figure 20**).

Figure 20: The red crown in relief on a large pot sherd (AMO 1895.795) from Nubt. Photo by Hafsaas-Tsakos.

The size of the grave pits increased and grave goods became more numerous in the Great Cemetery during Naqada II (Bard, 1994: 85, 95). In Naqada IIB, a separate burial ground was established for the elite – Cemetery T (Wilkinson, 2000b: 382). It contained 69 burials, but most of them were badly disturbed by robbers (Bard, 2008: 97). One of the largest and most important burials was tomb T5 (Petrie and Quibell, 1896: 32), which is dated to Naqada IIC (Wengrow, 2006: 119). Six skulls were found in the grave as well as heaps of disjointed bones in the centre of the grave and around the sides (Petrie and Quibell, 1896: 32). It seems that the persons buried in T5 had been dismembered as part of the funerary rituals, and this practice was reserved for a minority (Wengrow, 2006: 119). Among the grave goods were eight beer jars with wide mouths, eleven wavy-handled jars, numerous other pots, six large stone vessels, a double-bird palette, malachite and beads (Petrie and Quibell, 1896: 19). Some of the beads were made of precious metal such as gold or exotic materials such as lapis lazuli from Afghanistan (Bard, 1994: 99).

During Naqada III, the number of burials at Nubt decreased, and there were fewer objects made of exotic materials deposited in the graves (Bard, 2008: 97). However, Nubt must still have retained some elevated position, because at the beginning of the First Dynasty, King Aha buried his mother Neith-hotep in a large, niched mud-brick tomb at Nubt (Bard, 1994: 99, 2008: 97), which suggests that his father Narmer had married an aristocratic woman from the leading family at Nubt (see pp. 130-131 below). Further support for identifying Nubt as one of the earliest political centres in Egypt is the elevated position that the local god Seth received in later times as one of the two gods securing political order and stability of united Egypt (Kemp, 1989: 28, 35-36).

Nekhen

The southernmost district in Upper Egypt where social stratification and state ideology developed was the region of Hierakonpolis. This is the Greek form of the ancient Egyptian *Nekhen*, meaning 'City of the Falcon' (see p. 33 above). Nekhen was the southernmost political centre in Predynastic Egypt, and its rulers probably considered Lower Nubia as a source of their powerbase, since they could expand their sphere of influence southwards and profit from trade with the south (Friedman, 2008a: 26). Lower Nubia was also a target for military conquest (see *Chapter 11*). The presentation of the political centre at Nekhen will thus be more detailed than for Abedju and Nubt, as the discussions of Part II will rely on this information.

The earliest Naqada settlement at Nekhen clustered around the large alluvial embayment created where Wadi Abu Suffian enters the Nile. The extension of habitation was bounded by Wadi Terifa in the north and Wadi Khamsini in the south (Friedman, 2008a: 9). Deep coring 6 metres below the present surface at Nekhen has showed that the location had been continuously settled since the Badarian period, i.e. the latter part of the 5th millennium BCE (Friedman, 2011: 34). Coring and sondages around the mouth of Wadi Abu Suffian have suggested that the occupation stretched for 2,5 kilometres along the edge of the desert and almost 3 kilometres into the great wadi already from Naqada IC, making it the largest identified urban centre in Egypt during the Naqada period (Hoffman, Hamrouch and Allen, 1986: fig. 3; Friedman, 2011: 34).

There are several cemeteries in this area dating from Naqada IC, but so far no earlier cemeteries have been uncovered (see Friedman, 2008a: table 1). The earliest burial ground for an elite at Nekhen is Cemetery HK6 on the north-western bank of Wadi Abu Suffian (Friedman, 2008a: 11; Bard, 2008: 100). The earliest graves contain pottery dating to the transition between Naqada IC and IIA (Friedman, 2008a: table 2; Bard, 2008: 100). This is accordingly the earliest cemetery in Egypt where the elite was buried separately from the rest of the population (Wilkinson, 2000b: 381).

The earliest graves seem to concentrate in the north-western part of the cemetery. The largest tomb in this area is tomb 2, which is a rock-cut tomb dating to Naqada IIIA2-B (Friedman, 2008: table 2). Tomb 2 was one of the first tombs made in

Cemetery HK6 after a period of abandonment (see Friedman, 2008a: table 2). It seems that it reused the grave pit of an earlier ruler, but the earlier tomb was destroyed when the later tomb was constructed in its place (Hoffman, 1982: 58-60). The whole cemetery was probably reused in order to gain legitimacy from the earlier rulers (see p. 120 below), and the reuse of the tomb of an early ruler may have been an empowering act. It has been demonstrated that another grave of the second phase of use, tomb 16B, also reused a large grave pit of the early phase (see Friedman, 2008a: 19). This makes it more probable that tomb 2 also reused an earlier grave pit. Furthermore, there was an admixture of black-topped red-polished potsherds of the early predynastic period in the grave fill (B. Adams, 1996: 2).

The six disturbed graves surrounding tomb 2 are dating to Naqada IC-IIA – except two of them that had no funerary gifts and thus remain undateable (B. Adams, 1996: 5-7). The large size of tombs 3 and 6 as well as the many weapons that they contained despite serious plundering, indicate burials of persons of high social status (Friedman, 2008a: 13). Two humans and two goats were buried in tomb 3. The weapons found in the grave consisted of a disc-shaped mace-head of black and white porphyry, a transverse chert arrowhead and a box filled with notched arrow shafts of reed (B. Adams, 1996: 5). Five humans were buried in tomb 6, and the weapons found were a fragment of a porphyry disc-shaped mace-head, 15 transverse chert arrowheads and two reed arrow shafts (B. Adams, 1996: 6). Adjacent tomb 9 with human remains and three dog skulls was probably of the same character (B. Adams, 1996: 6), but no weapons were found in this grave. Next to these graves was also a small pit, tomb 4, containing a bundled skeleton of a man, with the skull placed on top of the femurs. The long bones had cut-marks, so the body may have been deliberately defleshed (B. Adams, 1996: 5). The vertebrae were poorly represented, so it is uncertain how he was decapitated. Unfortunately, no artefacts were found in this grave, so it cannot be securely dated. Next to this grave was tomb 5 with the remains of two humans and seven dogs (B. Adams, 1996: 6). On the opposite side of tomb 2 was tomb 7 – a pit with remains of five cattle (B. Adams, 1996: 6).

It has been argued that tombs 3 and 6 "*retained nothing that substantially differentiated them from the increasingly large elite burials at other sites*" (Friedman,

2008a: 13), and it has been suggested that tombs 3 and 6 together with the other graves just described were subsidiary burials to an even larger tomb, probably belonging to a person of authority (Hoffman, 1982: 58-60). I agree with Friedman that these tombs are not different from other elite tombs and that there are no indications that the people interred there had a status as rulers. Furthermore, I support Hoffman's interpretation of these tombs as subsidiary to a larger tomb, since all of them except the pit with cattle remains cluster to the east of the location of the later tomb 2. This implicates that the earliest tomb of a ruler at Nekhen had been destroyed by a later tomb. I thus propose that tombs 3 and 6 were subsidiary graves of elite warriors. The practice of placing subsidiary warrior graves next to the graves of rulers is a phenomenon that I have already noted at Kerma in Upper Nubia in the mid-2nd millennium BCE (Hafsaas-Tsakos, 2013: 90).

Tomb 16 had also been used twice (Friedman, 2008a: 19). It was initially a large tomb, 4,3 x 2,6 metres in dimensions, and still contained fragments of 115 pots dating to Naqada IC-IIA (Friedman, 2011: 38-39). Two of the earliest funerary masks in Egypt were found almost intact in this grave (Friedman, 2011: 39). Around the tomb was "*a network of interconnected wooden enclosures*" containing subsidiary graves (Friedman, 2011: 39). The whole complex is not excavated yet, but the arrangement of the graves was intentional and perhaps representing the layout of the chiefly residence (Friedman, 2009: 6, 2011: 39). In tomb 18 at the rear of the complex around tomb 16 were found remains of five individuals, and several children were buried in nearby pits. All of them had fine grave gifts consisting of pots, ivory combs and carnelian beads. Anthropological examinations show that the adults were female, so this has been interpreted as the wives and children of the tomb owner (Friedman, 2009: 5). On the perimeter of the complex were numerous animal graves – including an African elephant (Friedman, 2011: 39). Of particular interest for a warfare perspective is a subsidiary tomb to the east of tomb 16. Tomb 20 was almost completely plundered out, but it still contained the remains of three young individuals and eight tanged arrowheads of the so-called Hierakonpolis type (Droux and Pieri, 2010: 4; see p. 191 below).

Tomb 23 in Cemetery HK6 is the largest tomb in Egypt dated to Naqada IIB (Friedman, 2008b: 1161). The dimensions were 5,4 x 3,1 metres (Friedman, 2008: table 2), and the tomb also had an extensive wooden superstructure in form of an above-ground funerary monument (Friedman, 2010: 68). The grave has been plundered repeatedly, but still contained several fine and unique objects worthy of a ruler (Friedman, 2008b: 1163). Among the grave goods were scorpion statuettes of calcite and limestone, a bird-headed cosmetic palette, a copper spatula, ivory/bone pins, an ivory comb, fragments of a cow figurine, a broken vessel of greywacke with three bowls and a number of pots (Friedman, 2008b: 1163). The tomb also contained fragments of ceramic funerary masks that are only known from this cemetery at this early time (Friedman, 2008b: 1164). A preliminary analysis suggests that a minimum of 10 individuals were buried in this grave (Friedman, 2008b: 1165). Exceptional are the fragments of a near life-size human statue that were found in the remains of an offering chapel belonging to the tomb (Friedman, 2008b: 1167). An intentional deposit in the north-eastern corner of the wooden enclosure surrounding the tomb complex consisted of materials with "*strong connotations of power and contro*l": an ibex and a ram head figure of chipped flint, an incised ivory cylinder – possibly a mace handle, several transverse arrowheads and "*a single human cervical vertebra with deep peri-mortem cut marks indicative of decapitation*" (Friedman, 2010: 68-69). On the basis of the size of tomb 23 and its contents, it has been suggested that this was the tomb of one of the chieftains of the region (Friedman, 2008b: 1169). Also the other early Naqada II tombs in Cemetery HK6 were of great size and contained remarkable wealth testifying to the elite status of the people buried there.

The area of the cemetery where tomb 23 was dug appears to have been a special ritual area where a series of above-ground wooden buildings were constructed (Friedman, 2008a: 13-14). Deposits of artefacts were associated with several of these structures (Friedman, 2008a: 15). Of particular interest to the discussion in this section are the fragments of a masterfully carved statuette of a falcon from malachite-veined basalt that was found in structure 07 dating to Naqada IIA-B. This is the earliest known occurrence of this royal motif (Friedman, 2008a: 16), as the falcon was used in conjunction with the royal serekhs during Naqada III (Friedman, 2010: 70). Later

Nekhen became the cult centre of Horus, the falcon-headed god symbolizing the living king (Bard, 2008: 107). It thus seems likely that the falcon found within the complex of tomb 23 had royal connotations (Friedman, 2010: 70). Furthermore, numerous lithics were found in structure 07 including 43 transverse arrowheads and 36 concave based projectile points (Friedman, 2008a: 16). Some of the latter were of the oversized Nekhen-type (see p. 191 below).

It is interesting to note that several of the tombs contained multiple human interments (see Friedman, 2008a: table 2), which we saw were also the case at the elite Cemetery T at Nubt (see p. 114 above). Furthermore, animal burials were common in Cemetery HK6 – especially dogs and sheep/goats, but also exotic wild animals (see Friedman, 2008a: table 2).

During Naqada IIA-C, the common people at Nekhen were buried in Cemetery HK43 on the outskirts of the settlement in the south at the northern edge of Wadi Khamsini (Bard, 2008: 100; Friedman, 2008a: 20). Several people buried there had died from violence – including 21 individuals with perimortem cut-marks on the cervical vertebrae indicating that their throats were slit and in some instances complete decapitation had occurred (Friedman, 2008b: 1168, n. 14).

Cemetery HK6 was apparently abandoned at the end of Naqada IIB, as the elite cemetery temporarily moved closer to the cultivation and to the settlement during Naqada IIC (Wilkinson, 2000b: 384), but also closer to Cemetery HK43 of the commoners (Friedman, 2010: fig. 1). This transition appears to have been violent. The wooden superstructures of three tombs in Cemetery HK6 were burned and the statue in the chapel of tomb 23 was defaced and broken up (Friedman, 2008a: 21-22). Furthermore, the shift appears to signal a change in burial practices of the elite – from funerary rites undertaken for a selected few at a remote desert wadi to public display and inclusive rituals (Friedman, 2008a: 22). The new elite cemetery was excavated in 1899. Unfortunately, no plan of the site was made, and the whole burial ground is now under modern habitation (Friedman, 2008a: 22). The cemetery seems to have consisted of only one grave for a ruler, the unique tomb 100, as well as some associated graves, so the shift of location appears to have had limited success (Friedman, 2008a: 22, n. 22). Tomb 100 is usually called the *Painted Tomb*, because it was decorated with

painted scenes. We can recognize some of the motifs in later royal iconography: a victorious warrior or chief smiting three bound prisoners with a mace in his upraised hand (**Figure 21:a**) and a man standing beneath a sunshade that compares with later scenes of the king seated during the jubilee or Sed-festival (Kemp, 1989: 38). These scenes demonstrate that royal iconography and the ideology of kingship developed as expressions of political power (Wilkinson, 2000b: 384). Furthermore, the painting depicts several instances of fighting (**Figure 21:b**), which may refer to a violent shift of power holders at Nekhen and/or violent conflict with other political centres in Upper Egypt.

Figure 21: Details from the Painted tomb 100 at Nekhen. a) Man smiting three bound prisoners with a mace. b) Scenes of fighting. After Quibell and Green (1902: plate 67).

During Naqada IIC, the burial ground for commoners was established on the northern bank of the mouth of Wadi Abu Suffian. It is termed Cemetery HK27, but is better known as the *Fort Cemetery* (Friedman, 2008: 23).

The location, or even existence, of an elite cemetery at Nekhen during Naqada IID is yet unknown (Friedman, 2008a: 23). The elite burials re-located back to Cemetery HK6 in Naqada IIIA. This appears to have been a conscious decision reflecting a wish to be closely associated with their ancestors in order to gain legitimacy from the earlier rulers (Friedman, 2008a: 23). One of the earliest burials belonging to the second phase of use was the rock-cut tomb 2, which has a side chamber (Friedman, 2008a: table 2). Parallels to this tomb can be found in the large and rich A-Group tombs of Cemetery L at Qustul close to the Second Cataract (Williams, 1986: 14; B. Adams, 1996: 14; Friedman, 2008a: 26; Roy, 2011: 204), where the A-Group chieftains were buried in side-chambers of large tombs (Williams, 1986: 14; see also the section *The royal cemetery at Qustul* in Chapter 11). Unfortunately, tomb 2 in Cemetery HK6 had been repeatedly plundered as well as

hastily excavated during the early 20th century, so little remained of the grave goods. The uncovered pot sherds consisted of both hard orange wares dating to Naqada III as well as black-topped red-polished wares of Naqada I-II dates (B. Adams, 1996: 2). This is thus consistent with two phases of use of this grave pit (see pp. 115-116 above).

Another large elite tomb dating to Naqada IIIA2 is tomb 11 (Friedman, 2008a: table 2). Although plundered on at least two occasions, some of the grave goods remained in and around the tomb. A fine wooden bed with carved bull's legs had been thrown out of the tomb by grave robbers (B. Adams, 1996: 13). Beads and amulets found in the disturbed grave fill were made of precious metals like gold, silver and copper as well as exotic stones like carnelian from the deserts, turquoise from Sinai and lapis lazuli from faraway Afghanistan (B. Adams, 1996: 13). Some obsidian blades may have come from either Ethiopia or south-western Arabia (see Bavay et al., 2000: 12, 15 for analysis of the source of obsidian). There were also flint blades and microliths of flint and carnelian, and the latter may have been arrowheads. There were also fragments of copper implements (B. Adams, 1996: 13). Furthermore, numerous other objects and pot fragments were uncovered from tomb 11 (B. Adams, 1996: 13-14).

The first excavations of Nekhen by James Quibell and Frederick Green in the late 19th century focussed on the walled town with a fenced temple precinct. Within the temple area, they uncovered the archaeological context termed the *Main Deposit*. It included numerous artefacts, which have been dated to Naqada IIIB-C1 on stylistic grounds. Among these objects were the famous Scorpion and Narmer mace-heads as well as the Narmer palette (Bard, 1987: 83). The close similarities between the iconography and style of these items are taken as evidence for the two kings to be contemporaries. There is no record of a late predynastic king by the name Scorpion at Abydos[9] (Wilkinson, 1999: 56). It has therefore been suggested that king Scorpion II belonged to the ruling lineage of Nekhen, where his ornate mace-head was found (Wilkinson, 1999: 56). He may thus have been a regional ruler presenting himself as a

[9] This proto-dynastic King Scorpion II should not be confused with the earlier King Scorpion I in tomb U-j at Abedju.

king of the same status as his contemporary Narmer, who became the first ruler of the First Dynasty (see p. 130 below).

The largest and latest elite burial in HK6, tomb 1, is dated to Naqada IIIB-C1 (Friedman, 2008: table 2). Its dimensions were 6,5 x 3,5 metres, and the interior was lined with triple-course mud-brick walls. The tomb had been looted at least twice, and little remained to suggest the identity of the tomb owner. However, on the basis of size and timing, this grave has been suggested as the tomb of king Scorpion II (B. Adams, 1996: 7). Furthermore, both recent finds from Nekhen (see p. 118 above) and long-known depictions from Lower Nubia suggest that scorpions were associated with the rulers at Nekhen (see the section *King Scorpion II of Nekhen* in Chapter 11). The scorpion was probably "*a potent symbol of royal aggression*" during the Predynastic period (Wilkinson, 1999: 299), and thus Scorpion became a popular king's name.

Nekhen appears to have been the most important site south of the Qena Bend and the settlement had a hinterland with smaller sites. One of the earliest archaeological surveys in southern Egypt was undertaken by Henri de Morgan for Brooklyn Museum in 1906-1907. The area that he surveyed stretched from Esna in the north to Gebel es-Silsila in the south, which constitutes a large part of the territory belonging to the earliest chieftains of Nekhen (see pp. 125-126 below). De Morgan excavated seven sites with predynastic and early dynastic artefacts. In the survey, he recorded thirteen additional sites of the Naqada tradition. Unfortunately, de Morgan left his material unpublished, but Winifred Needler (1984) has published the objects in the Brooklyn Museum that have been identified as coming from these sites. She has thus demonstrated that some of these sites have remains dating to Naqada I.

As we saw in Chapter 3, Gebel es-Silsila has been proposed as the southern border of Egyptian settlements during the Naqada period. However, a Naqada cemetery with surface potsherds dating to Naqada IC was recently discovered at Nag el-Qarmila just to the north of Wadi Kubaniya in the neighbourhood of the First Cataract (Gatto, 2009: 130). A square was also excavated in a nearby contemporary settlement site. This suggests that the territory of Nekhen stretched almost to the First Cataract by Naqada IC.

The southernmost Naqada I site in Upper Egypt was excavated at Kubaniya on the west bank, *c*. 10 kilometres south of the downstream end of the First Cataract, by Junker in 1910-1911. The earliest dateable graves belong to Naqada IC based on the presence of rhomboidal siltstone palettes (Junker, 1919: 87) and sherds of white cross-lined bowls (Junker, 1919: 48). This fertile plain at the mouth of Wadi Kubaniya was probably settled by Naqada people that expanded southwards (see *Chapter 11*).

Unfortunately, the largest and most fertile plain in the area of the First Cataract is now buried under modern Aswan, so we do not know when Naqada people, or A-Group people, first settled in this area. Elephantine Island opposite the plain was first inhabited during Naqada IID (Raue, 2002: 20).

After these summaries of the state of research at the three central sites in Upper Egypt during the 4th millennium BCE, I will continue with the chronological development of political organization in Egypt.

The chiefdoms of Upper Egypt

At the beginning of Naqada IA, there were only egalitarian agricultural villages in Upper Egypt. During Naqada I, a homogenous ethnic identity appears to have been established from the Badari region to just downstream the First Cataract (see **Map 4**). This process of ethnogenesis has not been studied, but the people of this stretch of the Nile Valley had a similar material culture from that time onwards, and the burial practices were becoming increasingly more uniform. I will use the general terms *Naqada culture* and *Naqada people* for the material culture and the people who made it respectively.

During Naqada IA-B, the first aggregations of previously autonomous villages formed the earliest "*moderately composite social and political units of Upper Egypt*" (Anđelković, 2008: 1051). A concept of territoriality probably developed early among the agricultural societies in the Nile Valley as the permanent occupation and tilling of the same land for generations fostered a sense of rights to that land (Kemp, 1989: 32). However, in the long and narrow river valley of Upper Egypt, there were no buffer zones between various polities and their habitats, and there were no possibilities for lateral dispersion (Anđelković, 2008: 1044) as desert environments bordered on the

river valley throughout its length (see *Chapter 2*). It thus seems that violent conflict arose between the polities in Upper Egypt as the population increased and competition over land and resources intensified. The state in Egypt thus emerged in tandem with warfare, and symbols of battle and conquest became important elements in the conceptualization of kingship.

It has been argued that there existed five Upper Egyptian centres with powerful regional elites during Naqada IC: Tjenu/Abedju, Hut-Sekhem, Nubt, Iuny and Nekhen (see Wilkinson, 2000b: 378-381 for a discussion). Iuny, or Armant as the site is usually called in archaeological literature, was located at the upstream head of the Qena Bend. From Naqada IC and onwards, there was a decline in inequality at Iuny (Griswold, 1992: fig. 2). The local elite at Iuny were probably caught between Nubt and Nekhen – two centres with a more rapid development of political and military power (Griswold, 1992: 196). Hut-Sekhem, or Hiw in Arabic, appears to have been conquered or absorbed by Tjenu/Abedju early in Naqada II (Kemp, 1989: fig. 8; Wilkinson, 2000b: 381-382). Kathryn A. Bard (1987: 92) has suggested that conflict between these early centres began with Nekhen in the south because the floodplain is narrowest there so that population pressure would first have been felt in the most constricted environment. The archaeological evidence appears to agree with this interpretation. In Chapters 10 and 11, I will propose that the first expansion from the region of Nekhen was not northwards but southwards into Lower Nubia already during Naqada IC.

In Naqada IC, the first indications of an ideology of power was formulated by the ruling lineages of Upper Egypt (Wilkinson, 1999: 31) – like the beaker from Abedju decorated with male figures smiting two minor figures with a mace (see **Figure 18**) and the jar from Nubt decorated with the red crown (see **Figure 20**). Although later associated with Lower Egypt, the red crown was probably originally an Upper Egyptian symbol – perhaps the emblem of the local chief at Nubt (Baines, 1995: 96). The colour red was traditionally associated with Seth, the local god of Nubt (Wilkinson, 1999: 192).

Between Naqada IC and IIB (Anđelković, 2008: 1051), archaeological evidence demonstrates that regional chieftains were taking control over three centres in Upper

Egypt: Tjenu/Abedju, Nubt and Nekhen (Kemp, 1989: fig. 8; Midant-Reynes, 2000: 56; Bard, 2008: 105; Stevenson, 2009: 44). These chiefdoms were probably established as the chieftains waged war in order to acquire neighbouring territories, wealth and personal glory (Gilbert, 2004: 29). Rather than being conquered, some of the neighbouring villages of the expanding chiefdoms would probably have sought to allay with the chieftain, who would then be the dominating partner in the alliance (Gilbert, 2004: 29).

Weapons were not common in the earliest tombs at Cemetery U at Abedju. However, from Naqada IC onwards, mace-heads, flint daggers and arrowheads were part of the grave goods in some of the graves (Gilbert, 2004: app. 4), and I suggested above (see p. 111) that tomb U-141 was the grave of a warrior chief. Furthermore, the beaker decorated with the incised figures of men smiting enemies with a mace indicates that the expansion of the chiefdom of Tjenu was founded on warfare. The border between Tjenu and Nubt was probably just upstream from Hut-Shekhem (**see Map 4**).

There are indications that also the expansion of Nubt was violent. Numerous chipped flint axe-heads with tranchet scars have been found in the Qena Bend – the so-called Naqada axe (Gilbert, 2004: 65). It is likely that the chieftains of Nubt and their allies used this axe as a weapon of war during the early struggles when the Upper Egyptian chiefdoms were established through expansions from their original village settings (Gilbert, 2004: 66). The chiefdom of Nubt probably encompassed all of the Qena Bend.

The chieftains of Nekhen probably relied on warriors carrying both bows and arrows and maces in their fights for control, as indicated by the co-occurrence of mace-heads and numerous arrowheads in the earliest graves in the elite cemetery HK6 (see the section *Nekhen* above). The mortuary remains from Cemetery HK6 demonstrate that this was the seat of a regional power at least from the end of Naqada IC and continuing to Naqada IIIB-C1, but with a possible break during Naqada IID (see the section *Nekhen* above). The territorial border between Nubt and Nekhen was probably at the upstream beginning of the Qena Bend (see **Map 4**). The constriction of the river and valley at Inerty [Gebelein] (see p. 33 above) was probably the

geographical border, and Inerty appears to be part of the territory of Nekhen. The southernmost settlement of the chiefdom of Nekhen in early Naqada IC seems to have been Wadi Kubaniya just north of the First Cataract[10]. In Chapter 11, I will discuss how people from Nekhen started a violent expansion into Lower Nubia during Naqada IC. As a result, the chiefdom of Nekhen spanned the Nile Valley from Inerty to Bab el-Kalabsha in northern Lower Nubia at the end of Naqada IIIB.

As presented above, the excavations in the cemeteries at Abedju, Nubt and Nekhen demonstrate that social hierarchies were emerging, since only a few individuals were buried in large tombs with quantities of grave goods – both finely manufactured local products and exotic imports. The access to these commodities appears to have been restricted, and these new modes of display were limited to the elites (Wengrow 2006: 140).

The Upper Egyptian chieftains based their power on the control of a surplus deriving from agriculture, which was also used to support craft specialists. Copper tools and weapons were becoming increasingly more important for the elite members from Naqada II onwards (see the section *Egypt becomes part of the Bronze Age world* above). The technological processes necessary for both mining and smelting copper ore as well as for making the desired objects out of the metal needed the skills and expertise of a specialized craft industry (Köhler, 2010: 39). These craftspeople were attached to the chieftains, so that the manufacture of copper weaponry as well as prestige metal objects came under their control (cf. Earle and Kristiansen, 2010b: 224).

Between Naqada IC and IIC, the political organization of the Naqada people seems to have consisted of three chiefdoms that were ruled by chieftains and their allies. The position as chieftain was probably an inherited status. This would mean that there were three centres of power in a relatively small portion of the Nile Valley in southern Egypt. During this period, there are no indications of warfare between the three chiefdoms in Upper Egypt. It was probably necessary with a period of peaceful

[10] Nubiologists often interpret the Naqada cemetery at Kubaniya in southern Upper Egypt as an A-Group site (e.g. Nordström, 1972: 28; Edwards, 2004: 70). But the material culture is overwhelmingly of Naqada types. For instance, 31 cosmetic palettes were made of siltstone and only 4 of quartzite and 7 of other materials (data from Junker, 1919), as discussed in the section *Cultural and social significance of cosmetic palettes* in Chapter 8.

relations in order for each chieftain to consolidate the power over his territory and to subjugate the population living there (cf. Otterbein, 2004: 107). I suggest that the ruling lineages of the chiefdoms as well as their elite members were equals in a heterarchical organization. Prestige grave goods in all three chiefdoms appear to have been of the same kinds: mace-heads, copper objects, ivory objects, human figurines and garlic models (Takamiya, 2003: 489). The wide distribution of uniform elite artefacts indicates that the Naqada people had similar ideas about how status and rank should be expressed (cf. Wason, 1994: 112). I thus propose that the chieftains and elite members on the top of the social hierarchy of the chiefdoms were equals within a heterarchy where the elite of each group held the same positions and authority. This equilibrium would not last for long.

Expansion to Lower Egypt

During Naqada IIC, the cemetery of el-Gerzeh was established by immigrants from Upper Egypt belonging to the Naqada culture (Stevenson, 2009: 26, 207). El-Gerzeh is located *c*. 35 kilometres north of the entrance to the Faiyum (Google Earth; see **Map 4**), and it is the earliest known Naqada site north of the Abydos region in Upper Egypt (Stevenson, 2009: xvi). Alice Stevenson (2009) has recently re-examined the cemetery of el-Gerzeh, and she suggests that it was the competitive environment in Upper Egypt that instigated the spread of Naqada people into Lower Egypt (Stevenson, 2009: 44). She furthermore argues that the Naqada community at el-Gerzeh was a spear-head in a chain migration of Naqada people into Lower Egypt (Stevenson, 2009: 208). Chain migration is a term used for long-distance migrations where people follow specific routes on the basis of information received from earlier migrants (Anthony, 1990: 902-903). In our example this would be Naqada people following the Nile northwards in the wake of the people already settled at el-Gerzeh.

There were also other early Naqada sites in Lower Egypt. The site of Harageh, *c*. 40 kilometres south of el-Gerzeh, is contemporary with the latter, while Abusir el-Meleq, located between el-Gerzeh and Harageh, date from Naqada IID2 (Stevenson, 2009: 46-47). The large cemetery at Minshat Abu Omar in the north-eastern Delta was also established slightly later than el-Gerzeh (Hendrickx, 2006: 78; Stevenson, 2009:

48). I hypothesize that the settlement at Minshat Abu Omar originally was a Naqada outpost controlling the trade with Palestine.

Kaiser (1956: plate 26) proposed that the northward expansion of Naqada people to these sites represented a series of invasions by a single Upper Egyptian political entity (Stevenson, 2009: 63). Even though there is not room for making an elaborate argumentation here, I will propose that the most likely metropolis[11] of the Naqada people expanding into Lower Egypt was Tjenu and vicinity, which was the nearest densely populated region of the Naqada people, although being more than 400 kilometres further south. There is so far no evidence for this expansion to have been violent, and Stevenson (2009: 58) has suggested that the Naqada people arriving at el-Gerzeh may "*have moved into a niche created by the abandonment of nearby settlements*" by people with an ethnic identity representative of Lower Egypt – the so-called Maadi culture. If people from the Abydos region expanded into Lower Egypt, this would mean that the chieftain of Tjenu/Abedju was gaining increasing control over Lower Egypt and the trade networks to Palestine. This would have given the chieftains of Tjenu/Abedju an advantage over their southern peers in the heterarchical organization of the previous phases (cf. Wilkinson, 1999: 50-51), and the unification of Upper and Lower Egypt had begun.

Unification

During Naqada III, the rulers of Tjenu continued the process of economic and political expansion and integration that would lead to the territorial unification of the Egyptian Nile Valley. The richest grave of Naqada IIIA was tomb U-j at Abedju, which has been suggested as belonging to Scorpion I – the first regional ruler that has been identified as a king (see the section *Abedju and Tjenu* above). At this time, the rulers of Tjenu already seem to have taken political control over Lower Egypt (cf. Wilkinson, 1999: 50), thus ruling over a large territory of the Nile Valley spanning from the exit of the Qena Bend to the Mediterranean Sea.

[11] *Metropolis* is literally 'mother city' in Greek. It is used here as a term for the location from where the migrants originated.

There is archaeological evidence for an expansion of people from Upper Egypt into Lower Egypt already during Naqada IIC (see previous section). During Naqada IID, Upper Egyptian style pots were being produced even at indigenous sites in Lower Egypt (Bard, 2008: 104). By the beginning of Naqada III, control by a polity from Upper Egypt seems to have been firmly established over Lower Egypt (Bard, 2008: 105). I suggested above that it was people from the chiefdom of Tjenu that migrated northwards, and the chieftains of Tjenu eventually incorporated Lower Egypt into their polity. It is still not clear how Lower Egypt became incorporated into an Upper Egyptian polity, but warfare was probably a contributing factor although sites with destruction layers, skeletons with trauma and other indications of warfare have not yet been uncovered in Lower Egypt (see Bard, 2008: 106; Köhler, 2008: 520). Furthermore, the unparalleled size and wealth of tomb U-j at Abedju, which probably belonged to King Scorpion I, suggest that Tjenu had become the dominant polity in the Nile Valley by Naqada IIIA2. Furthermore, the many wine-jars from Palestine found in the chambers of his tomb demonstrate the ready access to trade goods coming via Lower Egypt (see the section *Abedju and Tjenu* above), which could not be matched by the chieftains of Nubt and Nekhen.

Already during the Naqada period, several routes crossing the Theban Desert and circumventing the Qena Bend started at Hut-Sekhem [Hiw] at the downstream end and arrived in the Nile Valley again at Qurna and ‘Alamat Tal opposite modern Luxor (Darnell and Darnell, 2002: 4). These tracks appear to have been used for military purposes already at this time. At Gebel Tjauti on the ‘Alamat Tal road, a very interesting rock art tableau – probably dating to the reign of Scorpion I – has been recorded (Darnell, 2002: 9). Its most important elements consist of a bearded man holding a mace above a back-bound prisoner that he also holds by a rope (**Figure 22**). Between these two figures is a bucranium on a pole. To the right from this scene is a long-necked bird with a serpent in its beak followed by a figure holding a staff. Next to this is a falcon above a scorpion (Friedman, Hendrickx and Darnell, 2002: 11). The first scene has parallels to the depiction on the white cross-lined beaker uncovered at Abedju (see **Figure 18**) and the scene in the Painted Tomb at Nekhen (see **Figure 21**), as well as later iconography of the king smiting a captive or enemy (see **Figure 27**).

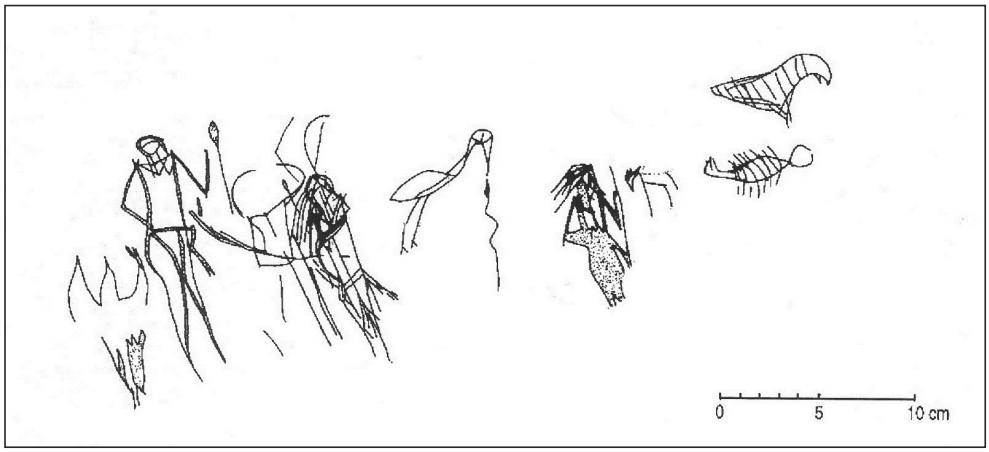


Figure 22: Rock art tableau at Gebel Tjauti depicting a man with a mace and the king name Horus Scorpion. After Friedman, Hendrickx and Darnell (2002: 10).

The bucranium on the pole may represent a standard or symbol of power – e.g. the capture and killing of a strong enemy (Friedman, Hendrickx and Darnell, 2002: 16). Long-necked birds with serpents in their beaks are known from several carved ivories dating to early Naqada III (Friedman, Hendrickx and Darnell, 2002: 15), as well as a painted pot from tomb 23 in the royal A-Group Cemetery L at Qustul (Williams, 1986: plate 84). The last scene with the falcon above the scorpion is interpreted as the earliest use of the Horus title, and the king's name is Scorpion. On the basis of other iconographic details, Horus Scorpion has been suggested as the king buried in tomb U-j at Abedju (Friedman, Hendrickx and Darnell, 2002: 14). The whole tableau contains a large number of iconographic features with parallels in tomb U-j, which support a dating to the reign of king Scorpion I as well as the identification of the man holding the mace as Scorpion I himself (Friedman, Hendricks and Darnell, 2002: 16). This tableau has thus been interpreted as the commemoration of a victorious campaign by King Scorpion I against the territory of Nubt. From this time onwards, there was an increase in the tomb size and wealth of grave goods in Cemetery U at Abedju, while there was a decrease in the number of tombs as well as the quantity and quality of grave goods in the elite Cemetery T at Nubt (Wilkinson, 2000b: 386; Friedman, Hendrickx and Darnell, 2002: 17). Moreover, the location of the First Dynasty Queen Neith-hotep's tomb at Nubt may indicate that she was originally from there (see p. 114 above). It is not unlikely that Narmer, the first king of the First Dynasty, took a

member from the ancient ruling family of Nubt as his wife in order to cement a political alliance between two of the most important centres in Upper Egypt (Wilkinson, 1999: 70).

This review has focussed on the political consolidation north of the chiefdom of Nekhen, which seems to have remained independent until the commencement of the First Dynasty. The chiefdom of Nekhen appears to have been the last region to be incorporated into a unified Nile Valley north of the First Cataract. The last ruler of Nekhen was probably Scorpion II, who represented himself as king by wearing the later white crown of Upper Egypt (see **Figure 105**). If the iconography of his macehead depicts reality, then king Scorpion had probably conquered Upper Egypt until Gebtu [Coptos] and Nubt [Naqada] at the easternmost point of the Qena Bend as well as Lower Nubia until Wadi Allaqi (see section *A violent state expansion* in Chapter 11). The white crown was intimately linked with Nekhen through king Scorpion II (Wilkinson, 1999: 194), and A-Group kings in tombs 24 and 11 in Cemetery L at Qustul also used the white crown (see pp. 353-354 below). On the ceremonial palette commemorating the unification of the Nile Valley below the First Cataract, king Narmer is depicted as significantly larger with the white crown on his head than with the red crown (see **Figure 58**), and this may point to the superior position of the white crown. The end of king Scorpion II's reign may have been the moment when the king of Tjenu/Abedju assumed the position as sovereign of the whole territory later identified as the core of Egypt (Wilkinson, 1999: 51). It is not yet understood how the king at Tjenu gained control over the territory of Nekhen – through a military attack and conquest or through negotiations and alliances. The on-going excavations at both Abedju and Nekhen may be able to through more light on this process in the future. What can be said with certainty from a warfare perspective is that the unified Egypt established by Narmer was one of the most powerful states in the Bronze Age world (Hamblin, 2006: 319). The First Dynasty kings apparently had equipped and experienced warriors under their command, so the Egyptian state could wage war on the polities on its frontiers in the northeast and the south in order to eliminate external military threats as well as to secure the flow of commodities and raw materials.

* * *

This chapter has discussed some of the central innovations and hallmarks of the Bronze Age: the use of copper and bronze, the formation of ethnic identities, long-distance trade and alliance networks, and the beginning of institutionalized political organization. Another important aspect of the Bronze Age was the beginning of more advanced forms of warfare with new weapon technologies, and Part I is concluded with a chapter presenting the evidence of war in Lower Nubia in the 4th millennium BCE. But first, let us move on to a chapter presenting earlier research on war that closes with a section on warfare studies in Sudan archaeology and a chapter on theoretical perspectives on war that ends with a presentation of a model for war on the frontier of states that will be relevant for interpreting the episodes of war in Lower Nubia in the 4th millennium BCE.

Chapter 5: Earlier research on war

There is great variation in the nature and frequency of war through time and across the globe (Otterbein, 1999: 802). This has been documented by both archaeology and anthropology. However, the approaches of the two disciplines are very different, since anthropologists can observe warfare and its causes and consequences in contemporary societies, while archaeologists use the material remains of past societies to infer about warfare. Although studying the same topic, the two disciplines use different data as a basis for their theories. In colonial and post-colonial Sudan, the divergence of the data set has gone so far that the country was divided into two halves with archaeologists working mainly on the monumental past of the north and ethnographers and anthropologists primarily describing tribal peoples of the south, east and west (Wengrow, 2006: 3). Neither discipline have been particularly interested in questions about causes of war in this war-ridden country and thus left this topic to the historians. The situation is slowly starting to change with some anthropological fieldwork being undertaken in northern Sudan (e.g. Boddy, 1989; Beck, 2009), with the beginning of archaeological fieldwork in South Sudan (e.g. Phillipson, 1981; Robertshaw and Mawson, 1991; David, 1982; Kleppe, 1999; Lane and Johnson, 2009; Davies and Leonardi, 2012), and with an increasing interest for war as a topic for research.

This chapter will first examine the history of warfare studies in anthropology at large with some case-studies from what is now the new state of South Sudan and from the province of Darfur in Sudan, and then discuss warfare studies in archaeology in general including comments about the limited attention devoted to weapons, warriors and warfare in the archaeological research of the societies along the Middle Nile.

Anthropological studies of warfare

In an analysis of the history of anthropological research on warfare around the globe, Otterbein (1999) identified four major periods. The earliest is the *foundation period* (*c*. 1850 to 1920), when the gathering of ethnographic field descriptions became available for scholars whom posterity have considered to be anthropologists. Warfare was usually included in ethnographic descriptions, although it was not a

central topic for study. The only theoretical framework used at the time was evolutionary, which meant that weapons and military practices were linked to stages in developmental typologies (Otterbein, 1999: 795).

The first ethnographic and anthropological investigations in Sudan started after the establishment of the Anglo-Egyptian Condominium in 1899. One of the earliest ethnographic surveys was undertaken by the British ethnographer Charles Gabriel Seligman and his wife Brenda Z. Seligman. In 1909 and 1910, they journeyed southwards along the White Nile, and in 1911 and 1912 they travelled from Kordofan in the west to the Red Sea coast in the east. In 1921 and 1922, they studied some of the *"pagan tribes of the Nilotic Sudan"* – e.g. the Shilluk, the Dinka and the Bari (Seligman and Seligman, 1932: xii-xiii). The Seligmans had a racist perspective, arguing that the inhabitants of today's South Sudan were Negro-Hamitic peoples. The Negroes were considered to be of *"primitive African stocks"*, while *"the incoming Hamites were pastoral Caucasians, arriving wave after wave, better armed and of sterner character than the agricultural Negroes"* (Seligman and Seligman, 1932: 3-4). The focuses of their ethnographic descriptions were the regulation of public life, kinship and family life, religion and rainmaking as well as death and funerary ceremonies. Their only contributions to warfare studies were a few descriptions of the preferred weapons used by different ethnic groups (e.g. Seligman and Seligman, 1932: 17).

During the following *classical period* (*c*.1920 to 1960), the so-called *"myth of the peaceful savage"* gained support among anthropologists (Otterbein, 1999: 795). Rousseau's concept of the noble savage was promoted by proponents arguing that tribal people conducted a less horrible form of warfare than their civilized counterparts (Keeley, 1996: 9). According to archaeologist Lawrence Keeley (1996: 9-10), Quincy Wright and Harry H. Turney-High were the architects behind the concept of primitive warfare through the books *A study of war* (Wright, 1942) and *Primitive warfare* (Turney-High, 1949). Keeley (1996: 14) has criticized their works for dismissing primitive warfare as *"a relatively harmless sport, directed toward impractical goals and incapable of affecting any essential aspects of social existence"*. Otterbein (1999: 796) dismisses Keeley's attribution of the myth of the peaceful savage to Wright and

Turney-High and argues instead that the view on primitive war as innocent was a result of the evolutionary approach in general: *"If war was a monstrous scourge in the twentieth century (...), [then] it must have been less common and less lethal in the past"*. With the horrors of World War I and the atrocities of World War II as part of the collective experience, anthropologists of the classical period considered modern warfare as the most cruel and deadly. Moreover, Otterbein points out that the new concept of cultural relativism emphasized illiterate peoples as calm and good, and he also stresses that there is a tendency for anthropologists to describe the people they study in more admirable terms than justifiable (Otterbein, 1999: 797).

The anthropologists working in Sudan during the classical period of warfare studies seem to have had a more balanced grasp on reality when it came to warfare. Sir Edward E. Evans-Pritchard was then the most productive anthropologist in Sudan. His structural-functionalist analysis of segmentary political groups among the uncentralized Nuer has become one of the classic studies in anthropology (Ahmed 2002: 61), and the concept of segmentary political systems as well as the description of warriors and feuds were some of his lasting contributions to warfare studies. The Nuer still live in the northern part of the Sudd, from Bahr al-Ghazal in the west to Sobat River in the east (see the section *The sources of the Middle Nile* in Chapter 2 for geographical details). Evans-Pritchard arrived in Nuerland in 1930 after British colonial forces had finally defeated the Nuer in 1929 (Hutchinson, 1996: 21-22). The aim of his fieldwork was to provide the colonial administration with information on the social organization of the Nuer so that the problems of administering them could be solved (Ahmed, 2002: 59). Based on the fieldwork, Evans-Pritchard wrote three books and numerous articles (e.g. Evans-Pritchard, 1940). He described the Nuer men as fierce warriors that would go to war regularly in order to acquire wealth in the form of cattle and captives (Evans-Pritchard, 1940: 50, 126). This position was certainly in contrast to the prevailing view on primitive warfare during the classical period of warfare studies.

The decades between 1960 and 1980 saw a dramatic increase in anthropological publications dealing with war, so Otterbein (1999: 798) calls this the *golden age*. During this period, anthropologists used functionalist approaches to warfare in order to

demonstrate that warfare was beneficial to society, as the common paradigm of the time considered human societies to be functionally integrated systems (Hallpike, 1973: 451). A prominent proponent of functionalist explanations of warfare was the ecologically oriented anthropologist Andrew P. Vayda. In *War in ecological perspective*, Vayda (1976) argued that important causes of war are population pressure and scarce resources with warfare's ultimate effect being a demographic restructuring of the cultural landscape. Despite the title, his book has been criticized for not presenting ecological factors related to demography and stress (Webster, 1978: 216). Anthropologist Christopher R. Hallpike (1973), a former student of Evans-Pritchard, condemned Vayda's work and other functionalistic approaches to warfare and argued that it is wrong to consider war as beneficial to society (Hallpike, 1973: 451). Also Evans-Pritchard (see above) later reflected on his structural-functionalist descriptions of the segmentary political system of the Nuer and made the following criticism of his former position in relation to anthropology more generally:

> *"It is obvious that customs and institutions do not form in any society a harmonious mosaic in which each piece serves the purpose of the whole… [T]here is always conflict between persons and groups of persons, all trying to manipulate institutions in their own interests" (Evans-Pritchard, 1973: 763).*

This observation is especially important for inter-group competition and warfare – and also a relevant critic of archaeological interpretations in general.

During the Golden Age, anthropological research in Sudan flourished. Central was the so-called Bergen school of anthropology (e.g. Gunnar Haaland, Leif Manger, Gunnar Sørbø, Abdel Ghaffar M. Ahmed and Frode Storås), which developed around Fredrik Barth. However, there is little reference to war related topics in their research at that time. I consider this the result of two factors: first, their research interests were economic and ecological anthropology, and second, their fieldwork was undertaken in regions where active warfare had ceased, and no fieldwork was undertaken in the areas where the on-going civil war between north and south was fought.

In the *recent period* (from *c*. 1980 onwards), ethnic wars and genocides have ensured that the interest for studying warfare has been maintained (Otterbein, 1999: 798, 800). During this period, the controversy between proponents of man's warlike nature and his peaceful nature escalated. The side that favours human nature as

peaceful blames warfare on the state: whether the state is expanding and fighting with other states or tribes, or dissolving into warring ethnic groups (Otterbein, 1999: 801).

The territory of colonial Sudan was defined by warfare (see p. 3 above), and today's South Sudan was a battlefield where capturing slaves was the ultimate goal. Independent Sudan was a state where ethnic wars and civil war prevailed since shortly after independence in 1956, but only from the 1990s onwards was warfare becoming a more prominent subject among the anthropologists working in the country. Foremost among them is Sharon E. Hutchinson. The main focus of her research has been on war-provoked processes of social and cultural change among the Nuer (e.g. Hutchinson, 1996, 2000). Another study with war as a subject has been undertaken by Wendy James (2009) on the Uduk-speaking people, originally from the Blue Nile region. This group was caught up in and displaced by decades of civil war between the north and the south of Sudan. Examining the most recent of the internal wars in Sudan, Karin Willemse (2005, 2007) has approached the conflict in Darfur from a gender perspective. She emphasizes how young men "*without a future*" are becoming soldiers in a "*quest for respect, self identity, and a sense of control*" (Willemse, 2005: 15). Also the representatives of the Bergen school of anthropology in Sudan are now using their long experience in the country to reflect on causes for war there with special consideration of conflict over resources – in concordance with their previous theoretical positions (e.g. Manger, 2009; G. Haaland, 2006; Sørbø, 2012).

Anthropologists acknowledge that narrations of warfare tend to become commemorations of heroes if the subjective experiences of war by its victims are left out (Vandkilde, 2006a: 67). A recent trend in anthropology has thus been to complement the impersonal political analysis of warfare with *"a concern with understanding the actions, experiences, motives and feelings of combatants, civilians and victims under the chaotic conditions of war and after-war"* (Vandkilde, 2003: 139). This understanding can be achieved by focussing *"directly upon the violent acts and their meanings in the cultural and social contexts that created them"* (Vandkilde, 2006a: 67). Also archaeologists should not overlook the fact that violence and death are intimately linked with warriors and warfare, as the findings of weapons and the status of warriors in the past tend to be glorified.

After this necessary brief review of studies of war in anthropology, let us continue with an examination of how archaeologists have approached (or neglected) war with examples from research on the Bronze Age along the Middle Nile.

Archaeological studies of warfare

Antiquarians and the first archaeologists collected weapons among other artefacts. Like the first ethnographers, they worked within an evolutionary perspective and accordingly organized weapons from simple to more complex forms. Lane-Fox Pitt-Rivers' (e.g. 1868) classifications of weapons is an eloquent example (**Figure 23**). He was a pioneering archaeologist and ethnographer (Bowden, 1991: 1), who collected archaeological and ethnographic artefacts from all over the world (Bowden, 1991: 47-48). Most of these objects are now housed in the Pitt-Rivers Museum in Oxford (**Figure 24**).

Between 1842 and 1845, the Prussian Egyptologist Richard Lepsius undertook the first scientific investigation and documentation of the monumental heritage of the Middle Nile. At that time, the European middleclass considered the archaeological record as evidence for a continual evolutionary process, which was the basis for their own technological progress and hence powerful position in the world (Trigger, 1994:

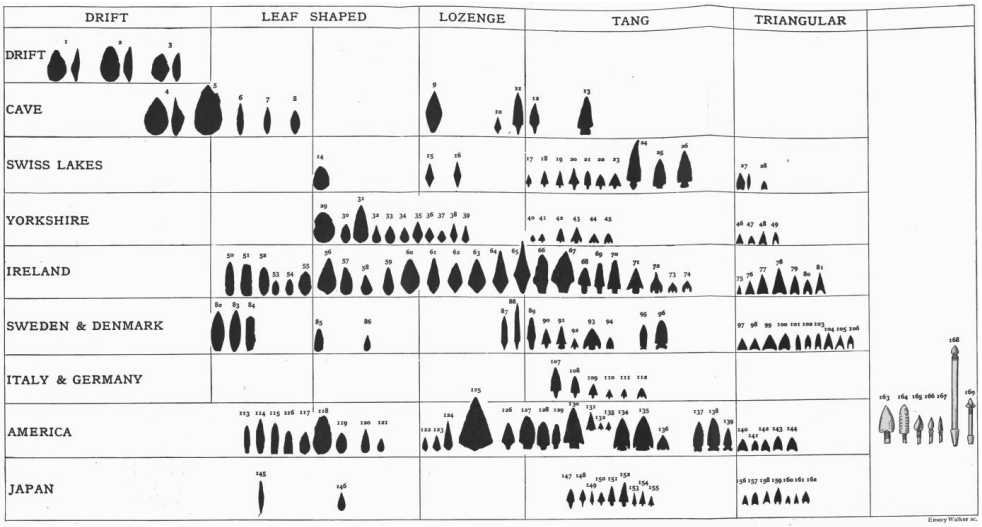


Figure 23: Evolutionary typology of spear- and arrowhead forms. From Pitt-Rivers (1868: plate 13).

Figure 24: The exhibitions in Pitt-Rivers Museum in Oxford. Photo by Hafsaas-Tsakos**.**

325). In Africa, evolutionary perspectives had a particularly racist flavour. Lepsius was a representative of evolutionary archaeology. He correctly demonstrated that the temples and pyramids of the Middle Nile were much later in time than the earliest monuments in Egypt (Lepsius, 1853: 18-19). So from his work onwards, the monuments of the Middle Nile were interpreted as the products of Egyptian activity or influence (Trigger, 1994: 325), as the light-skinned Egyptians were considered mentally superior to the black Africans of the south. This racist view was also expressed by Ernest Alfred Wallis Budge (1907: 511-512), the first Egyptologist to undertake excavations in the Middle Nile region, i.e. at Jebel Barkal in 1897 (Budge, 1907: vii). When Reisner started the excavations at Kerma in 1913, he argued against the evidence that the site was an Egyptian trading post and not an indigenous town (Reisner, 1923: 28), which shows that he was influenced by the same racist thoughts. The archaeology of the Middle Nile was thus becoming dominated by both an evolutionistic perspective and an Egyptocentric outlook, which also supported the racist opinions and colonial ambitions of the time. While Lepsius ignored the subject of war, Budge (1907: 511) made the following comment:

> *"Fighting and trading have always been the chief occupations of tribes in the Sûdân, and when war failed to give them employment, they devoted themselves diligently to the haggling and bargaining which never failed to give zest to the business of buying and selling".*

Of the two occupations Budge accorded to the people of Sudan, it was trade that would become the favorite subject of archaeologists working in the country, while warfare has been understudied until today.

The culture-historical archaeology was prevalent during the first half of the 20th century (Trigger, 2006: 211-313). The rejection of evolutionism for explaining cultural change had by then made external stimuli through diffusion and migration the new framework of explanation (Trigger, 2006: 217), and this is already apparent in the work of Lepsius (see above). Independent development was almost abandoned as a model for explaining change (Trigger, 2006: 217). Furthermore, archaeological data were taken as evidence for the existence in prehistory of various ethnic groups, which were conceptualized as 'archaeological groups' (Trigger, 1994: 326). The most prominent representative of culture-historical archaeology was Childe (see the section *Long-distance exchange* in Chapter 4). He was promoting migrations as an explanation for sudden material changes, and he often suggested that migrating groups had warriors as front figures (Vandkilde, 2006: 59). This idea is conceptually the same as the Seligmans hypothesis of Hamitic immigrations into Africa (see the previous section).

In 1935, Childe made his first visit to the Soviet Union where he became inspired by a different approach to the past. The new perspective explained change in terms of materialist principles and processes internal to societies (Trigger, 2006: 344). In his following works, Childe sought to implement Marxist principles for social change (Trigger, 2006: 345). Probably inspired by contemporary events, Childe published an article titled *War in prehistoric societies* in 1941. There he attacked contemporary diffusionists for considering warfare as a late *"perversion of human nature due to by-products of 'civilization'."* Childe (1941: 126) discredited the idea that war was absent in primitive societies, and he presented archaeological evidence for war in form of weapons and defensive structures from Palaeolithic times onwards with competition for land and other economic motives as the main reasons for war

(Childe, 1941: 129-138). Although Childe used war as an explanation for change in this article, it was mainly his frequent descriptions of warriors in other works that had most influence on contemporary and later archaeologists. Childe was thus a major contributor to the idea of Bronze Age society in Europe as being class-based with warriors as part of the aristocratic class (Vandkilde, 2006: 60).

Working within a culture-historical perspective and influenced by Childe, the Lithuanian archaeologist Marija Gimbutas argued that warfare was an important factor affecting social change – particularly in connection with the expansion of the so-called Kurgan warrior culture into Europe and the process of Indo-Europeanization (e.g. 1977). Gimbutas' interpretation was unique for its time since it contained direct references to violence and warfare (Vandkilde, 2006: 62). Today Gimbutas is perhaps most famous for her hypothesis about the Great Goddess of pre-Bronze Age Europe (e.g. Gimbutas, 1991). From a feminist perspective, Gimbutas envisioned Old Europe as a place ruled by women in peace and that this idealised society was violently destroyed by the migrating Kurgan warriors with masculine values (Vandkilde, 2006: 62).

Along the Middle Nile, the culture-historical perspective was first applied by Reisner and Firth during the first Archaeological Survey of Nubia (see the section *Lower Nubia in the 4th millennium BCE* in Chapter 3). As we saw in Chapter 3, Reisner interpreted the archaeological record of Lower Nubia in terms of a series of archaeological groups, which he identified as different peoples who were replacing each other through migration (see also Trigger, 1994: 331). However, the most prevalent approach to the culture history of Sudan was through the perspective of colonial archaeology, which still followed the racist perspective of the cultural evolutionists of the previous century that believed in the superiority of light-skinned people (see Trigger, 1994: 325-328). So Reisner did not envision the alterations of populations in terms of violent conquests, except in the change from the C-Group people to Egyptians (sic) at the shift to the New Kingdom (Reisner, 1910: 342). He rather explained change as a decrease or increase of *"the negroid element in the population"*, which he linked to prosperity or underdevelopment respectively (Reisner, 1910: 335).

The most active archaeologist in Sudan during the mid-20th century was Arkell, who filled the office of Commissioner for Archaeology from 1939 to 1949. He was interested in promoting the past as a means for creating a national history for the Sudanese. Arkell was influenced by culture-historical archaeology, but still maintained a colonial perspective on the history of the people of the Middle Nile by accepting Reisner's ideas of devolution (see p. 61 above). On the one hand, Arkell recognized the A-Group as an indigenous ethnic group (see p. 57 above), but on the other hand, he described the B-Group in devolutionary terms: *"The communities had not only ceased to advance but there had been retrogression"* (Arkell, 1961: 40). Furthermore, Arkell cited the many Egyptian conquests of the Middle Nile during the Bronze Age known from written sources. However, like other Sudan archaeologists, Arkell failed to discuss warfare and violence even though the conquests clearly were undertaken by military expeditions.

Nevertheless, Arkell made an interesting observation of a possible transmission of weapon technology. He noted that mace-heads were found at Neolithic sites in Central Sudan (Arkell, 1961: 32; see Usai, 2008: 55-57 for a recent survey of all known specimens from Central Sudan and Upper Nubia); and he suggested that the disc-shaped mace-heads of Predynastic Egypt developed from the mace-heads invented by people living in the southern parts of the Middle Nile during the Neolithic (Arkell, 1961: 32, 35-36). Arkell did not explain the possible routes and processes of transmission of the mace-head from Central Sudan to Egypt, and the hypothesis of an African origin for the Egyptian maces have lately been rejected on the basis of finds of roughly made disc-shaped mace-heads in Lower Egypt from the early Neolithic (Gilbert, 2004: 39). However, the relationship remains to be clarified (see also the section *Maces* in Chapter 7).

During the 1960s, there was a major paradigmatic shift in archaeology with the establishment of the so-called New Archaeology with a processual approach to changes in past societies. The American archaeologist Lewis Binford was the most active promoter of the new perspective (Trigger, 2006: 393). According to one of his programmatic papers, archaeological explanations of change should take the form of generalizations about systemic change and cultural evolution (Binford, 1962: 217).

According to processual archaeologists, all changes were in the end caused by ecological factors rather than diffusion and migration as in the culture-historical explanations (Trigger, 2006: 395). The importance of contact and competition between societies was thus neglected (Trigger, 2006: 396), and processual archaeologists also ignored warriors and warfare, while weapons were merely interpreted as symbols of social status (Vandkilde, 2006: 63).

In Sudan archaeology, the 1960s coincided with the UNESCO campaign salvaging the past remains of Lower Nubia before the region was flooded by the lake created by the Aswan High Dam. The young archaeologists and anthropologists working for the campaign were influenced by New Archaeology, e.g. Trigger (1965), Nordström (1972) and W.Y. Adams (1977). The positive impact of processual archaeology in Sudan was that the Egyptocentric culture-historical diffusionism was replaced by an emphasis on ethnic and cultural continuities in response to changing environmental conditions (Trigger, 1994: 342). Archaeologists working in Sudan thus *"abandoned a paradigm that rationalized a colonial regime by attributing cultural progress to foreign groups asserting their control over the indigenous inhabitants"* (Trigger, 1994: 344). The negative impacts of processual archaeology were that many alternative perspectives and other topics for research were excluded. Weapons, warriors and warfare were hardly included in the interpretations of the past before the introduction of processual archaeology, and these topics continued to be excluded as a focus of research afterwards.

The first critic of the absence of warfare in archaeology came in the 1980s. The Czech archaeologist Slavomil Vencl (1984: 116) argued that archaeologists only studied the most numerous and conspicuous remains, for instance pottery and stone implements, while they neglected war as a major contributor to social and cultural change.

During the 1980s, processual archaeology as a paradigm was also being criticized. The ecological focus was accused of being both deterministic and too simplistic for explaining cultural change (Trigger, 1994: 340). The new postprocessual perspective in archaeology was first developed by the British archaeologist Ian Hodder and his students (Trigger, 2006: 450). One of the sources of inspiration for the

postprocessual archaeologists was French Neo-Marxist anthropology (Trigger, 2006: 444-445). Subjectivity was also embraced by the followers as they argued for multiple versions of the past depending on the viewpoint – not only of the individual researcher, but also of the standpoints of different groups and individuals in the past (Trigger, 2006: 447). In the United States, the new cultural anthropology encouraged the adoption of postprocessual archaeology by focussing on cultural diversity, idiosyncrasy and uniqueness (Trigger, 2006: 449). The importance of postprocessual archaeology was firmly established with Hodder's publication of his ethnoarchaeological fieldwork from Africa, *Symbols in action* (1982), where he argued that material culture was an active element in social interaction. As such, material culture could be used:

- by competing ethnic groups to emphasize their dissimilarities (Hodder, 1982: 31).
- by inferior sub-groups in adaptive social strategies of resistance (Hodder, 1982: 73).
- by high-status groups to legitimize their power (Hodder, 1982: 122).

A unifying theme in Hodder's book is competition between ethnic groups and how this may lead to raids and war. Warfare was thus introduced as a legitimate subject for archaeological research.

In 1985, the Danish archaeologists Lotte Hedeager and Kristian Kristiansen wrote a pioneering article about war in Denmark's prehistory. They emphasized the significance of warfare and military organization for social development, and they listed several factors that could motivate people to fight (Hedeager and Kristiansen, 1985: 9, 11). In this treatise of the importance of warfare and conflict, Hedeager and Kristiansen described the Bronze Age as a hierarchical society where an ideology of aristocratic warriors emerged (Hedeager and Kristiansen, 1985: 15). Kristiansen (1999, 2001, 2011; Kristiansen and Larsson, 2005) has later elaborated on the notion of warrior aristocracies in Bronze Age Europe. However, the view of the warrior aristocracy as *"centred around values and rituals of heroic warfare, power and honour"* (Kristiansen, 1999: 181) has been criticized for retaining celebrative

undertones while underplaying actions of brutality and killing (Vandkilde, 2006: 60, 64).

In a review of warfare studies in archaeology, the Danish archaeologist Helle Vandkilde (2003: 127, 2006a: 57) argued that warfare and violence only entered the archaeological discourse after *c*. 1995. Before that time, archaeologists only studied weaponry and to some extent warriors (Vandkilde, 2003: 126). This is for instance apparent in the special issue on *Warfare and weaponry* that was published by the journal *World Archaeology* in 1986, where the majority of the articles concerned either a specific type of weapon or a particular military strategy. Vandkilde's observation that several of the central works on warfare in prehistory have only appeared in the last two decades is therefore accurate.

The interest in war by archaeologists seems to start in 1996 when Keeley published the influential book *War before civilization – the myth of the peaceful savage*, where he demonstrated that warfare was at least as deadly and common in the past as it is today. However, Keeley was criticized for only including a few cases of war in prehistoric society and basing most of his arguments on the ethnographic record (Ferguson, 1997: 424; Thorpe, 2001: 132; Chapman, 1999: 102). Consequently, both Keeley's argumentation and the critic of it stimulated archaeologists to start looking for evidence of prehistoric warfare. Already the next year two edited volumes appeared. The first book, *Material harm – Archaeological studies of war and violence* (Carman, 1997), aimed at approaching violence in the past from archaeological perspectives in order to give archaeology a moral voice in the debates of our time (Carman, 1997: 220). Again, several of the essays were criticized for not actually using archaeological approaches (Halsall, 2000: 237). The second book, *Troubled times – Violence and warfare in the past* (Martin and Frayer, 1997), focussed on a wide range of forms of violence – including warfare – by using cross-cultural analysis, archaeological data and skeletal remains. Also from 1997 was Timothy Earle's book *How chiefs come to power*, which included a chapter on *Military power* where he discussed how warfare was linked to the establishment and maintenance of political power by using case-studies from Denmark, the Andes and Hawaii. In 1999, a third edited volume was published, *Ancient warfare – Archaeological perspectives* (Carman

and Harding, 1999), which includes several important contributions to the study of warfare in the past. In this volume, the use of archaeological data was more refined, and the discussions of warfare became more complex. At the turn of the millennium, warfare had thus become a hot topic in archaeology (Thorpe, 2001: 132), and overviews, case-studies and edited volumes have continued to be published (e.g. Guilaine and Zammit, 2005 [2001]; LeBlanc, 2003; Parker Pearson and Thorpe, 2005; Gat, 2006; Otto, Thrane and Vandkilde, 2006).

Warfare studies in Egyptology

The earliest specialist study of war in ancient Egypt was James Henry Breasted's book on *The Battle of Kadesh* (1903), which described the military strategy of the Egyptians in the war between Egypt and the Hittite empire in 1274 BCE at the very end of the Bronze Age. Ian Shaw's introductory book on *Egyptian warfare and weapons* (1991) is the earliest systematic overview of data relating to war in Ancient Egypt.

It was first at the turn of the millennium that warfare also received a stronger focus in Egyptology, as in archaeology more generally. Robert B. Partridge's specialized overview *Fighting pharaohs – Weapons and warfare in ancient Egypt* (2002) was an elaboration of the themes covered by Shaw and included brief chapters on potential enemies, categories of weapons and other military equipment as well as the materials they were made of, the army, fortifications, campaigns and battles, and the gods of war in the Egyptian pantheon. The next publication was the extensive case-study *Weapons, warriors and warfare in early Egypt* (2004) by Gregory Phillip Gilbert. As the title implies, Gilbert examined the periods up to the beginning of the Old Kingdom. He provided comprehensive appendices of weapon finds and warrior graves from the periods under consideration, and he used the data assembled to discuss the role of warfare in the formation of the Egyptian state. The following year, Anthony J. Spalinger published *War in ancient Egypt* (2005), which is a case-study of warfare in the New Kingdom. The next year saw a summary of warfare in Egypt from the Predynastic period to the New Kingdom being treated by William J. Hamblin, who devoted seven chapters to Egypt in his overview *Warfare in the ancient Near East to*

1600 BC (2006). Unfortunately, the only volume dedicated solely to the Middle Kingdom is the short book *Soldier of the pharaoh* by Nic Fields (2007). In 2010, Spanish Egyptologist Juan Carlos Moreno Garcia published *War in Old Kingdom Egypt* as the first chapter of a collection of studies on war in the ancient Near East. The same year, Spalinger (2010) contributed with a chapter on *Military institutions and warfare* in a companion to ancient Egypt. The potential of warfare perspectives on the past in Egypt is thus far from exhausted.

Warfare studies in Sudan archaeology

Although warfare has become a topic for research in mainstream archaeology as well as in Egyptology, the critique of Vencl from 1984 is still valid for Sudan archaeology. Warfare is rarely included as a factor for cultural and social change in the historical narrations of the past in the Middle Nile region, and even the most important recent syntheses fail to problematize warfare as a significant factor for change (e.g. Edwards, 2004; Török, 2009). Furthermore, the great exhibition *Sudan – ancient treasures* (Welsby and Anderson, 2004), which was planned by personnel at the British Museum and first exhibited there in 2004, also undercommunicated the violent aspects of the past, and that at a time when the eyes of the world were fixed on Sudan because of the atrocities of the war in Darfur (e.g. Jones, 2004).

There are only a few historical overviews or specific case-studies of the Middle Nile region where war have been investigated in more detail. The most important of these studies is Karola Zibelius-Chen's (1988) investigation of the causes for Egyptian expansions into Lower and Upper Nubia during the Bronze Age. Her publication is in German, and it has made little impact outside the German-speaking circles in Sudan archaeology. Zibelius-Chen (1988: 238) argued that political motives in form of the kings' obligation to expand the border with violent means as well as the extraction of raw materials caused Egypt to expand into Nubia. The extent to which this important work has been ignored in Sudan archaeology is emphasized by its absence in the bibliography of Derek A. Welsby's (2004) treatment of the same topic in a longer timeframe – i.e. Egyptian invasions of Nubia over the past 5000 years. Welsby (2004: 283) is not concerned with the causes behind the invasions, but rather makes an

interesting discussion of tactics in form of advances in transport on the Egyptian side and the "*consistent failure to provide a coherent system of defence*" at key strategic points on the side of the people of the Middle Nile. The most detailed war-related study concerning the relations between Egypt and the Middle Nile is Williams' (1999) investigation of the Egyptian rationale behind the construction of a chain of fortresses in Lower Nubia and Batn el-Hajar during the Middle Kingdom with the fortress at Serra East as the case-study. He concluded that the Egyptian policy of fortifications along the Nile and patrolling in the deserts was due to the military threat posed by the people of the Middle Nile (Williams, 1999: 449). After Williams article, recent years have seen an increasing interest in the remains of fortifications in Sudan among the archaeologists working there (e.g. Jesse and Vogel, 2013). Although this attention is supported by renewed excavations of fortresses, the focus is mainly directed to architecture and function. Nevertheless, the time seems ripe for warfare perspectives in Sudan archaeology.

I can see several reasons for the absence of warfare and violence in the archaeological literature dealing with the Middle Nile region until now. The most important ground is that the field of Sudan archaeology is relatively isolated from general discourses in archaeology, while another obvious reason may be a wish to avoid glorifications of violence and warriors in the past in a war-ridden present.

I aim to rectify the absence of warfare in studies in the Middle Nile by focussing on episodes at the beginning of the Bronze Age when war was an important factor for social change, development and collapse. I will not glorify violence, but rather focus on the conditions under which violence and warfare occurred, how the wars unfolded and how they affected society (see the section *Research questions* in Chapter 1).

Chapter 6: Theoretical perspectives on war

Reflections on war have long roots. This chapter is about theoretical approaches for explaining causes of war in anthropology and archaeology culminating with a presentation and discussion of the so-called *theory of war in the tribal zone*, which is the main source of inspiration for explaining war between Egyptians advancing towards statehood and stateless people in Lower Nubia during the 4th millennium BCE in Chapter 12. This theory also seems to be fitting for the rest of the Bronze Age along the Middle Nile as well.

In modern western philosophy, two contradictory views have persisted on the capacities for war in human nature: The first is represented by Hobbes' brutal primitive man and the second by Rousseau's noble savage (Keeley, 1996: 5-6; Vandkilde, 2003: 137; Warburton, 2006: 39). The English philosopher Thomas Hobbes (1588-1679) used an evolutionary perspective on human origins in his major work *Leviathan* (1651) (Trigger, 2006: 95). Hobbes argued that civilized society was the only way that the weak could be protected from the strong. His summary of the life of primitive man is still quoted as being *"nasty, brutish and short"* (Warburton, 2006: 39). A century after Hobbes, the French enlightenment philosopher Jean-Jacques Rousseau (1712-1778) took an opposite view and argued that greed, envy and warfare were corrupting influences of civilization (Trigger, 2006: 111). He reasoned that war originated with the earliest states, because war would prevail between them in form of frontiers separating artificial polities without natural boundaries (Warburton, 2006: 39). Rousseau's romanticist perspective on people's capacity for violence is still common, as war is repeatedly seen as one of the prime movers in the emergence of states (Thrane, 2006: 211), and vice versa, as we will see below in the discussions of different approaches to explaining causes of war.

The diametric positions of Hobbes and Rousseau, where Hobbes argued that humans are aggressive by nature and Rousseau viewed aggression as a later development of human nature, are early representatives of the two poles of warfare studies: the "hawks" and the "doves" (Otterbein, 2004: xiii). The hawks argue that warfare has characterized humankind at all times and in all places, while the doves believe that warfare only arose when the first states developed around five thousand years ago

(Otterbein, 2004: 11). Archaeology may enlighten this largely anthropological debate, as violence caused by warfare has left recoverable traces from many periods and places (Ferguson, 1997: 322). On the one hand, archaeological evidence demonstrates that warfare existed long before the development of the state, but, on the other hand, not all societies have been plagued by war (Ferguson, 1997: 321). This means that warfare is more dependent on external circumstances than on tendencies of human nature, while some people may be more disposed to being violent than others. On this basis, I will rule out psychological dispositions of humankind as a cause of war, since there are peaceful societies, and I will not venture into the discussions of the origins of war, since warfare was a deep-rooted practice by the Bronze Age.

Although I have come to establish my theoretical foundation in the intermediate position between hawks and doves, there is still a need for a more detailed theoretical framework. The purpose of this chapter is thus to arrive at an outline of a theoretical framework for explaining causes of war along the Middle Nile during the Bronze Age. This will be achieved by describing and evaluating different single-factor approaches for explaining causes and consequences of warfare in anthropology and archaeology. In conclusion, a more complex theory for explaining war on the frontiers of states is presented with wars between Naqada people of ancient Egypt and A-Group people of the Middle Nile in the 4th millennium BCE as the case-study presented in Part II.

Different approaches for explaining causes of war

After the overviews of the history of research on war in both anthropology and archaeology in the previous chapter, I will now present different approaches used by anthropologists and archaeologists for explaining causes of war. These approaches derive mainly from the field of anthropology. Few generalizing theories about causes of war have been formulated by archaeologists, as they often tend to see the circumstances of each instance of violent conflict or war as historical particularities.

There is no unifying theory that explains the complexity of causes of war from its origins until today, but it has been suggested that archaeologists and anthropologists should join to create a common field of theory for explaining war (Ferguson, 2006: 502), since the two disciplines are working on similar questions although employing

different data. Anthropologists are limited to studying the development of warfare from ethnographic fieldwork and ethnological comparison of different contemporary societies in the present and thus involves *"a circuitous inference of how one contemporary society might be representative of the evolutionary antecedents (or descendants) of another contemporary society"* (Haas, 2001: 9 about the study of cultural evolution in general). Due to the diachronic nature of the archaeological record, archaeologists are actually better positioned than anthropologists for studying long-term developments of social and cultural change (Haas, 2001: 9) – including how warfare practices have evolved and why people have waged war in response to different environmental and social variables. Different approaches for explaining warfare have therefore been articulated. Some of these approaches have prevailed within certain research paradigms as described in the previous chapter, while others can fit different case-studies as there seems to be no universal and absolute cause of war. For the purpose of this study, I have grouped these perspectives into six single-factor approaches to warfare, and these different perspectives will be presented and evaluated in the following sections.

Evolutionary approaches

Evolutionary approaches to warfare have been the dominant theoretical perspective in anthropology for the past 150 years (Otterbein, 1999: 802), as warfare has been arranged from simple to more complex forms. In their most basic form, these approaches develop evolutionary typologies where both weapons and warfare practices are placed in sequences (Otterbein, 1999: 795). Charts illustrating weapon typologies are early examples of evolutionary categorizations of weapons that were not necessarily based on chronological development (see **Figure 23** above). Early evolutionists proposed developmental sequences of warfare practices where primitive people had no war or only ritual war followed by progressively more violent types of warfare ending with modern imperialistic war (Otterbein, 2004: 23).

Current evolutionary approaches for explaining the causes of war are usually considering different epochs as the origin of war in the history of human evolution – either that war was part of our human experience since the beginning in form of

biological evolution or that it rised with the emergence of complex societies in form of political evolution. I will now consider the two approaches.

The lack of war among primitive people has been dismissed in recent research (e.g. Keeley, 1996; LeBlanc, 2003), and violent conflict between different groups seems to be part of the behaviour of early hominids already 800,000 years ago (Carbonell et al., 2010; Otterbein, 2011: 439; Carbonell et al., 2011: 441).

Actually, new research in human evolution suggests that our faces, especially those of our australopith ancestors, evolved to minimize injury from punches to the face during fights between males rather than from the need to chew hard-to-crush foods such as nuts (Carrier and Morgan, 2014: 10). The bones that suffer the highest rates of fracture in fights are the same parts of the skull that exhibited the greatest increase in robusticity for males during the evolution of basal hominines around 4 million years ago, and these sexually dimorphic traits are still present in modern humans (Carrier and Morgan, 2014: 13). Significantly, these facial features appear in the fossil record at approximately the same time that the australopiths evolved hand proportions that allow the formation of a fist for punching (Carrier and Morgan, 2013: 241-242). Fighting and violence, if not war, thus seems to have been part of our hominine heritage since the very beginning.

Since the 1960s, evolutionary sequences of war were cast in the framework of progressive stages of socio-political development (Otterbein, 2004: 24). Two central research questions for evolutionary approaches then became: 1) How do the practices of war differ at different evolutionary stages of political development? 2) What is the role of war in the process of political evolution? (Ferguson, 1984: 18).

A classic example of research focussing on the first question is Otterbein's book *The Evolution of War* (1970), which found a strong relationship between Elman Service's (1962) types of evolving political organization (band, tribe, chiefdom, state and empire) and various aspects of warfare. Otterbein (2004: 25) has modified his conclusions from 1970 by arguing that although there is a relationship between political organization and military efficiency, the evolutionary sequence has to be rejected as societies at one stage of political organization rarely evolve into a higher stage in the sequence. However, it is still common to study war in relation to political

evolution (see Gat, 2006 for a recent example). Also this thesis aims to demonstrate that there is a relationship between political organization and how people engage in or respond to war.

Research focussing on the second question often considers political evolution in itself as the cause of war, since evolution leads to higher levels of socio-political complexity. A common argument is therefore that state formation is the outcome of warfare (Otterbein, 1999: table 1). However, political consolidation is not the only possible result of warfare, since political fragmentation may also be the outcome. The Dutch anthropologist Henri J. M. Claessen (2006: 225) has assembled several case-studies to disprove the role of war and conflict as an evolutionary factor in state formation. Although warfare certainly played a crucial role in many cases of state formation too (Cohen, 1984: 332); it never appears to have been a single-factor cause.

I find that evolutionary approaches are insufficient for explaining causes of war as they tend to focus on the outcomes of war rather than the provoking roots of war. In order for war to take place also other factors need to be present than just political evolution. Furthermore, the capacity for organized violence seems to have been part of human behaviour in certain circumstances even at the beginning of the evolution of our species. However, typologies of evolving weapon technology can be a useful tool for how warrior organization and fighting tactics changed over time.

Materialist approaches

The proponents of materialist approaches to warfare argue that war is fought because it can be materially rewarding (Ferguson, 1997: 424). According to this view, people will only risk their life in combat if there is a desperate need for more land, food or women (Thorpe, 2003: 148; Vandkilde, 2006: 67). The anthropologist R. Brian Ferguson (1984, 1990, and 1997) is a prominent advocate for materialist causes for warfare, as he argues that "*wars occur when it is in the material self-interest of decision makers to fight*" (Ferguson, 1997: 335). Materialists often consider that warfare emerges with the Neolithic period, since it was only with the emergence of agriculture and permanent settlements that people would be able to amass surpluses that could lead to asymmetric accumulation of wealth with competition and greed as

the outcome (Guilaine and Zammit, 2005: 19). Sedentism made territorial gains a possible objective of warfare, but raids for moveable property such as domesticated livestock were probably more important (Ferguson, 1997: 335). For instance, the Nuer of South Sudan readily and frequently fought over cattle, and Nuer wars with the Dinka had almost always the aim of appropriating herds and annexing grazing grounds (Evans-Pritchard, 1940: 48), and they also captured people – women of marriageable age, boys and girls (Evans-Pritchard, 1940: 128). Capturing of live animals and slaves was also an outcome, if not always the primary cause, for fighting the people in the Middle Nile as well as for military raids into the region by the Egyptians (see *Part II*).

According to materialist approaches, wars undertaken for material gains are not solely conducted in a context of scarcity, but also with the purpose of increasing surpluses and labour power (Allen and Arkush, 2006: 3), as well as to get access to scarce valuable resources. Ancient Egypt waged war in the region of the Middle Nile for materialist causes – both during periods of scarcity and at times of plenty.

Furthermore, Ferguson (1997: 335) argues that the first indications of widespread and enduring warfare is associated with major trade routes, so that plundering caravans or efforts to forcibly improve positions in trading networks were one of the commonest incentives for the earliest wars. This seems fitting for the Middle Nile, where fighting with the aim of taking control of the trade corridor through the Sahara as one of the objectives was repeated throughout the Bronze Age (see *Chapter 12*).

While enslaved women are attested as part of war-booty in many ethnographic examples, Ferguson (1997: 346 n. 9) argues that reproductive success is not among the material gains that people are willing to go to war for. In ancient Egypt, the seizure of foreign women and their incorporation into the king's harem seem to have been a common military theme, although it is unlikely that it was necessary due to a shortage of Egyptian women (Wenke, 2009: 244). The capturing of women was not a cause of warfare in a materialist perspective, but rather one of the outcomes for the victors. After all, rape and forced concubinage seem to be universal expressions of power (Wenke, 2009: 244).

It has been argued that since the improvement of material conditions is irrefutable in most violent conflicts today, then this must also have been the case to some extent in prehistory (Thorpe, 2006: 142). Nevertheless, the materialist approach can be criticized for emphasizing what we today think are sensible material reasons for allocating labour and resources into fighting and warfare. The materialist approach is not always convincing alone, and it will in this thesis be combined with ecological and practice-agency approaches (see the relevant sections below).

Ecological approaches

The common denominator for ecological approaches is that warfare is seen as an outcome of resource scarcity, and these approaches are thus closely related to the materialist approaches. In the past, the most scarce and most essential resource was food (LeBlanc, 2003: 9). The shortage of game and/or agricultural land and pastures led to food shortages and stress within a group as well as competition between groups (Helbling, 2006: 118). Resource scarcity arises in a region because humans are unable to control population growth and overexploitation or degradation of their environments are the results (LeBlanc, 2003: 10).

As we saw above, ecological approaches were common during the 1960s and 1970s (Earle, 1997: 107). At that time, the ecological approaches were criticized for being functionalistic (Hallpike, 1973), in the sense that the proponents argued that the function of warfare in times of resource scarcity was to reduce the population or to redistribute it more evenly across the landscape (e.g. Vayda, 1967; Chagnon, 1968; Rappaport, 1968). In contrast, Hallpike (1973: 468) argued that resource scarcity tended to be less common in the past and that population growth only escalated after the introduction of agriculture and domesticated animals. He furthermore argued that *"migration, rather than sitting tight and fighting it out, has generally been the preferred response to situations of overcrowding"*. The deterministic functionalist claim that warfare is an adaptive strategy has thus been abandoned in more recent research.

Ecological approaches have regained interest in recent years (Ferguson, 2006: 476). This is probably in response to the progressively more evident human impact on

the earth, its climate and ecosystems, and the conflicts that this causes today. Indeed, archaeology can make a valuable contribution to research on ecological causes for warfare since archaeologists can study long-term correlations between warfare and resource stress (Allen and Arkush, 2006: 2-3). Archaeologist Steven LeBlanc agrees with Keeley (1996) that a peaceful past is only a myth. Furthermore, LeBlanc (2003) has examined and rejected the myth of humans living in ecological balance until recently (contra Hallpike's argument above). LeBlanc concludes that in a historical perspective, warfare has ultimately been about scarce resources. The only solution to "*constant battles*" is thus to provide adequate resources for everyone by living within the carrying capacity of the earth (LeBlanc, 2003: 230). A lesson for the future is a common denominator for the more recent ecological approaches (see also Diamond, 2005).

Ecological approaches are related to materialist approaches, because the scarce resources that are fought over are land, food and women (see LeBlanc, 2003: 9). The contrast between the two approaches to warfare is that the materialist approaches focus on material gains in a wider sense – including access to non-essential resources, while the ecological approaches emphasize the environment and its degradation – either natural or human-made – as well as population increase as reasons for resource scarcity. Furthermore, while Ferguson (see previous section) dismissed the idea that wars could be fought over women, LeBlanc (2003: 208) argues that conflicts where men fight over women are actually about food scarcity, because female infanticide is common when food is scarce and the result will soon be a shortage of women as well.

A recent criticism of ecological approaches has been put forward by the Swiss anthropologist Jürg Helbling (2006: 118-119). His first contra-argument is that conflicts over scarce resources can have other outcomes than war, e.g. relocation/migration of part of the population or agricultural intensification (see also Hallpike, 1973: 468); his second contra-argument is that there are warlike societies with low population densities and absence of resource scarcity; and his third contra-argument is that resource shortages in warlike societies may be a consequence rather than a cause of war. Helbling's line of reasoning is valid and has to be taken into consideration. In case of his first argument, a peaceful solution to a conflict over

scarce resources would not leave evidence for violence or war in the archaeological record. If the evidence points towards wars being undertaken between societies with low population densities and limited resource competition, as in his second argument, then the cause of war has to be found outside the ecological approach. Helbling's third argument is certainly true, e.g. there have been widespread famines in South Sudan because wars, and recently also civil war, have driven people from their fields, but that does not explain why the wars started initially.

However, more important than dismissing ecological approaches to warfare is to ask the pertinent question of Paul Shankman (1991: 305): *"Under what conditions does warfare become more likely than alternatives such as mediation, dispersal, or other forms of dealing with inter-group hostility?"* His answer is that the likelihood of war seems to increase with the existence of more complex technology, greater environmental constraints, more dense population and more heavy pressure on subsistence resources (Shankman, 1991: 305). The American anthropologist Robert L. Carneiro (1970) has developed a theory combining these factors – the circumscription theory. He argues that in regions of circumscribed agricultural land, increasing population pressure was the major incentive for initiating wars in order to acquire needed land. Defeated villages would be incorporated into the political unit of the victor and subordinated through paying tribute (Carneiro, 1970: 735). In this way, villages were aggregated into chiefdoms and kingdoms. When these political entities became sufficiently complex and centralized, then they are justly termed states (Carneiro, 1970: 736). The rise of the state in ancient Egypt is one of the prime examples that give credibility to the circumscription theory (see the section *The rise of the united kingdom of ancient Egypt* in Chapter 4).

Although Carnerio's theory aims at explaining the origin of the state and why it arose in some areas and not in others (Carneiro, 1970: 738), it also provides a good answer to Shankman's question: Warfare tends to arise in circumscribed ecological niches where it is difficult to solve conflicts by movement and where the absence of centralized political authority makes it difficult to resolve conflicts by negotiation (Shankman, 1991: 305). Carneiro (1970: 736-737) also mentioned that resource concentration and social circumscription also can be reasons for waging war –

although non-environmental factors may also contribute to the decisions to take up arms.

Environmental factors are significant causes of war, as the natural landscape shapes all aspects of human life (see *Chapter 2*). Yet, cultural and social factors as well as agency are not without influence, as we will see in the last three approaches for explaining causes of war.

Culture contact approaches

In many places of the world, ethnic diversity is seen as a reasonable explanation in itself for conflict and war between different ethnic groups (Haas, 1999: 12). The basis for this explanation is the groundless belief that peoples who are culturally or ethnically different have a basic hatred and fear of each other (Haas, 1999: 11). The ongoing war in Darfur is an eloquent example as it is often portrayed as an ethnic conflict between African Fur people who are settled agriculturalists and the Arab Baggara people who are nomadic pastoralists. It is however extremely rare for members of one group to attack another without any other source of conflict than their difference (Ferguson and Whitehead, 1992: 28). This was also the case in Darfur, where violent conflict arose from population increase causing resource competition and stress (e.g. Cockett, 2010: 172). This underlines the complexities of factors leading to war. Hence the culture contact approaches have to be considered in combination with other perspectives – especially the ecological approach. Nevertheless, warfare between ethnic groups is a common phenomenon, and this section will address why culture contact between ethnic groups occasionally causes conflicts, which again may lead to war.

Barth's (1956) ecological perspective on the distributions and relationships of ethnic groups in the Swat Valley of Pakistan provides insights into causes of war between ethnic groups. Barth's approach was based on his ethnographic fieldwork, which was an earlier study than his seminal article on ethnic groups and boundaries from 1969 (see the section *Ethnicity* in Chapter 4). Inspired by ecology, Barth (1956) argued that different natural environments within a region constitute different

ecological niches. He defined a niche as *"the place of a group in the total environment, its relations to resources and competitors"* (Barth, 1956: 1079).

Ethnic groups with particular economic and political organizations are able to exploit certain ecological and social niches. In Swat, Barth studied the distribution of three ethnic groups and the relationships between them. The three groups had different ecological adaptations: sedentary agriculturalists, agropastoralists and nomadic pastoralists (Barth, 1956: 1079). These three subsistence modes were also present along the Middle Nile during the Bronze Age (see Sadr, 1991).

According to Barth, there are three principles for how the distribution of ethnic groups can be determined according to the concept of an ecological niche (Barth, 1956: 1088). These principles explain why violent conflict may occur in some cases of culture contact and not in others: First, different ethnic groups can co-exist peacefully in an area if they exploit different and, perhaps, complementary ecological niches. This can then facilitate the establishment of symbiotic economic relations through barter and trade. Second, if different ethnic groups are able to fully exploit the same environmental niches, then the militarily more powerful ethnic group will usually replace the weaker group. Third, if different ethnic groups can exploit the same ecological niches, but the weaker of them is better adapted to utilize marginal environments, then both groups may inhabit the same area (Barth, 1956: 1088).

In view of these principles, warfare seems to be the outcome if two different ethnic groups compete in the same environmental niche in the same region, unless the weaker group simply moves away in order to avoid conflict. The principles can also explain why there are peaceful forms of culture contact. In all situations, Barth's approach to culture contact is combined with ecology in order to explain why culture contact in some cases leads to violent conflict and war while peaceful relationships are established in other cases.

Archaeologist John Chapman (1999: 140) has more recently argued along similar lines as Barth, but he has elaborated on the situations that make two ethnic groups inhabit the same region. He argues that frontier contexts – including new populations settling next to already established groups or new people exploiting unutilized niches within an already settled landscape – increase the probability of

severe warfare. However, in contrast to Barth, Chapman argues that even the utilization of an unused niche within the region by a new-coming group may cause conflict. Both situations will be discussed in the case-studies in Part II.

On the basis of the above discussion, I find resource competition in contexts of contact between ethnic groups as a stimulating explanation for war, although there are always other factors that need to be present in order for conflicts leading to war to arise between different cultural and political groups. As we saw, Barth himself was influenced by ecology when he developed his theory of possible outcomes from culture contact.

Structuralist and structural approaches

Structuralist and structural approaches have been popular for explaining change in both anthropology and archaeology. In the early years of postprocessual archaeology, cultural structuralism was a favoured method of explanation. The influence came via French anthropology. Inspired by the Swiss linguist Ferdinand de Saussure, the French anthropologist Claude Lévi-Strauss assumed that a deep structure was underlying every culture and that all human thought was organized by binary opposites such as culture/nature or male/female (Trigger, 2006: 463). Structuralists thus consider warfare as the other side of exchange within a structure of relations (Ferguson, 1984: 17). Lévi-Strauss (1943: 136) himself argued that, war and trade are activities that cannot be studied in isolation, since exchange can be the outcome of a potential war resolved peacefully and war can be the result of an unsuccessful transaction. A more recent structuralist anthropologist, Simon Harrison (1993: 8), has showed that war and gift-exchange on Papua New Guinea can be alternative, but equivalent, forms of political action – especially among men. However, structuralism was replaced by other perspectives in mainstream anthropology already at the shift from the 1970s to the 1980s; and archaeologists lost interest in structuralism in the early 1990s (Trigger, 2006: 467), just before they became seriously interested in warfare (see p. 145 above). Nevertheless, structuralists made an important contribution to warfare studies by pointing out that there is often an intimate connection between

war and exchange (Ferguson, 1984: 18), as we also saw in the materialist approaches (see above).

Advocates of structural approaches to warfare consider certain patterns of the social structures themselves as the reasons for war (Vandkilde, 2006: 67). One of the inspirations for British social anthropology was the work of the French sociologist Emile Durkheim. He considered societies as systems made up of interdependent parts. Consequently, change could not occur in one part of the social structure without causing change in other parts (Trigger, 2006: 320-321). Supporters of this approach associate different forms of social structure with different frequencies and types of warfare. For instance, institutions that unite related men into solidary groups – so-called *fraternal interest groups* – make it more likely that they will go to war if their interests are threatened, while social institutions that divide men's loyalties – such as matrilocality – diminish the likelihood of using violence in settling disputes (Ferguson, 1984: 16). The difficulties for societies where war has prevailed, e.g. Sudan and Afghanistan, to replace the institutions and leaderships of war with a peaceful civil society and government are eloquent testimonies of how warfare can shape the social structure of these societies.

Additionally, some structural approaches to the study of warfare have focussed on the inherent potential of violence and war in creating identities by forming the structural division on which identity is built (Kolind, 2006: 447). An early example is Evans-Pritchard's structural-functionalist interpretation of warfare practices among the Nuer (see pp. 135-136 above). He argued that the institution of warfare maintained the structural relations between the Nuer and other ethnic groups, while the institution of the feud sustained the structural relations between segments of the same tribe (Evans-Pritchard, 1940: 190). In this case, the institutions of warring and feuding contributed to reproducing the social structure of the society. Harrison (1993: 18) has elaborated on the structural function of warfare in group formations in Melanesia by arguing that ethnic groups are constituted through war whereby they separate themselves from each other *"as distinct entities capable of competing for resources"*. In his analysis *"it is not so much groups that make war, but war that makes groups"*. This perspective is interesting for processes of ethnogenesis, which appear to have happened at several

times along the Middle Nile during the Bronze Age, i.e. with the appearance in the archaeological record of groups with a distinctive material culture recognized as A-Group, C-Group, Kerma and Pan-Grave (see *Chapter 3*). However, these mechanisms for ethnogenesis are certainly not applicable universally.

The structural approaches to how warfare shapes identities have been criticized for not explaining why violence occurs in the first place. Furthermore, although violence contributes to constructing a structural division of *"us and them"*, it is not war itself that is creative, but people's reactions to violence (Kolind, 2006: 448). Structural approaches have also been criticized for being circular in their argumentation (Ferguson, 2006: 476); for does war create groups, or vice versa?

Other structural approaches consider warfare to be the result of a breakdown of social norms. This can both cause a change in the social norms or the collapse of the social structure itself (Vandkilde, 2006: 67). Again the argumentation becomes circular: is the war the result of the breakdown of norms, or are the norms breaking down because of war?

The major critic of structuralist and structural approaches is that people and their choices are without much significance for explaining change in general and causes for war in particular (see Vandkilde, 2006: 67). Although there are features of any society that can make it more or less prone to waging war, the structuralist and structural approaches need to be combined with a consideration of agency.

Practice-agency approaches

One of the stimuli for the emergence of postprocessual archaeology was the increasing awareness of the deterministic claims of processual archaeologists (Trigger, 2006: 468). During the 1980s and 1990s, the Cambridge archaeologists Michael Shanks and Christopher Tilley were the most active promoters of the transformative power of human agency (Trigger, 2006: 467). They proposed that societies would not exist without individuals and their social practices. Shanks and Tilley also argued that all agents are positioned in relation to other agents, groups, institutions and social structures (Shanks and Tilley, 1987: 123). There was therefore a need of a dialectical conception of the relationship between people and structure, or agent and society.

Archaeologists have since been inspired by theories linking social action to social structure (Trigger, 2006: 469), i.e. the practice theory of the French sociologist Pierre Bourdieu (1977) or the structuration theory of the British sociologist Anthony Giddens (1984).

Both practice and agency are important for explaining warfare. War as a form of social practice is defined as *"violent acts [...] embedded in webs of significance and organized socially and in which technology is usually applied"* (Bossen, 2006: 90). The *"webs of significance"* refer to the strategic and meaningful aspects of warfare, since violence can be used to achieve goals – both practical and symbolic. It is therefore necessary to legitimize the use of violence (Riches, 1986: 5). The organizational aspect focusses on the need for coordination among actors engaged in war (Bossen, 2006: 92), and the technological aspect has important effects for how warrior bands and armies fight as well as what kind of coercive rule they can sustain (Bossen, 2006: 93).

The social practice of war is important since it approaches warfare from the perspective of actors (Bossen, 2006: 93). In centralized hierarchical societies, it is often the ruler together with a small group of elite followers/advisors who decide to wage war in pursuit of their own objectives. In decentralized societies, people rely on discussion and consensus in the decision to fight, and they share risks and rewards (Allen and Arkush, 2006: 5). In both cases, agency is significant for making a decision to fight. Nevertheless, the decision is made on the background of environmental and social factors, so that multiple factors lead to the decision (Otterbein, 2004: 21). Therefore, practice-agency approaches to warfare also have to be combined with other approaches, since the circumstances leading to war are so complex.

Despite the potential of using agency for explaining how decisions concerning making war or avoiding conflict are made, there is a serious lack of studies in both anthropology and archaeology that consider agency in this context (Vandkilde, 2006: 67; Nielsen and Walker, 2009: 3). However, the motives of violent aggression do not survive in the archaeological record in directly observable form (Carman and Harding, 1999: 3), although they may be hinted at in contemporary written sources where such exist. For the purpose of this study, it is important to emphasize that the decisions of

waging war taken by the Egyptian king and his followers should be seen in relation to the Egyptian ideology where there was a link between the power of the king and his victory in war, so that the king may undertake military expeditions in order to legitimize himself. Furthermore, the agency of the Nehesyw must not be overlooked. I will discuss the options that they had when they faced military threats from Egypt: fighting, moving, surrendering, forging new alliances or peace-making (cf. Nielsen and Walker, 2009: 8), as well as to make their own decisions about attacking neighbouring ethnic groups as well as the state of ancient Egypt.

According to the practice-agency approaches, violent conflict and war are considered as strategic action and part of social practices (Vandkilde, 2006: 67). These approaches are thus closely linked to the materialist approaches, since warfare can also be viewed as a profitable investment through raiding for booty and/or fighting to control the territory, production and trade of neighbouring groups (cf. Kristiansen, 1999: 183).

* * *

The discussions so far in this chapter show that single factor approaches are insufficient for explaining causes for war, so a multifaceted approach is required to explain the causes of war in Lower Nubia in the 4th millennium BCE. A characteristic of Lower Nubia was that the region was located next to Egypt – a society with a more complex political organization. It seems that wars in Lower Nubia and other parts of the Middle Nile were often initiated by Egypt. I will therefore also discuss a theory that considers the indigenous responses to war caused by state expansion into stateless territories.

A theory for explaining wars on the southern frontier of ancient Egypt

The concluding section of this chapter will present *The theory of war in the tribal zone* as formulated by the anthropologists R. Brian Ferguson and Neil L. Whitehead (1992). This theory was developed in order to explain the complexities of war on the tribal frontier of states, and it draws on several of the single-factor

approaches for explaining causes of war that were presented in the previous section. In Chapter 12, I will use a modified version of this theory for explaining war between Egypt and communities in Lower Nubia during the 4th millennium BCE. I will complement this theory by first assessing the causes of violent state expansions from Egypt in form of a combination of single factors such as resource scarcity, material gains, political development, culture contact, structural change and strategies of individuals. In this section, I will make a critical examination of the theory of war in the tribal zone as proposed by Ferguson and Whitehead (1992).

The theory of war in the tribal zone

The so-called theory of war in the tribal zone examines wars on the peripheries of expanding states and how these wars are often related to state intrusions (Ferguson and Whitehead, 1992). The primary focus of the case-studies in the volume presenting the theory was European colonial expansion since the fifteenth century CE, although Ferguson and Whitehead suggest that the theory can also be applied to ancient state expansions (Ferguson and Whitehead, 1992: 1). I will thus test this theory against the case of southward expansion during the formative stages of the ancient state of Egypt.

With reference to the application of the theory before European expansion, Vandkilde (2006: 67) has remarked that the tribal zone theory *"would not have survived unmodified for long if archaeological sources of prehistory had been consulted"*. It is, however, unclear on which reasoning she bases this criticism. On the contrary, I find the theory stimulating for the specific situation of the peoples living along the Middle Nile in the Bronze Age, since the region was adjacent to one of the pristine states of the world.

Instead of considering the perspective of war in the tribal zone as challenging the notion that warfare occurred before the development of states, as phrased in other critics (cf. Keeley, 1996: 20; Otterbein, 1999: 801), I evaluate the tribal zone theory as an approach addressing a specific type of war, i.e. on the fringe of expanding states, in accordance with the intentions of Ferguson and Whitehead.

Ferguson and Whitehead (1992: 27) stressed that their focus on war in the tribal zone was one end of a range of possibilities, with peaceful contact at the other

extreme. We saw in the first principle of Barth's ecological approach to culture contact that it is possible for ethnic groups to co-exist peacefully in a region under certain ecological conditions (see p. 159 above). Furthermore, they criticized earlier research where pacification was considered as a major effect of state expansion, and they argued instead that the immediate consequence of state intrusion is an overall militarization with pacification only occurring later in the process of culture contact between states and tribal peoples (Ferguson and Whitehead, 1992: 2-3).

In view of the above cited criticism of the theory and counter arguments by the authors, I consider it interesting to test a modified version of the tribal zone theory against the evidence for war in Lower Nubia in the 4th millennium BCE, since this will expand the applicability and validity of the theory in space and time.

The tribal zone on the state frontier

Ferguson and Whitehead (1992: 3) defined the *tribal zone* as a region in proximity of a state, but outside state administration. This is a fitting description of Lower Nubia in the latter part of the 4th millennium BCE since no indigenous states had emerged there, while the region was the neighbour of expanding polities in Egypt on proto-state and state levels of organization (see the section *Political organization* in Chapter 4 above). However, the terms *tribe* and *tribal* have been widely criticised for their pejorative connotations and for being colonial constructs (Jones, 1997: 52). Ferguson and Whitehead (1992: 12-13) were certainly aware of this, but they still considered *tribe* as a useful term for a form of decentralized political organization that was a secondary phenomenon deriving from contact with a more complex society – most often a state. By extension, Ferguson and Whitehead (1992: 13) termed the peripheries of expanding states as a tribal zone. However, they admitted that other forms of political organization were also encountered, such as secondary states, chiefdoms, autonomous villages and specialized bandit groups (Ferguson and Whitehead, 1992: 13). In addition to being negatively loaded terms, *tribe* and *tribal* are therefore not descriptively accurate for the political realities on the fringes of the expanding states described in their theory. I will consequently focus on the contrast between the state and the decentralized forms of indigenous political organization in

replacing the term *tribal zone* with *state frontier*, since the location on the margin of a state is the constant variable in their theory, which I will rename as *The theory of war on the state frontier*.

The indigenous peoples living in the territories bordering a state are affected by the nearby state through technological, ecological and pathological factors (Ferguson and Whitehead, 1992: 11), and I would also add influences from state ideology (see *Chapter 11*). This dynamic field of influence defines the extension of the frontier of the state (cf. Ferguson and Whitehead, 1992: 8-11). Although not the topic here, we should not forget that indigenous people's practices and beliefs also had an impact on the inhabitants and rulers of the nearby state. The peoples living in the Middle Nile region were deeply affected by the ancient Egypt state and the southward expansion of its frontier and border. This thesis will thus investigate if the episodes of war both in Lower Nubia during the 4th millennium BCE and along the Middle Nile during the Bronze Age conform to the patterns of war in the indigenous zone on the state frontier as outlined below.

Indigenous responses to state expansion

It is difficult for states to deal with peoples without authoritative leadership, so expanding states seek to identify and elevate leaders. The status of state-identified leaders is increased by their central position in trade relations with the state as well as their privileged access to foreign manufactured prestige items (Ferguson and Whitehead, 1992: 13). However, for the indigenous people, cooperation in exchange for manufactured goods and political backing inevitably leads to dependency and loss of autonomy, and there is always the backside of coercive and unpredictable behaviour by the agents of the expanding state (Ferguson and Whitehead, 1992: 17). In the arguments about the state's influence on indigenous political organization and the close relationship between trade and warfare, Ferguson and Whitehead draw on structural and structuralist approaches respectively (see the relevant section above).

Besides cooperation with the state, indigenous people and their leaders have two other choices when facing an expanding state: resistance and flight. The existence of these options can cause factional division among the indigenous peoples, but each

party would make pragmatic responses in order to maintain tolerable living conditions and prevent military losses (Ferguson and Whitehead, 1992: 17). In Chapters 11 and 12, I will discuss when, how and why these different options were utilized by the indigenous peoples of the Middle Nile when confronted by the expanding Egyptian state. In this part of the theory, Ferguson and Whitehead used agency to explain why there are different responses to state expansion.

Wars on the state frontier

After contextualizing indigenous responses to encounters with expanding states, Ferguson and Whitehead (1992: 18) moved on to discussing three categories of war on the frontiers of states:

- First, *wars of resistance and rebellion* are usually directly related to state expansion. The army or other military agents of the state are then in direct combat with indigenous people involving *"attacks by the state on the natives, their settlements and their provision grounds"* and the response of the indigenous people in form of *"attacks on state outposts, such as forts, watering places, or sites of resource extraction"* (Ferguson and Whitehead, 1992: 18). Raids by either side can also have purely materialist motives, such as the state capturing slaves or the indigenous people plundering for manufactures (Ferguson and Whitehead, 1992: 19). The military advantage of intruding states is the *"ability to authoritatively direct and sustain massive force against a target"*, while the advantage of indigenous people is often mobility (Ferguson and Whitehead, 1992: 19). In Chapter 12, I will investigate how this form of warfare is largely fitting the responses by the indigenous people of the Middle Nile to the successive phases of Egyptian expansion into the region.
- Second, *ethnic soldiering* involves indigenous people fighting under the control or influence of the nearby state (Ferguson and Whitehead, 1992: 21). The ethnic soldiers can be included in the service of the state through various combinations of coercive and seductive measures or through negotiated alliances with native polities. The state control over the soldiers may span from hired raiders to regular auxiliary units, from ethnic groups disproportionately incorporated into

state armies to a standing army of ethnic mercenaries (Ferguson and Whitehead, 1992: 22). The ethnic soldiers are employed to make war on other indigenous people and neighbouring states, and they can also be used to perform the function of police within the state (Ferguson and Whitehead, 1992: 22). There is ample evidence for employment of mercenaries from the region of the Middle Nile by the ancient Egyptians (e.g. Fischer, 1961; Hafsaas, 2006), and they were used as soldiers in wars against the peoples inhabiting Egypt's frontier towards Palestine, as warriors for various warlords during periods of civil war in Egypt, and as police within the state.

- Third, *internecine warfare* includes wars waged by politically autonomous indigenous peoples who pursue their own interests under the changing conditions of the state frontier. This category of war is closely related to the control of trade (Ferguson and Whitehead, 1992: 23), which is a lucrative undertaking as it brings both wealth and power. Those who are able to establish themselves at a middleman position that cannot be circumvented will thus be able to maximize the economic, military and political advantages of trade control (Ferguson and Whitehead, 1992: 24). There was also warfare between different ethno-political groups along the Middle Nile and the neighbouring deserts during the Bronze Age. Furthermore, a pattern has been identified whereby the indigenous people of the Middle Nile grasped the opportunities to control the trade by force when there was an opening due to weakness or collapse of the Egyptian state.

Ferguson and Whitehead (1992: 27) concluded the presentation of their theory with the observation that a state frontier can be a very violent place, where warfare can cause major demographic losses or even wipe out a population from the frontier region. I will argue that the Middle Nile was periodically a violent place when the neighbouring state turned its aggression southwards, and this was particularly strongly felt in Lower Nubia. The state violence naturally had its effects in the form of the brutal destruction of the means of making a living as well as losses of human lives due to both fighting and possibly also starvation.

Chapter 7: Evidence of war in Lower Nubia during the 4th millennium BCE

After the presentation of theoretical approaches to explaining causes of war in the previous chapter, I will now discuss actual evidence of war in the Nile Valley during the 4th millennium BCE.

There are generally two opposing opinions on the level of technology and organization of warfare in ancient societies. On the one hand, it has been suggested that violence and war were so ubiquitous because only a small amount of specialized equipment and esoteric knowledge were required for exercising it (see Riches, 1986: 11). On the other hand, it has been argued that warfare usually entails technology in form of weapons, items of personal protection and fortifications, which all require specialized knowledge for manufacture and utilization, as well as organizational skills for coordinated action, cooperation and tactics (Bossen, 2006: 91). I suggest that both opinions are correct, depending on the level of technology and the complexity of the society.

During the Bronze Age in the Nile Valley, warfare seems to develop from simple weapons and little organization to more specialized weapons and more advanced warrior institutions, i.e. following an evolutionary trajectory (see the section *Evolutionary approaches* in Chapter 5). The increasing sophistication in weaponry, defensive structures and warrior institutions was a response to the development of copper and bronze metallurgy and its use for making weapons, as well as the emergence of the state in ancient Egypt, which brought along increased levels of organization and large groups of people under central command. In my opinion, the position on the state frontier of ancient Egypt is one of the reasons that make war along the Middle Nile such an interesting topic.

The topic of this chapter is a presentation of the weapons used in Upper Egypt and Lower Nubia during the 4th millennium BCE and the related injuries on human remains. The actual finds of the different categories of weapons in Lower Nubia are presented in the form of two catalogues. The focus of the following discussion is the categories of weapons that were most probably used in warfare during the 4th millennium BCE: maces, daggers, bows and arrows, axes and spears. I will start the

examination of this material by first presenting the most specialized weapons. The descriptions of the forms of each type of weapon are organized from earlier to later specimens. Furthermore, I will present the weapons found in Egypt as a starting point, because these finds are more widely discussed in the literature today and the common direction of technology transfer in the Bronze Age was from north to south, i.e. from Egypt to the Middle Nile. The topic is closed by an outline of skeletal trauma related to violence and a comment on which weapons could have caused these injuries. Thereafter, we move on to Part II and the reconstruction of a narrative of war on the southern frontier of ancient Egypt during the 4th millennium BCE.

Weapons

Weapons can be defined as tools whose primary function is to inflict physical harm during warfare (Gilbert, 2004: 3). Tools used for causing physical harm can be classified in different ways. A basic categorization is related to the extent that causing physical harm is the primary function of the object, and this system consists of four groups: specialized weapons, weapon-tools, tool-weapons and weapons of opportunity (Chapman, 1999: 112; Gilbert, 2004: 33). Weaponry used in warfare usually belongs to specialized weapons or the weapon-tool category, but also tool-weapons and weapons of opportunity could be used if no other arms were available. Specialized weapons and weapon-tools can also be categorized as to whether they are used for close combat or for attacking at a distance, called melee weapons and ranged weapons respectively. For the Bronze Age of the Nile Valley, the melee weapons included sticks, clubs, knives, axes, spears, maces and daggers. Maces and daggers can be considered as specialized weapons, spears and axes as weapon-tools, while the other categories can be considered as tool-weapons. However, some types of spears and axes seem to have been made specifically as weapons and not as tools, thus fitting in the specialized weapon category. Ranged weapons included bows and arrows, throwing sticks and slings. All of these types must be considered as weapon-tools that were also used for hunting.

The Egyptians also seem to have had the practice of using spiritual objects such as execration texts and repressive iconography with the intention of symbolically

harming the opponents (cf. Gilbert, 2004: 3). There are also a number of tool categories that also could have been used as weapons, such as knives, adzes and possibly also chisels.

Let us consider the different categories of weaponry used in warfare in the Nile Valley during the Bronze Age (see Ciałowicz, 1985 for an earlier analysis).

Maces

Stone maces were hand-held striking weapons that could be deadly at close range. The length of the haft added significant power to the swing making the impact of a blow capable of breaking bones and crushing skulls (Partridge, 2002: 33). The stones used for the mace-heads were apparently carefully selected based on hardness, but also on colour and veining (**Figure 25**). The surface was often highly polished with the purpose of emphasizing the colours of the stone. A central hole was drilled through the stone in order for the mace-head to be securely fitted to a wooden haft. The haft often had a textured surface on the end of the handle in order to ensure a secure grip (Partridge, 2002: 32). The mace-heads appear to have been made by skilled individuals – possibly by the carriers of the maces themselves (see Olausson, 1998: 136 for the Swedish-Norwegian Battle-axe Culture; Gilbert, 2004: 36 for Neolithic Egypt). The unique appearances of the mace-heads suggest that they were not only used as weapons, but also for displaying individual identity and power. The latter was emphasized by the threat of physical violence that was inherent in this weapon. However, the maces should not be considered as prestige goods, since they were usually made by the carriers and not ordered from a specialized stoneworker by a patron (see Olausson, 1998: 136 and Vandkilde, 2006: 410 for the Battle-axe Culture). This changed with the appearance of the ritual mace-heads of Naqada III.

Figure 25: Mace-head of beautiful hard stone from the Naqada Cemetery 17, grave 50, at Khor Bahan. Photo by Tsakos. Courtesy of Nubia Museum, Aswan.

For this study, four different shapes of mace-heads can be recognized on the basis of the typology established by Krzysztof M. Ciałowicz (1989: 261-262 & fig. 1): disc-shaped[12], pear-shaped, biconical[13] and double-pointed (**Figure 26**). The disc-shaped mace-heads can further be subdivided into three sub-categories: convex-topped, flat-topped and concave-topped (see **Figure 26:a-c**). Both the convex-topped disc-shaped mace-heads and the biconical mace-heads have mainly been found in Upper Nubia and Central Sudan (Ciałowicz, 1989: 262-263).

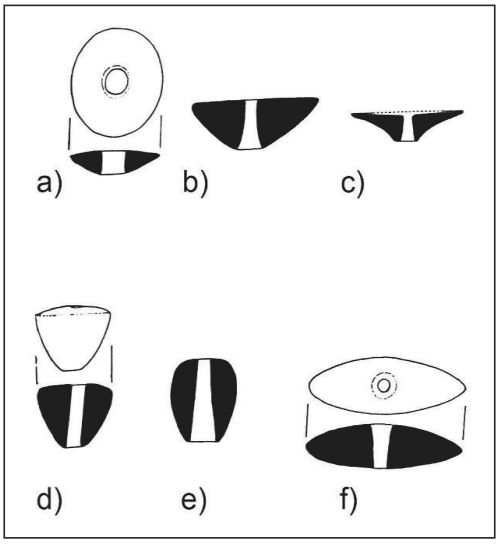


Figure 26: Typology of mace-head shapes. a) convex-topped disc-shaped, b) flat-topped disc-shaped, c) concave-topped disc-shaped, d) biconical, e) pear-shaped, and f) double-pointed. pointed. After Ciałowicz (1989: fig. 1).

Upper Egypt

In the Faiyum and at Merimde in Lower Egypt, both disc-shaped and pear-shaped mace-heads were made at the beginning of the Neolithic (*c*. 5000 BCE), but the disc-shaped mace-heads became dominant during the late Neolithic, contemporary with Naqada IA-B (Gilbert, 2004: 36, fig. 5.7, app. 3). This is the first time that maces – all disc-shaped – were deposited in graves in Upper Egypt as well (Gilbert, 2004: fig. 5.7, app. 3). At that time there was contact and technology transfer between Lower and Upper Egypt (see p. 81 above). During Naqada IC to IIB, the commonest shape of mace-heads was disc-shaped (75%), with some pear-shaped (12%) and double-pointed (10%) mace-heads as well (Gilbert, 2004: fig. 5.8). The disc-shaped maces must have been efficient weapons with light weight and a sharp edge, and they were probably designed to crush bone in hand-to-hand fighting. During Naqada IIC-D, the pear-shaped mace-heads had become the preferred type (70%), followed by the disc-shaped

[12] Termed *conical* by Ciałowicz (1989: 261). I have retained the conventional term.
[13] Termed *conical pear-shaped* by Ciałowicz (1989: 261). I use the term employed by Usai (2008: 55).

(20%) and the double-pointed (5%) mace-heads (Gilbert, 2004: fig. 5.8). Nearly 80 mace-heads, mainly of the pear-shaped type, were found in the Main Deposit at Nekhen [Hierankonpolis] (B. Adams, 1974: 5-13). The composition of shapes suggests that they date to Naqada IIC-D. The abundance of these weapons indicates that maces were favoured in combat at this time (Hoffman, 1979: 302). It is possible that the chieftains of Nekhen called in the maces from all men in conquered territories in order to avoid revolts and that these weapons ended up in the Main Deposit of the temple together with other votive offerings.

During Naqada IIIA-B, the pear-shaped (40%) and disc-shaped (12%) mace-heads continued to be made, but the commonest type was the so-called ritual mace-heads (48%) (Gilbert, 2004: fig. 5.8), which comprise many different forms including the decorated mace-heads of the kings Scorpion and Narmer (Gilbert, 2004: 38). In hieroglyphic writing, the disc-shaped mace was used for the phonogram *mn* and the pear-shaped mace was used for the phonogram *ḥḏ,* while a tilted pear-shaped mace was used as a determinative for 'smite' (Allen, 2000: 442).

Already by late Naqada I and early Naqada II, the mace was no longer only a weapon, but had also become a symbol of power, as evident in the iconography of early chieftains in Upper Egypt (see the section *The rise of the united kingdom of ancient Egypt* in Chapter 4). From Naqada III onwards, the maces appear to have become even more important as powerful symbols in form of the decorated mace-heads than as actual weapons (cf. Gilbert, 2004: 37). Throughout the three millennia of dynastic Egypt, the mace was one of the weapons held by the victorious king (Midant-Reynes, 2000a: 55; **Figure 27**).

Figure 27: Narmer, first king of the First Dynasty, smiting an enemy with a pear-shaped mace. Note the chisel-like object that the king is holding on the head of the enemy. Detail from the reverse side of the Narmer palette after Kemp (1989: fig. 12).

I suggest that the symbolic power associated with the mace in ancient Egypt probably derived from it being used in the actual killing of enemies and defeated rivals during the state formation and unification processes. A particular detail in the iconography of smiting kings from the earliest dynasties is that the king holds a chisel-like object on the top of the head of the kneeling captive (see **Figure 27**; see also depictions on three ivory cylinders from the Main Deposit at Nekhen in Gilbert, 2004: fig. 8.9). This would have made the blow to the top of the head even more likely to be lethal, and it is probable that the king in this way could publicly execute his captured enemies by a single stroke with his mace and thus demonstrate his superior power in a dramaturgical way. In any case, the greatest number of enemies struck by maces were killed in battles by warriors – the king's men specialized for this task.

The Middle Nile

During the Neolithic (*c*. 5000-2500 BCE) of Upper Nubia and Central Sudan, many mace-heads were made. Maces have mainly been found in burial contexts from the following sites, listed from north to south: Kadruka (site 1), Kawa (site R12), Multaga, el-Ghaba, Kadada (site A), Shaheinab, Geili and Kadero (Usai, 2008: 56). The mace-heads had biconical, pear[14] and disc shapes (Usai, 2008: 55). Arkell (1961: 36) suggested that the mace was introduced to Upper Egypt from the Middle Nile (see previous section), but this proposal has been rejected on the basis of finds of Neolithic mace-heads in Lower Egypt as well (Gilbert, 2004: 39). However, the chronological relationship between the Neolithic in the southern parts of the Middle Nile and in Lower Egypt is not clarified, so the question of independent invention or direction of transmission remains unclear. Although this topic is outside the scope of this thesis, my opinion is that since maces apparently were used earlier in Upper Nubia and Central Sudan than in Egypt, then this type of specialized weapon could have been carried to Egypt by people circumventing Lower Nubia and migrating through the increasingly arid Sahara during the 5th millennium BCE (see *Chapter 2*).

[14] Termed *ovoid* by Usai (2008: 55).

In northern Lower Nubia, Cemetery 17 at Khor Bahan is remarkable for the many mace-heads that were uncovered in the graves there (**Catalogue 1**). The majority of these mace-heads were of the disc-shaped type and found with young men (see **Catalogue 1**). I argue below that the site was used as a burial ground for peoples coming from Upper Egypt during Naqada IC-IID1 (see the section *Reuse of Cemetery 17 at Khor Bahan* in Chapter 10), and thus provides evidence for an early expansion into Lower Nubia by people coming from Upper Egypt (see the section *The first war in the area of the First Cataract* in Chapter 11).

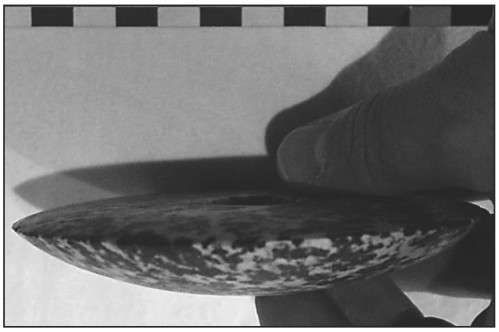


Figure 28: Disc-shaped mace-head with convex top from grave 229 at Cemetery 7, dated to the proto phase of the A-Group people. Photo by Tsakos. Courtesy of Nubia Museum, Aswan.

Maces were rare in A-Group contexts, but some exceptional specimens have been uncovered from burials. Two disc-shaped mace-heads with convex tops were found in A-Group graves dating to the proto phase at Cemetery 7 at Shellal (**Figure 28**). Both maces were buried with adult men (Reisner, 1910: 37). The maces were probably weapons rather than status symbols, as there were no other indications of a stratified society during the proto phase. The A-Group graves in Cemetery 7 at Shellal were only slightly earlier than the Naqada graves in Cemetery 17 at Khor Bahan. The characteristic shape of these maces makes it likely that the practice of making maces – if not also the maces themselves – came from Upper Nubia and Central Sudan rather than Upper Egypt. Based on finds in burials, maces appear to have been insignificant weapons in A-Group society – probably because copper and bronze axes and adzes became the most important weapons and status symbols (see the section *Axes* below).

In the terminal phase of the A-Group, which was contemporary with Naqada IIIB-C1, maces were clearly associated with persons of high status (Roy, 2011: 193). The maces were then certainly used in Lower Nubia under influence of or as imports from Egypt, where the mace appeared in the iconography as the favoured weapon of the victorious king. This is particularly well demonstrated by findings in Cemetery 137

at Sayala, a small elite burial ground that is dated to the middle phase (see the section *The princes of Sayala* in Chapter 11). In grave 1, which contained the remains of several bodies, a hoard that had been overlooked by grave robbers was found protected under a slab from the collapsed sandstone roofing (**Figure 29**). The most prestigious items in the cache were 15 copper objects and two stone maces with unique handles covered with plated gold. Both mace-heads were pear-shaped, and one was made of quartz and the other of marble (Firth, 1927: 204-207). One of the Sayala handles (EMC 43883) was decorated with an impressed frieze consisting of wild animals (**Figure 30**). This mace-handle was stolen from the Egyptian Museum in Cairo in 1920,[15] and it has never been retrieved. Fortunately the handle had been photographed and the animal procession had been drawn before it was lost, and this documentation allows us to examine the meaning of the decoration of the mace handle.

Figure 29: The objects found under a slab in grave 1 at Cemetery 137 at Sayala. From Firth (1927: plate 5/c).

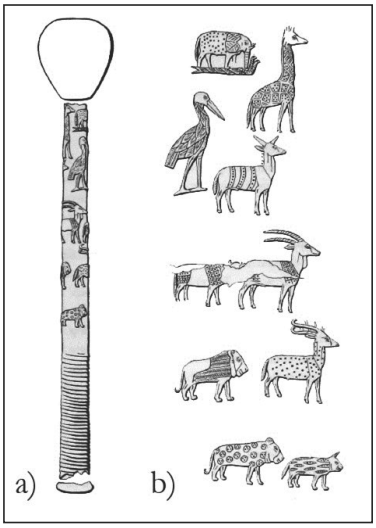


Figure 30: a) The mace with gold handle decorated with an animal frieze from grave 1 at Cemetery 137. b) Detail of the impressed animals. After Firth (1927: fig. 8).

The style and arrangement of the animals on the Sayala mace-handle were very similar to the iconography on contemporary objects in Egypt (Roy, 2011: 238), especially carved ivories such as the knife handles of Carnarvon, Pitt-Rivers, Gebel et-Tarif, Gebel el-Arak, a newly cleaned handle from the Hierakonpolis Main Deposit, the new handle fragments from Abydos (K 1262 at Cemetery U) and the Brooklyn knife found at Abu Zaidan, as well as the Davis comb (Friedman, 2004: 161). Figures were also carved on contemporary cosmetic palettes. Wengrow (2006: 185) has pointed out that relief

[15] A note attached to the plate showing the golden mace handle informs that it was stolen from the museum (see Firth, 1927: plate 18).

carving was reserved for objects that were related to the vulnerable margins of the human bodies in opposite pairs: cosmetics ground on palettes were used to decorate the skin, while knives could penetrate the skin and kill; and combs were used to ornament the hair, while maces could crush the skull. The Sayala mace handle is thus part of these complex ideas, so let us have a closer look at the animals depicted on the handle.

The elephant on intertwined snakes motif, which is on top of the Sayala frieze, is a characteristic theme in Naqada III art and has been interpreted as a symbol of victory (Friedman, 2004: 161). Below the first pair are a giraffe and a saddlebill stork (Osborn, 1998: fig. 13/1). However, it is curious that an eland appears to be depicted below the giraffe on the Sayala mace-handle (see **Figure 30:b**), since elands are not known from other depictions in ancient Egypt (Osborn, 1998: 6). Today, elands are found in South Sudan (Osborn, 1998: 157). Since their habitat is arid zones and savannah that includes semi-deserts, they may have lived along the southern parts of the Middle Nile during the Bronze Age. The symbolism of the animal pairs on the Sayala mace handle has been interpreted as representing a ruler subduing his opponents: the elephant trampling the snakes, the bull attacking the oryx, the lion attacking the deer and the leopard attacking the hyena (H.S. Smith, 1993: 367; see p. 350 below).

Unfortunately, most of the Egyptian ivory knife handles were obtained from the antiquity market, so they lack find contexts (Wengrow, 2006: 178). However, the handles found at the important Naqada cemeteries of Abedju [Abydos] and Nekhen [Hierakonpolis] indicate that these knives were status symbols. Ivory was an exclusive material, and objects with ivory carvings were prestige items during Naqada III (Takamiya, 2003: 491-492). The fine execution of the carved animals on these ivory handles must have been made by specialists. Furthermore, the handles were attached to ripple-flaked flint blades that represent the highest quality of flint knapping. Lithic specialist Diane L. Holmes (1989: 338) has argued that these blades were so standardized that they were most probably produced in only one workshop "*by craftsmen who practiced this extremely specialized skill over a period of a few generations*". A place for production of specialized flint implements has been identified within an administrative or palatial structure at Nekhen [Hierakonpolis] (Friedman, 2011: 35).

Despite the extravagant use of gold for the Sayala handle and the unique depiction of an eland, there are thus strong indications that the handles, if not the mace-heads, were imports from Egypt. Besides the gold handles, the small size of the Sayala maces suggests that they were status symbols rather than weapons. Actually, the small size of both the mace-heads and the short length of the hafts suggest that these maces may have been used as sceptres. King Narmer carries a similarly proportioned mace in the scene on the obverse side of the Narmer palette (**Figure 31**). It has been suggested that the Sayala mace handles were gifts from a ruler in Upper Egypt to an A-Group ruler (H.S. Smith, 1993: 376; Roy, 2011: 239), but it is also possible that the A-Group chieftain commissioned the handles from a specialized goldsmith in Upper Egypt (see the section *The market places of the First Cataract* in Chapter 11). In any case, the mace handles were part of a common ruler ideology that was being established in Upper Egypt and Lower Nubia during late Naqada II and early Naqada III.

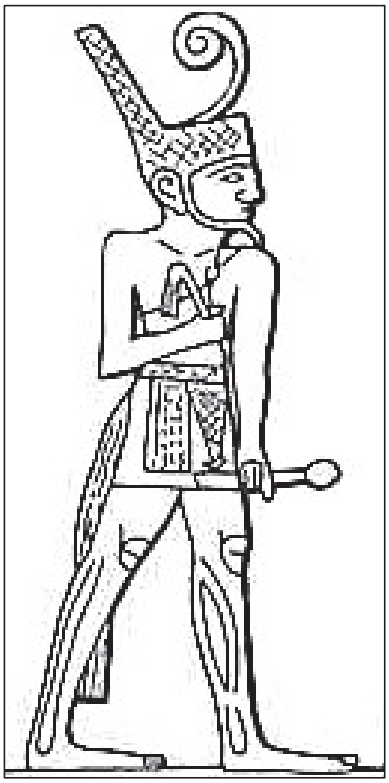


Figure 31: Narmer with a mace. Detail from the Narmer palette after Kemp (1989: fig. 12).

Another pear-shaped mace-head (OIM E24159) associated with a ruler was found in Cemetery L, the elite burial ground at Qustul (see the section *The royal cemetery at Qustul* in Chapter 11). The mace was found in the most important burial, grave 24, dating to the terminal phase. The breccia used as raw material for this mace has a distinctive appearance with a grey colour mottled with irregular patches of blue and white, which seem to be fragments of fossils (Williams, 1986: 130; **Figure 32**).

Figure 32: The mace-head (OIM E24159) from grave 24 in Cemetery L at Qustul. Photo by Ressman in Williams (2011: fig. 9.6).

A pear-shaped mace-head of white marble was also found in the wealthy multiple burials of grave 683 in Cemetery 89 at Koshtemna (Firth, 1912: 193). The grave most probably also dates to the terminal phase. The mace was found with two adult women and an infant (Firth, 1912: 193), and it has been suggested that the mace was a status symbol for the new-born child, who may have been a boy belonging to an elite family (Roy, 2011: 110).

Maces were almost unknown in the later periods of the Bronze Age along the Middle Nile, but they reappeared as rare symbols of royal power during the Iron Age.

Daggers

Daggers are specialized weapons that were held in one hand and used for stabbing (Gilbert, 2004: 43). The main characteristics of the dagger blade are its double-edge and pointed tip as well as the short length, if compared with a sword (Partridge, 2002: 49). The daggers could be used for close-quarter combat as well as for executing a fallen opponent (Partridge, 2002: 49). In fact, the Pyramid Texts of the Old Kingdom describe the dagger as a weapon used for delivering the *coup the grace* to enemies of the king (Hamblin, 2006: 357). During the 4th millennium in Upper Egypt, archaeological finds of daggers, a small number of depictions and osteological evidence indicate that daggers were used as both weapons and status symbols by elite warriors. In a recent article, I have argued that the elite warriors at Kerma in Upper Nubia carried bronze daggers during the first half of the second millennium BCE (Hafsaas-Tsakos, 2013). The earliest certain depictions of daggers date to the Early Dynastic period, when the hieroglyph sign  is encountered as a phonogram for *tp* and determinative for the *mṯpnt* daggers of this shape (Gilbert, 2004: 41).

During the 4th millennium BCE, daggers were made of both stone and metal, mainly flint and copper alloys respectively. Daggers made of these different categories of raw materials are treated separately below.

Flint daggers

The earliest daggers in Egypt were made of flint – or of limestone based chert, to use the correct geological term – and they date to the Neolithic and Badarian periods, i.e. before 4000 BCE. It was probably individual flint knappers – perhaps the warriors themselves – who made the first daggers when needed, since their shapes vary greatly (Gilbert, 2004: 42). It is unlikely that these early flint daggers were made after metal prototypes. According to a recent survey of copper artefacts in Palestine, the earliest copper daggers appeared in the Early Bronze Age I period, between 3600-3100 BCE (Anfinset, 2010: 141).

The bifacially flaked flint daggers of the Naqada period in Upper Egypt represent some of the highest level of the craftsmanship of Egyptian flint workers (Midant-Reynes, 2000a: 51-52). Two categories of daggers were made: fishtail daggers (**Figure 33**) and rhomboidal daggers (**Figure 34**). The latter are named after their geometrical shape (Hendrickx, 2006: 75), and the fishtail daggers have their name from the bifurcated blade that resembles the shape of a fishtail (Gilbert, 2004: 61). Rhomboidal daggers were first made during the Badarian period, while

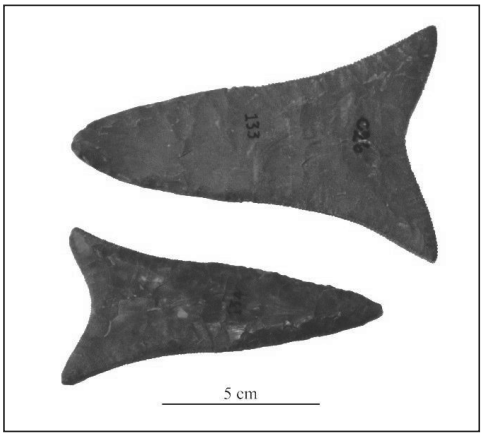


Figure 33: Fishtail daggers with U-shaped notch from grave 68 at Cemetery 17 in Lower Nubia. Photo by Tsakos. Courtesy of Nubia Museum, Aswan.

Figure 34: Rhomboidal dagger from grave 58 at Cemetery 17 in Lower Nubia. Photo by Tsakos. Courtesy of Nubia Museum, Aswan.

the earliest fishtail daggers date to Naqada IA-B (Gilbert, 2004: 62). Typologically, the notch of the fishtail daggers was U-shaped at first, and then it became increasingly V-shaped with a sharper and deeper notch (Gilbert, 2004: 63). Both types of daggers were commonest during Naqada IC to IID, and that is also when the finest specimens were made (Gilbert, 2004: 62). The fishtail daggers are sometimes referred to as lance-heads after the original classification of the lithics from Naqada and Ballas by Flaxman Charles John Spurrell (1896: 58). It is, however, more probable that they were handheld weapons (Gilbert, 2004: 60). Recently, the latter option seems to be confirmed by a fishtail dagger found with a hollow handle of reed in a male grave at Nekhen (Friedman, 2004: 8). The rhomboidal daggers are sometimes referred to as knives (e.g. Baumgartel, 1960: 32), also according to the initial classification (Spurrells, 1896: 57). Models of rhomboidal daggers show that they had a grip at one end (Gilbert, 2004: 60).

Neither the rhomboidal nor the fishtail shape conforms to the definition of daggers (see p. 180 above), i.e. they do not have a clearly pointed tip. I will nevertheless classify these flint blades as daggers (see also e.g. Rizkana and Seeher, 1988: 34), since the most important diagnostic criterion for a dagger as opposed to a knife are its two edges. The fishtail dagger has cutting edges both on the external and internal sides of the notch. The unique shape of the fishtail dagger has led to the suggestion that it was used for ritual activities in association with warfare or hunting – perhaps the killing of defeated enemies by cutting or stabbing their throats (Gilbert, 2004: 61).[16] We already learned that several individuals in Cemetery HK43 at Nekhen had been killed by having their throats slit (see p. 119 above). By considering these two flint implements as daggers, a continuous development of flint daggers from the early Neolithic onwards is retained instead of leaving a gap between the Neolithic and Badarian flint daggers and the introduction of metal daggers during Naqada IIC (contra Gilbert, 2004: 43, 62). Contextual corroboration for the identification of these

[16] The fishtail dagger has also been considered as the forerunner of the Old Kingdom forked knife called *pesesh-kef*, which was used in the 'Opening of the Mouth' ceremony during funerals (Roth, 1992: 113). Furthermore, Ann Macy Roth (1992: 123) has argued that the fishtail daggers were used for the ritual act of cutting the umbilical cord at the time of birth. This interpretation seems to be contradicted by the finding of the fishtail daggers primarily with adult men (Hikade, T. 2004).

daggers as specialized weapons is their occurrence in male graves together with another specialized weapon – the mace.[17]

Rhomboidal and fishtail daggers were found in Naqada IC graves at Cemetery 17 at Khor Bahan in Lower Nubia, and these are the only flint daggers recorded from the Middle Nile region. In Chapters 10 and 11, I argue that this site was used by people expanding from Upper Egypt and establishing themselves in northern Lower Nubia through violent attacks on the people already living there. The finding of flint daggers characteristic of the material culture of Upper Egypt supports the interpretation of this site as controlled by people from Upper Egypt from Naqada IC onwards. This argument is strengthened by the fact that no flint daggers have been found in A-Group contexts (see **Catalogue 2**).

Flint was also used to make the very fine ripple-flaked knives and blade knives. These knives were probably also used as both weapons and status objects. Furthermore, flint blades of up to 10 centimetres lengths were characteristic for some male graves in both Cemetery 17 of the Naqada people and Cemetery 41/200 of the A-Group people (see **Catalogues 1** and **2**). Hafted, these blades could have been used as less prestigious blade weapons (see p. 273 below). Iconographic representations of men fighting with knives are known (see **Figure 111**), so the blade implements of flint have been included as tool-weapons in the catalogues prepared for this study (see **Catalogues 1** and **2**).

Metal daggers

A small bifurcated dagger of copper was found in tomb H85 from El-Mahasna (Ayrton and Loat, 1911: 19, plate 29/5).[18] This rendering of a fishtail dagger in metal

[17] For instance: grave T22 at Cemetery T at Naqada where two fishtail daggers were found together with a disc-shaped mace-head (Petrie and Quibell, 1896: 24); grave 1416 in the Great Cemetery at Naqada where a fishtail dagger was found together with two disc-shaped mace-heads (Petrie and Quibell, 1896: 28); grave 1417 in the Great Cemetery at Naqada where a fishtail dagger was found together with a disc-shaped mace-head (Petrie and Quibell, 1896: 28). See also three co-occurrences in Cemetery 17 in **Catalogue 1**.

[18] Although the tomb was described by the excavators as belonging to after S.D. 60 (i.e. Naqada III), it has been suggested that the grave can be dated to Naqada I (Midant-Reynes, 2000b: 181). This is based on the presence of a black-topped vessel of Petrie's type B25m (as identified by the excavators). Furthermore, the shape of the copper dagger is more similar to the fishtail daggers of the Naqada I phases than to the shapes used during the Naqada II phases (compare the daggers in Kaiser, 1957: plate 21 and 22). No other dateable material was found in the tomb.

dating to Naqada I is the earliest known imitation of stone artefacts in copper (Midant-Reynes, 2000b: 181), and the first metal dagger we know from Egypt. Beside this specimen, the earliest copper daggers in Egypt date to Naqada IIC, and these metal daggers were probably imported from Palestine (Gilbert, 2004: 42). Support for this suggestion is the dagger found in grave 836 in the Great Cemetery of Nubt [Naqada] (see Petrie and Quibell, 1896: 22-23). It has a long and thin blade with raised spine and two rivet holes (**Figure 37:a**), which was the common shape of contemporary daggers made in Palestine (Gilbert, 2004: 43; Tadmor, 2002: fig. 15.7). In contrast, daggers with a shorter and more triangular shape, a mid-ridge and a single rivet hole were most probably made in Egypt (**Figure 37:b**) (Gilbert, 2004: 43). Such daggers have been found at el-Amrah (MacIver and Mace, 1902: 46, plate 10/5), Saghel el-Baglieh (De Morgan, 1896: 201, fig. 536), Homra Dom (Quibell, 1905: plate 58), and allegedly at Abusir el-Meleq (Möller and Scharff, 1926: 49). A silver dagger with a preserved ivory handle was also found at el-Amrah. The blade had a similar form to the triangular copper daggers, and the ivory handle had a horn-like design (MacIver and Mace, 1902: 46, plate 6/1-2; Gilbert, 2004: 43). A similar dagger blade of silver was found at Hamrah Dom (Gilbert, 2004: fig. 5.10/4). Recently, a virtual autopsy of a mummy known as the *Gebelein man* revealed that he had been killed from a stab in his

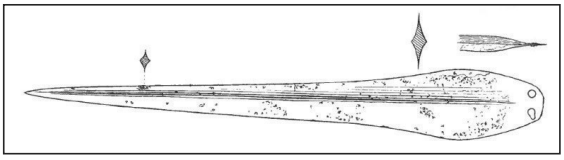


Figure 37. a) Copper dagger imported from Palestine found in grave 836 in the Great Cemetery of Nubt. Length of blade: *c*. 26,2 cm. After Petrie and Quibell (1896: 22-23, plate 65/3).

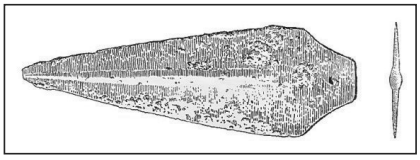


Figure 37. b) Triangular dagger from Saghel el-Baglieh. Length of blade: *c*. 13 cm. After De Morgan (1896: 201, fig. 536).

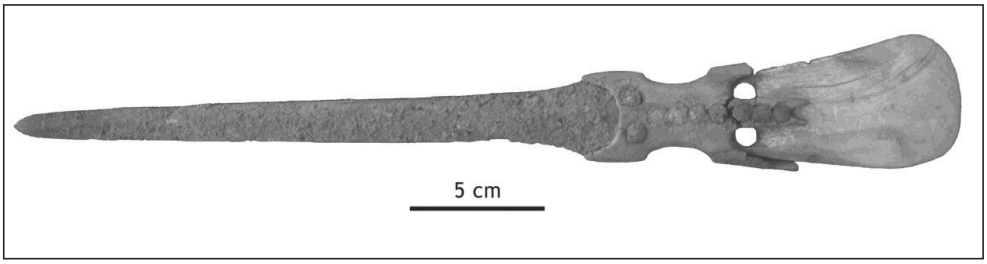


Figure 37. c) Kerma dagger from the middle of the second millennium BCE. Photo by Hafsaas-Tsakos. Courtesy by Sudan National Museum.

back – most probably by a metal dagger – around 3500 BCE (Friedman and Antoine, 2012) – i.e. in Naqada IIA.

Metal daggers were rare in Egypt during the Naqada period, and no metal daggers have been found at contemporary sites along the Middle Nile. Bronze daggers were also unusual during the Early Dynastic period and Old Kingdom in Egypt (Hamblin, 2006: 325, 357). No metal daggers were uncovered in A-Group contexts, but three copper-alloy knives have been found (see **Table 5**). It was first in the second millennium BCE that bronze daggers became an important weapon in Upper Nubia in form of the indigenous Kerma dagger (**Figure 37:c**; **Table 7**; see p. 92 above).

Bows and arrows

Arrows projected from a bow represent a complex projectile technology, since the arrow is propelled at a high velocity by energy stored in the bow when the bowstring is pulled. In contrast, simple projectile technology involves only human mechanical energy for propulsion, such as hand-cast spears, javelins and throwing sticks (Sisk and Shea, 2011: 2). Furthermore, arrows shot from a bow have a quiet flight, which facilitates attacks from a distance without being noticed. This made the bow and arrow effective as a weapon (Partridge, 2002: 39), and the introduction of bows and arrows would thus have caused new tactics and strategies to emerge in both hunting and warfare (Guilaine and Zammit, 2005: 60).

There is no consensus about when and where the bow and arrow were first invented (Guilaine and Zammit, 2005: 63), but recent findings from Pinnacle Point on the southern coast of South Africa suggest that microliths unearthed from contexts as old as 71,000 years could have been used as tips of complex projectile weapons (Brown et al., 2012: 590). This is the most recent addition to the evidence for the invention of the bow and arrow technology in Africa (cf. Sisk and Shea, 2011).

The invention of the bows and arrows was most probably conceived in order to boost the success rate of hunting by increasing the possibilities of hitting target and reducing injuries from hunting accidents, but these tools were probably soon used to extend the effective range of lethal interpersonal violence among fellow humans (Guilaine and Zammit, 2005: 61; Brown et al., 2012: 592).

Bows and arrows used as early weapons along the Middle Nile

A much quoted example of the use of bows and arrows in a violent encounter between people in the Upper Palaeolithic is Cemetery 117 at Jebel Sahaba near the Second Cataract of the Nile (e.g. Hendrickx and Vermeersch, 2000: 30; Hill and Wileman, 2002: 18; LeBlanc, 2004: 125; Otterbein, 2004: 74; Guilaine and Zammit, 2005: 67-72; Gat, 2006: 15). The site was excavated in 1965 in the frame of the Aswan High Dam salvage campaign by Fred Wendorf and a team from the Southern Methodist University (Wendorf et al., 1966). A total of 58 bodies were uncovered (Wendorf, 1968: 954), and they had an almost uniform burial position with the majority crouched on the left side with the heads to the east and facing south (Wendorf, 1968: 957). The site was dated to the period between 12000 and 10000 BCE on the basis of the lithics, which resemble the Qadan industry (Wendorf, 1968: 954, 990-991).

According to the excavators, the causes of death of 41 per cent of the individuals buried in the cemetery were unretouched flakes and chips of chert (Wendorf, 1966: 22, 1968: 990-991), since 24 skeletons were associated with 116 lithics in positions suggesting that they had originally penetrated the body either as points or barbs of arrows or spears (Wendorf, 1966: 959, 982). Initially, only six stone points were found embedded in the bone of four individuals (Wendorf, 1968: 990), and two more chips were identified in the pelvis of one of these individuals in a recent re-examination, giving a total of eight stone points in four individuals (Judd, 2007: 162). A fresh examination of the bones with a scanning electron microscope has revealed many more tiny chips embedded in the bone. Ongoing research is aiming at measuring the velocity and directionality of the arrows penetrating the bodies in order to recreate the lethal raid (Friedman, 2014). The associated lithic artefacts consisting of unretouched chips and flakes would normally have been classified together with lithic debitage and not as tools (Gilbert, 2004: 71; see also Honegger, 2008: 164). Wendorf (1968: 992) explained the abnormal points by arguing that any pointed thin flake could be used as an arrowhead and any chip with a thin sharp edge could be used as a barb (**Figure 38**). The data from Cemetery 117 at Jebel Sahaba thus emphasizes how difficult it can be to identify the weapons that were used in the remote past

(Gilbert, 2004: 71), and deaths from arrow shots may be almost osteologically invisible.

The skeletons from Cemetery 117 at Jebel Sahaba were first studied by James E. Anderson (1968). He remarked that six skeletons had healed fractures of the ulna bone consistent with parrying a blow to the head, one skeleton "*shows severe reaction to points buried in the lower cervical vertebrae and in the pubis*" and eight skeletons had signs of cut-marks on the bone (Anderson, 1968: 1028). The skeletal remains were recently re-examined by Margaret Judd (2007), when the whole collection of material from Jebel Sahaba was donated to the British Museum. Judd observed that the defensive injuries of the ulna bone in the forearm in six out of 58 individuals is a frequency of 10 per cent, and she argues that this is a strong signal that the population was exposed to physical aggression (Judd, 2007: 162). There were also eight cases of head injuries, probably from blunt force violence, but all had healed without complications (Judd, 2006: 162). In Judd's opinion, the alleged cut marks on the bones were rather dubious and often resembled gnaw marks (Judd, 2007: 162), although the marks on the femurs, i.e. thigh bone, could have been to sever the hamstrings and prevent escape (Judd, 2007: 162).

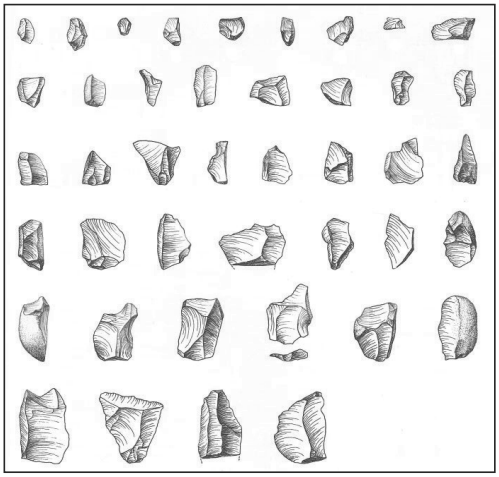


Figure 38: Some of the unretouched chips and flakes proposed as projectile points at Cemetery 117 at Jebel Sahaba. No scale. After Wendorf (1968: fig. 34).

The evidence of violence which has caused this site to be cited as the earliest evidence of war in the world thus consists of lithic points embedded in bone, lithics found in positions suggesting they had been embedded in soft tissue, healed parry fractures of the ulna in the lower arm and healed blunt force trauma on the skull as well as possible cut marks – especially on the femur. All the individuals who seem to have been killed from violence were associated with flint chips that could have been used as points or barbs on arrows making bows and arrows the earliest weapons of war.

Arrowheads

Arrows have sharp tips for causing injury or death (Guilaine and Zammit, 2005: 61). Arrowheads made for hunting were rapidly made and aimed at making large, shallow wounds, while arrowheads for use in warfare were well-balanced in order to be fired from a distance with the aim of inflicting deep wounds (Fields, 2007: 18). Besides the possibility that any type of pointed and/or sharp unretouched chip or flake could be used as point or barb on arrows (see previous section), there are four types of stone arrowheads that seem to have been used for warfare in the Nile Valley during the Bronze Age: lunates, trapezoids, tanged points and concave based points.

Both lunates and trapezoids are transverse arrowheads. Transverse arrowheads do not form a point, but are characterized by a broad and sharp projectile edge (Gilbert, 2004: 52).

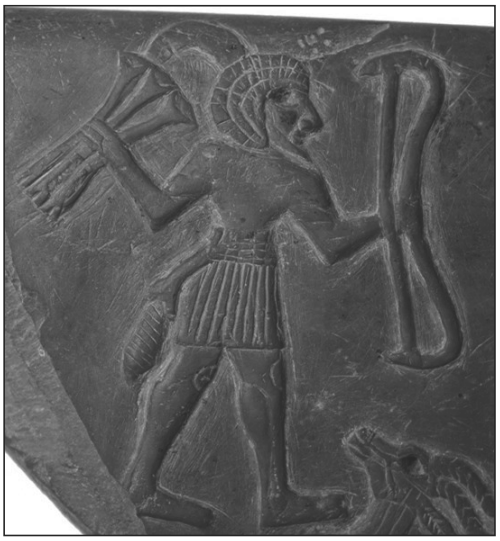


Figure 39: Archer on the Hunters' Palette (BM EA 20790) holding a double-curved bow and arrows with lunates as points. Photo from British Museum.

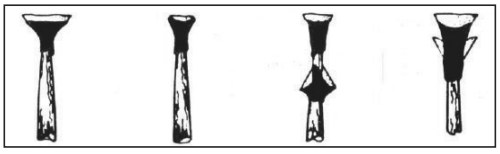


Figure 40: Hafting of lunates on arrows uncovered at Naga ed-Deir. No scale. After Clark et al. (1974: fig. 9).

Lunates are, as the name describes, crescent-shaped microliths usually struck from small round pebbles, like rolled quartz, quartzite and chalcedony (Caneva, 2004: 30; Jesse, 2004: 57). Lunates were used as arrowheads throughout the Bronze Age in the Nile Valley. Two of the warriors on the so-called Hunters' Palette (BM EA 20790) dating to Naqada III hold arrows with lunates hafted transversely on the tips (**Figure 39**). The well-preserved arrows from the Old Kingdom cemeteries at Naga ed-Deir also had the lunates hafted in this manner, and sometimes two lunates were inserted as barbs below the point as well (Clark et al., 1974: 334; **Figure 40**). More than 2700 lunate arrowheads of carnelian

were found in the armoury of Iken – a Middle Kingdom Egyptian fortress in the Second Cataract region (Vila, 1970: 186). This demonstrates that stone was not abandoned as a raw material for weapons – even at an advanced stage of the Bronze Age in the Nile Valley.

In contrast to lunates, trapezoids were made of flint using blade technology as they were made on segments of a blade (**Figure 41**). The widest lateral margin was left unretouched to serve as the projectile edge, while the ends of the blade segments were steeply retouched to give a triangular or trapezoidal shape (Holmes, 1989: 416-417). The only positively identified trapezoids belonging to the 4th millennium BCE in Lower Nubia were from Cemetery 17 and consisted of *c*. 20 flint specimens in grave 26, which contained the burials of five dogs (Reisner, 1910: 138).

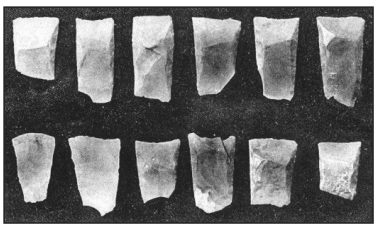


Figure 41: Trapezoid flint arrowheads from Cemetery 17. No scale. After Reisner (1910: plate 62/a/6).

The tanged arrowheads were either made in bifacial or unifacial forms (Gilbert, 2004: 51), and they are characterized by the use of a tang for fastening the arrowhead to the shaft. Tanged arrowheads made for warfare were often long in order to cause deep wounds (see Fields, 2007: 18). Arrowheads of tanged types seem characteristic for the Early Dynastic period in Egypt, and only a few tanged arrowheads have been found in indigenous contexts along the Middle Nile.

The concave base arrowheads were typically bifacially flaked flint triangles with a concave notch at the base of the triangle (Gilbert, 2004: 51). The wide triangular shape of these arrowheads made them designed for cutting flesh (Fields, 2007: 15), and they were thus well suited for warfare. The concave base arrowheads were rare after the Naqada period, as there was a decline in the production of bifacially flaked arrowheads after the unification of Egypt (Gilbert, 2004: 50). No concave base arrowheads have been found in indigenous contexts in Lower Nubia during the 4th millennium BCE (see **Catalogue 2**), but bifacially flaked lens-shaped, triangular and concave base arrowheads were made in the upstream stretches of the Middle Nile well into the 1st millennium BCE despite the availability of both copper-alloy and iron (Welsby, 2004b: 135).

Upper Egypt

During the early Naqada period in Upper Egypt, the bow was usually a wooden stave between one and two metres in length that was made from locally available acacia wood (Partridge, 2002: 40). The earliest form is the segment bow with a uniform curvature (**Figure 42:a-b**), while the double-curved bow consisting of "*two arms bending away from the string at the centre and with tips bent back towards the string*" is attested in iconography from Naqada III (Gilbert, 2004: 48; see **Figure 39** and **Figure 42:c**). The double-curved bows had greater power and range (Partridge, 2002: 41). Some bows also appear to have been made from long straight oryx horns plugged with wood, but it is unlikely that these bows would have been functional as the stiffness of the horns would have prevented a long draw (Gilbert, 2004: 45). The tips of the bow stave had notches for fixing the bow string made of twisted animal gut. The bows appear to have been strung only when they were used (Partridge, 2002: 40-41). Different forms of bows were applied as signs for several hieroglyphs: and for the phonogram *pd/pḏ* and determinative for *pḏt* meaning 'bow' (Allen, 2000: 442), and  for the phonogram *stj* (Allen, 2000: 448), which was used in the toponym *Ta-Seti* ( [*t3 stj*]), probably meaning Lower Nubia (see p. 76 above).

The arrow-shafts were usually made of reeds, which were a perfect material by being both light-weight and naturally straight. The shafts were tipped with arrowheads made of a variety of materials, including stone, bone, ebony and ivory. It is first from the Eleventh Dynasty that copper and bronze arrowheads survive in the archaeological record (Partridge, 2002: 41). The ends of the arrow-shafts were provided with three

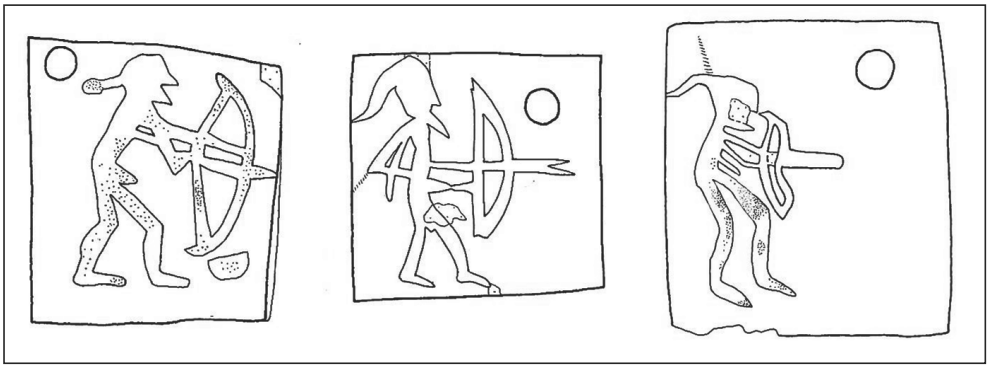


Figure 42: Ivory tags with depictions of archers. a) and b) depict segment bows and c) a double-curved bow. Height: *c.* 2 cm. After Dreyer (1998: fig. 76/45-47).

feathers for fletching in order for the arrows to fly straight (Partridge, 2002: 42). Although the mace seems to have been the favoured weapon of the king, a fragmentary temple relief from Inerty [Gebelein] depicts a late Second Dynasty king carrying four arrows in his right hand. The left hand is missing from the fragment, but it probably held a bow (Seidlmayer, 1998: fig. 61). The famous depictions of the New Kingdom kings shooting arrows from long bows while driving chariots represent a more advanced use of missile technology. Below follows a short description of evidence of arrowheads that could have been used for warfare in Upper Egypt during the 4th millennium BCE.

Transverse arrowheads in form of both lunate and trapezoid shapes were used by Naqada archers as testified in the graves of warriors at Abedju [Abydos] (see p. 111 above) and Nekhen [Hierakonpolis] (see pp. 116-118 above). Arrowheads were remarkably absent in the graves at Nubt [Naqada] (see Gilbert, 2004: app. 6, 200-202).

Numerous concave based arrowheads of flint have been found in Upper Egypt from the Badari period onwards (see Gilbert, 2004: 158-160, appendix 3). A distinctive type of concave base arrowhead is the one with long straight lobes. They have been found in some numbers at Nekhen and seem to be typical for this site (Needler, 1984: 263; Friedman, 2008: 1173; **Figure 43** and **Figure 46**).

Figure 43: Concave-based arrowhead characteristic for the territory of Nekhen. No scale. Photo by Rossiter in Friedman (2011: fig. 4.16).

Another type of arrowhead characteristic for Nekhen is a triangular bifacially flaked point with barbs and a tang, which has been called *Hierakonpolis point* (Hikade, 2001: 121; see **Figure 47**). Furthermore, numerous long tanged arrowheads were found in the subsidiary graves of king Aha of the First Dynasty (Petrie, 1901a: plate 4/14; **Figure 44**). The people interred in these graves were all under the age of 25 years, which has led to the suggestion that they were

Figure 44: Tanged arrowheads from subsidiary graves of King Aha. No scale. Photo after Petrie (1901a: plate 4/14).

slain servants (Spencer, 1993: 79). I rather suggest that they were the warriors of the royal guard, as these arrowheads appear designed for warfare. Numerous finely worked tanged arrowheads of flint and crystal were also found in the tomb of Aha's successor, king Djer (Petrie, 1901a: plate 6/5-16). Moreover, hundreds of long tanged points of bone and ivory were found in king Djer's tomb (Petrie, 1901a: 34-35, plate 34/27-51; **Figure 45**). The First Dynasty kings who were most closely connected with warfare on the southern frontier appear to be precisely Aha and Djer (see *Chapter 11*), so it is not surprising that they were also the First Dynasty kings buried with most weaponry.

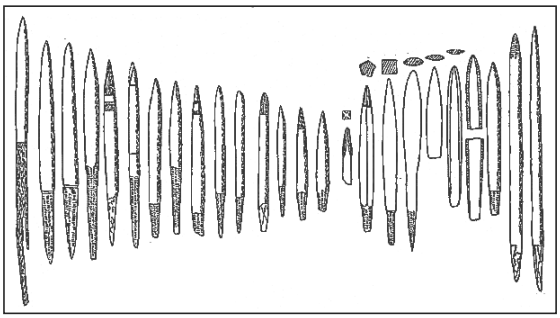


Figure 45: Tanged points of bone and ivory from the tomb of king Djer. No scale. After Petrie (1901a: plate 34/27-51).

The Middle Nile

Throughout Egyptian history, the people living along the Middle Nile were feared and admired as excellent archers. Both the bows and the arrows – except some of the arrowheads – were made of organic materials that have a poor rate of preservation. Although written and iconographic sources represent bows and arrows as the preferred weapon of the people of the Middle Nile, very few specimens of either bows or arrows have been uncovered from archaeological contexts dating to the Bronze Age.

As we saw above in the description of Jebel Sahaba (see pp. 186-187), bows and arrows were definitely used along the Middle Nile during the Upper Paleolithic, and there is no reason that the technology should later be abandoned. Lunates first appeared in the Qadan sequence of the Second Cataract during the last stages of the Upper Paleolithic (Wendorf, 1968: 990), and lunates were among the most significant tools of this time (Honegger, 2008: 164). It is thus peculiar that Cemetery 117 at Jebel Sahaba is believed to belong to the Qadan sequence with only one doubtful lunate found at the site (cf. Wendorf, 1968: 990). Lunates were the commonest lithic

elements during the Mesolithic of the Middle Nile and may have been used for various purposes depending on the size (Magid, 1995: 63; Honegger, 2008: 164). Small lunates were evidently used as arrowheads, as it has been demonstrated that many of them have fractures attributed to projectile impact (Honegger, 2008: 166).

Two types of arrowheads characteristic for weaponry at Nekhen [Hierakonpolis] were found in Cemetery 17 at Khor Bahan in the northernmost part of Lower Nubia, so these arrowheads were most probably brought to Lower Nubia by Naqada people expanding southwards (see *Chapters 8, 10* and *11*). These imports were a large concave-base arrowhead with long, straight barbs (**Figure 46**) and three small bifacially flaked arrowheads with barbs and a tang – the so-called Hierakonpolis points (**Figure 47**). Both lunates and trapezoids were also found in graves from Cemetery 17 (see **Catalogue 1**), and these points were most probably brought from Egypt too.

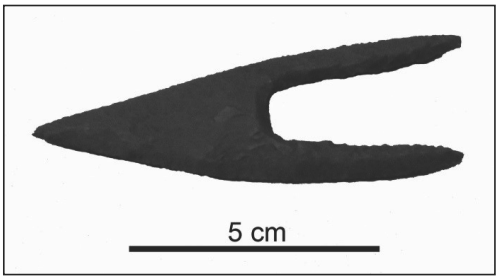


Figure 46: Large concave-base arrowhead found in Cemetery 17 in Lower Nubia. Photo by Tsakos. Courtesy of Nubia Museum in Aswan.

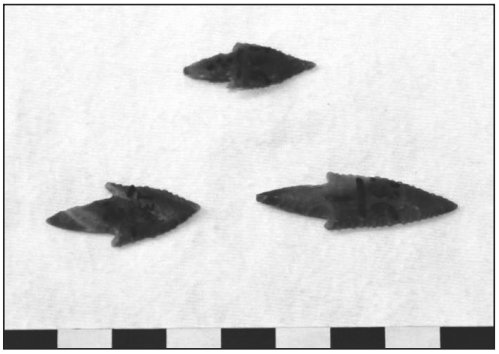


Figure 47: The three tanged arrowheads with barbs found in Cemetery 17 in Lower Nubia. Photo by Tsakos. Courtesy of Nubia Museum in Aswan.

No certain remains of bows or arrows have been uncovered in A-Group graves (see **Catalogue 2**). A few bone points may have been arrowheads of a similar type as those found in the tomb of king Djer (see p. 192 above; **Figure 45**), although it is impossible to say on the basis of the published reports. There were also some conspicuous concentrations of unretouched chips and flakes in the graves in Cemetery 298 at Serra East and Cemetery 332 at Ashkeit. It is in these cases impossible to ascertain whether these lithics were arrowheads. However, they have been included in the catalogue for the weapon finds in A-Group cemeteries. Nevertheless, the Egyptians used the bow as an attribute of the A-Group people, and they called their territory

Ta-Seti, meaning *Land of the Bow* (see the section *Ancient geographical and ethnic names* in Chapter 3). These choices in jargon hint at the use of bows and arrows by the A-Group people. Furthermore, some people inhabiting the Second Cataract region had probably been called *Iunw,* translated as the 'Bow-People', since the First Dynasty (see p. 77 above).

From the Sixth Dynasty, both written and archaeological sources suggest that the Egyptians employed people from the Middle Nile as mercenaries – usually as archers (Fischer, 1961: 76-77). These warriors from the south were eloquently depicted in the Eleventh Dynasty model of forty bow-men with dark skin and a distinctive curly hair-style from the tomb of Mesehti, nomarch of Saut in Middle Egypt. I have previously interpreted these archers as representing the C-Group people on the basis of the style of their kilts (Hafsaas, 2006: 111, 140). The C-Group people must have been attractive as mercenaries because they were experienced in archery from their daily life as herders and hunters. This is depicted in a scene on a C-Group jar where a man carrying a bow in his right hand and a bunch of arrows in his left hand while he is herding cattle (Firth, 1915: 137; Hafsaas, 2006: 69). The herders probably used the bows and arrows to protect their herds – both from predatory animals and from cattle raiders. The same was probably the case for the A-Group people. It is possible for both the A-Group and the C-Group people that boys started to practice archery at a young age and that the bows and arrows were the standard weapon for hunting and defence and thus carried by all men. Bows and arrows would thus have been unsuitable for expressing statuses beside masculinity in the funerary rituals of these societies.

Spears

The spear is a problematic category of weapon – especially when using older literature. In the late 19th and early 20th century, archaeologists categorized many pointed implements as spear-heads or lances. However, later finds have demonstrated that these double-edged blades were in fact daggers based on both hafting and context (see the section *Daggers* above; Petersen, 1999: 136 for Denmark).

A spear used for warfare has usually a long, leaf-shaped blade with sharp point and edges (Partridge, 2002: 39). The spearhead was attached to a long wooden shaft

(Gilbert, 2004: 59). It could be used for stabbing, but also slashing and cutting. The leaf-shape was important in warfare because it ensured that the spear could inflict a deep and serious wound but still be easily pulled out of the opponent for new attacks (Partridge, 2002: 39). Spearheads with barbs or prongs were therefore not suitable for warfare, but were rather used for hunting and fishing (cf. Kleppe, 1999: 126). As a hunting tool, a spear could be thrown at the pray, but as a weapon against a human opponent, a spear would leave the spearman defenceless once it was thrown (Partridge, 2002: 38). In Egypt, all paintings and models of spearmen show only one spear per man. This suggests that the spear was used as an effective weapon for stabbing (Partridge, 2002: 39). This overview of spears will thus only be concerned with the leaf-shaped spears, and these spears are categorized as weapon-tools, since they most probably were used for warfare although they could also have been used for hunting.

Upper Egypt

Spears were rare during the 4th millennia BCE, as they are almost non-existent in both the archaeological and iconographic records (Gilbert, 2004: 58). Among the few pictorial attestations is the Hunters' Palette (BM EA 20790) dating to Naqada III. The hunting scene made in relief includes several men armed with spears (Grimal, 1992: 36; **Figure 48**). It has been proposed that the spears on the Hunters' Palette were made of metal because of the distinctive ribbing that is visible on them (Friedman and Antoine, 2012). The earliest copper spearhead in Egypt was found at Tarkhan in Lower Egypt (Gilbert, 2004: 59). It is dated to Naqada III and thus contemporary with the Hunters' Palette. It had a leaf shape with a midrib and flat tang, which was inserted into a wooden shaft and kept in place by a cylindrical copper collar (Gilbert, 2004: 59). However, the majority of the few spearheads uncovered from this period were made of flint and

Figure 48: Warrior carrying a leaf-shaped spear-head. Detail of the Hunters' Palette (BM EA 20790). Photo from British Museum.

bifacially worked (Gilbert, 2004: 59). It thus seems that spears were not that important as weapons in the 4th millennium BCE. This is supported by the fact that in contrast to the other categories of weapons, spears do not form part of the hieroglyphic script, which was invented at the time (Gilbert, 2004: 58). Spears probably became more important when fighting against mounted warriors commenced in the mid-2nd millennium BCE.

The Middle Nile

Only two spears have been uncovered from 4th millennium BCE contexts in Lower Nubia (see **Table 5**). One of them is a copper-alloy spearhead (OIM 23727) from grave 24 in Cemetery L at Qustul (Williams, 1986: 128), which has been interpreted as a burial ground for rulers (see the section *The royal cemetery at Qustul* in Chapter 11). The spear is shaped like a leaf with a distinctive mid-ridge and a long tang with two rivet holes (**Figure 49**). It is comparable to the spearhead found at Tarkhan (see previous page), but it shows even stronger similarities with a copper spearhead with rivet holes found in a cave-burial at Azor on the coast of Palestine (Wengrow, 2006: 171). The other spearhead was found in Cemetery 215 at Abu Simbel nearby.

Figure 49: Copper spearhead (OIM 23727) from grave 24 in Cemetery L at Qustul. Photo by B.B. Williams.

Axes

A more common category of weapon was the axe. The axe-blades were attached to a long handle, and the axes were used in sweeping movements for cutting and/or chopping (Gilbert, 2004: 64). The axe could be used both as a weapon against a

fellow human and as a tool against materials. During the Bronze Age, axes could be made of both stone and metal.

In the following three sections, I will first discuss stone axes, since they were earlier than the metal axes, the topic of the following section. In the last section, I will propose to include copper-alloy adzes and chisels as status symbols and tool-weapons.

Stone axes

Ground and polished stone axes were a characteristic feature of the Neolithic period worldwide (Edwards, 2004: 38; Usai, 2008: 53). These axe-heads were made of hard igneous or sedimentary rocks by grinding the stone into an axe with a cutting edge (Gilbert, 2004: 63). For the classification of the axes uncovered in Lower Nubia, I will use the typological framework established by Donatella Usai (2008: fig. 5.1-5.2) for the axes uncovered in the Neolithic Cemetery R12 at Kawa in Upper Nubia (**Figure 50**).

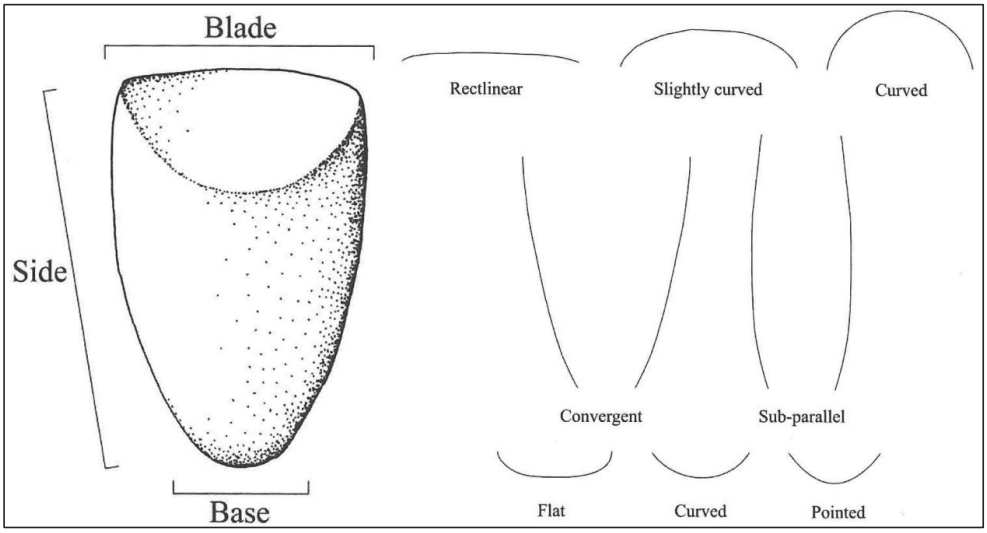


Figure 50: Typology of stone axe-head shapes. After Usai (2008: fig. 5.1-5.2).

In Upper Egypt, axe-heads of ground stone were first made during the Badarian period, but the practice of making chipped flint axes continued as well (Gilbert, 2004: 65). Stone axes were predominant throughout Naqada II (Gilbert, 2004: 181-183). The so-called Naqada axe-head was made by bifacially flaking a flint core into an oval or U-shaped body. A tranchet or transversal blow was applied to the widest end in order to create a sharp cutting edge (Gilbert, 2004: 64; **Figure 51**).

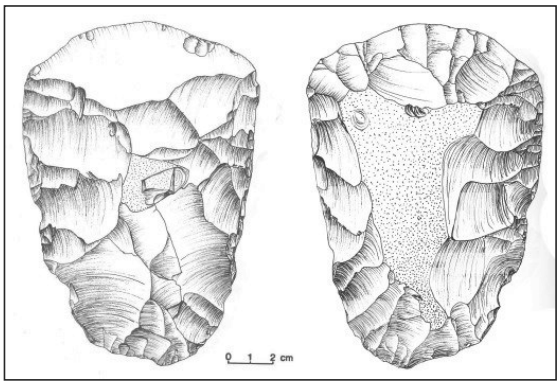


Figure 51: The so-called Naqada axe with tranchet edge. After Holmes (1989: fig. 7.15 & 7.16).

The earliest ground stone axes in the Middle Nile region date to *c*. 5750 BCE and have been found at the Early Neolithic cemetery at El-Barga in the desert to the east of the Kerma basin in Upper Nubia (Honegger, 2005: 247). The Neolithic axes were of a modest size – the average length of the axe-heads uncovered from Cemetery R12 was between 4 and 6 centimetres, and they were usually found in graves of men (Usai, 2008: 55). Ground stone axes of exotic raw materials were used as prestige objects for display in late Neolithic and early Copper Age Europe (Sherratt, 1994: 170). This seems not to be the role of the small axes along the Middle Nile. However, less than 10 per cent of the axes had lengths more than twice the size of the width (Usai, 2008: 55), and these may have been prestige objects. A detailed study of the possible uses of the stone axes is lacking, but they have been suggested as weapons, and as tools for butchering or as tips of ploughs (Usai, 2008: 55). In my opinion, the small size of these axe-heads would have rendered them inefficient as plough heads, and there is no other evidence for the use of the plough along the Middle Nile at this early time. Likewise, the axes seem too small for being efficiently used as weapons. However, the Indian tomahawks were not much larger in size and made of stone prior to European contact (Taylor, 2000: 30). The study of the human remains from Cemetery R12 showed instances of skull injuries caused by blunt force, but none of them were lethal (Judd, 2008a: 98, 102). I have observed that iron axes of small size are commonly employed in traditional butchering in Sudan today, where the axe is used for breaking the bones and a knife for cutting the meat into smaller pieces (**Figure 52**). It should not be ruled out that the small ground stone axes could thus have been used as both tools and weapons during the Neolithic and the following Bronze Age. Consequently I will consider the stone axes as belonging to the tool-weapon category.

Only seven ground stone axes were found in A-Group cemeteries (see **Catalogue 2**). In most cases, these stone axes were of small sizes, but the two larger stone axes found in Cemetery 7 could have been used as weapons (see pp. 258-259 below). It is likely that copper-alloys gradually replaced stone as the favoured raw material for axes in Lower Nubia from the end of the 4th millennium BCE onwards.

Figure 52: An axe being used for breaking the bones of a slaughtered sheep in Dar al-Manasir in the Fourth Cataract, Eid al-Kabir, December 2005. Photo by Hafsaas-Tsakos.

Copper-alloy axes

The preferred shape of axes used as weapons were determined by whether armour was used and its quality. A wide cutting edge was effective against an unarmoured enemy, while a long blade ending in a short edge was required in order to have penetrating power against armoured enemies (Yadin, 1963: 12). The latter type has no significance for the 4th millennium BCE in the Nile Valley, since armoury was first introduced during the New Kingdom (Partridge, 2002: 55).

During the 4th millennium BCE, copper-alloy axes could cause injuries and fatalities by crushing skulls, breaking bones and cutting flesh. The earliest copper axe from Egypt is also the earliest heavy copper object found in the country, so it was most probably imported. This unique copper axe-head was uncovered under the coffin in grave 3131 at Matmar in Middle Egypt (**Figure 53**). The grave is dated to Naqada I on the basis of the pots deposited as grave goods (Brunton, 1948: 16; Wilkinson, 1999: 29). Besides, two copper axe-heads were found at the settlement of Adaima, and they have been tentatively

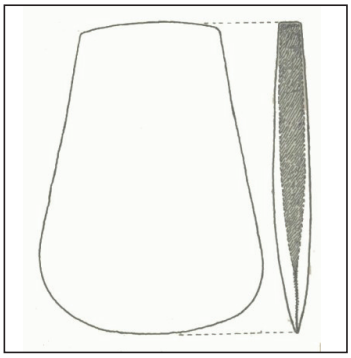


Figure 53: Copper axe from Matmar. No scale. Brunton (1948: plate 16/47).

dated to Naqada IIB-D1 (Midant-Reynes, 2000b: 194). First from Naqada IIIA-B onwards were copper-alloy axes commoner than stone axes (Gilbert, 2004: 66, fig. 5.44). The earliest copper-alloy axes were single edge blades with forms that can be described as splayed, rectangular or rounded. The unifying characteristic is that neither had any device for enabling attachment to a haft (Davies, 1987: 22).

Eight copper-alloy axe-heads from the end of the 4th millennium BCE have escaped the plunderers of the cemeteries in Lower Nubia (**Figure 54**).[19] Chemical analyses of the copper axe (BM 51185) found in grave 10 in Cemetery 3 at Faras showed that it was made of arsenical copper (Davies, 1987: 24). The axe has a rectangular shape, but the sides turn outwards at the corners of a convex cutting edge (**Figure 54:a**). It has a length of 12 centimetres and a weight of 541 grams (Davies, 1987: 27). Four of the other copper-alloy axes were of comparable shape and size (e.g. **Figure 54:b-c**). The other type of copper axe found in Lower Nubia has a rounded shape with a slightly convex butt, converging sides and a convex cutting edge, and it is only represented in grave 763 in Cemetery 89 at Koshtemna (**Figure 54:d**). The rectangular axes were used throughout the span of Naqada III, while the rounded axe dates from the First Dynasty, i.e. Naqada IIIC1 (Petrie, 1917: 7; Nordström, 1972: 124). The copper-alloy axes in Lower Nubia were found in the most important A-Group cemeteries, where also the majority of the other copper objects were deposited

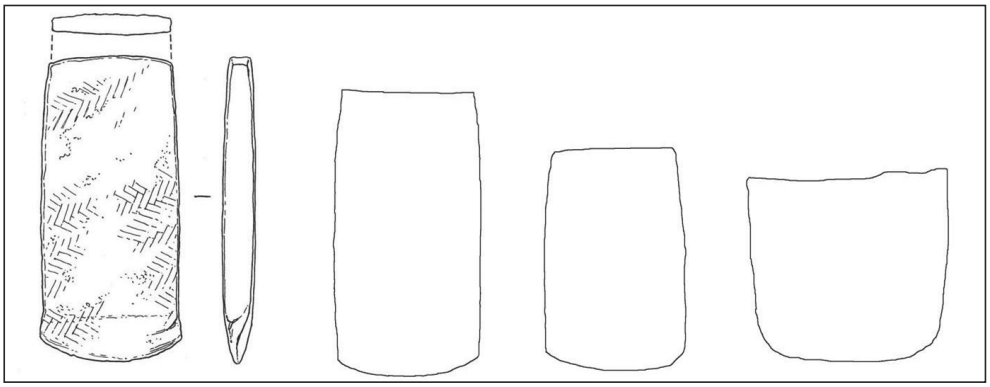


Figure 54: Copper alloy axes found in A-Group graves. a) Grave 10 in Cemetery 3 at Faras. From Davies (1987: plate ½), **b) Grave 1 in Cemetery 142 at Naga Wadi.** Drawing after Firth (1927: plate 22/b/3), **c) Grave 1 in Cemetery 142 at Naga Wadi.** Drawing after Firth (1927: plate 22/b/4), **d) Grave 763 in Cemetery 89 at Koshtemna.** Drawing after Firth (1912: plate 38/c/7). **Not to scale.**

[19] The copper axe-head found in grave 617 in Cemetery 101 at Dakka is not depicted in the excavation report (see Firth, 1915), so its shape is unknown.

(see **Table 5**). They were probably prestige objects besides being used as weapons or tools.

By the late Second Dynasty, axe-heads with a single hole in the middle were being made. The hole obviously facilitated the hafting as the blade could be bound to the haft. This type of axe-head continued through the Old Kingdom (Davies, 1987: 23). A single specimen of this axe type (OIM 23299) has been found in the Middle Nile, namely in grave T35 at Cemetery T at Adindan (see Williams, 1989: fig. 70/c). This grave is thus one of a few contexts that can be dated with certainty to the hiatus between the A-Group and C-Group occupations of Lower Nubia (Williams, 1989: 122).

Adzes and chisels

Together with the copper-alloy axes were sometimes uncovered copper-alloy adzes or chisels in the A-Group graves. These implements also occurred without axes in graves, but they were never found together (see **Catalogue 2**). Axes, adzes and chisels were usually uncovered in male graves (see **Catalogue 2**), and they occurred in the more wealthy areas such as Koshtemna, Sayala, Qustul-Faras and Halfa Degheim (see **Table 5**). These three categories of copper-alloy implements are all considered as wood-working tools (Petrie, 1917: 5, 22; Gilbert, 2004: 63, 71), but they were never found as a set in Lower Nubia (see **Catalogue 2**). No remains of hafting have been found on these implements in Lower Nubia, and neither of them have any means of attachment to a wooden haft. In general, the difference between an axe and an adze is that the axe has the blade fastened parallel to the haft, while it is perpendicular to the haft of the adze (Usai, 2008: 55). The predynastic form of chisel was usually without a wooden haft (Petrie, 1917: 19). Based on archaeological finds, there is no evidence that suggests the A-Group people were involved in specialized wood working and carving. The wooden furniture from Cemetery L was most probably imported from Egypt (see the section *The royal cemetery at Qustul* in Chapter 11). Copper-alloy axes, adzes and chisels were probably used for display of wealth and status. Both adzes and chisels may have been used as melee weapons. Adzes were used to kill some of the 34 victims in the mass grave at Talheim in Germany dating to *c*. 5000 BCE (Thorpe,

2006: 143). The injury caused by a copper-alloy implement on the skull of a man in Cemetery 7 is more compatible with the angle of an adze than an axe (see p. 325 below). Also the chisel could have caused lethal injuries, and a chisel-like object seems to have been used in executions at the beginning of the First Dynasty (see p. 175 above; **Figure 27**). I will consider both adzes and chisels primarily as status symbols in the A-Group society, but it is possible that they were used as "battle axes" in wartimes.

Summary

This examination of the evidence for weapons in the Nile Valley during the 4th millennium BCE suggests that maces were the earliest specialized weapons used in the region. Although the mace was an effective weapon of war during Naqada I and II in Upper Egypt (see discussions in *Chapter 4* and *Chapter 11*), it thereafter appears to have become a ritual weapon for executing enemies and a symbol of the power of the ruler.

Along the Middle Nile, maces have been found in burial contexts of the Neolithic period in Upper Nubia and Central Sudan, but the mace was never popular in Lower Nubia. After the terminal phase of the A-Group, maces were only rarely used by people in the Middle Nile. A new specialized weapon – the dagger – was to replace the mace as a melee weapon and status symbol – first in Egypt and then along the Middle Nile in the 2nd millennium BCE. However, the mace remained a powerful attribute of the Egyptian king.

In iconography and written sources, bows and arrows appear to have been important weapons in the Middle Nile, but they have left few remains in the archaeological record. Spears and axes were rare along the Middle Nile during the Bronze Age, but certainly not absent in the archaeological record of Lower Nubia during the 4th millennium BCE.

According to the catalogues, only a few specialized weapons or weapon-tools have been uncovered in 4th millennium BCE graves in Lower Nubia. In the Bronze Age along the Middle Nile, there appears to have been an accumulation of weapons at some sites at specific times, namely Cemetery 17 at Khor Bahan (see the section *Reuse of Cemetery 17 at Khor Bahan* in Chapter 10) and the classic phase of the Eastern

Cemetery at Kerma (see **Table 7**; Hafsaas-Tsakos, 2013). The reason for the scarcity of weapon finds can probably be found in the burial traditions, where only certain categories of objects were considered suitable for inclusion as burial gifts. In both Egypt and the Middle Nile region, these categories seem to have been items for personal decoration as well as food and drink offerings deposited in pots. We know that the ancient Egyptians did not consider warfare as part of their afterlife, and they would have been horrified by the concept of Norse Valhalla, where the forces of chaos were included in the natural order of the world (Gilbert, 2004: 82-83). It seems that the people of the Middle Nile shared the same sentiments with the Egyptians. When weapons were included as grave goods, it is thus probable that the weapons were used to convey a particular identity or status, e.g. elite warrior, wealthy elite or powerful ruler.

Human remains as evidence of war

Skeletal trauma caused by violence has been identified on several individuals from 4th millennium BCE grave contexts in Lower Nubia (see *Chapters 9* and *10*). Unfortunately, only a minority of the human remains excavated were examined by anatomists or physical anthropologists, so this important evidence for war could not be exploited to its full extent in this thesis (see p. 10 above). Fortunately, the anatomist Sir Grafton Elliot Smith and his assistant Frederic Wood Jones studied the human remains excavated by Reisner during the first season of the Archaeological Survey of Nubia more thoroughly than the remains found during the subsequent seasons, so the skeletal evidence for war in northern Lower Nubia has been documented.

However, not all forms of violence leave traces on the bones in form of fractures. Research on modern trauma shows that assaults usually produce soft-tissue injuries that would be invisible in ancient skeletal material (Walker, 2001: 584). Elliot Smith and Wood Jones even gave an example of this from Lower Nubia in the 4th millennium BCE by arguing that a skeleton with extensive blood-staining of the bones without any fractures was evidence of a violent death. They had observed repeatedly that heavy bleeding just before death had caused blood-staining of the bones in the area of the wound, even if no bone was fractured (Elliot Smith and Wood Jones, 1910:

329-330). Although this can be noted in some well-preserved human remains, as some of the bodies from Lower Nubia, stains from decomposed blood will be absent in most archaeologically uncovered cases of violent deaths (see Walker, 2001: 578).

There is also another drawback of using the study of physical remains as evidence for war, because it may be difficult to interpret the events causing death of a skeleton found with unhealed traumatic injury: Was the person a victim of war, a domestic murder or a tragic accident? (Hill and Wileman, 2002: 16). Cases of trauma that consist of only single individuals can thus not be taken as evidence for war without supporting evidence from other data. Another shortcoming for using human remains as evidence for war is that not all war victims may have received a formal burial – especially during mass killings when systematic disposal of the dead may have been impossible (Walker, 2001: 581). It is a common feature of war that the bodies of the dead are left to rot on the battle field (**Figure 55** and **Figure 56**). The absence of trauma in a skeletal sample is therefore not necessarily consistent with absence of war at a given time or place. On the contrary, the identification of victims who met a violent death – in particular through the use of specialized weapons or

Figure 55: A man studies the human remains of a victim of war. Corpses are strewn across the battlefields of South Sudan during the civil war in 2014. Photo by Jacob Zocherman in Guardian.

weapon-tools – is a strong indication of warfare.

Skeletal trauma caused by violence

Violence can be categorized according to whether the bodily harm was caused by striking, i.e. blunt force, or stabbing/slashing/piercing, i.e. sharp force. Not all injuries obtained in war would be deadly, although the aim in warfare is normally to kill the opponents (see p. 6 above). Injuries caused by interpersonal violence are often of specific types, and I will list here those fractures that I have considered as possible evidence of violence on the human remains from Lower Nubia during the 4th millennium BCE.

Cross-cultural comparative research has demonstrated that the skull is the preferred body part for attack in most societies (Judd, 2006: 131 with references), although there might be preferences for whether the vault of the skull or the face is the main target (Judd, 2004: 48). The adult human skull can be divided into two main

Figure 56: The Battlefield palette (BM EA 20791) from late 4th millennium BCE Egypt depicting victims of war being preyed upon by vultures, ravens and a lion. Width: 20 cm. Photo from British Museum.

parts: the *calvaria* consisting of eight parts that protect the brain and the *face* consisting of 14 parts. The mandible is the only moveable part of the skull of an adult (Steele and Bramblett, 1988: 20). Violent injuries of the skull can be attributed to direct blows and punctures (Judd, 2004: 46). The facial bones most susceptible to fractures caused by interpersonal violence are the mandible (lower jaw), the zygoma (cheek) and the nasal complex (Carrier and Morgan, 2014: 3), and all of these types of fractures were present in the human remains examined from 4th millennium BCE contexts in Lower Nubia.

In northern Lower Nubia, Elliot Smith and Wood Jones (1910: 330) observed that many cases of violent deaths were caused by extensive injuries inflicted upon the skull with a blunt instrument. The majority of these victims were found in contexts dated to the 4th millennium BCE. Elliot Smith and Wood Jones (1910: 332) argued that the injury pattern of blunt force injuries was fitting with the use of mace-heads of hard stone as striking weapons. Although most of these victims of interpersonal violence had received several blows to both the facial and the vault parts of the skull, it was probably the depression fractures of the calvaria that were lethal. There were also a few cases of healed fractures of the zygoma and nasal bones that were probably caused by interpersonal violence (see the sections *Evidence of weapons and violence* in Chapters 9 and 10). Fractures of the zygomatic bones are usually caused by assaults in form of a high-impact blow (Punjabi et al. 2011: 36), which would fit with injuries caused by a mace in a frontal attack. The same would probably be the case with fractures of the nasal bones.

The data on fatal skull injuries in Lower Nubia during the 4th millennium BCE assembled by Elliot Smith and Wood Jones (1910: 331-332) have been almost completely overlooked for more than a century giving the impression that the contact zone between people in Upper Egypt and people of Lower Nubia at the time was more peaceful than it was in reality.

Moreover, the practice of attacking the head led to distinctive defensive injuries. Fractures of the distal ulna in the lower arm are characteristic for fending a blow to the head (Judd, 2004: 46), and these injuries are therefore referred to as *parry fractures* if radial involvement is absent and the fracture line is transverse (Judd,

2008b: 1661). Fractures of the middle of the clavicle can be similar defensive injuries that could be caused by avoiding blunt force violence to the head (Robinson, 1998: table 3). In ancient societies, this type of injury was probably caused either through a direct frontal blow (Robinson, 1998: 476)[20], or when bracing a fall with outstretched hands (Judd, 2004: 40). This injury may thus have been related to interpersonal violence, or it may be accidental, so the context needs to be considered. The anatomists examining the two cases of clavicle fractures in the 4th millennium BCE sample from Lower Nubia noted that these breaks appeared to have been caused by direct force in form of a blow with a stick or other weapon (Wood Jones, 1908: 63). Other injuries that could also have been caused by violence are fractured ribs and extremities (Judd, 2004: 46). In exceptional cases, the weapon killing an individual can still be found embedded in the bone, like the arrowheads at Jebel Sahaba (see p. 186 above), but no such examples were noted for the Lower Nubian sample dating to the 4th millennium BCE.

Of particular relevance to the identification of war victims would be fractures that are *perimortem* (*peri-* meaning 'around' in Greek and *mortem* meaning death in Latin, i.e. 'at or near the time of death'). In perimortem fractures, the bone damage occurred at or near the time of death, without the healing process starting because the person died (Walker, 2001: 576). In these cases, the fracture itself, or simultaneous injuries that have not left traces on the bones, would have been the cause of death.

* * *

This chapter has described specialized weapons and weapon-tools found in 4th millennium BCE grave contexts in Lower Nubia and their Egyptian parallels as well as injuries that could have been caused by interpersonal violence identified in the skeletal remains excavated from cemeteries dating to the 4th millennium BCE in Lower Nubia. However, violence and war are social phenomena that should be studied in their social and historical contexts, and this is the aim of Part II of the thesis where a detailed

[20] This study was based on modern hospital cases where the injury was commonest for road traffic accidents (see Robinson, 1998).

account of two episodes of war between peoples from Egypt and Lower Nubia in the 4th millennium BCE will be scrutinized.

Part II: War on the southern frontier of ancient Egypt

Archaeologists have not explored how the long-lasting ethnic boundary at the First Cataract was established. In Part II of this thesis, I will first argue that war contributed to the creation of an ethnic boundary between Naqada people in Upper Egypt and indigenous A-Group people in Lower Nubia during the 4th millennium BCE, and then I will demonstrate that a violent Egyptian state expansion was responsible for the final disappearance of the A-Group material culture if not the A-Group people themselves from Lower Nubia at the very end of the 4th millennium BCE.

The dilemma of attributing ethnic identity to the people inhabiting Lower Nubia during the 4th millennium BCE was introduced in Chapter 3. There is no consensus about the ethnic identity of the people inhabiting the Nile Valley from Metardul in Lower Nubia to Gebel es-Silsila in Upper Egypt. On the one hand, Egyptologists generally follow the interpretation of Reisner by suggesting an expansion of Naqada settlements or colonies into northern Lower Nubia (e.g. Griffith, 1921: 3; Kaiser, 1957: 74; Midant-Reynes, 2000a: 47; Hendrickx, 2006: 71, 76; Wengrow, 2006: 75). On the other hand, Nubiologists usually support the argument of Junker that Kubaniya and all sites south of the First Cataract, or even Gebel es-Silsila further downstream, belonged to the A-Group people (e.g. Arkell; 1961 [1955]: 37; Trigger, 1976: 32-33, Morkot, 2000: 38; Edwards, 2004: 68, 69, fig. 3.10; Nordström, 2004a: 134; Török, 2009: 35), and even some Egyptologists have lately been influenced by this view (e.g. Bard, 2000: 67, 2008: 103). It is therefore necessary to clarify the ethnic identity of the inhabitants of northern Lower Nubia during the 4th millennium BCE before I can argue for a violent establishment of the ethnic boundary. This means that I will investigate both how far north the A-Group people roamed and if there was a Naqada expansion into Lower Nubia. The possibilities of co-existence of the two peoples in northern Lower Nubia as well as the replacement of one group by the other need to be considered.

Six topics will thus be discussed in the next four chapters:

1) The ethnic identity of the inhabitants in northern Lower Nubia during the 4th millennium BCE in Chapter 8.

2) The northernmost extent of the earliest A-Group sites in Chapter 9.

3) The evidence for a Naqada expansion into Lower Nubia in Chapter 10.

4) The contribution of war in forging the ethnic identity of the A-Group people and establishing the ethnic boundary between Naqada and A-Group peoples in Chapter 11.

5) The shifting location of the ethnic boundary between Naqada and A-Group peoples in Chapter 11.

6) The disappearance of the A-Group people from the archaeological record of Lower Nubia in Chapter 11.

Since the 4th millennium BCE is the period preceding the first written sources, the arguments for border wars will have to rest on a thick description of the archaeological record. It is thus important to cite multiple lines of evidence for a positive identification of ancient warfare: weapons and skeletal trauma, as well as the limited iconographic and written sources for the end of the period under consideration.

Chapter 8: Ethnicity in Lower Nubia during the 4th millennium BCE

The most recent research into the ethnic identity of the inhabitants in Lower Nubia during the 4th millennium BCE has been undertaken by Maria Gatto – a Nubiologist taking the Egyptologist stance to this unresolved riddle (see the section *The A-Group people* in Chapter 3). She has suggested that all sites found between Kubaniya and Metardul should be included as part of the settlement system of the Naqada people (Gatto, 1997: 109-110; Gatto, 2006a: 62; Gatto, 2013: 65). However, part II of this thesis will demonstrate that the situation was more complex than has hitherto been proposed.

In order to investigate the ethnic identity of the people living in northern Lower Nubia during the latter half of the 4th millennium BCE, I will examine the distribution in the cemeteries of Lower Nubia of some categories of artefacts and traits of burial practices that can indicate that the deceased identified him- or herself with a particular ethnic group. The sites that were ascribed by Reisner as B-Group will be retained as a separate category, in contrast to many other statistical studies that either exclude them or include them with the A-Group sites, in order to see if the material culture and practices in these cemeteries were comparable to the A-Group people, the Naqada people or if they were indeed of a different character, as proposed by Reisner.

The basis for the argumentation about ethnic identification is that it is reasonable to deduce that a site is most likely made by a specific ethnic group if more than 50 per cent of the objects in a category of grave goods or occurrences of a particular burial practice are similar to those of that specific group. If this can be proven for several categories of objects of different materials and practices in different spheres of social life, then this strengthens the initial argument (see the section *Ethnic identity in the archaeological record* in Chapter 4). I begin by examining the practices for placing the body in the grave of both the Naqada people and the A-Group people before discussing if the burial positions and/or orientations were either ethnic markers or expressions of religious beliefs. Then I continue by establishing the geographical distribution in Lower Nubia of two categories of funerary goods that were commonly deposited in the graves: cosmetic palettes and pots. I expect that no sites were

monocultural as there must have been various forms of contact. Finally, I discuss whether the appearance of Naqada material culture in Lower Nubia was the result of trade and/or migration as well as how different categories of Naqada material were related to either ethnic identity and/or social status. It will thus be demonstrated that some objects used as grave goods were commodities that were easily exchanged across the ethnic boundary, while other categories rarely changed hands between people with different ethnic identities.

Burial position and orientation of the deceased

In many cultures, the placement of the body in the grave is related to religious practices and thus conforms to a recognizable pattern (Parker Pearson, 1999: 54). Excavators working in burial grounds in the Nile Valley started to record the shape of the grave pits as well as the position and orientation of the bodies already at the end of the 19th century. Since these traits have been widely recorded by archaeologists, these parameters are easy to compare in the present study.

Naqada people

A standardized position and orientation of the body in the graves have been interpreted as significant for the Naqada people, but this has recently been questioned as an ambiguous feature both when it came to expressing ethnic identity in the past and when it comes to assigning ethnic identity to the deceased in a grave by archaeologists (Stevenson, 2009: 145-147). At Nubt [Naqada] and neighbouring sites in the Qena Bend, the nearly exclusive burial position was contracted on the left side with the head to the south facing west (Petrie and Quibell, 1896: 30). These sites are, however, dated from Naqada IIA onwards (Kaiser, 1957: 73), and it has been observed that this burial position was applied with far greater orthodoxy during Naqada II than earlier (Stevenson, 2009: 145). Likewise, at the Fort Cemetery at Nekhen, dating to Naqada II and III, 65 per cent of the bodies were buried with the head south and facing west (B. Adams, 1987: 181), while a majority of 83 per cent of the bodies were positioned on the left side, with a noticeable minority of 17 per cent buried on the right side (data from B. Adams, 1987). Furthermore, recent research has demonstrated that

the burial position was not static when Naqada people migrated northwards to new stretches of the Egyptian Nile Valley (Stevenson, 2009: 148-149, 207). The British Egyptologist Alice Stevenson (2009) has recently re-examined the Naqada site of el-Gerzeh, located *c*. 20 kilometres north of the entrance to the Faiyum. The cemetery at el-Gerzeh dates to the Naqada IIC-IIIA interval. Stevenson demonstrates that the Naqada people moving into this region and using the cemetery diversified the arrangements of the bodies of the deceased (Stevenson, 2009: 149). There were 256 graves from which data on burial position and orientation could be obtained. Of these, 79 per cent were buried on the left side and 21 per cent on the right side, while north was the preferred orientation of the head with 35 per cent of the cases, although all alignments were represented (Stevenson, 2009: 148). It thus seems that burial position and orientation were rather dynamic for Naqada people outside the core region of the Qena Bend, although a clear preference for positioning the body on the left side was observed. It is probable that there were religious beliefs behind the relative consistencies in burial positions and other similarities in the burial practices of the Naqada people.

The A-Group people

Among the A-Group people, there seems to have been even less strict rules concerning the position and orientation of the body in the grave than appears to have been the case among the Naqada people. The body was usually placed in a contracted position on the side with the head oriented to the south or southwest (Nordström, 1972: 130). At the large and well-preserved Cemetery 277 at Halfa Degheim spanning the middle and the early terminal phases, 73 bodies were sufficiently preserved for the burial positions and orientations to be recorded (see Nordström, 1972: table 4, 131). Of these, 52 per cent were buried on the left side and 48 per cent on the right side (calculations based on Nordström, 1972: table 4, 131). Five more bodies preserved the orientation of the head, in total 78 bodies. Of these, 95 per cent had a burial orientation in the range from southeast to west, with a majority of 58 per cent being buried with the head towards southwest (calculations based on Nordström, 1972: table 4, 131).

There was no apparent relationship between burial position and orientation on the one hand and the sex and age of the deceased on the other (Nordström, 1972: 130).

For comparison, I have also selected to examine the burial arrangement of the bodies in another typical A-Group cemetery of some size with many undisturbed burials and dating to the late middle and the early terminal phases, namely Cemetery 148, which was located midway between Mediq and Sayala (see Firth, 1927: 220). A total of 41 bodies were uncovered that displayed burial positions and orientations (see Firth, 1927: 221-228). Of these, 54 per cent were buried on their left side and 46 per cent on their right side. The commonest burial orientation was with the head towards the south, southwest or west, which together counted for 90 per cent of the cases.

In order to also include a cemetery dating from the early to early middle phases of the A-Group and with a more northern location, I have also examined the arrangements of the bodies in the graves of Cemetery 80 at Gerf Hussein. It was a small cemetery with 22 graves and dateable to the early A-Group phase contemporary with the latter part of Naqada II (see Roy, 2011: 105). One of the graves only contained fragments of human bones, but the remaining 21 graves preserved 22 bodies with observable burial positions and orientations. Of these, 68 per cent were buried on the left side and 32 per cent on the right side. A majority of 86 per cent had their heads oriented towards southwest and west (see Firth, 1912: 151-155 for the data). It thus seems like the A-Group people in the middle parts of Lower Nubia were influenced by the Naqada burial positions from an early time (see also the section *Cemeteries 102 and 103* below).

The main difference between the Naqada and the A-Group peoples concerning burial positions and orientations thus seems to be that the A-Group people buried their dead on both the right and the left side, while the Naqada people preferred the left side. Both peoples seem to have favoured a burial orientation with the head in southward directions.

The B-Group graves

Reisner (1910: 43, 45) used the irregular burial positions and orientations as one of the distinguishing features when he defined the B-Group based on the graves on the south-eastern knoll of Cemetery 7 at Shellal. He argued that irregular positions and orientations of the bodies were distinctly dissimilar from sites in Egypt. Accordingly,

of the 31 graves where the burial position was preserved, 65 per cent of the bodies were buried on the left side and 32 per cent on the right side.[21] There seemed to be no standard orientation of the head, but 44 per cent of the bodies had their heads oriented eastwards (Reisner, 1910: 43). The burial positions of the B-Group conforms to the A-Group practice of placing the dead on both sides, but the orientation of the bodies in the graves on the south-eastern knoll at Shellal was more related to the later C-Group people (see Hafsaas, 2006: 31) or the earlier interments at Jebel Sahaba (see p. 186 above). Since only the former was known to Reisner, this similarity with the C-Group may be part of the explanation for why he drew the conclusion that the B-Group should be dated to the period between the A-Group and the C-Group. However, it is now known that there was no preference for a particular orientation of the burials in Upper Nubia and Central Sudan during the Neolithic (Geus, 1991: 58).

Summary

Burial positions and orientations appear to be fairly unreliable for determining the ethnic identity of the users of a cemetery and even more untrustworthy for dating the graves since considerable variation occurred during the 4th millennium BCE. Nevertheless, the burial traditions in form of standardized position and orientation of the bodies as well as the shape of the grave pit can be related to religious beliefs or to the habitual aspect of ethnicity rather than to self-conscious expressions of ethnic identity. The irregular orientation of the so-called B-Group graves seems more related to the A-Group people than to the Naqada people since the latter preferred the left side while the B-Group people were buried on both sides like the A-Group people. The preference for having the head oriented towards the south among both the Naqada and the A-Group peoples seems to be a practice that spread from Nubt, where it was commonest from Naqada IIA onwards, i.e. after the proto phase of the A-Group.

Yet, ethnic identity cannot be based exclusively on the social practices or rituals determining burial position and orientation, so we will continue the search for both indigenous A-Group people and immigrating Naqada people in northern Lower Nubia

[21] One body was also found on its back – possibly disturbed (Reisner, 1910: 38).

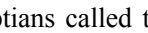
by analysing the distribution of ethnically distinct types of palettes and pots. Burial position and orientation will therefore only be investigated in order to give additional support in the identification of the ethnic identity of the majority of the people buried at given cemeteries that are discussed further below (see *Chapter 9* and *Chapter 10*).

Cultural and social significance of cosmetic palettes

David Wengrow (2001: 96) has argued that strikingly similar forms of funerary rites were practiced in the Nile Valley from the confluence of the Blue and the White Niles to Middle Egypt during the 5th millennium BCE. The deceased were placed in contracted positions on the side (see previous section) together with portable objects – often directly related to the decoration and ornamentation of the body. The uniformity suggests a coherent and widely spread set of beliefs and practices connected with a pastoral life-style leading to a mobile, body-centred habitus with a special attention devoted to the presentation of skin and hair (Wengrow, 2001: 96; 2010: 49-50; Wengrow et al. 2014: 105; R. Haaland and G. Haaland, 2013: 548). Part of this corpus of body-related objects were cosmetic palettes used to grind red ochre and malachite pigments for face and/or body painting. The oldest palettes date to the 6th millennium BCE and have recently been found at Djara in the Western Desert of Egypt (Riemer, Kindermann and Atallah, 2009) and at El-Barga on the eastern border of the Kerma basin (Honegger, 2004c: 30).

Cosmetic palettes were also commonly placed in A-Group graves (Gatto, 1997: 108; Nordström, 2004a: 134; see **Table 8** below). Palettes of siltstone were used by peoples in Upper Egypt during the Badarian period and used for grinding malachite (Brunton, 1937: 54). In Upper Nubia and Central Sudan, palettes of sandstone and granite were used to grind red and yellow ochre already during the middle Neolithic period (Usai, 2008: 56-57). In Lower Nubia, siltstone palettes imported from Upper Egypt have been uncovered together with malachite in the so-called B-Group cemeteries, which is proposed dated to the proto phase of the A-Group (see **Table 9** below). It is therefore probable that the A-Group people were inspired by the Naqada people when they adopted the practice of grinding pigments, especially the green of malachite, on stone palettes before mixing the powder with fat or resin and applying

the colourful paste on face and/or body as decorative and/or protective patterns. The shape of the quartzite palettes made by the A-Group people are however very similar to the Neolithic palettes of Upper Nubia and Central Sudan, which demonstrates that the A-Group people were also under influence from peoples living further south along the Middle Nile.

Although the Naqada people used a wide variety of stones for making beads and vessels, they preferred a specific stone for their cosmetic palettes (Stevenson, 2011: 70). Already during Naqada IB, the hard grey-green siltstone[22] had become the favoured raw material from which palettes were made (Stevenson, 2011: 106). The Egyptians called this type of stone *bekhen* ( [*bḫn*], det.  [stone]) (Lucas and Harris, 1962: 420; Budge, 1920: 221 for the hieroglyphs). The preference for siltstone could be related to the efficacy of grinding the pigments upon this stone (Stevenson, 2009: 106), but an aesthetic predilection seems even more likely. In contrast, the majority of palettes found in A-Group graves were made of whitish quartzite (Nordström, 2004a: 134), although other hard rocks were also used and a few palettes were made of pottery (**Table 8**). Quartzite was probably available locally at many places in Lower Nubia, since this rock is the metamorphic derivative of sandstone (Skinner and Porter, 1995: 152), which was the bedrock underlying most parts of Lower Nubia (W.Y. Adams, 1977: fig. 4, 23). In contrast, the only known quarry for the siltstone used for palettes in Egypt was in Wadi Hammamat – midway between the Nile Valley and the Red Sea opposite the Qena Bend (Aston, Harrell and Shaw, 2000: fig. 2.1, 57).

It has long been recognized that there was an uneven distribution of the raw materials chosen for making palettes in Lower Nubia during the 4th millennium BCE. Siltstone palettes were limited to northern Lower Nubia, i.e. north of Sayala, while quartzite palettes predominated in southern Lower Nubia (Nordström, 1972: 20). Since Nubiologists consider that Lower Nubia was only inhabited by the A-Group people, this observation has been linked to the increasing distance from the source of the raw material, which produced a distinctive fall-off pattern for the import of siltstone palettes to Lower Nubia. However, the selection of raw materials for making cosmetic

[22] In older publications incorrectly referred to as ‘slate’ or ‘schist’ (Aston, Harrell and Shaw 2000: 57-58).

palettes should not only be considered as a matter of accessibility. More importantly, I will untangle the choices of raw material for palettes as statements of cultural and social identity – i.e. ethnicity and status.

Palette / Cem.	Rhom-boidal	Zoomorphic					Geometrical			Not stated	Total siltstone	Quart-zite	Other material	Total all	Total Graves
		Turtle	Ox	Hippo	Fish	Bird	Rect.	Round	Other						
7/100 & 300		1					6	3		10	20	2	10	32	66
17	11	3	1		2	1			3	1	22	1	4	27	35
23					1					3	4		1	5	10
30										3	3			3	9
41/400	1										1		2	3	17
40						1	5		3		9	7	5	21	41
43	1				1				2		4			4	26
44										2	2		1	3	20
45	1	1			1		3	3		5	14	2	7	23	78
50							1	1	1		3	4	1	8	70
73							1			4	5	16	7	28	74
76					3	4	1			4	12	1	4	17	51
79	1	1		1	2	1	5	1		9	21	24	8	53	204
80							1				1		1	2	22
89					2	3	2	1		4	12	10	10	32	61
92							2		4		6	3	3	12	34
98							2	1		1	4	5	3	12	102
99					1	1			1	2	5	5	2	12	26
101-102	3			1	7	5	8	2	1	14	41	21	9	71	295
103	1					4				1	6	3	2	11	39
111						3	7	2	6		18	5	14	37	60
134						1	2			4	7	10	13	30	42
136	1				1	1		1			4	6	9	19	21
137						2					2	10	15	27	14
142						1					1	5	2	8	10
148					1	1				3	5	15	7	27	44
166										1	1	14	5	20	72
168												4	1	5	21
Aniba NN												4		4	10
204												18		18	11
206								1	1	1	3	36	1	40	36
215												28	3	31	104
OINE W												17		17	41
OINE L												21	3	24	27
OINE V														0	11
Faras 3												15	1	16	116
SJE 298												2		2	18
SJE 292												4		4	25
SJE 95												5		5	7
SJE 308														0	25
SJE 230														0	6
SJE 187												1		1	10
SJE 332												16		16	26
SJE 401												1		1	27
SJE 277												28	2	30	66
B&D 600												6		6	15
Total	**20**	**6**	**1**	**2**	**22**	**29**	**46**	**16**	**22**	**72**	**236**	**379**	**156**	**767**	**2145**

Table 8: Distribution of cosmetic palettes according to raw material (and shape in case of the siltstone) in 4th millennium BCE cemeteries in Lower Nubia. Data from Reisner (1910), Firth (1912, 1915, 1927), Emery and Kirwan (1935), Steindorff (1935), Williams (1986, 1989), Griffith (1921), Nordström (1972) and Bates and Dunham (1927).

The chronological development of siltstone palettes

A chronological development of the shapes of the Egyptian siltstone palettes has been identified (e.g. Kaiser, 1957: 70, plate 21-24; Hendrickx, 2006: 75-87;

Stevenson, 2009: 28). An overview of this development is included here as it is useful for dating the cemeteries in Lower Nubia (**Figure 57**). It is evident in a few cases that the siltstone palettes in Lower Nubia were used for a considerable period of time, and in these cases it is probable that the palettes had become heirlooms (Roy, 2011: 90). The use of palettes for dating purposes will therefore be employed together with other chronological characteristics.

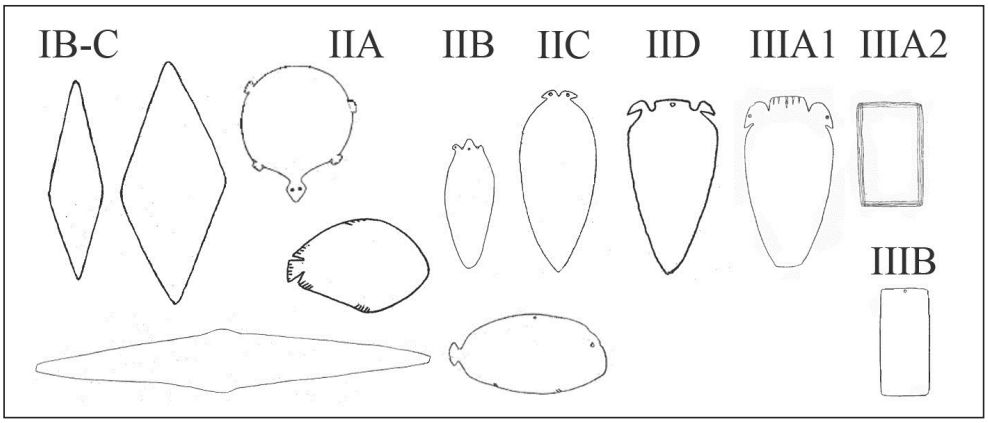


Figure 57: Shapes of siltstone palettes through time. Not to scale. After Petrie (1921: plates 52, 54, 56, 57 & 58) and Petrie and Quibell (1896: plates 49 & 50).

During Naqada IB-C, siltstone palettes had mainly a rhomboidal shape[23] or no definite shape. Besides, a few palettes were made in the shape of stylized turtles (Petrie, 1917: plate 52; Baumgartel, 1960: 84). During Naqada IC, there was a marked increase of cosmetic palettes in the funerary assemblages (Hendrickx, 2006: 75). In the following Naqada IIA, rhomboidal palettes were still predominant, but fish-shaped palettes were also being made (Hendrickx, 2006: 77). During Naqada IIC, the rhomboidal shapes became rare, while zoomorphic shapes – both fishes and antithetic bird-heads – became popular (Hendrickx, 2006: 79). The fish and bird shaped palettes were made – although in slightly different styles – throughout Naqada IIIA1 (Kaiser, 1957: plate 23-24). From Naqada IIIA2, the palettes were usually made in rectangular shapes with incised lines around the edge, so there was a loss in diversity of form (Hendrickx, 2006: 83-84). During Naqada IIIB, both rectangular and circular palettes were made (Kaiser, 1957: plate 24). Palettes continued to be popular through Naqada

[23] Sometimes referred to as diamond shaped or lozenge shaped in the archaeological reports from Lower Nubia.

IIIC1, but had disappeared almost completely by Naqada IIIC2 (Hendrickx, 2006: table II/1.4.b, 87). It has been suggested that the Naqada elite banned the use of palettes and cosmetics by ordinary people at this time (Baduel, 2008: 1063-1064). The cultural significance of the siltstone palettes in Upper Egypt culminated with the monumental and elaborately carved palettes that were fashioned around the time of the unification of Egypt between Naqada IIIB and IIIC1: e.g. the Narmer Palette (**Figure 58**), the Two Dog Palette, the Ostrich Palette, the Hunters' Palette (see **Figure 91**), the Battlefield Palette (see **Figure 56**), the Bull Palette, the Libya Palette and the Cities Palette (Grimal, 1992: 35-39; Wengrow, 2006: 209). From the First Dynasty onwards, relief carving was reserved for the static and monumental surfaces of temples and tombs (Wengrow, 2006: 140), and cosmetic palettes were rarely included among the funerary goods from the reign of king Djet of the First Dynasty onwards, i.e. from Naqada IIIC2 (Hendrickx, 2006: 87, 90).

Let us continue by considering the geographical distribution of palettes in Lower Nubia.

Figure 58: The carved cosmetic palette of King Narmer of the First Dynasty (EMC JE32169). Height: 67 cm. Photo by the Egyptian Museum, Cairo**.**

The geographical distribution of palettes made of different raw materials

I will employ a quantitative analysis of the distribution of palettes made of different raw materials and forms, and I argue below that the distribution pattern can be used as a primary detection of the ethnic identity of the populations using the various cemeteries. All cemeteries of the 4th millennium BCE in Lower Nubia that contained more than five graves and were published in sufficient detail have been included in the analysis (see **Table 8**).[24] The categories of raw materials recorded were siltstone and quartzite, which seem to be the culturally significant choices, as well as a category for other raw materials including various hard stones and a few palettes made of pottery. The siltstone palettes have in addition been subdivided according to shape, since this is chronologically relevant. The quartzite palettes were commonly oval, rectangular or hexagonal in shape throughout the period (**Figure 59**). A diagram of the raw material choices in per cent at the different sites was then produced for the whole period (**Figure 60**). Cemeteries where less than 10 per cent of the graves contained a palette have been excluded from the diagram, because the small number becomes statistically dubious. In Lower Nubia, a total of 767 palettes were uncovered from the 2145 graves in the sample (see **Table 8**). This means that palettes were deposited in 36 per cent of the graves. In Upper Egypt, Stevenson (2009: 107) has analysed the occurrences of palettes and concluded that 15 per cent of the graves in a cemetery was the average number containing a palette as grave goods. There is thus a significantly higher frequency of palettes deposited as funerary goods in Lower Nubia than recorded for Upper Egypt during the same period.

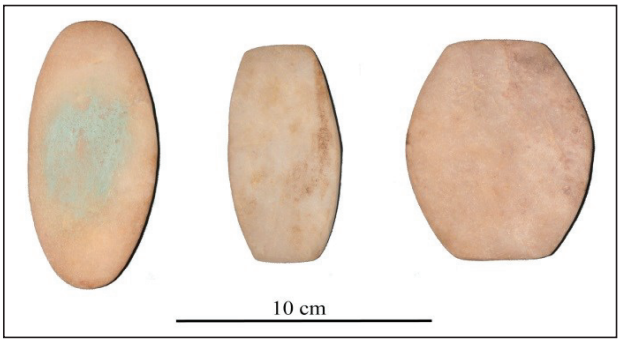


Figure 59 The commonest shapes of the quartzite palettes. Composed from photos by Tsakos. Courtesy by Sudan National Museum.

[24] Unfortunately, the sites on the west bank between Faras and Gemai (Nordström, 2014) were published too late to be included in this thesis.

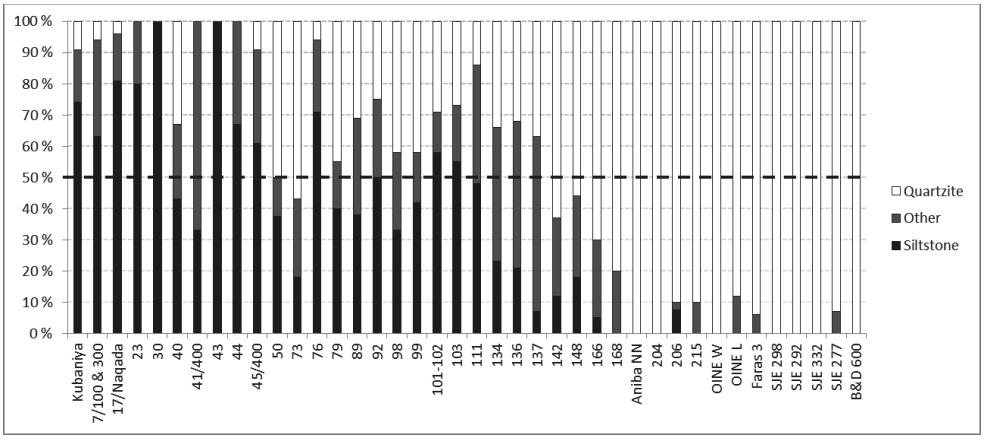


Figure 60: Distribution of raw materials used for making cosmetic palettes in Lower Nubia during the 4th millennium BCE.

The fall-off patterns in the diagram (see **Figure 60**) show that siltstone clearly predominated as the raw material preferred for making palettes northwards from Cemetery 45 at Shem Nishai near Khor Dehmit. Actually, only Cemeteries 40 and 50 had significant amounts of quartzite palettes with 33 and 50 per cent respectively (see p. 243 below). Quartzite dominated as raw material for making palettes southwards from Cemetery 142 at Naga Wadi in the neighbourhood of Sayala. Additionally, malachite was rarely uncovered in the graves in the region where quartzite dominated, i.e. south of Cemetery 142 (see **Table 5** above). Furthermore, the distribution pattern shows that there was almost equilibrium in the occurrences of siltstone and quartzite palettes between Cemetery 79 at Gerf Hussein and Cemetery 101 at Dakka, although quartzite palettes were slightly more numerous. South of the Dakka plain (i.e. from Cemetery 134), the use of siltstone for palettes dropped to less than 20 per cent of the cases, and siltstone palettes were rarely imported south of Amada (i.e. from Cemetery 168). Quartzite was the sole material used for palettes in the majority of the cemeteries between Aniba and the Second Cataract.

Cemeteries 134, 136 and 137 in the neighbourhood of Sayala stand out as cemeteries where another material, in all cases a black and white speckled stone[25], predominated as raw material for making the palettes (**Figure 61**). It is difficult to locate the source of this rock now that the region is flooded, but it seems more likely

[25] The rock has not been determined.

Figure 61: Cosmetic palette (NMA 373) of black and white speckled stone from Cemetery 137. Photo by Tsakos. Courtesy by Nubia Museum, Aswan.

that its conspicuous visual appearance was chosen over quartzite than that a good source of quartzite was distant from the area. Furthermore, from Amada northwards, other hard stones[26] were used as raw materials for between 20 and 30 per cent of the palettes. Also Cemetery 41/400 in the area of siltstone dominance had a majority of palettes made of other raw materials. However, only three palettes were found in the 17 graves of the site, thus constituting less representative data for statistics. One of the palettes was of siltstone, while the two others were of other materials. One of the latter was described as being a pebble and the other was made of limestone, which would also have had to be imported from Egypt.

Furthermore, there are four cemeteries that had an anomalous development according to the general trend with siltstone being more common north of Khor Dehmit, and these are Cemetery 76 at Gedekol, Cemetery 92 at Ikkur, and Cemeteries 102 and 103 at Dakka. At these sites, palettes made of siltstone constituted the raw material for 50 per cent or more of the palettes. The examination of the distribution of pots and other aspects of burial practices will thus be discussed individually for these four sites (see the section *Concluding observations on ethnic identity* below).

The B-Group graves

Siltstone palettes imported from Upper Egypt were also found in the so-called B-Group cemeteries, which have been proposed as dating to the proto phase of the A-Group people (see the section *The B-Group graves* in Chapter 3). These cemeteries have been excluded from the main diagram, because of their questionable affiliation. Based on the trends observed for the other 4th millennium BCE cemeteries above, the B-Group cemeteries are treated separately in order to identify to which ethnic group

[26] The rock was only described, not determined in the report.

and/or time period these cemeteries belonged to as indicated by the use of palettes (**Table 9**).

Cemetery	No. of palettes (per cent)			Total no. of palettes	Total no. of graves	Palettes in % of graves	Malachite in % of graves
	siltstone	quartzite	other				
7/200	5 (42%)	0	7 (58%)	12	52	23	15
14	2 (50%)	1 (25%)	1 (25%)	4	21	19	23
17/B-Group & Indet.	3 (37%)	1 (13%)	4 (50%)	8	27	29	19
41/200	3 (60%)	0	2 (40%)	5	40	13	20
45/200	0	2 (100%)	0	2	29	7	4
Total	**13**	**4**	**14**	**31**	**169**		
Average number of graves with palettes in %						**18**	
Average number of graves with malachite in %							**16**

Table 9: Distribution of palettes and malachite in so-called B-Group cemeteries in northern Lower Nubia.

First of all, siltstone was used as raw material for less than 50 per cent of the palettes at all sites except Cemetery 41/200. This indicates a different affiliation than the Naqada culture, and also other parameters of the burial practices were distinctively divergent from Naqada burial practices (see pp. 214-215 above). The use of a variety of hard stones as raw material for palettes is similar to practices of the Neolithic period in the southern parts of the Middle Nile (see p. 216 above).

Second, the shapes of the siltstone palettes suggest a date contemporary with Naqada I. Of the 13 siltstone palettes found in total, six were rhomboidal in shape, one had a long rectangular shape, one was not reported, and the shapes of the five siltstone palettes uncovered in Cemetery 7/200 were recorded as being rough, irregular, oval, oblong and ovoid (see Reisner, 1910: 33-38). The irregular shapes of the palettes in Cemetery 7/200 suggest that these graves were early in the Naqada I sequence (see p. 219 above), and it seems improbable that they should date to after Naqada III, when palettes went out of use in Egypt, although this was hesitantly suggested by Reisner (1910: 45). The examination of the palettes in these graves thus corresponds with H.S. Smith's proposed dating of the B-Group graves to a proto phase of the A-Group people, i.e. contemporary with Naqada I (see the section *The A-Group period in Lower Nubia* in Chapter 3).

In northern Lower Nubia, the long distance from the source of siltstone – more than 250 kilometres – indicates that the siltstone palettes were exotic possessions for the people there and thus used for displaying incipient social status differentiation. In comparison, Egyptian siltstone palettes were also imported into Palestine, where they were deposited in the tombs of local elites (Braun, 2011: 116). The majority of the

palettes in the B-Group graves were made of various hard stones (see **Table 9**), and this variability was also common in the choice of raw materials for palettes during the Neolithic in Sudan (see p. 216 above). The limited use of quartzite for making the palettes in these graves indicates that this raw material had not yet become a cultural marker, if these graves are the earliest A-Group remains. Malachite was the only pigment attested in connection with the palettes in the B-Group graves, which points to influence from the Naqada people. The shapes of the siltstone palettes in the B-Group graves seem to suggest a dating to the early 4th millennium BCE, and the choice of raw materials and the shapes of the palettes were related to practices along the Middle Nile in the 5th millennium BCE, while the pigments used were influenced by the Naqada people. The evidence from the palettes is thus supporting a dating of the B-Group graves to the proto phase of the A-Group people.

In the next section, we will see how the distribution of pots in the cemeteries in Lower Nubia reflects ethnic identities and long-distance exchange networks during the 4th millennium BCE.

Import versus production of pots

It has been argued that pots were recognized as cultural markers along the Middle Nile since the beginning of the Mesolithic at *c*. 7500 BCE (Garcea and Hildebrand, 2009: 310). However, ethnoarchaeological studies of pottery production in Africa have demonstrated that potting traditions are "*sociotechnical aggregates*" meaning that they are "*an intricate mix of inventions, borrowed elements, and manipulations that display an amazing propensity to redefinition by individuals and local groups*" (Gosselain, 2000: 190). Some parts of the aggregates appear to be unaffected by culture contact, while others are readily altered through technical transmission or during social practice (Gosselain, 2000: 191). Olivier P. Gosselain (2000: 191) argues that the propensity to change is due to a production process consisting of different components, i.e. a *chaînes opératoires*, with different levels of technical fluidity and diverse processes of social interaction. In contrast to what one should expect on the basis of the criteria of ethnic signals (see p. 98 above), techniques for decorating pots – e.g. use of roulettes – are easily transferred. Pottery decorations

may thus have become distributed over large areas in Sub-Saharan Africa independent of other cultural variations (Gosselain, 2000: 198). The methods for shaping a pot need a learning process that involves close interaction between two individuals, so this stage in the manufacturing process of pots thus seems to be much more resilient to technological diffusion although less obvious on the ready product (Gosselain, 2000: 207-208). These observations can also be illustrated with examples from the Nile Valley. Red pots with black tops seem to have been visually appealing as well as the black interior functionally superior as it clogged the pores of the pots and made them less permeable. This caused variations of this aesthetic element to appear in a wide geographical region over a considerable lapse of time. However, the pots that had this colourful decoration were made of Nile silt with different types of temper, in different techniques and into different shapes depending on the particular potting tradition of each ethnic group. Later on, other technological choices became significant as pots in Egypt were turned on the wheel, while they continued to be hand-modelled along the Middle Nile. The continuation of making hand-made pots in the south was perhaps a very conscious choice, but also related to the social complexity of the societies and the level of specialization in the production of goods.

I will start the examination of imported and locally produced pots in Lower Nubia with brief descriptions of the different categories of pots in the repertoire of the Naqada and A-Group peoples respectively. Then I will look at the distribution of Naqada and A-Group pots in Lower Nubia in order to discuss the ethnicity of the inhabitants in the various parts of this area throughout the 4th millennium BCE.

The Naqada pottery tradition

Petrie undertook the first study of Naqada pottery for his system of sequence dating (see p. 68 above; see **Table 3**). His terminology consisting of nine different categories of pots is the conventional reference point until today (**Figure 62**). The emphasis in this brief overview is on the seven categories that were found in Lower Nubia in some quantities, although the other two categories are also described in a few words.

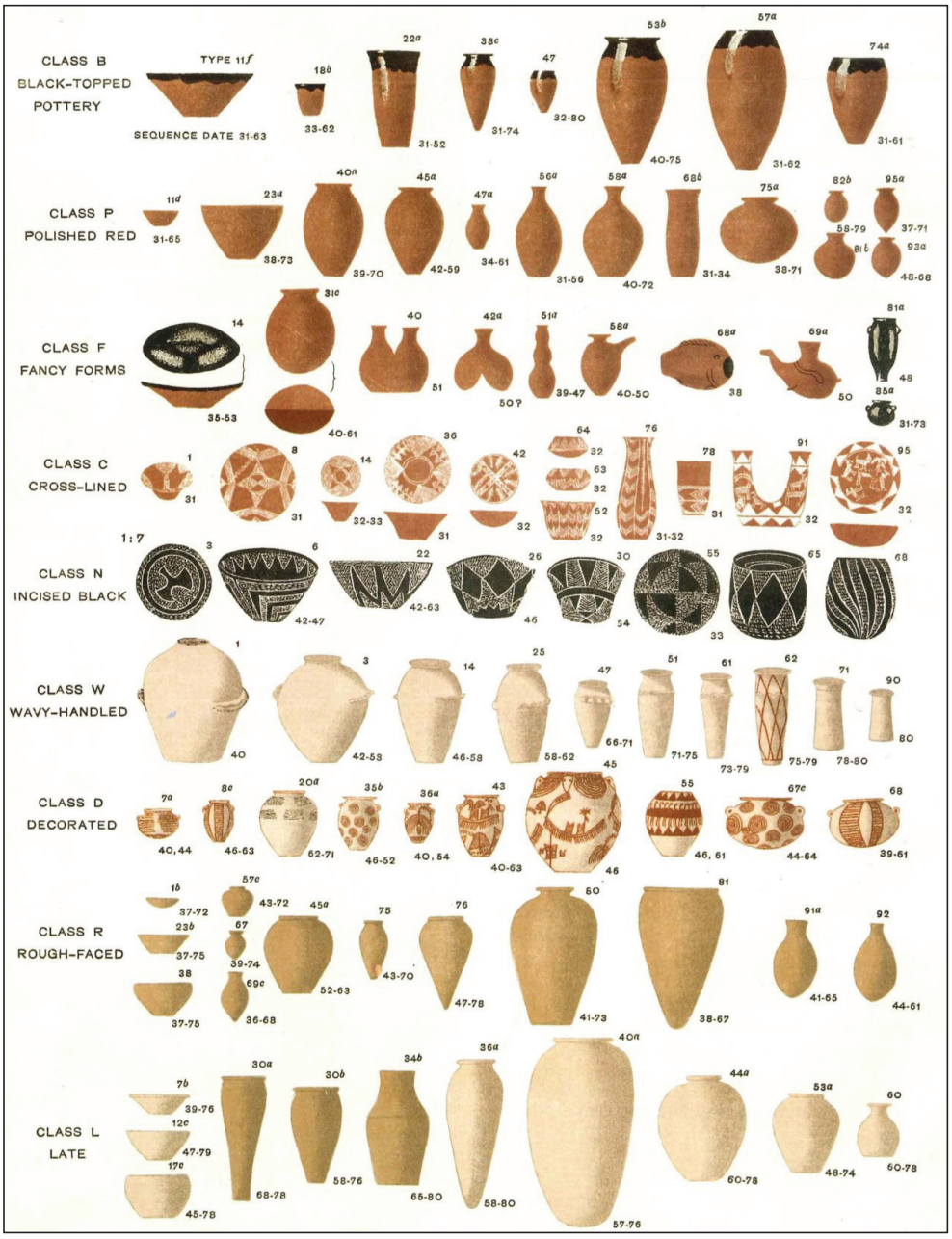


Figure 62: Petrie's nine categories of Naqada pottery. From Petrie (1901b: frontispiece).

The pottery repertoire in Upper Egypt during the early Naqada phases was dominated by three categories. All of the early pots were made of silty clay deposited by the Nile and shaped by hand into a wide range of shapes including jars, bottles and

cups by using various techniques (Teeter, 2011: 169). A common characteristic of early Naqada pots was that they had a flat base (see **Figure 62**).

During Naqada IIC, a major technological development in Egyptian potting took place as a new source of clay was being utilized – calcareous marl clays (Hendrickx, 2006: 79). The geological origin of this clay is securely identified in the shale and limestone deposits found along the Nile between Esna and Cairo in Egypt (Bourriau, Nicholson and Rose, 2000: 121). When the marl clay pots were fired in closed kilns at high temperatures, the result became hard, less porous vessels of a pale pink or orange colour (Hendrickx, Friedman and Loyens 2000: 171, 185). These pots are thus sometimes referred to as *hard pink* or *orange ware*.

Black-topped pots

The commonest category during Naqada IA to IIA was the *black*-topped pots (Petrie's B-ware), which counted for more than 50 per cent of the assemblage (Hendrickx, 2006: table II/1.4b). This category of pots was still prevalent during Naqada IIB with almost 40 per cent, but then rapidly lost popularity and disappeared before the beginning of Naqada III (Hendrickx, 2006: table II/1.4b). The characteristic wide black top was achieved by concluding the firing of the pots in a reducing environment, and this decorative element was probably a side-effect of the blackening of the interior of the pots in order to make them less porous (Hendrickx, Friedman and Loyens, 2000: 183).

Red-polished pots

The second commonest category during the early Naqada phases was the red-*polished* pots (Petrie's P-ware), which counted for between 8 and 18 per cent of the assemblage throughout Naqada I and II (Hendrickx, 2006: 71, table II/1.4b).

White cross-lined pots

The third commonest category during the early Naqada phases was the white *cross-lined* pots (Petrie's C-ware) (Hendrickx, 2006: 71). These were glossy orange-red bowls, plates and, rarely, jars that were decorated with creamy white designs

(Stevenson, 2011: 67). The white cross-lined pots counted for 16 per cent in Naqada IA and 7 per cent in both Naqada IB and IC, before they disappeared during Naqada IIA (Hendrickx, 2006: table II/1.4b). Some of the bowls decorated with white cross-lined painting had round bases in contrast to the common flat bases of the early pots (see **Figure 62**).

Rough pots

During Naqada IIA, *rough* pots (Petrie's R-ware) made of Nile silt were almost as popular as the black-topped pots (Hendrickx, 2006: table II/1.4b). These pots had a buff colour with clearly visible inclusion of chopped straw as temper, giving them the rough appearance. This style of pottery was mainly used in baking and brewing (Teeter, 2011: 173). The rough pots were the commonest category of pots in Upper Egypt from Naqada IIC through IIIA1, when they constituted *c*. 50 per cent of all pots in Egypt (Hendrickx, 2006: table II/1.4b). The beer jar with a pointed base and a wide opening (R81) was a very common vessel during Naqada IIA to IID2 (Hendrickx, 2006: 77, 79, 81; **Figure 63**).

Figure 63: Beer jar (OIM E5330). Height 20 cm. Photo by Ressman in Teeter (2011: 173).

Wavy-handled jars

The *wavy-handled* jars (Petrie's W-ware) were first made in globular shapes with a gradual preference for increasingly more cylindrical shapes (**Figure 64**). Over time, the diagnostic handles changed from two functional handles to a stylized wavy line (Hendrickx, 2006: 61). The earliest forms had a globular body and characteristic wavy ledge handles, which was a feature adopted from imported pots from Palestine (Stevenson, 2011: 67). The developmental path of the wavy-handled jars is useful for dating purposes (see **Table 3**). The wavy-handled jars were first made during Naqada IIC, and they then counted for less than 5 per cent of the repertoire (Hendrickx, 2006: 78). These pots were commonest during Naqada IIIA2 and IIIB, when they constituted

Figure 64: The development of the wavy-handled jars from ovoid to cylindrical shapes. The jar to the right is made of alabaster. (From left OIM E5816, E26072, E26815, E26112, E29255 and E11912). Photo by Ressman in Teeter (2011: 168).

c. 40 per cent of all pots. The later cylindrical forms were increasingly being replaced by vessels of stone rather than marl clay (Hendrickx, 2006: 87). The large number of wavy-handled pots that has been uncovered in Egypt suggests that they were mass produced as containers for daily use (Hendrickx, 2011: 95). The wavy-handled jars probably contained oil or fat, and these substances also appear to have been of special importance as food for the deceased in the afterlife (Dreyer, 2011: 132), since these pots were often included in the funerary assemblages. More than 600 wavy-handled jars were uncovered in the chambers of tomb U-j at Abedju [Abydos], which belonged to the regional king Scorpion I ruling during Naqada IIIA2. This eloquently demonstrates the importance and value of fat (Dreyer, 2011: 131). The tomb of the proto-dynastic king Ka, dated to Naqada IIIB (Hendrickx, 2006: 89), also contained many cylindrical jars of the late form of the wavy-handled pots (Petrie, 1901a: 5). The wavy-handled jars in the cylindrical handle-less shape decreased drastically in number during Naqada IIIC, and they had gone out of production by Naqada IIID (Hendrickx, 2006: 86-87).

Decorated pots

The *decorated* marl clay pots (Petrie's D-ware) were the inverse of the white cross-lined pots, since the decoration was painted in red ochre on a pale pink/orange surface (see **Figure 62**). The shape of these pots often imitated stone vessels

(Stevenson, 2011: 68), and many include lug handles. These pots first appeared in small numbers during Naqada IIB, and the decoration was then limited to spirals and rippling lines (Hendrickx, 2006: 77), which was also an imitation of the patterns of the rock used for the stone vessels. During Naqada IIC-D, these decorated pots increased in popularity and constituted between 7 and 8 per cent of the assemblage. The decorated pots disappeared in Naqada IIIB after a decline in popularity during Naqada IIIA (Hendrickx, 2006: table II/1.4b).

Late pots

The so-called *late* pots (Petrie's L-ware) are a diverse collection of utility vessels consisting of bowls, plates and storage jars, and they were also made of marl clays (see **Figure 62**). These pots increased in popularity from a limited presence in Naqada IIC to 30 per cent in Naqada IIIA1. The peak of their production was during Naqada IIIC2 and IIID when between 60 and 70 per cent of the pots in Egypt were made in this style (Hendrickx, 2006: table II/1.4b). The so-called wine jars belong to the late pots, and they were large jars with high shoulders and a characteristic short neck (Nordström, 1972: 91). This type of wine jar was the commonest type among the Egyptian pots imported by the A-Group people during the late middle and terminal phases (see Takamiya, 2004: fig. 7).

Fancy pots

Petrie's fancy ware (F-ware) was a heterogeneous grouping of unusual forms of pots – both foreign and domestic (Stevenson, 2011: 68; see **Figure 62**). Only a handful of these pots have been uncovered in Lower Nubia.

Black incised pots

Another exotic group of pots consists of dark vessels, usually bowls, with impressed or incised white-filled decoration (see **Figure 62**). Petrie associated this pottery tradition with the south, for instance the black incised pots of the later C-Group people of Lower Nubia (e.g. Hafsaas, 2006-2007: 166), so Petrie called these pots N-ware after *Nubia* (Stevenson, 2011: 68). With hindsight, these pots have turned out to

be more common in Upper Egypt than in A-Group contexts in Lower Nubia (Glück, 2007: 10). These pots thus seem to have been made by Naqada potters inspired by vessels from Neolithic people in the Western Desert and Central Sudan.

Let us now turn to the actual pottery making tradition of the A-Group people.

The A-Group pottery tradition

In general, A-Group pottery can be distinguished from Naqada pottery on the basis of the shape of the pots, which mainly consisted of open forms, i.e. cups and bowls (**Figure 65**). The A-Group potters usually made bowls with ovoid shapes and rounded or pointed bases with either open or slightly inverted mouths (Needler, 1984: 224), while the Naqada pots were usually made with a flat base (see **Figure 62**). Many classifications of the A-Group pottery have been undertaken (e.g. Steindorff, 1935; Nordström, 1972: 81-90; Williams, 1986: 27-67; H.S. Smith, 1991: 93-94). I will use Nordström's typology as a basis, but follow some conventions from earlier studies as well.

Pots were only rarely deposited in the graves of the A-Group people during the proto phase (i.e. in the B-Group graves, see the section *Indigenous inhabitants in*

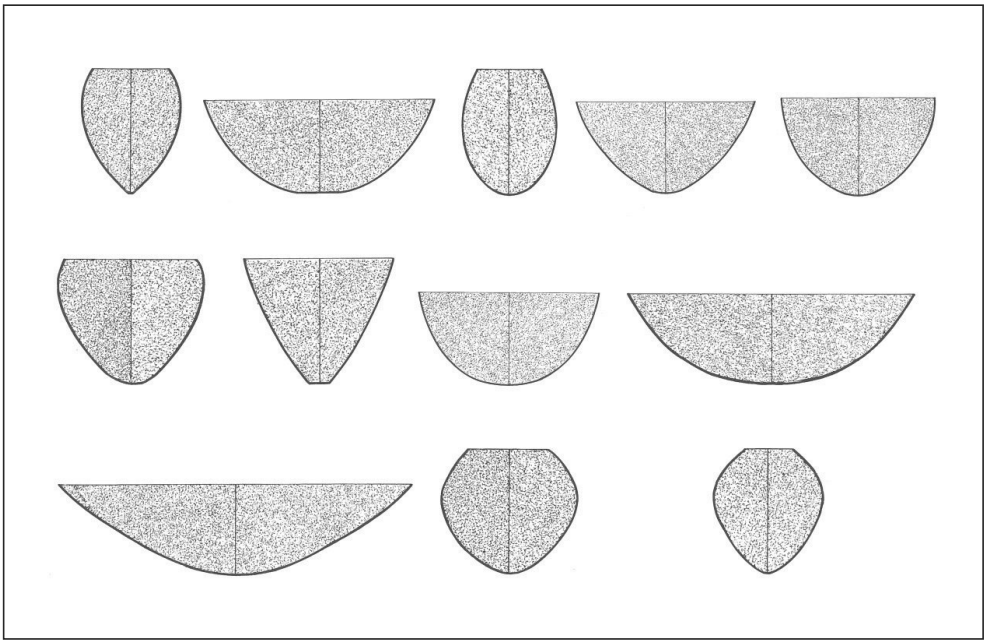


Figure 65: The commonest shapes of A-Group pots during the middle and terminal phases. All of these forms were testified more than ten times in the Scandinavian Joint Expedition's concession in southern Lower Nubia. After Nordström (1972: 93, plates 11-14, 16).

northern Lower Nubia below), and the pots that were found were rarely depicted in the publications. Consequently, very little is known about the early pottery production, so this is a topic that deserves future treatment through an analysis of the actual pots in the Nubian Museum in Aswan.

Red-polished black-mouthed ware

One of the earliest characteristic forms of the A-Group pottery repertoire was the so-called red-polished black-mouthed ware (Gatto, 2006b: 226). It seems to be a typical A-Group pot already during the proto and the early phases (Nordström, 1972: 28; see *Chapter 9* for the proto phase). This category of pots was first recognized as an indigenous ware by Firth (1912: 10), although a few pots were also uncovered by Reisner north of Bab el-Kalabsha (Reisner, 1910: fig. 285/1-2, 14, fig. 286, fig. 292/1-8). The red-polished black-mouthed pots were made of Nile silt tempered with chaff or dung and shaped by hand as bowls with both restricted and unrestricted contours. The bases were made rounded, pointed or dimpled, and the rims were plain or milled – i.e. with incised transverse nicks or cross-hatching on the rim top. A red wash was applied on the surface before firing, and the surface was usually burnished. These pots are thus characterized as *red-polished* (H.S. Smith, 1991: 93). A distinctive feature is the narrow irregular smoke-blackening on the outer rim, which gave the name *black-mouthed* (Firth, 1912: 10; H.S. Smith, 1991: 93; **Figure 66**). This name was chosen in contrast to the *black-topped* pots in Egypt, which have a wide blackened rim, in addition to different shapes (see previous section).

Figure 66: Red-polished black-mouthed cup with milled rim (MFA 19.1608). Height: 7 cm. Photo by Boston Museum of Fine Art.

However, in view of Gosselain's observations of how easily styles of pottery decoration can be transferred between ethnic groups, as the aesthetic and functional blackening of the interior and rim, it is rather the shapes and tempers of the red-polished and black-topped or black-mouthed pots that were most characteristic for these types of pots. In any case, it can sometimes be difficult to differentiate between

Naqada and A-Group red and black wares in the original publications – especially in the cases when the pots were not depicted. Among the red-polished black-mouthed pots of the A-Group, Nordström (1972: 88-89) distinguished between plain and rippled wares (Nordström's type groups A IX and A X respectively). The great variety of shapes of this category has made it difficult to establish a relative chronology of these pots, which were made throughout the A-Group period (Nordström, 1972: 88). However, the rippled varieties, usually with a red, vertically rippled exterior, seem to be the characteristic fine ware pots for the middle phase (**Figure 67**), and they were rarely found in contexts dating to the terminal phase (Nordström, 1972: 89).

Figure 67: Red-polished black-mouthed jar (OIM E21901) with rippled exterior from Cemetery Q at Qustul. Height: *c.* 28 cm. Photo by Ressman in Williams (2011: fig. 9.1).

Brown coarse or smooth ware

Pots made of a brown coarse or smooth ware were commonly used by the A-Group people throughout the A-Group period (Nordström, 1972: 82). This category consisted mainly of cups and deep bowls (Nordström, 1972: plate 36). Some of the bowls were decorated with impressed roulette patterns in form of herring-bones and zigzags. This ware was also used for making large simple jars without necks (Nordström, 1972: plate 37).

Red-polished plain wares

Another principal type of A-Group pottery is the red-polished plain wares. These pots were mainly shaped as shallow bowls and dishes. They have red-polished exteriors with brown or red polished or brown unpolished interiors. Pots of this ware were made already during the middle phase, but they were commonest in the terminal phase (Nordström, 1972: 84).

Black-polished wares

Pots made of black-polished ware or coarse black ware were found in A-Group contexts, although rarely. This category of pots is similar to the red-polished black-mouthed pots, with the exception that the entire surface of the pots had been smoke-blackened. The finer vessels of this type were usually highly burnished (H.S. Smith, 1991: 94; **Figure 68:a**), and some of them had a rippled exterior (**Figure 68:b**). In this group can also be included black conical bowls decorated on the exterior with incised patterns organized in horizontal bands (Williams, 1986: 60; **Figure 68:c**). The black-polished ware seems to be more common in the area between Dakka and Sayala, and it was commonest during the middle phase of the A-Group – i.e. contemporary with Naqada IID1-IIIA2.

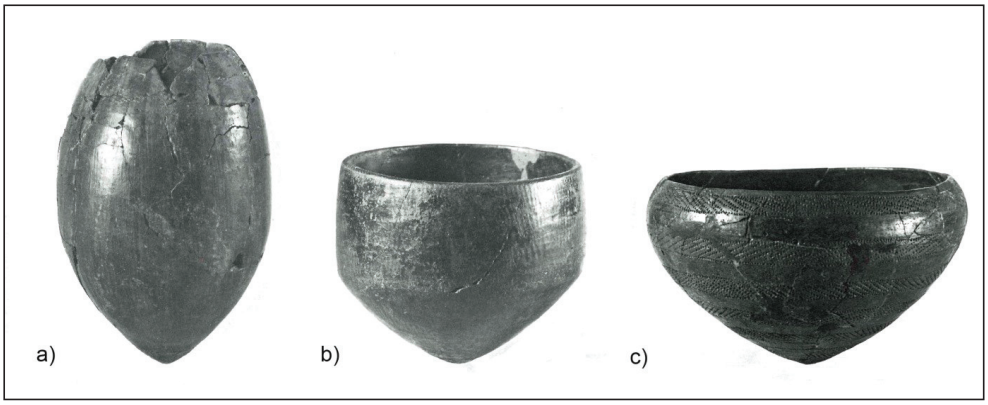


Figure 68: Black-polished wares. a) Highly polished, b) ripple polished, c) polished with incised horizontal bands. After Nordström (1972: plates 162/4, 162/3, 179/1).

Eggshell ware

The so-called eggshell ware (Nordström's type group A VIII) was used exclusively for cups and bowls of a very fine and thin handmade fabric (H.S. Smith, 1991: 93). The commonest shape was a tall bowl with tapering sides and a small flattened base – a so-called dimpled shape (Williams, 1986: 27; Nordström, 1972: plate 22/A3). The fractures usually have a black core with a buff, orange or light brown surface. The exterior was highly polished and decorated with patterns in red paint – usually in horizontal bands (H.S. Smith, 1991: 93; **Figure 69**), and the interior was often blackened (Nordström, 1972: 87). There are also some undecorated brown pots without black interiors of the eggshell-thin ware (Nordström's type group A II)

Figure 69: Eggshell ware dimpled bowl (MFA 19.1540). Height 19 cm. Photo by Boston Museum of Fine Art.

(Nordström, 1972: 84). The eggshell ware pots were only made during the terminal phase (Nordström, 1972: 84, 87; Williams, 1986: 27), and they were particularly numerous in the graves in the royal Cemetery L at Qustul (Williams, 1987: 27). However, the painted eggshell-thin bowls have been found in the whole territory of the A-Group people during the terminal phase – from Cemetery 71 upstream from Bab el-Kalabsha to the Second Cataract.

* * *

We have now seen that although there were similarities between the Naqada and A-Group pottery traditions, there were also important differences – especially concerning shapes. The contrasts between the shapes were related to differences in how the pots were made and used. The rounded or pointed bases of the A-Group pots connect them to the pottery tradition that evolved in the Western Desert during the early Holocene wet phase (see Nelson, 2001: 536). Moreover, the round and pointed bases made the pots suitable for steady placement in the sand, while the pots with flat bases of the Naqada pottery tradition could be placed on even surfaces such as tables. These dissimilarities in pot shapes point to important differences in the habitus of the two groups – perhaps reflecting mobile versus sedentary modes of life.

After this brief overview of the two pottery traditions, let us proceed to the distribution of pots in Lower Nubia.

The distribution of Naqada and A-Group pottery traditions

On the basis of the typologies of the different traditions for making pottery among the Naqada and A-Group peoples outlined above, I have prepared a diagram that shows the percentages of pots of each tradition that were deposited in the graves

in cemeteries in Lower Nubia with more than 10 graves and published in sufficient detail (**Figure 70**). The number of pots used as data is based on my own analyses for northern Lower Nubia until Cemetery 76 and for Cemeteries 111 and 134. The remaining sites are based on the recent investigation of the distribution of pottery in Lower Nubia by Roy (2011: tables 96, 114, 131, 158). Cemetery L has been excluded from the diagram because the very fragmented state of the pots makes quantification difficult. In the cemeteries where I have analysed the pot distribution, I found that some pots were unique or inadequately published so that it was impossible to assign these pots to a specific traditions. I therefore designated these pots as belonging to *unknown* traditions.

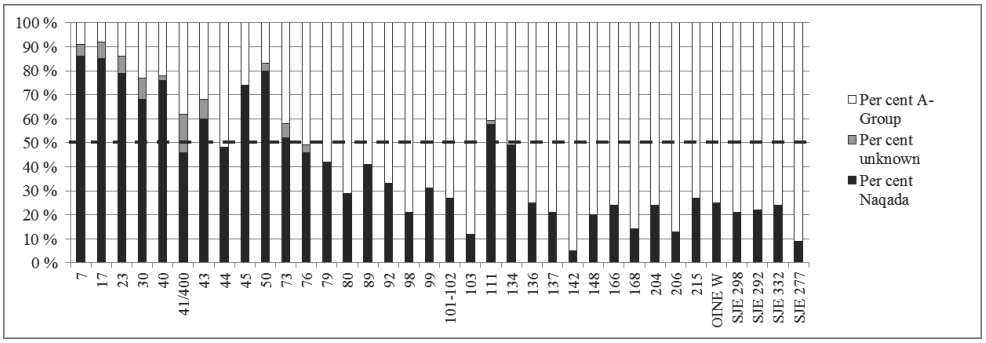


Figure 70: The distribution of pots made according to Naqada or A-Group traditions in cemeteries in Lower Nubia during the 4th millennium BCE.

If more than 50 per cent of the pots belonged to either the A-Group or Naqada traditions, then it is most probable that the site belonged to that ethnic group. The distribution of the pots of the two pottery traditions was comparable to the distribution of the different raw materials preferred for the palettes in the two traditions, but the shares of each tradition are more conspicuous since import of pots from other traditions appears to have been more limited, while there was a more even distribution of imported pots in middle and southern Lower Nubia.

From Cemetery 50 at Metardul and northwards, the majority of the pots were made according to the Naqada tradition, and in most cases this constituted more than 70 per cent of the pots. From Cemetery 73 at Fagirdib to Cemetery 98 on the Dakka plain, there was a gradual decrease in Naqada pots from 50 per cent to 20 per cent respectively. In the majority of the cemeteries from the Dakka plain southwards,

Naqada pottery constituted *c*. 20 per cent of the assemblages with the great majority of the pots being made according to A-Group traditions. The major exceptions to this pattern are Cemeteries 101, 111 and 134 with significantly higher shares of Naqada pots. In fact, at Cemetery 111, Naqada pots constituted more than 50 per cent of the pots, so this indicates that this site belonged to a Naqada community (see the section *A Naqada cemetery in A-Group territory* below).

Early Naqada pots in Lower Nubia

Except for the B-Group graves, which are considered as belonging to the proto phase of the A-Group, very few sites in Lower Nubia were contemporary with Naqada I in Upper Egypt. So I have only examined the sites where the rhomboidal siltstone palettes, mainly dateable to Naqada I, were found in order to identify occurrences of early Naqada pots in Lower Nubia. The following sites contained rhomboidal palettes: Cemeteries 17, 41/400, 43, 45, 79, 102, 103 and 136 (see **Table 8**). Four of these sites appear to have belonged to Naqada people (see *Chapter 10*).

Cemetery 17 contained 11 siltstone palettes and numerous red-polished black-topped vessels of characteristic Naqada types dateable to Naqada IC-IIA (see the section *Reuse of Cemetery 17 at Khor Bahan* below). This was probably the only Naqada site dating to Naqada I in Lower Nubia (see *Chapter 10*).

The Naqada pots from Cemetery 41/400 date mainly from Naqada IIC to Naqada IIIB (Roy, 2011: 82). The only rhomboidal siltstone palette found at the site was described as being "*considerably worn on both faces*" (Reisner, 1910: 220). It may thus have been an heirloom that was deposited as grave goods after rhomboidal palettes had gone out of production, since a decorated pot found in the same grave dates to Naqada IIC. The same seems to be the case of the rhomboidal siltstone palettes uncovered singly at Cemetery 43, dating to Naqada IIB to IIIA (Takamiya, 2004: 44; Roy, 2011: 84-85), and Cemetery 45, dating from Naqada IIB to IIIC1 (Roy, 2011: 88).

Cemeteries 79, 102 and 103 seem to be A-Group sites used over a considerable time, spanning from the proto phase to the terminal phase (see the shapes and distribution of siltstone palettes in these cemeteries in **Table 8**). Red-polished black-topped pots of Naqada tradition have been positively identified on the basis of figures

in the reports (Firth, 1912: fig. 97, 124, 125, 139; 1915: fig. 31, 61, 64, 66, 107, 109, 113, 116, 119, 124, 125) as being 1,5 per cent (i.e. 4 out of 276) of the pots in Cemetery 79, 1 per cent (i.e. 5 out of 457) of the pots in Cemetery 102, and 12 per cent (i.e. 14 out of 122) of the pots in Cemetery 103. There thus seems to have been limited contact between Naqada people in northern Lower Nubia and A-Group people on the Dakka plain during the proto and the early phases, i.e. Naqada IC to IIC.

The southernmost cemetery in Lower Nubia where a rhomboidal[27] siltstone palette has been found is Cemetery 136 at Sayala. A Naqada style red-polished black-topped pot with modelled rim (Petrie's B 35b) (see Firth, 1927: fig. 136/3/12) dating to Naqada IIB-C was found in another grave in the cemetery. The objects deposited as grave goods in this cemetery have otherwise a dating from Naqada IID2 to IIIB. It thus seems that some Naqada objects were also preserved for some time as exotic imports at Sayala.

Hard orange ware pots in Lower Nubia

After Naqada IIC, pots made of marl clays, the so-called *hard orange ware*, became common in Upper Egypt. The Japanese Egyptologist Izumi H. Takamiya (2004) has made an excellent quantitative analysis of the fall-off pattern of pots made of hard orange ware – i.e. wavy-handled jars, decorated pots and wine jars in Lower Nubia (see the section *The Naqada pottery tradition* above). These categories of Naqada pots were uncovered in some quantities in graves in Lower Nubia, and they are usually easily identifiable in old excavation reports. Takamiya chose the hard orange ware as a case-study because the marl clay used to make them is only found next to the Nile between Esna and Cairo in Egypt (Takamiya, 2004: 35-36). Consequently, this class of pottery had to be imported to Lower Nubia.[28] The aim of Takamiya was to explore exchange systems in the Nile Valley during the Predynastic and Early Dynastic periods, but her results can also throw light on ethnic identity. As a background to the discussion of exchange, Takamiya (2004: 37-41) presented the

[27] It was described as lozenge shaped in the report (Firth, 1927: 202).
[28] It is highly unlikely that people from Lower Nubia would wander to these clay sources in Egypt, bring the clay to Lower Nubia and make copies of Naqada style pots.

frequencies of pots made of hard orange ware at the Fort Cemetery at Nekhen [Hierakonpolis], the closest Naqada centre in Upper Egypt.

In Lower Nubia, pots made of hard orange ware were found in limited numbers south of the Dakka plain during Naqada IIC-D, (Takamiya, 2004: table 3, fig. 5), and a few pots were uncovered as far south as Cemetery 166 at Amada in the Korosko Bend (Takamiya, 2004: 48). Only two sites could be dated solely to Naqada II – Cemetery 43 at Dehmit and Cemetery 76 at Gedekol. Both sites had almost identical assemblages of hard orange ware pots, which were furthermore comparable to that of the Fort Cemetery at Nekhen (Takamiya, 2004: 44 & fig. 4b). A greater number of bowls made of hard orange ware than usual in Lower Nubia were part of the assemblages at both sites (Takamiya, 2004: fig. 4a). Takamiya (2004: 48) suggested that both Nekhen and northern Lower Nubia were served by the same distribution system during Naqada II. I would rather argue that the similarities in the composition of the assemblages at the three sites are a strong indication that the inhabitants using the cemeteries had the same ethnicity, because they did not only have the same pots (i.e. obvious expressions of ethnicity), but also had the same assemblages of pots, which indicates that they followed the same practices (i.e. ethnic identity incorporated in habitus). Furthermore, the high percentage of bowls is remarkable as they appear unsuitable for transporting goods (see Roy, 2011: 86 for Cemetery 43). Below, I consider Cemetery 43 to be a Naqada site (see the section *Naqada cemeteries in northern Lower Nubia* below), and the majority of the Naqada pots in Cemetery 76 seems to be deposited in only seven graves that I argue belonged to Naqada people (see the section *Cemetery 76* below).

During Naqada III, Takamiya (2004: 44) revealed two geographical groups with distinctive distribution patterns for the hard orange ware pots: a northern group from Cemetery 7 at Shellal to Cemetery 148 at Mediq and a southern group from Cemetery 215 at Abu Simbel to Cemetery 277 at Halfa Degheim. Only a few hard orange ware pots were uncovered in the graves of the cemeteries along the stretch from Mediq to Abu Simbel (Takamiya, 2004: fig. 6). Takamiya interpreted this as different distribution systems serving the three regions. The northern group and the Fort Cemetery at Nekhen still had similar assemblages, while the southern group had a

different composition of the hard orange ware assemblages (Takamiya, 2004: 48). In Takamiya's site selection, the intermediate group consisted of only one site, Cemetery 166 at Amada, so this group was not included in her study.

According to the results of Takamiya's analyses, there are two categories of hard orange ware pots that are particularly relevant for identifying social and ethnic identity from Naqada IIC onwards, and they are the wavy-handled jars and the wine jars.

In Lower Nubia, the wavy-handled jars were found in clusters in three regions (Roy, 2011: 270). The northernmost cluster covered the region from Shellal to Metardul. The middle cluster centred on the Dakka plain with an appendix in the region of Sayala and Mediq. The southernmost cluster stretched from Qustul to Halfa Degheim with some isolated examples at Toshka and Amada (Roy, 2011: fig. 6). However, Takamiya's quantitative analysis demonstrates that although the wavy-handled jars were concentrated in the region from Shellal to Sayala (Takamiya, 2004: 44), there was a distinctive fall-off pattern where the wavy-handled jars constituted 15 per cent of the hard orange ware assemblages at the northernmost sites to 0 per cent south of Sayala. In the southern group, the wavy-handled jars constituted less than 2 per cent of the hard orange ware assemblages (Takamiya, 2044: 53, fig. 7).

The distribution of wine jars had conspicuous concentrations in the area north of Cemetery 50 at Metardul and in the area between Cemetery 215 at Abu Simbel and Cemetery 277 at Halfa Degheim (Takamiya, 2004: 54). Furthermore, at the sites northwards from Cemetery 50 at Metardul,[29] the proportion of wine jars in the assemblages of hard orange ware pots is comparable to the Fort Cemetery at Nekhen (see Takamiya, 2004: fig. 4a).

In the area north of Metardul, this distribution can be explained by the cemeteries being used by Naqada people rather than A-Group people – i.e. the presence of wavy-handled jars and wine jars was linked to ethnic identity of the inhabitants. The sites in the south were however clearly A-Group cemeteries (see the distributions of palettes and pots in **Figure 60** and **Figure 70**), so pots containing fat

[29] With exception of Cemetery 43, which was only used during Naqada II, i.e. before the characteristic wine jars of hard orange ware had appeared.

and wine were probably imported to this region for elite consumption – i.e. the presence of wavy-handled jars and wine jars was linked to social status. Wine appears to have been particularly attractive for displaying social status, since it could be used as a social lubricant at feasts.

Concluding observations concerning ethnic identity

Having processed all this material, it is now time to analyze the distribution of Naqada and A-Group sites in Lower Nubia. I will thus compare the distribution of palettes and pots (**Figure 71**). In the cases where more than 50 per cent of the pots and palettes were made according to either Naqada or A-Group traditions, I will assume that the people buried at these sites mainly belonged to that ethnic group. If the palettes and pots show different affiliations, I will also look at the burial positions and discuss possible reasons for the divergences. A detailed examination of the proto phase sites of the A-Group, i.e. the B-Group graves, will be made in the next chapter.

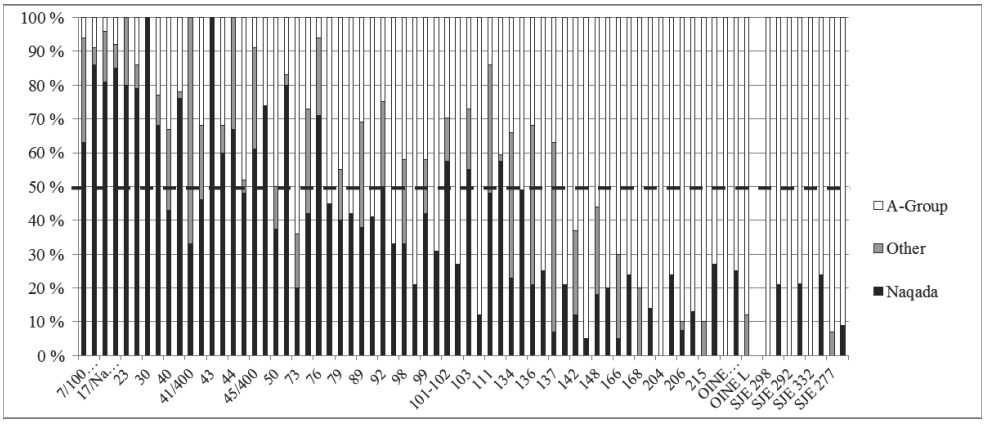


Figure 71: Distribution of different cultural traditions for palettes (left column) and pots (right column) in 4th millennium BCE cemeteries in Lower Nubia.

Naqada cemeteries in northern Lower Nubia

The diagram clearly demonstrates that the material culture from Cemetery 7 southwards to Cemetery 50 was overwhelmingly of a Naqada character, but with four exceptions to the 50 per cent levels among these ten sites. At Cemeteries 40, 41/400 and 50, less than 50 per cent of the palettes were made of siltstone, while Cemeteries

41/400 and 44 were the only sites where less than 50 per cent of the pots were made according to Naqada traditions.

Cemetery 50 was the northernmost site where quartzite was used as raw material for the palettes in 50 per cent or more of the cases. However, 80 per cent of the pots were made according to Naqada traditions and comprised a variety of forms – including bowls that were unsuitable as containers for imported products. Bowls may have been important for practices related to ethnicity. In addition, the composition of vessel in Cemetery 50 was comparable to the Fort Cemetery at Nekhen (Takamiya, 2004: fig. 4d). Furthermore, all of the 22 preserved bodies in the cemetery were buried on the left side in accordance with Naqada burial practices (see **Table 31**). So why were most of the palettes made of quartzite as normally preferred by the A-Group people? The site dates to Naqada IIIA-B (Roy, 2011: 94), when zoomorphic siltstone palettes were going out of fashion and production in Egypt (see p. 219 above). The people using the site may therefore have preferred to obtain palettes locally or to make palettes of materials available nearby. In Cemeteries 40 and 41/400 were also less than 50 per cent of the palettes made of siltstone, while the majority of the pots were made according to Naqada traditions. Nevertheless, siltstone was the preferred material at Cemetery 40 with 43 per cent, followed by 33 per cent made of quartzite and 24 per cent made of other stones. The dominant burial position was on the left side with the head to the south according to Naqada burial customs (see **Table 27**). At Cemetery 41/400, only three palettes were found (see p. 223 above), but two of them were certainly coming from Upper Egypt as they were made of siltstone and limestone respectively. Pots made according to Naqada traditions were in majority, but they constituted less than 50 per cent since a considerable amount of pots were not described in the report (see p. 305 below). The dominant burial position with 88 per cent of the bodies was also in this cemetery on the left side in accordance with Naqada practices, and the majority of the bodies were oriented with the head to the south (see **Table 28**).

The extensive examination of the distribution of two categories of burial goods and body positions in the graves makes it reasonable to draw two conclusions about

the ethnic identity of the inhabitants in northern Lower Nubia during the 4th millennium BCE:

1) After the proto phase of the A-Group people, all the sites between the First Cataract and Bab el-Kalabsha belonged to Naqada people with the single exception of Cemetery 44 (see *Chapter 10*).

2) Besides Cemetery 44 (see the section *Cemetery 44* below), there were no A-Group sites north of Bab el-Kalabsha after the proto phase of the A-Group people.

A-Group cemeteries in middle and southern Lower Nubia

Concerning the sites southwards from Metardul, the investigation demonstrates that the sites from Cemetery 73 southwards belonged to the cultural traditions of the A-Group people, with only a few exceptions that need further explanations. Excluding the proto phase A-Group sites (see *Chapter 9*), Cemetery 44 was the only 4th millennium BCE site north of Bab el-Kalabsha where Naqada pots were not in majority (see **Figure 70**), while Cemetery 73 was the only site south of Bab el-Kalabsha where Naqada pots outnumbered A-Group pots (see **Figure 70**). Furthermore, siltstone palettes were in majorities in Cemeteries 76, 102 and 103 in the area south of Bab el-Kalabsha (see **Figure 60**). These anomalous sites will be briefly discussed here.

Cemetery 44

Cemetery 44 was the northernmost of the clusters of cemeteries on the alluvial plain downstream of Khor Dehmit on the east bank of the river in northern Lower Nubia. The burial ground consisted of 20 graves with human remains and grave goods as well as several empty pits (Reisner, 1910: 256-258). The investigation of ethnic identity demonstrated that the majority of the palettes uncovered in this cemetery were imported from Upper Egypt, since two out of three palettes were made of siltstone, but regrettably of unspecified shape (see **Table 8**). The third palette was tentatively determined as diorite (Reisner, 1910: 257). However, there was a slight majority of A-Group pots with 52 per cent (see **Figure 70**).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	—	4	3	—	—	—	**7**
Right	—	—	2	1	2	—	—	2	**7**
Total	**0**	**0**	**2**	**5**	**5**	**0**	**0**	**2**	**14**

Table 10: Burial position and orientation for the 14 bodies that preserved these data in Cemetery 44. Data from Reisner (1910: 256-258).

An investigation of the burial positions shows that the deceased were buried in equal numbers on the right and the left sides (**Table 10**), which is consistent with A-Group rather than Naqada burial practices. The imported Naqada pots consisted of various jars, but only one bowl. This indicates import of jars as containers for foodstuff by A-Group people rather than pots transported to the site for every-day use as expected for a Naqada community. Furthermore, Naqada objects were only found in seven of the 20 graves (Roy, 2011: 86). It thus seems likely that the cemetery was used by the A-Group people. The date of the imported pots suggests that the site was only used during Naqada IIC, i.e. from *c*. 3400 to 3360 BCE, which was towards the end of the early phase of the A-Group people.

Cemetery 73

Cemetery 73 was situated on the west bank at Fagirdib on an alluvial terrace in a small valley. This was one of the first habitable stretches of the Nile Valley south of Bab el-Kalabsha (see p. 29 above). The burial ground was heavily affected by plundering and digging for fertilizing soil (Firth, 1912: 98), so only a selection of 74 graves was published. Of these, 14 were described as being B-Group graves (Firth, 1912: 103-105), but Firth seems to have used different criteria for using this term than Reisner. The so-called B-Group graves in Cemetery 73 were not earlier than the A-Group (H.S. Smith, 1966: 98). They were rather diverging from the Naqada patterns of Upper Egypt (H.S. Smith, 1966: 96), since Firth believed he was excavating predynastic Egyptian sites (Firth, 1912: 5). All the 4th millennium BCE graves in Cemetery 73 are thus analysed together here.

In Cemetery 73, quartzite was used as raw material for 64 per cent of the palettes, which means that the majority were made according to A-Group preferences. This was also the southernmost site where the majority of the pots could be attributed to the Naqada traditions of pot making. Both the Naqada palettes and pots suggest a date spanning Naqada IIC to IIIB (cf. Roy, 2011: 96), which corresponds with the interval between the late early and early terminal phases of the A-Group people. Unfortunately, 6 per cent of the pots could not be affiliated with either the A-Group or the Naqada traditions because of insufficient descriptions in the report, but it is more

likely that they belonged to the A-Group tradition than to the Naqada corpus of pottery that was better defined at the time of publication. In the statistics, the Naqada pots outnumbered the A-Group pots with 52 against 42 per cent. Nevertheless, the hard orange ware pots uncovered in this cemetery had a diverging assemblage composition from the Fort Cemetery at Nekhen – especially by lacking wine jars (see Takamiya, 2004: fig. 4d). Furthermore, the burial positions were almost evenly distributed between the left and the right sides – 60 per cent on the left and 40 per cent on the right – in accordance with A-Group customs (**Table 11**). Despite a high degree of imported pots from the Naqada people, the people buried in Cemetery 73 appear to have been A-Group people. The case is slightly different at nearby Cemetery 76.

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	—	7	2	3	—	3	**15**
Right	—	—	—	2	5	2	1	—	**10**
Total	**0**	**0**	**0**	**9**	**7**	**5**	**1**	**3**	**25**

Table 11: Burial position and orientation for the 25 bodies that preserved these data in Cemetery 73. Data from Firth (1912: 99-105).

Cemetery 76

Cemetery 76 was a burial ground with 51 excavated graves located on the west bank at Gedekol. We have seen that more than 50 per cent of the palettes were made of siltstone at Cemetery 76, and almost 50 per cent of the pots were made according to Naqada traditions (see **Figure 71**). Actually, of the 17 palettes found, 12 were made of siltstone, i.e. 71 per cent, in form of three fish-shaped, four bird-shaped, one rectangular and four palettes with unrecorded shapes, while only a single palette was made of quartzite and four palettes were made of other materials (see **Table 8**). The shapes of the siltstone palettes suggest that the majority of the graves date in Naqada II, because of the lack of rhomboidal shapes and the occurrence of only one rectangular palette. Also the Naqada pots are dated from Naqada IIB to IID2 (see Takamiya, 2004: 44), and we saw that the repertoire of the hard orange ware pots was comparable to the Fort Cemetery at Nekhen, which included a high percentage of bowls (see p. 240 above).

Furthermore, the burial positions show that 83 per cent were buried on the left side and 17 per cent on the right side (**Table 12**), and this gives a clear preponderance

for the placement of the body according to Naqada traditions. The statistical observations thus seem to point to a Naqada identity for the people buried at the site.

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	—	6	11	11	1	—	**29**
Right	—	—	—	1	3	2	—	—	**6**
Total	**0**	**0**	**0**	**7**	**14**	**13**	**1**	**0**	**35**

Table 12: Burial position and orientation for the 35 bodies that preserved these data in Cemetery 76. Data from Firth (1912: 111-121).

Nevertheless, the Naqada pots were extremely unevenly distributed in this cemetery, as the majority of the Naqada pots were found in only seven graves (i.e. the graves 64, 65, 67, 133, 134, 141 and 142, which all contained more than three Naqada pots). Moreover, these graves stand out on the original cemetery plan by being situated on the southernmost or northernmost fringes of the cemetery (see Firth, 1912: plan 11). If these seven graves are excluded from the statistics, then 70 per cent of the pots were made according to A-Group traditions. In the excluded group, 88 per cent of the pots were in contrast made according to Naqada traditions. No siltstone palettes were found in the seven graves with more than three Naqada pots, and this suggests that these valuable and attractive objects were traded to the A-Group people. The seven graves in the excluded group as well as the rest of the graves in the cemetery had similar burial positions with roughly the same frequencies for burying the corpses on the left and right sides. On the basis of the high frequency of Naqada pots in these graves and their locations on the fringes of the cemetery, I will suggest that the eight individuals buried in these seven graves were Naqada people. The A-Group people at Cemetery 76 were however strongly influenced by the Naqada people. Cemetery 76 was thus most probably a multicultural burial ground that spanned from the early phase to the early middle phase of the A-Group people, which is contemporary with Naqada IIB-IID2 in Upper Egypt. This may already indicate that this was a peaceful period in Lower Nubia in order for the two groups to co-exist at the same location (see the section *Contact in the area of Abisko and Dehmit during Naqada IIC* in Chapter 11).

Cemeteries 101-102 and 103

The only other sites south of Cemetery 50 where siltstone palettes constituted more than 50 per cent of the palettes were Cemeteries 101-102 and 103 (see **Figure**

60). Cemetery 102 was the largest excavated 4th millennium BCE cemetery in Lower Nubia with 222 graves (see **Table 8**). It was situated on the west bank in the southern part of the Dakka plain and next to Cemetery 101 with 73 graves, and the two sites actually constituted a continuous burial ground (Firth, 1915: 51). Cemetery 101-102 is therefore treated as an entity here with a total of 295 graves. This large cemetery was placed behind an A-Group habitation site that unfortunately was left unexplored.

Cemetery 101-102 spanned from the proto phase of the A-Group to the early terminal phase (i.e. Naqada I to Naqada IIIB), as demonstrated by palette shapes ranging from rhomboidal to rectangular and circular (see **Table 8**), as well as Naqada pots ranging from red-polished black-topped varieties (see p. 228 and p. 239 above) to wine jars and local eggshell ware pots (see Firth, 1915: fig. 88/1, 101/3 and fig. 80/10 respectively). H.S. Smith (1991: 107) has suggested that the empty graves closest to the settlement were the oldest in the cemetery, and they possibly belong to our proto phase. Despite a significant import of siltstone palettes, the great majority of the pots were made according to A-Group traditions, i.e. 80 per cent. The burial positions were more ambiguous since 70 per cent were buried on their left side and 30 on their right side (**Table 13**). This is however comparable to Cemetery 80 (see p. 214 above), and it is again shown that Naqada burial practices influenced the A-Group communities in middle Lower Nubia with a preference for the left side. However, the deceased in Naqada sites were rarely buried on the right side in more than 20 per cent of the total.

	NE	E	SE	S	SW	W	NW	N	Total
Left	3	1	9	108	62	9	—	2	**194**
Right	5	—	—	28	40	6	2	3	**84**
Total	**8**	**1**	**9**	**136**	**102**	**15**	**2**	**5**	**278**

Table 13: Burial position and orientation for the 278 bodies that preserved these data in Cemetery 101-102. Data from Firth (1915: 52-96).

When summarizing the evidence, the overwhelming majority of A-Group pots make it most likely that it was the A-Group people who established and used the great Cemetery 101-102.

Only 500 metres south of Cemetery 101-102 was Cemetery 103 (Firth, 1915: plan 1). The smaller Cemetery 103 with 39 published graves seems to have been a more short-lived community with dates ranging from the end of the proto phase to the early middle phase, as based on the shapes of the siltstone palettes with one rhomboidal and four bird-shaped palettes (see **Table 8**). The great majority of the pots

were red-polished black-mouthed vessels belonging to the A-Group tradition (see **Figure 70**). The burial positions conform to A-Group practices of placing the deceased on both sides with 58 per cent on their left side and 42 per cent on their right side (**Table 14**).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	1	6	1	7	—	—	**15**
Right	—	—	—	1	1	9	—	—	**11**
Total	**0**	**0**	**1**	**7**	**2**	**16**	**0**	**0**	**26**

Table 14: Burial position and orientation for the 26 bodies that preserved these data in Cemetery 103. Data from Firth (1915: 97-103).

It thus seems that two A-Group communities were settled on the Dakka plain already during the proto phase, i.e. Cemeteries 101-102 and 103. Late in the early phase, Cemeteries 98 and 99 were established further north on the plain (Firth, 1915: plan 1). Over a period of at least 500 years, a total of 56 siltstone palettes were imported and deposited in the A-Group graves in Cemeteries 98, 99, 101, 102 and 103 on the Dakka plain. This means that on average, one siltstone palette was deposited in a grave on the Dakka plain every ninth year. The siltstone palettes must have been attractive imports, and they appear to have been buried in the more wealthy graves. Rather than considering the siltstone imports as an anomaly, it is in my opinion more extraordinary that so few palettes made of local materials were deposited in the cemeteries on the Dakka plain.

* * *

It thus seems well-founded to recapitulate the conclusion that the sites to the south of Bab el-Kalabsha (i.e. Cemetery 73 southwards) were belonging to the A-Group people, although seven graves in Cemetery 76 apparently were made for Naqada people, and a few isolated Naqada graves may be identified at other sites as well. The only anomalous sites according to the distribution of palettes and pots that we have not yet discussed are Cemeteries 111 and 134 (see **Figure 71**). Cemetery 111 will be the next topic, and Cemetery 134 will be discussed in Chapter 11 (see the section *Cemetery 134 at Sheikh Sharaf*).

Cemetery 111 – A Naqada burial ground in A-Group territory

I will finally consider the only site south of Cemetery 50 where more than 50 per cent of the pots and almost 50 per cent of the palettes were made according to Naqada traditions, namely Cemetery 111 (see **Figure 71**). Cemetery 111 was situated *c*. 110 kilometres south of Shellal and just to the north of the mouth of Wadi Allaqi (see p. 29 above). The burial ground was used intermittently during the whole Bronze Age and consisted of *c*. 100 graves of which 58 date to the 4th millennium BCE (Firth, 1927: 98-112). The parameters that I have selected for investigating ethnic identity suggest that the people using the cemetery belonged to the Naqada culture. Regarding pots, 55 per cent were made according to Naqada traditions against 43 per cent made according to A-Group traditions, while 2 per cent of the pots could not be determined based on limited information in the report. But even if all the indeterminable pots belonged to the A-Group repertoire, the Naqada pots would still be in majority (see **Figure 70**). Furthermore, siltstone was the most popular material for making palettes with 48 per cent of the occurrences, followed by 38 per cent made of other hard stones, and only 14 per cent made of quartzite (see **Figure 60**). Since this cemetery is inside the area where A-Group cultural traditions dominated in the surrounding cemeteries, it is of interest to check if the third parameter, i.e. burial position, conformed to Naqada practices. Indeed, the examination shows that 84 per cent of the preserved bodies were buried on the left side against 16 per cent on the right side, and the prevalent head orientation was southerly (**Table 15**). This is again more in agreement with Naqada practices than A-Group traditions. Since this seems to be the only Naqada cemetery in A-Group territory, it is worthwhile to have a closer look at the material found at the site.

	NE	E	SE	S	SW	W	NW	N	Total	
Left	—	1	—	3	14	—	—	—	18	Naqada
Right	—	—	—	—	—	—	—	—	0	
Subtotal	**0**	**1**	**0**	**3**	**14**	**0**	**0**	**0**	**18**	
Left	—	—	—	2	20	7	—	—	29	A-Group
Right	1	—	—	3	4	1	—	—	9	
Subtotal	**0**	**0**	**0**	**5**	**24**	**8**	**0**	**0**	**38**	
Total	**Left**		**47**	**Right**		**9**	**Total**		**56**	

Table 15: Burial position and orientation for the 56 bodies that preserved these data in Cemetery 111 – both in the Naqada and the A-Group parts. Data from Firth (1927: 98-110).

The most numerous category of pots was various shapes of red-polished black-mouthed pots of the A-Group tradition (**Figure 72**). This might seem strange for a Naqada site, but given that the site was located far beyond Naqada territory, it must

have been more economical to procure bowls locally than to import utility bowls from Egypt. The second commonest category of pot was wavy-handled jars (**Figure 73**), which were both important as funerary gifts in the Naqada culture and also considered as attractive imports by A-Group people (see p. 230 and pp. 241-242 above). Furthermore, the series of wavy-handled jars consists of types dating to either Naqada IID1 or IIIA2, while two circular siltstone palettes, a decorated jar of hard orange warepainted with undulating vertical lines and two eggshell ware pots suggest an extension of use into Naqada IIIB.

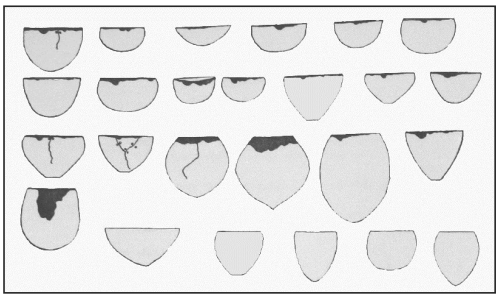


Figure 72: Black-mouthed pots from Cemetery 111. After Firth (1927: fig. 2).

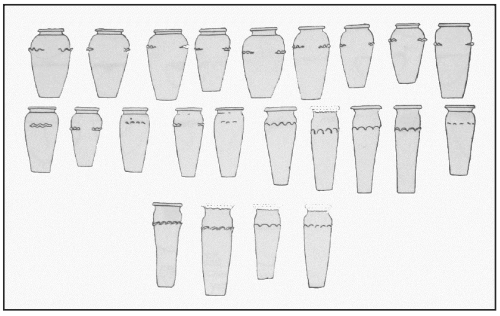


Figure 73: Wavy-handled jars from Cemetery 111. After Firth (1927: fig. 3).

The excavator implied that the cemetery expanded from north to south (Firth, 1927: 98), and this seems correct since all the cylindrical shapes of the wavy-handled jars were found in the southern part of the cemetery (**Figure 74**). Looking at the cemetery plan, we then observe that all the bodies in the early graves in the northern part of the cemetery were placed on the left side, while occurrences of bodies placed on the right side were limited to the southern part (see **Figure 74**). The divergence from the standard burial position of the Naqada people with time could have been an influence from the A-Group people, or it could mean that the Naqada burial practices were no longer followed as strictly. However, a more detailed examination of the dating of the wavy-handled jars as well as other objects shows that the site appears to have been used during two separate phases: Naqada IID1 and Naqada IIIA2-B. On the basis of Firth's report, no objects can be positively dated to Naqada IID2-IIIA1. This leaves a gap in the use of the cemetery between *c*. 3330 and 3240 BCE, i.e. a period of almost a century. I therefore suggest that Naqada people were only buried in 19 graves in the northern part of Cemetery 111 during Naqada IID1, which was contemporary

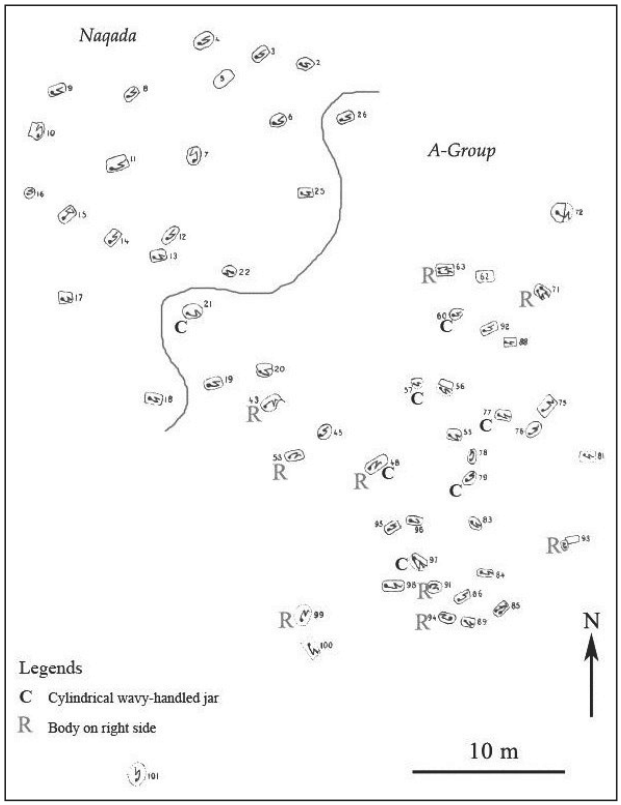


Figure 74: Linear development of Cemetery 111 with the Naqada graves in the northern part, and distribution of cylindrical wavy-handled jars and body positioned on the right side in the southern part of the cemetery during a later use of the cemetery by the A-Group people. Modified plan from Firth (1927: plan 7).

with the use of a nearby site interpreted as a transit market (see the section *A transit market at Khor Daoud* in Chapter 11). The cemetery was then reused by the A-Group people during Naqada IIIA2 to IIIB when 39 graves were established to the south of the Naqada graves. The occurrences in the southern part of the cemetery of all the burials on the right side, i.e. 24 per cent of the total, and of four out of five quartzite palettes support the suggestion that the cemetery was indeed used by the A-Group people in the later phase of use. The red-polished black-mouthed pots were quite evenly distributed in the cemetery (see pp. 250-251).

This isolated Naqada cemetery in A-Group territory during Naqada IID1 was probably belonging to a trading community. This assumption is supported by the nearby location of the site Khor Daoud with storage pits containing Naqada pots, which I have previously interpreted as a *transit market* (Hafsaas–Tsakos, 2009: 26; see the section *A transit market at Khor Daoud* in Chapter 11). Furthermore, the analysis of the material culture according to ethnicity has confirmed the conclusion repeated by many Nubiologists concerning the great extent that Naqada pots were imported by the A-Group people. The amount of imports of pots is estimated to average *c*. 20 per cent of the assemblages according to the quantitative analysis presented here (see **Figure 70**).

Locating the ethnic boundary

Based on this investigation into the ethnic identity of the inhabitants in Lower Nubia, the border between Naqada and A-Group sites appears to be in the region between Cemeteries 50 and 73 in the northern part of Lower Nubia. According to the surveys of Reisner and Firth, there were no cemeteries dating to the 4th millennium BCE for *c*. 40 kilometres between Cemetery 50 at Metardul and Cemetery 71 at Sharaf el Din Togog on the east bank downstream of Gerf Hussein. Cemetery 71 was described as "*the traces of a cemetery of some size*" that was only surveyed since *"the graves were much denuded and entirely plundered"*. It has thus not been included in the quantitative analysis of in this chapter. Nevertheless, Firth (1912: 6) noted potsherds of typical A-Group eggshell ware of the terminal phase and Naqada wine jars of hard orange ware. As we have seen, the so-called wine jars were a common import into A-Group society during the terminal phase (see p. 231 and pp. 241-242 above). Cemetery 71 thus seems to have been an A-Group site occupied during the early terminal phase, and possibly also before.

In the northern part of the stretch of the river between Sharaf el Din Togog and Metardul was Bab el-Kalabsha (see p. 30 above). Based on the distribution of the palettes and pots outlined above, as well as the discussions below, I suggest that the physical constriction of the river valley at Bab el-Kalabsha was an early border between Naqada people and A-Group people from the early phase of the A-Group people until Naqada IIIB of Upper Egypt and the contemporary early terminal phase of the A-Group. The uninhabited stretch of the river valley between Sharaf el Din Togog and Metardul was very rocky and thus agriculturally unproductive, and it may have served as a no man's land between the two ethnic groups. This idea is not new: Already in the second preliminary report from the survey, Reisner (1909: 6) posed the question: "*Was Bab el-Kalabsha the limit of Egyptian culture in the predynastic period?*" We can continue this line of questioning: If Bab el-Kalabsha was an ethnic boundary during the latter half of the 4th millennium BCE, then which circumstances led to its establishment and why? I will argue that war was the ultimate cause, but before the historical reconstruction can be presented, we will have to examine the evidence for the proto phase sites of the A-Group people and for an expansion of

Naqada people into Lower Nubia, as well as evidence for war in both the A-Group and the Naqada cemeteries in northern Lower Nubia.

As preliminarily discussed in Chapter 3, H.S. Smith identified very early A-Group sites, i.e. of the proto phase, to the north of Bab el-Kalabsha. As demonstrated in this section, Reisner and other Egyptologists seem to have been correct about an expansion of Naqada people into the same area. This would mean that these two ethnic groups came to live in the same region at the same time during the mid-4th millennium BCE. Conflicting interests may have led to war, where one of the groups was displaced from the region. This may explain why the ethnic boundary was established. However, in order to support this interpretation, a more detailed examination of the sites of the 4th millennium BCE in the region between Bab el-Kalabsha and the First Cataract is needed. I will therefore review these cemeteries in the next two chapters with a particular focus on their dating and possible evidence of war, i.e. weapons and human remains carrying traces of violence.

Chapter 9: A-Group people of the proto phase in northern Lower Nubia

No remains from the 5th millennium BCE were recorded during the surveys of the northern part of Lower Nubia, i.e. between Bab el-Kalabsha and the First Cataract, when Reisner undertook the archaeological salvage campaign in that area before it was flooded by the old Aswan Dam reservoir. Furthermore, Reisner overlooked the actual date of the earliest remains that he recorded in the area when he placed the archaeological assemblage that he called the B-Group in the Old Kingdom. Subsequently, H.S. Smith (1966) identified five of Reisner's B-Group sites as being the earliest remains of the A-Group and dating to the first half of the 4th millennium BCE (see **Table 1**; p. 61 above). The A-Group people of the proto phase thus appear to be the earliest inhabitants in northern Lower Nubia who left traces uncovered by archaeologists during the salvage campaigns before the region was flooded.

Recent archaeological surveys in the region between the First Cataract and Kom Ombo in Upper Egypt show that the scanty material remains dating to the 5th millennium BCE in the area were related to cultural traditions of the Middle Nile region. This is taken as evidence for the location of a cultural border between Egypt and the south in a more northern position than during the 4th millennium BCE (Gatto, 2009: 132).

Based on H.S. Smith's identification of the B-Group sites as the earliest A-Group, I will in this chapter describe and discuss the A-Group cemeteries of the proto phase, to use the more precise chronological term that I have suggested for these sites in this thesis (see p. 73 above). The cemeteries where the early dating as well as the ethnicity of the deceased are less obvious will be most thoroughly discussed through the use of a thick description of as many parameters as I find necessary in order to convincingly demonstrate that the site under investigation belonged to the A-Group people during the proto phase. Furthermore, evidence of war in form of weapons as grave goods or skeletal trauma caused by interpersonal violence will be discussed for each cemetery.

The earliest graves in Cemetery 7 at Shellal

On the south-eastern knolls of the plain of Shellal, Reisner (1910: 33-42) excavated a group of graves in Cemetery 7 that had a uniform character. He numbered them from 201 to 268 and assigned them to the early B-Group (Reisner, 1910: 42). This group contained 62 grave pits (numbers 244-249 were not used) of which nine were animal burials without grave goods, and one was not a tomb but a small mud brick enclosure. This gives a total of 52 graves (Roy, 2011: 69). In these, only 28 bodies were found in a fairly well preserved state, and these showed that men and women as well as all age categories were buried at the site. Only twelve graves were recorded as being undisturbed (see Reisner, 1910: 33-42).

Burial practices and grave goods

The burial practices recorded for this group of graves were deviating from the common forms observed in Upper Egypt during the Naqada period. The bodies were placed in a contracted position on both right and left sides, and there was no regular orientation for the head (**Table 16**). The deceased were usually covered by goat skins or mats (Reisner, 1910: 333). Seven cosmetic palettes were made of various hard stones, and five palettes were made of siltstone with irregular shapes (see **Table 8**). Malachite, resin and rubbing pebbles were commonly associated with the palettes (Reisner, 1910: 334). Reisner (1910: 335) remarked that there was an extreme poverty of beads and amulets in these graves, but he noted that a characteristic decorative trait was the use of small spiral shells (Reisner, 1910: 142), probably of the genus Conus.

	NE	E	SE	S	SW	W	NW	N	Total
Left	5	5	1	1	2	3	5	—	**22**
Right	1	2	2	—	3	1	1	—	**10**
Totalt	**6**	**7**	**3**	**1**	**5**	**4**	**6**	**0**	**32**

Table 16: Burial position and orientation for the 32 bodies that preserved these data in Cemetery 7/200. Data from Reisner (1910: 142-144).

No copper implements were uncovered from these graves, but malachite was found in connection with the cosmetic palettes in eight graves (see **Table 5**).

A total of 16 pottery vessels including four fragmentary pots were found in 11 of the 52 graves, which means that pots were part of the funerary goods in 21 per cent of the burials. Pots were thus commoner as grave goods in Naqada cemeteries in Upper Egypt than in the graves on the south-eastern knoll at Shellal. The infrequency

of pottery thus became one of the characteristics of the B-Group cemeteries according to Reisner (1910: 333-334). It is thus interesting to see which kinds of pots were found in this cemetery and to which archaeological group the pots resemble. Most of them were bowls of ovoid or bag-shaped forms that were made of a thick ware with a black interior and a red exterior, and some were also described as black-mouthed (Reisner, 1910: fig. 15, 33-39, 333). They thus conform to the A-Group pottery making tradition. One of the pots was a small shallow sieve of smooth brown ware that was found in a small pit interpreted as the grave of an infant (Reisner, 1910: 36). Based on the material excavated on the east bank between Serra and Debeira just downstream of the Second Cataract, Nordström (2004b: 129) observed for the middle and terminal phases of the A-Group that sieves were regularly deposited in the graves of infants. The pots found in the graves of the south-eastern knolls of Cemetery 7 thus seem to belong to the A-Group pottery tradition, with one exception in form of a red-polished black-topped pot with a flat base that was either an import from Upper Egypt or an imitation of the Naqada pottery tradition. The former option seems most likely.

Dating

Only one of the pots found in the graves of the south-eastern knolls had a flat base and a wide black top, which make it similar in shape and colour to some Naqada I types of black-topped pots in Upper Egypt. Furthermore, a fragment of a white cross-lined pot was found in the debris on the surface (Reisner, 1910: 38). This type was commonest during Naqada IA and disappeared in Naqada IIA (Hendrickx, 2006: table II/1.4b).

In the re-examination of the site, H.S. Smith (1991: 98) argued that it is plausible that the intact graves of the south-eastern knoll lacked Naqada objects because they belonged to an earlier period than the initial contact with the Naqada people in the region. This indigenous group should thus be considered as the A-Group people in their earliest form (H.S. Smith, 1991: 98), which I have termed the proto phase of the A-Group (see p. 73 above). Supporting this early dating is the location of the cemetery on higher ground and further away from the Nile than the otherwise oldest group of graves at Shellal, i.e. graves 101-108, 149, 301-361 (cf. Reisner, 1910:

33), which can be dated from Naqada IIIA2 into Naqada IIIC (Roy, 2011: 68) and which belonged to the Naqada people according to the analysis in the next chapter (see the section *Reuse of Cemetery 7 at Shellal* in Chapter 10).

Having established the identity of the people buried on the south-eastern knolls and the date of their occupation in the region, let us now turn to the evidence related to the subject of this thesis – war.

Evidence for weapons and violence

Two weapons and two tool-weapons were uncovered in these early 4th millennium BCE graves at Shellal: two mace-heads and two ground stone axe-heads (**Figure 75**). The mace-heads were of the disc-shaped type and made of black and white/pink speckled stone. It is significant for the discussion of ethnic identity that the shape of these maces is similar to the disc-shaped maces in Neolithic Sudan rather than in Predynastic Egypt (see the section *Maces* in Chapter 7). Both axe-heads had a triangular shape with a slightly curved blade, convergent sides and a curved base, and they were made of an unidentified blackish stone (see **Catalogue 2**). The largest mace-head was found with a man, the other mace and the largest axe-head were found together in a grave from where the body was absent or had been removed, and the small axe-head was found in a grave containing a double burial of both a man and a woman (Reisner, 1910: 37-39).

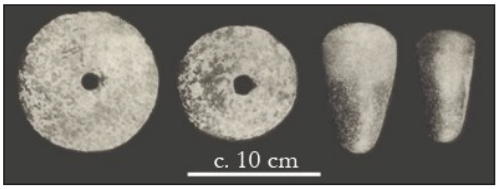


Figure 75: The weapons and tool-weapons uncovered at the south-eastern knoll of Cemetery 7. a) grave 229, b) and c) grave 230, d) grave 234. Adapted from Reisner (1910: plate 63/d).

The anatomical analysis of the skeletons of this group of graves demonstrated that two individuals had experienced violence. A man in grave 257 had died a violent death through several blows to the head that had fractured his skull. Besides blunt violence that had fractured several bones in his face, a sharp weapon had cut away a crescent-shaped piece of the right parietal bone on the back of his skull. This indicates that he had been hit with a copper implement. The blow appears to have been delivered from behind and from the right side (Elliot Smith and Wood Jones, 1910: 188, 331-332; Reisner, 1910: 41). The grave

had been lined with matting, and his body was covered with leather and a thick layer of halfa grass (Reisner, 1910: 41, plate 5/e). Despite the care for the body, the man had received no grave gifts (Reisner, 1910: 41). Furthermore, a woman in grave 263 had experienced a defensive injury in form of a parry fracture of her right ulna (Elliot Smith and Wood Jones, 1910: 313). Both the man and the woman were buried on the north-eastern fringe of the cemetery, and the man must have been one of the last if not the last person to be buried in the cemetery before it was abandoned by the A-Group people (see Reisner, 1910: plan 10/A).

Summary

This re-examination of the graves on the south-eastern knoll of Cemetery 7 suggests that this was the earliest cemetery on the plain at Shellal, as it was situated at a higher point in the terrain than the later graves and the dating of the few Naqada objects found at the site suggests that it must have been contemporary to Naqada I in Upper Egypt, i.e. *c*. 3800 to 3530 BCE.

Although the majority of the pots were similar in shape to the A-Group pottery tradition, no types distinctive of its later phases (e.g. rippled ware or eggshell ware) were uncovered at this site. Two mace-heads were made in the same shape as common for Neolithic Sudan. It thus seems very probable that this cemetery belonged to a community of people that we can label as A-Group of the proto phase.

Four weapons or tool-weapons were found in three graves – two maces and two ground stone axes. The only practical use of maces was as striking weapons, while ground stone axes could have been used as both weapons and tools (see *Chapter 7*). However, the rather large size of these stone axes, with lengths of *c*. 8 and 10 centimetres, suggests that they could have been effective as weapons. Two individuals had experienced violence that left traces on their bones: a man killed by the use of both maces and a copper implement, and a woman with a defensive injury on her lower arm.

It is not unreasonable to conclude that the cemetery was abandoned because the A-Group people living in the area around the Shellal plain during the proto phase were displaced by war.

Cemetery 14 at Khor Ambukol

The next B-Group cemetery identified by Reisner was the small Cemetery 14 on the east bank at Khor Ambukol (H.S. Smith, 1966: 87), which was located *c*. 10 kilometres upstream from Shellal. The burial ground consisted of 21 graves dug into a sandy ridge on the northern bank of the khor (**Figure 76**), and they were severely affected by denudation and digging for fertilizing soil (Reisner, 1910: 141).

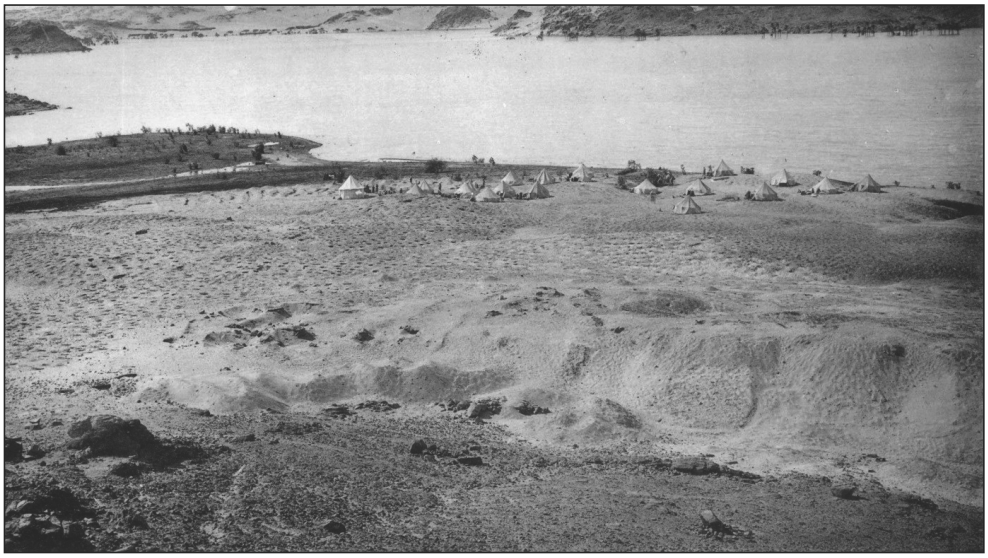


Figure 76: Cemetery 14 at Khor Ambukol. Photo from Reisner (1910: plate 29/a).

Burial practices and grave goods

The shapes of the grave pits were in most cases indeterminable (Reisner, 1910: 142-144). The bodies were found contracted on both the right and left sides and with the heads oriented in various directions, but with a slight preference for eastward orientations (**Table 17**). It is indicative that the southerly orientation practiced by the Naqada people was totally avoided (see **Table 17**). The deceased were usually placed on matting, and almost always accompanied by sewed leather (Reisner, 1910: 141). The placement of the bodies in the graves is thus in accordance with the proto phase of the A-Group (see pp. 214-215 above).

	NE	E	SE	S	SW	W	NW	N	Total
Left	4	2	2	—	—	—	—	—	8
Right	1	1	—	—	—	2	2	—	6
Totalt	5	3	2	0	0	2	2	0	14

Table 17: Burial position and orientation for the 14 bodies that preserved these data in Cemetery 14. Data from Reisner (1910: 142-144).

The demographic profile included adult women and men as well as infants and children (see Reisner, 1910: 142-144). However, females were in the majority among the deceased, which included 10 females and 6 males – 47 and 28 per cent respectively. Like at nearby Cemetery 17 (see the next section), there appears to have been segregation between where women and men were buried in the cemetery (see **Figure 80**), with the women towards the northeast and the men towards the southwest (**Figure 77**). A similar pattern of spatial sex segregation has been uncovered in a Mesolithic cemetery at El-Barga in the Kerma basin (Crèvecæur, 2012: 25). The only case in Cemetery 14 where the graves of men and women have a spatial overlap consisted of two men buried above an earlier interment of a woman in the border zone between the two sexes (see Reisner, 1910: 144-145; see **Figure 77**).

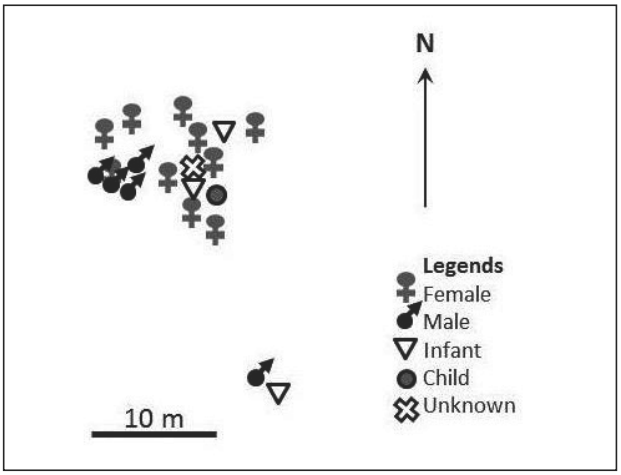


Figure 77: The distribution of biological sex in Cemetery 14 at Khor Ambukol. Data from Reisner (1910: 142-144, plan 12).

Funerary gifts were very rare in Cemetery 14, but some of the items give a hint of the time that the cemetery was used and the identity of the people buried there. Two rhomboidal siltstone palettes were uncovered as well as two rectangular palettes of which one was made of "*hard crystalline purple stone*" and the other of "*alabaster*" (Reisner, 1910: 142-143), which was probably white quartzite. Malachite was found associated with all of the palettes, as well as in one more grave (Reisner, 1910: 142-144). The two palettes of hard stone show affiliation with the cultural traditions of the earlier Neolithic in Upper Nubia and Central Sudan as well as the later A-Group phases in Lower Nubia. The rhomboidal siltstone palettes belonged to the Naqada cultural traditions and were commonest during Naqada IC, although continuing into Naqada IIA-B (Hendrickx, 2006: 75, 77, 79). In addition, two ivory combs with carved animals, probably gazelles, on top were uncovered (Reisner, 1910: 142, 144, plate

66/b/31, 33). Gazelles were mainly used to decorate the ivory combs of the Naqada people during Naqada IC (cf. Kaiser, 1957: plate 21; Baumgartel, 1960: 48).

Six pots were uncovered as grave goods in four graves (see Reisner, 1910: 142-144), which means that 19 per cent of the deceased were buried with one or two pots. None of the pots were of a diagnostic type that could be described as imported from Egypt. However, three black-mouthed pots and two black pots with a pointed base fit with the A-Group pottery repertoire (see Reisner, 1910: fig. 92/1-2). Furthermore, four graves contained the small spiral shells that seem to be characteristic for the A-Group people during the proto phase.

Dating

The imported Naqada siltstone palettes and ivory combs suggest a Naqada IC date, which would be contemporary with the proto phase of the A-Group.

Evidence of weapons and violence

Concerning weapons, only a woman in grave 17 was buried with a flint blade (Reisner, 1910: 143), which is of the tool-weapon category (see **Catalogue 2**). There were thus no specialized weapons uncovered in this cemetery.

Observations related to violence on the bones are however strongly indicative of war. Examinations of the skeletal remains revealed that a woman in grave 13 had a perimortem fracture of a rib on the left side that had caused much blood-staining of the bones (Elliot Smith and Wood Jones, 1910: 108). This shows that the fracture happened shortly before death (see p. 207 above). The injury generating the fracture was probably the cause of death of this woman.

Furthermore, a man buried in grave 10 died a violent death through "*mortal injuries to the head*" (Elliot Smith and Wood Jones, 1910: 108). Beside extensive damages on the skull, this man had experienced a number of other violent injuries in form of eight fractured ribs on his right side and a fracture on the right side of the pubis. These fractures had caused much blood-staining of the bones, which testify to the perimortem infliction of the injuries (Elliot Smith and Wood Jones, 1910: 331).

A man in grave 23 had a healed fracture through the right zygoma, i.e. cheekbone (Elliot Smith and Wood Jones, 1910: 299), which is a common injury after an assault where the opponent uses blunt force violence (see p. 206 above).

In addition to these cases of violence, three of the other bodies in this cemetery were lacking the skull: a man in grave 8, a man in grave 12 and a woman in grave 19 (see Reisner, 1910: 143-144). It is impossible to know whether the skulls were absent due to disturbances of the graves, burial rituals involving dismemberment (cf. Wengrow, 2006: 118-119 for Naqada people at Nubt [Naqada]), or decapitation before burial. However, it is a curious coincidence that three out of 21 preserved bodies in the cemetery were lacking the head when already two of the other persons interred in the cemetery had met a violent death and one had survived a violent attack. As we will see, missing skulls were common for the A-Group people during the proto phase.

Summary

The review of the findings from this cemetery thus suggests that it belonged to A-Group people, but they had obtained a few status objects from the Naqada people. The most likely date of the site based on the Naqada imports is contemporary with Naqada IC, which fits chronologically within the proto phase of the A-Group people. Cemetery 14 was thus used immediately after the earliest use of Cemetery 7 at Shellal was terminated (see previous section), and it also seems that Cemetery 14 went out of use as people retreated further south due to violent attacks.

Cemetery 17 at Khor Bahan

The earliest of the Predynastic burial grounds identified by Reisner was Cemetery 17 at Khor Bahan, which was situated on the east bank of the river, around one kilometres south of Khor Ambukol and nine kilometres south of Shellal. The site had its name from a large khor coming down from the high ground of the desert (Reisner, 1910: 114). The water that occasionally flowed through the khor had over time deposited an alluvial fan where it left the steep mountain valley behind and entered the Nile valley (cf. Skinner and Porter, 1995: 272). The alluvial fan below Khor Bahan offered a considerable fertile ground (Reisner, 1910: 113). This is testified

by the palm trees that were lining the river bank and thus giving an impression of the extent of the alluvial plain in front of the khor before the reservoir of the Aswan Dam flooded the area (**Figure 78**). As the Nile made its own channel deeper, the water flowing through the khor cut a channel through its fan and deposited a new fan further below. This resulted in a landscape with terraces on both sides of the gully (Reisner, 1910: 114).

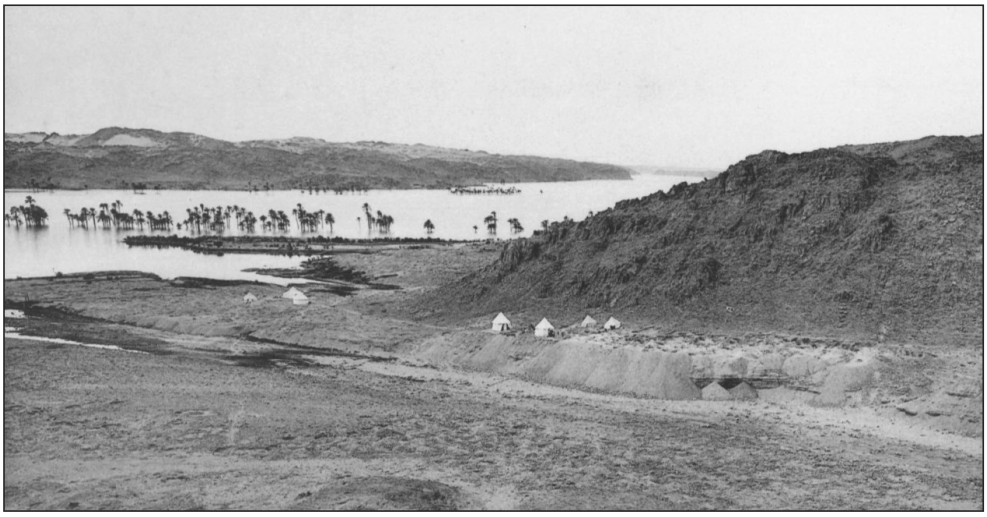


Figure 78: Cemetery 17 at Khor Bahan was situated on the higher terrace of the khor, to the right of the white tents. The palm trees lined the river bank, so the alluvial plain was already flooded by the reservoir of the Aswan Dam when the excavations took place. Photo from Reisner (1910: plate 23/b).

The highest terrace, which was also the oldest, contained about 100 graves (Reisner, 1910: 115).[30] Reisner published a description of 79 of these graves, which he divided into four groups: 28 early predynastic graves, 7 middle predynastic graves, 27[31] graves of the B-Group or indeterminable date and 15 animal graves (Reisner, 1915: 133, 137). As will be demonstrated below, Cemetery 17 at Khor Bahan was the

[30] The few graves on the lower terraces are not considered here as they are later in date and were heavily disturbed.

[31] Reisner listed 30 graves. I have excluded three of them. Grave 12 seems to be middle predynastic because of a red-polished black-topped pot, a rough red-ware bowl and green glazed beads found as grave goods. Furthermore, the burial position was on the left side with the head towards south. It has been included with the middle predynastic graves in this study. It would have supported the sex segregation division in the cemetery if included with the B-Group graves (see next section), since it was a man on the southeastern side of the cemetery. Grave 34 consisted only of "*fragments of female bones*", and it was not included on the cemetery plan, so the context is too uncertain. Grave 59 may have been a second interment in the early predynastic grave 58, which also makes the context uncertain. In any case, the sex was not recorded for the body.

earliest burial ground of Naqada people in Lower Nubia (see the section *Reuse of Cemetery 17 at Khor Bahan* in Chapter 10). Here we will consider the 27 graves in Cemetery 17 that were either of indeterminable date or of the early B-Group.

Previous analyses of Cemetery 17

Before I present my interpretations of the ethnic identities present at Cemetery 17 and the periods that the site was used, let us first see what archaeologists have concluded after previous analyses of the cemetery.

According to H.S. Smith's (1991: 98) reanalysis of the site, Reisner was correct in identifying indigenous graves in the cemetery (i.e. the B-Group in Reisner's terminology), but he was wrong in dating these burials contemporary to the Old Kingdom. The intact burials without Naqada objects should in H.S. Smith's opinion rather be dated earlier than the time when the contact between Naqada and A-Group people was established. H.S. Smith therefore argued that Cemetery 17 at Khor Bahan was the burial ground of a single developing community of the A-Group people (H.S. Smith, 1991: 98).

In another reanalysis of Cemetery 17, Gatto (2000: 108) also treats the whole cemetery as belonging to the same group. She classified the pots that could be categorized as "*either of Egyptian or Nubian manufacture*" and found that "*85% of the products had to be considered Egyptian and only 15% Nubian*" (Gatto, 2000: 109). In the conclusion, Gatto makes the following point: "*In the First Cataract area before and after Nag. Ic (sic), the presence of Nubian people was sporadic and less evident than the Naqada 'immigrant' presence*" (Gatto, 2000: 115). So she thus draws the opposite conclusion from H.S. Smith, since she interprets the site as mainly of a Naqada character. Gatto maintains this standpoint in more recent articles (Gatto, 2006a: 62, 2006b: 229).

In the most recent re-examination of Cemetery 17, Roy (2011: 72) argues that the large amount of Egyptian goods (including pots, palettes, stone vessels, copper objects and stone mace-heads) suggests that the deceased interred in this cemetery were belonging to a tradition shared with the Naqada people in Upper Egypt. Of the 30 graves that Reisner considered as being indeterminable or belonging to the early B-

Group, Roy (2011: 74) agrees with H.S. Smith's argument against a separate B-Group culture, but she finds it problematic to date the graves and leaves the question of their identity open.

In another recent article, Williams (2011: 83) still agrees with H.S. Smith that Cemetery 17 was an A-Group site for the reason that the grave shafts were circular. He argues that circular grave shafts are "*not characteristic of the Naqada tradition, but typical of the Sudanese Neolithic*". However, Williams seems to draw a too rapid conclusion since during Naqada I and II, the Naqada people buried their dead in round or oval pits. It was first towards the end of Naqada II and in Naqada III that rectangular burial chambers were becoming the standard (Grajetzki, 2003: 4). An identification of the site as belonging to the A-Group people on the basis of the shape of the grave shafts is thus inadequate because grave shaft shapes are unreliable as ethnic markers for this time.

Identifying the graves of the proto phase of the A-Group people

Reisner had separated the B-Group and indeterminable graves from the rest of the graves in Cemetery 17 due to a lack of characteristic Naqada material in them. However, he also attached special characteristics to the group that could be positively observed and which linked these graves to the so-called early B-Group graves of the south-eastern knolls at Shellal (see Reisner, 1910: 137). The graves were irregularly oriented, and the bodies were placed both on the left and the right side (**Table 18**). The deceased were frequently wrapped in goat skins. Small spiral shells were found in three of these graves, and also other types of shells were used for decorative purposes. Reisner also noted tortoise-shell bracelets as a characteristic feature of the outfit of the people buried in five of these graves. No complete pots were found in these graves, but potsherds with a red exterior and black interior were recorded in four graves (see Reisner, 1910: 134-135). However, this description fits both red-polished black-topped

	NE	E	SE	S	SW	W	NW	N	Total
Left	1	3	1	1	1	1	—	—	**8**
Right	—	2	—	—	—	2	—	1	**5**
Totalt	**1**	**5**	**1**	**1**	**1**	**3**	**0**	**1**	**13**

Table 18: Burial position and orientation for the 13 bodies that preserved these data in the B-Group and indeterminable graves in Cemetery 17. Data from Reisner (1910: 133-137).

pots of the Naqada people and red-polished black-mouthed pots of the A-Group people.

The cultural traditions of the people buried in the B-Group and indeterminable graves are important for the statistical data that are used to identify the group identity of the people using the cemetery. I will therefore re-examined the cemetery with the aim of uncovering the identity of the B-Group and indeterminable graves. The graves with Naqada material are discussed in Chapter 10 (see the section *Reuse of Cemetery 17 at Khor Bahan*).

I start by examining the distribution in the cemetery of the four categories of graves defined by Reisner (**Figure 79**). The central part of the cemetery was occupied by 28 early predynastic graves with seven middle predynastic graves on the eastern fringe of this core. The B-Group and indeterminable graves seem to be located on the outer edges of the cemetery. This may explain why Reisner dated them later than the early and middle predynastic graves, if he supposed that the horizontal stratigraphy followed a concentric development. The animal graves were scattered among the three other categories of graves. This distribution seems to contradict the current view that Reisner's B-Group graves should be considered as the earliest A-Group and dated

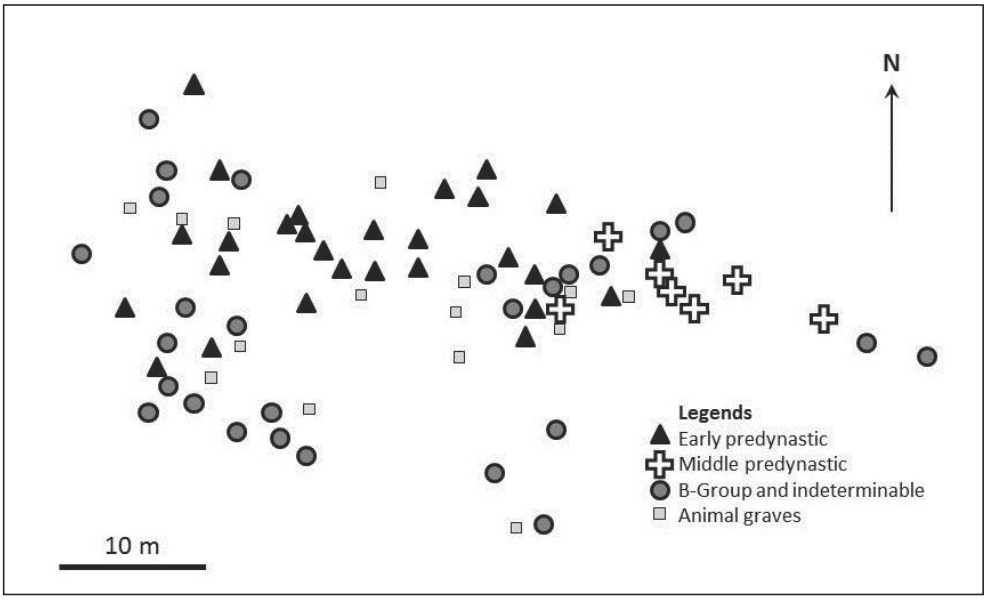


Figure 79: The distribution of Reisner's categories of graves in Cemetery 17 at Khor Bahan. Redrawn after Reisner (1910: plan 14).

earlier than Naqada IIA (see the section *The B-Group* in Chapter 3). However, Reisner's (1910: 137) identification of the B-Group in Cemetery 17 was based on similarities in cultural characteristics with the assemblage of the graves on the south-eastern knolls of Cemetery 7 at Shellal, including the occurrence of the small spiral shells and stone palettes, as well as the inconsistent positions and orientations of the bodies. On the basis of re-examinations of the other B-Group cemeteries, it has been argued convincingly for dating these graves to a period before regular contact was established between Lower Nubia and Upper Egypt.

Horizontal stratigraphy

We have seen that Reisner's dating of the B-Group to after the Naqada period in this cemetery was most probably based on the deceptive location of these graves on the fringes of the cemetery. However, the chronological development of the horizontal stratigraphy in a cemetery has several possibilities (see Parker Pearson, 1999: 12), not only from a centre and outwards, as must have been supposed for Cemetery 17 by Reisner. Indeed, the Naqada burials in this cemetery were following a linear development from west towards east (see **Figure 79**). I will therefore look at Reisner's B-Group and indeterminable graves in isolation, in order to see if an explanation for the distribution pattern would become evident.

Gender is one of the major structuring principles in decentralized societies, so gender could be a way of organizing the graves in a cemetery. An examination of the distribution of the biological sex of the deceased in this category of graves was thus a natural place to start. The biological sex had been determined for 17 of the skeletons in the 27 graves, and the distribution of the sexes in the cemetery shows a clear pattern (**Figure 80**). The females were buried in a cluster of graves on the north-western part of the alluvial terrace of the cemetery, while the males were buried on the south-eastern part. Three infant burials were found between the two groups. This pattern is unlikely to be accidental, as it was also noticed at the nearby Cemetery 14 (see previous section)[32]. It thus seems like the B-Group and indeterminable graves in

[32] A differential distribution of biological sex has not been investigated for the other A-Group cemeteries of the proto phase, as it is unnecessary for the topics discussed in this thesis.

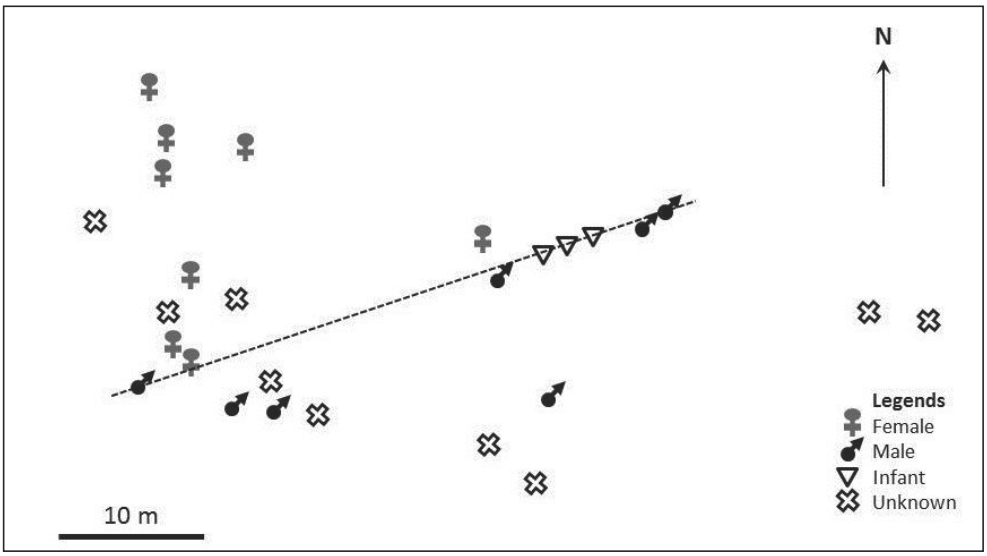


Figure 80: The distribution of biological sex in the B-Group and indeterminable graves at Cemetery 17 at Khor Bahan. Data from Elliot Smith and Wood Jones (1910: 117-119) and Reisner (1910: 133-137, plan 14).

Cemetery 17 represent the earliest use of the cemetery, which was then a burial ground with graves dispersed over the entire alluvial terrace. There was however ample open space between the graves of women and men, and this area was later utilized by the Naqada people (see the section *Reuse of Cemetery 17 at Khor Bahan* in Chapter 10).

Dating

The few Naqada imports in these graves consisted of one siltstone palette of rhomboidal shape, which date to Naqada I, as well as one siltstone palette of a peculiarly long rectangular shape and one siltstone palette of unknown shape. The absence of other diagnostic Naqada material suggests that the earliest use of the site took place before frequent contact between the A-Group people and the Naqada people was established, i.e. before Naqada IC.

Evidence of weapons and violence

No weapons were found in these graves, but numerous small flint blades of the tool-weapon category were uncovered in three graves (see **Catalogue 2**). The sex

could be determined for the deceased in two of these graves, and both were female. These flint blades were thus most likely used as tools (see pp. 273-274 below for long flint blades with men). The flint was probably obtained from Upper Egypt (see p. 48 above).

Two male skeletons belonging to this group of graves had healed fractures that might have been caused by violence. A man in grave 24 had experienced a fracture of the middle of his right clavicle (Elliot Smith and Wood Jones, 1910: 306). This type of injury could be caused by a direct frontal blow with a heavy instrument – like a mace (see p. 207 above). A man in grave 29 had experienced two fractures that had both healed. He had broken the right ulna on the distal portion of the shaft (Elliot Smith and Wood Jones, 1910: 313, fig. 87), which is indicative of a parry fracture caused when fending a blow to the head (Judd, 2008b: 1661). He had also broken his left clavicle at the mid-point (Elliot Smith and Wood Jones, 1910: 305, fig. 74), which suggests a direct blow with a heavy implement. Both injuries sustained by this man may be related to interpersonal violence, and they may have occurred during a single attack. Furthermore, the skulls were missing from the bodies in graves 19 and 29. The latter body missing the head was the man who had sustained the fractures of the right ulna and the left clavicle – probably in a violent attack, and his body was possibly mutilated around the time of his death.

Summary

This section has aimed at demonstrating that the earliest use of the highest terrace at Khor Bahan as a cemetery was by indigenous A-Group people during the proto phase by presenting several lines of evidence: segregation between sexes, irregular burial position and orientation, goat skin wrapping, presence of small spiral shells and tortoise-shell bracelets. These graves have however a general lack of Naqada material culture, and they are not following Naqada funerary practices. If Cemetery 17 indeed had been used already by A-Group people during the proto phase, it would not be the only instance where the incoming Naqada people established their cemetery at the same location as the indigenous people fleeing the region during the Naqada expansion (see *Chapter 10*). Furthermore, two men had injuries that most

probably were caused by violence – probably in warfare with Naqada people. Two men were also missing their skulls from the graves.

Cemetery 41/200 at the Meris plain

There was a group of Bronze Age cemeteries situated on the larger knolls of the plain on the west bank between Marko's Island and Meris, *c*. 25 kilometres south of Shellal. Reisner interpreted the locations of the graves as if the plain itself had been under cultivation at that time (Reisner, 1910: 208), although it could also be that the plain was flooded during flood season and provided pasture land when the water retreated.

In the middle of the plain on the western edge of the cultivable area was a low broad knoll that had been used as a cemetery (Reisner, 1910: 211, plan 4, 25) (**Figure 81**). It consisted of 40 human graves and three animal burials – two for cattle and one for a ram. Just to the north of this cemetery was a slightly later Naqada settlement dating to Naqada IIB-C (see the section *The Naqada sites on the Meris plain* in Chapter 10).

According to both Reisner (1910: 211) and H.S. Smith (1991: 101), this group of graves, which was given the numbers 201-243, corresponds with the B-Group type

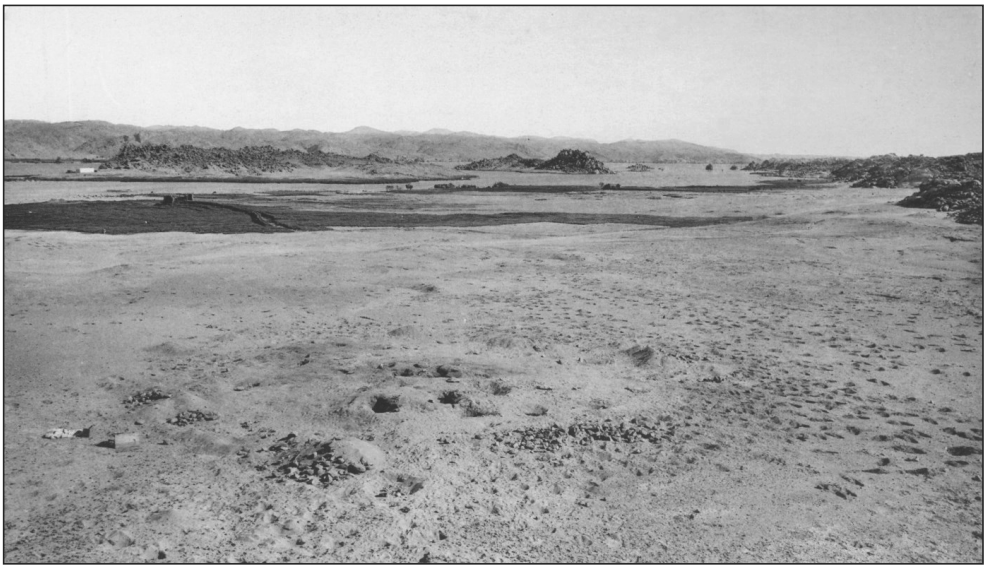


Figure 81: Cemetery 41/200 on the Meris plain looking south. The Nile is seen in front of the mountains in the far distance. Photo from Reisner (1910: plate 45/a).

site at Shellal. Based on this correspondence, it is possible that Cemetery 41/200 actually was among the earliest A-Group sites, dating to our proto phase.

Burial practices and grave goods

The burial positions and orientations were irregular, with the bodies placed equally often on the right and the left sides in accordance with A-Group practices. There was a preference for northern head orientations, and the southern orientations preferred by the Naqada people were avoided (**Table 19**). Men, women and children were buried in the graves, and hide and matting were used for wrapping their bodies (Reisner, 1910: 211-215).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	1	—	1	—	—	4	7	**13**
Right	4	1	—	—	—	2	3	2	**12**
Totalt	**4**	**2**	**0**	**1**	**0**	**2**	**7**	**9**	**25**

Table 19: Burial position and orientation for the 25 bodies that preserved these data in Cemetery 41/200. Data from Reisner (1910: 211-214).

The grave goods consisted of items for personal decoration: small spiral shells, tortoise-shell bracelets and cosmetic palettes used as surfaces for grinding malachite. Three of the palettes were made of siltstone and two of other stones.

Only two complete but undiagnostic pots were uncovered in uncertain contexts (see Reisner, 1910: fig. 145), but potsherds with red exteriors and black interiors as well as black polished wares were found in several graves (see Reisner 1910: 211-214). Although the red-polished wares with black interiors were used by both Naqada and A-Group peoples, the black polished wares are closer to the A-Group pottery tradition (see the section *Black-polished wares* in Chapter 8).

The Naqada objects in this cemetery were limited to three elongated rhomboidal siltstone palettes and two copper needles (see Reisner, 1910: 212-213). No characteristic Naqada pots were uncovered.

Dating

The rhomboidal siltstone palettes suggest a date contemporary with Naqada I, and the copper needles are thus the earliest copper objects uncovered in indigenous contexts in Lower Nubia. The earliest copper needles uncovered so far in Upper Egypt were found in grave U-141 at Abedju [Abydos] (see p. 111 above), and copper needles were also found in the Naqada graves at Cemetery 17 at Khor Bahan (see p. 288

below). Both U-141 and the graves with needles at Khor Bahan date to the same time span. Cemetery 41/200 on the Meris plain thus seems to date to Naqada IC-IIA, which was contemporary with the latter part of the proto phase of the A-Group people.

Evidence of weapons and violence

No specialized weapons were uncovered in these earliest graves on the Meris plain, but six graves contained flint blades[33] of the tool-weapon category (see **Catalogue 2**). Four of the five sexed individuals with flint blades were men, and the flint blades were deposited singly in five of the six instances. One of the blades was described as being *"broad"*. It is possible that these flint implements were used both as tools and weapons, i.e. tool-weapons. Unfortunately none of these blades were illustrated in the report. However, it is reasonable to argue that they could have been linked to masculine practices and identity, since they mainly occurred in graves of males. A comparative case is found in the contemporary Copper Age cemetery Tiszapolgár-Basatanya on the Hungarian Plain where small blades were common in the burials, but flint blade knives longer than seven centimetres were usually restricted to males and the longest blades were considered as knives used as weapons (Bognár-Kutzián, 1963: 318-321; Vandkilde, 2006: 405).

No injuries related to interpersonal violence were recorded at this site, but the skeletal remains were reported to be very fragmentary. It is thus possible that it was difficult or impossible to detect fractures. It should be noted that two male individuals lacked their skulls, i.e. grave 227 and grave 238 (Reisner, 1910: 214), while a male in grave 212 had his skull displaced. Furthermore, the anatomists noted that five individuals had their skulls broken, i.e. the bodies in graves 205, 206, 224, 235 and 236 (Elliot Smith and Wood Jones, 1910: 155-156), and Reisner (1910: 213) noted that the heads of the individuals in graves 216, 218 and 219 were smashed. These damages to the bones had most probably occurred post-mortem by being intentionally afflicted in acts of grave desecration.

[33] Reisner described these flint implements as flakes, but whenever he published photos of other flint flakes they are in fact blades (see e.g. Reisner, 1910: plate 62/b/1 depicting blades called flakes in the description of the grave on p. 123).

Summary

This section has shown that the cemetery on the central knoll of the Meris plain most probably belonged to a community of the A-Group people, and the few dateable objects suggest that it was used during the latter part of the proto phase. Large flint blades were deposited in the graves of some men, and this is suggested as an indication of masculine identity, although it cannot be proven that this aspect of the masculine identity was linked to warriorhood or war. There were no specialized weapons in the graves, and no evidence of violence – but that can be because of the later disturbances of the graves and human remains.

There is strong evidence for that this cemetery was vandalized in ancient times. The bodies were all greatly disturbed, and skulls and other body parts had been removed. Moreover, the pots seem to have been broken intentionally since only two were found complete. It is thus probable that the later Naqada inhabitants of the plain destroyed the cemetery of its previous inhabitants. The intentional crushing of the skulls of the corpses indicates that a hostile relationship existed between the two groups.

Cemetery 45/200 at Shem Nishai

On the plain of Dehmit below the khor with the same name, Reisner identified another B-Group cemetery at Shem Nishai, which was *c*. 32 kilometres south of Shellal. It was termed Block F of Cemetery 45, which extended over a series of mud banks along the cultivation on the east bank of the river (Reisner, 1910: 258). All the graves in Cemetery 45 were heavily disturbed by recent agricultural activities (Reisner, 1910: 259).

The graves in Block F were numbered from 201 to 242, but only 28 graves were published (Reisner, 1910: 258, 262-265), while the anatomists examined 32 bodies (Elliot Smith and Wood Jones, 1910: 169-173). This group of graves fits the characteristics of the B-Group graves of Reisner's type site at Shellal, which I argue belong to the proto phase of the A-Group in accordance with H.S. Smith (1966, 1991).

Burial practices and grave goods

In Cemetery 45/200, the deceased were placed in the grave pit on both sides, but the left side was slightly preferable with 59 per cent (**Table 20**). A variety of orientations were also practiced, although it was commonest to place the head towards north, like at Cemetery 41/200 (see **Table 19**). It thus seems that standardization in the burial practices related to position and orientation was being developed.

	NE	E	SE	S	SW	W	NW	N	Total
Left	2	—	—	6	—	1	—	8	**17**
Right	—	1	—	1	—	1	—	9	**12**
Totalt	**2**	**1**	**0**	**7**	**0**	**2**	**0**	**17**	**29**

Table 20: Burial position and orientation for the 25 bodies that preserved these data in Cemetery 45/200. Data from Reisner (1910: 259).

Men, women and children were buried in the cemetery. The bodies were covered by goat skins, and small white shells were uncovered in some of the graves. Only two palettes were found, and they were both made of quartzite (see **Table 8**).

A total of 16 pots were found in the 28 graves, which means that pots were part of the funerary goods in 57 per cent of the burials. Pots were thus commoner in this cemetery than at the other A-Group sites of the proto phase. The majority of the pots appear to have been made locally due to the shapes of the pots. The only Naqada style pots were a red-polished black-topped vase (Petrie's B19a) and a coarse red bowl (Petrie's R23a) (see Reisner, 1910: fig. 212/2-5, 12), which both date within Naqada IC-IIA (see Kaiser, 1957: plates 21-22).

The identity of the people buried in this cluster of graves thus appears similar to the other A-Group sites of the proto phase.

Dating

The only dateable objects in this cemetery are the two Naqada pots dating to Naqada IC-IIA. This cemetery thus seems to date to the latter part of the proto phase of the A-Group, since the burial practices and remaining grave goods suggest that the inhabitants belonged to the A-Group people.

Evidence of weapons and violence

No categories of weapons were uncovered in these graves. However, there was ample skeletal evidence for interpersonal violence. An elderly man in grave 211

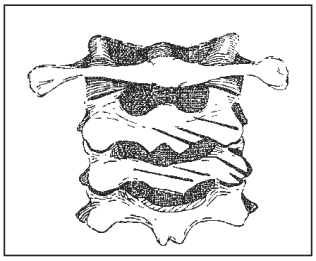


Figure 82: Vertebrae with cut marks of the man in grave 211. From Elliot Smith and Wood Jones (1910: fig. 69).

appears to have been executed by having the back of his neck cut with a sharp instrument, because seven distinct incisions were present across the posterior surface of three of the cervical vertebrae (Elliot Smith and Wood Jones, 1910: 301; **Figure 82**). This practice of execution has recently been revealed on a large scale at Nekhen (see p. 119 above and discussion in the section *Capital punishment in Egypt during the Naqada period* below). The anatomists examining the bones in grave 211 suggested that a copper-alloy weapon had been used (Elliot Smith and Wood Jones, 1910: 334). It seems that it was the lowest cut that had caused death as it "*passed into the spinal canal by cutting off the tip of the spine of the third, and the upper edge of the posterior arch of the fourth vertebra*" (Elliot Smith and Wood Jones, 1910: 301). The anatomists reconstructed the event as follows:

> *"The cuts present the appearance of having been inflicted from above downwards from left to right, and the neck of the victim was evidently fully flexed. The result could have been produced by pressing the head downwards and forwards, and cutting from behind and from the right side. No other wounds were found about the body" (Elliot Smith and Wood Jones, 1910: 301).*

Furthermore, a man in grave 202 had perimortem injuries on the right side of his chest, which had fractured the fourth to the eighth rib and caused much blood-staining – especially around the nares, which suggests bleeding from the nose (Elliot Smith and Wood Jones, 1910: 334).

Finally, a woman in grave 201 had a healed fracture through the left zygoma, i.e. cheekbone (Elliot Smith and Wood Jones, 1910: 299), which most probably was caused by a blunt force blow to the face.

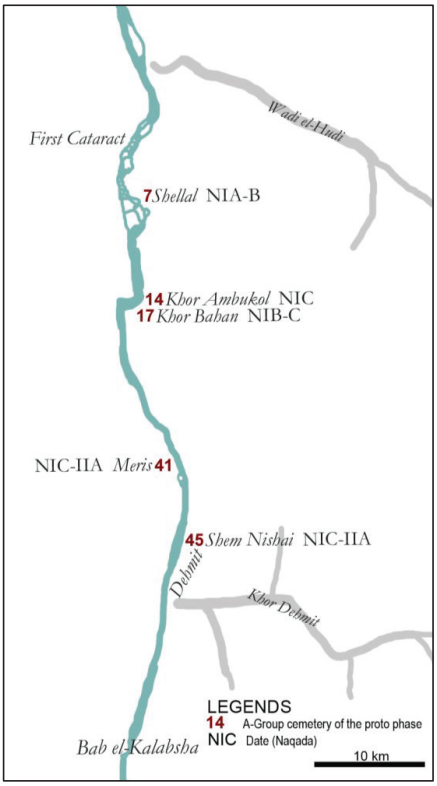
Additionally, the anatomists recorded that the individuals buried in graves 205, 212, 217, 218 and 232 had their skulls broken – probably post-mortem (Elliot Smith and Wood Jones, 1910: 170-173). The skull was missing from the bodies of females in graves 204, 223 and 241 (Reisner, 1910: 262, 264-265).

Summary

This cluster of graves at Shem Nishai was probably the earliest in the area and date to the latter part of the proto phase of the A-Group. No weapons were found in the graves, but among the 32 bodies preserved (Elliot Smith and Wood Jones, 1910: 169-173), two men showed skeletal injuries that indicate that they died from violence and a woman had recovered from a violent attack. Four other female bodies were found without their skulls, which may either have been cases of decapitation or later disturbances of the burials. Furthermore, five bodies had their skulls broken – most probably post-mortem. The missing or broken skulls would in any case conceal injuries received in life.

Concluding remarks concerning the proto phase of the A-Group people

This review of the evidence for the existence of a proto phase of the A-Group people in northern Lower Nubia indeed confirms that there were people in the region contemporary with Naqada I, i.e. between *c*. 3800 and 3500 BCE. These indigenous people had a material culture that was more similar to the later A-Group people further south and different from the material culture of the contemporary Naqada people further north. H.S. Smith's (1966, 1991) proposal of placing the B-Group as the earliest A-Group thus seems validated (**Map 5**). However, it is not possible to distinguish a coherent cultural group occupying all of Lower Nubia from the beginning of the 4th millennium BCE. During the proto phase, the A-Group people inhabited the northern part of Lower Nubia, while the middle part is almost unknown and the southern part was inhabited by people with a



Map 5: A-Group site of the proto phase in northern Lower Nubia. Graphics by Hafsaas-Tsakos.

material culture that has been termed *Abkan* from the type site Abka in the Second Cataract (see p. 73 above). The people leaving the material culture called Abkan are mainly known from settlement sites, so they may not have had formal places for depositing the dead. This may also have been the case in middle Lower Nubia, if people were living there at the beginning of the 4th millennium BCE, since neither mortuary nor habitation sites have been securely dated to this period in this area.

The earliest cemetery identified until now and related to the A-Group culture are the graves at Shellal (see the section *Cemetery 7 at Shellal* above) in northernmost Lower Nubia. The prerequisite for the cemetery to be established may have been the deteriorating climate that made land a more critical resource to which access needed to be controlled. Access to critical resources are commonly transferred from parents to offspring as inheritance (Parker Pearson, 1999: 136), and this may have led to the establishment or strengthening of corporate groups of lineal descent among the A-Group people. The establishement of *"a permanent, specialized, bounded area for the exclusive disposal of the dead"* may have been a way to regularly reaffirm the corporate lineage group and its rights to use and/or control essential resouces (Parker Pearson, 1999: 136). At the beginning of the 4th millennium BCE, an increasing sense of territoriality thus seems to have developed among the predecessors of the A-Group people as they probably became more sedentary along the Nile rather than roaming the increasingly arid regions of the Sahara. These people appear to have been the first inhabitants in northern Lower Nubia during the 4th millennium BCE, so I will therefore consider the A-Group predecessors as indigenous to the region in contrast to the later Naqada immigrants.

Evidence for war at the earliest A-Group sites in northern Lower Nubia

The earliest cemetery of the 4th millennium BCE excavated in Lower Nubia was located on the south-eastern knolls at Shellal – the widest plain and thus most attractive habitat in the First Cataract region. Between Shellal and Bab el-Kalabsha, four other sites originally attributed to the B-Group by Reisner have in this thesis been demonstrated as belonging to the proto phase of the A-Group people. Furthermore, the imported Naqada finds show that these sites had a chronological progression as they

were established farther upstream with time (**Table 21**). It thus seems that the A-Group people were retreating southwards during the proto phase, and the reason for this movement was probably linked to an expansion of Naqada people that caused violent clashes (see *Chapter 11*).

Site	Km S of Shellal	Per cent violent deaths	Per cent injuries due to violence	Per cent missing skulls	Date (Naqada)
Cemetery 7, SE knolls	0	4	4	0	IA-B
Cemetery 14	10	10	5	14	IC
Cemetery 17	11	0	7	12	IB-C
Cemetery 41/200	25	0	0	12	IC-IIA
Cemetery 45/200	35	6	3	10	IC-IIA

Table 21: Violent deaths, injuries caused by violence and missing skulls in per cent in A-Group cemeteries dating to the proto phase. Data from the preceding re-examinations of the sites.

The anatomical study of the human remains from the five A-Group cemeteries of the proto phase showed that of the preserved bodies, five persons had died of violence while another five had survived a violent attack. Most of the injuries seem to have been caused by blunt force violence – most probably executed with maces. However, two individuals had died in attacks where sharp force violence was used – most likely copper-alloy weapons. Furthermore, it is curious that 12 individuals appear to have been buried without their skulls, and this requires some further comments.

Capital punishment in Egypt during the Naqada period

Recent anthropological examinations of skeletal remains at Nekhen [Hierakonpolis] show that stabbing in the throat or full decapitations were rather frequent for common people in the Cemetery HK 43 during Naqada IIA-C (Dougherty and Friedman, 2008; see p. 119 above). In the excavated parts of the vast cemetery, 21 individuals out of 453 had lacerated vertebrae, which mean 5 per cent of the sample (Dougherty and Friedman, 2008: 110, 113). The cut marks were most frequently observed on males with 52 per cent, while 10 per cent were found on females. The sex of the remaining 38 per cent was not possible to identify. Most of the people killed in this way were young adults. The cut marks were found on several vertebrae, usually the second and the third, and the numerous lacerations suggests "*repeated blows with a lighter blade, as opposed to a heavier chopping implement*" (Dougherty and Friedman, 2008: 116). Based on the available weapon technology during Naqada II (see *Chapter 7*), I suggest that the implements used were sharp pointed weapons like daggers of

copper-alloy or flint. At Nekhen, the purpose of the stabbing in the neck does not appear to have been complete decapitation, but to sever the neck. However, once the ventral neck muscles and anterior longitudinal ligaments were cut off, access would have been given to the posterior neck anatomy and in effect the head could subsequently be completely severed without leaving direct evidence on the more posterior elements of the vertebrae (Dougherty and Friedman, 2008: 319). Indeed, some of the heads were found in positions inside the grave proving that complete decapitation had occurred (Dougherty and Friedman, 2008: 313).

The practices of decapitation and/or dismemberment in Upper Egypt are often interpreted as rites of human sacrifice, like retainer sacrifices in connection with the late First Dynasty burials (e.g. Wilkinson, 1999: 266). Wengrow (2006: 116-120) has taken a different approach suggesting that dismembered bodies, including pre-burial skull removal, were an alternative treatment of the human body in death for a minority of the population. He interpreted this practice as the ritual redistribution of the human body when the individual had gathered more social connections in life than the complete body could satisfy in the funerary rituals (Wengrow, 2006: 123), e.g. different parts of the body could be buried in different locations providing a funerary ceremony for more people. Nevertheless, the burials of bodies with lacerated vertebrae in Cemetery HK43 seem incompatible with both of these interpretations. The people buried there were not retainers that were sacrificed, since elite graves to which their burials could be subsidiary were absent (Dougherty and Friedman, 2008: 327). Furthermore, the graves of people with lacerated vertebrae in Cemetery HK43 were very poor in grave goods, so that they were not themselves belonging to an elite. The violence performed on these people at Nekhen thus seems more related to the later attested practices in Egypt of the ceremonial execution of criminals (e.g. Wilkinson, 1999: 266). Dougherty and Friedman (2008: 330) indeed suggest that the people with severed necks in Cemetery HK43 were the result of "*mundane concerns of discipline and punishment*" in form of capital punishment whereby the neck was severed.

However, capital punishment seems unlikely as an explanation for the missing skulls in the A-Group cemeteries of the proto phase, since the A-Group society had an uncentralized political organization. A later practice in Egypt was decapitation of

prisoners of war, and this is attested in iconography, e.g. on the Narmer Palette from the very beginning of the First Dynasty (**Figure 83**) and on the Jebel Sheikh Suliman relief dating to the reign of King Djer (see the section *King Djer* in Chapter 11; **Figure 109**). This brings us to the cases of missing skulls in the A-Group cemeteries of the proto phase, as I will discuss the possibility that these bodies belonged to A-Group people killed in action and decapitated on the battle field.

Figure 83: Decapitated corpses. Detail from the obverse face of the Narmer Palette (EMC JE 32169). Photo by the Egyptian Museum, Cairo.

Missing skulls in A-Group cemeteries of the proto phase

There is an obvious pattern where between 10 and 14 per cent of the skulls were noted as missing in the A-Group cemeteries in northern Lower Nubia dating to the latter part of the proto phase – i.e. contemporary with Naqada IC-IIA (see **Table 21**). Archaeologists usually explain the absence of skulls in graves along the Middle Nile as deliberate vandalism by plunderers of the graves, and that may in many instances be the case. However, the systematic pattern seen in these four cemeteries (see **Table 21**), made me look for a different explanation for why the skull was absent from the body in so high numbers in so many of these cemeteries.

As we saw in the re-examination of Cemetery 45/200, a man in grave 211 had been stabbed seven times with a sharp implement – possibly a copper-alloy dagger – in the back of his neck (see pp. 275-276 above). The anatomists' reconstruction of this killing placed the man prostrate with his face down in front of his assailant who struck him seven times. If the weapon indeed was a copper-alloy dagger, as suggested from similar injuries on decapitated victims at Nekhen (cf. Dougherty and Friedman, 2008: 316), then it is probable that his attacker was coming from Egypt since no large copper implements are known from the proto phase of the A-Group, and copper-alloy daggers

were indeed also rare in Egypt during Naqada IC-IIA (see the section *Metal daggers* in Chapter 7).

By considering the historical context of war between Naqada people and A-Group people (see *Chapter 11*), it is possible that the man had been brought down by an arrow-shot or taken captive, and then finished off by the stabbing in the neck. The missing skulls in other A-Group cemeteries of the proto phase could similarly have been executions of fallen warriors in skirmishes with Naqada people. Their heads might have been cut off as trophies. Indeed the seizure, modification and display of human body parts as trophies have been practiced worldwide since prehistoric times, and the head was the most prestigious trophy since it was believed to contain the individual's spirit (Okumura and Siwe, 2013: 685). Actually the word *trophy* comes from the (ancient) Greek word *τρόπαιον* meaning 'monument of an enemy's rout' (Britannica: webpage), and headhunting is indeed closely related to warfare practices. More specifically, Harrison (2006) has argued that headhunting is a device to mask or deny the humanness of a chosen category of people in societies where male identity is related to hunting animals. Moreover, he suggests that it was by such practices that actors created and negotiated group boundaries and thus, in a sense, the groups themselves (see also p. 161 above):

> *"[H]eads were taken not because the victims were distant strangers, but to make them distant, to generate estrangement, and 'produce' a category of people as enemies with whom to fight"* (Harrison, 2006: 831).

This seems very fitting for the initial context of war between Naqada people and A-Group people in northern Lower Nubia, as will be discussed in Chapter 11. But first, we will review the evidence for a Naqada expansion into Lower Nubia.

Chapter 10: Naqada people in Lower Nubia

The investigation of ethnicity in Chapter 8 indicated that it was mainly Naqada people that were buried in nine cemeteries in northern Lower Nubia. In this chapter, these sites will be presented from north towards south in accordance with the original excavation reports.

The purposes of this review of the sites are threefold: First to confirm the ethnic identity as indicated by the statistical analyses in Chapter 8. In order to make the identification more certain, I will also discuss the burial positions and orientations of the bodies. Those sites where more than 50 per cent of the palettes and pots were made according to Naqada traditions, i.e. Cemeteries 7, 17, 23, 30, 43 and 45, will be discussed more briefly in terms of identifying the ethnicity. I will also see if it is possible to establish the starting point of the Naqada immigrants who arrived in Lower Nubia.

The second aim is to examine the dating of the different sites. Reisner (1910) assigned five cemeteries to the Predynastic period, which he subdivided into an early, middle and late phase, and eight cemeteries had graves that he assigned to the Early Dynastic period. Early and middle predynastic graves were only found at Cemetery 17 at Khor Bahan, and this site will be thoroughly discussed below, as I will argue that it represents the earliest expansion of Naqada people into Lower Nubia (see *Chapter 11*). Late predynastic sites were Cemeteries 43 and 44, and late predynastic graves mixed with early dynastic graves were found in Cemeteries 23, 30 and 41. Early dynastic sites were Cemeteries 7, 40, 45 and 50. In this chapter, the time-spans of the nine sites will be re-examined and dated according to Naqada phases (see **Table 3**). An accurate dating will make the reconstructions of both the expansion into the region and the episodes of war more detailed.

The third aim is to identify and discuss evidence of war in form of both occurrences of weapons and traces of violence on the human remains. The evidence for weapons and violence will be used in the next chapter in the reconstruction of wars in Lower Nubia during the 4th millennium BCE.

Let us now turn to the Naqada sites in northern Lower Nubia.

Reuse of Cemetery 7 at Shellal

Shellal is situated at the upstream head of the First Cataract, and thus belonged to the territory of the ancient state of Egypt. The 66 graves at Shellal assigned to the Early Dynastic period by Reisner were situated in the central part of the plain, which was partly built over by the late 19th century train station and market place (**Figure 84**).

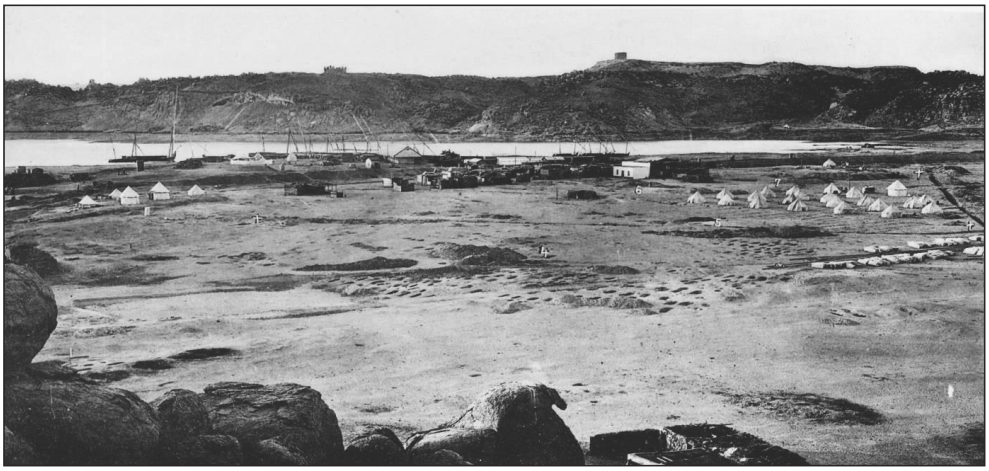


Figure 84: The plain of Shellal. The Naqada cemetery was under the late 19th century train station and market place. Photo from Reisner (1910: plate 1/b).

Burial practices and grave goods

More than 50 per cent of both the palettes and the pots uncovered in these graves were made according to Naqada traditions. In fact, of all the cemeteries in Lower Nubia, this group of graves contained the highest amount of securely identified Naqada pots with 86 per cent. All the 49 preserved bodies were placed on the left side in accordance with Naqada practices (see pp. 212-213 above). The majority, i.e. 76 per cent, of the bodies were oriented with the head towards the south, 18 per cent with the head towards southwest or southeast and 6 per cent with the head towards west (**Table 22**). It thus seems beyond doubt that these graves in Cemetery 7 belonged to people with a Naqada ethnic identity.

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	2	37	7	3	—	—	49
Right	—	—	—	—	—	—	—	—	0
Total	0	0	2	37	7	3	0	0	49

Table 22: Burial position and orientation for the 49 bodies that preserved these data in the Naqada graves in Cemetery 7. Data from Reisner (1910: 19-31).

Dating

The material uncovered from the graves date from Naqada IIIA2 and into Naqada IIIC (Roy, 2011: 68), i.e. from *c*. 3240 to 3020 BCE.

Evidence of weapons and violence

A trapezoid flint arrowhead[34] was the only tool-weapon found (see **Catalogue 2**). There was one individual with an injury that was most probably caused by violence. An adult woman in grave 102 had a tunnel passing through the lower part of the twelfth thoracic vertebrae (**Figure 85**). The tunnel was one centimetre in diameter, but avoided the spinal canal. There were both signs of inflammation and healing around the hole. The anatomists suggested that the injury could have been caused by a sharp instrument, e.g. a small spear or an arrow, hitting the body from a transverse direction. The woman survived the attack as there were signs of healing (Elliot Smith and Wood Jones, 1910: 301).

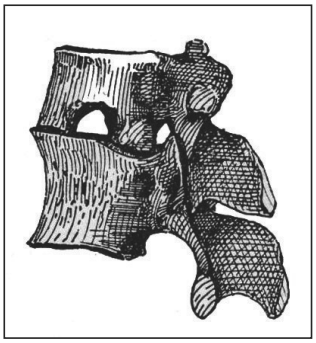


Figure 85: Vertebrae with tunnel of a woman in grave 102 at Cemetery 7. After Elliot Smith and Wood Jones (1910: fig. 68).

Reuse of Cemetery 17 at Khor Bahan

As we saw in the previous chapter, Cemetery 17 was located *c*. 10 kilometres south of Shellal. It covered the entire upper alluvial terrace on the eastern bank of Khor Bahan (Reisner, 1910: 114, plan 14). I have presented evidence for identifying both the graves attributed to the B-Group and the graves considered indeterminable by Reisner as in fact beloning to an A-Group cemetery of the proto phase in accordance with H.S. Smith (see the section *Cemetery 17 at Khor Bahan* in Chapter 9). Here I will discuss 35 graves assigned to the Predynastic period by Reisner, and these were divided into 28 early and 7 middle predynastic graves (Reisner, 1910: 115, 128).

[34] Described by Reisner as "*flint chip*" and compared with what he called "*flint chisel (?) points*" (Reisner, 1910: 25, 138). The photo of the latter suggests that these flint implements are trapezoid arrowheads. See also entry in **Catalogue 2**.

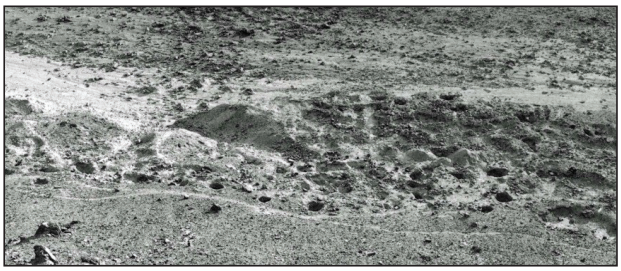


Figure 86: The disturbed surface of Cemetery 17 before excavations started. Note the many holes, and the debris of material thrown out of the graves can be seen. Photo in Reisner (1910: plate 24/a).

The graves in Cemetery 17 were heavily disturbed in ancient times as well as more recently by both robbers and extractors of fertile soil (**Figure 86**). The ancient plundering had focussed on valuable objects found near the body, and the corpses had been partly or completely removed in some of the graves. An indication of what may have attracted the ancient robbers are the two golden bow tips found in grave 15 (Reisner, 1910: 115), as well as the possibilities of finding copper-alloy weapons in the graves since at least two of the victims of violence in the A-Group graves of the proto phase appear to have been killed by sharp force through some form of copper implements (see p. 258 and p. 276 above).

Burial practices and grave goods

The burial positions and orientations of the bodies in the predynastic graves at Khor Bahan were not in accordance with the pattern normally observed in Naqada cemeteries (**Table 23**), but the lack of regularity seems to be due to the early date of the majority of the graves, as these standardized burial positions and orientations were first commonplace in Upper Egypt during Naqada II (see discussion on p. 212 above). In the early predynastic graves in Cemetery 17, the desceased were buried on both the left and right sides with various head orientations on the eastern side between extreme north and south. Conversely, the middle predynastic graves were following the Naqada practices with the majority, i.e. 86 per cent, being placed on the left side with the head oriented towards south. The irregularities in burial positions and orientation observed at first glance in Cemetery 17 are thus not contradicting a Naqada identity of the people buried there, but it may

	NE	E	SE	S	SW	W	NW	N	Total	
Left	3	1	2	—	—	—	—	2	**8**	Early
Right	—	1	2	2	—	—	—	2	**7**	
Total	**3**	**2**	**4**	**2**	**0**	**0**	**0**	**4**	**15**	
Left	—	1	—	5	—	—	—	—	**6**	Middle
Right	—	1	—	—	—	—	—	—	**1**	
Total	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**7**	
Total: early and middle predynastic										**22**

Table 23: Burial position and orientation for the 21 bodies that preserved these data in the Naqada graves in Cemetery 17. Data from Reisner (1910: 115-133).

have led to the suggestion that this site was an A-Group cemetery.

The overwhelming majority of the grave goods in the 35 predynastic graves can be attributed to the cultural repertoir of the Naqada people, as 81 per cent of the palettes were of siltstone and 85 per cent of the pots belonged to the Naqada tradition (see **Figure 60** and **Figure 70**; cf. Roy, 2011: 140, table 96). H.S. Smith (1991: 98), Gatto (2000: 109) and Roy (2011: 140, table 96) have argued respectively that 18, 15 or 17 per cent of the pots were characteristic of the A-Group people. In my re-examination of the pottery repertoire, I found that only 8 per cent of the pots belonged to the A-Group tradition, while 7 per cent were not possible to assign to either group, e.g. four so-called crucibles of either "*thick coarse reddish ware*" or "*slightly baked mud*" (see Reisner, 1910: 120-121). In any case, the pots show an overwhelming similarity with Naqada pot making practices, and it seems unlikely that 85 per cent of the pots were imported. Roy also recognizes that:

> *"Khor Bahan is very close to the First Cataract region and the large amount of Egyptian material may indicate that sites in the very north of Lower Nubia are, in the early Naqada periods, broadly similar to those of Upper Egypt and may be seen as part of a shared tradition"* (Roy, 2011: 72).

This demonstrates that it is difficult to maintain that these graves were belonging to the A-Group people after an examination of the grave goods and practices in this cemetery.

Beside siltstone palettes and pots, there were also numerous other characteristic Naqada objects in these predynastic graves. Ivory combs, hair pins and bracelets (**Table 24**) were all similar to such objects found in Upper Egypt. A few ivory items have also been found in A-Group contexts, but these combs and spoons have comparable forms to Naqada types. It is thus most probable that they were imported status objects (Roy, 2011: 284). Bifacial flint knives, flint daggers of fishtail and rhomboidal shapes (**Figure 87**) as well as various arrowheads of flint were all of Naqada types. Flint daggers were never found in A-Group contexts, and flint implements in general

Grave no.	Comb	Pin	Bracelet
5	1		
6		1	
58			1
78	3		
82		1	
83	1		
15			2
Total	**5**	**2**	**3**

Table 24: Ivory combs, pins and bracelets in the predynastic graves in Cemetery 17. Data from Reisner (1910: 115-133).

Figure 87: Fishtail daggers typical for the Naqada people from grave 68 in Cemetery 17. Photo by Tsakos. Courtesy by Nubia Museum, Aswan.

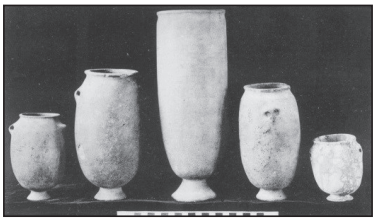


Figure 88: Some stone vases from predynastic graves in Cemetery 17. After Reisner (1910: 64/a).

were only rarely imported to Lower Nubia by the A-Group people (see **Catalogue 2**). There were also many mace-heads of Naqada types found in the graves (see pp. 290-291 below). Furthermore, five copper needles and some copper rivets of northern provenance were found in four of the early predynastic graves. These constitute some of the earliest copper objects found south of the First Cataract (see p. 272 for equally early copper needles in indigenous contexts). Four footed vessels of black basalt and breccia as well as five cylindrical alabaster vessels were found in a cache next to a burial (**Figure 88**). Three more stone vessels were found in graves. Stone vessels were not made by the A-Group people, and only rarely imported from Egypt (Roy, 2011: 277). In sum, the numerous Naqada style objects made of a variety of materials and found in the early predynastic graves in Cemetery 17 strengthen the argument for a Naqada identity of the people buried there.

The material culture uncovered from the seven middle predynastic graves also belonged mainly to the Naqada cultural repertoire. Among the grave goods of two females in grave 66 were many flint noodles, worked cores and plenty of debris from flint working (Reisner, 1910: 132). This suggests that the Naqada people in Lower Nubia brought flint with them from Upper Egypt and produced even the less specialized tools from flint according to local needs. In these six graves, necklaces made of beads were common. The beads were made of carnelian, garnet, beryl, green-glazed faience, silver and lapis lazuli. A copper knife imitating a flint blade knife was found in the rich double-burial of two females in grave 66, and a copper bracelet was found on the right wrist of another wealthy woman in grave 15. The latter was also buried with two ivory bracelets, bow-tips of gold and a piece of thin copper ribbon-wire.

Having considered all the categories of grave goods that occurred in some amount in the so-called predynastic graves in Cemetery 17, it seems beyond doubt that the people buried there were Naqada people and not the A-Group people in their earliest phase, as often proposed by Nubiologists (see p. 209 above for references).

Dating

Reisner correctly identified the early predynastic date of 28 of the graves in the cemetery as well as the cache of stone vases. The earliest objects that can be precisely dated belong to the Naqada IC repertoire and consist of numerous pots in form of black-topped red-polished beakers, white cross-lined bowls with flat bases and red-polished bottles with flat bases. Furthermore, eleven siltstone palettes of rhomboidal shape, which was commonest during Naqada I, were deposited in these graves. Other siltstone palette shapes were a turtle, two fishes, an ox and two crescents (see **Table 8**), of which the first two are dateable to Naqada IIA while the latter two are not considered diagnostic for any of the Naqada phases (see **Figure 57**).

All the ivory objects in Cemetery 17 were found in the early predynastic graves, except for the two bracelets in grave 15 of the middle predynastic phase. During Naqada IC-IIB, ivory objects were identified as prestige goods in Naqada burials, while they disappeared almost completely in the smaller cemeteries during Naqada IIC-D (Takamiya, 2003: 490). Eight bifacial flint knives, four rhomboidal flint daggers and two fishtail flint daggers with U-shaped forks date to Naqada I, but should be dated rather later than earlier in the phase (see Holmes, 1989: 336-337). All of the stone vessels date within Naqada IC-IIB (see Kaiser, 1957: plates 21-22). Furthermore, in these graves were uncovered 16 mace-heads of which ten were disc-shaped mace-heads with concave tops, two were double-pointed with pointed ends, one was double-pointed with rounded ends, one was of a unique hexagonal shape and two were not described or depicted for the shape to be decided (see **Catalogue 1**). Both the disc-shaped and the double-pointed mace-heads were commonest during Naqada IC-IIB (Gilbert, 2004: 40, figure 5.8). All the categories of finds, including pots and palettes, thus support a Naqada IC date for the graves dated to the early predynastic phase by Reisner.

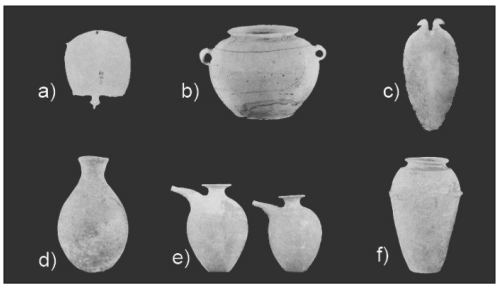


Figure 89: Finds from Reisner's middle predynastic graves. a) Turtle shaped palette, b) c) antithetic bird-shaped palette, d) e) pots with spout, and f) wavy-handled jar. No scale given. Selection from Reisner (1910: plate 60/b).

The seven graves dated to the middle predynastic phase by Reisner contain material dating to the timespan between Naqada IIA and IID1 (**Figure 89**). The pots consist of types characteristic of Naqada II: numerous tall red-polished black topped pots with flaring rims, red-polished bowls and storage jars, and various pots of smooth coarse ware (Petrie's R-ware) (see Reisner, 1910: figs. 281-282, 284). Characteristic for Naqada IIB are two squat jars with pierced cylindrical side-handles and painted decoration in form of spirals (see Hendrickx, 2006 : 77) (**Figure 89:b**). Two "fancy" pots with spout (Petrie's F58a) date to Naqada IIC (**Figure 89:e**). Also a wavy-handled jar (**Figure 89:f**) and a red-polished pot with flaring rim (**Figure 89:d**) date to Naqada IIC. Of the five siltstone palettes uncovered in these graves (see **Table 8**), two had turtle shapes (**Figure 89:a**), which first appeared in Naqada IIA (see Kaiser, 1957: 71) and continued into IID (see Stevenson, 2011: app. F/117-118). One siltstone palette had an anti-thetic bird-shape characteristic for Naqada IIC (compare **Figure 89:c** with **Figure 57**). A crescent shaped palette is of undetermined date, and the shape of one siltstone palette was not published.

The Naqada use of Cemetery 17 thus appears to have been most intensive during Naqada IC-IIA, to which belong the 28 early predynastic graves, and it continued into Naqada IID1. This gives a time span from *c*. 3600 to 3330 BCE. The Naqada IC-IIA graves were contemporary with the proto phase of the A-Group people, and the Naqada II graves were contemporary with the early phase of the A-Group people.

Evidence of weapons and violence

An interesting point for the study of warfare is that the 28 Naqada IC-IIA graves in Cemetery 17 concealed 16 mace-heads (see **Catalogue 1**). This means that 43 per cent of the early graves contained a mace-head. Ten of the maces are disc-

shaped mace-heads with concave tops, two are double ended with pointed ends and a central groove for hafting, one is double ended with rounded ends and one is of a unique hexagonal shape (**Figure 90**). Other weapons, weapon-tools or tool-weapons were flint daggers of rhomboidal and fish-tail shapes, bifacial flint knives, chalcedony blades, arrowheads and remains of two possible bows (see **Catalogue 1**).

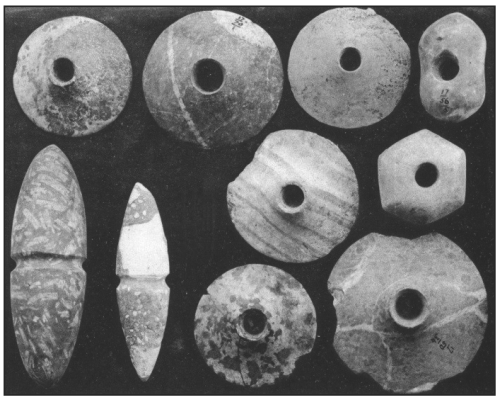


Figure 90: Some of the mace-heads uncovered in Naqada IC graves in Cemetery 17. No scale given. After Reisner (1910: 62/c).

Unfortunately, the repeated disturbances of the burials in this cemetery had rendered the human remains in "*a badly damaged and extremely disintegrated state*" (Elliot Smith and Wood Jones, 1910: 116). The physical anthropological examination of the fragmentary skeletons in the Naqada IC-IIA graves showed that remains of 16 bodies were found in the 28 graves. Unfortunately, the anatomists focussed their attention on the racial characteristics rather than pathology and trauma, since they considered its early date important for the racial development (Elliot Smith and Wood Jones, 1910: 116). Nevertheless, the demographic composition of the deceased in the early graves of the cemetery is rather revealing as 15 of the 16 bodies belonged to young men. Five of these men were buried with maces. In all cases only one mace was found with each body. The remaining seven graves where 11 maces were found contained no human remains, although there was always an empty space in the grave for a body. It has been suggested that the bodies had either been entirely removed during plundering (Reisner, 1910: 115), or removed in secondary rituals connected with ancestor worship (Roy, 2011: 75). I find neither entirely convincing, so I will venture to propose that these graves were cenotaphs for warriors whose bodies were not retrieved from the battlefield and thus never inserted in the graves. Graves with weapons and no human bodies have been interpreted as cenotaphs for fallen warriors whose bodies were never retrieved at Bronze Age cemeteries in the Danube Basin such as Varna in Bulgaria (see Chapman, 1999: 127, table 10) and Mýtna Nová Ves in

Slovakia (Hårde, 2006: 358). Supporting my proposal that graves without bodies in Cemetery 17 were cenotaphs is the fact that in three of these graves, more than one mace were found (two maces in graves 70 and 78 and three maces in grave 88), while there would only have been space for one body. Other forms of grave goods had also been doubled, like two combs in grave 78. If this assumption is correct, then this could mean that several warriors had fallen in battle at the same time, but their bodies had been lost during the turmoils. Further indications of deaths caused by violence were the two males buried in grave 5 dating to Naqada IC-IIA. One of them was buried with a mace and his skull was *"partially absent*", while the other was recorded as having "*skull blackened by fire*" (Reisner, 1910: 115). The drawing of the grave (see Reisner, 1910: fig. 68) furthermore shows that both men were missing their right arm. I suggest that the damages to these skeletons may have been caused by mutilations of the dead bodies at the place of a battle, but that they were finally retrieved and given a burial. The only woman found in the early graves was also the only middle-aged individual. No trauma were recorded for these bodies, and I believe that this was due to the fragmentary state of the bones. Because, when young men die in great numbers, as the case was here, it is usually war-related.

Five of the seven graves dating to Naqada IIA-IID1 contained human remains. The demographic profile was different in these later graves as there were three women, two men, an adolesent boy and an indeterminable body (see Elliot Smith and Wood Jones, 1910: 117-119). All the women were well-equipped, and two of them were interred in a double burial.

Animal graves

Animal graves are a characteristic trait of Cemetery 17. In total 15 animals graves were recorded, and their graves were distributed all over the terrace (see **Figure 79**). Dogs were the commonest animal, since 21 dog skeletons were found in 12 graves (Reisner, 1910: 137-139). Many of the dogs were buried with their collars and leashes (Reisner, 1910: 139). Naqada IC material was found in two of these graves, and although this may not have been intentional grave goods, it shows contemporaneity. Of special interest is the observation of "*considerable quantities of gnawed fragments*

of bones" under the ribs of these dogs (Elliot Smith and Wood Jones, 1910: 116). This has been interpreted as a practice of sacrificing dogs with full stomachs from a last meal when their owners were buried (Elliot Smith and Wood Jones, 1910: 117).

A fascinating parallel has come to light in recent years at Nekhen. Around the large and once richly equipped tomb 16 dating to Naqada IC-IIA was a complex of associated graves containing both humans and animals (see p. 117 above). The animals had been sacrificed to accompany their masters in death, and they included 27 dogs (Friedman, 2011: 39). Some of the dogs were found in pits associated with graves of young males. Although their graves had been utterly plundered, some tanged arrowheads of the Nekhen type were found. This has led to the assumption that they were hunters (see Friedman, 2011: 39; Droux and Pieri, 2010: 4). I find it probable that some, if not all of them, were actually warriors. There was certainly a small difference between hunters and warriors during the Predynastic period. Both were trained in cooperation and weaponry. It was probably the local chieftains that raised, equipped and led both hunting and war parties for their own political ends (Gilbert, 2004: 84). Indeed the nineteen men depicted on the unprovenanced Hunters' Palette (BM EA 20790) were carrying the same types of weapons as found in the Naqada IC-IIA graves of both Cemetery 17 at Khor Bahan and HK6 at Nekhen: maces, spears, bows and arrows and throwsticks. Furthermore, at least three hunting dogs were partaking in the lion hunt together with the men (**Figure 91**). Since dog burials have been found in

Figure 91: The Hunters' Palette (BM EA 20790) depicting nineteen men and three hunting dogs in a lion hunt. Length: 30,5 cm. Photo from British Museum.

association with graves of men with weapons at both Khor Bahan and Nekhen, I will suggest that dogs were trained to assist both hunters and warriors.

Summary

The great majority of the grave goods in this burial ground belonged to the cultural repertoire of the Naqada people of Upper Egypt, so I will argue that the site represents the earliest expansion of Naqada settlements into Lower Nubia. The graves dating to Naqada IC-IIA are remarkable for the high percentage of weapons as grave goods and the high frequency of young men buried in them.

Cemetery 23 at Dabod

Cemetery 23 was situated on the small plain of Dabod on the west bank of the river, *c*. six kilometres south of Khor Bahan (**Figure 92**). This cemetery will only be briefly discussed as it was of ephemeral character with only ten graves.

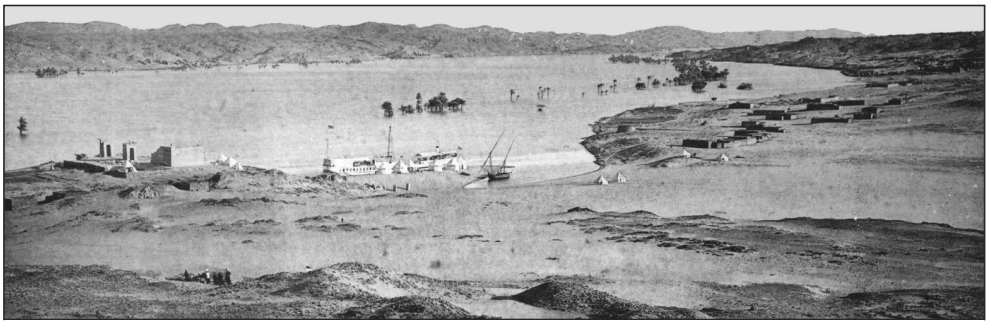


Figure 92: The small plain at Dabod that is here flooded by the reservoir, but the palm trees lined the old river bank. Cemetery 23 located to the left in the picture. Photo in Reisner (1910: plate 34/a).

Burial practices and grave goods

The deceased were all adults – both men and women. Eight out of nine bodies (i.e. 89 per cent) were placed on the left side, and five bodies (i.e. 63 per cent) had their heads oriented southwards (**Table 25**). The place-ment of the body on the left side according to Naqada customs were thus preferred.

	NE	E	SE	S	SW	W	NW	N	Total
Left	1	—	—	4	1	—	—	1	**7**
Right	—	—	—	—	—	—	—	1	**1**
Total	**1**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**8**

Table 25: Burial position and orientation for the nine bodies that preserved these data in the Naqada graves in Cemetery 23. Data from Reisner (1910: 157-159).

The objects found in these graves were largely of Naqada origins – 80 per cent of the palettes and 79 per cent of the pots (see **Figure 71**). However, the time span of the ten graves could be more than 150 years, and the graves were dispersed over a distance of *c*. 40 meter (see Reisner, 1910: plan 16). These Naqada graves therefore seem to represent sporadic visits to the area rather than continuous habitation.

Dating

Reisner (1910: 156) identified and published six graves belonging to the late predynastic phase and four graves belonging to the Early Dynastic period or his B-Group. He also published another 59 graves that he attributed to a later use of the cemetery during the 3rd and 2nd millennium BCE. It is unclear why Reisner made a distinction between the late predynastic graves and the early dynastic and/or B-Group graves, as they all contained material dating within Naqada IIC and IIIA1 – i.e. *c*. 3400 to 3240 BCE, which is firmly within the Predynastic period (Roy, 2011: 77). However, it is true that the individuals buried in the so-called early dynastic graves had fewer pots as grave goods.

Evidence of weapons and violence

No categories of weapons were found in these graves, and the human remains showed no signs of violence.

Cemetery 30 at Khor Risqalla

Cemetery 30 was located *c*. 3 kilometres south of Dabod, on the east bank of the river and on the southern end of the small plain at the mouth of Khor Risqalla (**Figure 93**). Reisner recorded and published eight graves assigned to the late predynastic[35]. The cemetery was later reused by the C-Group people (see Reisner, 1910: 194-197), but the earlier graves were placed close together in the central position of the gravel ridge occupied by the burial ground (Reisner, 1910: 190, plan 20).

[35] Two graves published with the predynastic and early dynastic graves by Reisner are excluded here: grave 36 of two dogs of uncertain dating and grave 40 which is described as two pots located "*on pile of debris 10 cm. high, just under present surface*" (see Reisner, 1910: 192-193).

Figure 93: Cemetery 30 on a gravel ridge overlooking the river. Photo in Reisner (1910: plate 39/a).

Burial practices and grave goods

The burial practices favoured the left side with 67 per cent of the cases, and the commonest orientation of the head was towards the east and the southeast (**Table 26**). Although the position and orientation of the bodies in the graves were not as coherent as among the Naqada people in Upper Egypt, they were still more in accordance with Naqada practices than A-Group practices (see the section *Burial position and orientation* in Chapter 8). Nevertheless, the cemetery contained very few burials so that some variation makes a greater statistical impact.

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	2	2	—	—	2	—	—	6
Right	1	1	—	1	—	—	—	—	3
Total	1	3	2	1	0	2	0	0	9

Table 26: Burial position and orientation for the nine bodies that preserve these data in Cemetery 30. Data from Reisner (1910: 191-194).

Three palettes were found in this cemetery, and these were made of siltstone. Despite their small number, palettes appeared in one out of three graves, which is a high frequency. All three palettes belonged to Naqada types (see **Figure 60**).

A total of 20 pots were uncovered in the eight graves. Of these, 60 per cent clearly belonged to the Naqada repertoire in form of two-handled jars, wavy-handled jars and bowls of hard orange ware dateable to Naqada IIC-IID2. Grave 8 contained a

black-topped jar with modelled rim (Petrie's B35b) with a long timespan during Naqada IIA-IIC. This grave is located in the middle of the densest cluster of graves, so the man buried there was probably the earliest interment in this cemetery. Furthermore, 20 per cent of the pots seemed to be of the A-Group tradition in form of four red ware bowls with round bases and one black-mouthed pot (see **Figure 70**; cf. Reisner, 1910: 191-194, figs. 285-291). Two pots were unique and could not be assigned to either tradition.

Dating

The three siltstone palettes were bird-shaped and can be dated to Naqada IIC and IID2 (compare Reisner, 1910: plate 63/b/2-3 with **Figure 57**). The earliest form of dateable pot was the red-polished black-topped jar spanning Naqada IIA-IIC. In view of the small number of graves at the site and the other finds, it is more probable that the red-polished black-topped jar was deposited in the grave in Cemetery 30 during Naqada IIC than earlier. The latest forms of pots date to Naqada IID2. The cemetery thus seems to have been used between Naqada IIC and IID2, i.e. *c*. 3400-3300 BCE.

Evidence of weapons and violence

There were no weapons found among the grave goods in Cemetery 30 (see **Catalogue 1**). However, an old man in grave 8 was killed by a series of wounds. His "*head was literally in fragments*". Parts of the left side of his face were completely fragmented, and the bones on the right side and back of his skull were "*deeply stained with blood*". Furthermore, several ribs on the left side were fractured and blood-stained, and blood stains were also found on the thoracic vertebrae of which two had fractures on their left transverse processes (Elliot Smith and Wood Jones, 1910: 331). The deadly injuries to the head were most probably caused by blunt force violence in form of an attack where maces or stone axes were used (see Elliot Smith and Wood Jones, 1910: 332). The fractures on the thoracic vertebrae and ribs suggest that the assult continued after he had fallen to the ground.

Summary

The site was used for *c*. 100 years during Naqada IIC-IID2. This is a rather long period for only eight graves with nine burials, and, like Cemetery 23 above, it suggests that Naqada people only had sporadic visits to the area. At least one of the persons buried there had been killed by violence, and it is curious that he was probably the first person to be buried at the locality on the basis of both the date of the objects in the grave and the situation of the grave in a central position (see above).

Cemetery 40 at Siali

Cemetery 40 was located on the east bank, *c*. 5 kilometres south of Dabod. The cemetery was situated next to the village Siali on the alluvial plain between Hafir and Fugda (see p. 30 above; **Figure 94**). At Siali, Reisner (1910: 233) excavated and recorded 41 graves that I will argue were made by Naqada people rather than A-Group people as suggested until recently by Nubiologists (e.g. Roy, 2011: 82-84, Williams, 2011: 88). The site was probably first used by A-Group people during their proto phase, since Reisner noted 30 completely plundered graves of circular shape situated on all the mounds north of the cemetery with Naqada graves. He assigned these graves to the B-Group (Reisner, 1910: 233, 241), but it is probable that they were earlier like

Figure 94: Cemetery 40 at Siali looking south. Photo in Reisner (1910: plate 43/b).

the other B-Group cemeteries reported by Reisner (see *Chapter 9*). Unfortunately, no further record was made of these graves. I will here present the evidence supporting a Naqada ethnic identity of the people buried in the published graves of this cemetery and attributed to the Early Dynastic period by Reisner (1910: 232-233).

Burial practices and grave goods

The investigation of ethnic identity in Chapter 8 showed that the majority of the palettes and pots in the graves of Cemetery 40 belonged to the Naqada traditions (see **Figure 71**). Additionally, of the 41 recorded graves, 31 contained the skeletons of the deceased in situ. Of these, 90 per cent were buried on the left side and the great majority of these had the head oriented towards south according to Naqada burial customs (**Table 27**). The remaining 10 per cent were buried on the right side. As expected, a majority was buried with the head towards south. The burial practices thus support a Naqada identity for the people interred in this cemetery. It was noted that 75 per cent of the preserved skeletons were identified as male and only 25 per cent as female (Elliot Smith and Wood Jones, 1908: 48).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	—	26	1	1	—	—	**28**
Right	—	—	—	2	—	—	1	—	**3**
Total	**0**	**0**	**0**	**28**	**1**	**1**	**1**	**0**	**31**

Table 27: Burial position and orientation for the 31 bodies that preserved these data in Cemetery 40. Data from Reisner (1910: 234-241).

The majority of the palettes were made of siltstone in Naqada style, and this counted for 43 per cent, which is less than half of the cases. In fact, 33 per cent of the palettes were made of white quartzite, while 24 per cent were made of other stones. We have already seen (see p. 243 above) that when rectangular shapes became the norm for the palettes in Egypt during Naqada IIIA, Naqada people in Lower Nubia seem to have increasingly turned to other raw materials for the making of their palettes.

Re-examining the distribution of pots, I observed that 76 per cent belonged to the Naqada tradition, 22 per cent were A-Group types, while 2 per cent could not fit with either group (see **Figure 70**). Among the Naqada pots, 26 per cent of the shapes were bowls. This is in-between the frequencies for Naqada II and Naqada III at Nekhen (see Takamiya, 2004: fig. 2), and further strenghtens the connections with

Naqada traditions. All of the A-Group pots were bowls, and they were mainly of the black-mouthed category.

There were also other types of grave goods that support the Naqada identity of the people in this cemetery. Copper objects were found in four graves and included a harpoon, a bracelet, a dog amulet and a scorpion amulet (**Figure 95**; **Table 5**; Reisner, 1910: 234-241). Furthermore, a vase of black and white stone of undetermined type was found in grave 55 (Reisner, 1910: 239), and grave 73 contained an ivory pin with a seated ape on the top (Reisner, 1910: 241). However, the most contested find from Cemetery 40 is the seal impressions from a cylinder seal uncovered in grave 43. This has been interpreted either as evidence for social classes with administrative functions under the Qustul dynasty (Williams, 2011: 88) or simply as Naqada imports to Lower Nubia (Roy, 2011: 234). I tend to support the latter opinion as only eight seals and three seal impressions have been found in Lower Nubia (see Roy, 2011: 229-233). Cylinder seals in A-Group contexts were thus probably an adoption of prestige objects from Egypt by the A-Group elite, and the majority of the cylinder seals were found in graves in Cemetery L at Qustul or nearby cemeteries in southern Lower Nubia dating to the latter part of the A-Group period.

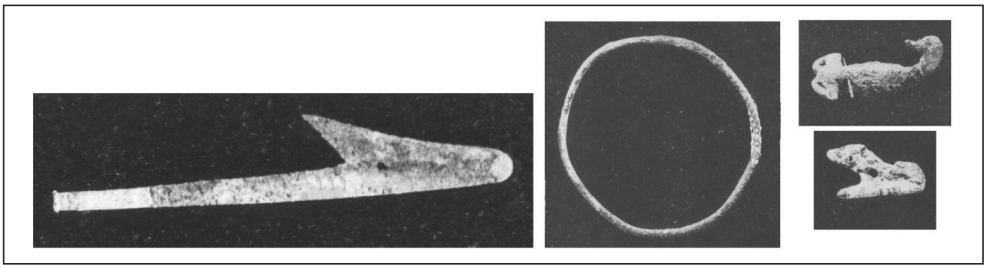


Figure 95: Copper objects from Cemetery 40. Harpoon from grave 14, length 19 cm, bracelet from grave 3, scorpion amulet from grave 73 and dog amulet from grave 33. Not to scale. After Reisner (1910: plate 65/b/5 and a/6-8).

Dating

The earliest Naqada pots deposited in Cemetery 40 were two wavy-handled jars dating to Naqada IID2, and the latest pots were two wine jars dating to Naqada IIIB. However, the majority of the pots date to Naqada IIIA. The site thus spanned from *c*. 3330 to 3100 BCE (see **Table 3**).

Evidence of weapons and violence

No categories of weapons were found in these graves, and the only signs of violence was a man in grave 2 who had a fracture of the nasal bone (Elliot Smith and Wood Jones, 1910: 300). Although this injury is commonly related to a blow to the face, it most probably only involved the fist and not a form of weapon so that it is impossible to tell whether the attack happened in a quarrel, in a feud or in war.

Summary

All the three parameters selected for investigating ethnicity are in accordance with a Naqada identity for the people buried in Cemetery 40. There was no evidence for war.

Naqada sites on the Meris plain

The Meris plain on the west bank opposite Siali was already inhabited by A-Group people of the proto phase contemporary with Naqada IC-IIA (see the section *Cemetery 41/200 on the Meris plain* above). At a small distance to the south of this cemetery was a broad low bank where the remains of a camp site were uncovered, and a small cemetery was in close proximity (see **Figure 81**). We will first consider the habitation site, then the cemetery, and finally attempt a summary of both sites.

The habitation site 41/300

The settlement site was recorded as an "*archaic camp",* and it was rapidly excavated. Reisner (1910: 215) described the work like this:

> *[T]he men came on a layer of surface dust containing potsherds, stone axes and other archaic objects. They at once recognized the fact that they had a camp (...) and had it half cleared when I arrived.*

Despite the lack of methodological excavation, this site is among just a few investigated habitation sites of the 4th millennium BCE (**Figure 96**), and thus of great importance.

Figure 96: The camp site on the Meris plain. Note the excavation technique where finds were left in situ on piles of sand. Photo from Reisner (1910: plate 46/a).

The site consisted of 16 fireplaces, but no structural remains from huts or tents were observed. The lack of post holes was probably due to the excavation technique. The workmen exposed quantities of potsherds, stone implements and flint chips (Reisner, 1910: 215). Only ten more or less complete pots were published, and these were all belonging to the Naqada tradition, with a possible exception of a black-topped jar with ovoid shape and pointed base in accordance with A-Group pot shapes (see **Figure 65** lower left). Only one pot can be securely dated: a wavy-handled jar with modelled rim characteristic for Naqada IID1. Two two-handled pots of hard orange ware range from Naqada IIB to Naqada IID2, although the decoration in form of vertical bands seem commonest during Naqada IID1 (see Kaiser, 1957: plate 23). Four siltstone palettes were uncovered. A complete palette with antithetic birds is also dateable to Naqada IID1 (compare **Figure 97** with **Figure 57**). An oval palette is less characteristic chronologically, while two fragments of rhomboidal palettes range from Naqada IB to IIA. Only a single palette was made of a different material than siltstone, and this was a *"dark hard blue-grey stone"* (Reisner, 1910: 218). Both the pots and the palettes belong to the Naqada traditions, and

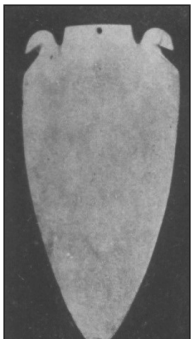


Figure 97: Palette with antithetic birds of Naqada IID1 date. No scale. After Reisner (1910: plate 63/b/1).

the camp site seems to have been inhabitated by Naqada people during Naqada IID1.

Among the stone implements, there were two mace-heads and several small ground stone axe-heads. The mace-heads were of the pear-shaped type, which was commonest during Naqada IIC and IID (see p. 173 above). The axe-heads had either slightly curved or rectilinear blades, convergent sides and curved bases (**Figure 98**). Furthermore, they were smaller and of a different type of stone than the axe-heads uncovered in two graves in Cemetery 7 of the proto phase of the A-Group people (see **Figure 75**). In addition to the complete specimens, several broken axe-heads were also uncovered. These implements were probably of the tool-weapon category, and they could have been used as hoes for preparing the soil before sowing. The finding of a flint core and the identification of several spots at the site where flint debris were recorded suggest that flint knapping took place at the site (see Reisner, 1910: 216-217). The discovery of several flint sickle-blade segments indicates that cereals were harvested. Many small pierced spherical stones were found, and I suggest that they could have been used as weights on digging sticks that were used in agricultural labour. Mace-heads, flint implements and sickle blades were rarely deposited in A-Group graves, but were common for the Naqada people.

Figure 98: Ground stone axe-heads from the Naqada settlement on the Meris plain. No scale given. After Reisner (1910: plate 63/d).

Several stray finds of green-glazed beads and amulets were probably used both for decoration and apotropaic purposes, but possibly also as ethnic emblems.

Of particular significance to the present study was the finding of a copper axe-head of a splayed type without any device for enabling attachment to a haft (**Figure 99**), as was typical for the earliest metal axes (see p. 200 above). It was probably a similar type of copper-alloy axe that was used in the execution of the man buried in grave 257 in the A-Group cemetery at Shellal (see p. 258 above). Another unidentified copper fragment was also found at the habitation site. Both glazed and copper objects

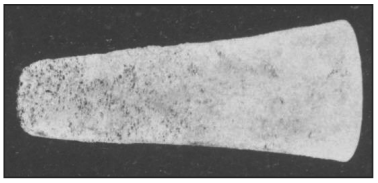


Figure 99: Splayed copper-alloy axe from the camp site on the Meris plain. No scale given. After Reisner (1910: 65/b/6).

were made by the Naqada people, but only imported from Egypt on a limited scale as luxury commodities by the A-Group people.

Cemetery 41/400

A cemetery was situated next to a granite hill *c*. 150 metres to the south of the camp site (**Figure 100**). It consisted of only 17 graves (Reisner, 1910: 219), and like the habitation site, the cemetery seems to have been shortlived. Four slightly later graves were also located *c*. 100 metres to the southwest of the central cluster.

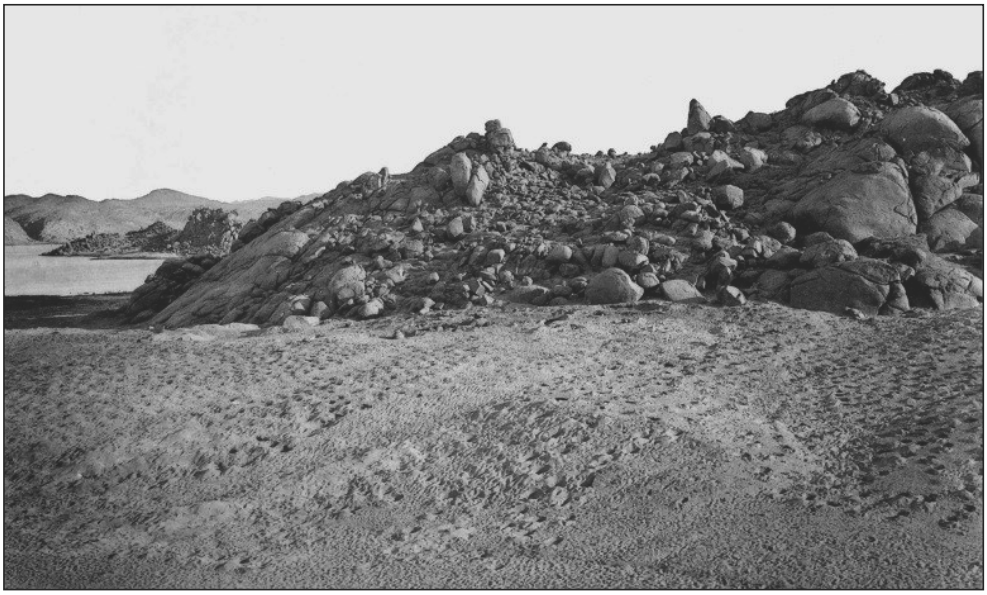


Figure 100: The location of Cemetery 41/400 next to a granite hill. After Reisner (1910: plate 46/b).

Burial practices and grave goods

The presence of Naqada style palettes and pots was not as overwhelming at this cemetery as in the other Naqada cemeteries in northern Lower Nubia (see **Figure 70**), so it is the burial position and orientation that will help us identify the ethnic identity of the inhabitants. Of the 16 bodies preserved, 14 individuals or 88 per cent were buried on the left side and the rest on the right side with 13 individuals or 81 per cent having their heads oriented to the south and the rest to southwest or southeast (**Table 28**). The burial practices were thus according to Naqada traditions. Men, women and children were buried in the cemetery (Elliot Smith and Wood Jones, 1910: 156-157).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	1	12	1	—	—	—	14
Right	—	—	—	1	1	—	—	—	2
Total	0	0	1	13	2	0	0	0	16

Table 28: Burial position and orientation for the 16 bodies that preserved these data in Cemetery 41/400. Data from Reisner (1910: 219-221).

As we saw in the discussion of the geographical distribution of raw material choises for the palettes, two of the three palettes found in these graves were made of stone imported from Egypt (see p. 243 above). The third palette was only described as a pebble palette (Reisner, 1910: 219), and thus of indeterminable origin.

The pots showed that 46 per cent were of Naqada traditions against 32 per cent of A-Group traditions, while 22 per cent could not be determined due to lack of description in the report (see **Figure 70**). Although the majority of both palettes and pots derived from Naqada traditions, there was a significant inclusion of A-Group bowls. However, given the burial positions noted above, the Naqada identity of the majority of the people interred in the cemetery seems quite certain.

Dating

The two wavy-handled jars uncovered date to the interval between Naqada IIC and IID1 with one specimen characteristic for each phase. These dates are supported by two jars with cylindrical side-handles – one of them being decorated with a ship and a standard according to preferences during Naqada IIC. A red-polished necked jar dates to the same phase, while some bowls with restricted openings and flat bases were made of red-polished and hard orange wares that fit with a dating during Naqada IIC and IID (see Reisner, 1910: fig. 154). The four graves to the southwest from the Naqada II cemetery are dating to Naqada IIIA2-IIIB, i.e. between 3240 and 3100 BCE, on the basis of a wavy-handled jar with painted net pattern and a cylindrical jar with incised line below the rim (see Reisner, 1910: 222).

Evidence of weapons and violence

There were no categories of weapons uncovered in these graves. The examination of the bones revealed only a characteristic defensive wound in form of a parry fracture of the right ulna of a man in grave 418, which was one of the four later burials in the southwestern group.

Summary

The contemporaneous dating of the habitation site and cemetery as well as the similarities in the object inventories make it quite certain that the burial ground was used by the people living at the habitation site (Reisner, 1910: 215, 218-219). Both seem to have been abandoned before the onset of Naqada IID2 around 3330 BCE. The habitation site seems to have been abandoned abruptly, since several valuable objects were left behind there (Trigger, 1965: 72). Naqada people appear not to have returned to the Meris plain for continuing the habitation, but the four Naqada IIIA2-IIIB graves testify to sporadic visits a century after abandonnment. No weapons were found in the earlier graves and no indications of violence were noticed on the bones, but the population may either have fled in a hurry before the attack or been exterminated in an ambush (see p. 346 below). In any case, they seem not to have returned to the Meris plain before a century later, but then their presence was very limited. A parry fracture was found on the right ulna of a man in one of the later graves.

Cemetery 43 at Abisko

Cemetery 43 was located on the west bank *c*. 3 kilometres south of the Meris plain. The site was situated on a gravel bank on the northern side of a steep ravine near Abisko (**Figure 101**). It consisted of 82 graves of a uniform character dated to the "*later predynastic*" (Reisner, 1910: 246). Fourteen pits were empty except for a few fragments of bones in some, and most graves were plundered or otherwise disturbed (Reisner, 1910: 246).

Burial practices and grave goods

The demographic profile shows that men, women and children were buried in the cemetery. There were 52 skeletons in the cemetery that were preserved well enough for the position and orientation of the bodies to be recorded (**Table 29**). Of these, 85 per cent were buried on the left side

	NE	E	SE	S	SW	W	NW	N	Total
Left	2	1	3	20	16	2	—	—	**44**
Right	1	2	—	1	2	—	1	1	**8**
Total	**3**	**3**	**3**	**20**	**16**	**2**	**1**	**1**	**52**

Table 29: Burial position and orientation for the 52 bodies that preserved these data in Cemetery 43. After Reisner (1910: 246).

Figure 101: Cemetery 43 on top of a steep ravine near Abisko. Photo in Reisner (1910: plate 50).

in accordance with Naqada traditions, and 69 per cent had the head oriented towards south or southwest (Reisner, 1910: 246). This is in agreement with the ethnic identity as identified by the fact that all the palettes were made of siltstone and 60 per cent of the pots were made according to Naqada traditions (see **Figure 71**).

Dating

Only two of the siltstone palettes had chronologically diagnostic shapes, and one of them was rhomboidal and the other of fish-shape. These forms cover the span of Naqada I and II (see **Table 8** and **Figure 57**). An earlier study has shown that all the pots date to Naqada II (Takamiya 2004: 44). A beer jar (R81) in grave 20 dates between Naqada IIA and IID1, and several wavy-handle jars and decorated jars with

two handles were made between Naqada IIB and IID1. Characteristic for the site is the prevalence of bowls, which were even more common at Cemetery 43 than at the Fort Cemetery at Nekhen (see Takamiya, 2004: fig. 4b). The bowls are of fabrics and shapes characteristic for Naqada IIA-IIC. There were also several red-polished black-topped tall vases of the late types characteristic for Naqada IIA-C. The cemetery thus seems to have been used during Naqada IIA to Naqada IID1.

Evidence of weapons and violence

Except for a flint blade found in grave 80, no weapons were found at this site. The human remains were mostly in fairly good conditions (Elliot Smith and Wood Jones, 1910: 162). One instance of violent death was recorded. A woman in grave 25 had injuries that had caused extensive perimortem bleedings of the cervical and thoracic vertebrae, both clavicles and scapulas, and almost all the ribs (Elliot Smith and Wood Jones, 1910: 164).

It is notable that the skulls were missing from eight bodies in the following graves: 29, 31, 36, 40, 41, 58, 64 and 74. Six of the headless bodies belonged to males and two to females (see Reisner, 1910: 246-256).

Summary

Cemetery 43 seems to be a Naqada cemetery used during the whole time span of Naqada II, i.e. from *c*. 3530 to 3330 BCE. The cemetery was much disturbed by plundering. No specialized weapons were found among the grave goods. Only a single victim of violence was identified through the examination of the bodies. However, eight bodies were missing the skulls.

Cemetery 45/100 and 400 at Shem Nishai

Cemetery 45 was located on the east bank some 400 metres south of Cemetery 44. It consisted of several groups of heavily disturbed graves situated in the mud banks along the cultivation at Shem Nishai (Reisner, 1910: 258, plan 4). The whole cemetery contained *c*. 400 graves, but the site was destroyed by ancient plundering, agricultural activities, as well as a travelling band of late 19th century tomb robbers, as testified by

the inhabitants of Shem Nishai (Reisner, 1910: 259). The earliest graves seem to belong to the proto phase of the A-Group people (see the section *Cemetery 45/200 at Shem Nishai* in Chapter 9). Naqada graves were recorded in four different patches called Block A, C, D and E (Reisner, 1910: 259). Block D and E were situated closely together and just below the A-Group graves, while Block A was located around 250 metres further north and Block C just 25 metres north of A. In total, 60 Naqada graves were published (see Reisner, 1910: 260-262, 265-275), but this may not be a representative sample of the entire Naqada cemetery.

Burial practices and grave goods

The investigation of ethnic identity in Chapter 8 demonstrated that 61 per cent of the palettes were made of siltstone and 74 per cent of the pots were made according to Naqada traditions (see **Figure 71**). In the published graves, 55 bodies preserved the burial position and orientation. Of these, 84 per cent were buried on the left side, and more than 90 per cent had the head oriented in a southerly direction (**Table 30**).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	1	3	37	5	—	—	—	**46**
Right	—	—	1	3	—	1	—	2	**7**
Total	**0**	**1**	**4**	**40**	**5**	**1**	**0**	**2**	**53**

Table 30: Burial position and orientation for the 52 bodies that preserved these data in Cemetery 45/100 and 400. After Reisner (1910: 260-262, 265-275).

Dating

The majority of the siltstone palettes were rectangular and date to Naqada IIIA2-IIIB (see **Table 8**). A worn rhomboidal palette was found together with a wavy-handled jar of Naqada IID1 type. A fish-shaped palette spanning Naqada IIB-IIIA1 and a broken bird-shaped palette of Naqada IIC style were also uncovered. Among the pots, the wavy-handled jars span the series from Naqada IID1 types with modelled necks to cylindrical shapes with painted net-pattern of Naqada IIIA2 date (see e.g. Reisner, 1910: fig. 222, 227 and 231). The Naqada IIIA2 types – both painted and plain – were most numerous. The decorated jars had spiral decoration characteristic from Naqada IIB, a unique figurative composition consisting of a procession of hyenas, a scorpion and a secretary bird killing a serpent, as well as necked jars with wavy lines, which was the commonest design on decorated pots at Cemetery 45 and dateable to Naqada

IIIA1-IIIB. The area seems to have been occupied during Naqada IID1, although the majority of the finds date to Naqada IIIA. No pots diagnostic for Naqada IIIB were uncovered. This gives a timeframe of occupation from *c*. 3360 to 3200 BCE.

Evidence of weapons and violence

No specialized weapons were uncovered in the Naqada graves of Cemetery 45, but two ground stone axes and two blades of the tool-weapon category were found.

Evidence of violence was more substantial, as three adult men had been killed by blunt force violence to the head as well as received other injuries related to violence. The anatomists suggested that maces or similar stone weapons were used to cause these kinds of head injuries (Elliot Smith and Wood Jones, 1910: 332).

A man in grave 247 B had received severe blows to the left side of the head and face, which caused many fracture lines (Elliot Smith and Wood Jones, 1910: 173). Another man in grave 253 had a perimortem depressed fracture of the frontal region as well as healed fractures of the right ulna and the right tibia (Elliot Smith and Wood Jones, 1910: 332). Ulna fractures are typical for blocking a blow to the head (see p. 207 above), and the healed parry fracture of the man in grave 253 suggests that he had been attacked also before he met a violent death. A third victim was a man in grave 481, who had been hit twice on the skull. The blows had caused circular fractures on the left temporal bone and on the top of the head just below the bregma. The former had caused the left zygoma and mandible to break as well (Elliot Smith and Wood Jones, 1910: 332). The men in graves 253 and 481 had received no grave goods (Reisner, 1910: 266, 272), while the man in grave 247 was interred in a multiple burial that contained two pots – one of which was a wavy-handled jar with painted net-pattern dating to Naqada IIIA2 (Reisner, 1910: 265).

There were also other cases of injuries most probably caused by violence. Beside the man in grave 253, an adult woman in grave 249 had also a healed defensive wound in form of the characteristic parry fracture of the ulna (Elliot Smith and Wood Jones, 1910: 314). The fragmentary remains of the skeleton of an adult man in grave 490 showed that he had a healed fracture of the left clavicle (Elliot Smith and Wood Jones, 1910: 307). This fracture could have been caused by avoiding a blow to the head

(see p. 207 above). One out of two skulls that were found in the fill of the double burial in grave 249 had a fracture of the nasal bone (Reisner, 1910: 265 for archaeological context; Elliot Smith and Wood Jones, 1910: 300 for anatomical observation). The anatomists studying the remains from this cemetery were furthermore surprised by the abnormally high frequency of leg fractures below the knee in this cemetery (Elliot Smith and Wood Jones, 1910: 328), since three adult men, in grave 245, grave 251A and grave 253, all had their legs broken (Elliot Smith and Wood Jones, 1910: 326).

Beside the disturbed graves, the human remains in Cemetery 45 were very well preserved with cases where the skin of the whole corpse was intact and also the hair and intestinal contents were sometimes preserved. It is therefore curious that two otherwise intact bodies were missing the heads, i.e. in graves 115 and 134. Decapitation of victims of warfare is one possible explanation for this phenomenon in 4th millennium BCE cemeteries in northern Lower Nubia (see the section *Missing skulls in the A-Group cemeteries of the proto phase* in Chapter 9).

Summary

The people buried in Cemetery 45/100 and 400 mainly used Naqada pots and palettes as well as respected Naqada beliefs and practices when positioning and orienting the bodies in the grave pits. The main period of use was during Naqada IIIA2, at the end of which the cemetery appears to have been abandoned. The abandonment may be linked with war as three men were killed by blunt force violence, while several other individuals also had injuries related to violence and two bodies were headless.

Cemetery 50 at Metardul

Cemetery 50 was located on some mud and gravel knolls inside a small khor at Metardul on the west bank of the river, *c*. 10 kilometres south of the previous site (**Figure 102**). This cemetery was situated in a region where the rock was close to the river on both sides. A total of 70 graves of the 4th millennium BCE were published, but 32 of them were empty circular pits. These graves may have belonged to the proto phase of the A-Group, although there were no grave goods or other indications that would support this circumstantial suggestion. The remaining 38 graves will be the

Figure 102: Cemetery 50 inside a khor at Metardul. Photo in Reisner (1910: 58/a).

basis for the discussion here, but many of these were heavily plundered – sometimes shortly after interment when the ligaments still kept the bones together (Reisner, 1910: 284-285).

Burial practices and grave goods

The burial positions and orientations of the bodies that were found in graves slightly disturbed by robbers showed that all the deceased were buried on the left side with 91 per cent of the head orientations towards south (**Table 31**). This is a strong indication for a Naqada ethnic identity since similar uniformity in placing the body in the grave has never been seen in firmly identified A-Group cemeteries.

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	—	—	20	1	1	—	—	22
Right	—	—	—	—	—	—	—	—	0
Total	0	0	0	20	1	1	0	0	22

Table 31: Burial position and orientation for the 22 bodies that preserved these data in Cemetery 50. After Reisner (1910: 285-292).

Based on the investigation of ethnicity in Chapter 8, the ethnic identity of the people buried in Cemetery 50 seemed ambiguous (see the section *Naqada cemeteries in the north* in Chapter 8). The reason is that 50 per cent of the palettes were made of quartzite according to A-Group preferences, while 38 per cent were made of siltstone in Naqada style (see **Figure 60**). In total, eight palettes were found showing that 21 per cent of the dead were buried with a palette – or even fewer if the empty graves are included in the total. Palettes were thus more popular with the A-Group people, where

on average 36 per cent of the graves contained a palette against *c*. 15 per cent in Naqada cemeteries (see p. 221 above). In contrast to the few Naqada palettes, 80 per cent of the pots were made according to Naqada traditions and 17 per cent were belonging to the A-Group traditions, while 3 per cent were undiagnostic (see **Figure 70**). Furthermore, the publication mentions only two occurrences of the characteristic A-Group eggshell ware in form of sherds in graves 55 and 63, while the repertoire of Naqada pots consist of a variety of forms – including bowls that were unsuitable as containers for imported products, which we would expect to find at A-Group sites.

There are several possible explanations for the low frequency of siltstone palettes in Cemetery 50. One explanation could be the distance from Egypt. Metardul was more than 300 kilometres upstream from the junction of Wadi Hammamat and the Nile, so that siltstone palettes must have been increasingly more difficult to obtain given the increased distance from the source. However, this seems implausible since 21 siltstone palettes were found in Cemetery 79 at Mediq and 33 siltstone palettes were uncovered in the graves of Cemetery 102 on the Dakka plain. Both these sites were located more than 50 kilometres further south than Cemetery 50. Another explanation may be that the siltstone palettes were some of the objects sought and looted by plunderers, but this also seems unlikely since siltstone palettes should then have been few in numbers at other sites as well. A third reason may be that siltstone palettes became less popular among the people buried in Cemetery 50 when figurative siltstone palettes were going out of production in Egypt during Naqada IIIA-B (see p. 243 above), which is the date of the site (see p. 314 below; Roy, 2011: 94), and this also seems to have been the case at other late Naqada sites in northern Lower Nubia (see p. 243 above).

Other objects of Naqada manufacture were beads of faience, carnelian and garnet as well as four green-glazed scorpion amulets. Two sickle-blade segments of flint were belonging to the tool-kit of Naqada people rather than A-Group people.

Thus, the combination of evidence from the burial practices and the grave goods at Cemetery 50 makes it very probable that the people buried there had a Naqada ethnic identity.

Dating

The wavy-handled jars were all of cylindrical shape characteristic of Naqada III – both with painted net-pattern dateable to Naqada IIIA2 and with a cord-like band instead of wavy-handles/band dateable to Naqada IIIB (see **Table 3**). Several wine jars of hard orange ware are also dateable to Naqada IIIB. The siltstone palettes were of rectangular and circular shapes, which also belong to the Naqada IIIA-IIIB interval (see **Table 8** and **Figure 57**). The site thus seems to have been used during Naqada IIIA2-IIIB, i.e. from *c*. 3230 to 3100 BCE.

Evidence of weapons and violence

No weapons were found in this heavily plundered cemetery. It is unfortunate that the human remains in this cemetery were not studied by the anatomists. However, the skeletons that were found more or less intact – 22 in 38 graves – were damaged and decayed, so evidence of violence if present, would most probably have been destroyed.

Concluding remarks regarding a Naqada expansion into Lower Nubia

This review has demonstrated that there was indeed a Naqada expansion into Lower Nubia. The majority of the grave goods in the nine cemeteries discussed can be securely ascribed to the Naqada culture, and the burial position and orientation were in accordance with Naqada practices. It is thus probable that the people buried in these cemeteries between Shellal and Metardul were Naqada people and not indigenous to the region.

The origin of the immigrants

Having confirmed the existence of a Naqada migration to northern Lower Nubia, it would be interesting for the reconstruction of the historical events if the origin of the immigrants could be determined as well. The most likely candidate would be the nearest centre of the Naqada people, and this we find *c*. 130 kilometres downstream at Nekhen [Hierakonpolis].

During Naqada IC, Nekhen had grown to a large urban settlement, and the first elite cemetery including a tomb worthy of a chieftain was established in Wadi Abu Suffian (see pp. 115-116 above). The developments at Nekhen at this time have been interpreted as an indication of a "*population explosion*" in the latter half of Naqada I (Hoffman, Hamrouch and Allen, 1986: 181; Wenke, 2009: 221; R. Haaland and G. Haaland, 2013: 546). Initially the land around Nekhen was particularly attractive as its small region included: 1) a concentration of several habitats (desert, wadi, flood plain, river); 2) good soil and access to raw materials; 3) regular summer rainfall; 4) the existence of an extinct Nile channel close to the border of the desert; and 5) the Wadi Abu Suffian (Hoffman, Hamrouch and Allen, 1986: 178). However, summer rains ended around the beginning of Naqada IC at *c*. 3600 BCE, and at the same time there appears to have been a decline in the height of the average annual Nile flood. Furthermore, Nekhen was placed in the southern part of the Nile Valley in Egypt, where the bedrock was still sandstone. The floodplain was thus narrower[36], and population pressure would consequently have arisen earlier there (cf. Bard, 1987: 92). The environmental changes seems to have had several effects: more efficient food production in form of reliance on flood plain farming, irrigation techniques and improved harvesting went hand in hand with the emergence of an elite initiating centralized decision-making, economic reinvestment and conflicts with neighbouring regions (Hoffman, Hamrouch and Allen, 1986: 184). For us, the latter point is most significant since this indicates a motivation to expand the territory of Nekhen.

Expansion westward or eastward was impossible as desert conditions were becoming established there with the withdrawal of the summer rains, and expansion northwards was difficult since there was a chiefdom on the rise in the Qena Bend with Nubt as a centre (see pp. 113-114 above). The only option seems to have been expansion southwards, despite the fact that the river valley in northern Lower Nubia was even more narrow and thus less attractive from an agricultural point of view.

Beside the proximity between Nekhen and Lower Nubia and the circumstantial evidence in form of a substantial population increase and a deterioration of the

[36] Today the flood plain is *c*. 4 kilometres wide at Hierakonpolis, compared to *c*. 14 kilometres at Naqada and *c*. 17 kilometres at Abydos (Google Earth).

environment, there is also archaeological evidence pinpointing Nekhen as the metropolis of the immigrating Naqada people in Lower Nubia. This is the finding at Cemetery 17 of arrowheads of concave base and tanged types distinctive for Nekhen (see p. 191 above, **Figure 46** and **Figure 47**). Furthermore, the 21 dog burials in Cemetery 17 have their parallels in the complex around contemporary tomb 16 in Cemetery HK 6 at Nekhen where 27 dogs were found buried (see the section *Animal graves* above).

On this background, I find it probable that it was the chieftain of Nekhen, possibly the individual buried in tomb 16 at Cemetery HK 6, who was responsible for the expansion of Naqada people into Lower Nubia rather than one of the chiefdoms further north.

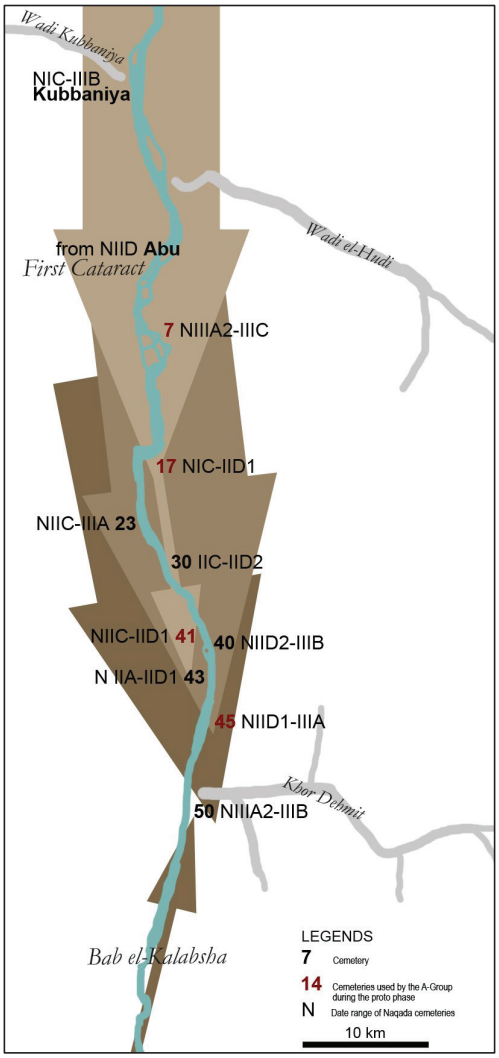
The Naqada settlement pattern in northern Lower Nubia

One of the aims of this chapter was to undertake a precise dating of the Naqada sites identified in northern Lower Nubia. With this accomplished, it becomes evident that there were at least three waves of Naqada expansions southwards beyond the First Cataract (**Map 6**). The first wave dates to Naqada IC, i.e. *c*. 3600 BCE, when Naqada people established cemeteries at Kubaniya and Khor Bahan (Cemetery 17), and slightly later in Naqada IIA at Abisko (Cemetery 43). This coincides in time with the population explosion at Nekhen, and it was probably a surplus population that migrated southwards.

The sites on the Meris plain (the habitation site and Cemetery 41) seem to have been established in Naqada IIC, i.e. *c*. 3400 BCE, and the ephemeral cemeteries at Dabod (Cemetery 23) and Khor Risqalla (Cemetery 30) were first used at the same time, so this may have been a second wave of expansion. Naqada IIC was also a period of change at Nekhen. It is possible that this emigration was not only caused by population pressure, but the migrants may also have been escaping internal and/or external conflicts at Nekhen. During Naqada IID1, Naqada people settled Cemetery 45 at Shem Nishai, which was the southernmost Naqada site in the area controlled by the Naqada people in northern Lower Nubia. In addition, two satellite communities appear to have been established in A-Group territory as indicated by some graves in Cemetery

76 at Gedekol and Cemetery 111 at Wadi Allaqi (see the relevant sections in *Chapter 8*). The two latter communities were abandoned at the end of Naqada IID1.

The third wave of expansion took place in Naqada IID2 to Naqada IIIA2, i.e. after *c*. 3330 BCE. Cemetery 40 at Siali further north was established at the beginning of Naqada IID2. The last Naqada site to be established was Cemetery 50 at Metardul. This last wave of site formations may have been a result of displacement of Naqada people already settled in Lower Nubia, since the earlier Naqada sites in Lower Nubia were abandoned at this time, i.e. Cemeteries 17, 30, 41 and 43, and the Naqada people also retreated from the satellite communities further south in Lower Nubia, i.e. Cemeteries 76 and 111. Cemetery 7 at Shellal just upstream of the First Cataract was possibly also established at this time, and this may be an indication that some of the Naqada people also started to withdraw from location further south in Lower Nubia, unless this cemetery was established much earlier in advent of the first wave demonstrated here. Earlier graves than Naqada IIIA2 may have been situated under the late 19th century train station and market place (see p. 284 above and **Figure 84**). Besides Cemetery 7, there were no Naqada graves further south in Lower Nubia that contained material dateable to Naqada IIIC, i.e. after the establishment of the First Dynasty. It thus seems that the First Dynasty state set up its southern border just upstream of the First Cataract.



Map 6: The Naqada expansion into northern Lower Nubia. Graphics by Hafsaas-Tsakos.

Evidence of war

Actual evidence for war is significant for this study, and this chapter has collected all the available data concerning conflict and violence at the Naqada sites in northern Lower Nubia.

Although weapons were found in Naqada graves throughout the 4th millennium BCE, less than 10 per cent of the burials contained weapons (Gilbert, 2004: 83). The low frequencies of weapons in graves were probably related to the idea of the afterlife as a peaceful state where enemies could not enter (Gilbert, 2004: 82-83). It is therefore uncharacteristic that so many weapons were deposited in the Naqada graves in Cemetery 17. However, if these burials were undertaken in a land that was not yet perceived as part of the Naqada territory, then it may have seemed dangerous to travel to the afterlife unarmed. Furthermore, with the exception of one woman, all the bodies uncovered in these graves were young men. Cemetery 17 was the northernmost and earliest Naqada cemetery in Lower Nubia, and the combination of weapons and young men indicates that the invasion was violent. Nevertheless, no specialized weapons were found in any of the other Naqada cemeteries in northern Lower Nubia. The few uncovered tool-weapons were a copper harpoon and at least two flint blades in Cemetery 40, a flint blade in Cemetery 43, and two ground stone axes and two flint blades in Cemetery 45/100-400. There is no reason to believe that any of these were used as weapons of war. The lack of weapons in the other Naqada cemeteries further emphasizes that Cemetery 17 was an exceptional case – a cemetery where it was important to highlight the warrior status of the men interred in the graves. However, several weapons were found at the only habitation site, which was situated on the Meris plain, so the Naqada settlers in Lower Nubia were not at all unarmed.

Deaths caused by violence were more widespread than weapons in the Naqada cemeteries in northern Lower Nubia. Violent deaths were recorded at three of the seven burial sites studied by the anatomists, i.e. Cemetery 30, 43 and 45, with one victim in each cemetery except the latter where three casualties had occurred. Four of the deaths were caused by blunt force to the head – most probably through attacks with maces or ground stone axes. All of these victims were men, and it seems most probable that these fatalities were caused in close arm combat. The fifth victim was a

woman from Cemetery 30 with heavy bleeding in the chest region at the time of death, and I interpret her wounds as caused by sharp force that possibly punctured the lungs and positively caused massive blood loss. I suggest that she was attacked in an ambush with a long range weapon, since the injuries are consistent with having been shot with bow and arrows. Arrows tipped with long and slender bone or ivory points with round sections (see p. 192 above) would have had good penetration power, but could not have made large open cuts and probably not broken any bones thus leaving no traces on the skeletons. Analyses have shown that these types of arrows killed the target through the poison applied on the tips (Clark, Phillips and Staley, 1974: 342). Furthermore, a woman in Cemetery 7 had narrowly escaped death by a sharp weapon piercing one of her vertebrae, and this may also have been caused by an arrow fired in an ambush. The other non-lethal injuries related to violence were three parry fractures of the ulna and two fractures of the nasal bone. In two out of three cases of parry fractures, the victims were men, and one of them died later in another violent attack. Both victims with broken nasal bones were men. Although not directly related to violence, it is curious that the three cases of fractures of the leg below the knee occurred in the cemetery with most violent deaths. All three victims were men, and one of them later died from violence. It seems clear that men had higher risks of being both killed and injured due to violence at the Naqada sites in Lower Nubia.

It is unfortunate that it was not prioritized to study evidence for trauma on the very fragmentary human remains in Cemetery 17 (see pp. 291-292 above), since the many weapons found among the grave goods suggest that the interred men were warriors. It would have been enlightening to see if any of them had injuries related to violence or had died from violence.

Beside the three killed men buried in Cemetery 45, probably during Naqada IIIA2, there is no single phase when war appears to have been more prevalent. It thus seems like the Naqada people in Lower Nubia were constantly under threat of minor attacks from the A-Group people. The settlement on the Meris plain shows evidence of having been abruptly abandoned – perhaps because of a violent confrontation.

The previous three chapters have presented northern Lower Nubia as a region inhabited by two different ethnic groups during the 4th millennium BCE. We have

revealed the likely ethnic identity of the majority of the people interred in a specific cemetery for all burial grounds with more than ten graves in northern Lower Nubia, established a date for the period of use of each site, and examined the evidence for war in form of finds of weapons and traces of violence on the human remains. The next chapter will on this basis attempt a reconstruction of the episodes of conflict and war between the incoming Naqada people and the indigenous A-Group people.

Chapter 11: War between Naqada people and A-Group people

As we saw in Chapter 1, war is an aspect of inter-group relations in form of armed combat between communities. Especially before the emergence of written sources, which only appeared at the end of the 4th millennium BCE in Upper Egypt, warfare may have left few traces in the archaeological record as it was yet an activity that required little specialized equipment. However, the preceding three chapters have demonstrated that northern Lower Nubia was a complex cultural area during the 4th millennium BCE, and I have presented tangible evidence of war in form of specialized weapons and trauma caused by violence on the skeletons. From the beginning of the 4th millennium BCE, the stretch of the Nile between the Dakka plain in Lower Nubia and Gebel es-Silsila in Upper Egypt appears to have been a frontier zone where two populations intermingled and interacted. From *c*. 3400 BCE, i.e. Naqada IIC, there was a significant amount of trade between the Naqada people and the A-Group people, as most recently analysed by Roy (2011). However, there were also episodes of war throughout the millennium, but these have so far been neglected in the archaeological literature about this time and place.

In this chapter, I will use inferential techniques on the contextual data already assembled (environmental and socio-political settings as well as evidence of war) in order to bridge inevitable gaps in the data and arrive at a historical narrative of war in Lower Nubia during the 4th millennium BCE. I will demonstrate that there were two main periods of violent confrontations: The first war was between intruding Naqada people and indigenous A-Group people in the region between the First Cataract and Bab el-Kalabsha; and the second war was between the state of Egypt and the political centres of the A-Group people. In-between the wars was a period when the interethnic relations were characterized by peaceful exchanges.

The first war in the area of the First Cataract

Between *c*. 3800 and 3600 BCE, a community of people utilizing the resources around the plain at Shellal established a burial ground for their deceased on the south-eastern knolls in what was to become Cemetery 7 in Reisner's nomenclature. The

material culture found in the graves suggests that the community was related to groups further south along the Middle Nile (see pp. 256-259 above). This is the earliest attestation of a cultural group termed the A-Group people (see *Chapter 10*). The northernmost extension of this cultural group seems to be the area just downstream of the First Cataract, as recent surveys in the area between Aswan and Kom Ombo have identified scattered remains of the A-Group people dating to the early 4th millennium BCE (Gatto, 2009, 2013), i.e. our proto phase.

At *c*. 4000 BCE, people in Upper Egypt adopted agriculture as the main form of food production from the region of the Eastern Mediterranean littoral via Lower Egypt. This was followed by the establishment of centralized forms of political organization before *c*. 3600 BCE, and this development culminated with the formation of the territorial state of dynastic Egypt in *c*. 3100 BCE (see the section *Political organization* in Chapter 4). In contrast, the A-Group people appear to have had a pastoral orientation and a decentralized organization consisting of corporate lineage groups (see p. 278 above). Despite similarities in the material culture that may render it difficult to determine the cultural identity of the two groups at the beginning of the 4th millennium BCE, there were some marked differences in food producing strategies and forms of political organization between the two groups.

This main section will narrate the events of the first violent confrontation between the A-Group people and the Naqada people in northern Lower Nubia. I will discuss how this confrontation contributed to an ethnogenesis for the A-Group people by stimulating a more conscious focus on their own cultural identity in contrast to the ethnicity of the Naqada people.

Population explosion and social hierarchy at Nekhen

Between 3800 and 3600 BCE, the Naqada community living at Nekhen, *c*. 130 kilometres north of Shellal, had already been farmers for some centuries. They had experienced a rapid population growth as an effect of the sedentary life as agriculturalists – most probably because each woman gave birth to more children with a better survival rate (see Haaland, 1995 for a comparable argument for Mesolithic Sudan). A hierarchical organization was developing, as testified by the establishment

of Cemetery HK 6 exclusively for an economic and political elite in Naqada IC – i.e. *c*. 3600 BCE (see the section *Nekhen* in Chapter 4). The elite organized a division of labour in the society. The majority of the people belonged to a peasant class that was involved in food production, and they produced a food surplus that could sustain the other classes. There was a class of full-time specialist workers such as potters, brewers and bakers as well as producers of luxury goods such as fine flint tools, semiprecious beads, cosmetic palettes and stone vessels (Hoffman, Hamrouch and Allen, 1986: 163; Friedman, 2011: 35). These craftspeople constituted a middle class that subsisted from selling their produce or from rations or grants received for their services (contra Trigger, 2003: 154). The fact that some of the commodities produced by the specialists were desirable objects for displaying prestige indicates that some of the highly skilled specialists held distinctive positions within the social hierarchy (see Sofaer, 2010: 211). The social elite or upper classes consisted of the nobility in form of the ruler and his family as well as the high-ranking officials – probably including religious specialists (Trigger, 2003: 149). The society was thus headed by a single man – the ruler, but he was mainly involved in protecting and promoting the upper classes. The elevated lifestyle of the elite was supported by land ownership and state salaries (Trigger, 2003: 147). Warriors were a group of specialists at Nekhen that have not yet been clearly identified by archaeologists. I have suggested that a specific type of grave in Cemetery HK 6 at Nekhen is evidence for the existence of a warrior class. This interpretation rests on the finding of several graves of men with weapons as grave goods next to the largest tombs interpreted as graves of rulers (see the section *Nekhen* in Chapter 4). These warrior graves were probably subsidiary burials, and the placement of the warrior graves accompanying the rulers' tombs indicates that the warriors were intimately connected with the ruler in life and that they were probably also expected to protect him in afterlife.

The archaeological evidence thus demonstrates that the society at Nekhen had a hierarchical form of social and political organization. Unfortunately, the largest tombs of Naqada IC-IIA, which are interpreted as the resting places of the rulers, were both heavily plundered and later reused (see pp. 115-117 above). Therefore, no insignia later used to symbolize Egyptian kingship have been uncovered in them. Nevertheless,

the remaining fragments of the grave goods suggest that the upper class at Nekhen was very prosperous.

When the climate in southern Upper Egypt deteriorated noticeably from Naqada IC onwards, there were suddenly more people in the area than the carrying capacity of the flood plain could sustain with the agricultural technology used at the time. Nekhen needed more land in order to feed its growing population. However, the possibilities of expansions were limited in all directions as deserts were encroaching from the east and west, while the Nile Valley to the north and south was already inhabited (see p. 315 above). To the north, the Naqada people living in the Qena Bend were already forming a chiefdom under the big man at Nubt (see pp. 124-125 above), just like the chieftain of Nekhen was establishing a chiefdom in the southernmost part of Upper Egypt. The chieftain of Nekhen therefore looked to Lower Nubia in the south, although the people at Nekhen must have known that the region they wanted to conquer was already inhabited. The people of Lower Nubia were not too different from the Naqada people from a cultural perspective, although they lacked the political hierarchy and economic specialization of the community at Nekhen. The chieftain of Nekhen must have calculated that it was possible to conquer the land in the south and kill or displace the inhabitants, since the A-Group people living there were few in number with a decentralized organization in contrast to the option of conquering the populous chiefdom of Nubt to the north, where more fierce opposition could be met.

Slightly before the expansion southwards into northern Lower Nubia, a group of Naqada people started a cemetery at Kubaniya just downstream of the First Cataract. We do not know if they had to displace – violently or not – an indigenous population before they could settle there. Ongoing archaeological surveys and excavations in the area may throw light on this question in the future. What concerns us here is the evidence suggesting that there was a violent expansion of people from Nekhen beyond the First Cataract, as presented in the previous two chapters.

Battle at Shellal

The A-Group community of the proto phase that used the south-eastern knolls of Cemetery 7 at Shellal as their burial ground seems to have faced a violent encounter

with Naqada people at the very beginning of Naqada IC. Two individuals uncovered in this cemetery carried traces of violence on their bones (see pp. 258-259 above). The cemetery appears to have ended with the burial of a man who was killed by excessive use of violence as he was hit repeatedly on the head with weapons causing both blunt and sharp force injuries (see p. 258 above). Maces and stone axes were the favoured types of weapons for hand-to-hand fighting at this time in Upper Egypt and probably also in Lower Nubia (see the sections *Maces* and *Axes* in Chapter 7; **Catalogue 1** and **Catalogue 2**). I find it highly probable that the blunt traumas were caused by either one or both of these melee weapons of stone. According to both pictorial and archaeological sources, maces were the main melee weapon of the warriors at this time. The last attack of the man in Cemetery 7 was probably undertaken by the leader of the warriors, since the final blow at the back of his head was delivered with a copper-alloy axe or adze, either of was not only an efficient weapon in war, but also a prestigious metal object signalling high social status. The sharp force injury thus seems to have been caused by one of the earliest attested uses of copper weapons for killing fellow humans in the Nile Valley.

On the basis of the forensic evidence alone, it is hard to figure out whether the man was a victim of a homicide, had been attacked in an ambush, or had fallen in a battle between two opposing groups. However, the use of two different types of weapons – stone maces/axes and a copper-alloy axe/adze – suggests that he was attacked by more than one assailant. A frontal attack with melee weapons is indicative of a battle, while an attack by assailants in hiding, for instance in between rocks, seems less likely. Besides, the preferred weapons of ambushes during the Bronze Age were bows and arrows (e.g. Hårde, 2006: 372), i.e. ranged missile weapons, as is still common in war tactics. The historical setting at a time when there was a Naqada expansion into the area makes it more probable that the violent death of the last man buried in the A-Group cemetery dating to the proto phase at Shellal was related to violent conflict between communities rather than a homicide.

On this basis, I visualize that the man was fighting in a battle against a band of Naqada warriors, who probably outnumbered the fighting members of the local community at Shellal. Our victim was first assaulted by warriors carrying maces, from

which he received several blows to his face in a frontal attack. After the battle had ended, the man could have been forced to kneel with his back towards the leader of the warriors, who delivered a swinging blow with a copper-alloy axe to the back of his head with a force that cut off a piece of his skull. Or perhaps the injury pattern is more compatible with the already deadly wounded man being prostrate on the ground with the leader of the warriors standing above him and slicing off a piece of his skull with a copper-alloy adze.

From the same cemetery, a woman with a healed parry fracture was also attacked face to face – evidently in an earlier confrontation than the battle in which the man was killed. However, parry fractures of women may also be an indication of woman battering, although this practice has not been observed as an inherent part of gender relations in other Bronze Age societies along the Middle Nile (see Judd, 2007: 1664). It rather seems related to episodes of war as at Jebel Sahaba (see pp. 186-187 above). In addition, several other men in nearby cemeteries had healed injuries caused by violence that I suggest were inflicted in the battle at Shellal (see pp. 328-329 below). The finding of two maces and two ground stone axes in other graves in the cemetery are strong indications that the community at Shellal was in a violent conflict with a neighbouring group. Nevertheless, the man with the head injuries had been buried by his own people, but without funerary gifts. We cannot know if more people of this community were killed in the same battle without receiving a formal burial. However, the cemetery was abandoned after the killed man's funeral. It is therefore likely that the survivors of the community moved further south and settled around the khors at Ambukol and Bahan, since the end of the A-Group graves in Cemetery 7 at Shellal is contemporary with the establishment of Cemetery 14 at Khor Ambukol during Naqada IC. Cemetery 17 at Khor Bahan may date already from Naqada IB.

With the A-Group people leaving the First Cataract area, the Naqada people could settle there. We know that a Naqada community was established at Kubaniya at a safe distance from the nearest known A-Group site, i.e. Cemetery 14 located *c*. 22 kilometres further south. The stretch of approximately one day's march between the southernmost Naqada community and the northernmost A-Group community was thus probably a contested no man's land. Midway in this area was Shellal – the largest plain

upstream of the First Cataract and thus attractive for settlement. Strangely, no Naqada remains dating before Naqada IIIA were uncovered during the excavations of the plain. It is however possible that the earliest Naqada graves were built over by the late 19th century railway line and station (Reisner, 1910: 18, plan 9). It is reasonable that the Naqada people first settled in the area of Shellal in Naqada IC after the A-Group community was pushed out. However, the archaeological evidence suggests that they immediately continued the expansion further south, as we will see in the next section.

Battle near Khor Bahan

The earliest hard evidence for a Naqada expansion into Lower Nubia is from Cemetery 17 at Khor Bahan. The site was initially used as a cemetery by A-Group people of the proto phase (see the section *Cemetery 17 at Khor Bahan* in Chapter 9), and it was thereafter reused by Naqada people (see the section *Reuse of Cemetery 17 at Khor Bahan* in Chapter 10). The people buried in the Naqada graves of the cemetery at Khor Bahan probably belonged to the earliest wave of expansion from the core area of the Naqada people in the Egyptian Nile Valley between Matmar in the north and Nekhen in the south. In this wave, the area from Gebel es-Silsila to Khor Bahan was conquered and settled.

Migrations are typically carried out by defined sub-groups of a population (Anthony, 1990: 895). It is commonly young adult men who migrate so that the sex distribution of migrants is initially dominated by males, and this should be visible archaeologically in the mortuary assemblages in form of sex ratios that are heavily unbalanced towards males (Anthony, 1990: 905). Young men in societies where male statuses were partially based on success in war seem to have actively sought violent conflicts with neighbouring groups, and this "*glory-seeking raiding*" resulted in expansion into the conquered areas (Anthony, 1990: 898).

With one exception, the individuals buried in the Naqada graves dating to Naqada IC in Cemetery 17 were men. Furthermore, the presence of numerous weapons in their graves demonstrates that it was necessary to be violent or threatening in order to expel the indigenous population. In fact, I interpret the earliest Naqada graves in the cemetery at Khor Bahan as belonging to a band of warriors from Nekhen. The

weaponry deposited in the graves seems to be part of weapon sets consisting of maces in combination with flint knives or daggers and in some cases also bows and arrows (see **Catalogue 1**). The human remains from the site were unfortunately too fragmented to preserve evidence of violence. However, several graves lacked a body and were probably cenotaphs (see pp. 291-292 above). If these graves indeed were cenotaphs for fallen warriors, it is probable that some fighting also took place deeper inside the area inhabited by the A-Group people. This is corroborated both by the skeletal trauma identified on the bodies in the A-Group Cemetery 45 on the Dehmit plain and by the interpretation of the empty Naqada graves in Cemetery 17 as cenotaphs for Naqada warriors whose bodies could not be retrieved and carried back to territory controlled by the Naqada people for burial. The circumstantial evidence thus suggests that a similarly organized and equipped warrior band as the one I propose attacked the A-Group community at Shellal, had met a violent death in the neighbourhood of Khor Bahan, and their main opponents can probably be found in the immediate vicinity, namely the A-Group people.

The A-Group sites at Khor Bahan and Khor Ambukol were abandoned during Naqada IC, which is contemporary with the Naqada expansion into the area. I suggested that Khor Ambukol and Khor Bahan were the locations to which the A-Group people escaping war at Shellal fled. Nevertheless, the A-Group communities were not left in peace at their new locations. The skeletal remains uncovered in the small and short-lived Cemetery 14 at Khor Ambukol show the highest percentages both of people killed by violence and of individuals missing their skulls in all of the proto phase cemeteries of the A-Group people in northern Lower Nubia (see **Table 21**). A man had been killed through extensive blunt force violence that had fractured many bones of his skull and body, and a woman had probably bled to death after a violent injury in her chest. Three individuals appear to have been buried without their skulls. I have argued that the missing skulls may have been taken by victorious Naqada warriors as trophies from A-Group people killed in battles (see pp. 275-276 above). Furthermore, a man had a healed fracture of his zygoma – perhaps received in the battle at Shellal. The much disturbed human remains in the A-Group part of Cemetery 17 at Khor Bahan preserved two individuals with healed fractures caused by

violence. Although farfetched, it is not impossible that these men were also survivors from the battle of Shellal who had taken refuge with family or friends further south.

It is probable that the A-Group community living in Khor Bahan and in adjacent Khor Ambukol also moved from the region after a battle with the Naqada people. The A-Group cemeteries of the proto phase on the plains of Meris and Dehmit, at *c*. 15 and 25 kilometres to the south respectively, were established at the same time as the cemeteries at Khor Ambukol and Khor Bahan were abandoned. I thus suggest that the surviving A-Group people around Khor Bahan escaped southwards and founded new cemeteries, while the Naqada people buried their dead warriors in the A-Group cemetery at Khor Bahan. The taking over of the A-Group cemetery by the Naqada people was an eloquent statement that they had taken over their territory and ended their history in and claims on the land there.

Expulsion of the A-Group people from northern Lower Nubia

Following the withdrawal of the A-Group people from the area around Khor Bahan in late Naqada IC, two new A-Group cemeteries were established – one on the Meris plain and another on the plain downstream of Khor Dehmit. The new cemeteries appear to have been abandoned already in Naqada IIA, which is the time when the first Naqada cemetery in the area was established at Abisko – midway between the two A-Group sites. No violent injuries or deaths were recorded in the A-Group Cemetery 41/200 on the Meris plain, but the human remains were in a very bad state of preservation. Evidence for violence could easily have been eradicated or overlooked. However, two males lacked their skulls, and long flint blades were found in six graves of which four were positively identified as belonging to men. These tool-weapons may have been linked to masculine identity and were probably used as weapons in case of war (see p. 273 above). In Cemetery 45/200, a man had been killed by being stabbed in the back of his neck with a pointed weapon, and another man had died after breaking four of his ribs, which caused extensive bleeding in his chest. Furthermore, a woman had a healed fracture of the zygoma. All these traumas are consistent with violent attacks (see the section *Skeletal trauma caused by violence* in Chapter 7). In addition, three females were lacking their skulls.

Evidence of violence was also uncovered at Cemetery 43 of the Naqada people. A woman died from extensive bleedings in the chest – possibly from wounds caused by arrows. In this cemetery, eight out of 58 bodies – i.e. 14 per cent – were lacking the skulls, and six of these headless bodies belonged to men.

As at Shellal and Khor Bahan, the A-Group people retreated southwards from the plains of Meris and Dehmit after a battle in Naqada IIA. The Naqada people seem to have occupied Abisko even before the withdrawal of the A-Group people. The former habitat of the A-Group people on the plains of Meris and Dehmit was settled by Naqada people during Naqada IIC and IID1 respectively. This was probably a second wave of expansion caused by conflict at Nekhen (see p. 316 above). The Naqada people apparently continued headhunting of the victims of battles and ambushes since several headless bodies were found in these A-Group cemeteries too (see **Table 21**). Harrison's (2006) proposal that headhunting created estrangement and enmity between neighbours and thus contributed to formations or negotiations of group boundaries seems very fitting for this plausible case of ancient headhunting (see pp. 281-282 above). The trophy heads were probably put on display in order to estrange the two peoples and to warn the A-Group people against resistance.

After the retreat to the south, the A-Group people seem to have continued to fight for their former territory. The victim of a ranged weapon in the Naqada Cemetery 43 at Abisko suggests that the A-Group people ambushed and killed Naqada people, and the high frequency of headless bodies in the same cemetery indicates that the A-Group people were also collecting trophies – possibly in retaliation. However, the distance of *c*. 40 kilometres between the two ethnic groups appears to have decreased competition and hostilities, and the war apparently came to a halt as the ethnic boundary became fixed around the inhospitable stretch of the Nile known as Bab el-Kalabsha. With the third wave of Naqada expansion into northern Lower Nubia during Naqada IIIA2, the occupied territory had already long been abandoned by the A-Group people.

A confrontational ethnogenesis for the A-Group

In a recent article, Gatto (2011: 26) has provided a simplified view on the process of establishing a new cultural identity in northern Lower Nubia at the end of the 4th millennium BCE. She proposes an ascriptive ethnogenesis on the basis of Egyptian iconography consisting of scenes where the people from the Middle Nile were represented as "*captured enemies*". She thus ignores self-ascription of ethnic identity by the A-Group people. Furthermore, Gatto argues that the Egyptians applied "*the classical concept of duality, 'Egypt in the opposition to the others', which is a metaphor for 'order over chaos'*". However, she denies the historicity of the actual events depicted:

"[T]*he king smiting the enemies does not have to be seen as a real event, but as the symbolic representation of order over chaos. The Egyptian royal ideology, thus, needed the 'other' as a justification for its existence. And the Nubians (sic) went from being the 'same' to becoming the 'other'*" (Gatto, 2011: 26).

I have argued to the contrary by infering that the power of the mace as a symbol was derived exactly from having been used for smiting enemies (see p. 175), so the smiting scene could have been based on real events – whether the king himself killed the enemies or his warriors killed them acting as the king's extended arm. It is more probable that the development of a royal ideology of maintaining order against the outside forces of chaos was based on real conflict and war during the unification process, and it was subsequently applied both to curb internal opposition and to legitimize expansion into foreign terriotory.

It thus remains to see if a warfare perspective can throw new light on how the characteristic material culture and social practices of the corporate lineage groups of the A-Group people emerged as an ethnic group with a shared cultural identity.

Before the people inhabiting northern Lower Nubia came into more frequent contact with the Naqada people from the beginning of Naqada IC onwards, they appear to have been rather indifferent to displaying a distinct and obvious ethnic identity through their material culture – at least this is the impression gained from the limited grave goods uncovered in their burials. However, in contrast to the Naqada people, the people inhabiting northern Lower Nubia used small spiral shells and

tortoise-shell bracelets for personal decoration. Furthermore, their tradition of making pots was distinctive although the pots themselves looked rather similar, and their burial practices were different although appearing to follow the same general beliefs (see discussions in *Chapter 8* and *Chapter 9*). It is also likely that they maintained a pastoral way of life in continuation of the traditions encompassing all of the Nile Valley in the 5th millennium BCE – in contrast to the agricultural Naqada people who had adopted cereal farming. This would suggest that the habitus of the people living in northern Lower Nubia was different from that of the Naqada people, although they both inhabited quite similar ecological environments along the Nile.

It is probable that the Naqada people knew of the population in northern Lower Nubia and that the indigenous people in Lower Nubia were aware of the agricultural neighbours in the north, even before they came into closer contact in the mid-4th millennium BCE, because the area between Gebel es-Silsila in Upper Egypt and the First Cataract seems to have been sporadically used by both groups. This may thus have been the first frontier or contact zone between the two populations, and ongoing archaeological investigations in this region may provide additional evidence for this (see Gatto, 2009, 2013).

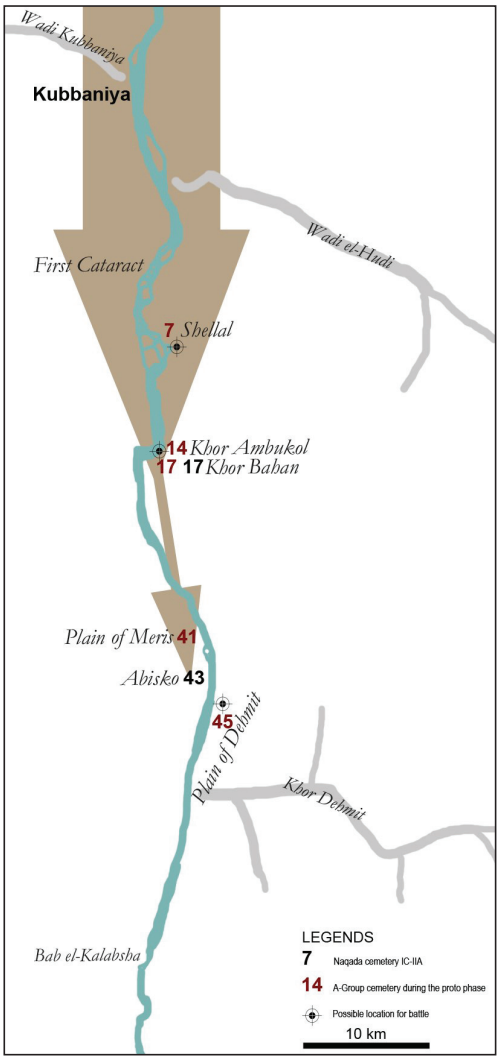
The war described in the previous section was most probably instigated by the Naqada people as the chieftains of Nekhen dispatched warriors to fight the communities between the First Cataract and Khor Bahan in order to incorporate this territory into the chiefdom of Nekhen. The chieftain must have considered it possible for his populous chiefdom with an army and a new social and political organization to conquer the small kin-based communities in northern Lower Nubia (cf. Campagno, 2004: 698). The warriors in Cemetery 17 at Khor Bahan seem so uniformly equipped that they appear to have been under central command and acting on the orders of the chieftain of Nekhen.

The evidence for war can be summarized in three points:

- The people killed or injured by violence in Cemeteries 7, 14, 17 and 45 (see **Table 18**).
- The weapons found in the A-Group graves of the proto phase in Cemetery 7 at Shellal.

- The numerous dead young men with weapons buried in the Naqada graves in Cemetery 17.

Interpreted together, these data strongly suggest that the indigenous communities at Shellal, Khor Ambukol and Khor Bahan at first attempted to defend their territory in what I have interpreted as two battles – at Shellal and Khor Bahan – when the Naqada people first entered the region during Naqada IC (**Map 7**). Despite opposition, the warriors from Nekhen seem to have achieved their mission in the end – probably because they were better organized by being under central command, better equipped by carrying specialized weapons of war and outnumbering the fighting members of the indigenous people. The archaeological remains indicate that two battles were fought and possibly a couple of ambushes were undertaken before the indigenous people retreated southwards and settled on the plains of Meris and Dehmit further upstream. There was temporarily a status quo with a short-lived ethnic boundary between the Naqada people and the indigenous people in the no man's land between Khor Bahan and the Meris plain (see **Map 7**). The indigenous people were finally expelled from northern Lower Nubia after an intensive military campaign with a battle at Dehmit during Naqada IIA. Headhunting was evidently part of the assignment of the warriors from Nekhen after the first battle at



Map 7: The first wave of the Naqada expansion in to northern Lower Nubia with indications of possible battlefields. Graphics by Hafsaas-Tsakos.

Shellal. With northern Lower Nubia under control by Naqada people, a second site was established at Abisko in Naqada IIA (see **Map 7**).

Ethnogenesis

It is probable that increased contact with the Naqada people in the form of intensive competition for resources that resulted in war created the social environment where the establishment of an ethnic identity became both necessary and profitable for the indigenous people in northern Lower Nubia. The necessity arose when it became vital to be able to distinguish between friends and enemies after the Naqada people had attacked them. Moreover, it became crucial to belong to a community larger than the corporate lineage groups in order to be protected, and it was essential to be recognized visually as different from the enemy (see p. 99 above), whom the A-Group people appear to have attacked in ambushes (see p. 319 above). At a later time, when exchange was established, it became profitable to belong to the A-Group people as the whole community appeared to prosper from the trade. It is probable that the ethnic identity of the A-Group people was established as they perceived themselves as being both culturally different from the Naqada people and probably also of common descent in accordance with a lineage organization of the society (see p. 278 above). Likewise, the Naqada people also seem to have recognized the A-Group people as different from themselves. The people in northern Lower Nubia thus appear to have conceived themselves as a distinctive cultural group in accordance with the definition of ethnic groups presented in Chapter 4 (see p. 96 above). The violent expansion of the Naqada people thus caused a violent confrontation that forced an ethnogenesis. If the contact at first had been peaceful, an alternative outcome could have been that the indigenous people of northern Lower Nubia had gradually been assimilated with the Naqada people, because although there were differences between the two populations, similarities were also present – such as the body-centred habitus suggested by Wengrow (2001, 2010; see p. 216 above).

We do not know what the members of this ethnic group called themselves, but their material remains have been catalogued under the term *A-Group* by archaeologists since Reisner's initial identification (see p. 55 above). In order to emphasize that the

material remains were not existing in their own right, but made by people who also forged their own ethnic identity, I have called them the 'A-Group people' throughout this thesis.

The earliest toponym for Lower Nubia recorded by the Egyptians was *Ta-Seti*, which meant 'the Land of the Bow' in the Egyptian tongue (see p. 75 above). This name was also used for the first nome of Upper Egypt, which stretched from Elephantine at the First Cataract to downstream Gebel es-Silsila. I take this as an indication that the name was originally used for a single region – namely the territory between Gebel es-Silsila and Bab el-Kalabsha – which the chieftains of Nekhen conquered from the A-Group people and occupied from Naqada IC to Naqada IIIB (see *Chapter 9*). The toponym would thus be much older than its earliest attested use in writing during the reign of king Aha – the second king of the First Dynasty. At least by the time of the reign of his follower king Djer, the toponym had come to encompass all of Lower Nubia, i.e. the territory of the A-Group people (see pp. 75-76 above). The warfare perspective applied here thus explains the peculiar use of the same toponym for two adjacent regions – Lower Nubia and the first nome of Upper Egypt – populated by different ethnic groups and belonging to different political communities since the mid-4th millennium BCE.

Summary of the first war

The Naqada people and the A-Group people were enemies of war during Naqada IC and IIA, i.e. a period of 140 years between *c*. 3600 and 3460 BCE (see **Table 3**). The violence against the A-Group people in Lower Nubia developed to also include headhunting, which may have been a contributing factor in distinguishing the two warring groups culturally, as they seem to have had many cultural characteristics in common from a shared historical trajectory during the 5th millennium BCE. Although there were not constant battles between the Naqada people and the A-Group people during this time span, the relationship between the two ethnic groups remained hostile. It was during these crucial years of war that both the ethnic identity of the A-Group people was forged in response to the beginning of the war, and an ethnic

boundary between the two groups was established at Bab el-Kalabsha at the end of the epoch of war.

During Naqada IIB, the chieftains of Nekhen thus seem to have controlled the Nile Valley from the area just upstream of the Qena Bend until Bab el-Kalabsha in northern Lower Nubia, from where the A-Group community was just expelled.

From enemies to trading partners

The earliest exchange between the Naqada people and the A-Group people is attested by rhomboidal and turtle-shaped siltstone palettes of Naqada types found in small amounts in proto phase graves (*c*. Naqada IC to IIA) in cemeteries between Shellal and Dakka (see **Table 8**). The total number of imported palettes was only 10 over a period of more than a 100 years, but the two communities were at war during most of this time. The palettes could have been obtained by "*heroic journeys*" to Upper Egypt by members of the A-Group communities (see Wengrow, 2010: 44 for the concept), by entrepreneurial traders from Upper Egypt sporadically travelling through northern Lower Nubia, by the elite at Nekhen giving gifts in order to create favourable relations for exchange, or by A-Group people looting Naqada graves or robbing caravans for profit. In any case, the palettes were portable objects that could change hands easily outside organized trade expeditions.

The expansion of the Naqada people into northern Lower Nubia and the flight of the A-Group people further south created an ethnic boundary between the two groups. The boundary was first located temporarily at the Meris plain in Naqada IC, and it then moved to Bab el-Kalabsha in Naqada IIA for a longer term. The ethnic boundary structured the relationship and interaction between the two ethnic groups during the following centuries.

In this section, we will make a preliminary examination of the geographical points that facilitated peaceful cross-cultural contact. Although the subject of this thesis is war, the interlude of peaceful relations prepared the grounds for the final war between the Naqada people and the A-Group people after the former had established a territorial state in the Egyptian Nile Valley.

Contact in the area of Abisko and Dehmit during Naqada IIC

The relations between the A-Group people and the Naqada people appear to have been relatively peaceful during Naqada IIB to IID1, as weapons and injuries seem rare during this time span (see *Chapter 9* and *Chapter 10*). Already in Naqada IIA, the Naqada expansion had reached Abisko, almost 30 kilometres south of Shellal, where Cemetery 43 was founded. The rocky area in which this cemetery was established was less suitable for agriculture (see **Figure 101**) than the fertile plain of Dehmit on the opposite east bank. It thus seems that the Naqada presence at Abisko was set up as a base from which the Naqada people could engage in resource extraction in order to provide the elite at Nekhen with precious raw materials and exotic products. The burials of eight individuals of Naqada origins on the fringes of the A-Group Cemetery 76 at Gedekol upstream of Bab el-Kalabsha testify to peaceful relations and close contact between the two ethnic groups across the ethnic boundary during Naqada IIB-D1 (see the section *Cemetery 76* in Chapter 8).

Furthermore, an A-Group community was established on the northermost fringes of the plain of Dehmit, as testified by their use of Cemetery 44 during Naqada IIC (see the section *Cemetery 44* in Chapter 8). This means that the A-Group people returned for a short period – less than 40 years – to their former territory downstream of Bab el-Kalabsha. The distance between the southernmost Naqada cemetery and the northernmost A-Group site had suddenly decreased to only 3 kilometres, and the area of Abisko and Dehmit seems to have been an important geographical setting for contact during Naqada IIC. The exchange of commodities, raw materials and ideas were probably the focus of the interaction. Both societies seem to have been stimulated by the exchange. In the case of the A-Group community, incipient hierachization is evident in Cemetery 44. A man buried in grave 15 (Elliot Smith and Wood Jones, 1910: 167) had an unusully large grave pit for the early phase of the A-Group (for comparable data see Nordström, 1996: 22), as it measured 1,8 x 1,7 metres with a depth of 1,3 metres (Reisner, 1910: 257). His grave gifts were also eceptionally rich for the early phase, as they consisted of a siltstone palette (unfortunately the shape was not recorded), four imported Naqada pots – a beer jar, a wavy-handled jar, a flat-based bowl and a jar with pointed base – as well as a red-polished black-mouthed A-Group

pot with round base. This grave appears to have been the tomb of an individual with an entrepreneurial spirit who started to control trade by channeling raw materials from the south to the Naqada people based at Abisko in exchange for processed products from the north.

Moreover, it is interesting to note that the exchanges between the Naqada people and the A-Group people in Lower Nubia appear to have started in Naqada IIC, which is a period when there are indications of conflict at Nekhen, but also a very rich ruler's grave in form of the Painted tomb (see pp. 119-120 above). The impression is that the exchanges between individuals of different ethnicities flourished when the centralized political power in Nekhen was weakened and the elite was occupied with internal conflicts. Conflicts at Nekhen may also have been a factor in a second wave of immigration into northern Lower Nubia as the Cemeteries 23, 30 and 41 were first used during Naqada IIC. All these cemeteries were inside the territory already occupied by Naqada people (see **Map 3**), and the Naqada community establishing Cemetery 41 on the Meris plain seems to have been engaged in agriculture. In contrast to the evidence from the cemeteries, several weapons were found on the contemporary habitation site on the Meris plain (see the section *The habitation site 41/300* in Chapter 10).

The A-Group community only used Cemetery 44 during Naqada IIC (see the section *Cemetery 44* in Chapter 8). It is possible that Naqada attacks again drove them southwards, since a man in grave 4 in Cemetery 44 had a defensive parry fracture of his right ulna. However, the new retreat from the area may also be connected to the emergence of more organized exchange and the establishment of a transit market at the mouth of Wadi Allaqi in Naqada IID1.

The cross-road at Wadi Allaqi

From the 4th millennium BCE onwards, the Nile came to provide a north-south corridor with the increasingly arid Western Desert on the west bank and the barren Red Sea Mountains on the east bank. Wadi Allaqi was the main dry river branch entering the Nile on the east bank in Lower Nubia (see p. 29 above). It has a vast basin and penetrates more than 300 kilometres into the Red Sea Mountains (Google Earth;

see **Map 2**). Very limited archaeological investigations have been undertaken in the demanding terrain of the Eastern Desert, but the finding in Wadi Elei, a tributary of Wadi Allaqi located *c*. 200 kilometres from the Nile, of a gold bracelet in a tumulus dating to the mid-5th millennium BCE suggests that gold mining has very ancient traditions in the region (Castiglioni and Castiglioni, 2004: 125). Wadi Allaqi must have been an important artery for people and goods moving to and from the Eastern Desert, and its tributary Wadi Gabgaba was most probably also a shortcut to Abu Hamed and regions further south (see p. 29; see **Map 2**). Sabrina R. Rampersad's (2000) comparative research of pottery decoration styles in the regions of the Middle Nile, the Western Desert, the Eastern Desert and the Butana demonstrates that the A-Group pots had most motifs in common with the decorative patterns found on sherds of Khartoum Neolithic sites in Central Sudan, i.e. Kadero, Shaheinab and Geili (Rampersad, 2000: 131; see **Map 2**). Furthermore, she suggests that there was a direct link between the A-Group people and the people of Shaqadud in the Butana because of similarities in decorative styles that were not used on pots along the in-between stretches of the Middle Nile (Rampersad, 2000: 140). This indicates that the contact between the two areas used the shortest route by crossing the land between the Dakka region and Abu Hamed via the wadi routes (see **Map 2**).

A transit market at Khor Daoud

A single Naqada burial ground, Cemetery 111, was situated at the point where Wadi Allaqi joins the Nile Valley (see the section *Cemetery 111 – A Naqada burial ground in A-Group territory* in Chapter 8). In close proximity was another Naqada site, Khor Daoud. The site consisted of 578 storage pits, but no surface structures or hearths were uncovered (Piotrovksy, 1967: 128). This suggests that Khor Daoud had a different function than habitation, and it may throw light upon how cross-cultural exchange was conducted in the mid-4th millennium BCE. The excavations at Khor Daoud revealed that 74 of the pits contained various objects. Most frequent were Naqada pots, and many of these were found emptied and turned upside down. The most numerous Naqada pots in the pits were wavy-handled jars (Piotrovsky, 1967: 129), which were also the commonest imported pots in A-Group contexts in the

northermost and middle parts of Lower Nubia (see p. 241 above). Notable were also several beer jars (compare Piotrovsky, 1967: plate 15 with Petrie's R81; see p. 229 above), which may have contained imported beer. There were also other storage jars of both red-polished wares and rough wares (compare Piotrovsky, 1967: plate 13 with Petrie's R45a and R84d). The macro-organic finds from the pits consisted of some date stones and small quantities of barley and wheat. The cereals were probably imported from Egypt. A fragment of a copper-alloy chisel was also found (Piotrovsky, 1967: 130). After awls, chisels were the commonest copper objects obtained from Egypt by the A-Group people (see **Table 5**). Fragments of an ivory bracelet as well as abundant pieces of ostrich eggshell were recorded in many pits, and this points to some of the raw materials that the Naqada people sought in the south. However, the most important export was probably gold, which may have been obtained from nomads coming down from the Eastern Desert or through prospections by Naqada expeditions.

All of the wavy-handled jars were of the type with modelled necks dating to Naqada IID1 (see Piotrovsky, 1967: plate 12). The other pots were also used during this phase, although some of them were produced during a longer timespan. The site thus seems to be contemporary with the Naqada part of Cemetery 111, which was also dated to Naqada IID1, i.e. a very short time interval between *c*. 3360 and 3330 BCE (see the section *Cemetery 111 – A Naqada burial ground in A-Group territory* in Chapter 8).

I have previously interpreted the site at Khor Daoud as an early *transit market* (see Curtin, 1984: 28-29 for the concept), where Naqada people, A-Group people and possibly nomads from the Eastern Desert met to exchange their products on a 'neutral' ground (Hafsaas-Tsakos, 2009a: 26). It is interesting to note that a transit market was established during Naqada IID1, which is a period from which we have no evidence of rulers at Nekhen (see p. 120 above). It thus seems that exchange flourished in the absence of centralized political and economic control at Nekhen, and despite possible violent conflict between chiefdoms in Upper Egypt (contra the common-wealth theory, Anđelković, 2011: 29).

The finds from Khor Daoud suggest that the most important Naqada imports were jars that were evidently used as containers for imported cereals, beer, wine and

olive oil. At this early time, both wine and olive oil most probably came from Palestine (see Hafsaas-Tsakos, 2009c), as the cultivation of vine had not yet started in Egypt (Wengrow, 2006: 140). The commodities probably arrived by donkey caravans, as attested in written sources of the Sixth Dynasty (e.g. Harkhuf's autobiography, see Lichtheim, 1973: 26), since the earliest use of donkeys as pack-animals was in Naqada IIC (Wengrow, 2006: 39, 2010: 75). Bulky goods, such as jars containing food stuff, seem to have been stored temporarily at the site. The food stuff and other finished products were then traded from the transit market over a couple of weeks. The many Naqada pots found in A-Group contexts at this time in this region indicate that the contents were regularly distributed in the containers (see **Figure 70**). However, the emptied jars at Khor Daoud suggest that some of the products were also transferred into bags or baskets – containers more favourable for a nomadic life-style – and carried away by people living as pastoral nomads in the Eastern Desert. The fragments of ivory and copper indicate that more valuable commodities also changed hands. The near absence of specialized copper-alloy weapons in A-Group contexts indicates that there were restrictions by the Naqada people on exports of weaponry. The goods acquired from Lower Nubia and further south were probably raw materials such as incense, resins, ebony, exotic skins from wild animals, ivory, ostrich eggs and feathers, live wild animals, obsidian and gold (Roy, 2011: 251-267). The absence of obsidian at sites along the Middle Nile upstream from Dakka suggests that this raw material also arrived from Ethiopia to middle Lower Nubia via Wadi Allaqi and Wadi Gabgaba. The final destination of the obsidian was Upper Egypt, where larger items such as bowls were made of this rare black volcanic glass (see p. 111 above).

With the exception of gold and copper from the Eastern Desert, most of the raw materials that interested the Egyptians seem to have originated further south than Lower Nubia. The A-Group people must therefore have acted as intermediaries and profited from the exchanges between Naqada people and peoples to the south. It is uncertain how the A-Group people were supplied with these products, but they can be identified as the middlemen controlling the travel through Lower Nubia and profiting from the exchange, as testified by Cemetery 44 (see the section *Cemetery 44* in Chapter 8) and Cemetery 134 (see the next section).

Cemetery 134 at Sheikh Sharaf

Cemetery 134 was situated *c*. 25 kilometres south of the mouth of Wadi Allaqi on the east bank of the Nile near Sheikh Sharaf. The distance between Cemetery 134 and the Naqada sites at Wadi Allaqi was thus roughly a day's march, and there were no other identified 4th millennium BCE sites in the intermediate space.

According to the investigation of ethnic identity, Cemetery 134 was one out of three cemeteries in the area between Sheikh Sharaf and Sayala where a black and white speckled stone predominated as raw material for making the cosmetic palettes (see pp. 222-223 above; **Figure 61**). At Cemetery 134, 43 per cent of the palettes were made of this stone, 34 per cent of quartzite and 23 per cent of siltstone (see **Figure 60**). It seems that the A-Group people in this area opted for a different stone than the commonly used quartzite, and the reason was probably a demonstration of prosperity and distinction as these cemeteries belonged to some of the richest A-Group communities. This is also evident in the frequency of Naqada imports, which constituted 49 per cent of the pots (see **Figure 70**).

	NE	E	SE	S	SW	W	NW	N	Total
Left	—	1	—	2	4	3	—	1	**11**
Right	—	—	—	3	1	—	—	—	**4**
Total	**0**	**1**	**0**	**5**	**5**	**3**	**0**	**1**	**15**

Table 32: Burial position and orientation for the 15 bodies that preserved these data in Cemetery 134. After Firth (1927: 192-196).

The burial practices show a preference for the left side with 73 per cent of the bodies (**Table 32**). Of all the A-Group sites investigated in this thesis, this is the highest frequency for bodies placed on the left side in the graves. However, 69 per cent of the bodies were buried on the left side in Cemetery 7 dating to the proto phase (see **Table 16)**, Cemetery 101-102 dating from the proto phase to the early terminal phases (see **Table 13**) and Cemetery 80 dating to the early to early middle phases (see p. 214 above). In contrast, the left side was with the single exception of Cemetery 30 (see **Table 26**) preferred for between 84 and 100 per cent of the bodies in the Naqada cemeteries in Lower Nubia. It thus seems likely that the individuals buried in Cemetery 134 belonged to the A-Group people, but their exchange with the Naqada people caused a higher number of imports to be deposited in the graves. The close contact with the Naqada people also influenced the burial practices – most probably by letting foreign religious ideas determine the burial position and orientation of the

bodies in the graves. The pots at the site belonged to both A-Group and Naqada traditions in almost equal numbers. The A-Group pots consisted mainly of bowls in form of red-polished black-mouthed wares, red-polished plain wares and black polished wares (**Figure 103**). The latter type was rare, and the black polished pots thus appear to have been more exclusive (see p. 235 above). The Naqada pots date primarily to Naqada IID1, and there were no forms diagnostic for Naqada IID2. A rough storage jar (Petrie's R84d) spans from Naqada IID1 to IIIA1. Two wavy-

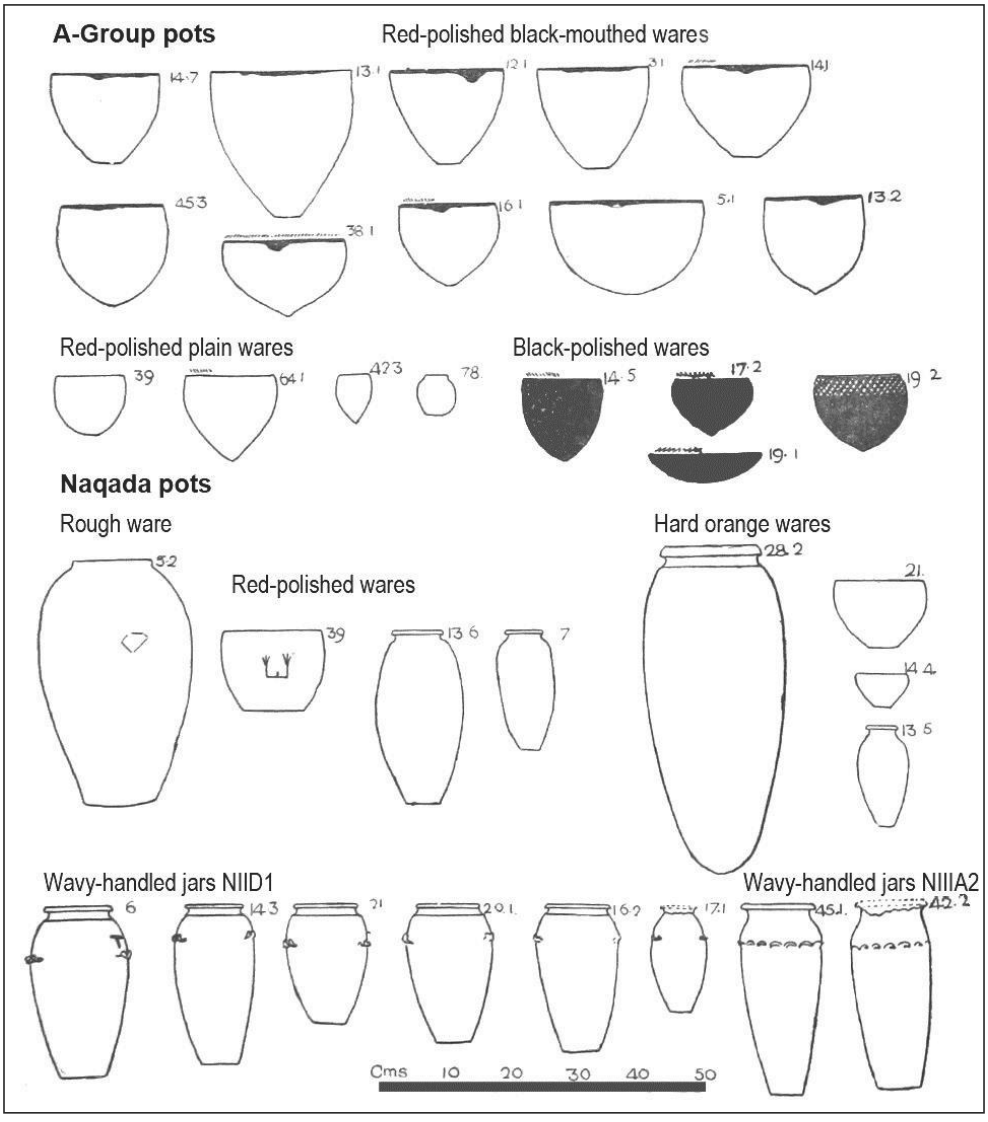


Figure 103: The pots uncovered at Cemetery 134. After Firth (1927: fig. 3).

handled jars of cylindrical form with a continuous wavy band date to Naqada IIIA1, and a large storage jar and the two bowls of hard orange ware date to Naqada IIIA1-2. The black-mouthed fine wares are consistent with the middle phase of the A-Group people (see p. 234 above), and this is exactly fitting the dating of the Naqada imports (see **Table 3**). Possible fragments of eggshell ware were only found in grave 62, so the use of the cemetery ended before the full transition into the material culture of the terminal phase, as also suggested by the lack of imports dating to Naqada IIIB.

Unfortunately, the cemetery was heavily plundered, but Firth (1927: 192) noted that it "*had no doubt been originally a very important site*". The graves that were still more or less intact showed that pots were common grave goods, and several pots – up to six – were often placed in the same grave. Both the quantity of pots and the great extent of imports were rare at other contemporary A-Group sites. Furthermore, 30 palettes were found in 42 plundered graves. This means that 71 per cent of the graves contained a palette, and this frequency is high even for the A-Group people (see p. 221 above). The shapes of most of the siltstone palettes were not recorded, but a bird-shaped and two rectangular palettes are in accordance with the dating based on the pots (see **Table 8**). Green glazed beads and amulets manufactured in Egypt were found in several graves. There were also objects imported from Egypt that indicate high social status such as a copper knife in grave 31 and a breccia stone vase in grave 1 (see Firth, 1927: plates 22/b/5 and 21/a/2 respectively). A broken obsidian blade in grave 6 (Firth, 1927: plate 21/e/1) is revealing for some of the raw materials that were passing through Lower Nubia from the south, since the obsidian used in Upper Egypt during the Predynastic and Early Dynastic periods was coming from Ethiopia or southern Arabia (Bavay et al. 2000: fig. 8-9). Fragments of ivory bracelets in grave 14 (Firth, 1927: 194) hint at another exclusive raw material that may also have been traded to the Naqada people through A-Group middlemen, and several marine shells from the Red Sea are strong indications for eastward contacts.

Cemetery 134 was one of the earliest A-Group cemeteries with a marked display of wealth in the graves. Wealth had also accumulated in some cemeteries dating to the middle phase in southern Lower Nubia (see Nordström, 2004: fig. 4). In accordance with a heterarchical organization, the marks of prosperity were quite

evenly distributed in the graves, and no grave pits were larger than necessary in order to accommodate both body and grave goods – unlike grave 15 in Cemetery 44 (see p. 337 above). The man who was buried in that grave was probably one of the earliest entrepreneurial traders controlling the trickle of exotic goods through A-Group territory from his position on the border of A-Group territory. However, the heterarchical lineage groups with decentralized organization still restrained overt personal accumulation and inhibited any attempts to wield explicit personal authority (see Davies, 2013: 733).

Changing patterns of contact

The Naqada people appear to have left the area of Wadi Allaqi before the beginning of Naqada IID2, since both Cemetery 111 and the transit market were only used by Naqada people during Naqada IID1, i.e. *c*. 3360 to 3330 BCE. The Naqada people seem to have retreated northwards as Cemeteries 40 and 45 were established in Naqada IID2. I have thus considered the establishment of these sites as part of a second wave of Naqada expansion into Lower Nubia in form of an internal reorganization of Naqada sites within the territory of Nekhen.

There was apparently a halt in the exchange as few Naqada commodities dating to Naqada IID2 have been uncovered in A-Group contexts, but it may also be that this phase was very brief and/or is poorly defined (see Hendrickx, 2006: 80). It is however curious that during Naqada IIC, the Painted Tomb, a monument of unprecedented scale and elaboration, was constructed at Nekhen (see pp. 119-120 above), while no contemporary elite graves have been identified at Abedju (see p. 111 above); whereas no elite graves dating to Naqada IID have been found at Nekhen (see p. 120 above), while contemporary tomb U-547 at Abedju is the earliest grave where a sceptre – later emblem of Egyptian kings – has been found (see p. 111 above). It is outside the scope of this thesis to investigate if the chieftains of This/Abedju and Nekhen were already competing to rule all of Upper Egypt during Naqada IIC-D, or if the gaps in elite burials are the results of chance recovery of the archaeological remains. The target here is to discuss if there are indications that violent attacks by the A-Group people drove the Naqada people settled around the mouth of Wadi Allaqi northwards again.

Retreating Naqada communities

Unfortunately, the human remains uncovered by the Archaeological Survey of Nubia under the direction of Firth were not that well studied and published as the bodies uncovered in the northernmost cemeteries excavated by Reisner. No victims of violence could therefore be found in the preliminary anatomical reports that mainly focused on racial characteristics (see Derry, 1909a; 1909b; Elliot Smith and Derry, 1910a; 1910b). We thus lack important data that could provide indications of which phases were more violent than others in the area between Bab el-Kalabsha and Wadi es-Sebua.

The two sites of the Naqada people at the junction between the Nile and Wadi Allaqi as well as the three cemeteries on the west bank of the Nile in northern Lower Nubia seem to have been abandoned after Naqada IID1, i.e. *c*. 3330 BCE. The transit market at Khor Daoud was apparently left abruptly since many pots remained in the storage pits. The nearby Cemetery 111 of the Naqada people was abandoned at the same time, and it only appears to have been reused by the A-Group people after some time. Further north, the Naqada habitation site on the Meris plain was evidently left in a hurry since so many valuable objects were left behind there (Trigger, 1965: 72), and the nearby Cemetery 41/400 was abandoned simultaneously. The strongest evidence for violent conflict is three adult men that were killed from head injuries caused by blunt force as well as four victims with fractures of ulna, clavicle or nasal bone, which can all be related to defensive wounds in interpersonal violence, in Cemetery 45/100 and 400 on the Dehmit plain. It may thus be possible to link the retreat of the Naqada people to A-Group aggression in form of a counterattack. The assailants may have come from the Dakka plain and both attacked the community on the opposite bank at the mouth of Wadi Allaqi as well as the settlements on the west bank in northern Lower Nubia in Naqada IID. The attack on Dehmit appears to have taken place in Naqada IIIA.

Since Lower Nubia is now flooded, it is unfortunately unlikely that new data that can throw light on the abandonment process will be uncovered.

Although the Naqada site south of Bab el-Kalabsha as well as three cemeteries on the west bank in northern Lower Nubia were abandoned, the Naqada presence in the area between the First Cataract and Bab el-Kalabsha continued on the east bank where Cemetery 40 at Siali was founded in Naqada IID2 and Cemetery 7 at Shellal and Cemetery 50 at Metardul were established in Naqada IIIA2. This was the third wave of Naqada site expansion in northern Lower Nubia (see *Chapter 10*).

Abandonment and new beginnings for the A-Group people

During the middle phase of the A-Group, new cemeteries were founded along the Nile between Gerf Hussein and the Second Cataract (see **Table 5**). After the Naqada site abandonment in Lower Nubia at the end of Naqada IID1, changes in the A-Group habitation pattern also took place, i.e. in the late middle phase of the A-Group. Three cemeteries were abandoned – Cemetery 80 at Gerf Hussein as well as Cemeteries 99 and 103 on the Dakka plain. These cemeteries had been in use since the proto or early phases. After the desertion of sites following the expulsion from northern Lower Nubia during the proto phase, Cemeteries 80, 99 and 103 were the only A-Group cemeteries to be abandoned before the end of the middle phase, which was otherwise a period of expansion (see **Table 5**). The three sites that went out of use had fewer commodities imported from Egypt than average in the A-Group cemeteries in the middle part of Lower Nubia (see **Figure 71** and **Table 8**). The human remains in these cemeteries were not studied (see previous page), and only a stone axe, two bone points and four flint blades – all of the tool-weapon category – were uncovered in the graves (see **Catalogue 2**). There are thus no traces of violent conflict in the graves. The three cemeteries were all situated in areas with other A-Group cemeteries, so the cause of abandonment may just have been that the family groups using these cemeteries became assimilated with their neighbours. However, Cemetery 80 was located close to Cemetery 76 with seven Naqada graves, but where a Naqada presence was ended at the same time, and Cemeteries 99 and 103 were situated on the opposite bank of Cemetery 111 where the Naqada use also came to a halt at this time. Violent conflict can thus not be ruled out as a cause for the site abandonment.

The market places of the First Cataract

Besides the new Naqada sites established at Dehmit and Siali in northern Lower Nubia (see *Chapter 10*), the long-lasting habitation site called Abu by the Egyptians was founded in Naqada IID on Elephantine Island just below the First Cataract (see p. 31 above; Raue, 2002: 20). Abu must have been a vital centre for the trade between south and north, as well as an increasingly important strategic point at the location that was to become the southern border of the ancient state of Egypt. It has been suggested that the market place on Elephantine Island was established as an outpost of the chiefdom at Nekhen (Kaiser, 1999: 283). This seems plausible in the framework adopted here, whereby the Naqada expansion into Lower Nubia has been interpreted as being ordered by the chieftain of Nekhen. With the abandonment of the transit market at Khor Daoud, it is possible that A-Group people brought African raw materials north to the First Cataract, where they in return could procure the finest Naqada products. There was certainly contact between the Naqada people in Abu and the A-Group people in Lower Nubia, as A-Group pot sherds were represented in the stratigraphy at Abu from the very beginning (Raue, 2002: 20). Some exceptionally fine status objects of Naqada manufacture found in A-Group graves were probably commissioned from craftspeople at Abu, or in some cases even at Nekhen – like the maces with golden handles from Cemetery 137 at Sayala, a ripple-flaked flint knife from Cemetery 89 at Koshtemna as well as the numerous stone vases and elaborate furniture in Cemetery L at Qustul.

The influence of exchange on political organization of A-Group communities

I have proposed that the ethnic group constituting the A-Group people was most probably organized into several corporate lineage groups or clans (see p. 278 above). These groups were probably becoming organized as emerging hierarchies with a chief on top, as we saw the first traces of in Cemetery 44 (see p. 337 above). This would have formed multiple power centres within the A-Group society as a whole, where each elite family interacted and exchanged goods as equals in a heterarchy (Hafsaas-Tsakos, 2009a: 31). A heterarchical organization can be identified archaeologically by a widespread distribution of prestige objects (Hayden, 2001: 249). Nordström's (2004:

139) study of rank in funerary displays in A-Group cemeteries demonstrates that a large proportion of the A-Group people could be categorized as elite, while only a small proportion was poor. One of the indicators of a heterarchical social organization in the A-Group was the widespread distribution of palettes, which were found in 36 per cent of the graves in Lower Nubia against 15 per cent in Upper Egypt (see p. 221 above). Like the situation in Lower Nubia during the 4th millennium BCE, it is in historical circumstances where the social hierarchies are based on the control of trade that heterarchies are most likely to emerge. The geographical feature of the Nile gave exceptional opportunities for several groups to take advantage of their position along the trade corridor. This culminated with the rise to power and wealth of two lineages at Sayala and Qustul on an unprecedented scale, as we will see in the next two sections.

The princes of Sayala

We have already seen that the people interred in Cemetery 134 at Sheikh Sharaf were wealthier than average among the A-Group communities, and their material riches probably derived from exchange with the Naqada people stationed at the mouth of Wadi Allaqi during Naqada IID1. About 6 kilometres further south was a group of cemeteries where the material culture also was distinctive in form of palettes of black and white speckled stone – like at Cemetery 134 – namely Cemetery 136 and Cemetery 137 at Sayala as well as Cemetery 142 at Naqa Wadi *c*. 3 kilometres further south, although the black and white speckled palettes were not in majority at the latter site.

Already Firth (1927: 204), the excavator of Cemetery 137, suggested that the grave with the golden mace handles (see pp. 176-179 above) belonged to a king or chief and that the whole cemetery belonged to a single family. H.S. Smith (1993) reinvestigated Cemetery 137, and he has elaborated on the argument by proposing that the cemetery was used by "*a family of princes through three generations*" together with their families and officials. His dating of the graves spans Naqada IIIA1-2 (H.S. Smith, 1993: 372), which constitute the latter part of the middle phase of the A-Group. Cemetery 136 was situated less than a kilometre to the north of Cemetery 137 (Firth, 1927: plan 3). Fewer high status objects imported from Egypt were deposited in the graves in Cemetery 136, which was contemporary to Cemetery 137. I therefore

suggest that this was the burial place for the subjects of the chieftains at Sayala. Furthermore, Cemetery 136 and Cemetery 137 were established around the time that Cemetery 134 was abandoned, which may indicate that there was a continuous development of social complexity in the region on the basis of control of trade, and/or, as suggested by H.S. Smith (1993: 376), of the extraction of alluvial placer gold from the wadis in the Eastern Desert. If the dynasty of chieftains at Sayala controlled the gold extraction, then this could explain how they could afford the gold handles of the maces.

H.S. Smith (1993: 363-372) demonstrated that Cemetery 137 was most probably the burial ground for the chiefs of an independent "principality", or chiefdom, on the basis of the large grave pits, abundant material wealth and iconography linked with rulers in Upper Egypt. Three of the grave shafts had lengths of between 2,4 and 2,85 metres, which were approximately double the average length of the grave shafts for the A-Group people. Furthermore, the grave goods consisted of more pots – both locally produced and imported from Egypt – than usual. Other objects such as stone vases, palettes, items of personal decoration and copper implements were also more numerous than customary for the A-Group people (see Firth, 1927: 207-212). There were also unique objects that point to a chiefly status of the people buried with them. First among these is the golden mace-handle with relief decoration displaying very close parallels to ceremonial objects with symbolism of rulership in Upper Egypt (see pp. 176-179 above for a discussion of similar iconography on objects from Upper Egypt; **Figure 30**). The scene included an elephant trampling intertwined snakes, a bull attacking an oryx, a lion chasing a deer and a leopard pursuing a hyena (Osborn, 1998: fig. 1-13), and these pairs were probably metaphors for the ruler subduing his enemies (H.S. Smith, 1993: 367). This demonstrates that the chieftains at Sayala were familiar with Naqada rulership ideology (H.S. Smith, 1993: 376). H.S. Smith (1993: 376) suggested that the maces arrived in the hands of the Sayala chieftains through direct gift-exchange with Upper Egyptian rulers, while I have proposed that a Sayala chieftain could have ordered them at a workshop in Abu or Nekhen – especially since he may have had the amount of gold necessary for their manufacture in his possession.

The Sayala chieftains apparently shifted the location of the burial ground again at the end of the middle phase, for the cemetery with the largest burial pits in this area during the terminal phase is Cemetery 142 at Naqa Wadi (H.S. Smith, 1993: 375). It is uncertain why the rulers shifted burial ground, and possible causes may have been internal strife within the ruling family or depletion of local resources. Unfortunately, Cemetery 142 had been systematically looted by a gang working for an antiquity dealer from Luxor in the early 20th century, some years before the site was excavated in connection with the first archaeological salvage campaign in Lower Nubia (Firth, 1927: 213). Grave 1 was the best preserved tomb consisting of a large rectangular shaft with dimensions of *c*. 3,4 x 1,4 metres. It contained two copper-alloy axes and two copper-alloy chisels (Firth, 1927: plate 22/b/1-4). The grave goods consisted of six eggshell ware pots as well as numerous other pots, four quartzite palettes, carnelian beads from a necklace and garnet beads from a waist band (Firth, 1927: 214). Of particular interest is an object described as a stone mortar, but it was most probably an incense burner like those found in the royal tombs in Cemetery L at Qustul (H.S. Smith, 1993: 274; see pp. 353-354 below). Grave 7 was the largest tomb, and it consisted of a grave trench with dimensions of *c*. 5,5 x 1,3 metres and a side chamber with dimensions of *c*. 3,5 x 2,5 metres (H.S. Smith, 1993: 372). Unfortunately, the only remains of grave goods were large quantities of recently broken pots of the characteristic eggshell ware (Firth, 1927: 214, 216). The presence of eggshell ware in both graves points to a date in the terminal phase of the A-Group. There were no objects with royal iconography in Cemetery 142, but such valuables would have been robbed if they indeed were present (H.S. Smith, 1993: 375). The plan of Cemetery 142 shows three other large tombs of comparable sizes to grave 1 – graves 4, 10 and 19 – but these had all been completely cleared out. Another large tomb, grave 15, contained the burial of an ox (Firth, 1927: plan 12).

A reconstruction of the political development in the Sayala region suggests that the three large graves in Cemetery 137 were the burial places of a succession of three chieftains during the latter part of the middle phase of the A-Group, i.e. Naqada IIIA1-2. These rulers were probably contemporary with the earliest rulers at Qustul – some 150 kilometres further upstream (see the next section). The largest tombs in Cemetery

142 were probably the continuation of the Sayala dynasty into the terminal phase with five additional chieftains. The limited preservation of Cemetery 142 leaves us without information on when the site ended in the terminal phase or why it was abandoned. Since no sites in the area north of Abu Simbel seem to continue into the late terminal phase (see **Table 5**), it is probable that also Cemetery 142 ended after the early terminal phase.

The royal cemetery at Qustul

At Qustul, close to the Second Cataract, another high-status cemetery of extraordinary character was excavated in the 1960s (Williams, 1980; 1986) – half a century after the revelation of the cemeteries around Sayala (see previous section). Cemetery L consisted of 33 tombs (Williams 1986: plate 4). All the graves were heavily plundered, and both the human remains and the funerary goods were smashed and burnt (Williams, 1980: 14). Bruce B. Williams (1980, 1986, 1987), who published the material from Qustul, has argued vigorously for the recognition of the cemetery as a royal burial ground of a polity of the same order as the three centres in Upper Egypt – Abedju, Nubt and Nekhen. The original dating of Cemetery L from Naqada IIIA1 to IIIB by Williams is controversial (Mark, 1997: 112; Wengrow, 2006: 167; Roy, 2011: 156), and the chronology of the site should probably be reconsidered in totality. However, the majority of the graves date from the late middle phase to the end of the terminal phase of the A-Group, i.e. contemporary with Naqada IIIA-C, and with emphasis on the latter part (Roy, 2011: 156, table 117).

The cemetery consisted of 27 human graves of which 14 were unusually large grave pits with associated trenches of up to 10 metres length (Williams, 1986: plate 4), which was double the length of the trench of the largest tomb in Cemetery 142 at Naqa Wadi (see previous section). Six graves contained burials of bovines (Roy, 2011: 156), as also encountered in Cemetery 142 at Naqa Wadi (see the previous section). The fragmented grave goods give an indication of the quantity and quality of the objects that were originally deposited in the graves. To give an impression of the affluence, suffice to say that grave L 17 contained more than 2600 "*lip plugs*" of shell, almost 1700 shell hooks, more than 1000 beads of carnelian and garnet, 15 ivory bracelets as

well as other forms for personal adornment including a gold bracelet and some gold beads (Williams, 1980: 16, 1986: 304-317). Another indication of local production of elite goods was the overwhelming amount of sherds from bowls made of the characteristically painted eggshell-thin ware. An examination of the numerous fragments of eggshell ware as well as the complete bowls preserved indicates that more than a thousand of these bowls were deposited in the graves in Cemetery L. These vessels were rare in other A-Group cemeteries (Williams, 1986: 27). Furthermore, there were few identically decorated bowls among this large number, which suggests that these bowls were not only high status items of the A-Group people, but also highly individualized identity markers (Wengrow 2006: 167).

The most disputed objects in Cemetery L are 29 stone bowls interpreted as incense burners (Williams, 1986: 108). The incense burner from tomb 24 (OIM 24069) has carved images that seem to relate to the royal iconography that was developing in Egypt (Williams, 1986: 138-145; **Figure 104**). Unfortunately, the incense burner was

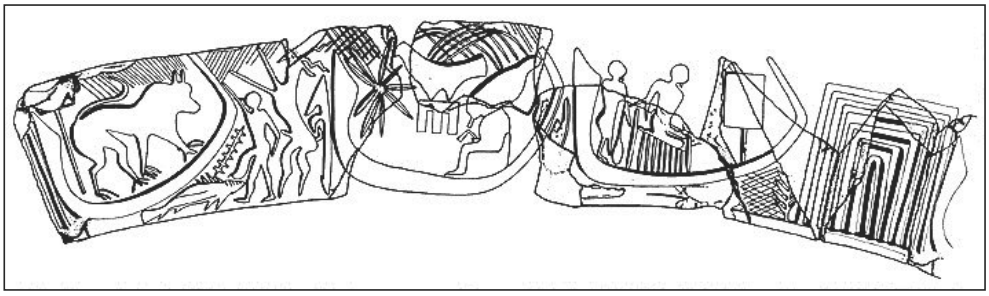


Figure 104: The iconography of the Qustul incense burner (OIM 24069) – including interpretations of missing elements. Outer diameter 15 cm. After Williams (1986: plate 34).

fragmentary, but the scene incised in sunken relief has been interpreted to include three boats – or sacred barks – sailing towards a nested palace façade (Williams, 1986: 139). In the foremost boat, which includes a sail, is a back-bound prisoner with a guard behind him. Between the two figures is possibly a mace positioned on the ground with the macehead down and the shaft up (Williams, 2011a: 88) – perhaps a sign indicating that fighting had ended. A crocodile is apparently following in the wake of this boat (Williams, 2011b: 163). In the middle boat sits a figure that has been interpreted as a ruler on the basis of a headwear that is similar to the *White Crown of Upper Egypt*. In front of him are a Horus falcon on a palace façade and a rosette – both of which were used as symbols of rulership in Upper Egypt (Williams, 1986: 141-142). Behind this

bark is a standing harpoon (Williams, 2011b: 163). In the third boat stands an animal interpreted as a lion, and behind it is a standard with a falcon, which suggests that the lion is a deity (Williams, 2011b: 162). At the prow of this boat, a man wearing a garment with a flap in front and a leaping antelope are positioned as if they are saluting the god. A fish and a frond are depicted below the boat (Williams, 2011b: 163).

A second incense burner (OIM 24058) with royal iconography was uncovered from tomb 11 (Williams, 1986: 145-146). The surface is in a crumbling condition, but two palace façades, outlines of boats, two falcons and two human figures with white crowns have been identified. It has thus been interpreted as displaying twice a procession of three boats in front of a palace façade like depicted on the other incense burner (Williams, 2011a: 88). Although the symbols on these objects were largely borrowed from contemporary objects from Upper Egypt, the incense burners were probably made as elite goods in Lower Nubia by A-Group craftspeople (Roy, 2011: 217; Williams, 2011a: 87). It is the images of the figures wearing the white crowns that have given Cemetery L at Qustul the tag "royal". Although William's original claim that the rulers buried in Cemetery L were the earliest pharaohs has been dismissed (e.g. W.Y. Adams, 1985; O'Connor, 1993; Baines, 1995; Williams, 2011), the rulers buried there seem to have aimed at representing themselves in the same style as the kings further north. It is however unlikely that the rulers at Qustul were heads of an emerging state as the contemporary kings in Egypt – they rather ruled a peripheral chiefdom that rose to prominence through a middleman position in long-distance exchange (see Baines, 1995: 105).

Numerous imports from Egypt were also deposited in the graves in Cemetery L. There were remarkably large quantities of Egyptian pots (Williams, 1980: 15), but due to the very fragmentary state of pots in general in the cemetery, no attempt at quantification has been made in this thesis (see p. 237 above). It is significant that the stone vessels numbered more than a hundred, since these were otherwise rare in A-Group contexts (Williams, 1986: 123). Almost all the stone vessels in Cemetery L at Qustul were made of alabaster (Williams, 1986: 123), which was commonest during the First and Second Dynasties (Aston, 1994: 50). Among the complete alabaster vases, at least 18 were of cylindrical shape with wavy bands and eight of the same

shape with rope bands – both of which were characteristic for the early part of the First Dynasty (compare Williams, 1986: 125-126, fig. 51-52 with Aston, 1994: 99-103). Moreover, more than 10 stone vessels were in various bowl shapes that were characteristic for the First Dynasty in Egypt – especially the reigns of king Djer and king Djet (compare Williams, 1986: fig. 49 with Mallory-Greenough, 2002: table 3 and fig. 4).

Despite the heavy plundering, remains of gold jewelry were found in five tombs (Williams, 1986: 131). Only a few objects made of copper – a spearhead, two fittings for furniture, a fragment of a plate, an awl and some rings – appear to have escaped the eyes of the grave robbers (Williams, 1986: 128). The remains of elite furniture also points to the high status of the people buried in Cemetery L. In tomb 24 were found the copper fittings that may have come from a bed with legs terminating in carved bull's hooves (Williams, 1986: plate 64/d), which has parallels in tomb 11 at Cemetery HK 6 at Nekhen dating to Naqada IIIA2 (B. Adams, 1996: 13), as well as in the burial of the First Dynasty king Djer (Petrie, 1901a: plate 34/17). Furthermore, the copper fittings for a carrying litter with lotus flower finials – also from tomb 24 – has the exact parallel from the tomb of king Djer (compare Williams, 1986: plate 64/a with Petrie, 1901a: plate 35/83).

At least five high loop-handled liquid containers from Palestine were uncovered in tomb 24 at Cemetery L (Williams, 1986: table 22, fig. 48). Similar vessels and a comparable copper-alloy spearhead as also found in tomb 24 were found together in some cave burials near Azor on the Palestinian coast. This has led Wengrow (2006: 171) to suggest that these items were "*elements of a new culture of violence and prestige*" that "*may have circulated […] as meaningful groups or sets, through which coherent social routines of action and display were disseminated among elites*". An important task for future research would thus be to situate the A-Group elites within a wider elite culture of the Bronze Age world – not only comparing them to the elites in Upper Egypt.

From heterarchy to hierarchy

After this summary of the elite cemeteries at Sayala and the royal cemetery at Qustul, there can be little doubt that these tombs belonged to rulers with powers and resources which at that time was unparalleled in Lower Nubia and tangential to that of the ruling elite in Upper Egypt. Nordström (2004: 142) has acknowledged that Qustul might have been a royal burial place. He furthermore suggests that other cemeteries with elite burials in the region around Qustul may represent families who were subordinate to this emerging polity; while the wealthy graves in the cluster of cemeteries at Sayala may represent a second polity. My re-examination of the cemeteries in the two regions supports the coexistence of the two centres. Consequently, Lower Nubia was not governed by a single ruler, but the rise of rulers at Sayala and Qustul on an unprecedented scale in Lower Nubia during the late middle phase represented a collapse of the heterarchical system (Hafsaas-Tsakos, 2009a: 31). The A-Group people thus entered a period of changing relationships of power and wealth – not only internally, but also externally towards their neighbour in the north.

Summary of a relatively peaceful interlude

The earliest high-volume trade between the Naqada and the A-Group peoples seem to have started in the area of Abisko and Dehmit during Naqada IIC and intensified around the entrance to Wadi Allaqi during Naqada IID1, as testified by the appearance of numerous Naqada pots in A-Group cemeteries (see **Figure 70**). This coincided in time with the earliest use of donkeys as pack-animals (Wengrow, 2010: 75), and it is probable that the Naqada traders brought the commodities to Lower Nubia in donkey caravans. The distribution of Naqada products in A-Group contexts maps the networks of exchange (see Wengrow, 2010: 44), with the most intensive relations encompassing the region from Bab el-Kalabsha to Sayala. Furthermore, exchange between the two groups explains why the diagrams of the distribution of pots and palettes in Lower Nubia recorded no monocultural sites with either only A-Group or only Naqada material remains (see **Figure 71**).

The movement of caravans into the territory of the A-Group people and the setting up of a transit market at the mouth of Wadi Allaqi are strong indications for

peaceful relations between the two ethnic groups for more than a century during Naqada IIB to IID1 – from *c*. 3460 to 3330 BCE – which was after the expulsion of the A-Group people from northern Lower Nubia. The trade was probably beneficial for both communities. The A-Group people made a temporarily and small-scale move back to northern Lower Nubia during Naqada IIC, while the Naqada people established sites within the territory of the A-Group people near Wadi Allaqi in Naqada IID1.

Naqada IID2 to IIIA2 seem to have been characterized by changes in the ways that trade was conducted, and there are strong indications of violent conflict. The Naqada people retreated north of Bab el-Kalabsha, and there seems to be a consolidation among the A-Group people into fewer sites in the area of Gerf Hussein and Dakka. However, the possible conflicts cannot have been serious for the A-Group people or the exchange of goods, for Naqada IIIA1-IIIB saw the rise of two political and economic centres at Sayala in the middle part and at Qustul in the southern part of Lower Nubia.

The development of political organization in Lower Nubia from Naqada IIIA1 onwards was apparently influenced by features originating in Egypt. There was a change in the form of political organization with the rise of hierarchies among the A-Group people, as seen at the centres of Sayala and Qustul. In correspondence with the theory of war on the state frontier (see the section *Indigenous responses to state expansion* in Chapter 6), the status of the leaders increased because of their privileged access to foreign luxury goods. The heterarchical organization of the A-Group people in time collapsed at localities where leaders were able to control resource extraction and trade, such as access routes to the gold of the Eastern Desert in the case of Sayala or the bottle-neck for the movement of goods at the downstream end of the Second Cataract in the case of Qustul. It is unlikely that this happened without internal competition and violent conflict between the rising centres, but direct evidence for violent confrontations has not been encountered. The rulers at Sayala and Qustul seem to have become elevated through their monopolization of the access to raw materials and trade routes. However, these rulers were also to experience the disadvantages of relying on the rising state in the north for their influence and prestige, as the first kings

of the unified state of Egypt had southward expansion on their agenda; and this topic will be discussed in the last section of this chapter on historical reconstructions.

The first state expansion into Lower Nubia

The disappearance of the A-Group people from the archaeological record of Lower Nubia around 3000 BCE is conventionally explained as caused by military interventions by the Egyptians (Emery, 1965: 127; Trigger, 1976: 46; O'Connor, 1993: 23; S.T. Smith, 1998: 259; Wilkinson, 1999: 180, 2010: 57; Edwards, 2004: 73; Török, 2009: 50-51; Emberling, 2011: 8; Williams, 2011: 91). This is thus one of a few cases where archaeologists acknowledge the occurrence of war in the culture history of the peoples inhabiting the Middle Nile region. However, there are also Nubiologists who argue that the A-Group people disappeared from Lower Nubia because of a decline in trade with Egypt that caused the elites in Lower Nubia to collapse (Nordström, 1972: 31; Roy, 2011: 313). Nordström (1972: 31) emphasized that an "*exclusion from the Egyptian 'cash-crop circles', would have a rapidly deleterious effect on the whole socio-economic structure of the A-Group*". This seems probable due to the extent of import of food stuff, but this approach still lacks an explanation for why there was a halt in the trade relations in the first place.

In the following final sections, I will examine the evidence for war as the ultimate cause for the collapse of the A-Group society in Lower Nubia. The focus will be the Egyptian iconographic and written sources for a violent state expansion into Lower Nubia, although the meagre archaeological evidence for war at the end of the 4th millennium BCE in Lower Nubia is also considered.

A state border in the First Cataract

I have argued that Bab el-Kalabsha and the rocky area surrounding it was the ethnic boundary between Naqada people and A-Group people from the late proto phase of the A-Group, i.e. contemporary with Naqada IIB. This ethnic boundary lasted until the end of Naqada IIIB in Upper Egypt and midways into the terminal phase of the A-Group in Lower Nubia, i.e. to *c*. 3100 BCE. With the formation of the ancient Egyptian state under leadership of the First Dynasty kings, there was a reorganization

of the trading relations with the south and the formation of a more static border at the First Cataract (Seidlmayer, 1996: 113). The remaining Naqada cemeteries in northern Lower Nubia were abandoned at the end of Naqada IIIB (see **Map 6**). The state border in the south was apparently established at the First Cataract at the beginning of the First Dynasty, i.e. in Naqada IIIC. Shortly thereafter, a fortress was constructed as part of Egyptian state policies. It was located on the highest point of Elephantine Island at the downstream end of the First Cataract and on the outskirts of the Naqada settlement of Abu [Elephantine] (Seidlmayer, 1996: 112). Both the fortress and the settlement of Abu were easily defended by being located on an island, and the fortress could also overlook and control river traffic (Wilkinson, 2010: 33). The garrison was probably ordered to keep under control both the local Naqada people, who had now become Egyptian citizens, and the neighbouring A-Group people (Seidlmayer, 1996: 113). The establishment of the southern border of the Egyptian state at the First Cataract meant that the Naqada sites in northern Lower Nubia were suddenly outside Egyptian territory. The consequence was that the Naqada people living in northern Lower Nubia abandoned Cemetery 50 at Metardul and Cemetery 40 at Siali after Naqada IIIB, and they probably went to live within the borders of the Egyptian state. Even Cemetery 7 at the upstream beginning of the First Cataract went out of use in Naqada IIIC. The collapse of the Naqada habitation in northern Lower Nubia was probably a deliberate act of the Egyptian state. Likewise, the establishment of a formal border at the First Cataract on the southern frontier of Egyptian territory was part of the policy for making a state consisting of inhabitants with a common group identity.

The rise of the Egyptian state had great influence on the realities for the A-Group people in Lower Nubia too, since archaeologists have found no traces of the A-Group people dating to after Naqada IIIB, or the early terminal phase, in the northernmost part of A-Group territory between Fagirdib and Dakka (see **Table 5**), and the A-Group societies in southern Lower Nubia collapsed in Naqada IIIC, or the late terminal phase. The next sections will explore the evidence for a violent state expansion into Lower Nubia immediately before and after the unification of Egypt.

The records of state expansions into Lower Nubia

We will first review the iconographic and written records for an Egyptian state expansion into Lower Nubia during the reigns of Egyptian kings at the end of the 4th millennium BCE. These historical sources demonstrate that the Egyptians developed an increasingly hostile relationship with the A-Group people.

King Scorpion II of Nekhen

The ceremonial macehead of the legendary king Scorpion II (AMO AN1896-1908.E3632) was uncovered in the Main Deposit at Nekhen [Hierakonpolis] (see p. 121 above). The Scorpion macehead is very similar to the Narmer palette and macehead, which were found in the same archaeological context, so these three objects must have been contemporary and possibly manufactured by the same craftspeople (Wilkinson, 1999: 56). Given that king Scorpion II so far is not attested at Abedju [Abydos], it has been suggested that he was a king of Nekhen (Needler 1967: 90, Wilkinson 1999: 51). We saw in the description of Nekhen (see *Chapter 4*) that tomb 1 in Cemetery HK6 has been suggested as the tomb of king Scorpion II. However, Günter Dreyer (1990: 71), the excavator of Cemetery B, the royal part of the vast burial ground at Abedju, has suggested that tomb B50, devoid of any inscriptions, may be the burial place for king Scorpion II. Without further finds, however, I evaluate the circumstantial evidence for king Scorpion II as a ruler of Nekhen as more likely.

The Scorpion macehead depicts a king wearing the *White Crown of Upper Egypt* and a kilt with a bull's tail (**Figure 105**). Nekhen had thus become a kingdom rather than a chiefdom during his rule (see pp. 121-122 above), and it is possible that the political organization that he headed could be termed a state. On the macehead, king Scorpion II is holding a hoe and has just opened an irrigation canal. His title and name are probably indicated by the rosette and scorpion depicted in front of his face. Behind him are two fan-bearers. Of special significance to a warfare perspective is the upper register, which depicts standards from which hang lapwing birds and bows – representing the subjects of Egypt and inhabitants of Ta-Seti respectively (Wengrow, 2006: 213). The iconography thus seems to stress the coercive power of the king over both his subjects and the people of Ta-Seti – i.e. the A-Group people (Wilkinson,

1999: 111). If king Scorpion II was the ruler of Nekhen at the end of Naqada IIIB, he probably ruled a territory stretching from Bab el-Kalabsha to the beginning of the Qena Bend. The upper register suggests that king Scorpion also had conquered adjacent regions. If the symbols on the standards of the lapwings are to be believed, he may even have controlled the Qena Bend down to Gebtu [Coptos], because both the thunderbolt of Min from Gebtu and the Seth-animal of Nubt [Naqada] were among the divine symbols on the standards with the hanging lapwing birds (Wilkinson, 1999: 290, 294).

The standards with suspended bows suggest that also parts of Lower Nubia had been conquered. The only preserved emblem on top of the standards with bows is a falcon on a crescent (see **Figure 105** upper right). It has been suggested that the falcon on crescent may have represented the falcon god Nemti in a boat (Wilkinson, 1999: 198), because of the similarity with Gardiner's sign G7a  or G7b (Allen, 2000:

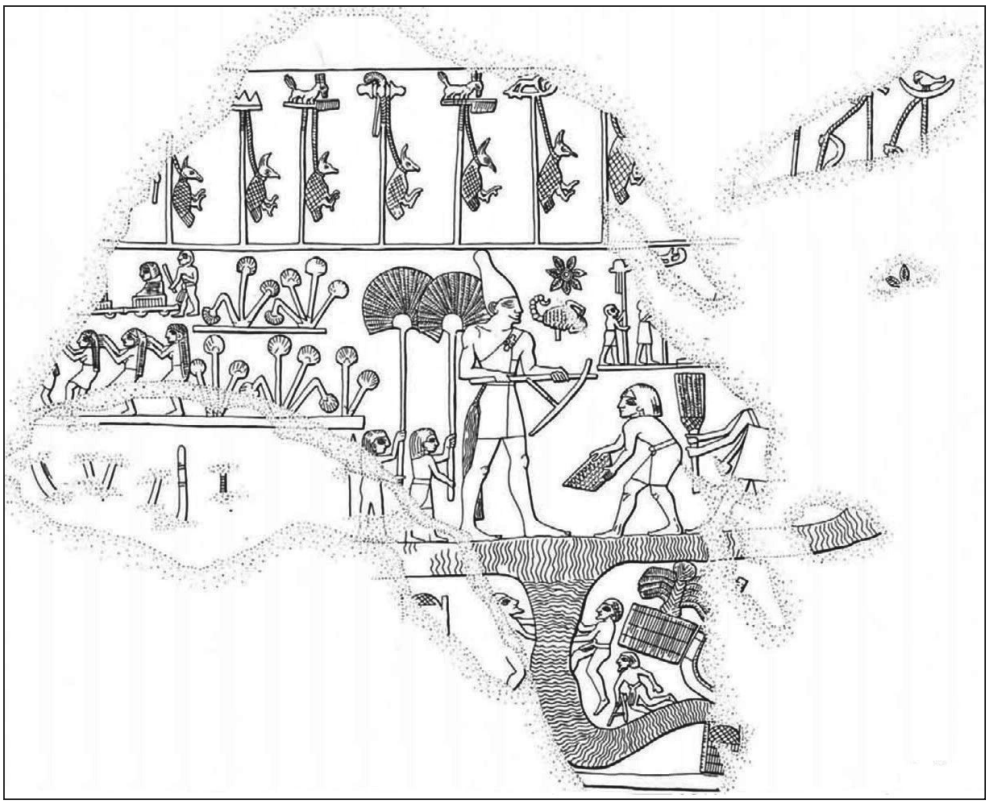


Figure 105: The preserved iconography on the Scorpion macehead (AMO AN1896-1908.E3632). After Spencer (1993: fig. 36).

431). This god was later associated with the eighteenth nome of Upper Egypt, which was located opposite the entrance to Faiyum (Pemberton, 2005: 19). I will however make a preliminary interpretation that links this symbol with the historical realities in Lower Nubia.

We have so far been unaware of any toponyms within Ta-Seti at this early time, but it must be significant that a slightly later relief at Jebel Sheikh Suliman in southern Lower Nubia depicts a falcon and a crescent (interpreted as a royal placenta) respectively on top of two signs for settlements, which were obviously located in Ta-Seti (see **Figure 109**).

Representations of a falcon on a crescent have also been found on three alabaster bowls (UCL 14951, 14952, 14962) from the Main Deposit at Nekhen [Hierakonpolis] (B. Adams, 1974: 44, plate 33/225, 227, 229) and on an ivory label in king Aha's tomb at Abedju (Petrie, 1901a: plate 3/15). The falcon on crescent symbol on the alabaster bowls from the Main Deposit is preceded by two joined arms with hands inverted over a circle or semi-circle, like the hieroglyph 𓊃, which is determinative for 'embrace' and 'open' (Allen, 2000: 427 for the hieroglyph). These objects belong together with two similar alabaster bowls that depict a scorpion after the inverted arms over the circle (see B. Adams, 1974: 44-45, plate 33/225-229). The sign of two joined arms in inverted position has also been found as potmarks on several vessels in Cemetery L at Qustul (Williams, 1986: plate 80/a-d, 83/b). Two of them – both from tomb 23 – have a circle between the arms, just like on the alabaster bowls from Nekhen. Together with representations of the white crown (see p. 131 above), these finds seem to link king Scorpion II and Nekhen with rulers at Qustul. The Scorpion mace-head furthermore seems to represent king Scorpion II as having subdued at least some settlements or centres in Ta-Seti.

Further support for military action in Ta-Seti by king Scorpion II comes from a rock drawing just downstream of the Second Cataract, which seems to be the southern border of A-Group territory proper in Lower Nubia. The rock art locality was situated on a small sandstone hill called Jebel Sheikh Suliman (Arkell, 1950: 27), and which was flooded by Lake Nasser. Two early records of Egyptian aggression towards the populations of Lower Nubia have been found on the top of the hill. The earliest rock

drawing depicts a large scorpion holding a rope in its claws from which a captive is dangling (**Figure 106**; see the section *King Djer* below for the later record). The captive appears to wear feathers on his head and his arms are bound behind his back. A second figure to the left is pointing at the captive with an unidentified weapon and possibly holds the rope of his back-bound arms. Under the scorpion is a third figure, upside-down, shooting at the captive with a bow and arrow. The two latter figures appear to wear an animal's tail hanging from the backs of their kilts (Needler, 1967: 88-89). Winifred Needler, who discovered this rock drawing, tentatively interpreted the scene as a record of an expedition of king Scorpion II to the Second Cataract, and the two figures that are threatening the captive with weapons probably represent followers or allies of the power embodied by the scorpion (Needler, 1967: 89-90). Wilkinson (1999: 179) supports Needler's interpretation of the scorpion as a representation of the royal power by arguing that the scorpion may allude directly to the king. The scorpion was probably seen as a potent symbol for royal aggression (Wilkinson, 1999: 299). Animals were used in similar ways on other late Predynastic objects, e.g. the catfish smiting a bound captive on an ivory cylinder of contemporary King Narmer (Wilkinson, 1999: 179). Furthermore, the captive with a feather on his head has been suggested as a native inhabitant of Lower Nubia (Wilkinson, 1999: 179), or even a representation of an A-Group chieftain (Török, 2009: 49-50).

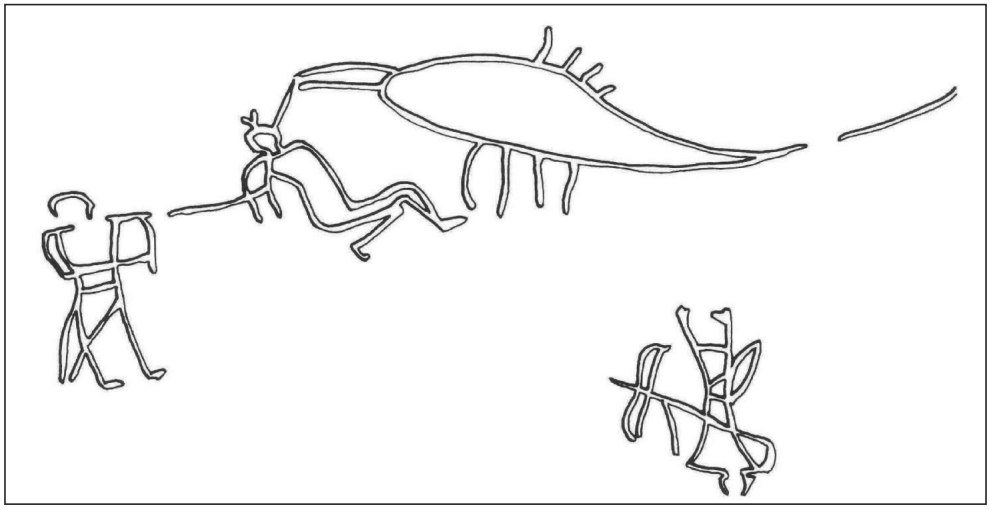


Figure 106: The rock art scene with a scorpion holding a captive from Jebel Sheikh Suliman. After Wilkinson (1999: fig. 5.3/1).

The scene of the rock drawing at Jebel Sheikh Suliman probably testifies to a military raid in Lower Nubia by king Scorpion II of Nekhen in the context of competition for power between the rulers of Abedju and Nekhen during the final stages of state formation and territorial unification in Egypt in Naqada IIIB (see p. 131 above).

King Aha

King Narmer was victorious in the struggle to control all of the Egyptian Nile Valley, and he inaugurated a new era with a single king ruling a territorial state in Egypt from Naqada IIIC. However, there is no evidence that he fought on the southern frontier of his newly won territory in Upper Egypt – i.e. the former kingdom of king Scorpion II at Nekhen. King Narmer's successor was king Aha, whose name was written with a mace and a shield,  (see also **Figure 13**), meaning 'the Fighter' (Midant-Reynes, 2000b: 249). King Aha had his burial complex placed next to king Narmer's tomb in the royal cemetery at Abedju (Engel, 2008: fig. 9).

In the burial chambers of king Aha, Petrie uncovered two ivory labels with the bow sign designating Ta-Seti – i.e. Lower Nubia. The label already discussed (see p. 75 above; **Figure 14**) shows the bow sign above the hieroglyph for 'land', thus reading the 'Land of the Bow', i.e. Lower Nubia. More important for a warfare perspective is a year label depicting a man with a beard and his arms bound on the back, thus identifying him as a captive (**Figure 107**). Above his head is a bow sign which has been interpreted as signifying that the man was a prisoner from Ta-Seti. The captive is sitting in front of king Aha's serekh. On top of the serekh is the Horus falcon and behind him an arm holding a pear-shaped mace in a striking position. This has been interpreted as a record of military action in the south at the very beginning of the First Dynasty (Trigger, 1976: 41). Ta-Seti was probably referring to the territory of the A-Group people. An alternative interpretation has suggested that the bow refers to the region between the First Cataract in the south and Gebel es-Silsila in the north, which was the southernmost nome of Upper Egypt and also called Ta-Seti (Morkot, 2000: 45). However, the territory between Gebel es-Silsila and the First Cataract appears to have already been incorporated into the early Egyptian state, so an interpretation of the

label as military action in Lower Nubia is more probable. The label was originally used to designate a specific year, and it should thus be considered as a historical document recording a violent conflict or war in Ta-Seti during the reign of King Aha (Gilbert, 2004: 95-96).

Figure 107: Ivory label of Aha depicting a campaign against Ta-Seti. No scale given. Photo from Petrie (1901a: plate 3/2).

King Djer

On the top of the aforementioned hill Jebel Sheikh Suliman, where the scorpion drawing was located (see the section *King Scorpion II of Nekhen* above), was also a monumental relief of a military victory. This relief was moved to the display in the garden of the Sudan National Museum when the area was flooded by the reservoir of the Aswan High Dam (**Figure 108**). The scene was first properly recorded by Arkell (1950; **Figure 109**). He attributed the relief to king Djer, the third ruler of the First Dynasty, on the basis of the reading of the carvings between the palace façade and the falcon on the far left as the hieroglyph used for his name. He thus interpreted the scene as the record of a military victory over the A-Group people (Arkell, 1950: 29). Wolfgang Helck (1970: 85) and William J. Murnane (1987: 283) have argued against this reading by stating that the incised lines read as the name of Djer is rather an antelope (see **Figure 108** far left). Both concluded that the serekh was without a king name and that the relief therefore predates the First Dynasty. Thus, the relief is now considered to commemorate an unnamed king of the late Predynastic period

Figure 109: The relief from Jebel Sheikh Suliman in the Sudan National Museum. No scale. Photo by Tsakos.

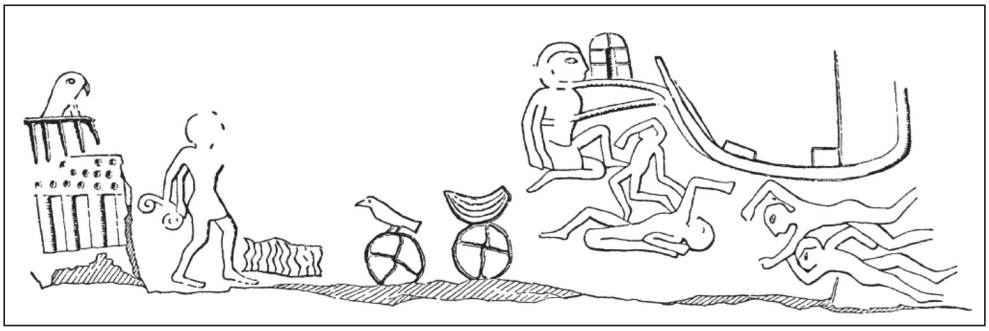


Figure 108: The scene depicting the aftermath of a battle at Jebel Sheikh Suliman. No scale given. After Arkell (1950: fig. 1).

(Wilkinson, 1999: 177; Török, 2009: 49). However, some researchers maintain that the military action commemorated in the relief most probably took place in the reign of king Djer or another of the early First Dynasty kings (Morkot, 2000: 45; Hafsaas-Tsakos, 2009a: 32), and I will present some new arguments supporting this position.

The scene was made by both raised relief and incised lines (Arkell, 1950: 28), but the two styles were most probably contemporary since they occur together in several elements of the scene (Murnane, 1987: 283). During the Naqada period, decorative painting and carved images were usually associated with portable objects such as pots and cosmetic implements (Wengrow, 2006: 99). Elaborate relief carvings on portable objects such as cosmetic siltstone palettes and ivory handles of flint knives first became popular during Naqada IIIA-C1, but they ceased in popularity as relief carving shifted to the static surfaces of monumental temples and tombs during the First Dynasty (Wengrow, 2006: 140). Monumental carving in raised relief on funerary stele

first appeared for the deceased in the subsidiary graves of the tomb complex of king Djer (MacArthur, 2011: 259). I thus find a dating of the relief at Jebel Sheikh Suliman to the First Dynasty more likely than to the Predynastic period. Let us continue by looking at some of the details of the scene.

In the upper right-hand corner of the scene is a boat with a vertical stern and high sloping prow, which is a type characteristic of the First Dynasty (Arkell, 1950: 28). A larger human figure is kneeling in front of the boat with his arms bound on his back, and a rope from his neck is tying him to the prow of the boat. This suggests that he was a captive. His chest is pierced by an arrow. On the rope tied to his neck is a tall, round-topped hut with a door. In front of him is a human figure that seems to have been decapitated. Below this is another human figure – apparently depicted in his death agony. Two other human corpses are below the boat. This part of the scene seems to depict the aftermath of a battle. The inclusion of a boat in the relief suggests that this was the means by which the Egyptian military incursion arrived this far south (Wilkinson 1999: 179; Hafsaas-Tsakos 2009: 32). In this context, it is interesting to note that 12 large boats have been uncovered next to king Djer's funerary cult enclosure, and these were most probably offered as burial gifts to king Djer (O'Connor 1991: 14). Although the boats may have been buried for their ritual significance, their existence demonstrates that king Djer was in possession of a fleet that could be used for a military expedition going upstream to the region of the Second Cataract.

To the left of the battlefield are two circles with a cross inside:  . This symbol can be identified with Gardiner's hieroglyph O49, which was used as an ideogram for town or a determinative for settlement toponyms (Allen, 2000: 439). This sign is not attested before the reign of king Djer, when it was used e.g. on ivory labels recording the toponyms Anpet [Mendes] and Pe [Buto] – both in the Delta (see Kahl, 2002: 82, 147). Before king Djer's reign, a settlement was indicated with the sign of an enclosure with battlements (e.g. on the Narmer palette [see **Figure 58**] and on the ivory label of Aha [see **Figure 107**]), comparable to Gardiner's O36 (det. [wall], ideogr. *jnb* [wall]) (Allen, 2000: 438). On top of the settlement sign O49 on the right is a crescent-shaped object interpreted as a royal placenta, while a falcon is sitting on the top of the sign to the left (Murnane, 1987: 283). An alternative interpretation of the

right sign is as a beheaded bird representing the death of Qustul (Jiménez-Serrano, 2003: 259). We have already observed that the Qustul incense burners linked a falcon with an A-Group site of importance – probably Qustul itself (see pp. 353-354 above), so it is interesting that a falcon is also used here to denote an important location in Ta-Seti. Furthermore, we have also seen that a crescent-shaped object was used as a seat for a falcon on a stand with a dangling seti-bow on the Scorpion mace-head (see p. 362 above). I find it convincing that these two symbols were used in this relief above the determinative sign for settlement toponyms in order to record the most important centres in Lower Nubia – probably Qustul and Sayala. Qustul was associated with the falcon, so it seems likely that the crescent was used as the symbol for the Sayala principality. This link is strengthened by the finding in Cemetery 142 at Naqa Wadi of an object described by Firth (1927: 217) as *"a small mother-of-pearl ornament shaped like a crescent above a rectangle"* in tomb 19, which was one of the exceptionally large graves in this burial ground (see p. 351 above). Unfortunately, the object was not depicted in the report, but it could possibly be interpreted as a simple palace facade with the crescent symbol on top. This could have been used to denote the ruling house of Sayala.

Returning to the relief, a sign interpreted as a body of water is incised to the left of the town signs (Murnane, 1987: 282). The vertical waves of this sign have been interpreted as the moving water of the rapids in the nearby Second Cataract (Jiménez-Serrano, 2003: 259), and this may locate the place of the battle near the Second Cataract. Marching towards this sign is the largest human figure – a prisoner with his arms bound on his back and holding the bow-sign used to denote Lower Nubia in his hands (Murnane, 1987: 212). The bow may have been a multivocal symbol in this context by symbolizing not only the defeat of Ta-Seti, but also the disarmament of the king as it may have been his own bow that was tied on his back.

In the left corner of the scene is a palace façade with rather uncharacteristic dots above the recessed niches (see **Figure 108** and **Figure 109**). This palace façade has been read as a *serekh* (e.g. Arkell, 1950; Murnane, 1987: 292; Wilkinson, 1999: 177). The earliest serekhs were empty with the palace façade alone symbolizing royal power (Wilkinson, 1999: 201), while already the Dynasty 0 rulers, contemporary with

Naqada IIIB, used the serekh with a falcon on top as an enclosure for the Horus name of the king (Wilkinson, 1999: fig. 2.3). The dotted serekh in the Jebel Sheikh Suliman relief has been compared with specimens of the corpus of palace facades and falcons as potmarks on some large storage vessels in Lower Egypt (Köhler, 2002: 502). More specifically, the similarity concerns two of the serekhs of the king with the name Double Falcon from el-Beda in the north-western Delta (**Figure 110:a**). However, in these cases, it has been argued that the dotted field belongs together with the falcons rather than the palace facade, and it has been read as the sign of a valley between two hills –  – denoting perhaps the territory of king Double Falcon (Dreyer, 1999: 5). In my opinion, a much closer parallel to the serekh of the Jebel Sheikh Suliman relief is to be found on one of the four bracelets of an unattached arm found in the tomb of king Djer at Abedju [Abydos] that most probably belonged to the lost body of the king himself. The bracelet (EMC 35054) was composed of alternating plaques made of gold and turquoise that were all shaped like palace façades with dots above the niches and falcons on top (Comand, 2001: 343; **Figure 110:b**). This links the serekh of Jebel Sheikh Suliman (**Figure 110:c**) directly to king Djer, as there is no doubt about the existence or the execution of the palace façade on the elements of this bracelet (e.g. Arkell, 1950: 29; Murnane, 1987: 282; Köhler, 2002: 502).

I thus find the evidence for dating the relief at Jebel Sheikh Suliman to the reign of king Djer convincing on three grounds. First, it was during his reign that monumental relief on static surfaces such as funerary stele is first testified. Second, the hieroglyph  is first attested in the reign of king Djer. Third, the peculiar dots of the palace façade have their closest parallel in the bracelet from king Djer's tomb. On this basis, I will also accept the reading of his name between the palace façade and the falcon as probable. King Djer's name was written with the hieroglyph  (phonogram *ḏr*), which depicts a bundle of flax. In the case of the writing of the name of king Djer, there could be a varying number of flax stems in the bundle (compare e.g. Petrie, 1901a: plates 5/1-4, 12/3, 15/105-110). In cases with four stems and a rope keeping them together, the shape resembles the body of an animal (compare **Figure 110:c** with **Figure 110:d**). I will thus argue, as Arkell (1950: 29) originally proposed, that the writing is a crude form of the name of king Djer, while the head of "the antelope" was

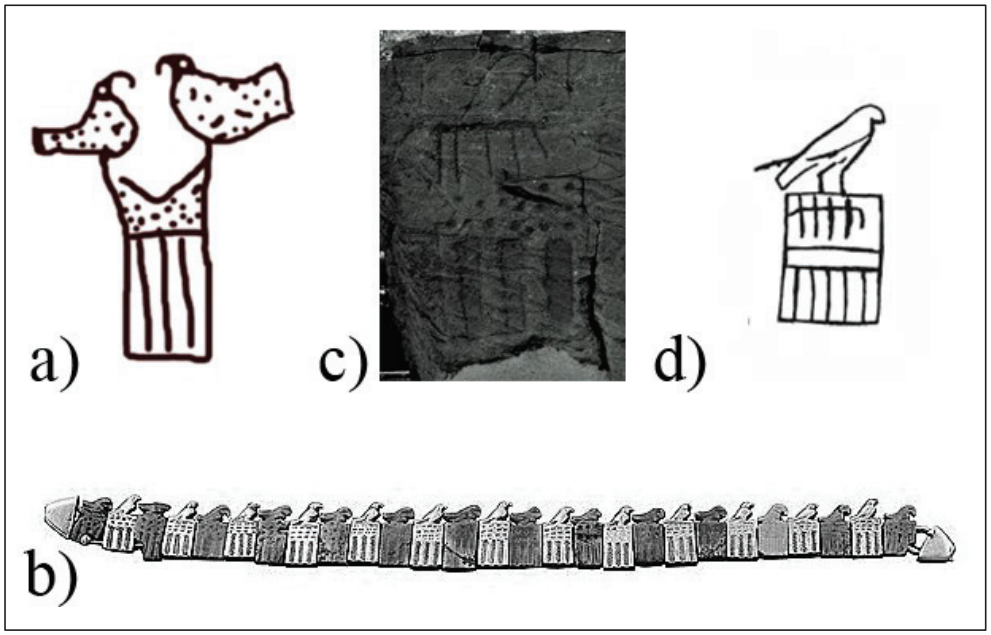


Figure 110: Serekhs. a) Serekh of king Double falcon from el-Beda. After Dreyer (1999: fig. 2/c). **b) Bracelet from tomb of Djer.** After Comand (2001: 343). **c) Detail of the palace façade from Jebel Sheikh Suliman.** Photo by Tsakos. **d) Serekh of king Djer on ivory label from his tomb.** After Petrie (1901a: plate 5/2).

added at a later time. The dating of the defeat of the A-Group people to the reign of king Djer is also contextually fitting (see the section *A violent state expansion* below).

King Djet

Although the relief of king Djer seems to depict a defeat of the A-Group people, military campaigns in Lower Nubia apparently took place during the reigns of his two immediate successors as well.

King Djet was Djer's follower, but very little is known about him (Wenke, 2009: 242). Nevertheless, two pieces of an ivory label recording the smiting of Ta-Seti during king Djet's reign have been uncovered in the royal Cemetery B at Abedju [Abydos] (Dreyer et al. 1998: 162-163, plate 12/a; Dreyer et al. 2003: 93, plate 18/f; **Figure 111**). In the middle of the upper register is the serekh of Horus Djet. To the right of the serekh are two cross-like signs, which may be read as his *Two Ladies* title meaning 'the two protectors' (Raffaele, 2004). Below and to the right of this double sign are two arms holding a raised stick with both hands, like the significant part of the

hieroglyph  , ideogram for 'victory' (Allen, 2000: 424). In the upper right corner of the label is the seti-bow (Raffaele, 2004), which is very similar to the execution of the bow-sign in the Jebel Sheikh Suliman relief (see **Figure 108**). Under the bow is the hieroglyph for 'land'. The two signs thus read *Ta-Seti* meaning 'Land of the Bow', which referred to Lower Nubia (see p. 75 above). Below the sign of striking are two human figures fighting each other with knives in their hands (Raffaele, 2004). The stroke from the stick above them is directed towards the signs for Ta-Seti, and the fighting figures may be a historical rendering of the way hand-to-hand fighting happened in the battle.

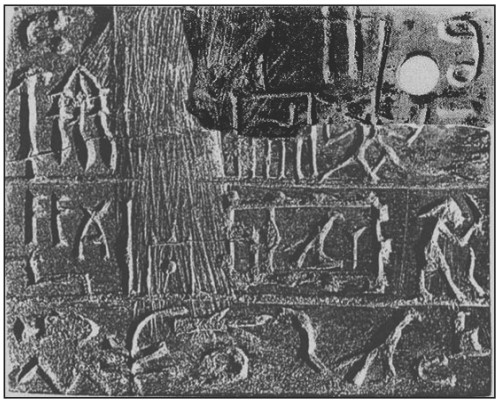


Figure 111: The ivory label of king Djer recording a military action in Lower Nubia. After Raffaele (2004).

King Den

King Den was the successor of Djet, and he had a long and prosporous reign that probably started with his mother Merneith as regent (Wilkinson, 1999: 74-75). In the early part of his reign, king Den seems to have waged war in Palestine as documented in several records of military activity dating to his reign (Wilkinson, 1999: 77). I will argue that it is possible that king Den also undertook a military campaign in the southern part of Lower Nubia. The Palermo Stone records for one of Den's entries: "*Year of striking down the Iunw*" (Wilkinson, 2000a: 106). The Iunw has in this context been considered as nomadic people of the Sinai peninsula on the north-eastern border of Egypt (Wilkinson, 2000a: 106), but I find it more likely that they are people of the Second Cataract region, as testified in later textual records (see p. 77 above).

This is the last reference to military activity in Lower Nubia during the First Dynasty, as both the written and the iconographic records thereafter are silent on the political situation on the southern frontier of Egypt.

King Khasekhem(wy)

The only reference to Lower Nubia during the Second Dynasty is from the reign of the last king Khasekhem(wy). A fragment of a stela (EMC 33895) found at Nekhen depicts a man prostrate on his belly, but with his head lifted from the ground (**Figure 112**). Above the head of the man is the characteristic Seti-bow denoting Lower Nubia (see p. 75 above). The man is obviously defeated as he is held down by the knee of his subjugator – probably the king. Under the kneeling figure is the serekh of king Khasekhem(wy). This is preceded by the epithet '*effective sandal against the foreign land*', where the sandal is interpreted as a metaphor for the king trampling his enemies (Wilkinson, 1999: 180, 191). The importance of this iconographic representation of the people of Lower Nubia is that they were considered utterly defeated by the end of the Second Dynasty.

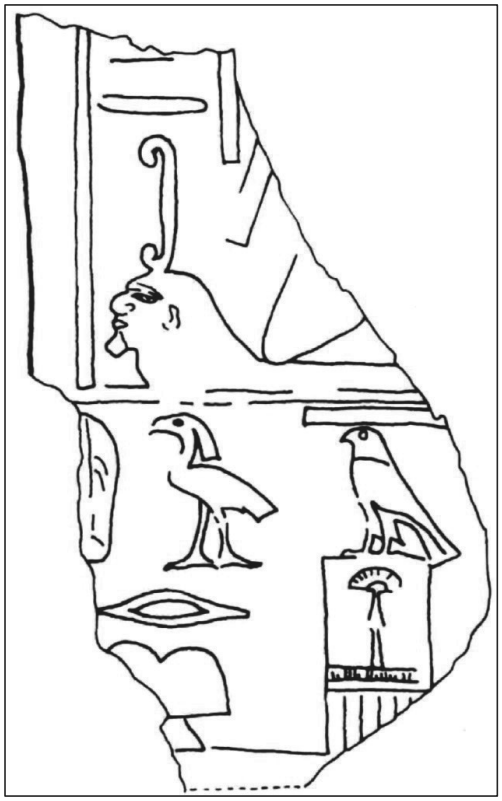


Figure 112: A defeated man from Ta-Seti on a fragmentary stela of King Khasekhem(wy) (EMC 33895). After Gilbert (2004: fig. 8.20).

Evidence for war from the archaeological record

We have seen that five of the kings ruling in Egypt at the end of the 4th millennium BCE have left records of military campaigns in Lower Nubia. However, there seems to be silence in the archaeological record when it comes to evidence for war. I will nevertheless examine the indications for war in the A-Group cemeteries of the middle and terminal phases.

Weapons

In his treatise of the A-Group people, Nordström (1996: 34) remarked for the middle and terminal phases that "*[t]rue weapons and warrior's graves are conspicuously absent*". However, the recording of all possible weapon categories demonstrate that implements that could potentially be used as weapons were not totally lacking (see *Chapter 7*; **Catalogue 2**).

Maces and stone axes were almost absent (see the relevant sections in *Chapter 7*). In the terminal phase, maces appear to have become ritual weapons and symbols of rulership after influence from Egypt (see p. 176 above). The absence of melee weapons of stone was probably related to the introduction of copper-alloy weapons (see p. 199 above). Various forms of knives made of flint also seem to have been linked to masculine identity and used in hand-to-hand fighting (see **Catalogue 2**, **Figure 111** and p. 183 above). Bows and arrows were probably ranged missile weapons that were used throughout the Bronze Age, but without leaving many traces in the archaological record. Both copper-alloy weapons and weapons in general were more common at some sites than others.

Weaponry in form of copper-alloy axes and chisels, flint knives of both the ripple-flaked type and the blade type, and a single stone axe were found in graves of adult males in Cemetery 89 at Koshtemna and nearby Cemetery 92 at Aman Daud (see **Catalogue 2**). These sites were among the northernmost A-Group sites during the middle and early terminal phases, and this area was thus on the Egyptian border.

Copper-alloy weapon-tools were also common in the elite graves in Cemetery 137 at Sayala and nearby Cemetery 142 at Naqa Wadi (see **Catalogue 2**). The only copper-alloy spears of the specialized weapon category from A-Group contexts were found in the royal Cemetery L at Qustul and nearby Cemetery 215 at Abu Simbel (see **Catalogue 2**).

Furthermore, axes of copper-alloy or stone as well as copper-alloy chisels, adzes and harpoons were found in Cemetery 148 at Mediq, Cemeteries 204 and 206 at Toshka, Cemetery W at Qustul, Cemetery 3 at Faras, Cemetery 292 at Debeira and Cemetery 277 at Halfa Degheim (see **Catalogue 2**).

Cemeteries 298 and 332 at Ashkeit, dating between the late middle and terminal A-Group phases, had conspicuous concentrations of small flakes of agate, quartz and carnelian in a number of graves (see **Catalogue 2**), and it is possible that these were arrowheads in the same manner as those testified in the Upper Paleolithic Cemetery 117 at Jebel Sahaba (see the section *Bows and arrows used as early weapons along the Middle Nile* in Chapter 7). Unfortunately, no illustrations of these points were provided in the publication, and the published record of these sites was not stating whether these implements could have been incorporated as grave goods in form of arrows or if they were found in positions indicating that they could have penetrated the bodies of the deceased. It is however remarkable that these lithic implements were only found in two contemporary cemeteries in close proximity.

The only A-Group burial grounds dating to the middle and terminal phases where weapons were totally absent were Cemeteries 166 and 168 at Amada, Cemetery NN at Aniba, Cemetery V at Qustul and Cemeteries 187 and 308 at Ashkeit. The sites at Amada and Aniba were situated in a region that was rapidly explored by the archaeologists, but which may also have been thinly populated during the 4th millennium BCE. Cemetery V at Qustul had only 11 tombs, and they were much destroyed. Cemetery 187 at Ashkeit had only 10 burials, and they were dated to the terminal phase of the A-Group (see **Catalogue 2**). The late date and impoverished character of these graves (see Nordström, 1972: 170-172) may suggest that this cemetery was used when the A-Group people in the area were already under attack by the Egyptian state.

On the basis of this summary of the different categories of weapons in the A-Group graves, I consider Nordström's statement of a conspicuous absence of weapons as being refuted.

Violence

Unfortunately, the skeletons excavated in the graves dating to the middle and terminal phases in the middle and southern parts of Lower Nubia were rarely thoroughly examined by anatomists (see p. 346 above). In the majority of the studied sites, the human remains were very fragile and fragmentary due to disturbances, and it

was therefore impossible to examine them fully under the conditions of salvage archaeology. In some cases, the bodies were missing completely due to vandalism – like in the royal Cemetery L at Qustul. Furthermore, the anatomists examining the remains focussed upon racial characteristics rather than pathologies and trauma (see Batrawi, 1935: 160-165 and Nielsen, 1970: 21).

We have already observed that no trauma were recorded for the human remains in the middle part of Lower Nubia that was examined during the first heightening of the Aswan Dam. A few cases were observed in the study of the human remains uncovered during salvage excavations before the second heigtening of the Aswan Dam. An old man buried in grave 39 in Cemetery 166 in the Korosko Bend had a fractured nose (Batrawi, 1935: 15). Two other cases of non-leathal violence were recorded in Cemetery 206 at Aniba. A young man in grave 13B also had a fracture of the nasal bone, while an adult woman in grave 14B had a healed depression fracture on the left side of the frontal bone (Batrawi, 1935: 75). No cases of violent trauma were recorded for the A-Group people excavated by the Scandinavian Joint Expedition in the southernmost part of Lower Nubia (see Nielsen, 1970: 114-115).

The lack of osteological evidence for violence for the middle and terminal phases of the A-Group rather seems to be due to the bad preservation of the bones and the bias of the anatomists who focussed on other research topics than violence. In addition, the weapons used could have caused injuries that were invisible or less visible on the bones than the cases of skulls crushed by maces during the proto phase of the A-Group in northern Lower Nubia. Furthermore, in the case of a violent state expansion, it is very possible that many war victims were not formally buried (see p. 204 above; **Figure 55** and **Figure 56**) or whole populations may have fled the advancing army never to return (see p. 167 above).

Site abandonment

There is strong evidence for a shift in the habitation pattern during the early terminal phase of the A-Group, i.e. Naqada IIIB. Sites to the north of Abu Simbel in southern Lower Nubia were abandoned en masse, while a number of new sites were established in the southern part of Lower Nubia (see **Table 5**). This coincided in time

with the assault by king Scorpion II of Nekhen on the verge of the political unification of Egypt, and the following military expedition by king Aha. These attacks were probably responsible for the collapse of the A-Group societies to the north of Abu Simbel (see p. 27 above). Abu Simbel was a natural border that also appears to have been the northern boundary of the kingdom of Qustul. The founding of new sites within the territory of Qustul indicate that at least some people escaping violence in the middle part of Lower Nubia settled in southern Lower Nubia. The kinglets at Qustul seem to have continued to receive processed goods from Egypt despite attacks on the A-Group people in the neighbouring territory controlled by the Sayala chieftains. The peaceful relations between Qustul and Egypt would not last for very long, since the remaining A-Group cemeteries seem to have been deserted during the first reigns of the First Dynasty kings in Egypt.

Already king Aha's successor, king Djer seems to have launched a devastating attack on Qustul. The large boats that were buried next to his funerary enclosure indicate that his army sailed swiftly upstream to Qustul. The fighting of this campaign probably took place in the area between Abu Simbel and the Second Cataract. The Egyptian army not only attacked the people, their possessions and habitation sites in this area, but the violent destruction and heavy plundering of the royal cemetery at Qustul was probably also undertaken by invading Egyptians at this time (Williams, 1980: 14).

Any material traces of the A-Group people seem to have disappeared by 3000 BCE, creating a hiatus in the archaeological record of indigenous people in Lower Nubia of about 500 years. It was probably the military campaigns of the First Dynasty kings that led to the collapse of the A-Group societies. In this war, many A-Group people may have been killed without being given proper funerals, and the survivors were scattered through the landscape lacking the means to uphold their previous standards of life.

A violent state expansion

The territorial state of ancient Egypt, from the First Cataract to the Delta, was politically unified by 3100 BCE (see the section *Unification* in Chapter 4). The belief

in an afterlife and the establishment of mortuary cults ensured that huge quantities of ordinary and luxurious objects went out of circulation and thus fuelled the demand for raw materials and exotic products (Hafsaas-Tsakos, 2009a: 31). Although the Naqada rulers at Nekhen first promoted the A-Group chieftains at Sayala and Qustul, the kings of a united Egypt soon became dissatisfied with the situation whereby trade and resources had to pass through middlemen in Lower Nubia. Already king Scorpion II of Nekhen, probably aspiring ruler of the Egyptian Nile Valley, may have led a military campaign into Lower Nubia in an attempt to seize control over the trade routes and natural resources there. If the historical reality behind the depiction of the scorpion and the captive at Jebel Sheikh Suliman and the bows hanging from standards on the Scorpion mace-head are taken at face value, then these iconographic records indicate that there was a violent conflict or war between the kingdom of Nekhen and the A-Group people at the end of Naqada IIIB. It is difficult to estimate the impact of the military attack on the A-Group society, but it coincides in time with the A-Group abandonment of middle Lower Nubia between Bab el-Kalabsha and Abu Simbel (see **Map 3** and **Table 5**). It is unlikely that this 200 kilometre long stretch of the river valley was abandoned voluntarily, and warfare seems to be a probable cause. The establishment of four new cemeteries in southern Lower Nubia during the terminal phase corroborates a migration from the northern parts of the A-Group territory (see **Table 5**). This would not account for all the people living in the middle part of Lower Nubia, and it is possible that many people were killed or remained in the region without upholding the elaborate burial rituals that were practically the only traces of the A-Group people that were excavated during the salvage campaigns.

It seems unlikely that king Scorpion II alone was responsible for the depopulation of all of the middle part of Lower Nubia – including the political centre at Sayala. King Aha was probably also fighting the population in this area. Furthermore, the chieftain at Qustul may have taken advantage of the Egyptian attacks in the north to attack his peer in Sayala from the south. A war between Sayala and Qustul has indeed been suggested by the Spanish Egyptologist Alejandro Jiménez-Serrano (2003: 262-263). A victory by Qustul over Sayala may be supported by the

position of the proposed Qustul falcon above the suggested Sayala crescent on the Scorpion mace-head (see p. 362 and p. 368 above).

It remains unclear why king Scorpion II presented himself as the victor over Qustul – if the falcon on the standard with the hanging bow indeed represents that site – as there are no indications of war in the southern part of Lower Nubia at this time. However, iconographic evidence of hostile sentiments towards Nekhen [Hierakonpolis] has been uncovered in Cemetery L at Qustul. In the bovine burial of grave 6, next to tomb 23, one of the largest graves dating to the early terminal phase (i.e. Naqada IIIB), were found two hard orange ware wine jars of Naqada IIIB date. One of these (OIM 24172) had a post-firing painting depicting a long-necked bird "devouring" the sign (Williams, 1986: 233, 344-357, 155, plates 86-87; **Figure 113**), which was used as an ideogram for Nekhen (Allen, 2000: 439). Williams (1986: 156) read the composition as an attack on Nekhen or a victory over Nekhen by the chieftains of Qustul. There is so far no evidence for war between Qustul and Nekhen at this time, but given the fact that king Scorpion II was attacking A-Group people in middle Lower Nubia, the aggressive attitude towards Nekhen becomes meaningful.

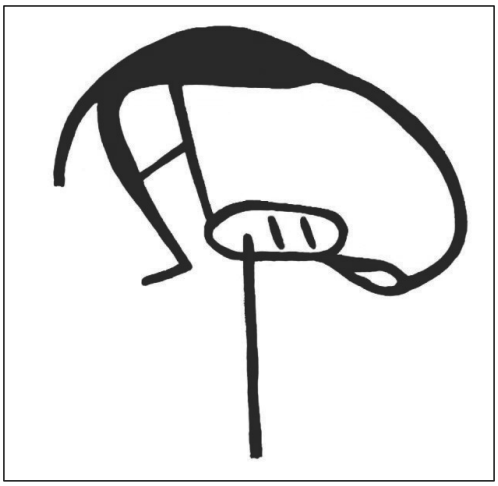


Figure 113: A long-necked bird devouring the ideogram for Nekhen was painted on a pot found in tomb 6 in Cemetery L at Qustul (OIM 24172). After Williams (1986: plate 86).

Despite the hostilities between Nekhen and Qustul, there are several indications for exchanges between the two centres, like the use of the white crown, the beds with bull's feet, animal burials, trench graves with side chambers as well as inscribed bowls with inscribed inverted joined arms above a circle in connection with possible names of kings. The nature of this relationship needs to be explored further. In any case, there are no indications that Qustul was targeted in the military actions of king Scorpion II, but it is most likely that his expedition reached the Second Cataract where the scorpion

rock art seems to record his expedition (see the section *King Scorpion II of Nekhen* above). It seems that king Scorpion II either was given right of passage by the ruler of Qustul or that he circumvented that part of the river by travelling for 80 kilometres through tracks in the desert from the area of Abu Simbel to Jebel Sheikh Suliman at the upstream border of the Qustul territory where he left his record. I opt for the former version. The rock drawing can thus be interpreted as not only a historical record of the fall of the Sayala chieftains, but also as a threat of what would happen if the kinglets of Qustul failed to cooperate with king Scorpion II of Nekhen. However, in the wider political setting in the Nile Valley, Nekhen turned out to be the wrong alliance partner for the kinglets at Qustul. Despite being victorious in the military attack on the A-Group people in middle Lower Nubia, king Scorpion II appears to have lost the battle of Egypt to his opponent there, namely king Narmer of Abedju

With the rise of the First Dynasty, Egyptian settlements became confined to the territory of ancient Egypt north of the First Cataract. The iconography of king Narmer's monumental palette (see **Figure 58**) suggests that he had fought in the Delta in order to seize the whole territory of the Egyptian Nile Valley, while it is unclear how he took control over what had apparently become an independent kingdom of Nekhen under king Scorpion II (see p. 131 above). It was therefore his successor king Aha who continued king Scorpion II's war to drive out the A-Group people and secure Lower Nubia as a depopulated Egyptian frontier where resource extraction could take place. The habitation in Lower Nubia from the First Cataract to Abu Simbel was already disturbed as the cemeteries were abandoned on both the Naqada side and the A-Group side of the old ethnic boundary at Bab el-Kalabsha. King Aha was probably fighting the remaining population in this area.

The Egyptian triumph over the people of Ta-Seti was expressed in the relief of king Djer at Jebel Sheikh Suliman (see the section *King Djer* above), which must have been located on the southern border of the Qustul principality. The relief depicts two larger human figures with back-bound arms: the captive with the arrow in his chest and the captive holding the seti-bow. Likewise, there are two town signs. I thus read this as the sacking of the two centres, which I have interpreted as Sayala and Qustul (see p. 368 above). The ruler of Sayala is depicted as killed, and this may have

happened two generations earlier during the campaign of king Scorpion II. The ruler of Qustul is depicted as captured alive. He may thus have witnessed the vandalism and plundering of the royal Cemetery L at Qustul – the burial ground of his ancestors. The cemetery seems to have been intentionally destroyed, and a probable occasion for this is the Egyptian raids in the area under king Djer. A frequent characteristic of conquests is exactly to destroy the monuments of the defeated people and thus their history and a source of their identity (Knapp and Ashmore, 1999: 19).

The clearest indication of war between Egypt and the A-Group polities during the early First Dynasty is the depopulation of Lower Nubia. There are hardly any traces of the A-Group people after the reign of king Djer at the very end of the 4th millennium BCE. Some A-Group people probably continued to live in the Nile Valley of Lower Nubia and in the surrounding deserts, but the conceptualization of their ethnic identity must have withered and their refuge status may have rendered them archaeologically invisible. Those who were not killed or had become impoverished in Lower Nubia, must have migrated. Some displaced A-Group people seem to have settled in Abu [Elephantine] on the southern periphery of Egypt, where excavations have shown that as much as 20 per cent of the potsherds from the levels dating to the Second Dynasty were made according to A-Group traditions (Raue, 2002: 20). The war between Egyptians and the A-Group people at the beginning of the First Dynasty was a violent conflict between the Egyptian state and its southern neighbours – not between the A-Group people and their former trading partners in southern Upper Egypt. So the likelihood that some A-Group people settled at Abu and its vicinity is not contradictory to a violent state expansion. Some of the A-Group people also seem to have migrated upstream to Batn el-Hajar, and further southwards to Upper Nubia. The material culture and social practices of the Pre-Kerma people have many similarities with the A-Group people (Gatto, 2006a: 64), and this is most obvious in the pottery making traditions (Honegger, 2004b: 41). Furthermore, a copper needle and a quartzite palette – a typical set in female graves of the A-Group people (Nordström, 2004b: 129) – had been deposited in a grave excavated near Kerma, and another grave in the same cemetery also yielded a quartzite palette. These burials date to *c*. 3000 BCE (Honegger, 2004a: 63). The characteristic A-Group objects linked with

both gender and ethnic identity (see the section *Cultural and social significance of cosmetic palettes* in Chapter 8) may rather have been buried with refugees from Lower Nubia than being trade goods from the north.

Archaeological, iconographic and written sources combined suggest that the Egyptians took control of Lower Nubia and marginalized the local populations during the First Dynasty. This left Lower Nubia open to Egyptian exploitation, and the ethnic boundary was transformed into a larger frontier zone that was almost depopulated in order for the Egyptians to have unmediated access to the natural resources there (Wengrow, 2006: 147; see p. 97 above) as well as to the trade corridor to exotic products from the south (Hafsaas-Tsakos, 2009a: 33).

Chapter 12: Conclusions from a warfare perspective on the A-Group people

This thesis has explored the practices of war on the southern frontier of the emerging state of ancient Egypt through a warfare perspective on the history of the A-Group people in Lower Nubia during the 4th millennium BCE. Although war was part of interethnic interaction, I have taken the perspective of the indigenous people in the Middle Nile rather than that of the expanding polities of Egypt. Through a thick description and an elaborate interpretation of the available evidence, I have argued for two phases of war between people intruding from centralized polities in Egypt and indigenous people in Lower Nubia. The **first war** happened in the area upstream of the First Cataract in the mid-4th millennium BCE, and the **second war** took place downstream from the Second Cataract towards the end of the 4th millennium BCE.

In this concluding chapter, I will first analyze the two wars in accordance with the research questions formulated in Chapter 1 (see p. 8 above). I will then proceed to evaluate how wars both in Lower Nubia during the 4th millennium BCE and in larger parts of the Middle Nile later in the Bronze Age fit with the theory of war on the state frontier (see the section *A theory for explaining wars on the southern frontier of ancient Egypt* in Chapter 6).

Recapitulation on the answers to the research questions

Before discussing the answers to each of the research questions, I will briefly remark on elements of the environmental background as well as cultural, economic, technological and political developments of the societies during the 4th millennium BCE that with hindsight seem significant for contextualizing war between Egypt and Lower Nubia (see *Part I*).

First of all, the climatic deterioration in eastern Sahara caused a drier environment in both Upper Egypt and Lower Nubia, and the ecological niches available for human occupation thus became limited to the vicinity of the Nile or the Western Desert oases. Less frequent contact between communities along the narrow corridor that the Nile provided as a habitat seems to have stimulated cultural differentiation and the formation of regional identities in form of ethnic groups.

Denser population concentrations along the Nile increased the competition for resources, and this further contributed to the consolidation of ethnic identities (see the section *Landscape, climate and warfare in the Nile Valley* in Chapter 2).

Geographically, Egypt was placed firmly within the economic and cultural core area of the interconnected Bronze Age world from the mid-4th millennium BCE onwards. In contrast, Lower Nubia was a marginal region on the southernmost periphery of the copper-using world. People in Egypt thus received new ideas and technology or made their own ideological and technological inventions, and both could be selectively transferred to people living further south. The peripheral A-Group people were thus mainly recipients of ideas and commodities from one of the centres of the Bronze Age world (see the section *Long-distance exchange* in Chapter 4). For instance, copper metallurgy was adopted in Egypt, but only finished objects were imported to Lower Nubia despite the existence of copper ores in the nearby deserts. However, Egypt seems to have become increasingly more dependent on raw materials that could be procured from the hinterlands of Lower Nubia, and this made the region attractive for incorporation into the Egyptian realm (see the section *The use of copper and bronze* in Chapter 4).

Furthermore, there were important differences in the forms of political organization between the societies in Egypt and Lower Nubia. In Egypt, an increasingly centralized and hierachical political organization developed, and this culminated with the formation of a state. A different trajectory with an uncentralized heterarchical organization prevailed in Lower Nubia. However, influences from the centralized form of political organization in Egypt made it possible for the big men at Sayala and Qustul to monopolize power and resources in order to start the same route to centralization of political power in the hands of one man as had happened in Egypt before, and the heterarchy collapsed. A characteristic feature of the relationship between the peoples in Egypt and the Middle Nile was thus that the former were organized in complex chiefdoms and thereafter in a state with a king as ruler, while the communities along the Middle Nile usually had heterarchical organizations which only collapsed occationally as the influence from Egypt created opportunities for some big

men to seize power as chieftains (see the sections *Political organization* in Chapter 4 and *From heterarchy to hierarchy* in Chapter 11).

With this contextualization in mind, I will now proceed to discuss the factors that seem to have contributed to the outbreaks of war in Lower Nubia during the 4th millennium BCE. I will treat the two documented wars separately and start with the earliest war.

The causes of war on the southern frontier of ancient Egypt

The first research question is the most complex one as it aimed at identifying the circumstances that led to war between different communities on the southern frontier of Egypt during the 4th millennium BCE. This question is thus related to the discussions of different approaches for explaining causes of war (see the section *A theory for explaining wars on the southern frontier of ancient Egypt* in Chapter 6). The different approaches will be highlighted in bold letters as they are accounted for in the discussion below. For each of the two wars, I will briefly assess seven factors as features that could have contributed to the circumstances where war became a probability, namely:

- resource scarcity (ecological approaches),
- material gains (materialist approaches),
- culture contact (culture contact approaches),
- strategies of individuals (practice-agency approaches),
- structural characteristics (structural approaches),
- political evolution (evolutionary approaches),
- structural oppositions (structuralist approaches).

The first war

The first documented war between Naqada people and A-Group people in this thesis seems to have contributed to drawing an ethnic boundary between these ethnic groups at Bab el-Kalabsha (see the section *The first war in the area of the First Cataract* in Chapter 11). The violent confrontation between them had forced the creation of an ethnic identity for the A-Group people, although cultural differences already existed between the two regional populations. The chieftain of Nekhen expanded the territory under his influence, and his successors also took advantage of

the possibilities that exchange with the A-Group people offered. However, trade relations only developed after the war had ended. In this section, I will make a summary of conceivable factors that could have led to war at the First Cataract between *c*. 3600 and 3460 BCE. I will furthermore demonstrate that the circumstances of the outbreak of war were complex and dependent on many single factors (see the section *Different approaches for explaining causes of war* in Chapter 6).

An important factor triggering the first violent expansion into Lower Nubia from Egypt seems to have been a deteriorating climate in combination with a population explosion in the area of Nekhen that caused the population to surpass the carrying capacity of the region in terms of the technology used for food production at the time. The desiccated environment caused Nekhen to be an increasingly circumscribed area on the banks of the Nile, and the only means of acquiring new lands for increasing the agricultural production was expansion along the perennial river. Since there was no empty land along the Nile next to Nekhen, the expansion had to be into already inhabited territory. As we have seen, the direction of expansion was southwards and it was violent (see the section *The first war in the area of the First Cataract* in Chapter 11). These environmental circumstances are very fitting with the circumscription theory of Carneiro (see p. 157 above). Although Carneiro's theory draws on several factors, resource scarcity resulting from environmental circumscription is the most important cause of war in the theory, so I included it with the ecological approaches in Chapter 6. It thus seems that there was an **ecological** background to the first war between Naqada people and A-Group people.

The need of arable land can also be seen as a **materialist** motivation for war (see pp. 153-154 above), since the deterioration of the climate in the 4th millennium BCE caused a lack of an essential resource, namely land for agricultural food production. It may be difficult to trace shortages of essential resources such as food or water in the past. However, if war takes place before or during a migration into a new region, then there is an indication that lack of land for food production was a motivation for both the conquest and the population movement. The decision-makers at Nekhen seem to have solved the lack of agrarian land by attacking the A-Group people in northern Lower Nubia with the aim of conquering their land. During and

after the first war, there was an expansion of Naqada people into northern Lower Nubia as testified by nine Naqada cemeteries (see *Chapter 10*). The only known Naqada settlement showed that agriculture was probably an important activity for the Naqada people on the fertile Meris plain. The finding of numerous weapons at the site furthermore demonstrates that the intruding population was better armed than the impression given by the grave goods (see the section *The habitation site 41/300* in Chapter 10).

The migration of new people into an already settled landscape often results in competition over localized resources, which is why violence and war often follow in the wake of migrations. It is thus not **culture contact** in itself that causes war, but competition over limited resources, as already described in accordance with the ecological and materialist approaches.

As already mentioned, the limited basic resource that was contested in Lower Nubia during the first war seems to have been land for food production (see previous page). The conflicting interests were solved through war from the beginning. The evidence suggests that it was the chieftain at Nekhen that took the initiative to attack the indigenous population in Lower Nubia. This shows that his **agency** was a factor in causing the war. Still, it is difficult to identify how rulers legitimized the use of violence at this early stage, or how they compelled some men to become warriors with the risks that this profession entailed. A possibility is that male statuses at Nekhen had become partially based on success in the practice of war, so that young men were motivated to improve their social standing by participating in warfare.

The chiefdom of Nekhen had just been fighting against neighbouring groups further north in Upper Egypt, and the Naqada people were thus prepared for war in form of warriors, existing weapons and a leadership experienced in warfare tactics (see the sections *Nekhen* and *The chiefdoms of Upper Egypt* in Chapter 4). The chieftain must have considered a conquest of northern Lower Nubia as a feasible exploit because the A-Group people lacked a centralized political organization and thus the means to respond effectively and coordinated to an attack. In sum, the more hierarchical social organization with a centralized leadership in form of a chieftain followed by a group of warriors must have been a **structural characteristic** of the

community at Nekhen that made it more liable to go to war if a strong materialist motivation was present.

The same characteristics of the political organization could be seen as an **evolutionary** cause of war (see pp. 152-153 above), if the political evolution of more complex societies is accepted as a cause of war by itself. However, the situation in the Nile Valley seems more intricate than the sheer fact that complex societies wage war. By the mid-4th millennium BCE, the Naqada societies in Upper Egypt had a complex organization and were moving towards statehood while the A-Group societies in Lower Nubia appear to have had a decentralized organization consisting of autonomous corporate lineage groups (see p. 278 above). Lower Nubia would thus fit the definition of a "tribal zone" on the frontier of an ancient state (see p. 166 above). Political evolution can thus throw light on causes of war in Lower Nubia if one accepts both that there are different trajectories that societies take in terms of developing political organizations and that discrepancies in forms of political organization may be a situation whereby a more centralized society can invade and conquer a decentralized society.

Before the first war, cross-cultural exchange had not yet started on a large scale, but exchange flourished as soon as the hostilities between the Naqada people and the A-Group people came to a halt. This seems fitting with **structuralist** approaches that emphasize how war and trade are opposite forms of culture contact within a structure of relations. In this perspective, war may have been an option when exchange was either unprofitable or impossible.

I could not find any indication that culture contact in itself was a cause of war (see p. 377 above). However, violence between communities – especially the practice of headhunting – may have contributed in establishing a **structural division** of people into the cultural categories of enemies or friends. In our case, this division was represented by distinctive ethnic groups (see the sections *Missing skulls in A-Group cemeteries of the proto phase* in Chapter 9 and *A confrontational ethnogenesis for the A-Group people* in Chapter 11).

In conclusion, more land to feed an increasing population seems to have been the decisive factor that caused the first war. This is in accordance with ecological and

materialist approaches. In line with structural approaches, the social structure with a centralized political organization probably made the Naqada people at Nekhen confident to pick up arms against their neighbours who had a decentralized political organization. The proposed existence of a warrior band under central leadership in all probability made the Naqada people the ultimate victors of the first war.

We will continue by summarizing the circumstances of the second war.

The second war

The second war in Lower Nubia during the 4th millennium BCE documented in this thesis was a state expansion that caused the disappearance of the A-Group people. In this section, I will examine the possible factors that could have led to war at the Second Cataract between *c*. 3100 and 3000 BCE.

The environmental degradation during the 4th millennium BCE was apparently part of the background for the first war between Naqada people and A-Group people, as discussed in the previous section. There seems to have been an intensive dry spell at the end of the 4th millennium BCE, and this has been linked to warfare during the territorial and political unification of Egypt (see p. 44 above). However, Nordström (1972: 31) dismissed the deterioration of the climate as a cause for the disappearance of the A-Group people, and I will also dismiss it as a cause for the Egyptian conquest of Lower Nubia. I have rather argued that the violent Egyptian state expansion caused the depopulation of Lower Nubia (see the section *A violent state expansion* in Chapter 11). Yet, there is absolutely no evidence that the Egyptians expanded into Lower Nubia in order to gain more arable land, as they did during the first war, since there is no evidence of Egyptian agrarian settlements in Lower Nubia during the 3rd millennium BCE. The **ecological** approaches thus seem inapplicable for explaining the second war.

In contrast, the archaeological evidence indicates that the expansion was driven by another **materialist** motive – the extraction of valuable resources. Control over the flow of exotic raw materials as well as access to copper- and gold-bearing regions and sources of precious stones were probably the critical resources that drove the state expansion into Lower Nubia during the First Dynasty (see p. 377 above). The

extermination of the local population was probably perceived as necessary in order to establish and keep full control of vulnerable mining and quarrying operations in the desert hinterland of Lower Nubia as well as to secure the trading expeditions along the river.

It was the Egyptian king and his advisers who agreed on the objectives for going to war (see p. 376 above). This shows again that **agency** of a society's decision makers – especially the rulers of the most centralized society in a region – was an important cause of war.

Moreover, there were warriors in the Egyptian society during the early First Dynasty – probably because of warfare both in order to coerce all the population into a unified state and in border conflicts on the north-eastern frontier (see p. 131 above). This was thus a **structural** characteristic that made it possible to wage war in the south as well – like in the first war.

The discussion in Chapter 11 has demonstrated that there was little exchange during periods of war and little violence during periods of exchange between Naqada people and A-Group people from the beginning of the first war. After an interlude with lively exchange (see the section *From enemies to trading partners* in Chapter 11), Egyptian imports were lacking in the A-Group graves from the moment the second war broke out. This is attested spatially first in middle Lower Nubia and then in southern Lower Nubia as the fighting progressively arrived there too (see the section *Site abandonment* in Chapter 11). It thus seems to have been a **structuralistic** opposition between war and exchange as forms of intergroup relations in Lower Nubia during the 4th millennium BCE.

Finally, **cultural contact** can once more be excluded from the causes of war, because after the first war, the Egyptians and the A-Group people had maintained a long-term non-violent relationship before the Egyptians attacked and ignited the second war (see the section *From enemies to trading partners* in Chapter 11).

* * *

In conclusion, the materialist desires of the Egyptian elite to extract valuable raw materials and control the trade with the south without interference from local

people were the driving forces of the second war, while agency and structural factors made the objectives of the war possible. By comparing the two wars, the causes appear as quite similar. In generalized form, this conclusion suggests that centralized societies can go to war in order to have material benefits at the costs of societies that they can defeat through armed and organized violence.

The identification of enemies in war in the archaeological record

Having discussed in the previous section the complexities of the factors that caused war, I will now turn to the second research question that concerned the identification in the archaeological record of the ethnic groups that were enemies in war (see the section *Ethnicity* in Chapter 4 and *Chapters 8, 9 and 10*). This is an important question for Lower Nubia in the 4th millennium BCE since there is no consensus about the cultural identity of the people that lived in the northern part of the region during that time period (see p. 209 above). However, in order to study war in the past, it is necessary to identify the opponents in violent conflicts between ethnic groups, since war is part of an intergroup relationship. I have proposed that the political communities opposing each other in the wars in Lower Nubia during the 4th millennium BCE consisted of ethnic groups that are manifested in the archaeological record in form of different cultural practices and distinctive material culture (see *Chapter 8*). In the theoretical discussion of ethnicity in Chapter 4, I argued that it is possible to identify different ethnic groups in the Nile Valley during the Bronze Age. In Chapters 8 to 10, I aimed at demonstrating that Naqada people and A-Group people were different ethnic groups that both inhabited northern Lower Nubia in the mid-4th millennium BCE. The remains dating to the proto phase of the A-Group appear to be older than the Naqada remains in Lower Nubia, so the A-Group predecessors were the indigenous population, and the Naqada people consequently expanded into an already inhabited region. Furthermore, I have argued that the first war contributed to the ethnogenesis of the A-Group people (see the section *The first war in the area of the First Cataract* in Chapter 11).

The weapons of war

The objective of the third research question was to identify the weapons used for warfare in the Nile Valley during the 4th millennium BCE (see *Chapter 7*). This was thus the closest I came to discuss warfare tactics in this thesis, so this topic should be explored in future studies (see the section *Future research* below).

During the first war in Lower Nubia in the mid-4th millennium BCE, maces were the most important melee weapons. These heavy implements were the earliest specialized weapons, and the maces left very obvious damages on the skulls of those who had been injured or killed in battle. Furthermore, two of the examined skeletons bore evidence of having been attacked with copper-alloy weapons – an axe or adze and a dagger respectively, but copper-alloy weapons were not found in contemporary graves in Lower Nubia. Arrows shot from bows were probably the only ranged weapons used during the first war, although this composite weapon is nearly absent in the archaeological record.

During the second war in Lower Nubia towards the end of the 4th millennium BCE, we have no archaeological sources for the weapons that the armies of the expanding Egyptian state actually used, since no contemporary Egyptian graves were uncovered during the extensive salvage excavations in Lower Nubia. It is possible that the Egyptians treated their injured warriors and that they received relatively few casualties so that the dead warriors could be brought back to Egypt for burial. In the A-Group graves, a variety of melee weapons were found in form of copper-alloy axes, spears and adzes as well as flint blades of various types. Bows and arrows were probably also used by both parties, as indicated in both the rock drawing and the monumental relief at Jebel Sheikh Suliman (see **Figure 106** and **Figure 109**).

Let us continue with the identification of the ethnic group that took the initiative to fight.

The initial aggressors in the wars

The fourth research question aimed at identifying the initial aggressors in the wars. The two cases of war on the southern frontier of ancient Egypt during the 4th millennium BCE that were discussed in this thesis demonstrated that the wars were

started on the initiative of the decision-makers – probably the rulers – in Egypt (see p. 332 and p. 377 respectively). The initial aggressors in the wars were thus the most centralized and hierarchical societies, and this seems to have been a general characteristic of wars on the southern frontier of the ancient Egyptian state (see the section *Wars on the southern frontier of the Egyptian state during the Bronze Age* below). The A-Group people were thus fighting wars of resistance in response to the violent expansions of the chiefdom of Nekhen in the first war and the ancient state of Egypt in the second war.

The end of wars

The fifth research question was concerned with how the wars in Lower Nubia during the 4th millennium BCE came to an end. In the first war, flight seems to have been the A-Group people's final response to the violent expansion into their land of the centralized chiefdom of Nekhen (see p. 333 above). The war thus ended with the A-Group people's abandonment of their former territory in northern Lower Nubia. This land was thereafter occupied by Naqada people from Nekhen (see p. 336 above). After their land was lost, there are indications that some A-Group people rebelled against the conquerors in guerrilla attacks with bows and arrows (see p. 319 above). However, the peaceful interlude suggests that a nonviolent relationship between the Naqada people and the A-Group people was established relatively soon after the fighting had ended (see the section *From enemies to trading partners* in Chapter 11).

The end of the second war differed from the first war in that it was a state expansion that appears to have aimed at unmediated resource exploitation and trade control in Lower Nubia. Therefore, the war only ended when the A-Group people were either killed, had fled from their former territory, or deteriorated to such a basic level of existence that they no longer posed any threat. This is thus a gruesome example of how the militarily strongest opponent in war can win at tremendous costs to the defeated people. The predictable victories of the society with the most centralized political organization also explain why the state frontier was often a very violent place in past societies. Indeed, it also explains how the strongly centralized, but cephalic

states of Sudan and South Sudan, still exploit the internal peripheries of the states through armed combat.

The effect of war on the societies on the state frontier in the 4th millennium BCE

Since all wars have an aftermath, the sixth and last research question involved the long-term effects of war on the involved societies; and I will briefly discuss this here. In general, both sides suffered from casualties in the wars, but the defeated people probably endured the greatest losses. Moreover, the twice defeated A-Group people had additional sufferings since all the fighting took place on their land with intentional destruction of their camps and cemeteries as well as seizure of their herds, fields and food reserves. In contrast, the victorious chiefdom of Nekhen in the first war and Egyptian state in the second war seem to have had advantages such as territorial expansion and access to mineral resources and trade routes. I will first consider the effects of the wars on the A-Group people, then on the chiefdom of Nekhen after the first war, and finally on the ancient state of Egypt after the second war.

The A-Group society

The effects of the first war between the expanding chiefdom of Nekhen and the A-Group people in the area of the First Cataract were multiple. The A-Group people lost the war and had to retreat from the region between Shellal and Bab el-Kalabsha that had been part of their land until then. Furthermore, the violent confrontation forced the A-Group people to consolidate their group identity in the form of an ethnic identity, which was based on their perception of being culturally different from the Naqada people as well as of their need to display this difference during the violent confrontation. This resulted in a firm ethnic boundary between the Naqada people and the A-Group people (see p. 333 above). Subsequently, ethnicity came to structure the interactions between the two peoples (see p. 336 above).

Towards the end of the relatively peaceful interlude following the first war, political elites asserted themselves among the A-Group people as a result of intensive trade with the north. This process was interrupted by the political unification of Egypt around 3100 BCE. The A-Group society seems to have collapsed in the first half of the

First Dynasty, since few material remains of indigenous people have been found in contexts later than the reign of king Djer (see the section *The first state expansion into Lower Nubia* in Chapter 11).

The second war between people from Egypt and the A-Group people discussed in this thesis seems to have caused a depopulation of Lower Nubia as people were killed, fled or migrated. I have suggested that the second war was instigated by the Egyptians for materialist purposes, and it caused the disappearance of the A-Group people who appear to have been literally "*bombed back to the Stone Age*"[37], since no copper artefacts have been found in context dating to the following centuries (see the section *The inclusion of the Middle Nile region in the Bronze Age world* in Chapter 4).

The southern frontier of the Egyptian state must have been a violent place – both for the indigenous people and for the Egyptian military expeditions sent there. Only a minority of the former population possibly remained in Lower Nubia under very difficult conditions. Their families and friends may have escaped or vanished, and the Egyptians had probably plundered their livestock and other means of food production. The A-Group people seem to have either given up on their traditions or been unable to keep them up, as they stopped making their characteristic pots and palettes, and few burials from the first half of the 3rd millennium BCE have been recorded in Lower Nubia. The descendants of the A-Group people that remained in their former territory must have had a very basic mode of life on the verge between survival and perishment that left few traces in the archaeological record. Without external assistance – like today's humanitarian help – it took 500 years for the population of Lower Nubia to recover from the second war with Egypt. By the beginning of the Fifth Dynasty, the A-Group people's remote descendants – the so-called C-Group people – were powerful enough to make the Egyptians retreat from their mining and quarrying installations in Lower Nubia and its hinterlands (see Hafsaas, 2006: 137-138).

[37] The phrase was first used in 1965 by Curtis E. Lemay, US Chief of Staff, in a threat towards North Vietnam.

The chiefdom of Nekhen

Following several episodes of violence during the first war, an ethnic boundary was forced into existence at Bab el-Kalabsha (see p. 330 above). The territory of the chiefdom of Nekhen had thus expanded *c*. 70 kilometres southwards from the First Cataract at the expense of the land of the A-Group communities. I have already suggested that the materialist motivation for the first war was land (see p. 324 and p. 385 above). After the war, the chieftains of Nekhen thus controlled the Nile Valley from the area upstream of the Qena Bend in Upper Egypt until Bab el-Kalabsha in northern Lower Nubia. The largest tomb in all of Egypt dating to Naqada IIB was located at Nekhen and has been interpreted as the grave of one of the Nekhen chieftains (see pp. 118-119 above). The prominence that the chieftains of Nekhen assumed at this time was due to their control of a far more extensive territory than the areas possessed by the chieftains of Tjenu/Abedju and Nubt, even though the flood plains in southern Upper Egypt and northern Lower Nubia were narrower and thus less productive in agricultural terms. Nevertheless, the expansion into Lower Nubia should not be underestimated, since a positive result of the territorial expansion was that the chieftains at Nekhen probably both met new trading partners in exotic raw materials and discovered precious mineral resources in the deserts. The chieftain who controlled the access to the rich natural resources in the south would inevitably have had a competitive advantage in the competition for supremacy in Upper Egypt.

The ancient Egyptian state

After the second war, the Egyptians came to control all of Lower Nubia during the first half of the 3rd millennium BCE. The extraction of raw materials seems to have been their primary motivation for the violent expansion into Lower Nubia. This is testified by the Egyptian copper mining station at Buhen and the Egyptian quarries extracting precious stones at Gebel el-Asr in the Western Desert (Hafsaas, 2006: 113). The Egyptians were probably also amassing gold in the Eastern Desert (Klemm, Klemm and Murr, 2002: 216, fig. 1). Moreover, they seem to have raided the already impoverished A-Group descendants for slaves and livestock, as recorded on the Palermo stone for king Sneferu at the beginning of the Fourth Dynasty (see p. 76

above). The lack of remains from Egyptian activities in Lower Nubia after *c*. 2500 BCE can be linked to the emerging power of the C-Group people. Their growing population with increasingly more centralized political organization forced the termination of the Egyptian control and exploitation of Lower Nubia during the second half of the 3rd millennium BCE (see Hafsaas, 2006: 137-138).

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Having recapitulated on the answers to my main research questions, I will continue with an evaluation of the utility of the theory of war on the state frontier for the relationship between the increasingly more centralized communities in Egypt and the indigenous people of the Middle Nile region during the Bronze Age.

Wars on the southern frontier of the Egyptian state during the Bronze Age

In this section, I will explore how the historically particular wars between people in Egypt and people along the Middle Nile during the Bronze Age correspond with the general theory of war on state frontiers (see the section *A theory for explaining wars on the southern frontier of ancient Egypt* in Chapter 6). This discussion will also draw on conclusions I have reached in other published studies, since the whole Bronze Age is under consideration here.

In accordance with the theory, I will first suggest a pattern for the development of centralized political organization on the state frontier of ancient Egypt and its implications for war. Thereafter, I will discuss the indigenous responses to violent state expansions into the Middle Nile during the Bronze Age.

Patterns of political organization on the state frontier

The Nile Valley was the setting for one of the earliest states to emerge in a global context – ancient Egypt. The state formation process started in Upper Egypt at the beginning of the 4th millennium BCE (see the section *Political organization* in Chapter 4). The concentrations of people with a Naqada identity at Tjenu/Abedju [Abydos], Nubt [Naqada] and Nekhen [Hierakonpolis] developed through warfare into

political centres in form of three chiefdoms by *c*. 3600 BCE. Thereafter followed a period of political consolidation, but also of rivalry in form of aggrandizement of the elites through consumption of exotic and precious materials (see the section *The chiefdoms of Upper Egypt* in Chapter 4). In contrast to the process of centralization of political power in Upper Egypt, there was initially no centralized political organization in Lower Nubia since the inhabitants consisted of corporate lineage groups with some common culture.

The original theory of war on the tribal zone proposed a characteristic feature of the relationship between states and their tribal neighbours. Representatives of the expanding states elevated the position of local leaders by providing privileged access to foreign manufactured luxuries. The aim was to find alliance partners in societies outside the state (see p. 167 above). A recurrent pattern to be observed in the relationship between the Egyptian state and the ethnic groups on its southern frontier is that when the polities that emerged through contact and exchange with Egypt grew too powerful, Egypt waged war on them.

In the Bronze Age of the Middle Nile, there was a repeated process whereby local big men rose to the position of paramount chieftains due to influence of political institutions from Egypt, imported luxury goods and strategic positions in the trading networks. This happened with the A-Group chieftains that founded ruling dynasties at Sayala and Qustul during the late 4th millennium BCE (see the section *The influence of exchange on political organization of A-Group communities* in Chapter 11), and it was repeated with the formation of the C-Group chiefdoms Wawat, Irtjet and Setju during the Sixth Dynasty in the late 3rd millennium BCE (see Hafsaas, 2006: 71-72, 138-139). The process recurred for the third and last time with the rise of the kingdom of Kush at Kerma in Upper Nubia during the early 2nd millennium BCE (e.g. Hafsaas-Tsakos, 2013: 82).

The regions with leaders cooperating with Egypt appear to have been incorporated into the Egyptian state as the Egyptians waged war on them when their power became too strong. This happened first in Lower Nubia with the collapse of the A-Group communities and the inclusion of their territory into Egyptian dominion between *c*. 3000 to 2500 BCE. Then the Egyptians occupied the C-Group territory in

Lower Nubia from *c*. 2000 to 1700 BCE (see Hafsaas, 2006: 141-142). Finally, both Lower and Upper Nubia became provinces of Egypt after the alliances and conquests between 1550 and 1500 BCE (see Hafsaas-Tsakos, 2010: 394-395).

The theory of war on the state frontier predicts that cooperation with a state inevitably would lead to loss of autonomy through violent state expansion, and this seems very fitting for the indigenous societies of the Egyptian state frontier in the Bronze Age.

Although short-lived, the A-Group polities at Sayala and Qustul were the first in a series of polities south of the First Cataract that based their power on the control of long-distance and cross-cultural trade during periods of peaceful relations with the north. The prestige goods that the elites obtained were used both to display elite status and as gifts for establishing and maintaining political alliances through redistribution. This often resulted in heterarchical organizations whereby power and wealth were shared by a larger segment of the population than in Egypt (Hafsaas-Tsakos, 2009a: 35).

It was first in the Iron Age that a secondary state formation took place on the Middle Nile with the re-emergence of the kingdom of Kush, but now organized as a state with Napata below the Fourth Cataract as capital (see **Map 2**). Shortly afterwards, this state in the Middle Nile was also successful in conquering Egypt. However, this is a development that surpasses the chronological limits of this thesis.

Indigenous responses to violent state expansions

The theory of war on the state frontier puts forward three choices for indigenous people without a centralized political organization that are facing a state expansion into their territory: cooperation, resistance and flight (see p. 167). We will now see how these options were employed by the indigenous societies along the Middle Nile during the Bronze Age.

The A-Group people

During the first war, the A-Group people initially resisted the violent expansion, but resorted to flight in face of a militarily stronger and organizationally superior

enemy. During the second war, there seems to have been a factional division of the A-Group people. The earlier expeditions under king Scorpion II of Nekhen and king Aha of Egypt seem to have attacked the area between Bab el-Kalabsha and Abu Simbel. The A-Group people in this area probably resisted the expansion before fleeing and becoming dispersed, while the A-Group polity at Qustul continued cooperation with the Egyptians. However, the behaviour of the Egyptian kings was unpredictable, as the theory also advocated (see p. 167 above), and the next ruler on the Egyptian throne, king Djer, attacked the kingdom of Qustul. The A-Group people in the southern part of Lower Nubia probably also put up resistance, but fled when the loss in terms of human lives became intolerable. The salvage excavations undertaken in Batn el-Hajar during the 1960s should be published in full so that it will be possible for future studies to investigate to which extent the Second Cataract and Batn el-Hajar became a zone of refuge for the retreating A-Group people. The evidence indeed suggests that some of them escaped the war by seeking shelter with neighboring groups such as Egyptians at Abu [Elephantine] and Pre-Kerma people at Kerma (see p. 380 above).

The C-Group people

After the disappearance of the A-Group people at the end of the 4th millennium BCE, the next major phase of violent state expansion from Egypt into Lower Nubia took place at the beginning of the 2nd millennium BCE. Tangible archaeological evidence for war has not been presented in form of a catalogue of all weapons and violent skeletal trauma recorded, since earlier research has relied too much on the Egyptian written sources.

Several inscriptions attributed to the first kings of the Twelfth Dynasty describe a military conquest of Lower Nubia. This was probably a war between the expanding Egyptian state and the indigenous C-Group people, who had by then become organized in a single chiefdom called Wawat (Hafsaas, 2006: 72, 116; Hafsaas-Tsakos, 2010: 393). The Egyptian aspirations were again materialistic. Their aims were to seize control of the trade in African exotics, such as incense, ebony, aromatic oil, leopard skins and ivory, extract raw materials, such as copper, gold and precious stone, and acquire slaves and mercenaries (Hafsaas, 2006: 115; Hafsaas-Tsakos, 2010:

393). The indigenous C-Group people must have fought in wars of resistance since it took several military expeditions before the Egyptians could establish their new southern border at Buhen below the Second Cataract around 1938 BCE (Hafsaas, 2006: 116). Wawat thereafter became a province of Egypt (Callender, 2000: 161).

Once the Egyptians were established in Lower Nubia, they constructed a series of monumental fortresses in the conquered land (see p. 23 above). The fortresses seem to have been built in order to hold the territory through intimidation by a military presence, to administrate the riverine traffic, to monitor the local populations as well as to patrol and explore the deserts on both banks. The fact that the major fortresses in Lower Nubia were located in the most populous regions suggests that control and surveillance of the indigenous population were important factors in the choice of the location and construction of the fortresses (Hafsaas, 2006: 117-121). The end of the violence probably came through an agreement on the use of the territory, whereby the Egyptians were not competing with the C-Group people for productive land, but received food rations from the central administration in Egypt. Instead, the Egyptians took control of both the lucrative trade in raw materials from Upper Nubia and the mineral resources in the hinterlands of Lower Nubia, which were their targets. Thus, the C-Group people continued their pastoral way of life without severe restrictions from the occupants, and this made nonviolent relations possible between the Egyptians and the C-Group people (Hafsaas, 2006: 141). The reconciliation stimulated and facilitated contact and exchange between the occupants and the indigenous people until the Egyptians retreated due to the collapse of central authority in Egypt in *c*. 1725 BCE (Callender, 2000: 172). The continued existence of the C-Group people after the Egyptian conquest was probably due to a strategy of cooperation with the Egyptians rather than fighting or fleeing. The latter option was rather impossible as there was no empty land in which they could seek refuge, while the option of continued resistance may have appeared too costly both in terms of people killed and loss of means of food production and other essential means for supporting continued well-being.

The Kerma people

At the beginning of the 2nd millennium BCE, Kerma emerged as one of the major economic and political centres in the Nile Valley. This coincided in time with the rise and prosperity of a political entity called Kush, which is mentioned in contemporary Egyptian sources. There is now agreement among archaeologists that Kerma was the seat of the rulers of Kush. From this time onwards, Kush participated in a thriving trade with Egypt (Hafsaas-Tsakos, 2013: 80). This long-distance exchange – covering more than 600 kilometres along the Nile between the First Cataract and Kerma – was probably only feasible from the fortified bases that the Egyptians had already established in Lower Nubia.

The first war with the Kerma people in Upper Nubia was probably fought between *c*. 1864 and 1854 BCE, since king Senusret III commanded four military campaigns into Upper Nubia at this time. During these campaigns, the southern border of Egypt was moved further south and closer to Kush as it was established at the strategically important Semna Gorge in the Batn al-Hajar (Hafsaas, 2006: 120). According to a boundary stele at one of the Egyptian fortresses constructed on the Semna Gorge, only the traders of Kush were allowed to travel further north to the fortress Iken – midway between the Semna Gorge and the Second Cataract (Breasted, 1962a: 293). This indicates that the exchange was so advantageous for both parties that peaceful relations resumed soon after the war. The rulers of Kush seem to have collected raw materials in their hinterlands, which they then brought to the Egyptian fortresses, where the exotic goods were exchanged for manufactured commodities (Hafsaas-Tsakos, 2013: 82). The growing social differentiation and centralization of the political organization that are evident at Kerma during the middle phase were in all probability fuelled by the access to Egyptian imports (Hafsaas-Tsakos, 2010: 392-393). Among these imports were also some bronze daggers (see **Table 7**).

After the Egyptians retreated from their fortified border in Batn el-Hajar to the First Cataract, the rulers of Kush had ambitions to expand northwards (Hafsaas-Tsakos, 2013: 82). The ruler of Kush seized control of both the Egyptian fortresses and the gold mines in the region between the Semna Gorge and the Second Cataract, while Lower Nubia was again in the hands of the local C-Group people. The prosperity of

Kush was thereafter related to the transfer of control over the north-south trade from the Egyptians to the Kerma people (Hafsaas, 2006: 142-143, Hafsaas-Tsakos, 2010: 393).

However, the Kerma people were not only peaceful traders during the classic phase. The C-Group people were fortifying their settlements at this time (Hafsaas, 2006: 145), and a tomb inscription from Upper Egypt narrates how war parties from Kush raided for booty in southern Egypt (Davies, 2003: 52). At the current state of knowledge, we can only speculate that the Kushites had been raiding for cattle, slaves and other commodities on their western, southern and eastern peripheries since the middle phase, while the northern region only became open for exploitation when the Egyptians retreated from Batn el-Hajar and Lower Nubia.

I have argued elsewhere that warriors played an important role in the aggressive policy of the rulers of Kush towards the people in the surrounding territories (Hafsaas-Tsakos, 2013). The expansion to the Second Cataract coincided in time with the manufacturing at Kerma of the characteristic Kerma daggers after Egyptian prototypes (see p. 92 above; **Figure 37:c**). The Kerma daggers were probably made for the ruler's body guard, trusted warriors and alliance partners. Beside at Kerma itself, men buried with Kerma daggers have been identified archaeologically near the former Egyptian fortresses Iken and Buhen (Vila, 1970; Randall-MacIver and Woolley, 1911). This suggests that warriors were instrumental for the Kushite expansion to and occupation of Batn el-Hajar and the Second Cataract (Hafsaas-Tsakos, 2013: 87).

In Bronze Age Europe, warrior societies emerged on the peripheries of hierarchical sedentary societies with stable finance and advanced political institutions. It has thus been argued that warrior aristocracies were a structural outcome of centre-periphery relations between centralized polities and their hinterlands in less productive and more unstable environments (Kristiansen, 1999: 186). Kerma was situated in a resourceful location, but on the southernmost periphery of an interlinked Bronze Age world (see the section *Long-distance exchange* in Chapter 4). Furthermore, the Kerma people were trading raw materials for manufactured luxuries in an asymmetrical exchange relationship with Egypt – one of the centres of this interconnected world (Hafsaas-Tsakos, 2009: 66-67). However, Kush was a centralized polity in its own

hinterland, and the warrior elite may have been established in order to exploit the resources there for trade with the north. The Kerma people thus seem to have been engaged in what the theory of war on the state frontier terms as internecine warfare (see p. 169 above), since the ruler of Kush appears to have waged wars on other indigenous people outside the state frontier in pursuance of his own materialist interests.

The polity of Kush and its warrior elite were short-lived phenomena since the invading armies of the early kings of the Eighteenth Dynasty of Egypt were both better equipped and more experienced in fighting after the expulsion of the Hyksos from Lower Egypt. The millennium-old Eastern Cemetery at Kerma was abandoned around 1550 BCE, and Kush was finally defeated around 1500 BCE. The victorious Egyptian king, Thutmose I, displayed the dead body of the last ruler of Kush hanging head down from the prow of his barge when he returned north (Breasted, 1962b: 34). The territory of Kush was thereafter annexed into the Egyptian empire of the New Kingdom.

* * *

When societies with different forms of political organization and different levels of weapon technology clash, then the superior group in respect of centralized organization and advanced equipment can use the inferiority of the other group as an opportunity for killing or enslaving the population, raiding and destroying their property, taking over their land and exploiting its resources, as well as using the victories over foreign people in state propaganda. War on the state frontier was thus both materially and ideologically advantageous for the elites of states with hinterlands of people without centralized organization. These advantages are probably responsible for why war is a social practice that haunts intergroup relationships worldwide until today (see Gat, 2006: 666, 670 for comparable insights).

Concluding remarks

During the Bronze Age, Lower Nubia and to a lesser extent Upper Nubia seem to have been liable to war due to violent expansions from the ancient state of Egypt, since the Middle Nile region was both located on the southern frontier of Egypt and had a hinterland rich in natural resources. The main focus in this thesis was wars in Lower Nubia during the 4th millennium BCE from the perspective of the indigenous A-Group people. I have argued that their ethnic identity was forged through a confrontational ethnogenesis due to war with the Naqada people in Upper Egypt between *c*. 3600 and 3460 BCE. The A-Group peoples' social and political development then continued until their society came to a violent end when the Egyptian state waged war in order to take control over Lower Nubia between *c*. 3100 and 3000 BCE. It thus seems that both the emergence of the A-Group society and its collapse were shaped by war instigated by a politically more centralized society than their own.

The warfare perspective used in this thesis has thus demonstrated that we can gain important information on how ethnic groups and political organizations were formed, changed and disappeared by expanding the topics of research to also include the violent aspects of intergroup relations in the past. Furthermore, the application of a new research perspective has also revealed the limits of the archaeological record in a region flooded by a dam reservoir, since salvage archaeology always have to make priorities. In a submerged land, it is impossible to refine research questions in the field or excavation methods in order to fully benefit from a new research perspective.

Future research

Although this thesis aimed at being exhaustive, several fields were left open for future research. These include topics such as the identification of cultural groupings, cross-cultural contact, warfare tactics, war and mythology as well as an expansion of the warfare perspective to later periods in the history of the people in the Nile Valley.

To begin with the identification of cultural groupings, it would be interesting if ongoing archaeological investigations discover more material remains from people inhabiting the region between the First Cataract and Gebel es-Silsila during the 5th and

4th millennia BCE (see p. 321 above). Research on cultural identity for this time and place would be enlightening for the interpretation of the ethnogenesis of the A-Group people that was suggested in this thesis. Furthermore, the proto phase of the A-Group should be more thoroughly studied – including the traditions of pottery production – as well as the relationship between the peoples creating the material culture of the A-Group and the Abka complex (see pp. 232-233 and p. 73 respectively).

An important task for future research will be the examination of cross-cultural contacts in order to situate the successive political and economic elites of the Middle Nile region within the wider elite culture of the Bronze Age world (see p. 355 above). Furthermore, the nature of the contact between Qustul and Nekhen [Hierakonpolis] should be studied in detail (see pp. 377-378). Moreover, I have only made some preliminary suggestions regarding the iconography and early writing either related to Ta-Seti or found in A-Group contexts, so future research should investigate this corpus. This would probably also throw new light on the relationship between Qustul and Nekhen.

Although war was the main subject of this thesis, warfare tactics were not studied in detail (see p. 391 above). I also avoided the vast topic of war and violence in ancient Egyptian mythology, since I focused on establishing a rigorous foundation for the analysis of war through archaeological sources. Furthermore, the few skeletal samples that have been stored for future studies should be examined or reexamined for traces of interpersonal violence (see p. 10 above).

Finally, a warfare perspective on the relationship between Tjenu/Abedju [Abydos] and Nekhen [Hierakonpolis] during the final stages of the territorial and political unification of Egypt would undoubtedly provide new insights on the formation of the territorial state of ancient Egypt (see p. 131 above). In conclusion, the warfare perspective should be expanded both to include other periods of the archaeological past of the Middle Nile region and for broadening our understanding of culture contact and political organization more generally.

Catalogues

Burials containing weapons, weapon-tools or tool-weapons in the Middle Nile Valley during the Bronze Age

These catalogues contain all the weapons, weapon-tools and tool-weapons uncovered from burials in Lower Nubia dating to the 4th millennium BCE as discussed in Chapter 7. Only cemeteries with more than 10 burials have been included. For each cemetery, the reference refers to the primary publication of the excavations. The time span of each cemetery has been established on the basis of the chronological parameters discussed elsewhere in the thesis. Where the remains of the deceased have been identified in terms of age and sex, then this is noted in the catalogues. Unfortunately the data on age and sex is very limited as the human remains were only thoroughly studied during the first season of the Archaeological Survey of Nubia.

Catalogue 1

Naqada cemeteries in Lower Nubia

Cemetery 7/100-300 – Shellal
Report: Reisner, 1910: 19-31.

Naqada IIIA2-IIIC graves

Grave 325 – two new-borns, adult woman and adult man
2+ x flint chips – probably trapezoid arrowheads

Grave 358
1 x carnelian chip – probably an arrow-head

Summary: 65 graves in total. No certain weapons uncovered, but some lithics that may have been arrowheads of the weapon-tools category.

Cemetery 17 – Khor Bahan
Report: Reisner, 1910: 115-127.

Naqada IC-IIA graves

Grave 5 – 2 young males
1 x disc-shaped macehead of black and white speckled stone
2 x flint blades
1 x possible bow of decayed wood (see Reisner 1910: fig. 68)

Grave 6
1 x disc-shaped macehead of pink limestone
2+ x flint blades
1 x chalcedony flakes set in wooden edge

Grave 35 – male
1 x macehead, possibly of diorite
2 x flint blades

Grave 49
2 x bifacial flint knives

Grave 50
1 x disc-shaped macehead of diorite
1 x concave base arrowhead of flint
1 x long flint blade
115 x lunate arrowheads of chalcedony

Grave 56 – young adult male
1 x double-ended macehead of breccia with traces of handle binding
5 x bifacial flint knives

8 x flint blades

Grave 57
1 x bifacial comma-shaped knife of flint
1 x blade knife of flint

Grave 58 – male
1 x disc-shaped macehead
3 x rhomboidal flint daggers

Grave 68
1 x hexagon-shaped macehead of alabaster
2 x fishtail flint daggers
2+ x slingshots (described as stone marbles of hematite balls)
2 x decayed horns (possibly bow tips from a composite bow)

Grave 70
2 x disc-shaped maceheads
1 x rhomboidal flint dagger
2+ x lunate arrowheads of chalcedony
2+ x flint blades
2+ x slingshots (described as ivory tusk filled with porphyry marbles)

Grave 74
2+ x chalcedony blades
2 x slingshots of breccia

Grave 78
2 x disc-shaped maceheads
2+ x lunate arrowheads of chalcedony
3 x barbed and tanged flint arrowheads
2 x decayed horns (possibly bow tips from a composite bow)

Grave 84
1 x flint blade
15 x slingshots (described as manganese nodules)
2 x broken horns (possibly bow tips from a composite bow)

Grave 88
1 x disc-shaped macehead of diorite
1 x double-ended macehead of breccia
1 x double-ended macehead of porphyry
2 x mace-handles
2 x decayed horns (possibly bow tips from a composite bow)

Grave 89 – male
1 x disc-shaped macehead

Grave 95
1 x broken macehead

1 x broken flint knife

Summary: 28 graves in total. 16 maceheads occurred in 12 graves, i.e. 43 per cent of the graves contained maceheads. The graves with maces also contained various forms of dagger, knives and blades made of flint. 3 graves contained arrowheads of various types.

Naqada IIA-IID1

Grave 15 – female
2 x bow-tips of gold

Grave 66 – two females
1 x copper knife imitating flint blade knife
2+ x flint blades

Summary: Seven graves in total. No specialized weapons, but the bow-tips of gold and the copper knife were high-status weapon-tool/tool-weapons.

Cemetery 23 –Dabod
Report: Reisner, 1910: 157-159.

Naqada IIC-IIIA1

Summary: 14 graves in total. No categories of weapons uncovered.

Cemetery 30 – Khor Risqalla
Report: Reisner, 1910: 191-194.

Naqada IIC-IID2

Summary: 8 graves in total. No categories of weapons uncovered.

Cemetery 40 – Siali
Report: Reisner, 1910: 234-241.

Naqada IID2-IIIB

Grave 13 – unknown sex
2+ x flint blades

Grave 14 – unknown sex
1 x copper harpoon

Summary: 34 graves in total. Sex was not determined for any of the bodies uncovered. Unknown number of flint blades (described as flakes in the report) in one grave and a copper harpoon in another – both belong to the tool-weapon category.

Cemetery 41/400 – Meris plain
Report: Reisner, 1910: 218-222.

Naqada IIC-IID1 and IIIA2-IIIB

Summary: 21 graves in total – 17 of the earlier date and 4 of the later date. No categories of weapons were uncovered in the cemetery, but maces, a copper axe and ground stone axes were found at the nearby habitation site (see p. 288 above).

Cemetery 43 – Abisko
Report: Reisner, 1910: 246-256.

Naqada IIA-IID1

Grave 80
1 x flint blade
Summary: 82 graves of which many were heavily plundered. The only specimen of the weapon types was a flint blade of the tool-weapon category.

Cemetery 45/100 and 400 – Shem Nishai
Report: Reisner, 1910: 260-262, 265-267.

Naqada IID1-IIIA2

Grave 114 – aged male
1 x axe-head of grey stone

Grave 441
1 x chalcedony blade

Grave 470 – male
1 x unfinished stone axe-head

Grave 492 – female?
1 x flint blade with triangular section

Summary: 60 graves in total. No specialized weapons were uncovered, but two ground stone axes and two blades of the tool-weapon category were found.

Cemetery 50 – Metardul
Report: Reisner, 1910: 285-292.

Naqada IIIA2-IIIB

Grave 2 – adult
1+ x flint flakes with serrated edges

Grave 57
1 x flint flake with serrated edge

Summary: 70 graves in total. The cemetery was greatly disturbed. Two graves contained flint flakes with serrated edges. These were probably sickle blades, and the flint was probably deriving from Egypt.

Cemetery 111 – Wadi Allaqi
Report: Firth, 1927:

Naqada IID1

Grave 18 – child
1 x flint blade

Summary: 19 out of 60 graves belonged to the Naqada people. The only weapons category uncovered was a flint blade of the tool-weapon category found in the grave of a child.

Catalogue 2

Burials containing weapons in A-Group cemeteries in Lower Nubia

Cemetery 7, south-eastern knoll
Report: Reisner, 1910: 33-42.

Proto A-Group (Early B-Group according to Reisner)

Grave 229 – adult male
1 x disc-shaped macehead of black and white speckled stone

Grave 230
1 x disc-shaped macehead of pink and black speckled stone
1 x ground axe-head of black stone

Grave 234 – adult male and female
1 x ground axe-head of black stone

Summary: 52 human graves and 9 animal graves. Three human graves contained four weapons and tool-weapons. One macehead was found in the grave of a man, and the other mace-head was found together with one of the axe-heads in a grave were the body had been removed. The other axe-head was found in a double grave containing a man and a woman, and it is uncertain to whom this object belonged.

Cemetery 14 – Khor Ambukol
Report: Reisner, 1910: 142-144.

Proto A-Group (B-Group according to Reisner)

Grave 17 – female
1 x flint blade

Summary: 21 graves in total. Only a flint blade of the tool-weapon category was uncovered in the grave of a woman.

Cemetery 17 – Khor Bahan
Report: Reisner, 1910: 133-137.

Proto A-Group (B-Group and indeterminable graves according to Reisner)

Grave 31
2+ x flint blades

Grave 48 – female
2+ x flint flakes

Grave 90 – female
3 x flint blades

Summary: 27 graves in total. Only flint blades and flakes of the tool-weapon category were uncovered.

Cemetery 41/201-243 – Meris-Markos plain
Report: Reisner, 1910: 211-215.

Proto A-Group (B-Group according to Reisner)

Grave 207 – female
1 x flint blade

Grave 212 – male
1 x flint blade

Grave 221 – male
1 x flint blade

Grave 230
1 x flint blade

Grave 233 – male
3 x flint blade

Grave 238 – male
1 x broad flint blade

Summary: 40 human graves and 3 animal graves. 8 flint blades of the tool-weapon category were found in 6 graves. 7 blades were deposited with men, 1 with a woman and 1 in a grave without remains of a body. Blades belong to the tool-weapon category. These flint implements were described as "flakes" in the report, but Reisner has elsewhere in the report shown with illustrations that his flakes actually were blades. This is considered to be the case here also.

Cemetery 44 – Dehmit
Report: Reisner, 1910: 256-258.

Late early A-Group

Summary: 20 published human graves. No weapons or tool-weapons were uncovered.

Cemetery 45/201-242 – Shem Nishai
Report: Reisner, 1910: 262-265.

Proto A-Group (B-Group according to Reisner)

Summary: 42 human graves of which only 30 were published due to heavy destruction of the site. No weapons or tool-weapons were uncovered.

Cemetery 73 – Gerf Hussein

Report: Firth, 1912: 98-108.

Middle to early terminal A-Group

Grave 15 – child
1 x flint blade

Summary: 74 human graves that were extensively plundered. The only tool-weapon uncovered was a flint blade with a child.

Cemetery 76 – Gerf Hussein
Report: Firth, 1912: 110-123.

Middle to early terminal A-Group

Grave 131
1 x flint blade

Summary: 51 human graves that were little disturbed. The only tool-weapon uncovered was a flint blade.

Cemetery 79 – Gerf Hussein
Report: Firth, 1912: 127-151.

Late early to early terminal A-Group

Grave 11 – adult male
1 x flint blade

Grave 130 – adult female with child and one later interred unsexed body
1 x bone point

Grave 137
1 x triangular flint flake – possibly an arrowhead
3 x bone points

Summary: 116 of 204 pits were certain burials while the remaining was described as 2 sheep burials and 86 empty pits. 4 bone points, a flint blade and a flint flake were the only weapon-tools or tool-weapons uncovered.

Cemetery 80 – Gerf Hussein
Report: Firth, 1912: 151-155.

Early to early middle A-Group

Grave 2 – adult
1 x rough stone axe-head
1 x bone point

Grave 16 – adult

1 x bone point

Summary: Small cemetery with 22 graves. Three tool-weapons uncovered in form of a stone axe-head and two bone points.

Cemetery 89 – Koshtamna
Report: Firth, 1912: 188-198.

Late middle to early terminal A-Group

Grave 647 – adult male
1 x copper chisel

Grave 683 – two adult females and a new-born
1 x pear-shaped macehead of white marble
1 x flint blade

Grave 763
1 x copper axe-head
1 x copper chisel

Grave 768 – adult male
1 x copper adze or chisel
1 x ripple-flaked flint knife

Grave 819 – adult male
1 x possible knife-handle of ivory

Grave 858 – adult male
1 x copper chisel (in right hand)
1 x flint knife (broken)

Summary: 61 published graves, but the numbering suggests that the site was larger. All the weapons were of high-status types: a pear-shaped mace and a copper-alloy axe. The majority of the weapon-tools were made of copper-alloys in form of four chisels, and there was also a fine ripple-flaked flint knife as well as a broken flint knife and a flint blade, which were all of imported flint and thus of some prestige.

Cemetery 92 – Aman Daud
Report: Firth, 1912: 198-201.

Early middle to early terminal A-Group

Grave 16
1 x flint point

Grave 79
2 x flint blade knives

Grave 93

1 x stone axe-head

Summary: 34 graves in total. The site was much affected by denudation and disturbances by later X-Group graves. Sex was not determined for any of the bodies uncovered. The flint point, flint blade knives and axe-head belong to the tool-weapon category.

Cemetery 98 – Dakka
Report: Firth, 1915: 43-46.

Middle to early terminal A-Group

Summary: 112 graves in total of which 44 are described as "*Later Early Dynastic or B-Group*" (Firth: 1915: 46). Only 19 graves were published with content, and none of them contained any objects of the weapon categories.

Cemetery 99 – Dakka
Report: Firth, 1915: 46-51

Early middle to early terminal A-Group

Grave 3
1 x flint knife

Grave 18/19
1 x flint knife (broken)

Summary: 26 graves in total. Two flint knives, probably imported from Egypt, were found. They were not illustrated, but belong to the tool-weapon category.

Cemetery 101 - Dakka
Report: Firth, 1915: 81-96.

Middle to early terminal A-Group

Grave 617 – adult
1 x copper axe-head (intentionally broken)

Summary: 73 graves in total. The cemetery was well-preserved and probably represented the wealthier people in the Dakka region. Only a copper-alloy axe was uncovered.

Cemetery 102 – Dakka
Report: Firth, 1915: 51-80.

Late early to early terminal A-Group

Grave 114 – adult
1 x flint blade

Grave 207 – adult
1 x flint blade with worked edge

Grave 478 – adult
1 x flint blade

Summary: 222 published graves of perhaps more than 500 graves in total. Three flint blades of the tool-weapon category were the only specimens of weapons uncovered.

Cemetery 103 – Dakka
Report: Firth, 1915: 97-104.

Late early to early middle A-Group

Grave 12
4 x flint blades

Summary: 39 graves were published. Of possible weapons, only four flint blades of the tool-weapon category were uncovered.

Cemetery 111 – Wadi Allaqi (Naqada graves in Catalogue 1)
Report: Firth, 1927: 98-109.

Late middle to early terminal A-Group

Grave 20
1 x flint blade

Grave 75
1 x flint blade

Grave 83 – adult
1 x flint blade

Grave 101 – adult
1 x flint blade

Summary: This cemetery was first used by Naqada people and then reused by the A-Group people after a short interval. 39 graves were excavated in the A-Group half of the cemetery. Four flint blades of the tool-weapon category were the only possible weapons uncovered.

Cemetery 134 – Sheikh Sharaf
Report: Firth, 1927: 192-197.

Middle A-Group

Grave 6
1 x proximal part of an obsidian blade fragment

Grave 31
1 x copper knife blade

Summary: 35 published graves from an extensively plundered cemetery. The copper knife blade and the obsidian blade are of the tool-weapon category, but due to the rarity of the raw materials from which they were made make it likely that they were prestige weapons.

Cemetery 136 – Sayala
Report: Firth, 1927: 200-204

Middle A-Group

Grave 2 – child and adult male
1 x obsidian blade

Grave 3 – child
1 x copper knife

Summary: 21 published graves from a heavily disturbed cemetery. It is curious that this cemetery contained exactly the same categories of tool-weapons as nearby Cemetery 134. The copper knife blade and the obsidian blade were probably prestige weapons at this cemetery too.

Cemetery 137 – Sayala South
Report: Firth, 1927: 207-212.

Middle to early terminal A-Group

Grave 1 – remains of 2 adults
1 x macehead of white marble
1 x gold mace-handle with figures of animals
1 x macehead of quartz
1 x gold mace-handle with ribbed pattern
3 x copper adzes
1 x copper harpoon
4 x copper chisels

Grave 6 – adult
3 x bone points
1 x copper chisel
1+ x flint blades with serrated edges

Summary: 14 graves in total in a much plundered and disturbed cemetery. Two maces belong to the weapon category, but these speciemen with gold handles were probably prestige weapons. There were nine other tool-weapon of copper that further emphasize the elite nature of the cemetery. Three bone points may have been arrowheads of the weapon-tool category. The serrated flint blades were probably sickle blades.

Cemetery 142 – Naqa Wadi
Report : Firth, 1927: 214-217.

Late middle to early terminal A-Group

Grave 1 – adult and remains of a child
2 x copper axe-heads
2 x copper chisels
1 x ivory knife handle

Grave 6 – adult
1 x decayed fragment of wood suggested as bow stave

Summary: 10 human graves and 5 animal graves give 15 graves in total. The cemetery had been systematically plundered prior to excavation. The two copper-alloy axes were probably both prestigious and efficient weapons. The copper chisels and ivory knife handle belong to the tool-weapon category. It is interesting that the remains of a possible bow was preserved.

Cemetery 148 – near Wadi es-Sebua
Report: Firth, 1927: 221-228.

Late middle to early terminal A-Group

Grave 13 – adult
2 x stone axe-heads
1 x sheep bone, possibly handle of stone axe

Grave 23 – adult
1 x copper chisel

Grave 23A – adult
1 x stone axe-head

Summary: 44 graves in total. Three stone axes and a copper-alloy chisel of the tool-weapon category were the only finds of possible weapons.

Cemetery 166 – Amada
Report: Emery and Kirwan, 1935: 168-182.

Late early to early terminal A-Group

Summary: 72 graves in total. No weapon categories uncovered.

Cemetery 168 – Amada
Report: Emery and Kirwan: 1935: 194-199.

Early terminal A-Group

Summary: 21 graves in total. No weapon categories uncovered.

Cemetery NN – Aniba
Report: Steindorff, 1935: 26-27.

Early terminal A-Group

Summary: 10 graves in total. No weapon categories uncovered.

Cemetery 204 – Toshka
Report: Emery and Kirwan, 1935: 332-346.

Late middle to early terminal A-Group

Grave 10 – 2 adult males and 1 young female
1 x bronze chisel

Grave 52b – 3 adult males and 2 young females
1 x bronze chisel
2 x sandstone celts

Summary: 11 graves in total.

Cemetery 206 - Toshka
Report: Emery and Kirwan, 1935: 348-358.

Late middle to early terminal A-Group

Grave 16 – two adult males
1 x copper chisel

Summary: 36 graves in total in plundered cemetery. A copper-alloy chisel of the tool-weapons was the only category of weapon uncovered.

Cemetery 215 – Abu Simbel
Report: Emery and Kirwan, 1935:

Late middle to terminal A-Group

Grave 12 – adult male
1 x wooden boomerang

Grave 76
1 x copper spearhead

Summary: In total 104 graves of 4th millennium BCE date in a well-preserved cemetery that seems to have a continuous series of graves from terminal A-Group to early C-Group. The boomerang was probably a weapon for hunting.

Cemetery W – Qustul
Report: Williams, 1989: 46-84.

Late middle to terminal A-Group

Grave 11
1 x copper axe-head

1 x copper harpoon
2 x copper adzes

Summary: 41 graves in total, some of them were undisturbed. Only one grave contained specimen of the weapon categories in form of a set of copper-alloy implements with an axe of the specialized weapon category, a harpoon of the hunting weapon category and two adzes of the tool-weapon category.

Cemetery V – Qustul
Report: Williams, 1989: 85-98.

Terminal A-Group

Summary: 11 graves in total. No categories of weapons were uncovered.

Cemetery L – Qustul
Report: Williams, 1986: 198-388.

Late middle to terminal A-Group

Grave 17
2 x ivory points

Grave 23
1 x flint blade

Grave 24
1 x macehead
1 x copper spearhead

Summary: 27 human graves and 6 animal graves constitute 33 graves in total. The cemetery was utterly destroyed by plundering. It still contained two specialized weapons in form of the mace and the spear, as well as possible ivory arrowheads of the weapon-tool category.

Cemetery 3 – Faras
Report: Griffith, 1921: 12-18.

Middle to terminal A-Group

Grave 10
1 x arsenical copper axe-head

Grave 11 – male
1 x copper chisel

Grave 110
1 x copper chisel
1 x flint blade with one edge serrated – probably sickle blade

Grave 116

1 x copper chisel

Summary: 116 graves in total. All the graves were excavated, but not all published. The copper axe was probably a prestigious possession as well as a specialized weapon. The three chisels belong to the tool-weapon category.

Cemetery 298 – Serra East
Report: Nordström, 1972: 145-151.

Late middle to terminal A-Group

Grave 1
1 x pointed flake of agate – possible arrowhead
2 x blades of flint with traces of retouch

Grave 2
1 x flake of agate

Grave 4
c. 20 x flakes of quartz and agate – possible arrowheads

Grave 9
5 x flakes of quartz and agate – possible arrowheads

Grave 19
4 x flakes of agate

Summary: 18 graves in total. The lithics found were not further described or illustrated. Their sudden appearance in the graves in Serra is possibly due to the inclusive recording methods of the members of the Scandinavian Joint Expedition. These lithics could have been arrowheads. No other implements possibly used as weapons were found.

Cemetery 292 – Debeira
Report: Nordström, 1972: 151-155.

Terminal A-Group

Grave 23 – adult
1 x axe-head of copper
1 x adze blade of copper

Summary: 25 graves in total. The copper implements were found in the largest grave. The axe was probably a specialized weapon, and the adze was a weapon-tool.

Cemetery 308 – Ashkeit
Report: Nordström, 1972: 162-168.

Middle to early terminal A-Group

Summary: 25 graves in total. No categories of weapons were uncovered in this much disturbed cemetery.

Cemetery 187 – Ashkeit
Report: Nordström, 1972: 170-172.

Terminal A-Group

Summary: 10 graves in total. No categories of weapons were uncovered in this much disturbed cemetery.

Cemetery 332 - Ashkeit
Report: Nordström, 1972: 172-182.

Late middle to terminal A-Group

Grave 3
11 x fragments of chert and agate

Grave 4
1+ x fragments of chert and agate

Grave 7
1 x fragment of agate

Grave 10
2 x fragments of agate

Grave 11 – adult
2 x fragments of agate

Grave 14
3 x fragments of agate

Grave 17
3+ x fragments of agate, quartz and flint

Grave 20
2+ x fragments of agate
2+ x fragments of wood

Grave 23
1+ x fragments of agate

Grave 36
20+ x chips of flint, agate and quartz

Grave 42 – adult
1 x broken copper knife blade

Grave 45 – adult
20+ x fragments of agate and flint

Grave 53A – adult male
1 x pointed implement of antler bone – possibly arrowhead

Grave 53B – adult male
1 x agate fragment

Summary: 26 graves in total. Numerous small stone implements that could have been used as arrowheads of comparative style to the ones from Jebel Sahaba (see p.186 above). These possible weapon-tools implements were the only category of weaponry found.

Cemetery 401 – Sahaba
Report: Nordström, 1972: 183-189.

Terminal A-Group

Grave 26 – adult male
1 x flake of chalcedony

Summary: 27 graves in total. A flake of chalcedony of the tool-weapon category constituted the only possible weaponry finds.

Cemetery 277 – Halfa Degheim
Report: Nordström, 1972: 190-212.

Middle to early terminal A-Group

Grave 21 – adult male
1 x pointed bone implement – possible arrowhead

Grave 28A – adult male
1 x copper adze blade (Khartoum)

Grave 47 – adult male
1 x copper adze blade (Khartoum)

Grave 58 – adult male
1 x copper axe-head

Summary: 71 graves in total. Three copper implements of the weapon-tool category and one pointed bone implement of the tool-weapon category were found in graves with adult men.

Abbreviations for museums

AMO – Ashmolean Museum, Oxford

BM – British Museum, London

EMC – Egyptian Museum, Cairo

NMA – Nubia Museum, Aswan

MFA – Museum of Fine Art, Boston

OIM – Oriental Institute Museum, Chicago

UCL – University College, London

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